2023

# REPORT

## FINANCIAL STABILITY COMMITTEE REPORT TO PARLIAMENT

SEÐLABANKI ÍSLANDS

# REPORT

## FINANCIAL STABILITY COMMITTEE REPORT TO PARLIAMENT FOR 2023

15 February 2023

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# Financial Stability Committee report to Parliament for 2023

As is required by law, the Central Bank of Iceland Financial Stability Committee (FSN) reports to Parliament on its work once a year. The report shall be discussed in the Parliamentary committee of the Speaker's choosing.

In 2023, the FSN's fourth year of operation, the Committee held four formal meetings. Members of the Committee during the year were Ásgeir Jónsson, Governor, who acted as chair; Gunnar Jakobsson, Deputy Governor for Financial Stability, vicechair; Rannveig Sigurdardóttir, Deputy Governor for Monetary Policy; Unnur Gunnarsdóttir, Deputy Governor for Financial Supervision, who sat on the Committee until the spring and was then replaced by Björk Sigurgísladóttir, the new Deputy Governor for Financial Supervision; Axel Hall, Assistant Professor; Bryndís Ásbjarnardóttir, Economist; and Gudmundur Kr. Tómasson, former Director. The Permanent Secretary or an appointed official from the Ministry responsible for financial stability also participates in Committee meetings as a nonvoting member with the right to address the meeting and present proposals.

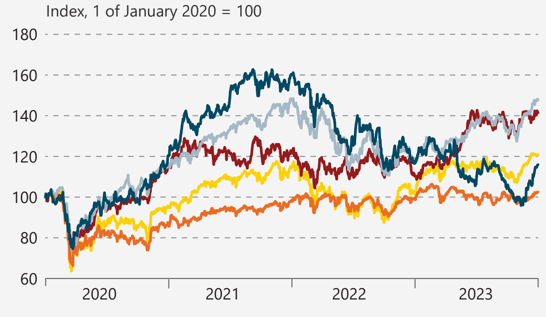
## Financial stability

The Financial Stability Committee (FSN) of the Central Bank of Iceland takes decisions on the application of the Bank's financial stability policy instruments. Financial stability means that the financial system is equipped to withstand shocks to the economy and financial markets, to mediate credit and payments, and to diversify risks appropriately. The FSN is tasked with assessing the current situation and outlook for the financial system, systemic risk, and financial stability; defining the measures necessary to ensure financial stability; and deciding which entities, infrastructure components, or markets shall be considered systemically important. When warranted, the FSN may make recommendations to the appropriate Governmental authorities concerning the measures needed to strengthen and preserve financial stability. In general, the FSN publishes the minutes of its meetings within four weeks of the meeting concerned. The minutes include information on the FSN's decisions, the rationale on which they are based, and its assessment of financial stability. The FSN's statements and minutes, enclosed with this report, contain the rationale for the Committee's decisions in 2023.

## Developments in 2023

Domestic asset prices continued to fall in 2023, in line with the tightening of the monetary stance. Signs of a turnaround in the domestic equity and bond market emerged towards the end of the year, how-

Chart 1
Development of stock prices




*Source:* Macrobond.

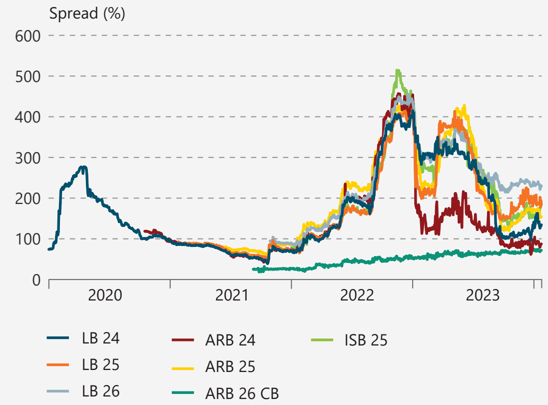
ever. Uncertainty in international markets had grown in the wake of failures of US banks in March and operational difficulties at European banks. Global asset prices declined after having risen early in 2023, and risk premia in foreign markets rose again after falling at the beginning of the year. The wars in Ukraine and the Middle East continue, with no end in sight. This uncertainty has spread to global financial markets, and risk premia have risen. Towards the end of the year, the uncertainty associated with the seismic activity on Reykjanes peninsula affected the Icelandic foreign exchange and equity markets.

The Nasdaq Iceland OMXI15 index fell by 1.6% in 2023, after falling by 26.5% in 2022. Share prices fell throughout much of the year but then started climbing in November, in the wake of media reports on the possible takeover of Icelandic firm Marel by a foreign company. Share prices rose for just under half of companies on the Nasdaq Main List during the year. Bond yields rose during the year, in line with Central Bank policy rate hikes and rising inflation expectations. Bond yields and inflation expectations declined, however, towards the year-end. House price inflation declined markedly in 2023. Non-indexed mortgage interest rates on new loans increased from 7.6% at the end of 2022 to 11% by end-2023, in line with the rise in the Central Bank's key interest rate. The capital area house price index rose by 4.5% in nominal terms (fell by 3% in real terms), as compared with a nominal increase of over 17% (7.1% real increase) in 2022. The index rose somewhat month-on-month during the spring, and again in late summer, albeit at a slower pace in the last two months of the year. Turnover in the capital area contracted in real terms by nearly 12% between years. However, it increased as 2023 advanced, and from September onwards, real monthly turnover increased between years – the first year-on-year increase since mid-2021. The number of homes advertised for sale surged in 2023, as in 2022, and the average time-to-sale lengthened between years. The ratio between house prices and their determinants held broadly unchanged during the year, and the deviation of the house price index from its estimated long-term trend narrowed from 13% at end-2022 to 6.4% at the end of 2023.

The index of commercial real estate (CRE) prices in greater Reykjavík rose by 14.5% in 2023 (6.2% in real terms). The deviation of real prices from their estimated long-term trend increased from 13.1% at the end of 2022 to 16.2% at the end of 2023. Turnover in registered CRE contracts shrank markedly between years, albeit relative to a historically strong 2022.

Chart 2

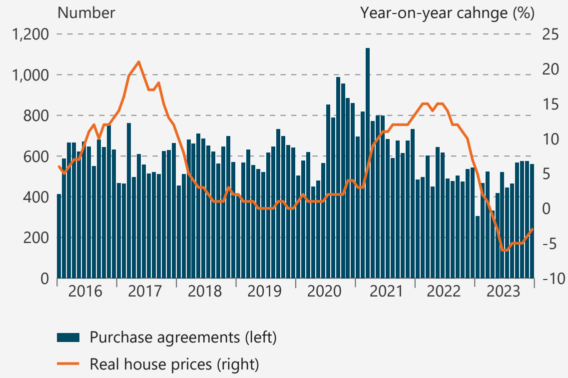
D-SIB: Spread on listed foreign bonds, EUR[1]




1. Domestic systemically important banks. Spread on euro benchmark curve. Daily data.
*Source:* Refinitiv Datastream.

Chart 3

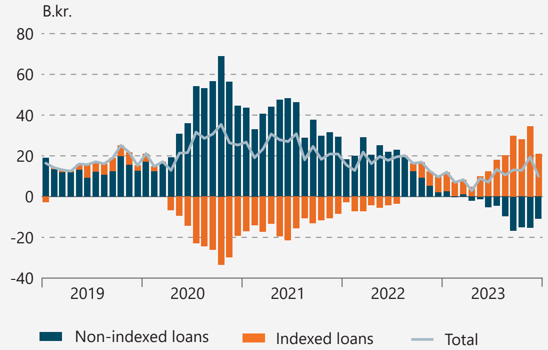
Real house prices and number of purchase agreements in greater Reykjavík




*Sources:* Housing and Construction Authority, Statistics Iceland, Central Bank of Iceland.

Chart 4

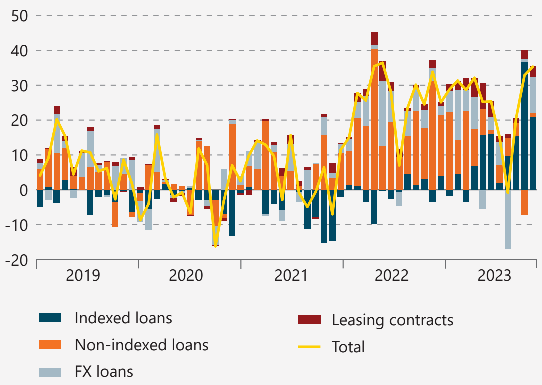
Net new household mortgages[1]




1. New loans less loan retirement and loan prepayments in excess of contractual requirements. Fixed prices. Figures include loans issued by deposit institutions, pension funds, the ÍL Fund, and the Housing Fund.
*Source:* Central Bank of Iceland.

Chart 5

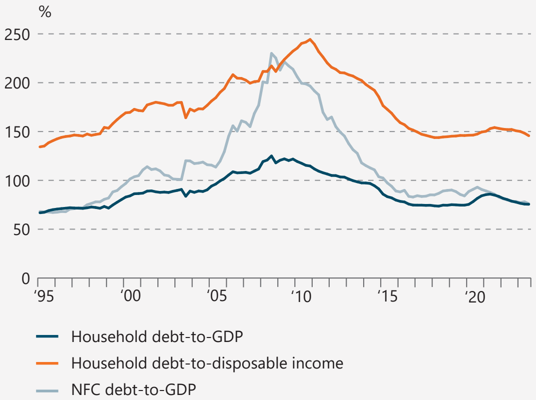
Net new corporate loans[1]




1. New loans less loan retirement and loan prepayments in excess of contractual requirements. Figures include loans issued by deposit institutions, the ÍL Fund, and the Housing Fund.
*Source:* Central Bank of Iceland.

Chart 6

Household and NFC debt[1]




1. Household debt to domestic financial undertakings. Non-financial corporations debt to domestic and foreign financial undertakings and debt securities issued. Disposable income from Q1 2021 is based on the Central Bank's estimates.
*Sources:* Statistics Iceland, Central Bank of Iceland

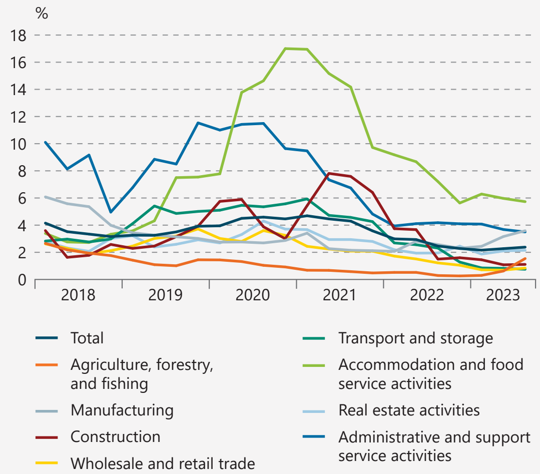
Lending rates rose in 2023, in tandem with the increase in the Central Bank's key rate. This caused many households' and businesses' debt service burdens to increase, particularly for borrowers with non-indexed variablerate debt. For instance, weighted average interest rates on new non-indexed variable-rate mortgage loans granted by the systemically important banks (D-SIB) rose by 3.4 percentage points in 2023, to 11% at the end of December. High inflation and interest rates have pushed debt service upwards. In October, 13.3% of households had debt service-to-income-ratios over 35%, up from 10% at the end of the previous year, after adjusting for estimated wage developments. Households with non-indexed fixed-rate mortgages had been relatively unaffected by interest rate hikes, and many households had mitigated the effects of higher interest rates by taking new indexed loans to refinance non-indexed variable-rate loans. As a result, the ratio of indexed mortgages to the total outstanding mortgage stock rose during the year, to just over 51% at the end of December, as compared with 44% at the beginning of 2023. At the end of 2023, about a fourth of households had non-indexed fixed-rate mortgages. There were signs that increased debt service burdens and higher inflation had begun increasingly to weigh on many households, as could be seen mainly in developments in private consumption – which contracted by 1.7% in Q3, according to preliminary figures from Statistics Iceland. Household arrears remained low, however, increasing only slightly during the year. Households and businesses were also highly resilient on the whole and therefore had some scope to absorb interest rate hikes. Unemployment was low throughout the year, and real disposable income increased, as it has consistently since 2011. Households' and businesses' equity position was historically strong at the beginning of 2023, and their debt position was relatively low and had fallen. At the end of December 2023, household debt had fallen 1.6% year-on-year in real terms. Household debt declined relative to both GDP and disposable income, and at the end of Q3, both ratios were historically low. Corporate debt developed similarly during the year, but growth in D-SIB lending to companies lost pace relative to 2022. At the end of Q3, corporate debt had fallen year-on-year by 1% in real terms, to its lowest level in years as a share of GDP.

All three of the large systemically important banks generated strong profits in the first nine months of the year, even though conditions in the financial markets were challenging during the period. The banks' returns averaged 11.8%, as compared with 10.4% for the same period in 2022. The D-SIBs' stronger returns in 2023 were due mainly to a significant increase in interest income, including returns on liquid assets and a turnaround in financial income. The interest rate spread on total assets over the first nine months of 2023 was 3.02%, as compared with 2.75% for the same period in 2022. Income from fees and commissions increased as well despite difficult market conditions.

Streamlining and costcutting have strengthened the banks' core operations considerably in the past 6-7 years. In 2023, however, this trend reversed, as costs increased somewhat. In the first nine months of 2023, the D-SIBs' combined operating expenses increased by 11.5% year-on-year in nominal terms and 3.2% in real

Chart 7

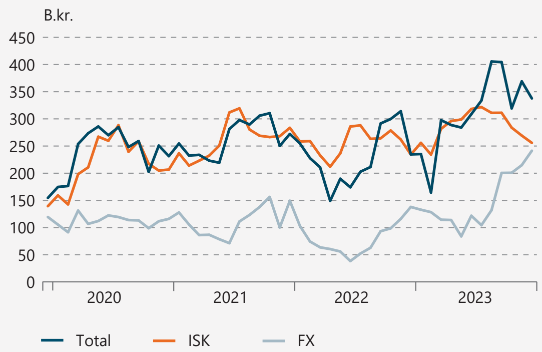
Non-performing loan ratios on D-SIBs' loans to non-financial corporations, by sector[1]




1. Consolidated figures for D-SIBs. NPL ratio according to EBA standards. NACE sector classification.
*Source:* Central Bank of Iceland.

Chart 8

D-SIB liquidity in excess of requirements[1]




1. Parent companies.
*Source:* Central Bank of Iceland.

terms. However, because income increased more than expenses, their expense ratio declined by 5.7 percentage points year-on-year over the first nine months of 2023, to 38.2%.

The loan impairment ratio was unchanged between years, at 0.73% as of end-September. Non-performing loan ratios were broadly unchanged during the year: domestic demand grew strongly and the rebound in tourism had a positive impact on loan quality, while high inflation and interest rates had a negative impact. At the end of September, non-performing loans accounted for 0.8% of loans to individuals, a decline of 0.1 percentage points between years. The corporate NPL ratio was unchanged year-on-year at 2.4%. The banks' capital ratio averaged 24% at the end of September 2023, after rising 0.3 percentage points year-on-year.

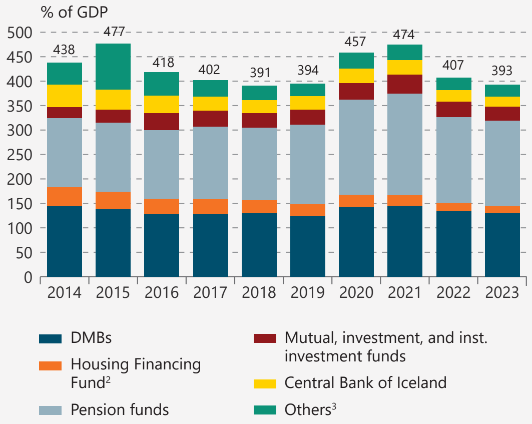
The banks' year-end liquidity ratio in all currencies was 187%, well above the 100% minimum re-quired under Central Bank liquidity rules. Their liquidity in excess of requirements increased by 96 b.kr. in 2023, to a year-end total of 331 b.kr. Their liquidity ratios rose over the summer and climbed still higher in the autumn, concurrent with the banks' foreign bond issues. The banks' market funding in krónur was largely limited to covered bond issuance, which exceeded their new mortgage lending during the year. Funding conditions abroad improved over the course of 2023, and interest rate spreads on the banks' foreign issues declined until the autumn, whereupon they increased marginally but then began to ease again towards the year-end. The banks issued foreign-denominated bonds for a total of 205 b.kr. in 2023. One was a euro-denominated covered bond issue amounting to 42 b.kr. Interest rate spreads on those issues have been far narrower than spreads on unsecured bond issues.

In December, the FSN discussed the pension funds and was given a presentation on developments and prospects for pension fund operations. The funds are dominant participants in the domestic financial market, with an asset portfolio that totalled 7,180 b.kr., or 176% of GDP, in Q3/2023, after having grown since the beginning of the year by 4.1% in the mutual and private pension divisions combined. Given the size of their asset portfolio relative to the size of the economy, their activities could affect financial stability. The Committee considered it important that the statutory framework for the pension funds should take account of this, and that the requirements made of them in connection with intermediation of capital should be comparable to those made of other financial market entities.

During the year, the Central Bank cooperated with the Prime Minister's Office and the Ministry of Finance and Economic Affairs on the preparation of a bill of legislation amending the Central Bank Act, with the objective of expanding the Bank's powers to set rules aimed at strengthening resilience in payment intermediation. At present, the vast majority of electronic payments are routed through payment card infrastructure owned by international card conglomerates, and most fintech solutions are based on this same infrastructure. Such concentration is conducive to increased risk to the security of domestic payment intermediation. What is important for retail payment intermediation resilience is that consumers and companies be offered a range

Chart 9

Financial system: Assets[1]




1. Parent companies. 2. The Housing Financing Fund (HFF) merged with the Iceland Construction Authority on 1 January 2020. HFF assets from 2020 onwards are the assets of the ÍL Fund, which took over the processing of the HFF's assets and liabilities. 3. Other: Failed financial institutions that have undergone composition are included with other financial institutions as of the time their composition agreements were approved. The Central Bank of Iceland Holding Company ehf. (ESÍ) is also included with other financial institutions from its establishment in December 2009 until its dissolution in February 2019.

*Sources:* Statistics Iceland, Central Bank of Iceland.

of payment options that they can resort to during shocks involving payment intermediation systems. The bill of legislation authorises the establishment of new core infrastructure in order to pave the way for further advances in the payment market, bolster competition, and expand the use of fintech in retail payment intermediation. The bill has been introduced before Parliament and awaits handling.

Reports of cyberattacks or attempted cyberattacks increased in number during the year. The largest increase was in notifications of phishing attacks, which involve attempts to access sensitive information such as payment card numbers or passwords. Because of growing cyber risk, the FSN considers it vital that active consultation take place among all relevant parties if they are to achieve the Government's objective of ensuring effective coordination among official cybersecurity actors, particularly in times of emergency, so as to delineate clearly the division of tasks, responsibilities, and – no less important – authorisations.

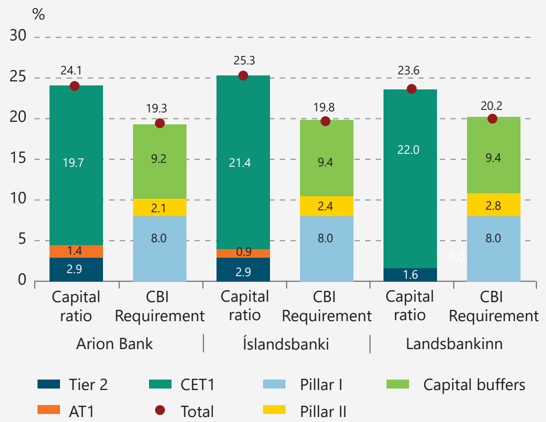
## Committee decisions in 2023

The FSN agreed that the state of financial stability in Iceland was good on the whole, high inflation and interest rates notwithstanding. Demand pressures in the economy were likely to subside gradually but reliably. GDP growth had eased over the course of the year and private consumption had contracted between quarters. The FSN was of the view that a protracted period of high interest rates could erode banking system asset quality but that, given the current situation and the most plausible outlook, the risk of such a development remained limited. In 2023, the Committee had considered the chief risks to financial stability to be economic developments and poorer funding terms, as well as cybersecurity; furthermore, the FSN was of the view that risk associated with the housing market still existed, although pressures had eased. The Committee was also of the opinion that risk associated with corporate debt and the CRE market had increased during the year.

The FSN discussed the real estate market at all of its meetings in 2023 and decided to keep borrower-based measures unchanged. The maximum debt service-to-income (DSTI) ratio was therefore maintained at 35% of disposable income (40% for first-time buyers), and the maximum loan-to-value (LTV) ratio was maintained at 80% of market value (85% for first-time buyers). In March, households' and businesses' financial conditions had deteriorated because of high inflation and interest rates. At that time, interest rates on non-indexed loans to businesses were 10% and non-indexed household mortgage rates were 8%, after having risen by over 4 percentage points since May 2021, when the Bank began its monetary tightening phase. According to the FSN's March statement, the Committee was of the opinion that borrower-based measures had significantly reduced risky lending and that lenders were well prepared to lower debt service burdens by changing loan types. The FSN reiterated how important it was for mortgage lenders to work with borrowers to prevent financial distress to the extent possible. The Central

Chart 10

D-SIB capital requirements and capital adequacy ratios at the end of 2023[1]

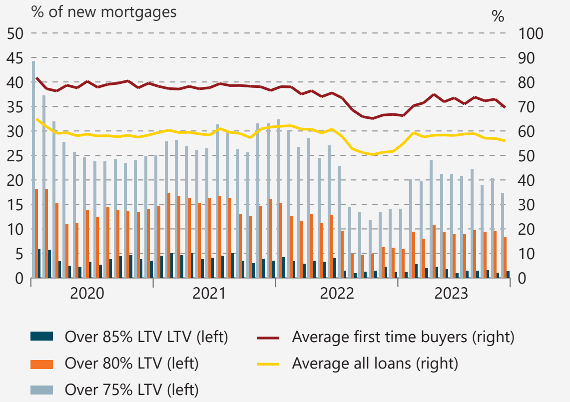



1. Consolidated figures for systemically important banks. The portion of 2023 profit to be paid as a dividend in 2024 has been deducted from the capital base when calculating the 2023 capital ratio

*Sources:* Commercial banks' financial statements and other published materials.

Chart 11

LTV ratios of new mortgages[1]




1. Each granted loan can include one or more individual loans. Data from SIBs, Housing Financing Fund and 9 largest pension funds. Loans from pension funds not included in data before August 2020.

*Source:* Central Bank of Iceland.

Bank raised its policy rate by a further 3.25 percentage points in 2023, to 9.25% by August. In spite of the rate hikes, arrears did not increase significantly. Some borrowers with fixed rate mortgages had not yet felt the effects of increased debt service, but when fixed-rate clauses expired over the next two years, the rise in financing costs could be expected to create financial problems for indebted households.

In June, the FSN discussed the fact that steeply rising real estate prices and negative real interest rates had delivered rapid equity creation, particularly for those who had financed property purchases with nominalrate loans. Households' strong equity had afforded them the resilience to withstand worsening financial conditions. In the minutes from the FSN's September meeting, it emerged that most indicators implied that demand pressures in the economy would ease slowly but surely. Members were also of the opinion that risks associated with the residential property market had receded, but they were nevertheless somewhat concerned about household debt. The FSN discussed the options available to households that have difficulty covering their mortgage debt service. Most households have considerable scope to lower their debt service; for instance, by lengthening loan maturities, refinancing supplemental loans, switching to an annuity format, or taking indexed loans to refinance non-indexed debt. Because of exemptions provided for in legislation on mortgage lend-ing, rules on maximum LTV ratios, and rules capping debt service, borrower-based measures do not affect households' debt restructuring or refinancing options. The Committee was of the view that forborne loans could increase in number, particularly if the economic outlook deteriorated more than was currently envisioned and if unemployment rose higher than currently expected.

At the Committee's December meeting, it emerged that housing market turnover had increased again and that nominal house prices had risen marginally – by 2.9% year-on-year in October – but had fallen by 4.6% in real terms. Because of rising wages and households' attempts to limit the increase in their debt service burden despite higher interest rates, the share of households with a DSTI ratio above 35% had held virtually unchanged since the summer but had risen from 10% to 13.3% over the first ten months of 2023, after adjusting for wage developments.

The FSN discussed the impact of the seismic activity on Reykjanes peninsula on financial stability, and members agreed that based on the scenarios currently deemed likeliest, financial stability would not be under threat. Some borrowers were in difficulty, however, and their situation highly uncertain. The Committee was also of the view that there was no reason as yet to respond by making changes to borrower based measures.

At its March 2023 meeting, the FSN decided to increase the countercyclical capital buffer (CCyB) rate from 2% to 2.5% of the domestic risk base, effective in March 2024. According to the minutes from the March meeting, the analysis of cyclical systemic risk suggested that risk had increased in recent years and was near or above the average of recent years. The main drivers of the increase are the surge in real estate prices since the beginning of the pandemic and the high inflation rate, which affects debt service burdens and repayment capacity. The main purpose of the CCyB was to enhance financial institutions' resilience against cyclical systemic risk, thereby providing them with the scope to absorb losses and maintain the supply of credit during periods of stress. In the Committee's March statement, it emerged that the banks were well prepared to meet increased capital requirements while maintaining the credit supply. Their capital and liquidity were strong, and the CCyB was an important element in banking system resilience. This increase would be conducive to bol-stering that resilience still further in the face of the risks that had accumulated. The increase in the buffer to 2.5% created further scope to lower it in the future, in the event of an economic contraction that could cause a decline in the supply of credit.

The Committee completed its annual review of systemically important financial institutions in December and confirmed the systemic importance of

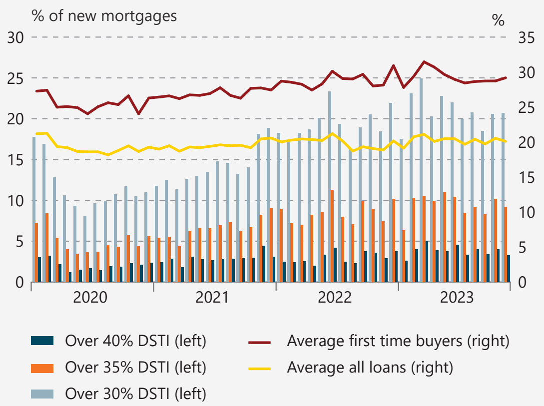
Arion Bank, Íslandsbanki, and Landsbankinn. It decided to hold the capital buffer for systemic importance (O-SII) unchanged at 2% of all of the systemically important financial institutions' exposures.

In March, the FSN discussed amendments to the Act on Covered Bonds, which completed the implementation of European regulatory instruments on covered bond issuance. The main change provided for in the new legislation is that bonds satisfying the conditions laid down in the law may be marketed as European Covered Bonds or European Covered Bonds (Premium), thereby making the banks' covered bond issues eligible for transactions with the European Central Bank.

Furthermore, in its statements from 2023, the FSN strongly emphasised that the Government and the Bank should work towards increasing security in domestic payment intermediation and should expedite the implementation of an independent retail payment solution, partly because of growing cyberthreats. The Committee discussed payment intermediation at all of its meetings during the year and considered cyber risk the chief threat to financial stability. A draft bill of legislation on operational security in payment intermediation was presented to the Committee in December. The Committee supports the bill of legislation on enhanced operational security in payment intermediation that has been distributed via the Government's consultation portal. The bill proposes that the Central Bank Act be amended so as to empower the Bank to set rules on operational security in payment intermediation, subject to prior approval by the FSN.

Chart 12

DSTI ratios of new mortgages[1]




1. Each granted loan can include one or more individual loans. Data from SIBs, Housing Financing Fund and 9 largest pension funds. Loans from pension funds not included in data before August 2020.

*Source:* Central Bank of Iceland.

Furthermore, at the FSN's meetings, it emerged that reported cyberattacks had grown in number and were increasingly directed at important infrastructure. The Committee also discussed operational security and contingency plans aimed at protecting payment intermediation in the event that international network connections are interrupted and payment cards that rely on foreign infrastructure owned by international card conglomerates cease to function. The Committee was given a presentation on cash as a last resort solution, and was unanimous in considering it important to adopt an independent domestic payment solution as soon as possible, strengthen financial institutions' cyber- and operational security, and ensure business continuity.

In June, the FSN was given a presentation on the results of the IMF's financial sector assessment program (FSAP) appraisal of Iceland's financial stability and macroprudential policy. The purpose of the FSAP appraisal was to determine the resilience of the financial system, the quality of the regulatory and supervisory framework, and the country's ability to respond to financial shocks. The Fund's advice following such an appraisal could focus on either microprudential or macroprudential policy, or both. The IMF presented 150 comments directed at the Central Bank or Government ministries, or both, and the FSN was given a presentation on the comments centring on financial stability and macroprudential policy. The comments pertained, among other things, to further data collection, the application of macroprudential tools, stress testing of financial institutions' liquidity and capital, pension funds' lending activities, powers of resolution, cybersecurity, and climate risk. It emerged at the meeting that the IMF's comments would be addressed in a given order of priority and that attempts would be made to respond to the most important ones within a year.

The Committee discussed the report from the Appraisal Committee tasked with assessing the performance of the Central Bank in 2020-2022, as prescribed in Article 36 of the Central Bank Act. The report, published in January 2023, was very positive overall. The regulatory architecture and framework for financial stability was considered to be in line with international best practice and in compliance with European regulatory provisions. When the COVID-19 pandemic reached Iceland in 2020, the FSN had responded promptly by lowering the CCyB. The Committee was similarly quick to respond to changes in financial conditions when it decided in September 2021, in view of increased accumulation of systemic risk, to increase the CCyB again, as it considered cyclical systemic risk to have risen to at least the pre-pandemic level. Furthermore, the Committee had acted appropriately in tightening borrower based measures in response to conditions in the housing market. The report stated that the Bank's stress tests were carried out professionally, that the Bank had developed measures of the financial cycle in order to identify changes in financial stability, and that the Financial Stability reports were well prepared and covered significant ground.

On behalf of the Central Bank of Iceland
Financial Stability Committee,

*Ásgeir Jónsson*

*Governor of the Central Bank of Iceland*
*and Chair of the Financial Stability Committee*

# Statement of the Central Bank of Iceland Financial Stability Committee
15 March 2023

The Icelandic financial system is on a solid footing. The systemically important banks have delivered solid results and they have supported households and businesses Their capital and liquidity positions are strong.

However, households' and businesses' financial conditions are tightening because of high inflation and interest rates. The outlook is for inflation to be stubbornly high and debt service burdens to grow heavier.

The headwinds facing financial institutions in international markets provide a reminder of how vital it is that deposit institutions maintain enough strength to perform their role of intermediating credit and payments and of analysing and managing risks appropriately through the financial cycle. Given that domestic demand is strong and developments in the financial markets are uncertain, it is important to preserve the resilience of domestic financial institutions.

Tension in the housing market has eased in recent months. Housing supply has increased and the average time-to-sale has grown longer. Real estate prices have begun to fall but remain high by nearly all measures. One indicator of this is the ratio of capital area property prices to construction costs, which is extremely high. Borrower-based measures have significantly reduced high-risk lending. Furthermore, Icelandic banks are strong enough to ease borrowers' debt service by converting their loans to other forms. The Financial Stability Committee (FSN) urges mortgage lenders to work with borrowers, as they have in the past, to minimize the likelihood of financial distress.

The FSN has decided to increase the countercyclical capital buffer rate from 2% to 2.5% of the domestic risk base. The banks are well prepared to satisfy increased capital requirements while maintaining the credit supply. The countercyclical capital buffer is an important element in banking system resilience. This increase is conducive to bolstering that resilience still further in the face of the risks that have accumulated and could materialise in the coming term. The Committee's decision will take effect twelve months from now.

The FSN reiterates the importance of establishing an independent domestic retail payment solution and supports the steps taken thus far towards achieving this goal. It is preferable that this work be expedited to the extent possible so that a conclusion can be reached within one year.

The Committee will continue to apply the policy instruments at its disposal so as to preserve financial stability, thereby enabling the financial system to mediate credit and payments and redistribute risks appropriately.

# Statement of the Central Bank of Iceland Financial Stability Committee

7 June 2023

The Icelandic financial system is on a solid footing at a time when the monetary stance has tightened. The systemically important banks' capital and liquidity are strong. Arrears are still limited, and the banks' operating results are good. Furthermore, recent bond issues in foreign markets have mitigated their refinancing risk, although cost of funding has increased. The Financial Stability Committee (FSN) considers the system resilient and has therefore decided to hold the countercyclical capital buffer (CCyB) rate unchanged at 2.5%.

GDP growth is strong and unemployment low in Iceland. Generous nominal wage increases have sustained purchasing power relatively well in the recent term despite high inflation. Households and businesses are faced with worsening financial conditions, however.

Steeply rising real estate prices and negative real interest rates have delivered rapid equity creation, particularly for those who financed property purchases with non-indexed loans. The adoption of borrower-based measures in the form of caps on loan-to-value and debt service-to-income ratios has reduced the risk that this rapid equity creation would be conducive to overleveraging. This can be seen in part in the household debt ratio, which has remained stable at 150% of disposable income. Households' strong equity position affords them the resilience to withstand worsening financial conditions.

Inflation and sharply rising interest rates increase debt service burdens for those who have loans with variable nominal interest rates. Furthermore, many borrowers' fixed-rate clauses are set to expire soon, and a rising real rate will increase the debt service burden.

The FSN urges lenders to consider this increased debt service in a timely manner so as to prevent financial distress among borrowers. Where necessary, lenders should consider lengthening loan maturities, adopting an annuity format, capping nominal interest rate payments, and offering a range of loan types that offer differing debt service. Many borrowers have ample equity and should have considerable flexibility to ensure that their debt service remains in line with the criteria provided for in the borrower-based measures set by the FSN.

It is vital to continue strengthening financial institutions' cyber- and operational security and to bolster the resilience of payment intermediation in Iceland. The FSN is of the view that the steps taken to date towards an independent domestic retail payment intermediation solution are a positive move in this context.

The Committee will continue to apply the policy instruments at its disposal so as to preserve financial stability in Iceland, thereby enabling the financial system to mediate credit and payments and redistribute risks appropriately.

Memorandum: Background to the decision on the countercyclical capital buffer. 2 June 2023

# Statement of the Central Bank of Iceland Financial Stability Committee
## 20 September 2023

The Icelandic financial system is on a solid footing. The systemically important banks' capital and liquidity are strong. In recent months, the banks have mitigated their foreign refinancing risk with bond issuance. Stress tests indicate that the banks are highly resilient and able to support households and businesses as necessary. Arrears are limited, and on the whole, borrowers appear well positioned. In view of this, the Financial Stability Committee (FSN) has decided to hold the countercyclical capital buffer rate unchanged at 2.5%.

Iceland's economy has recovered rapidly over the past two years. Increased economic activity has led to a rise in household and business income. A period of weaker economic activity and worsening financial conditions now lies ahead. Higher interest rates have added to debt service burdens, particularly for borrowers carrying non-indexed variable-rate loans. The fixed-rate clauses that have protected borrowers against rising debt service are beginning to expire. This represents a challenge for borrowers and lenders.

The FSN urges lenders to give attention to the rise in the debt service burden. Possible solutions in this regard include lengthening loan maturities, converting loans to an annuity format, capping nominal interest rates, and offering other loan types. Most borrowers have ample equity, which should provide plenty of room to adjust loan payments to debt service capacity and simultaneously ensure that it remains in line with the criteria provided for in the borrower-based measures set by the FSN. The Committee also urges borrowers to avert potential financial distress by seeking prompt assistance from their lenders if they expect their debt service burden to become onerous.

It is vital to continue strengthening financial institutions' cyber- and operational security and to further bolster the resilience of payment intermediation in Iceland. The FSN considers the steps taken towards infrastructure for independent domestic retail payments a positive move and agrees with Government proposals to expand the Central Bank's authority in this area.

The Committee will continue to apply the policy instruments at its disposal so as to preserve financial stability in Iceland, thereby enabling the financial system to mediate credit and payments and redistribute risks appropriately.

# Statement of the Central Bank of Iceland Financial Stability Committee

6 December 2023

The Icelandic financial system is sound. The systemically important banks' capital and liquidity are strong. Although lending growth has eased, the banks remain well able to continue to supply credit to households and businesses. Their foreign market-based funding has been smooth and orderly. Arrears are limited and have risen only slightly, despite higher inflation and interest rates and a heavier debt service burden. In view of this, the Financial Stability Committee (FSN) decided to hold the countercyclical capital buffer unchanged at 2.5%.

Financial conditions have tightened in tandem with the slowdown in economic activity. However, both household and corporate debt ratios are moderate relative to income and assets. This creates the scope to adapt households' mortgage debt service to their repayment capacity and the borrower-based measures implemented by the FSN.

The pension funds are dominant participants in the domestic financial market. The FSN therefore emphasises that the statutory framework for the funds and the requirements made of them in connection with intermediation of capital should be made comparable to the framework and requirements applying to other financial market entities.

The FSN supports the bill of legislation on enhanced operational resilience in payment intermediation that has been distributed via the Government's consultation portal. It is important to give comprehensive consideration to the resilience of payment intermediation, adopt an independent domestic payment solution as soon as possible, strengthen financial institutions' cyber- and operational security, and ensure business continuity.

The FSN completed its annual review of systemically important financial institutions and the capital buffer for systemic importance (O-SII buffer). It confirmed the systemic importance of Arion Bank, Íslandsbanki, and Landsbankinn. The FSN decided to hold the O-SII buffer unchanged at 2% for all exposures.

The FSN will continue to apply the policy instruments at its disposal so as to preserve financial stability in Iceland, thereby enabling the financial system to mediate credit and payments and redistribute risks appropriately.

Memorandum: Background to the decision on the countercyclical capital buffer. 1 December 2023

Enclosed (12.12.2023): Figures for the background to the decision on the countercyclical capital buffer 1 December 2023.

CENTRAL BANK OF ICELAND

# MINUTES
## FINANCIAL STABILITY COMMITTEE

2023

June
17th meeting
Published 5 July 2023

*The Financial Stability Committee of the Central Bank of Iceland*

# Minutes of the Financial Stability Committee meeting
## March 2023 (16th meeting)
## Published 12 April 2023

The Financial Stability Committee (FSN) of the Central Bank of Iceland takes decisions on the application of the Bank's financial stability policy instruments. Financial stability means that the financial system is equipped to withstand shocks to the economy and financial markets, to mediate credit and payments, and to diversify risks appropriately. The Committee is tasked with assessing the current situation and outlook for the financial system, systemic risk, and financial stability; defining the measures necessary to ensure financial stability; and decide which entities, infrastructure elements, or markets shall be considered systemically important. When warranted, the FSN may make recommendations to the appropriate governmental authorities concerning measures needed to strengthen and preserve financial stability. In general, the Committee publishes the minutes of its meetings within four weeks of the meeting concerned. The minutes include information on the Committee's decisions, the rationale on which they are based, and the assessment of financial stability.

At the meeting of 13 and 14 March 2023, presentations were given on recent economic developments and prospects and the state of the financial system and payment systems. The Committee also received a presentation on recent events in the global banking system. The Committee discussed the outlook for and principal risks to financial stability, such as economic developments, risks to the financial institutions and the financial system, developments in domestic financial markets, household and corporate debt, the real estate market, the efficacy of borrower-based measures, financial institutions' capital and liquidity position, and the financial cycle. The Committee also discussed cybersecurity and received information on the TIBER project and measures to strengthen cybersecurity in payment intermediation. The Committee discussed the recent report by the expert committee tasked with evaluating the Central Bank of Iceland's performance in the attainment of its objectives concerning price stability, financial stability, and the conduct of financial supervision since the Bank's merger with the Financial Supervisory Authority in 2020.

The FSN decided to increase the countercyclical capital buffer (CCyB) rate from 2% to 2.5% of the domestic systemically important banks' (D-SIB) domestic risk base. The decision will take effect on 15 March 2024.

The Committee also stressed the importance of establishing an independent domestic retail payment rails and selecting a solution within a year.

### Analysis of financial stability
Since the FSN's December meeting, inflation in Iceland's main trading partner countries had proven more persistent than previously assumed, and year-2023 GDP growth prospects had generally improved. Central banks had responded to high inflation by raising policy rates, and in some countries macroprudential tools had been applied in order to tighten the policy stance. Uncertainty in global

markets had grown in the wake of failures at US banks in March. Global asset prices declined after having risen early in 2023, and credit spreads in foreign financial markets widened again after tightening at the beginning of the year. Access to foreign funding had therefore worsened again.

Domestic GDP growth measured 6.4% in 2022 but is forecast to decline to 2.6% in 2023. Households' and businesses' financial conditions have tightened because of high inflation and interest rates. Interest rates on non-indexed loans to businesses were 10% and non-indexed mortgage rates were 8% in March, having risen by 4 percentage points since May 2021, when the Bank began its monetary tightening phase. Low unemployment and moderate debt levels among most Icelandic households enable them to meet increased debt service and worsening financial conditions. The FSN urged mortgage lenders to work with borrowers, as they have in the past, to minimize financial distress. Given that domestic demand is strong and developments in the financial markets uncertain, preserving domestic financial institutions' resilience is essential. The Committee considered the chief risks to financial stability to be economic developments and poorer funding terms, as well as cybersecurity; furthermore, the FSN was of the view that risk associated with the housing market still existed, although tension had eased in recent months.

**Banking system resilience**

The Icelandic financial system is on a solid footing. The D-SIBs' capital and liquidity are above regulatory thresholds. However, their liquidity position had declined between meetings, however. -This was due primarily to dividend payments and reduction in foreign debt. At the end of January, their liquidity in excess of requirements totalled 236 b.kr., and their liquidity ratio in all currencies combined was 160%. The banks are primarily funded by deposits, covered bonds, and unsecured issuance. Deposits, which account for about half of their funding, increased by 237 b.kr., or 10%, in 2022 in line with the banks' increased lending. Market funding conditions abroad had improved somewhat, and credit spreads on the banks' foreign-denominated bond issues had narrowed after surging in Q4/2022. The systemically important banks have obtained foreign market funding for their next maturities, and they have enough foreign currency liquidity to cover all 2023 payments without violating liquidity rules. Domestic bond issuance had been limited in the recent term, however, and net covered bond issuance had been negative in 2022.

The D-SIBs' operations were strong in 2022. The return on equity was 10.1%, or 2.3 percentage points less than in the previous year. Regular income – i.e., net interest income and commissions – increased by a fifth year-on-year, reaching an all-time high. Higher interest rates caused the net interest margin to widen by 0.39 percentage points year-on-year, to 2.81%. At the same time, their operating expenses rose only marginally, and underlying operations therefore improved markedly between years. The D-SIBs' capital ratio lay between 22.2% and 24.7% at the end of 2022, or 2.3-4 percentage points above the minimum set by the Central Bank. It fell by 1.2 percentage points between years, mainly because of dividend payments and share buybacks.

Household arrears had fallen to a post-2008-crisis low of 0.7% at the end of December. Corporate arrears had declined as well, and the financial position of companies that had needed forbearance measures during the pandemic had grown stronger. As a result, the banks have reversed unutilised impairment previously expensed as a precautionary measure due to the pandemic. A large share of the companies with forborne loans had already begun making full or partial payment on them.

New legislation amending the Act on Covered Bonds entered into force on 1 March 2023, thereby completing the implementation of European regulations on covered bond issuance. The main change provided for in the new legislation is that bonds satisfying the conditions laid down in the law may be marketed as European Covered Bonds or European Covered Bonds (Premium). In all likelihood, the change will have a positive impact on the Icelandic banks' covered bond issues, as they will be eligible as collateral for transactions with the European Central Bank. In all, the D-SIBs have issued covered euro bonds for 1,100 million euros, starting in September 2021 and have issued bonds for their own use in the amount of 550 million euros. The D-SIBs must also satisfy minimum requirements for own funds and eligible liabilities (MREL) by having sufficient funding to satisfy those requirements. Bonds maturing within one year are not MREL eligible. The banks therefore have to refinance continuously to fulfil MREL requirements.

**Private sector debt**

The ratios of household debt to GDP and to disposable income had declined since the FSN's last meeting and are low in historical context. Growth in household debt had lost pace and, in real terms, was marginally negative in January. Nominal growth remained robust, however, at nearly 10%, almost half of it due to indexation on indexed loans. Indexed mortgage loans had accounted for an increasing share of new lending in recent months. However, there had been few signs that households had begun to refinance older non-indexed debt with new indexed loans in an attempt to lighten their debt service burden.

In general, mortgage debt burden had increase alongside rising interest rates. As a share of disposable income, however, most households' debt service burden had risen only modestly. Just over half of households that had taken loans in January 2020 or later had seen their debt service rise by less than 30,000 kr. per month. In just over a fourth of cases, debt service had risen by more than 30,000 per month, and in another scant one-fourth of cases it had remained unchanged or declined. After adjusting for wage growth, which gives a more accurate view of households' housing cost burden, the ratio of debt service to disposable income is broadly unchanged. As of January 2023, the share of households whose debt service exceeds 35% of disposable income had risen by 2 percentage points, from 7% to 9%.

Part of the reason debt service has not increased more is that about a fourth of households are carrying non-indexed debt with interest rates fixed for three to five years. In addition, nearly half of households have taken indexed mortgage loans, and the debt service burden on these has risen more slowly than on non-indexed variable-rate loans. When interest rates on fixed-rate loans are reset in 2024 and 2025, some households could find it more difficult to cover the increased debt service, all else being equal. The possibility of switching to indexed loans or of extending loan maturities should considerably reduce the likelihood of financial distress. The Central Bank's rules capping loan-to-value ratios and debt service-to-income ratios do not apply to restructured loans, which are not considered as new loans, nor do they apply to refinancing, provided that the principal is not increased. The cap on loan-to-value ratios does not apply to borrowers in financial distress.

The available data indicate that households are generally well positioned. Arrears are limited, unemployment is low, and real disposable income has increased year by year since 2010.

Year-on-year growth in corporate debt turned a corner in 2022, flipping from being negative (at constant prices) in H1 to being positive by 0.4% at the year-end. Credit growth was driven by an increase in D-SIB lending, as companies appeared to seek financing from banks rather than from the market. The increase was greatest in lending to the real estate and construction sector.

At present, companies' main challenges lie in cost increases due to inflation, wage rises, and interest expense. Interest rates on corporate loans had risen markedly in recent months, as a large majority of corporate debt bears variable interest. Companies' financial position has developed favourably in the recent term, however, and arrears are limited. Businesses should be quite resilient.

**Asset prices**

The housing market turned around in mid-2022. Turnover in the residential real estate market contracted sharply, and the number of purchase agreements finalised in the capital area fell by 30% year-on-year. In January 2023, only a scant 290 contracts were concluded – the smallest single-month total since February 2011. The number of homes advertised for sale continued to increase, and by January the housing supply was broadly back to the pre-pandemic level. In January, house prices had risen year-on-year by 4.5% in real terms and 14.9% in nominal terms, with the entire increase in the index occurring in H1/2022. Since June 2022, house prices have risen by only 0.6% in nominal terms and have fallen by 3.4% in real terms. The ratio of house prices to fundamentals such as construction costs and rent prices had fallen in recent months, after peaking in mid-2022. At the end of January, the house price index measured 13% above trend, down from a peak of 19% above trend in June 2022.

The FSN was of the view that the interaction between borrower-based measures and higher interest rates had reduced imbalances in the housing market.

The price of shares in listed companies had remained unchanged since the FSN's last meeting. The Main List index had risen marginally in 2023 to date, however. Over the first two months of the year, stock market turnover had contracted by 3% between years. Nominal Treasury bond yields had risen since the Committee's last meeting, as inflation measured higher than expected.

**Exchange rate of the króna**

The exchange rate of the króna had been broadly unchanged since the Committee's early December meeting. An increased capelin quota and favourable fishing conditions were considered to have offset a sizeable goods account deficit, and the interest rate differential with abroad had widened as well. Forward positions with the króna had increased, and there had been moderate foreign investment inflows to Iceland. Furthermore, the pension funds had scaled down their foreign currency purchases year-to-date. The D-SIBs' foreign exchange balance was relatively unchanged between meetings and was in balance; i.e., the banks' foreign-denominated assets almost equalled their foreign-denominated liabilities.

**The financial cycle and cyclical systemic risk**

A composite measure of financial cycles indicated that the cycle was still in an upward phase at the end of 2022. It also indicated that cyclical systemic risk was at an average level and had increased marginally since the FSN's last meeting. The debt cycle was still in a relatively low position consistent with moderate household and corporate debt levels. The upward trend was estimated to be fastest and the position highest in the housing cycle, which runs counter to developments in house prices in the past few months, as the housing market began to cool in H2/2022. The mismatch between the housing cycle and recent months' developments in house prices is due to the indicator's emphasis on medium-long cycles and its relative insensitivity to short-term developments.

A new indicator that measures financial conditions with a monthly frequency and takes into consideration short-term movements in financial variables was presented to the Committee. That indicator showed a sharp decline in recent months, driven in particular by a cooling housing market, rising interest rates, and a depreciation of the króna, which suggested that financial conditions had shifted from being relatively accommodative and expansionary to being neutral. If the same trend continues in the coming term, financial conditions can be expected to be tight or even growth-impeding. The recent decline in the financial conditions index was considered to be a sign of uncertainty about whether the upward financial cycle would continue in the coming term.

Cyclical systemic risk can be estimated in a variety of ways, and the FSN uses more than one measure. The financial cycle is one such measure that the Committee considers, and another is the domestic composite systemic risk indicator, or d-SRI. The d-SRI indicated that cyclical systemic risk had declined throughout 2022 and was back to its historical average, after having been above average at the beginning of 2022. The main drivers of the decline were falling asset prices, slower credit growth, and strong GDP growth. On the other hand, the measure of growth-at-risk suggested that cyclical systemic risk had increased in 2022, as the fifth percentile of the probability distribution of GDP growth over the next two years had shifted downwards. Various indicators therefore give differing signals about developments in systemic risk, although all of the indicators imply that cyclical systemic risk is moderate.

**Cybersecurity**

The Committee received a presentation on cybersecurity. The cybersecurity framework in Iceland and measures to boost the resilience of financial market infrastructure were discussed. Significant work has been done in this area, which covers a broad range, as roles and responsibility are distributed widely through the administrative system. Emphasis was placed on the importance of the Central Bank as an active participant in formulating cybersecurity policy in cooperation with the Government.

The FSN received a presentation on two projects aimed at bolstering the resilience of financial market infrastructure. On the one hand, the Bank has decided to begin formal testing of cybersecurity and financial system resilience by introducing the so-called TIBER framework in Iceland. This entails directing unannounced tailor-made cyberattacks through important infrastructure and companies so as to determine the level of resilience against cyberattacks, thereby fostering increased financial stability. Participants receive an assessment of the quality of cyber defences and the weaknesses therein. The Central Bank administers the tests. On the other hand, a representative from Reiknistofa Bankanna (RB) presented an initiative designed to reduce the likelihood of cybersecurity-related incidents.

**Expert committee report on the Central Bank's performance in 2020-2022**

The expert committee tasked with evaluating the Bank's performance in attaining its objectives for price stability, financial stability, and financial supervision in the wake of its merger with the Financial Supervisory Authority, cf. Article 36 of the Act on the Central Bank of Iceland, delivered its report in January 2023. The expert committee's discussion of the FSN was very positive overall. The regulatory architecture and framework for financial stability is considered to be in line with international best practice and in compliance with European regulatory provisions. When the COVID-19 pandemic reached Iceland in 2020, the FSN responded promptly by lowering the CCyB. The Committee was similarly quick to respond to changes in financial conditions when it decided in September 2021, in view of increased accumulation of systemic risk, to increase the CCyB again, as it considered cyclical systemic risk to have risen to at least the pre-pandemic level. Furthermore, the Committee had acted appropriately in tightening borrower-based requirements in response to conditions in the housing market. The report states that the Bank's stress tests are carried out professionally, that the Bank had developed measures of the financial cycle in order to identify changes in financial stability, and that the *Financial Stability* reports were well prepared and covered significant ground.

The FSN discussed the expert committee's recommendations concerning increased cooperation between the Monetary Policy Committee and the Financial Stability Committee, a wider range of scenarios in the Bank's stress tests, and greater emphasis on the pension fund system from the perspective of financial stability. Work had begun on incorporating the recommendations into the work of the committees and the Bank.

## Financial Stability Committee decisions in 2022

**Countercyclical capital buffer**

The main purpose of the countercyclical capital buffer (CCyB) is to enhance financial institutions' resilience against cyclical systemic risk, thereby providing them with the scope to absorb losses and maintain the supply of credit during periods of stress.

Analyses of the level of cyclical systemic risk indicate that it has increased in recent years and is now near or above the average of the past several years. The main drivers of the increase are the surge in real estate prices since the beginning of the pandemic and the high levels of inflation, which affects debt service burdens and repayment capacity.

The FSN discussed the outlook for financial stability. Prospects were generally good in Iceland: demand was strong, unemployment low, and private sector indebtedness modest. On the other hand, inflationary pressures had proven persistent, both in Iceland and internationally, and interest rates were high. The domestic banking system's market funding had grown more expensive, and elevated uncertainty in foreign funding markets had also pushed credit spreads upwards. Fixed interest rates of non-indexed loan agreements totalling 650 b.kr. would reset in the coming two years. Furthermore, the effects of recent events abroad had yet to emerge in full and there could be a material risk of financial spillovers. Even though the banks are resilient, external risks were on the rise, both on the assets side (owing to conditions in asset markets) and on the liabilities side (owing to conditions in funding markets). In view of this, the Committee agreed that there was reason for the banks to further strengthen their resilience by holding sufficient capital. The decision to increase the CCyB now would not be onerous for the banks, as their capital ratios were already 2.3-4% above Central Bank requirements. Therefore, increasing the buffer should not curtail their ability to intermediate credit to households and businesses.

Following the discussion, the Governor proposed that the countercyclical capital buffer rate be increased from 2% to 2.5%. The proposal was approved unanimously, and the increase will take effect on 15 March 2024.

**Financial market infrastructure**

One of the Central Bank of Iceland's principal roles is to promote a safe and effective financial system, including domestic and cross-border payment intermediation. Work on strengthening Iceland's financial market infrastructure framework and further enhancing operational security is still ongoing. To this end, the Payment Council has established a task force on trade and service providers' response to a disruption in payment intermediation in Iceland.

Committee members agreed unanimously that it was of vital importance for the Government and Central Bank to place strong emphasis on cybersecurity in Iceland, operational security of telecommunications infrastructure, and the connection between telecommunications infrastructure and the operational security of financial market infrastructure. Information flows and consultation among all stakeholders in this area are of utmost importance and to assess whether the statutory framework for financial market infrastructure needs strengthening.

The FSN received a presentation on the status of the project focusing on an independent domestic retail payment solution. The main objective of an independent domestic retail payment solution is to safeguard national security, with emphasis on the resilience of domestic payment intermediation, and to ensure that the solution is open, secure, effective, and efficient. The Forum for the Future has established a task force entrusted with making recommendations concerning possible cooperation on a domestic payment scheme for account-to-account payments.

The FSN reiterates the importance of establishing an independent domestic retail payment rail and supports the steps taken thus far towards achieving this goal. This work should be expedited as possible and conclusion reached within a year concerning which option to adopt in putting an independent domestic payment solution in place. Statutory framework for financial market infrastructure relating to retail payment intermediation may need to be strengthened and the Central Bank's power to set rules in this area augmented.

At the end of the meeting, the Committee approved the statement for publication on the morning of 15 March 2023.

The following Committee members were in attendance:

Ásgeir Jónsson, Governor and Chair of the Committee

Gunnar Jakobsson, Deputy Governor for Financial Stability

Rannveig Sigurdardóttir, Deputy Governor for Monetary Policy

Unnur Gunnarsdóttir, Deputy Governor for Financial Supervision

Axel Hall, external Committee member

Bryndís Ásbjarnardóttir, external Committee member

Gudmundur Kr. Tómasson, external Committee member

Haukur C. Benediktsson, Director of the Bank's Financial Stability Department; Eggert Th. Thórarinsson, Deputy Director of the Financial Stability Department; Vigdís Ósk Helgadóttir, Head of the Financial Stability Department; and Rannveig Júníusdóttir, Director of the Bank's General Secretariat were present for the entire meeting. In addition, several other Bank staff members attended part of the meeting.

Rósa Björk Sveinsdóttir wrote the minutes.

CENTRAL BANK OF ICELAND

# MINUTES
## FINANCIAL STABILITY COMMITTEE

2023

June
17th meeting
Published 5 July 2023

*The Financial Stability Committee of the Central Bank of Iceland*

# Minutes of the Financial Stability Committee meeting

## June 2023 (17th meeting)

## Published 5 July 2023

The Financial Stability Committee (FSN) of the Central Bank of Iceland takes decisions on the application of the Bank's financial stability policy instruments. Financial stability means that the financial system is equipped to withstand shocks to the economy and financial markets, to mediate credit and payments, and to diversify risks appropriately. The Committee is tasked with assessing the current situation and outlook for the financial system, systemic risk, and financial stability; defining the measures necessary to ensure financial stability; and deciding which entities, infrastructure elements, or markets shall be considered systemically important. When warranted, the FSN may make recommendations to the appropriate Governmental authorities concerning the measures needed to strengthen and preserve financial stability. In general, the Committee publishes the minutes of its meetings within four weeks of the meeting concerned. The minutes include information on the Committee's decisions, the rationale on which they are based, and the assessment of financial stability.

At the meeting of 2, 5, and 6 June 2023, presentations were given on economic developments and prospects and the state of the financial system and payment intermediation infrastructure. The Committee was also given a presentation on the Central Bank of Iceland's roles and responsibilities in ensuring the cybersecurity of the domestic financial market. The Committee discussed the current situation and outlook for financial stability and the principal risks to financial stability, such as economic developments, risks in the operations of financial institutions and the financial system, developments in domestic financial markets, household and corporate debt, the real estate market, the efficacy of borrower-based measures, financial institutions' capital and liquidity position, and the financial cycle. The FSN also received information on the methodology for assessing the financial cycle and cyclical systemic risk, as well as financial indicators. Members were informed of the results of the International Monetary Fund's (IMF) recent appraisal of Iceland's financial system and macroprudential policy.

The FSN decided to keep the countercyclical capital buffer (CCyB) rate unchanged, as in accordance with the Committee's March 2023 decision, the CCyB will increase from 2% to 2.5% on 15 March 2024. The FSN urged lenders to give timely consideration to preventing financial distress among borrowers who could have difficulty covering increased debt service on their mortgage loans as a result of higher interest rates.

The Committee also emphasised the importance of strengthening financial institutions' cyber- and operational security and bolstering the resilience of payment intermediation in Iceland. In this context, the FSN welcomed the steps taken to date towards an independent domestic retail payment intermediation solution.

## Analysis of financial stability

Inflation had subsided in Iceland's main trading partner countries since the FSN's March meeting. Global GDP growth had lost pace but was nevertheless stronger than previously forecast. Inflation had eased in tandem with commodity prices, however, high services price inflation had widely impeded the decline in underlying inflation. Trading partners' central banks had continued to tighten their monetary stance. Volatility had eased in foreign markets after rising somewhat in March 2023, owing to operational difficulties in US and European banks. Global asset prices had risen as volatility subsided, and credit spreads in foreign capital markets had tapered off, although they remained high. Icelandic borrowers' access to foreign market financing had therefore improved.

GDP growth in Iceland measured 7% in Q1/2023 but was weaker than previously anticipated. For 2023 as a whole, GDP growth is expected to be stronger than previously assumed, owing both to robust growth in domestic demand and increased tourism sector activity. The labour market was still very tight, registered unemployment had fallen, and job numbers had risen since the FSN's March meeting. There were signs that strain on domestic production factors had peaked, however. The Central Bank's key interest rate had risen by 2.25 percentage points since the Committee's March meeting. Inflation had receded from its February peak of 10.2% and was expected to keep falling in the coming term, albeit more slowly than previously estimated.

The Committee agreed that households' overall position was good in many respects. Members were of the view that the key risks to financial stability were banking system funding and cybersecurity, while risks associated with the housing market had eased, although they were still in evidence. Higher financing costs could put strain on leveraged households, however, even though households were quite resilient. It was foreseeable that households that had taken fixed-rate non-indexed mortgages would see their debt service rise when their mortgage rates came up for review over the next two years. Poorer financial conditions had adversely affected businesses as well. The FSN urges lenders to consider this increased debt service in a timely manner so as to prevent financial distress among borrowers and, if necessary, restructure borrowers' debt in order to ease the burden.

**Banking system resilience**

The Icelandic financial system is on a solid footing at a time when both financial conditions and the monetary stance have tightened. The systemically important banks are strong, and their capital and liquidity are well above regulatory minima. The banks' liquidity ratio increased between meetings, owing mainly to foreign bond issuance. Their excess liquidity totalled 289 b.kr. at the end of April, and their liquidity ratio in all currencies was 182%, far above the 100% threshold required by the Central Bank. The banks' liquidity was therefore strong, and their high-quality liquid asset holdings were close to their highest ever. The FSN was also given a presentation on liquidity stress tests carried out on the commercial banks, which showed a high level of resilience. The majority of the commercial banks' funding is in the form of deposits, covered bonds, and unsecured marketable bonds. Deposits grew by 4% in Q1/2023, in line with lending growth, and they now account for around half of the banks' funding. Credit spreads on the banks' foreign bond issues had fallen slightly since the FSN's March meeting, and all of the banks had issued large eurobonds since then, in order to refinance upcoming euro-denominated maturities. The banks' refinancing risk had therefore receded, and it emerged that they had enough foreign liquidity to cover all of their 2023 maturities without violating liquidity rules. The systemically important banks must also satisfy minimum requirements for own funds and eligible liabilities (MREL) by issuing unsecured bonds. Their domestic bond issuance has been limited in the recent past, but in Q1/2023 it still exceeded net new lending to households.

The banks’ interest income continues to rise, particularly because of balance sheet expansion and increased returns on liquid assets. Higher interest rates, credit growth, and very low impairment have strengthened the banks’ operating performance in the recent term. Their return on equity was 12.5% in Q1/2023, as compared with 8.9% a year earlier. Their combined capital ratio was 24.0% at the end of Q1/2023, after rising by 0.3 percentage points during the year. After adjusting for the forthcoming increase in the CCyB to 2.5%, already decided by the FSN, the banks’ capital ratios are 2.0-4.2% above the overall required ratio.

Household arrears are still low, and facility-level non-performing loan (NPL) ratio for household loans was 0.75% at the end of Q1. The banks have seen a slight increase in frozen loans to households in recent months, however. The NPL ratio on the banks’ corporate loans declined in Q1, to 2.1%. It fell in all sectors apart from the hospitality industry, where it rose marginally. Business insolvencies have increased somewhat in 2023 but remained close to the historical average.

**Private sector debt**

New mortgage lending had declined considerably, while retirement of non-indexed variable-rate mortgages from deposit institutions increased marginally at the same time. Households therefore appeared to have begun restructuring their mortgage debt to a degree, possibly to lower debt service. The share of indexed mortgages in new lending was virtually unchanged from the last meeting, after having risen somewhat over the months beforehand. Slightly less than half of new mortgages issued since the Committee’s last meeting were indexed. Nominal growth in household debt eased to 8.5% in Q1/2023. Real growth in household debt was negative by 1.3% in March 2023, however, its most negative in any single month since September 2016. The household debt-to-GDP ratio had fallen significantly in the recent term, whereas the debt-to-disposable income ratio had held stable. Both ratios were historically low, however, and below those in, for instance, the Nordic region.

In general, households’ mortgage debt burden had continued to increase alongside rising interest rates. Non-indexed rates on household mortgages averaged 9.3% in May and had risen by 5.5 percentage points since May 2021, when the Central Bank began its monetary tightening phase. As a share of estimated disposable income, however, most households’ debt service burden had risen only modestly. The share of households whose debt service burden exceeded 35% of their disposable income was estimated to have risen from 9% in January to 10.9% in April, assuming that disposable income rose in line with the general wage index (loans taken after 1 January 2020). One reason debt service had not risen above 35% of disposable income for a larger share of households was that a fourth of household mortgages were non-indexed loans with interest rates fixed for three to five years. In addition, nearly half of household mortgage debt was indexed, and the debt service burden had risen much more slowly on these loans than on non-indexed variable-rate loans.

Low unemployment, wage growth, and moderate debt levels among most Icelandic households enable households to withstand increased debt service and worsening financial conditions. The available data indicate that households are generally well positioned. Arrears were limited, and real disposable income had risen steeply since 2010.

Year-on-year growth in corporate debt had peaked in late 2022 at 10%, its strongest since 2019. It eased slightly in Q1, and the corporate debt-to-GDP ratio had fallen quarter-on-quarter to a historically low 77.5%. Corporate debt to domestic banks is rising in real terms, while foreign debt and bond issuance have contracted. Banking system credit growth has been strongest in lending to the construction sector, owing both to new loans and reduced loan retirement as a result of slower sales of new buildings. The results of the Central Bank's lending survey, carried out in early April among the four commercial banks, suggest that both supply and demand for corporate loans could ease in coming months.

Corporate arrears are still on the wane despite higher costs due to inflation, wage rises, and higher interest rates.

**Asset prices**

Housing market activity has been on the decline since mid-2022. Market turnover shrank, and the number of purchase contracts fell by a fourth year-on-year in the first four months of 2023, to a low not seen since the first four months of 2014. The number of properties for sale had increased and the average time-to-sale had grown significantly longer. In April, for instance, it took nearly six months to sell a home, whereas in May 2022 the average time-to-sale had bottomed out at one month. The share of first-time buyers had fallen and was close to its long-term average. Twelve-month house price inflation in greater Reykjavík measured 8.6% in nominal terms in April, which meant that real prices fell by 1.1%. After having fallen month-on-month for three months, house prices started rising again in February. It emerged that this was surprising in view of the slower activity in the housing market, perhaps indicating that the shift was temporary. The ratio of house prices to fundamentals such as disposable income, building costs, and rent prices had fallen from the 2022 peak but had been unchanged in recent months. The house price index measured 11% above trend in April 2023, after peaking at 18% above trend in June 2022. The FSN was of the view that the combination of borrower-based measures and interest rate hikes had kept prices from deviating even more from fundamentals. It emerged that the Housing and Construction Authority had forecast that some 2,800 new homes would be built in 2023 and again in 2024, but that new construction would ease in 2025. The FSN was of the view that the combination of borrower-based measures and interest rate hikes had kept prices from deviating even more from fundamentals. Tension in the real estate market had clearly receded, and real prices could be expected to keep falling in the coming term; however, because demand was strong and households well positioned in other respects, there was no risk of a steep drop in nominal prices.

The commercial real estate (CRE) price index, which measures prices in the greater Reykjavík area, continued to rise in Q1, to a year-on-year rate of 14.4%. The index was at a historical high and was just over 20% above its estimated long-term trend. The large CRE firms' operations were strong in Q1/2023. Occupancy rates are high and returns on investment assets slightly higher than in Q1/2022. The CRE firms' financing costs have increased, however, and their cash flow ratios have fallen. A comparison of the companies with their foreign counterparts suggests that the ratio of investment properties available for leasing is relatively low and the return on investment properties relatively high. On the other hand, the Icelandic companies are more heavily leveraged than comparable firms abroad, and their financing costs are higher.

Listed companies' share prices had fallen between FSN meetings, and the Main List index was down about 7% year-to-date. Yields on short-term nominal Treasury bonds had risen since the FSN's last meeting, in line with the increase in the policy rate, while long-term yields had fallen marginally.

**Exchange rate of the króna and international reserves**

The króna had appreciated since the FSN's March meeting and was up by a total of 2.1% year-to-date. A wider interest rate differential with abroad and a narrower current account deficit are considered to have had the greatest impact on the trend. Forward positions with the króna had grown, and inflows for foreign investment in Iceland had increased with FTSE Russell's upgrade of Iceland to the emerging secondary market category, but trading in Treasury bonds had been limited. Furthermore, the pension funds bought more foreign currency in the first four months of 2023 than over the same period in 2022. The systemically important banks' foreign exchange balance had been broadly unchanged between meetings and was close to equilibrium; i.e., the banks' foreign-denominated assets nearly equalled their foreign-denominated liabilities.

The international reserves had shrunk in 2023 to date, mainly because of the appreciation of the króna. In Q2/2023 they measured 117% of the IMF's reserve adequacy metric, down from 124% at the end of 2022.

**The financial cycle and cyclical systemic risk**

A composite measure of financial cycles indicated that the cycle was still in an upward phase in Q1/2023 and that cyclical systemic risk was at an average level. The debt cycle was still in a relatively low position consistent with moderate household and corporate debt levels. The upward cycle was estimated to be fastest and the position highest in the housing cycle, which may seem paradoxical, as house price inflation has slowed markedly in the past year. The mismatch between the housing cycle and recent months' developments in house prices is due to the indicator's emphasis on medium-long cycles and its relative insensitivity to short-term developments.

The FSN was given a presentation on a new indicator that measures the financial cycle position on a monthly basis. The financial cycle indicator can be useful in forecasting economic activity in the near future and can thereby support analysis of how monetary policy makes an impact on the economy by affecting financial conditions. Furthermore, it can support assessments of the macroprudential stance and cyclical systemic risk. The indicator had fallen steeply in recent months, owing mainly to higher interest rates, reduced real estate market activity, and a weaker króna. This suggests that financial conditions had moved from being relatively accommodative and stimulative to a more neutral position.

Cyclical systemic risk can be estimated in a variety of ways, and the FSN uses more than one measure. The financial cycle is one such measure that the Committee considers, and another is the domestic composite systemic risk indicator, or d-SRI. The d-SRI indicated that cyclical systemic risk had declined throughout 2022 and was back to its historical average, after having been above average at the beginning of 2022. The main drivers of the decline in Q1/2023 were weaker credit growth, strong GDP growth, and the narrowing of the current account deficit in the previous twelve months. Taken together, indicators of cyclical systemic risk suggest a moderate risk level at present.

**Cybersecurity**

The Committee heard a presentation on cybersecurity. The presentation focused on the Central Bank's role and priorities, as the Bank monitors supervised entities' operational risk, including ensuring that cybersecurity is consistent with the law and Governmental directives. The Bank also oversees the operational framework for systemically important financial market infrastructure, the Central Bank's interbank system, and the Nasdaq CSD SE securities settlement system in Iceland.

Committee members considered it important that the Government and Central Bank place strong emphasis on cybersecurity in Iceland, operational security of telecommunications infrastructure, and the connection between telecommunications infrastructure and the operational security of financial market infrastructure.

**IMF appraisal of Iceland's financial system and macroprudential policy**

The FSN was given a presentation on the results of the IMF's recently concluded financial sector assessment program (FSAP) appraisal of Iceland's financial stability and macroprudential policy. The purpose of the FSAP appraisal was to determine the resilience of the financial system, the quality of the regulatory and supervisory framework, and the country's ability to respond to financial shocks. The Fund's advice following such an appraisal could focus on either microprudential or macroprudential policy, or both. The IMF presented 150 comments directed at the Central Bank or Government ministries, or both, and the FSN heard a presentation on the comments centring on financial stability and macroprudential policy. The comments pertained, among other things, to further data collection, the application of macroprudential tools, stress testing of financial institutions' liquidity and capital, pension funds' lending activities, powers of resolution, cybersecurity, and climate risk. It emerged at the meeting that the IMF's comments would be addressed in a given order of priority and that attempts would be made to respond to the most important of them within a year.

## Financial Stability Committee decisions

**Rules on Maximum Loan-to-Value Ratios for Mortgage Loans to Consumers**

Although a majority of households with mortgages were well positioned, the FSN considered it important to prepare for tighter household financial conditions. It emerged that it could prove more difficult for some households to cover the additional debt service once interest rates that had been fixed until 2024 and 2025 came up for review. These loans totalled some 650 b.kr., or just over a fourth of household mortgage debt. The FSN considered it appropriate to urge lenders to consider this increased debt service in a timely manner so as to prevent financial distress among borrowers. Where necessary, lenders should consider lengthening loan maturities, adopting an annuity format, capping nominal interest rate payments, and offering a range of loan types that offer differing debt service. The Committee was of the view that many borrowers had ample equity and should have considerable flexibility to ensure that their debt service would remain in line with the criteria provided for in the borrower-based measures set by the FSN.

After the presentation and discussions, the Governor proposed amendments to the rules on maximum loan-to-value ratios on consumer mortgages, which entailed that Article 1 be amended so as to remove all doubt that the rules did not apply to those who refinanced existing mortgage debt because of financial distress. The Committee was of the opinion that the amendments were not of a substantive nature but instead represented a clarification of this aspect of the rules. All members voted in favour of the Governor's proposal, and new Rules on Maximum Loan-to-Value Ratios for Consumer Mortgages, no. 550/2023, were issued following the meeting.

**Countercyclical capital buffer**

The main purpose of the countercyclical capital buffer (CCyB) is to enhance financial institutions' resilience against cyclical systemic risk, thereby providing them with the scope to absorb losses and maintain the supply of credit during periods of stress. The CCyB performs an important role when it is necessary to respond to unforeseen events that could jeopardise financial stability; cf. the reduction in the buffer at the beginning of the COVID-19 pandemic. The increase in the buffer to 2.5%, decided in March 2023, creates further scope to lower it in the future, in the event of an economic contraction that could cause a decline in the supply of credit. By law, the CCyB may range from 0% to 2.5%. It may exceed 2.5%, however, if the risk factors underlying the FSN's assessment warrant a higher buffer rate.

Analyses of the level of cyclical systemic risk indicate that it has increased in recent years and is now near its historical average. The main drivers of the increase are the surge in real estate prices since the beginning of the pandemic and the high inflation rate, which affects debt service burdens and repayment capacity.

It also emerged that the increase in the CCyB in March 2023 should not compromise the banks' capacity for lending or for private sector debt restructuring as needed. The banks' interest rate spreads had increased year-on-year, as had their return on equity. The systemically important banks' capital ratios were ample, averaging 24.0% at the end of Q1/2023, and had risen by 0.3 percentage points between years. After adjusting for the forthcoming increase in the CCyB to 2.5%, already decided by the FSN, the banks' capital ratios are 2.0-4.2% above the overall required ratio. Following the discussion, the Governor proposed that the countercyclical capital buffer be held unchanged at 2.5%, and the proposal was approved unanimously.

**Financial market infrastructure**

An element in promoting an effective and secure financial system, including domestic and cross-border payment intermediation, is to collect data on various payment instruments and assess the cost of using them. The Committee was given a presentation of the results of an analysis of the cost of retail payment intermediation, which showed that the cost to households of retail payment intermediation was around 30% higher than, for instance, in Norway.

Work on strengthening Iceland's financial market infrastructure framework and further enhancing operational security is still ongoing. The FSN heard a presentation on the status of the project focusing on the implementation of an independent domestic retail payment solution, which is intended to enhance national security and prioritise the resilience of domestic payment intermediation. A work group representing the Forum for the Future had previously submitted a proposal for an independent retail payment solution that had been presented before the Committee. The proposal entails the development of a joint core infrastructure that provides connections with all of Iceland's deposit institutions and would be open to all providers with the required licences. Furthermore, a work group operating on behalf of the Prime Minister's Office is preparing legislation aimed at providing a stronger legal foundation for an independent domestic retail payment solution.

The FSN is of the opinion that the steps already taken towards an independent domestic retail payment intermediation solution were a move in the right direction towards strengthening financial institutions' cyber- and operational security and enhancing the resilience of payment intermediation in Iceland.

At the end of the meeting, the Committee approved the statement for publication on the morning of 7 June 2023.

The following Committee members were in attendance:

Ásgeir Jónsson, Governor and Chair of the Committee

Gunnar Jakobsson, Deputy Governor for Financial Stability

Rannveig Sigurðardóttir, Deputy Governor for Monetary Policy, Central Bank of Iceland

Björk Sigurgísladóttir, Deputy Governor for Financial Supervision

Axel Hall, external Committee member

Bryndís Ásbjarnardóttir, external Committee member

Guðmundur Kr. Tómasson, external Committee member, approved the Governor's proposal electronically. Gudrún Thorleifsdóttir, Director General at the Ministry of Finance and Economic Affairs, attended the meeting, with the right to address the meeting and present proposals.

Haukur C. Benediktsson, Director of the Financial Stability Department at the Central Bank; Eggert Þ. Þórarinsson, Deputy Director of the Financial Stability Department; and Vigdís Ósk Helgadóttir, Head of Unit in the Financial Stability Department, attended the entire meeting. In addition, several other Bank staff members attended part of the meeting.

Rósa Björk Sveinsdóttir wrote the minutes.

CENTRAL BANK OF ICELAND

# MINUTES

## FINANCIAL STABILITY COMMITTEE

2023

September

18th meeting

Published 1 November 2023

*The Financial Stability Committee of the Central Bank of Iceland*

# Minutes of the Financial Stability Committee meeting

## September 2023 (18th meeting)

## Published 1 November 2023

The Financial Stability Committee (FSN) of the Central Bank of Iceland takes decisions on the application of the Bank's financial stability policy instruments. Financial stability means that the financial system is equipped to withstand shocks to the economy and financial markets, to mediate credit and payments, and to diversify risks appropriately. The Committee is tasked with assessing the current situation and outlook for the financial system, systemic risk, and financial stability; defining the measures necessary to ensure financial stability; and deciding which entities, infrastructure elements, or markets shall be considered systemically important. When warranted, the FSN may make recommendations to the appropriate Governmental authorities concerning the measures needed to strengthen and preserve financial stability. In general, the Committee publishes the minutes of its meetings within four weeks, including information on the Committee's decisions, the rationale on which they are based, and its assessment of financial stability.

At the meeting of 18 and 19 September 2023, presentations were given on economic developments and prospects and the state of the financial system and payment intermediation infrastructure. The Committee discussed the current situation and outlook for financial stability and the principal risks to financial stability, such as economic developments, risks in the operations of financial institutions and the financial system, developments in domestic financial markets, household and corporate debt, the real estate market, the efficacy of borrower-based measures, financial institutions' capital and liquidity position, and the financial cycle. The FSN was also given a presentation on the methodology for designating systemically important financial institutions (D-SIB) and a presentation on the results of the annual stress test on the D-SIBs.

The FSN decided to keep the countercyclical capital buffer (CCyB) rate unchanged. In accordance with the Committee's March 2023 decision, the CCyB will increase from 2% to 2.5% on 15 March 2024. The FSN also urged lenders to give consideration to increased debt service. Most borrowers had ample equity, which should provide scope to adjust loan payments to match debt service capacity and simultaneously ensure that it remains in line with the criteria provided for in the borrower-based measures set by the FSN. The Committee also urged borrowers to avert potential financial distress by seeking prompt assistance from their lenders if they expect their debt service burden to become onerous.

The Committee also emphasised the necessity of strengthening financial institutions' cyber- and operational security and bolstering the resilience of payment intermediation in Iceland. In this context, the FSN considered the steps taken towards an independent domestic retail payment intermediation solution a positive move and agreed with Government proposals to expand the Central Bank's authority in this area.

## Analysis of financial stability

Trading partner inflation had continued to ease since the FSN's June meeting but remained well above inflation targets. Trading partners' central banks had therefore continued to tighten their monetary stance. This had affected asset prices and global equity prices had therefore fallen. Inflation had tapered off in Iceland as well but measured 7.7% in August and was therefore far above the 2.5% target. The Central Bank's key interest rate had been raised by 0.5 percentage points since the Committee's June meeting.

The FSN agreed that the status of financial stability in Iceland was good on the whole despite high inflation and interest rates. The Committee considered cybersecurity one of the main risks to financial stability at present, although members were also of the view that risks associated with corporate debt and the commercial real estate market had increased. Most indicators implied that demand pressures in the economy would subside gradually but steadily. Risks associated with the residential property market had receded, but members were nevertheless somewhat concerned about household debt. Further ahead, however, rapidly rising financing costs could put strain on leveraged households, although households were quite resilient overall. In addition, poorer financial conditions had adversely affected businesses. The FSN considered it appropriate to urge lenders to consider increased debt service in a timely manner so as to prevent financial distress among borrowers and, if necessary, restructure borrowers' debt in order to ease the burden.

**Banking system resilience**

The Icelandic financial system is on a solid footing. The systemically important banks' capital and liquidity are strong. The banks' foreign refinancing risk has decreased with bond issues in recent months. Their foreign bond issuance had boosted their liquidity ratio between meetings, and their excess liquidity totalled 334 b.kr. at the end of July. Their liquidity ratio in all currencies had risen 22 percentage points between meetings, to 204%, well above the 100% required by the Central Bank. At that time, the liquidity ratio in foreign currencies was 429%, whereas the ratio in Icelandic krónur was 114%. The FSN was also given a presentation on the liquidity stress test carried out on the commercial banks, which showed a high level of resilience. The majority of the commercial banks' funding is in the form of deposits, covered bonds, and unsecured marketable bonds. In Q2/2023, deposits grew quarter-on-quarter by 5%, or 135 b.kr., and now constitute about half of the banks' funding. Household deposits rose the most, although there was a noticeable increase in large companies' deposits; however, deposits owned by pension funds and customers in the financial market declined. The banks' domestic funding comes primarily from deposits.

Credit spreads on the banks' foreign bond issues had fallen markedly since the June meeting and were broadly back to the levels seen at the beginning of the pandemic. This decline erased the surges from late 2022 and March 2023, the latter of which came in the wake of market uncertainty associated with banking sector turmoil in the US and Europe. The D-SIBs had all issued unsecured eurobonds since the last FSN meeting in order to refinance upcoming euro-denominated maturities. The banks' refinancing risk had therefore receded between meetings, and it emerged that they had enough foreign liquidity to cover all of their 2023 and 2024 maturities without breaking liquidity rules. Domestic bond issuance has been limited and has mainly taken the form of covered bonds, which exceeded net new lending to households in H1/2023.

The banks' interest income continues to rise, particularly because of balance sheet expansion and increased returns on liquid assets. Higher interest rates, credit growth, and low impairment rates have strengthened the D-SIBs' operating performance in the recent term. The banks' interest rate spreads have widened, particularly because of increased interest income from liquid assets; i.e., Central Bank deposits and Treasury bonds. Their return on equity was 12% in H1/2023, as opposed to 10% in H1/2022, when it was affected somewhat by Arion Bank's sale of Valitor. Their combined capital ratio was 24.2% at the end of June, after rising by 0.5 percentage points since the turn of the year. After adjusting for the forthcoming increase in the CCyB to 2.5%, already decided by the FSN, and next year's dividend payments, the banks' capital ratios are 3.5 - 5.2% above the overall required ratio. Their leverage ratio was unchanged year-to-date, measuring 12.9% at the end of Q2. The D-SIBs' minimum required own funds and eligible liabilities (MREL) as determined by the Central Bank ranged between 30.5% and 32.4% of their risk base as of end-June 2023. At the same time, their MREL funding ranged between 35.5% and 42% of the risk base.

Household arrears were still limited, and the non-performing loan ratio measured 0.8% at the end of June. A marginal rise in frozen bank loans to households had been detected in recent months, however, partly because individuals had taken increased advantage of deferred payment measures offered by the banks (for instance, due to childbirth leave). The D-SIBs' corporate non-performing loan ratio increased slightly in Q2, to 2.3%. It fell in all sectors apart from agriculture and fishing, manufacturing, and hospitality, where it rose marginally. The position of most borrowers that needed support during the pandemic has improved significantly, and impairment of loans to companies in the tourism sector has decreased. At the end of June, 3.8% of loans were classified as forborne and performing, about half the ratio seen at the turn of the year.

The results of the Central Bank's annual stress test of the systemically important banks showed that the banks were resilient and well equipped to withstand a severe stress scenario while continuing to intermediate credit to households and businesses.

**Private sector debt**

At the end of July, household debt had grown by 6.8% year-on-year in nominal terms but had declined by 0.8% in real terms. The banks' mortgage lending growth has eased, whereas pension fund lending has increased slightly. Households have increasingly sought out indexed mortgage loans, which accounted for 47.4% of the outstanding mortgage stock as of end-July, up from 44.3% at the end of 2022. The household debt-to-GDP ratio had fallen to 75.6% in Q2/2023. The ratio of household debt to disposable income had fallen as well, to 150.6%. Both ratios were low in historical context and lower than, for instance, in the Nordic countries.

Higher interest rates had increased debt service burdens, particularly for borrowers carrying non-indexed variable-rate loans. The fixed-rate clauses that have protected some borrowers against rising debt service are beginning to expire. The stock of loans subjected to interest rate reviews in August through December 2023 totals 1.3% of GDP (53 b.kr.). This amount is set to keep rising until H1/2025. Households appear quite resilient, however. Arrears were still limited and had increased only slightly since the last meeting, and there had been no increase in forborne loans. Unemployment was low and real wages high. There were signs that households were scaling down consumption and tapping into their savings. There are indications that many households have sought the available measures to lower debt service burdens, and data on net new household lending show that households are increasingly refinancing non-indexed debt with indexed loans in order to lower debt service. An analysis of the distribution of debt service-to-income ratios suggests that risk associated with debt service is on the rise. In July, 12.6% of borrowers had seen their monthly debt service increase by more than 100,000 kr. per month from the time of borrowing, up from 4.5% at the beginning of the year. This has been offset by pay rises, however.

Year-on-year growth in corporate debt had been significant recently, measuring 10% in nominal terms at the end of Q2/2023, its highest since 2019. It rose slightly between quarters, and the corporate debt-to-GDP ratio had risen to 77.5%, which is nevertheless historically low. Corporate debt owed to domestic banks had risen in real terms, while bond issuance had contracted. Banking system credit growth was strongest in lending to the construction sector, owing both to new loans and to reduced loan retirement as a result of slower sales of new buildings. Corporate demand for credit had therefore been considerable during the quarters prior to the FSN meeting in spite of rising interest rates; however, the first signs of a downturn in demand were coming to the fore. The four commercial banks' responses to the Central Bank's August lending survey suggested that the supply of credit to companies had shrunk. Indexed loans had been prominent in new corporate lending in recent months. This trend is due in large part, however, to a few large loans to real estate firms and construction companies. Interest rate hikes had strongly affected debt service on corporate loans, the majority of which were non-indexed variable-rate loans. Furthermore, cost increases due to wage developments and rising input prices had negatively affected companies.

Corporate arrears had increased by 0.1 percentage points quarter-on-quarter, and the D-SIBs' corporate non-performing loan ratio was 2.2% at the end of Q2. The ratio was highest in the hospitality industry, at 6%.

**Asset prices**

Housing market activity started to ease in mid-2022. Market turnover had shrunk, and the number of purchase contracts fell by a fifth year-on-year in the first seven months of 2023, to a low not seen since the first seven months of 2014. The number of homes for sale had risen, and the supply of new construction had risen significantly. The average time-to-sale had grown even longer since the FSN's June meeting. The share of newly built homes in purchase contracts had fallen somewhat year-on-year in Q3/2023. In addition, the share of first-time buyers had risen to 32%, its highest in two years. Twelve-month house price inflation in greater Reykjavík measured 0.8% in nominal terms in July, which meant that real prices fell by 6.3%. The ratio of house prices to fundamentals such as disposable income, building costs, and rent prices had fallen from the 2022 peak but remained high in historical context. It emerged that the Housing and Construction Authority had forecast that some 2,850 new homes would be built in 2023 and again in 2024, about the same as in 2022, but that new construction would ease in 2025. Tension in the real estate market had clearly receded, and real prices could be expected to keep falling in the coming term; however, because demand was strong and households well positioned in other respects, there was no risk of a steep drop in nominal prices, all else being equal. The number of employees in the construction industry had risen strongly in the recent term, and the number of job vacancies in the sector was still high in Q2. Furthermore, construction sector debt had increased by 70 b.kr. year-on-year in July. Sales of newly constructed homes had slowed, causing repayment of development loans to lose pace as well.

Turnover in registered commercial property transactions in greater Reykjavík has fallen significantly from the high point seen in 2022. The year-on-year rise in the index of real commercial real estate (CRE) prices in greater Reykjavík lost pace somewhat in Q2, measuring 4.1%. Nevertheless, the index was at a historical high and was just over 15% above its estimated long-term trend. Growth in the stock of fully finished commercial property remains sluggish, at 1% over the first seven months of 2023, down from 1.6% in 2022. There has been some increase in commercial property under construction, however. The large CRE firms – Eik, Reginn, and Reitir – had a strong operating performance in H1/2023. Leasing income had increased in real terms, and returns on investment assets had improved. The companies revised the value of their investment assets upwards during the period, particularly in

Q2, which weighed heavily in their positive performance for the period. Nevertheless, the companies' financing costs, which consist in large part of indexation component on indexed loans, have increased between years.

Listed companies' share prices had fallen between FSN meetings, and the Main List index was down about 7% year-on-year. Yields on short-term nominal Treasury bonds had risen since the FSN's last meeting, in line with the increase in the policy rate, and the breakeven inflation rate in the domestic bond market had fallen.

**Exchange rate of the króna and international reserves**

The króna had appreciated since the FSN's June meeting and was up by a total of 5% year-to-date. Interbank market turnover had declined somewhat, and forward positions with the króna had increased, suggesting expectations of an appreciation this summer, due partly to a buoyant tourist season and a foreign company's acquisition of Icelandic biotech firm Kerecis for 175 b.kr. (4.3% of GDP). Furthermore, Iceland's current account deficit narrowed to 0.2% of GDP in H1, from 4.1% in H1/2022. The year-on-year turnaround was due mainly to increased net factor income due to changes in the operating performance of foreign-owned Icelandic companies in the pharmaceuticals and aluminium sectors. In addition, the pension funds bought foreign currency for 68 b.kr. over the first eight months of the year. The D-SIBs' foreign exchange balance had increased between meetings and was positive; i.e., the banks' foreign-denominated assets exceeded their foreign-denominated liabilities.

The international reserves had declined between meetings, mainly because of the appreciation of the króna. At the end of Q2/2023, they measured 113% of the IMF's reserve adequacy metric, down from 124% at the end of 2022. The reserves were equivalent to 139% of short-term liabilities and 19% of GDP.

**The financial cycle and cyclical systemic risk**

Cyclical systemic risk can be estimated in a variety of ways, and the FSN uses more than one measure. A composite measure of financial cycles indicated that the cycle was still in an upward phase in Q2/2023, as were all of its sub-cycles. Financial cycle estimates and actual economic developments have begun to diverge recently, however. For example, real house prices have declined four quarters in a row, the household debt-to-GDP ratio fell by 22 percentage points from year-end 2020 through Q2/2023, and real private sector debt has held unchanged. This could indicate that the financial cycle is at a turning point or, at least, has stopped rising.

The financial conditions index had declined in recent months, primarily because of rising interest rates, reduced real estate market activity, and a lower exchange rate; however, it did not indicate that financial conditions were unusually tight in historical terms. The indicator is sensitive to the treatment of spreads between long- and short-term Treasury bond rates. A new version of the indicator was presented, showing that financial conditions had shifted from being relatively weak and expansionary in mid-2022 to being at their tightest in over a decade by mid-2023.

The financial cycle is one such measure that the Committee considers, and another is the domestic composite systemic risk indicator, or d-SRI. The d-SRI suggested that cyclical systemic risk had receded continuously for a year and a half. The majority of the increase from 2019 through end-2021 had reversed, and the indicator was therefore broadly back to its year-end 2020 level. Pulling in the other direction were, on the one hand, the increase in household debt service relative to disposable income, and on the other hand, the house price index, which was still high relative to the general wage index.

Taken together, indicators of cyclical systemic risk suggested a moderate risk level at present and an overall decline in systemic risk.

**Cybersecurity**

The Committee heard a presentation on cybersecurity. International institutions' forecasts indicate that operational risk will increase in coming years, particularly in connection with cyberthreats and payment intermediation. The Central Bank has begun working with the Ministry of Finance and Economic Affairs on improvements to cybersecurity and operational resilience in the financial system. Legislation on operational security and contingency preparations in payment intermediation has been strengthened in much of the Nordic region. The FSN deemed it important to prepare for comparable statutory amendments in Iceland.

The Committee considered it vital to continue strengthening financial institutions' cyber- and operational security and to bolster the resilience of payment intermediation in Iceland.

## Financial Stability Committee decisions

**Countercyclical capital buffer**

The main purpose of the countercyclical capital buffer (CCyB) is to enhance financial institutions' resilience against cyclical systemic risk, thereby providing them with the scope to absorb losses and maintain the supply of credit during periods of stress. By law, the CCyB may range from 0% to 2.5%. It may exceed 2.5%, however, if the risk factors underlying the FSN's assessment warrant a higher buffer rate. Tighter borrower-based measures and the increase in the countercyclical capital buffer have bolstered the financial system's resilience against housing market corrections and tighter financial conditions. The FSN discussed the options available to households that cannot cover their mortgage debt service. Most households have considerable scope to lower their debt service; for instance, by lengthening loan maturities, refinancing supplemental loans, switching to an annuity format, or taking indexed loans to refinance non-indexed debt. Because of exemptions provided for in legislation on mortgage lending, rules on maximum loan-to-value ratios, and rules on maximum debt service-to-income ratios, borrower-based measures do not affect households' debt restructuring or refinancing options. The Committee also discussed the potential impact of household debt restructuring on the banks' capital requirements, noting that the number of forborne loans could increase, particularly if the economic outlook deteriorates more than is currently anticipated and unemployment rises higher than assumed. The increase in the buffer to 2.5%, decided in March 2023, created further scope to lower it in the future, in the event of an economic contraction that could cause a decline in the supply of credit.

Analysis of cyclical systemic risk suggested that risk was moderate at present and was on the decline, particularly because growth in private sector debt had not kept pace with GDP growth. The D-SIBs' capital ratios were ample and arrears limited. The banks were financially sound and their liquidity ratios strong, and they had recently refinanced their foreign-denominated debt, thereby reducing their refinancing risk. Following the discussion, the Governor proposed that the countercyclical capital buffer be held unchanged at 2.5%, and the proposal was approved unanimously.

**Systemically important financial institutions**

Once a year, the FSN reviews its designation of systemically important financial institutions and the O-SII buffer. The European Banking Authority's (EBA) methodology for the identification of systemically important financial institutions was presented to the Committee, and at its December 2023 meeting, the Committee will determine the O-SII buffer and decide which financial institutions should be designated as systemically important.

**Financial market infrastructure**

One of the Central Bank of Iceland's legally mandated objectives is to promote an active and secure financial system, including domestic and cross-border payment intermediation. The Committee was updated on the implementation of an independent domestic payment solution, which will greatly enhance the security of domestic payment intermediation. On the one hand, the Bank's Strategic Forum (is: *Framtíðarvettvangurinn*) is working on analysing and preparing recommendations on which solution should be selected, and on the other, Government authorities are preparing amendments to the Act on the Central Bank of Iceland, with the aim of expanding the Bank's power to set rules on payment intermediation and financial market infrastructure. The FSN also heard a presentation on cash, as cash payments at points of sale are continually declining. The Committee also discussed the fact that Icelandic merchants are not required to accept banknotes and coin.

The FSN considers the steps taken towards an independent domestic retail payment intermediation solution a positive move from the standpoint of security and efficiency and agrees with Government proposals to expand the Central Bank's authority in this area.

At the end of the meeting, the Committee approved a statement for publication on the morning of 20 September 2023.

The following Committee members were in attendance:

Ásgeir Jónsson, Governor and Chair of the Committee

Gunnar Jakobsson, Deputy Governor for Financial Stability

Rannveig Sigurdardóttir, Deputy Governor for Monetary Policy, Central Bank of Iceland

Björk Sigurgísladóttir, Deputy Governor for Financial Supervision

Axel Hall, external Committee member

Bryndís Ásbjarnardóttir, external Committee member

Gudmundur Kr. Tómasson, external Committee member

Gudrún Thorleifsdóttir, Director General at the Ministry of Finance and Economic Affairs, attended part of the meeting, with the right to address the meeting and present proposals.

Haukur C. Benediktsson, Director of the Financial Stability Department at the Central Bank; Eggert Th. Thórarinsson, Deputy Director of the Financial Stability Department; and Vigdís Ósk Helgadóttir, Head of Unit in the Financial Stability Department, attended the entire meeting. In addition, several other Bank staff members attended part of the meeting.

Rósa Björk Sveinsdóttir wrote the minutes.

CENTRAL BANK OF ICELAND

# MINUTES

## FINANCIAL STABILITY COMMITTEE

2023

December
19th meeting
Published 3 January 2024

*The Financial Stability Committee of the Central Bank of Iceland*

# Minutes of the Financial Stability Committee meeting

December 2023 (19th meeting)
Published: 3 January 2024

The Financial Stability Committee (FSN) of the Central Bank of Iceland takes decisions on the application of the Bank's financial stability policy instruments. Financial stability means that the financial system is equipped to withstand shocks to the economy and financial markets, to mediate credit and payments, and to diversify risks appropriately. The Committee is tasked with assessing the current situation and outlook for the financial system, systemic risk, and financial stability; defining the measures necessary to ensure financial stability; and deciding which entities, infrastructure elements, or markets shall be considered systemically important. When warranted, the FSN may make recommendations to the appropriate Governmental authorities concerning the measures needed to strengthen and preserve financial stability. In general, the Committee publishes the minutes of its meetings within four weeks of the meeting concerned. The minutes include information on the Committee's decisions, the rationale on which they are based, and the assessment of financial stability.

At the meeting of 20 and 28 November and 4-5 December 2023, presentations were given on economic developments and prospects and the state of the financial system and payment intermediation infrastructure. The Committee discussed the current situation and outlook for financial stability and the principal risks to financial stability, such as economic developments, the impact of seismic activity on Reykjanes peninsula on the financial system and the economy more broadly, risks in the operations of financial institutions and the financial system, developments in domestic financial markets, household and corporate debt, the real estate market, the efficacy of borrower-based measures, financial institutions' capital position, and the financial cycle. The Committee also discussed the security, efficiency, and efficacy of financial market infrastructure and its importance for financial system stability. The Committee received information on pension funds' investment strategies, asset composition, and returns, as well as a presentation on matters relating to the funds' impact on financial stability. Furthermore, the Bank's work on the assumptions underlying the 2024 stress tests were presented to the Committee. The FSN heard a presentation on the supervisory review and evaluation process (SREP) of the commercial banks in 2023, the results of which are used to determine their Pillar II-R capital requirements. The Committee also received information on matters pertaining to the Resolution Authority and related statutory amendments.

In the FSN's quarterly review, it decided to keep the countercyclical capital buffer (CCyB) rate unchanged, but, in accordance with the Committee's March 2023 decision, the CCyB will increase from 2% to 2.5% on 16 March 2024.

The Committee supports the bill of legislation on enhanced operational security in payment intermediation that has been distributed via the Government's consultation portal. The Committee deems it important to give comprehensive consideration to the resilience of payment intermediation, adopt an independent domestic payment solution as soon as possible, strengthen financial institutions' cyber- and operational security, and ensure business continuity.

The FSN also completed its annual review of systemically important financial institutions and the capital buffer for systemic importance (O-SII buffer). It confirmed the systemic importance of Arion Bank, Íslandsbanki, and Landsbankinn. The Committee also decided to hold the O-SII buffer unchanged at 2% for all exposures.

## Analysis of financial stability

GDP growth in trading partner countries had lost pace, and inflation had fallen. Underlying inflation had fallen slowly in many economies, however, and it was expected that interest rates would be kept high for longer than previously anticipated. The risk attached to global financial stability, which had increased in 2023, was still considered substantial, and the effects of higher interest rates had come to the fore in, for instance, greater liquidity risk and credit risk faced by financial institutions. Credit spreads in global financial markets had inched upwards after falling steeply during the summer. The increase appeared to stem mainly from wars and global economic uncertainty, which could weaken households' and businesses' resilience and have a negative impact on the quality of banks' assets. Banks on both sides of the Atlantic had generated sound profits, however, and as a result, their resilience against potential loan losses was still considered good overall.

The FSN agreed that the status of financial stability in Iceland was good on the whole, high inflation and interest rates notwithstanding. Demand pressures in the economy were likely to subside gradually but reliably. GDP growth had slowed in Q3, and private consumption had contracted by just over 2% between quarters. The FSN was of the view that a protracted period of high interest rates could erode banking system asset quality but that, given the current situation and the most plausible outlook, the risk of such a development remained limited. The main risks to financial stability, in the FSN's view, centred on cyberthreats and risks associated with the residential and commercial real estate markets. FSN members agreed that borrower-based measures had preserved households' debt service capacity and helped to ensure that most households' financial situation was manageable. Arrears were limited and had risen only slightly, despite higher inflation and interest rates and a heavier debt service bur-den.

**Banking system resilience**

In the FSN's opinion, the domestic systemically important banks (D-SIB) are highly resilient. Their capital and liquidity were well above regulatory thresholds. The banks' liquidity had declined between meetings, owing to foreign bond maturities, and was nearly 326 b.kr. above the regulatory minimum at the end of October. The D-SIBs' combined liquidity ratio in all currencies was 176%, well above the 100% minimum required under Central Bank rules. Interest rate spreads on foreign issues declined considerably during the summer but began to rise again in October, in tandem with the rise in global credit spreads. In September, however, terms on the D-SIBs' unsecured eurobond issues were better than in May. It emerged at the meeting that there were no remaining instalments on the banks' foreign bonds for the rest of 2023, whereas year-2024 maturities totalled roughly 120 b.kr. The D-SIBs had enough liquid assets to cover instalments in both local and foreign currency without being in breach of liquidity ratios. As a result, they were well able to tolerate significant outflows of liquid assets. During the year, deposits had increased by 9%, or 229 b.kr. They accounted for about half of the banks' funding, while marketable bonds accounted for another 30%.

The D-SIBs' operations were strong over the first nine months of the year, delivering a combined 60 b.kr. in profit. The return on equity was 11.8%, or 1.4 percentage points more than over the same period in 2022. Net interest income totalled 113 b.kr., an increase of one-fifth year-on-year. Net fees and commissions from financial activities also increased between years in the first nine months of 2023, while other operating income was unchanged year-on-year. The banks' operating expenses in-creased at the same time. The D-SIBs' capital ratios ranged between 23.7% and 24.3% at the end of September, or 3.2-4.1 percentage points above the minimum required by the Central Bank, after adjusting for next year's dividend payments and the CCyB increase set to take effect in March 2024. At the end of Q3, their leverage ratios lay in the 11.8% to 13.5% range, or a combined 12.7%. The D-SIBs' minimum required own funds and eligible liabilities (MREL) as determined by the Central Bank ranged between 29.4% and 31% of their risk base as of end-September 2023. The banks' MREL funding ranged between 37.8% and 41.8% of their risk-weighted assets.

The facility-level non-performing loan (NPL) ratio for household debt was 0.8% at the end of September, while for corporate debt it was 2.4%. Both percentages had increased by 0.1 percentage points year-to-date.

The NPL ratio was highest among companies in the hospitality sector, although it had continued to decline since the FSN's last meeting. The share of loans classified as forborne and per-forming was 3.2% at the end of September, as compared with 7.3% at the end of 2022. The position of firms that had needed forbearance measures due to the pandemic had therefore grown stronger in recent months. On the other hand, high inflation and rising interest rates had added to most borrowers' debt service burden. Rising interest rates and increased financing costs generally have an adverse effect on loan quality.

**Private sector debt**

Nominal growth in household debt has eased since 2021, to 5.8% year-on-year at the end of Q3/2023. Household debt contracted in real terms during the quarter, the real growth rate was negative by 2.1% year-on-year in September. The pandemic-era rise in household debt relative to both GDP and disposable income had reversed more or less in full. Nevertheless, new lending to households had increased in recent months, although it was still below its long-term average. Households had increasingly refinanced non-indexed variable-rate loans with new indexed loans. Indexed loans therefore increased as a share of outstanding mortgage debt, from 43.8% at the beginning of the year to 49.3% at the end of October. Because of rising wages and households' attempts to limit the increase in their debt ser-vice burden despite higher interest rates, the share of households with a debt service-to-income ratio above 35% had held virtually unchanged since the summer and had risen modestly in 2023 to date; i.e., from 10% to 13.3% of households by the end of October, after adjusting for wage developments.

In October, real wages were up 2.8% year-on-year, and there were few indications of increased financial distress among households, although there were signs that some households' resilience was un-der pressure. Private consumption contracted by 1.7% year-on-year in Q3, and seasonally adjusted unemployment had risen. Arrears and other non-performance among households had increased marginally in 2023 to date but were limited in historical context. The FSN discussed developments in households' overdraft loans and noted that deposit institutions' overdraft loan figures also covered payment card debt, including outstanding month-end credit card balances. Overdraft loans according to statistical data move closely in line with card turnover and private consumption, thereby complicating the interpretation of the data. It came to light that, according to interest rate data from the Central Bank, households' overdrafts on deposit accounts had decreased in real terms in 2023.

Real year-on-year growth in corporate debt was negative by 1.1% at the end of Q3. Corporate debt measured 76.8% of GDP, its lowest since 1998. New lending had lost pace, and D-SIB lending to companies had contracted in nominal terms since the FSN´s last meeting. Corporate demand for indexed loans had increased somewhat, particularly loans to construction and real estate companies. Corporate bond issues had subsided between years, while alternative investment fund lending to companies had grown modestly. The results of the Central Bank's lending survey suggested expectations of a further contraction in corporate demand for credit in coming months. Corporate insolvencies had in-creased in number during the year, broadly reaching the pre-pandemic level, but new company registrations had also increased over the same period.

**Asset prices**

The number of property purchase contracts had fallen marginally year-on-year in Q3 but had risen between quarters. The composition of sold assets and of the buyer group had changed somewhat. For instance, the share of newly constructed properties in purchase agreements had declined since 2022, and the share of first-time buyers had risen to 32.5% in Q3, its highest in two years. Participating loans had grown more common after the regulation on them was amended in early July. From August through October, 30 participating loans were granted each month, yet this was only a small share of the nearly 1,000 contracts per month concluded in the real estate market as a whole. Even though the number of homes for sale had kept climbing, property prices had continued to rise. The capital area house price index had risen by an average of 1% per month from August through October. Year-on-year house price inflation measured 2.9% in nominal terms and -4.6% in real terms as of October 2023. Home prices remain high relative to fundamentals such as wages and rent prices. The deviation of house prices from estimated long-term trend was 7.4% in October.

The commercial real estate (CRE) price index, which captures real prices in the capital area, rose by 4% between quarters in Q3, and by 7.7% year-on-year, to a full 17% above its estimated long-term trend. Turn-over in registered CRE contracts has shrunk markedly since 2022 but was very high in historical terms during that year.

Construction market activity still appears strong, and the outlook is for more homes to be put on the market in 2023 than in previous years (excluding 2020). In real terms, construction market turnover held virtually unchanged year-on-year in July and August but had risen steeply until then. Labour demand still appears strong in the construction sector.

Listed share prices had fallen between meetings, with the decline driven by a small number of large companies. The OMXI10 index had fallen by 2.2% since the FSN's last meeting, and by 11% year-to-date. Turnover with equity securities in the stock market had shrunk by 29% year-on-year. Indexed Treasury bond yields had inched upwards in H2/2023, and the breakeven inflation rate in the bond market had fallen relative to H1, mainly on short maturities, but was still well above the Central Bank's inflation target. The spread between long- and short-term nominal bonds had narrowed, perhaps suggesting that market agents expect interest rates to remain high for a shorter period than they anticipated previously.

**Exchange rate of the króna**

The króna had depreciated by 6% since the FSN's late September meeting but was 1% stronger than at the beginning of the year. The Bank had sold currency on 13 November in order to mitigate exchange rate volatility caused by uncertainty stemming from the seismic activity on Reykjanes peninsula. Turn-over in the interbank foreign exchange market had nearly trebled between October and November. The short-term interest rate differential with abroad had widened during the year. In recent months, it had been broadly at the level seen in June 2015, when capital inflows from non-residents began to increase.

The current account showed a surplus of 42 b.kr. (1.4% of GDP) in the first three quarters of 2023 combined, as compared with a deficit of 54 b.kr. (1.9% of GDP) over the same period in 2022. The year-on-year improvement is due largely to the rebound in tourism. Tourist arrival numbers were only slightly fewer in the first ten months of 2023 than over the same period in the record year 2018. On the other hand, the number of overnight stays was greater and revenues from each tourist somewhat larger.

The banks' net forward foreign currency position was positive by 140 b.kr. at the end of October, after declining by 25% since end-June. Capital inflows from non-residents were positive by 33 b.kr. in the first ten months of 2023. Non-residents had bought listed securities and Treasury bonds for about 9 b.kr. more than over the same period in 2022. Furthermore, the pension funds had bought foreign currency for 76 b.kr. in the first ten months of the year, about the same as in 10m/2022. In October and November, however, they had scaled down their foreign currency purchases. The D-SIBs' foreign exchange balance held unchanged between meetings and was in equilibrium; i.e., the banks' foreign-denominated assets equalled their foreign-denominated liabilities.

The outlook is for commercial flight availability to and from Iceland in the first five months of 2024 to be considerably greater than in 2023. Flight bookings declined in the wake of news coverage about seismic activity on Reykjanes peninsula, as was stated in airlines' press releases. Both of Iceland's commercial airlines had recently announced that they had withdrawn their year-2023 earnings projections.

**The financial cycle and cyclical systemic risk**

Cyclical systemic risk can be estimated in a variety of ways, and the FSN uses more than one measure. A composite measure of financial cycles indicated that the cycle was still in an upward phase in Q3/2023. The cycle was still driven by all sub-cycles – i.e., the debt, housing, and funding cycles – but there were signs that the upward movement in the housing cycle had slowed marginally. The real de-cline in house prices in 2023, plus reduced indebtedness in the private sector, could suggest that the financial cycle is either at a turning point or is stagnating. The domestic systemic risk indicator (d-SRI) showed a decline in systemic risk for the seventh quarter in a row, and developments in Q3 were due primarily to positive changes in the current account balance and falling real equity securities prices. Taken together, indicators of cyclical systemic risk suggested a moderate risk level and an overall de-cline in systemic risk.

**Pension funds**

The FSN was given a presentation on developments and prospects for pension fund operations. At the end of Q3, Icelanders' pension savings equalled 7,180 b.kr., or 176% of GDP, and had increased by 4.1% year-to-date for mutual and private pension funds combined. For mutual pension divisions, foreign assets accounted for 37.7% of total assets in Q3, after increasing by 1.2 percentage points since the turn of the year. The pension funds' authorisations for foreign investments were expanded with statutory amendments made this year to the Act on Mandatory Insurance of Pension Rights and on Activities of Pension Funds, no. 129/1997. The funds' investment strategies for 2024 show that they expect to reduce the share of foreign assets by 2.1 percentage points of total assets and increase the weight of Treasury bonds and equities to compensate. The pension funds' flexibility to take risks varies, and their priorities differ as regards investments in foreign assets and Treasury bonds. It emerged that the outlook was for returns from the pension funds' mutual pension fund divisions to be negative in 2023, for the second year in a row. Over the first nine months of 2023, their real returns were estimated to have been negative by around 2%. It emerged that if developments continued in the present vein, some of the pension funds could need to take steps to respond to a deficit in their actuarial position.

The FSN noted that the pension funds are dominant participants in the domestic financial market. Given the size of their asset portfolio relative to the size of the economy, their activities could affect financial stability. The FSN considered it important that the statutory framework for the pension funds should take account of this, and that the requirements made of them in connection with intermediation of credit should be comparable to those made of other financial market entities.

**Stress test for 2024**

The FSN was given a presentation on a draft of the stress scenarios for the Central Bank's 2024 stress test on the systemically important banks. The scenarios are designed based on the key drivers of the banks' earnings and an assessment of systemic risk. The 2024 stress test addresses developments in key variables such as unemployment, wages, GDP growth, inflation, and interest rates. The chain of events is designed so as to assess the banks' resilience under stress over a three-year period, with assumptions based on developments in key asset markets, interest rates, and public and private sec-tor debt.

**Resolvability of systemically important financial institutions**

The purpose of the Act on Resolution of Credit Institutions and Investment Firms is to preserve financial stability and minimise the adverse implications of financial shocks by protecting insured deposits and investors, customers' assets and vital company operations, and minimising the risk that capital contributions from the Treasury will be needed. The Resolution Authority explained the Governor's key decisions in matters relating its activities since the previous year's presentation to the FSN. Resolution plans for the D-SIBs had been completed and approved. At the same time, decisions had been taken on MREL for the three large commercial banks. Furthermore, the Act on Resolution, no. 63/2023, had entered into force after having been passed by Parliament in June 2023. The Act is in-tended to incorporate the EU Bank Recovery and Resolution Directive (BRRD II) into Icelandic law. The aim is that resolution plans for the four savings banks be completed by year-end 2023.

### Decision on commercial banks' minimum capital requirements

The FSN heard a presentation on the assessment of the minimum capital requirements imposed on the commercial banks. The SREP is an important factor in assessing the minimum capital requirement imposed on financial institutions. The results of the SREP produce an estimate of the Pillar II-R capital requirement, and they depend on risk factors relating to capital, liquidity and funding needs, business plan assessments, governance, and internal controls. In the most recent assessment, the capital requirement on all of the systemically important banks declined, whereas it increased for Kvika banki.

## Financial Stability Committee decisions

### Countercyclical capital buffer

The main purpose of the countercyclical capital buffer (CCyB) is to enhance financial institutions' resilience against cyclical systemic risk, thereby providing them with the scope to absorb losses and main-tain the supply of credit during periods of stress. By law, the CCyB may range from 0% to 2.5%. It may exceed 2.5%, however, if the risk factors underlying the FSN's assessment warrant a higher buffer rate. The D-SIBs' capital ratios were ample and arrears limited. The banks' position was sound and their liquidity ratios ample, and their credit risk had declined. GDP growth had slowed, private consumption had contracted for three quarters in a row, and the current account balance had turned positive. Higher interest rates had yet not shown in increased arrears and loan losses. The banks' foreign-denominated funding was on schedule and their refinancing need for the coming twelve months was relatively moderate, and as a result, their refinancing risk was lower than it might be otherwise.

The longer interest rates remained high, the greater the potential impact on the banks. Loan quality could deteriorate and arrears could increase if the economic outlook deteriorated more than was currently envisioned and if unemployment rose higher than currently expected. The increase in the buffer to 2.5%, decided in March 2023 (and to become effective in March 2024), created further scope to lower it in the future, in the event of an economic contraction that could cause a decline in the supply of credit. Following the discussion, the Governor proposed that the countercyclical capital buffer be held unchanged at 2.5%, and the proposal was approved unanimously.

### Borrower-based measures

The FSN discussed the impact of the seismic activity on Reykjanes peninsula on financial stability, and members agreed that based on the scenarios currently deemed likeliest, financial stability would not be threatened. Some borrowers could experience difficulty, however, and their situation could prove highly uncertain. The FSN was also of the view that there was no reason to respond by making changes to borrower-based measures.

### Systemically important financial institutions

The assessment of the systemically important financial institutions, based on European Banking Authority (EBA) methodology, was presented to the FSN. The assessment was based on indicators pertaining to size, importance, complexity, and interconnectedness of financial institutions in Iceland. The importance of individual entities was also examined based on their impact on the financial system.

FSN members agreed that the systemic importance of Arion Bank, Íslandsbanki, and Landsbankinn should be confirmed. The Governor presented a proposal to this effect, and it was approved unanimously. The FSN agreed to continue using EBA methodology to assess the systemic importance of Icelandic financial institutions, as well as using expert opinion based on additional indicators and assessments of the importance of other entities in the financial system, as is provided for in the Central Bank Act and the Act on Financial Undertakings.

**Capital buffer for systemic importance**

The capital buffer for systemic importance (O-SII buffer), activated in 2016, is imposed on financial institutions that, because of their size and the nature of their activities, can have a substantial negative impact on financial stability and the real economy if they are failing or likely to fail. The risk addressed with the O-SII buffer is therefore inelastic. The Governor proposed that the O-SII buffer be held un-changed at 2% on all exposures at the parent company level and on a consolidated basis. The proposal was approved unanimously. The capital buffers on systemically important banks in Iceland equal a combined 9.5%, excluding the planned increase in the CCyB in March 2024.

**Financial market infrastructure**

One of the Central Bank of Iceland's principal roles is to promote a safe and effective financial system, including domestic and cross-border payment intermediation. Work on strengthening Iceland's financial market infrastructure framework is still ongoing. The FSN discussed operational security and contingency plans. It heard a presentation on cash as a last-resort solution in the event of an interruption in electronic payment intermediation. Iceland is facing a decreasing use of cash, and access to cash has declined with reductions in the number of bank branches and ATMs. Many countries in Europe – including the Netherlands and Sweden – have taken steps to address this trend. The FSN discussed security relating to electronic authentication and noted the importance of a joint effort by market entities to resolve the issues that have arisen and to strengthen defences against cyberfraud.

The FSN was given a presentation from Nasdaq CSD SE and the securities depository Verðbréfamiðstöð Íslands hf., which operate Iceland's securities settlement system.

Members welcomed the distribution of a bill of legislation on operational security in payment inter-mediation via the Government's consultation portal and declared their support for the bill. The bill proposes that the Central Bank Act be amended so as to empower the Bank to set rules on operation-al security in payment intermediation, subject to prior approval by the FSN.

As before, the FSN was unanimous in considering it important to give comprehensive consideration to the resilience of payment intermediation, adopt an independent domestic payment solution as soon as possible, strengthen financial institutions' cyber- and operational security, and ensure business continuity.

At the end of the meeting, the Committee approved a statement for publication on the morning of 6 December 2023.

The following Committee members were in attendance:

Ásgeir Jónsson, Governor and Chair of the Committee

Gunnar Jakobsson, Deputy Governor for Financial Stability

Björk Sigurgísladóttir, Deputy Governor for Financial Supervision

Rannveig Sigurdardóttir, Deputy Governor for Monetary Policy, Central Bank of Iceland

Axel Hall, external Committee member

Bryndís Ásbjarnardóttir, external Committee member

Gudmundur Kr. Tómasson, external Committee member

Gudrún Thorleifsdóttir, Director General at the Ministry of Finance and Economic Affairs, attended the meeting, with the right to address the meeting and present proposals.

Haukur C. Benediktsson, Director of the Financial Stability Department at the Central Bank; Eggert Th. Thórarinsson, Deputy Director of the Financial Stability Department; Vigdís Ósk Helgadóttir, Head of Unit in the Financial Stability Department; and Rannveig Júníusdóttir, Director of the General Secretariat, attended the entire meeting. In addition, several other Bank staff members attended part of the meeting.

Rósa Björk Sveinsdóttir wrote the minutes.

# New Central Bank rules on credit institutions' liquidity ratios

3 January 2023

New Rules on Credit Institutions' Liquidity Ratios, no. 1520/2022, took effect on 1 January 2023. At that time, the previous Rules no. 266/2017 on the same topic expired.

The new Rules introduce an 80% minimum liquidity ratio in euros for credit institutions whose euro-denominated liabilities equal 10% or more of their total liabilities. Concurrent with the introduction of the new requirements for liquidity ratios in euros, the 100% liquidity ratio requirement for all foreign currencies combined has been abolished. The minimum 100% liquidity requirement for all currencies combined remains in effect under the new Rules, in accordance with Regulation (EU) 2015/61. In addition, credit institutions are still required to satisfy at least 50% of their liquidity requirement in Icelandic krónur.

Regulation (EU) 2015/61 contains an authorisation to set liquidity requirements for individual currencies that reach a specified threshold; i.e., currencies for which liabilities equal or exceed 5% of the total liabilities of the credit institution concerned. As is noted above, the new Rules introduce an 80% minimum liquidity ratio in euros for credit institutions whose euro-denominated liabilities equal 10% or more of their total liabilities. The aim of setting separate liquidity requirements for specified foreign currencies is to mitigate credit institutions' liquidity risk by ensuring that they always have enough liquid assets in the specified currencies to satisfy their obligations in those currencies under stressed conditions over a specified period of time. It is appropriate to require that credit institutions generally have liquidity to offset liabilities if total liabilities in a given currency exceed a certain percentage of their total liabilities. At this point in time, it is suitable to require that credit institutions have liquidity buffers in those currencies to offset a sizeable proportion of their total liabilities. In this context, it is considered sufficient to set the threshold for liabilities in such currencies at 10% of the credit institution's total liabilities. For Icelandic credit institutions, it is primarily the euro that reaches this threshold.

In setting a suitable liquidity ratio for euros, consideration is given to the importance of giving credit institutions the flexibility to determine the composition of their liquid assets in accordance with the market conditions prevailing at the time in question. Markets that use euros are accessible and active, and in general, it should be possible to acquire high-quality liquid assets denominated in euros at relatively short notice.

It is worth stressing, however, that credit institutions must continue to satisfy the requirements on consistency in currency composition for all currencies exceeding the 5% threshold; cf. Article 8, Paragraph 6 of the aforementioned Regulation (EU) 2015/61.

The text of Rules 1520/2022 can be found here: Rules no. 1520/2022 on the website of the Law and Ministerial Gazette [Stjórnartíðindi]

# Amendments to covered bond legislation and rules

1 March 2023

Act no. 7/2023 amending the Act on Covered Bonds, no. 11/2008, and the Act on Financial Undertakings, no. 161/2002 entered into force today. The Act implements Directive (EU) 2019/2162 on the issue of covered bonds and covered bond public supervision and Regulation (EU) 2019/2160 amending Regulation (EU) 575/2013 (CRR) as regards exposures in the form of covered bonds. The EU instruments are intended to create a homogeneous collective market for covered bonds within Europe.

The main amendments made to the Act on Covered Bonds include the requirement that in order to receive authorisation for covered bond issuance, issuers must have satisfactory policies, systems, and processes in place for approval, amendment, renewal, and refinancing of loans in the collateral portfolio. Issuers must also have the requisite competence and expertise in covered bonds. Issuers must always have enough liquid assets in the cover pool to cover maximum outflows of liquid assets from covered bonds for the next 180 days, requirements concerning issuers' information disclosures to investors and the Central Bank are more detailed than before, and postponement of covered bond payment dates is authorised. The number of violations subject to administrative fines has been increased, as has the maximum fine amount. Moreover, issuers are authorised to market bonds satisfying the conditions laid down in the law as "European Covered Bonds" or "European Covered Bonds (Premium)".

Concurrent with these statutory amendments, the Central Bank has adopted new Rules on Covered Bonds, no. 190/2023, which also took effect today and supersede the previous Rules no. 528/2008 on the same topic. The new Rules mainly reflect the amendments made to the Act on Covered Bonds. For instance, they now include a new provision specifying which assets may be included with liquid assets pursuant to the new Article 6(a) of the Act. There is also a new provision on issuers' disclosures to the Central Bank, in accordance with the new Article 24(a) of the

Act. Furthermore, the provision in the Rules on covered bond-related derivatives has been amended, and there are other minor amendments as well.

Act no. 7/2023 amending the Act on Covered Bonds can be found on the Law and Ministerial Gazette [Stjórnartíðindi] website.

The Rules on Covered Bonds, no. 190/2023, can be found on the Law and Ministerial Gazette [Stjórnartíðindi] website.

# Amendments to the Rules on Price Indexation of Savings and Loans

7 March 2023

The Rules on Price Indexation of Savings and Loans, no. 877/2018, have been amended and reissued as the Rules on Price Indexation of Savings and Loans, no. 218/2023. The new Rules were published on the Law and Ministerial Gazette [Stjórnartíðindi] website today and will take effect on 1 June 2023.

**Repeal of provisions on commitment period for indexed deposits and term of indexed loans**

The amendments provided for in Rules no. 218/2023 primarily entail the repeal of current provisions on the commitment period for indexed deposits and the term of indexed loans. According to Article 2 of the current Rules no. 877/2018, credit institutions are authorised to accept savings for indexation to the consumer price index only if the deposit is subject to a commitment period of 36 months or longer, with further specified exceptions. Furthermore, Article 3, Paragraph 1 of the current Rules states that price indexation of loans is permissible only if the loan term is at least five years, while Paragraph 4 of the same Article provides for an exemption for indexed Treasury securities. In the Central Bank's assessment, the original grounds for such requirements concerning commitment period and term of indexed deposits and loans no longer apply, and the new Central Bank Rules on Price Indexation of Savings and Loans reflect this.

With the entry into effect of Rules no. 218/2023, Article 2 of the current Rules, which covers commitment periods for indexed deposits and specified exemptions from such commitment periods, is repealed. Also repealed are the provisions of Article 3, Paragraphs 1 and 4 of the current Rules, which cover the term of indexed loans and exemptions from minimum maturities for indexed Treasury securities.

**Other amendments**

In addition to the above-described amendments, the wording in Article 3 of the current Rules has been honed and further elaborated; cf. Article 2 of Rules no. 218/2023.

Finally, Article 4 of the current Rules, on the authorisation to index loan agreements to share price indices when they do not represent consumer loans or consumer mortgages, has been deleted, in part because a comparable provision can be found in Article 14, Paragraph 2 of the Act on Interest and Price Indexation, no. 38/2001. The deletion of the provision in the Rules therefore does not entail a restriction on this authorisation.

The text of Rules no. 218/2023 can be found here.

# Increase in countercyclical capital buffer
15 March 2023

New Central Bank Rules on Countercyclical Capital Buffers for Financial Undertakings, no. 256/2023, which were approved at the Financial Stability Committee's (FSN) 14 March 2023 meeting, were published today in the Law and Ministerial Gazette [Stjórnartíðindi]. With the new Rules, the value of the countercyclical capital buffer is increased from 2% to 2.5% of the risk base for financial institutions' domestic exposures. The increase will take effect twelve months from now.

In the FSN's opinion, this increase is conducive to bolstering resilience still further in the face of the risks that have accumulated and could materialise in the coming term.

The countercyclical capital buffer is reviewed on a quarterly basis, and decisions to increase it generally do not take effect until twelve months later.

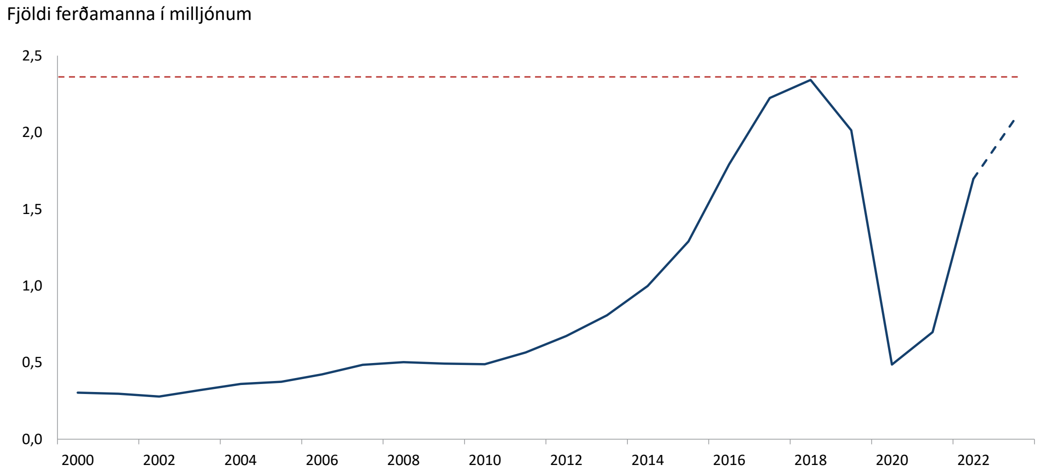
SEÐLABANKI ÍSLANDS

# Gullnáma eða fátæktargildra?

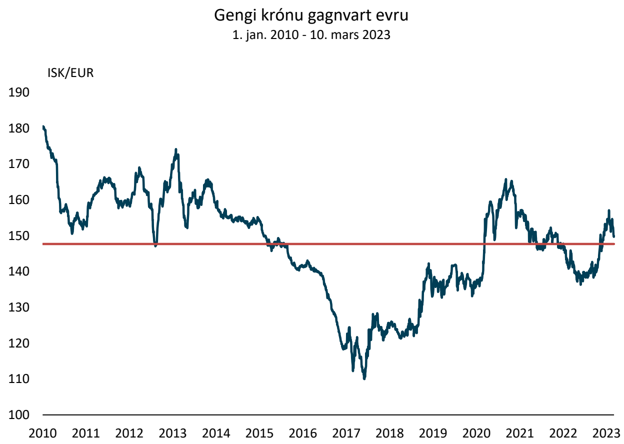
Ásgeir Jónsson
Seðlabankastjóri

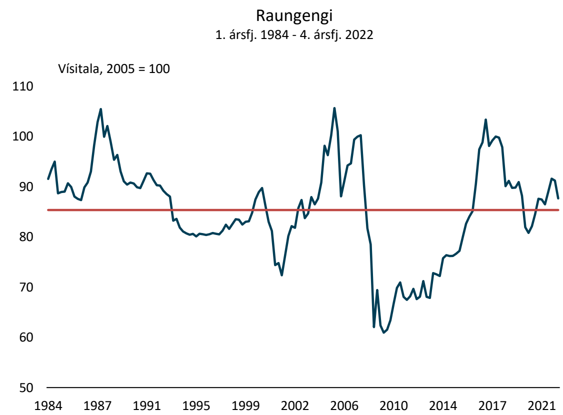
Ráðstefna um þjóðhagslegt mikilvægi ferðaþjónustu
22. mars 2023

## Snarpur viðsnúningur í ferðaþjónustu eftir faraldurinn

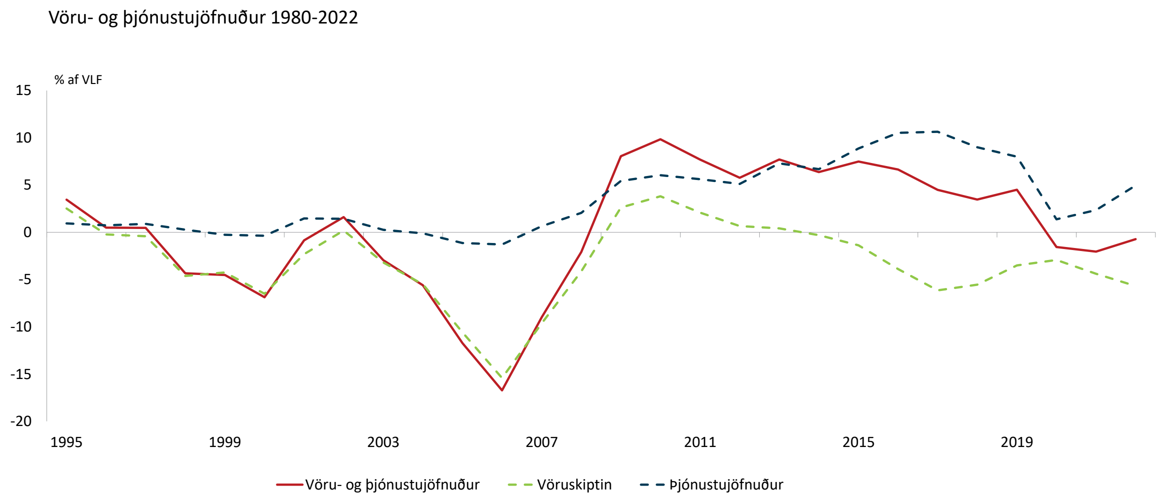


# Krónan er nú verðlögð í samræmi við langtímameðaltal

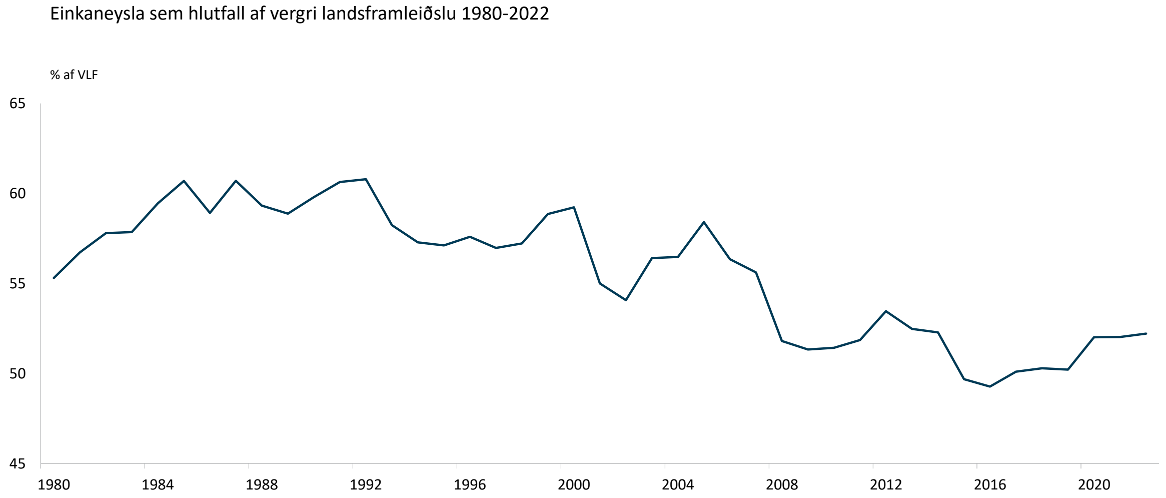


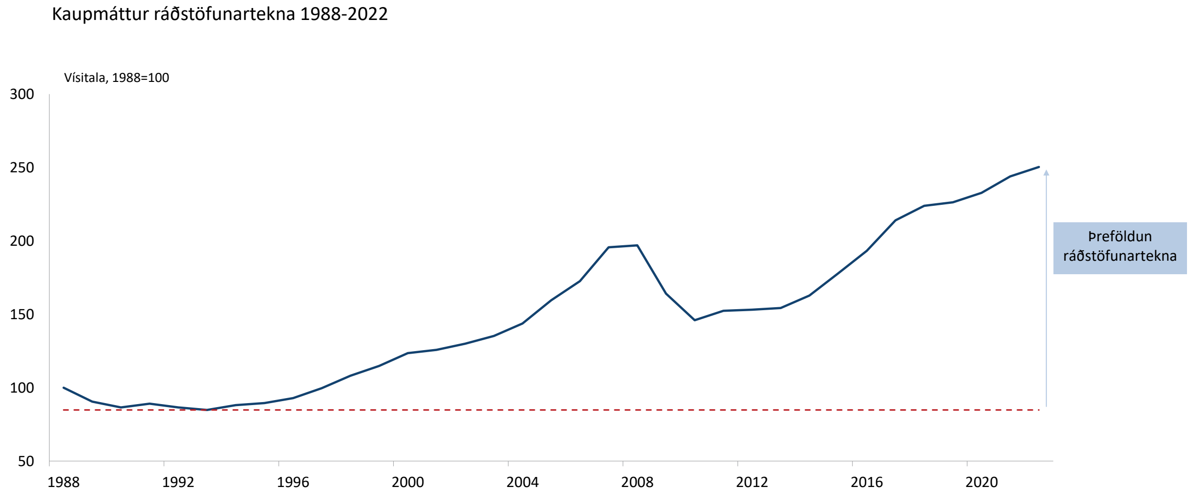

# Þjónustuafgangurinn greiðir fyrir hallann á vöruskiptunum



# Ekki gleyma því að viðskiptaafgangur endurspeglar einnig sparnað í efnahagslífinu …




# Velsæld aukist á sama tíma og viðvarandi halli við útlönd lokast – neyslan ekki tekin að láni



# Þjóðhagslegur ábati ferðamennsku

**1. Bætt framleiðni vinnuafls – með nýjum tegundum starfa:**

- Sköpun nýrra starfa í ferðaþjónustu hefur gefið fólki tækifæri á hærri tekjum en ella hefði orðið, að gefinni menntun, búsetu og starfsþjálfun. Hefur dregið úr staðbundnu atvinnuleysi eða vannýtingu vinnuafls.

**2. Bætt framleiðni einkafjármagns – með stærri markaði:**

- Vöxtur ferðaþjónustu er líkt og fólksfjölgun. Stærri markaður skapar grundvöll fyrir stærri framleiðslueiningar á hinum smáa íslenska markaði – og lækka meðalkostnað í framleiðslu eftir því sem fastur kostnaður dreifist á fleiri einingar.

**3. Bætt framleiðni opinbers fjármagns og innviða – með fleiri notendum:**

- Ferðamenn taka þátt í kostnaði vegna innviða og samgöngumannvirkja, með því að greiða bæði bein og óbein gjöld til íslenska ríkisins með bensíngjaldi, virðisaukaskatti, áfengisgjaldi. Hagræðið kemur einkum fram ef notkun landsmanna sjálfra er fremur lítil og aukinn fjöldi notenda tekur ekki af öðrum.

**4. Sterkari grundvöllur fyrir sérhæfingu og fjölbreytni – fyrir heimafólk**

- Ferðaþjónustan skapar ekki aðeins aukna fjölbreytni í störfum, heldur fjölgar einnig þeim þjónustumöguleikum sem heimamenn hafa sjálfir úr að spila – svo sem hvað varðar framboð flugsæta frá landinu.

# Ferðaþjónustan er einn af vaxtarbroddum atvinnulífs á landsbyggðinni

- **Ferðaþjónustan á landsbyggðinni byggir á notkun staðbundinna aðfanga sem ekki er hægt að flytja úr stað, s.s. náttúrufegurð.**
  - Búseta á landsbyggðinni var upphaflega grundvölluð á hagræði í nýtingu staðbundinna framleiðsluþátta, s.s. nálægð við fiskimið eða landbúnaðarhéruð.
  - Mikill samdráttur hefur átt sér stað í landbúnaði og vélvæðing, markaðsvæðing og kvótastjórnun hefur breytt nýtingu staðbundinna aðfanga í sjávarútvegi.
  - Fiskimið er hægt að sækja frá mörgum stöðum, lönduðum afla er hægt að aka hvert á land sem er og nálægð við flugvelli og útflutningshafnir getur falið í sér meira hagræði en nálægð við miðin.
- **Ferðaþjónustan er einn af vaxtarbroddunum á landsbyggðinni.**
  - Ferðaþjónustan er ein af fáum greinum þar sem landsbyggðin hefur enn raunverulega hlutfallslega yfirburði vegna landfræðilegra aðstæðna og hlýtur þess vegna að tengjast byggðastefnu stjórnvalda með afgerandi hætti.
- **Ferðaþjónusta styður við uppbyggingu á þjónustu úti á landi.**
  - Á síðustu árum hefur verslun og þjónusta víða á landsbyggðinni látið mikið á sjá, m.a. vegna bættra samgangna við Reykjavík – þörf á nýjum viðskiptavinum. Tækifæri til nýsköpunar, sérhæfingar og fjölbreytni.

# Neikvæð áhrif ferðamennsku

**1. Ruðningsáhrif fyrir aðrar atvinnugreinar – ef vöxturinn er of hraður**

- Mjög ör vöxtur ferðaþjónustu á árunum 2014-2018 hafði í för með sér ruðningsáhrif fyrir aðrar greinar – hækkun á gengi krónunnar, spennu á vinnumarkaði og skorti á húsnæði. Hætta á hinni svokölluðu hollensku veiki þar sem ör vöxtur einnar greinar dregur máttinn úr öðrum greinum.

**2. Álag á innlenda innviði – ef vöxturinn er of hraður**

- Vegakerfi, heilbrigðiskerfi, löggæsla og björgunarsveitir komin að þolmörkum – og valda kostnaði fyrir innlenda notendur. Aukið álag kallar á talsverðar fjárfestingar sem íslenskir skattgreiðendur verða að fjármagna.

**3. Ágangur á náttúruna – ef vöxturinn er of hraður**

- Náttúra íslands er ekki ótakmörkuð auðlind, ágangur á hana er talsverður og óafturkræfur ef ekki er vandað til verka. Íslensk náttúra er helsti sölupunktur ferðaþjónustunnar og hana þarf að varðveita. Það er ekki sjálfgefið að við viljum opna aðgengi að öllum náttúruperlum landsins.

**4. Einhæfni atvinnulífs – ef vöxturinn er of hraður**

- Covid-faraldurinn sýndi fram á það hve háð íslenskt efnahagslíf er ferðaþjónustu og jafnframt hve brothætt greinin er. Íslendingar þurfa fleiri stoðir undir atvinnulífið og fjölbreyttari störf.

# Til framtíðar

- Hinn mikli vöxtur í útflutningstekjum ferðaþjónustunnar á árunum 2014-2018 var forsenda fyrir hinni miklu lífskjarasókn á þessum tíma – útgjöld ferðafólks hér gáfu Íslendingum færi á því að kaupa erlendar vörur og þjónustu á hagstæðu verði.
- Ferðaþjónustan er mikilvæg ný stoð fyrir efnahagslífið – endurnýjaður kraftur greinarinnar er mjög mikilvægur nú þegar þörf er á auknum útflutningstekjum.
- En við hve mörgum ferðamönnum getum við raunverulega tekið á móti – án þess að verða fyrir neikvæðum aukaverkunum? Viljum við sjá þær þjóðfélagsbreytingar sem fylgja „massa-túrisma"?
- Forsvarsmenn ferðaþjónustunnar verða að viðurkenna að það eru takmörk fyrir vexti hennar – ef greinin ætlar sér að starfa í sátt við bæði land og þjóð.
- Áherslan þarf að vera á gæði fremur en magn – vöxturinn getur ekki verið hraðari en innviðir landsins þola. Of hraður vöxtur getur einnig leitt til vonbrigða og neikvæðni hjá erlendum gestum – og leitt til bakslags líkt og var farið að gerast hérlendis árið 2018. Og hefur gerst víða erlendis.
- Mögulega er ferðaþjónustan á svipuðum stað og sjávarútvegur við hrun þorskstofnsins 1988 – sem varð tilefni til hagræðingar og síðan mikillar verðmætaaukningar en án þess veiddum tonnum fjölgaði.
- Báðar greinar eiga það sameiginlegt að nýta takmarkaðar auðlindir landsins – og geta báðar skilað þjóðinni góðum ábata ef rétt er á haldið.

SEÐLABANKI ÍSLANDS


Gunnar Jakobsson
Varaseðlabankastjóri fjármálastöðugleika

1. júní 2023

**greiðsla**

er algengasti löggerningur einstaklinga

og undirstaða virkni hagkerfisins og almennrar velferðar

Reiðufé og lögeyrir

Notkun og kostnaður

Þjóðhagsvarúð

Innlend óháð greiðslumiðlun

Peningaþvætti

## Reiðufé

- Samkvæmt íslenskri orðabók er ***reiðufé*** skilgreint sem „lausafé, handbærir peningar“
  - Reiðufé, áður tilskipunarfé, er ávísun á vermæti og einfaldar þannig viðskipti, og gefið út af ríkisvaldi, þ.e. konungsvaldi áður fyrr en framkvæmdavaldi í dag
  - Einnig er að finna viðbótarskilgreiningu um að reiðufé taki einnig til „innistæðu á reikningi hjá lánastofnun eða seðlabanka eða sambærilegar kröfur um endurgreiðslu peninga í hvaða gjaldmiðli sem er
- Það er í samræmi við almenna málnotkun að innistæða á bankareikningi sé talið sem reiðufé, t.d. þegar millifært er af bankareikningi. Mikilvægt er þó að hafa í huga að áa þessu tvennu er grundvallarmunnur í lagalegum skilningi
- Megineinkenni reiðufjár [utan innlánsreikninga] er að það sé órekjanlegt

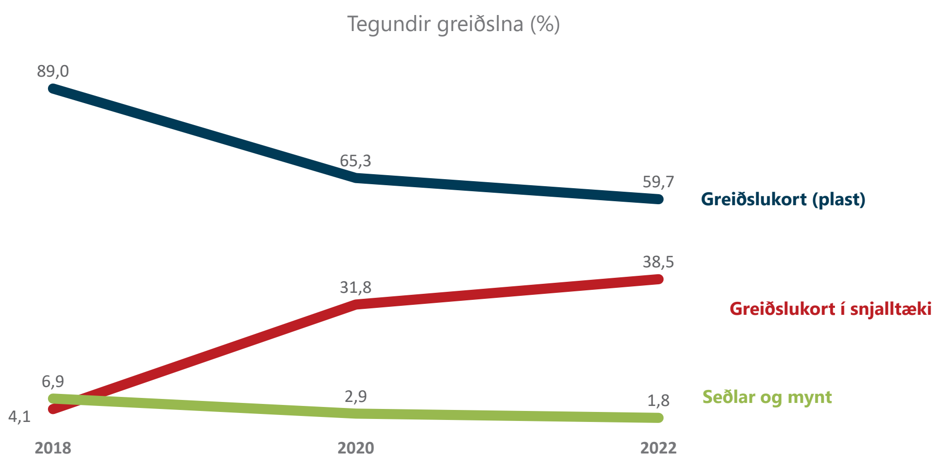
## Lögeyrir

- Samkvæmt 3. gr. laga um gjaldmiðil Íslands skulu seðlar og mynt, útgefin af Seðlabankanum, vera „lögeyrir í allar greiðslur hér á landi með fullu ákvæðisverði“.
  - Með lögeyri er vísað til ***verðmælis*** og ***traustfangs*** og hefur þá þýðingu að marka hvert grundvallarskipulag peningakerfisins sé

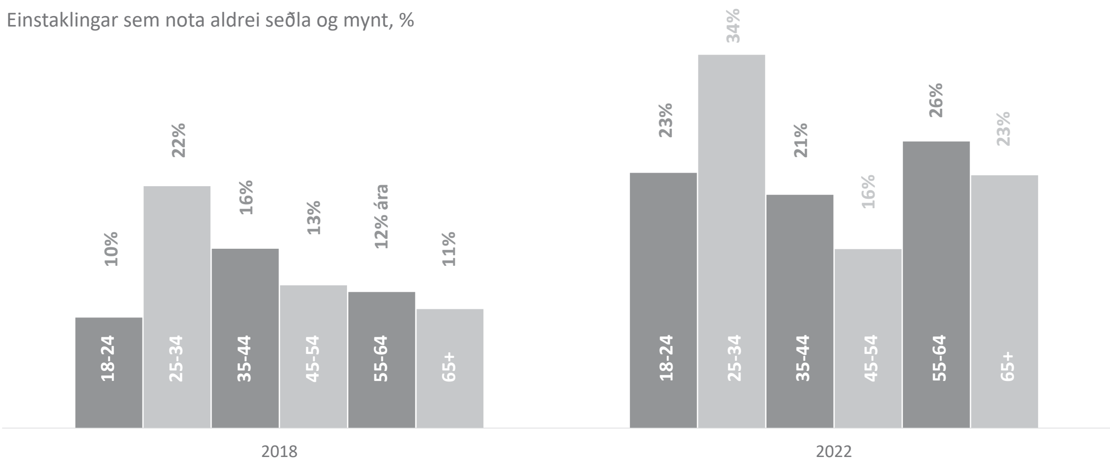
- Sölu- og þjónustuaðilar eru ekki skyldugir til að taka við lögeyri, þ.e. seðlum og mynt
  - Ekkert í lögum takmarkar samningsfrelsi sölu- og þjónustuaðila um það
  - Aftur á móti má segja að Seðlabankanum sé skylt að taka við þeim seðlum og þeirri mynt sem hann gefur út

- Samkvæmt orðabók er forn skýring lögeyris að það sé vaðmálsbútur eigi styttri en sex álnir

## Áfram dregur úr notkun seðla og myntar



# Þeim fjölgar hratt sem nota aldrei seðla og mynt

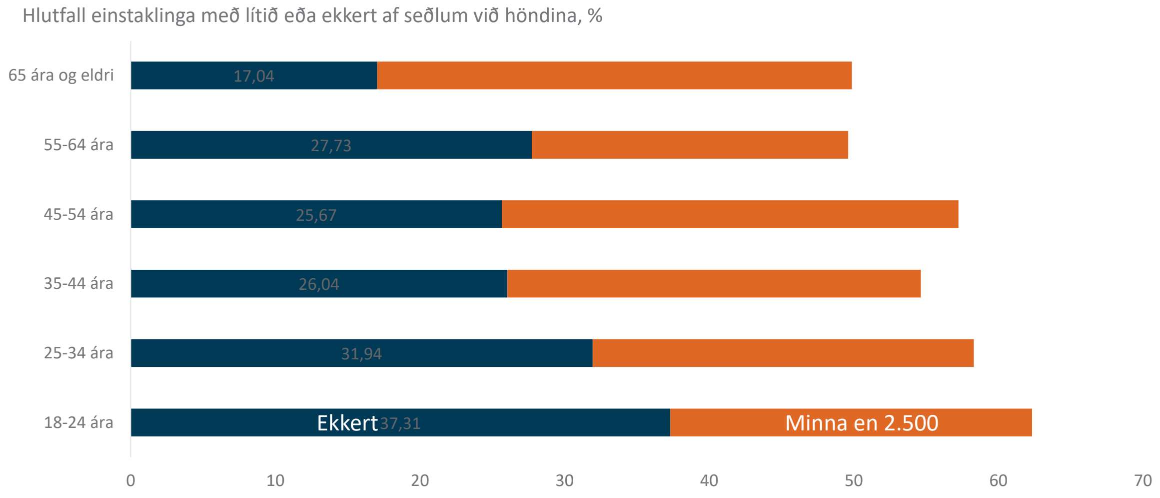



# Hagræðing hefur náðst – kostnaður þó enn mikill

Kostnaður og tekjur greiðsluþjónustuveitenda

| Kr. | Kostnaður (eining) | Tekjur (eining) | Hreinar tekjur (eining) |
|---|---|---|---|
| Seðlar og mynt | 235,1 | 32,7 | -202,4 |
| Greiðslukort | 109,6 | 166,4 | 56,8 |
| Greiðsluþjónusta | 78,4 | 16,9 | -61,5 |
| Alls | 101,7 | 72,7 | -29,0 |

## Seðlar eru mikilvæg fyrir þjóðhagsvarúð




## Innlend óháð smágreiðslulausn

- Núverandi högun rafrænnar greiðslumiðlunar á Íslandi er talin ógna þjóðaröryggi og efla þarf viðnámsþrótt greiðslumiðlunar hér á landi

- Tekin hafa verið fyrstu skref í átt að innlendri óháðri greiðslumiðlun sem gæti einnig lækkað kostnað

- Slík lausn þarf að virka ef þjónusturof yrði á rafrænum greiðslukortum sem fara í gegnum alþjóðlega kortainnviði

2 June 2023

# Memorandum

*To:* Financial Stability Committee
*From:* Central Bank of Iceland

***Re:*** **Background to the decision on the countercyclical capital buffer**

The Central Bank of Iceland Financial Stability Committee's (FSN) 15 March 2023 decision to increase the countercyclical capital buffer (CCyB) on financial institutions from 2.0% to 2.5% will take effect on 16 March 2024. Analyses of the level of cyclical systemic risk indicate that it has increased in recent years and is now near or above the average of the past several years. The main drivers of the increase are the surge in real estate prices since the beginning of the pandemic and the high inflation rate, which affects debt service burdens and repayment capacity. Inflation has proved persistent, both in Iceland and internationally, and interest rates have risen. The domestic banking system's market funding has grown more expensive, and elevated uncertainty in foreign funding markets has pushed credit spreads upwards. Furthermore, non-indexed fixed-rate loans in the amount of 650 b.kr. will be up for interest rate review in the coming two years. Increased capital shores up financial system resilience and better enables the system to withstand shocks. Raising the CCyB gives the FSN greater scope to lower it again later if warranted.

According to the Act on Financial Undertakings, the CCyB for exposures in Iceland shall generally range between 0% and 2.5%. It may exceed 2.5%, however, if the risk factors underlying the FSN's assessment warrant a higher buffer rate.[1]

## Recent economic developments and outlook

The domestic economy is running hot, driven by growing private consumption and rapidly increasing tourism sector activity. Unemployment is close to its historical low, and GDP growth has been strong in the recent term. The global output growth outlook has deteriorated, however, and uncertainty is unusually pronounced. Inflation has risen steeply, both in Iceland and in trading partner countries, and the monetary policy stance has been tightened. Financial conditions have deteriorated in recent months. Rising interest rates have increased debt service burdens, and persistent inflation causes

[1]cf. Article 85(a), Paragraph 3 and Article 85(b), Paragraph 1 of the Act on Financial Undertakings, no. 161/2002.

stagnation in real wages. Adverse developments abroad can also affect financial stability in Iceland. Tight foreign credit markets have already made it more difficult for Icelandic financial institutions to obtain foreign funding.

**Private sector debt**

Twelve-month real growth in household debt measured -1.3% at the end of April, as compared with -0.5% at the end of December. Nominal growth is still relatively robust, however, at 8.4% as of April. About half of nominal growth is due to indexation on CPI-indexed loans, which account for just under half of household debt. In terms of net new mortgage lending, credit system lending to households has slowed markedly in recent months, in accordance with reduced housing market turnover. Real growth in household debt is likely to slow still further in coming months.

With rising nominal interest rates, debt service on new loans and existing variable-rate loans has increased, particularly on non-indexed loans. This alone weakens the quantity of credit demanded, but in addition, the Central Bank's rules capping debt service-to-income ratios have grown more binding with rising interest rates. In recent months, households have turned increasingly to indexed loans, which generally have lower debt service early in the loan period than comparable non-indexed loans do. Since November 2022, a majority of net new mortgage loans have been indexed to the CPI.

Household debt totalled 79% of GDP and 152.6% of disposable income at the end of March. The debt-to-GDP ratio has fallen significantly in the recent term, while the debt-to-disposable income ratio has been relatively stable over the same period. The rise in these ratios, which occurred in the low-interest environment of the pandemic era, has now been halted and to some extent reversed.

By the end of March 2023, the ratio of corporate debt to GDP had fallen in real terms by 0.4% year-on-year, to 79%, while in price- and exchange rate-adjusted terms it had grown by 6,4%. On the whole, credit growth has eased slightly since December 2022, although domestic lending to businesses has gained pace somewhat, driven by bank lending. On the other hand, corporate bond issuance has contracted.

Arrears on loans from the systemically important banks to individuals and businesses are historically low. The facility-level non-performing loan ratio for loans to individuals was 0.75% at the end of March, up from 0.71% at the end of December 2022. Frozen loans have increased marginally as a share of the household credit stock, from 0.8% in mid-2022 to 1.1% at the end of March. The corporate non-performing loan ratio was 2.13% as of end-March, down from 2.25% at the end of

December. As before, arrears were most pronounced among companies in the hospitality industry (accommodation and restaurant services), measuring 6.2% after rising marginally between quarters. The share of frozen corporate loans was 4.8% at the end of March, down from 6.9% at the end of December, and is still falling. It is assumed that tighter financial conditions will show sooner or later in the form of increased arrears, but in this context, it should be noted that arrears can come to the fore with a time lag.

**Real estate market**

House price inflation has eased significantly in recent months. The number of homes available for sale is on the rise, and the average time-to-sale is growing longer. In April 2023, the capital area house price index had risen in real terms by 1.1% year-on-year, as compared with 7.1% in December. Prices have continued to climb in regional Iceland, however, and had risen in real terms by 6.6% year-on-year in April. This, too, represents a slowdown, however, as the real increase measured 10.9% year-on-year in December. Housing market turnover has contracted somewhat in recent months. In the first four months of 2023, turnover in transactions with multi-dwelling housing in greater Reykjavík was down by more than one-fourth in real terms, while turnover in transactions with single-family homes was lower by more than one-third. The contraction in turnover was somewhat smaller outside the greater Reykjavík area.

The ratio of house prices to fundamentals is high. The rise in house prices over and above fundamentals indicates significant imbalances in the market, with the associated systemic risk. There are signs that the imbalances peaked around mid-2022 and have been subsiding gradually since then. The application of borrower-based measures concurrent with interest rate hikes has dampened demand in the housing market, as can be seen in the slowdown in mortgage lending growth and reduced market turnover.

Turnover in registered contracts for commercial real estate (CRE) in greater Reykjavík contracted by more than one-fifth year-on-year in the first four months of 2023, although it remains relatively high in historical context. The large CRE firms’ operations are affected by rising financing costs. Returns on investment assets measured 5.6% in Q1/2023, as compared with 5.3% in Q1/2022. Offsetting this, higher interest rates put downward pressure on commercial property prices. Upward adjustments of investment asset values are still a large item on the CRE firms’ profit and loss accounts, however. A historically high percentage of the companies’ assets are occupied, and a large share of the leases are inflation-indexed. Large long-term loan maturities in the coming twelve months have lowered their current ratios and cash flow ratios, but the companies have ample collateral capacity, which gives them the flexibility to refinance.

## The banks

The banks' interest income continues to rise, particularly because of balance sheet expansion and increased returns on liquid assets. Higher interest rates, credit growth, and significantly reduced impairment have strengthened the banks' operating performance in the recent term. Their return on equity was 12.5% in Q1/2023, as compared with 8.9% a year earlier.

The banks' impairment account currently stands at a historically low 0.78% of their loan portfolio. It is important that the banks be forward-looking in recognising impairment in accordance with current accounting rules. The banks' cross-default non-performing ratio declined during the quarter for both household and corporate loans.[2] The facility-level non-performing loan ratio measured only 1.4% at the end of Q1/2023 and has held broadly unchanged in recent quarters.[3] Rising interest rates and increased financing costs will have an adverse effect on loan quality in the coming term. As yet, however, there are few signs of increased financial distress among debtors.

The banks' domestic market-based funding is overly homogeneous and is limited almost entirely to covered bonds. Conditions in foreign credit markets have been challenging for some time. The banks' access to foreign credit has grown tighter, and credit spreads on their foreign-denominated bonds have risen somewhat. The banks have significantly reduced their refinancing risk for the next few months with recent bond issues. it is important to broaden the buyer group for the banks' unsecured bond issues in both Icelandic krónur and foreign currencies.

The systemically important banks' capital ratio was 24.0% at the end of Q1/2023, or 0.3 percentage points higher than at the same time in 2022. Following the increase in the CCyB to 2.5%, the banks' capital ratios are 2.0-4.2% above the overall required ratio.

## Overall assessment of cyclical systemic risk

Financial conditions have tightened significantly in recent months, with swiftly rising interest rates and persistent inflation. At the same time, private sector credit growth has been limited. Developments differ between households and businesses, however: credit growth has gained

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[2] This refers to non-performing loans according to the cross-default method, according to which all of a borrower's loans are considered non-performing if one loan is frozen or in arrears by 90 days or more, or if the borrower is deemed unlikely to pay their obligations when due.
[3] The facility-level non-performing loan ratio is calculated in accordance with EBA standards.

pace among businesses and eased among households. The private sector debt-to-GDP ratio has continued to fall and is now 155% of GDP, Iceland's lowest since 1999. It is expected to keep declining if credit growth remains moderate.[4]

The combined effect of rising interest rates and tighter borrower-based measures has impeded the rise in house prices and somewhat mitigated imbalances in the market. The number of properties for sale has risen, and the average time-to-sale has grown longer. Significant imbalances remain, however, between house prices and fundamentals, and the likelihood of a price correction grows greater as financing costs increase.

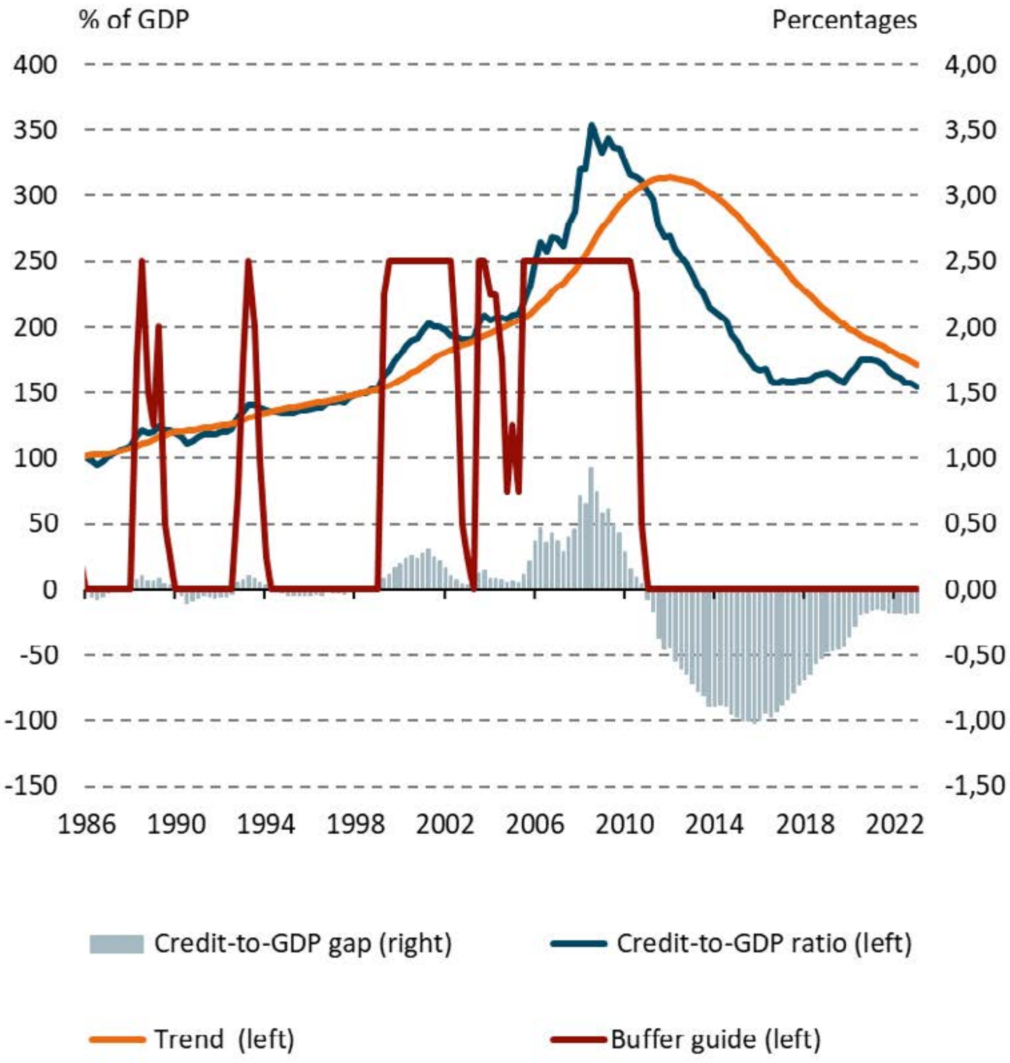
Even though the banks' core operations are sound, their access to funding market has grown tighter. Credit spreads on the banks' foreign-denominated bond issues have risen, which will eventually affect growth in foreign currency lending. The banks must maintain their current covered bond issuance, with comparable bonds in krónur or foreign currencies, to satisfy MREL requirements.

A composite measure of the financial cycle indicated a continued upward phase in Q1/2023. The upward phase is driven by all the subcycles, although the housing cycle upswing is markedly more pronounced than the other. Fallin real housing prices in the capital city area  for the last few months is still not visible in the estimate of a medium-term housing cycle. The domestic systemic risk indicator (d-SRI) has fallen for five consecutive quarters as is now just below historical average. The decline is driven by the fall in the private sector debt-to-GDP ratio and smaller current account deficits. Most indicators imply that the accumulation of cyclical systemic risk has lost momentum in recent months or has halted, although it is still uncertain to what extent it will be realised.

[4] The ratio of private sector debt – i.e., households and non-financial companies – to GDP.

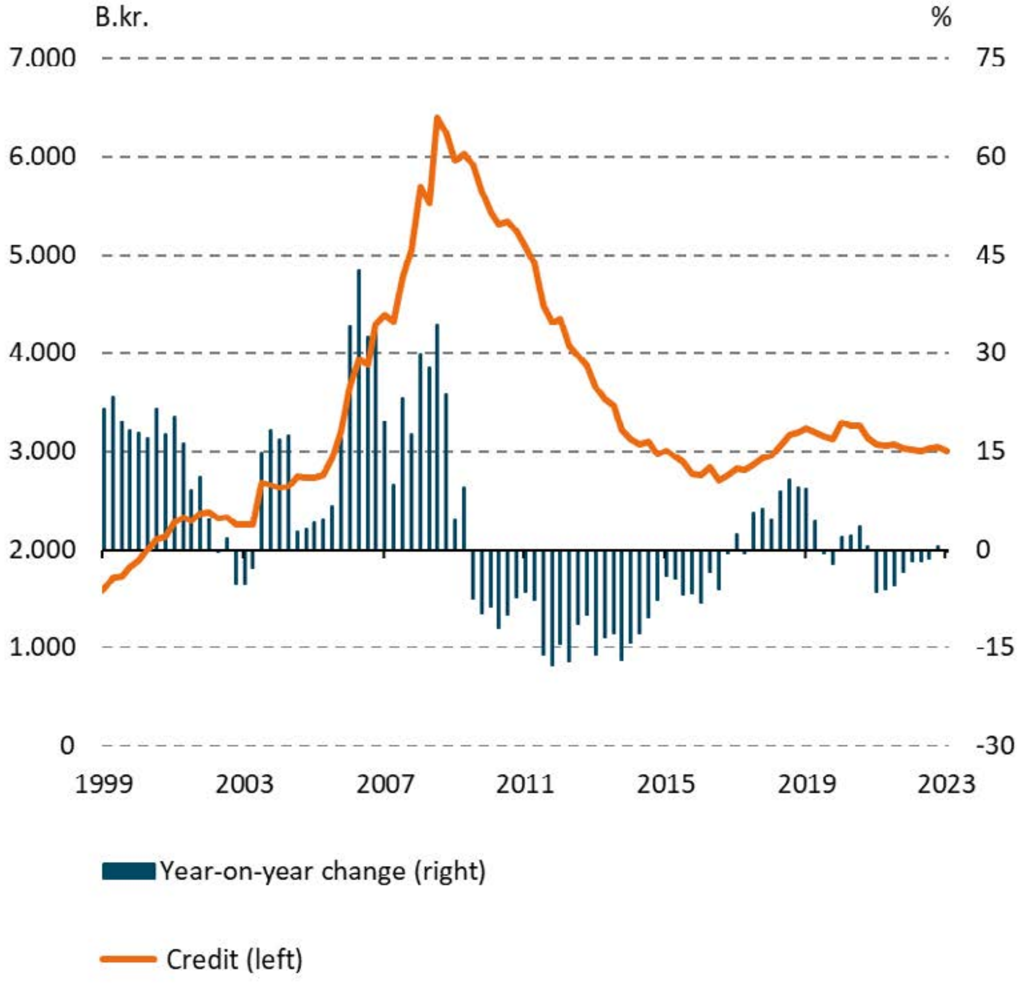
**Appendix – Charts**

## Credit-to-GDP ratio, gap and buffer guide



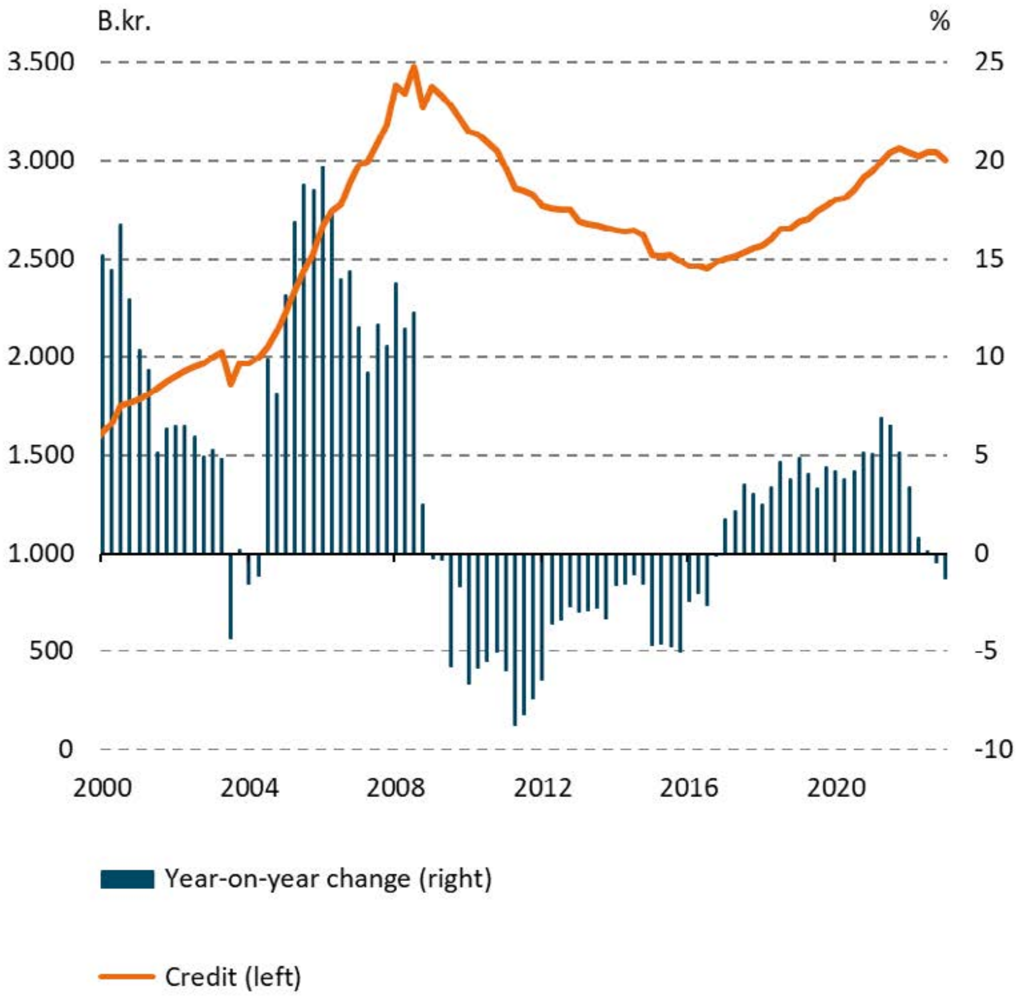

Total credit to households and firms, at claim value, as a percentage of the last four quarters GDP. The trend component is obtained with a one-sided Hodrick-Prescott filter with λ=400.000.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Real credit to firms



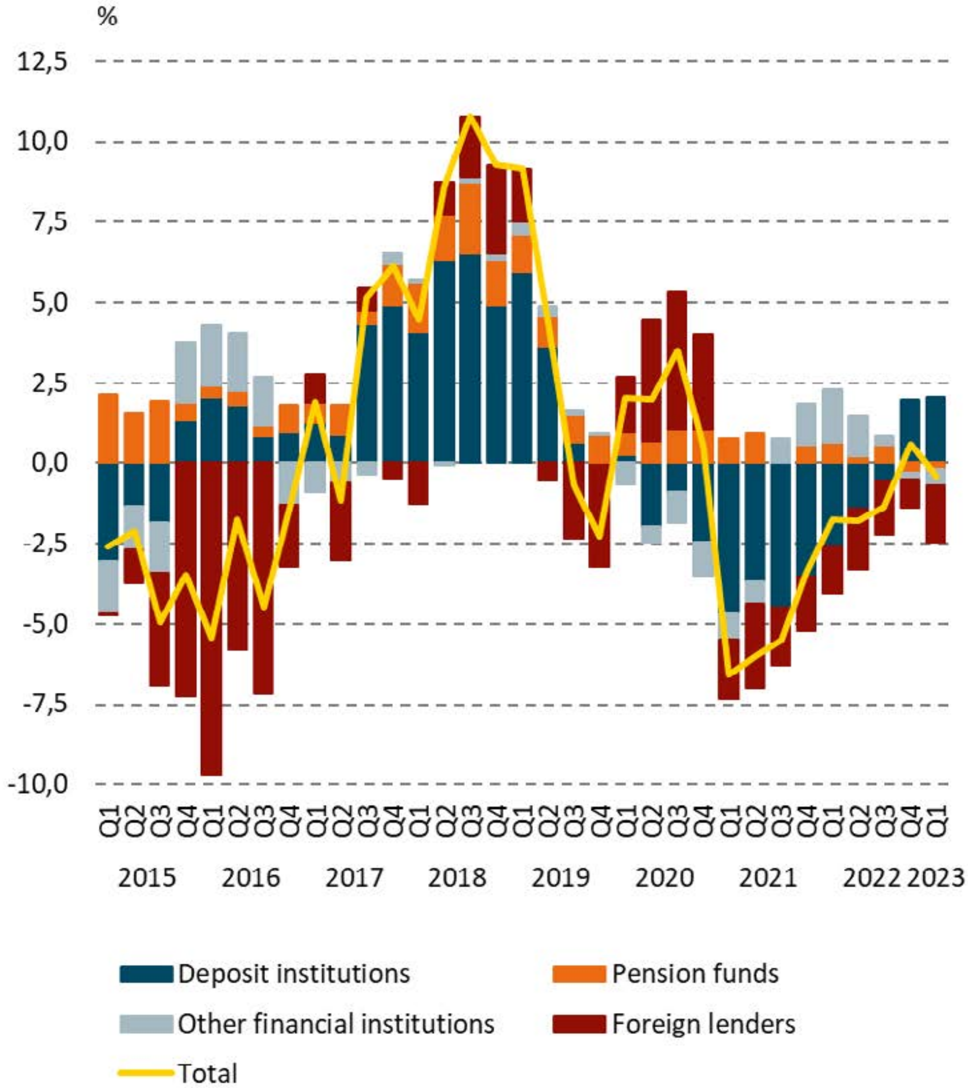

Claim value of credit to non-financial firms, at constant prices. Deflated with the consumer price index.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Real household credit growth



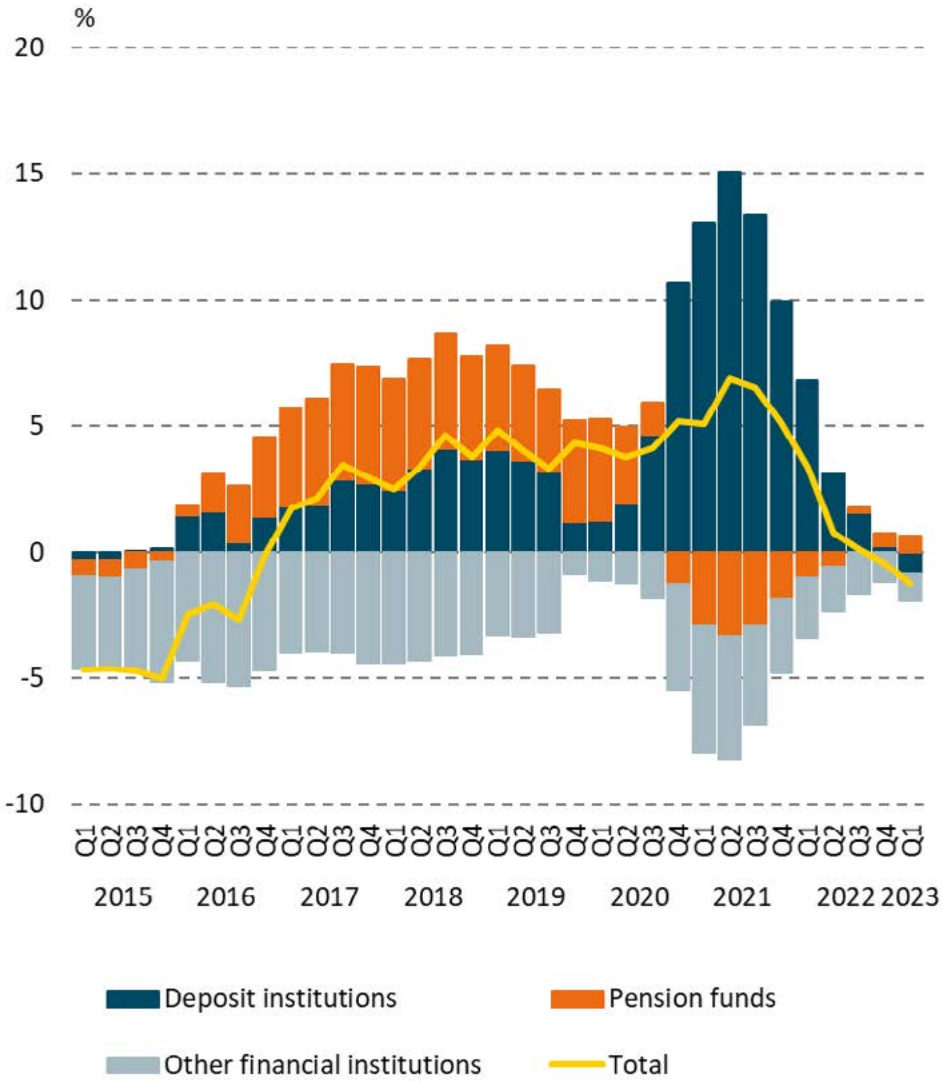

Claim value of total credit to households, at constant prices. Deflated with the consumer price index.
*Sources:* Statistics Iceland, Central Bank of Iceland.

## Corporate debt real growth disaggregated by lender type



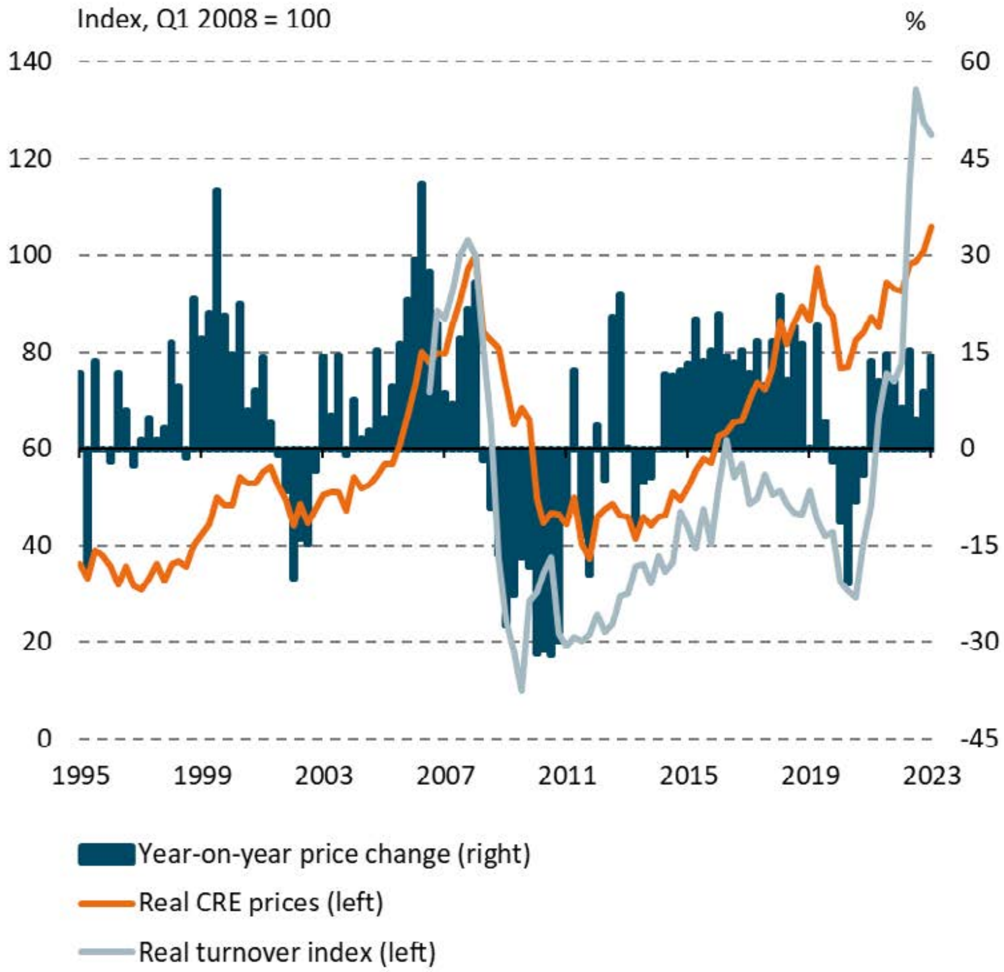

Claim value, deflated with the CPI, year-on-year change in aggregate and contribution of each lender type.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Household debt disaggregated by lender type



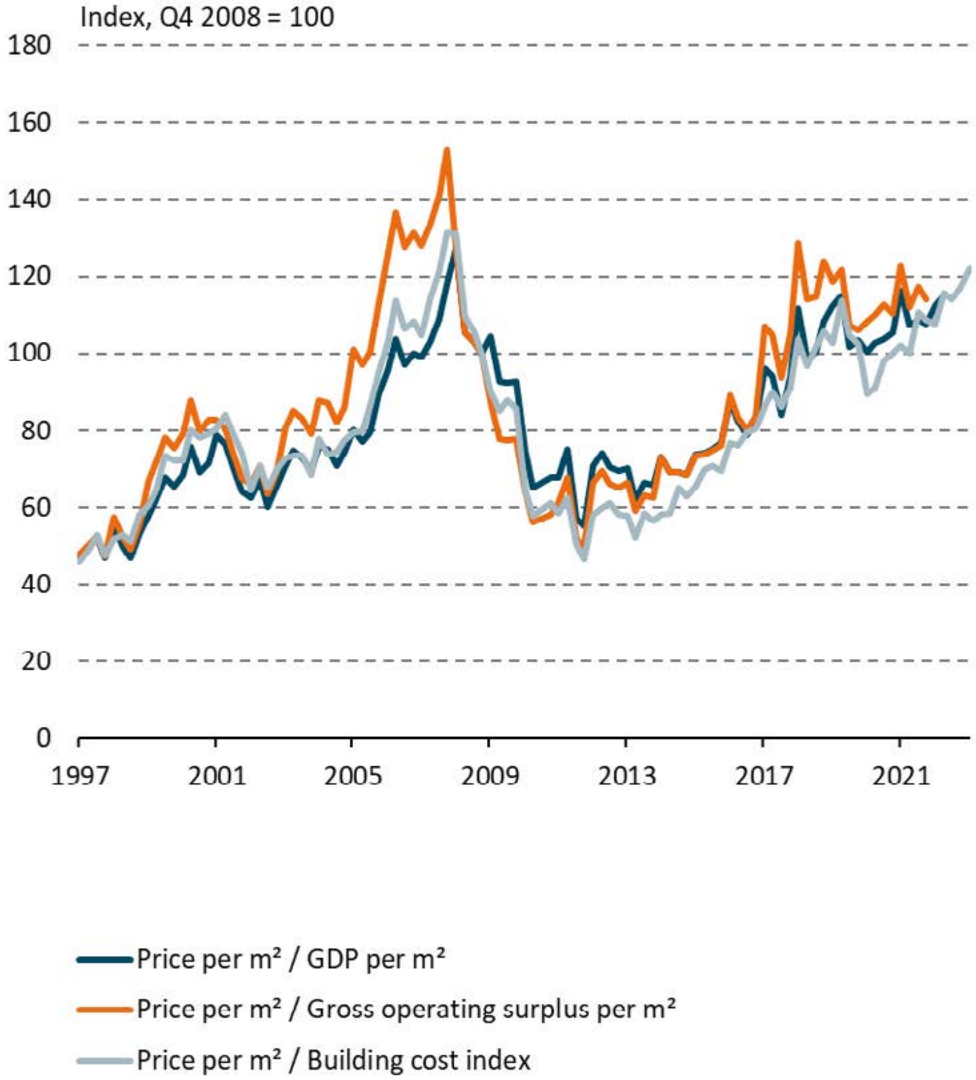

Real year-on-year change. Debt to financial institutions and issued marketable bonds.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Real commercial property prices and turnover in the capital area



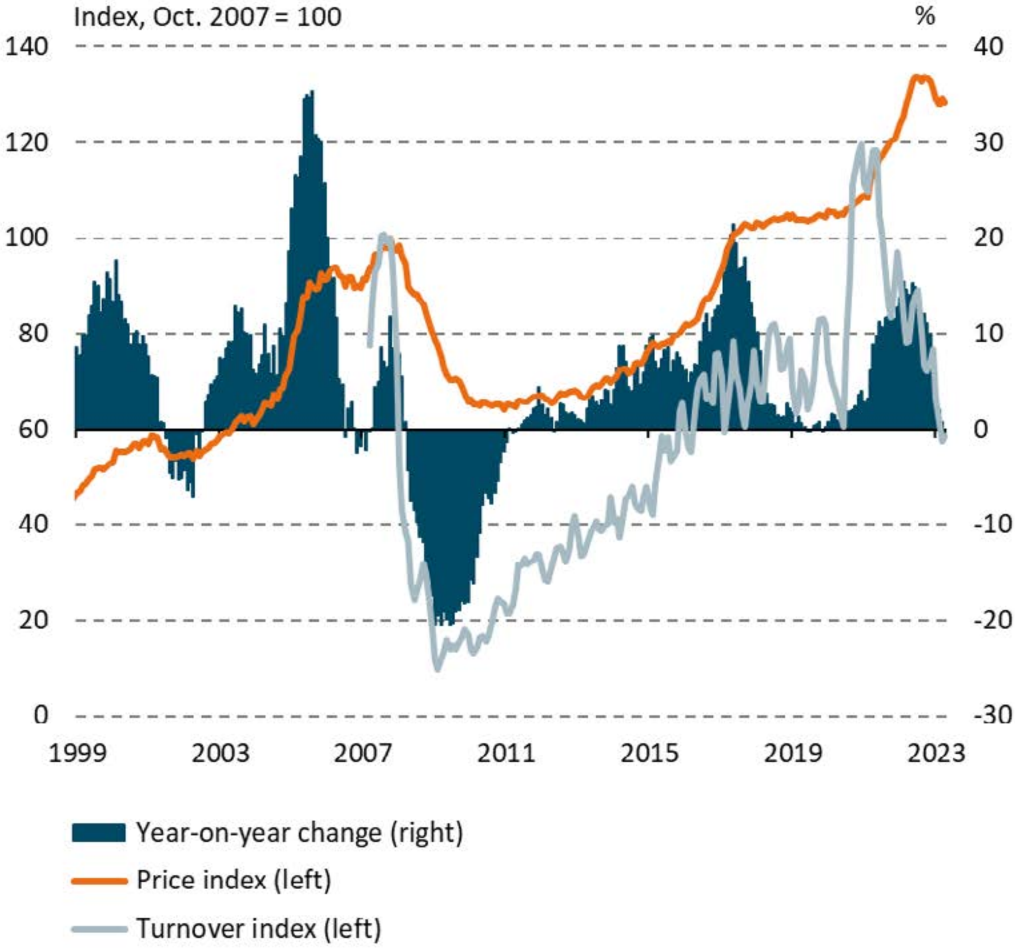

CRE price index, deflated with the CPI. The index shows the weighted average price of industrial, retail, and office space. The turnover index, deflated with the CPI, shows a four-quarter moving average. The most recent observations are preliminary.
*Sources*: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

## Commercial property price ratios



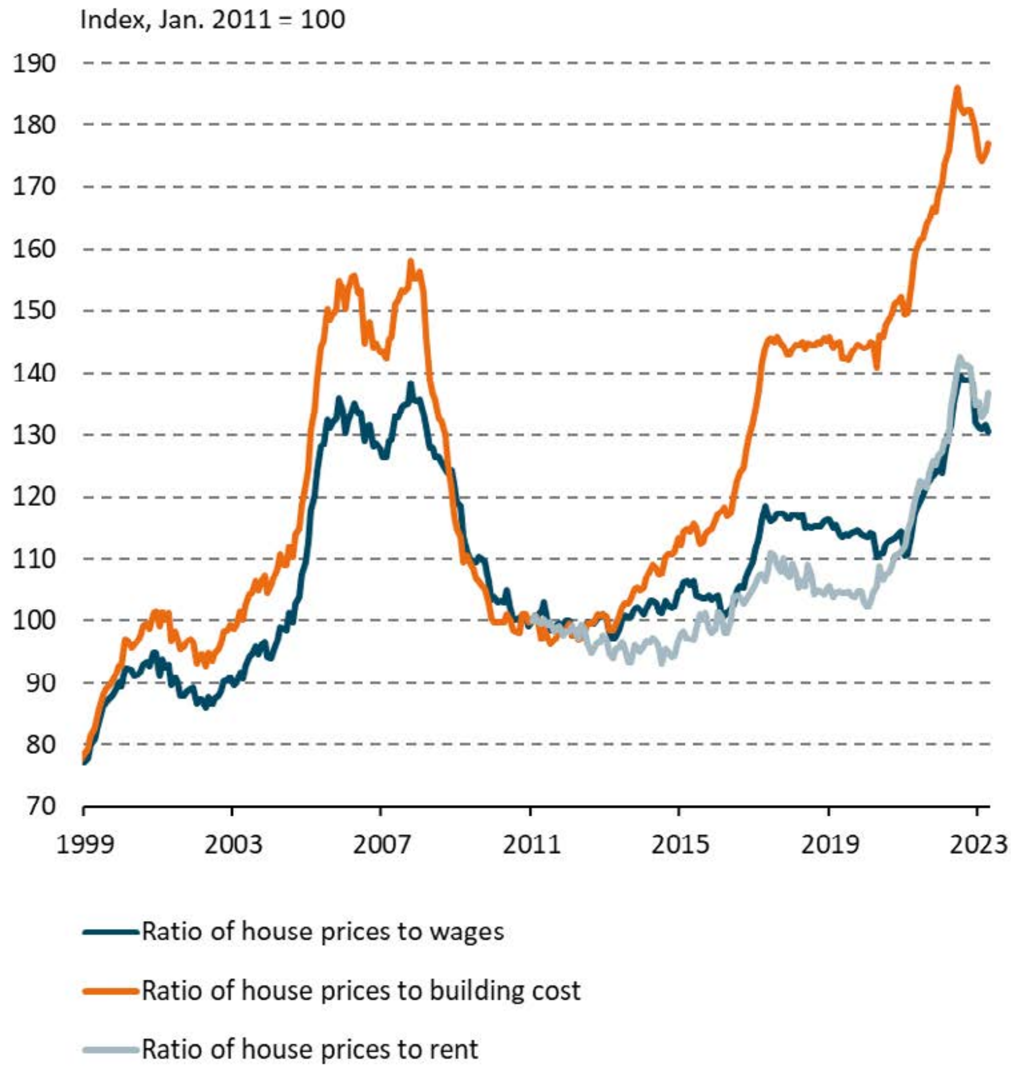

Annual data for gross operating surplus are non-linearly interpolated.
Annual data for the CRE stock are linearly interpolated.
*Sources*: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

## Real house prices and turnover in the capital area



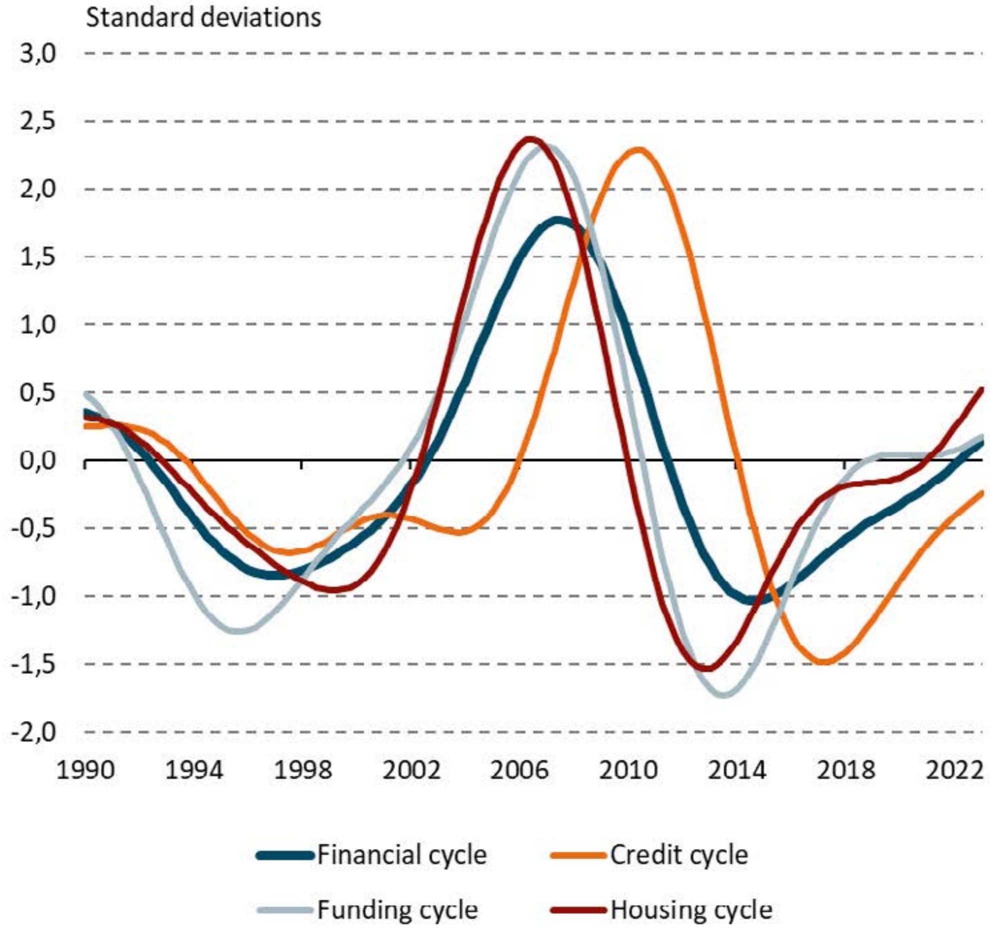

Capital area house price index, deflated with the consumer price index. The turnover index shows three-month average turnover, deflated with the consumer price index. The turnover data are linearly interpolated in 2Q/2015 to correct for a strike at the Reykjavík Commissioner's office.
*Sources:* Registers Iceland, Statistics Iceland, Central Bank of Iceland.

## Capital area house prices and determining factors



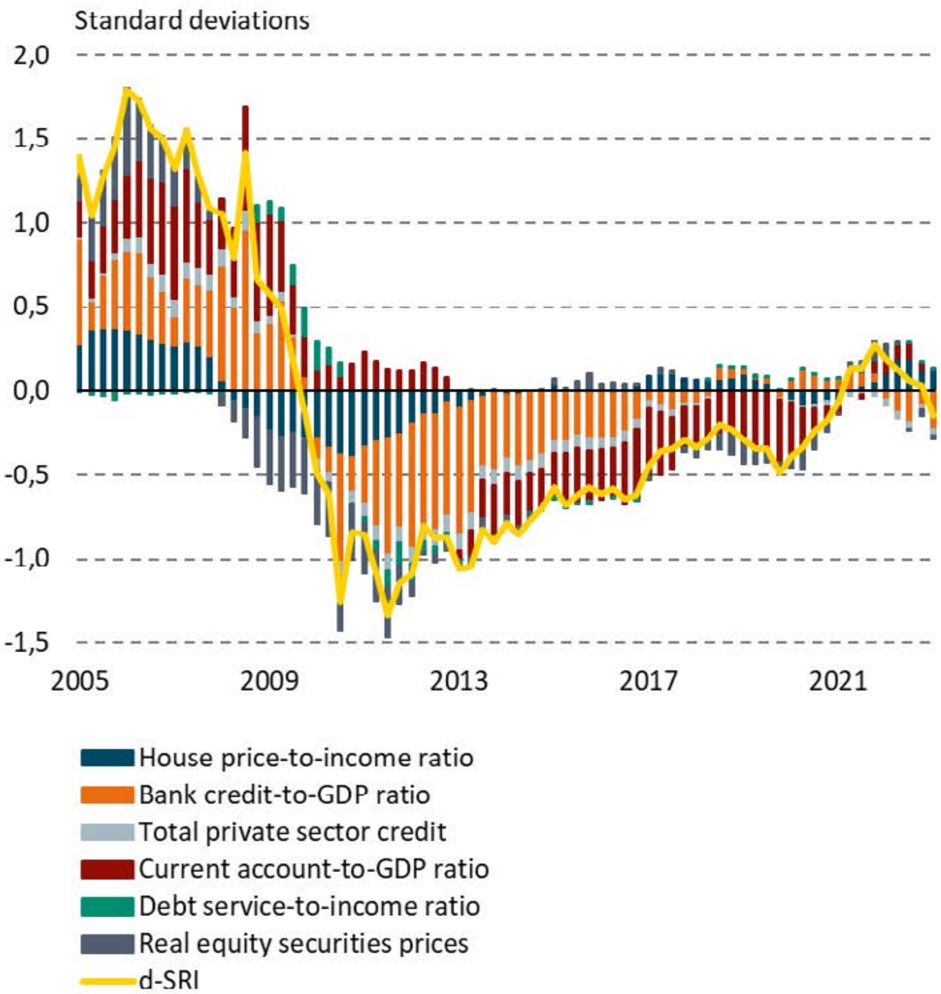

*Sources*: Registers Iceland, Statistics Iceland.

## Financial cycle and subcycles



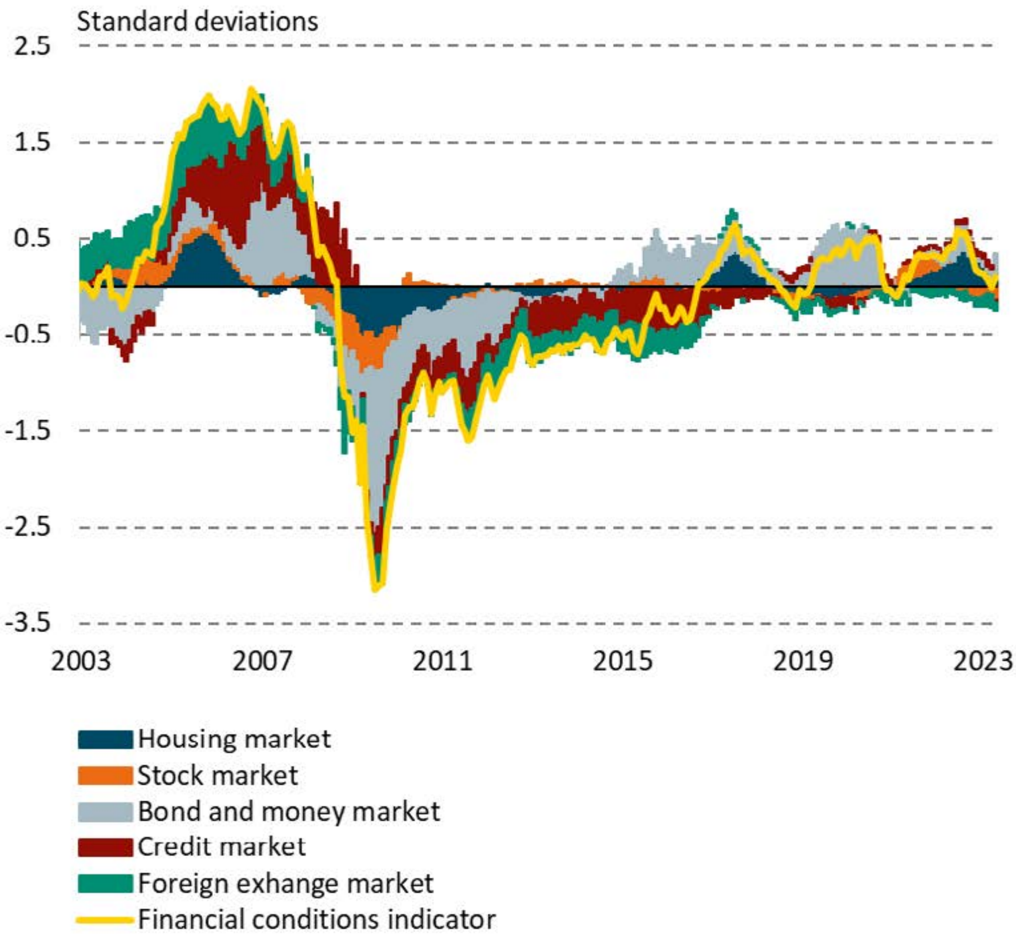

The financial cycle, the blue line, is a simple average of the subcycles. Each subcycle is a simple average of cyclical components from variables related to credit, housing, and bank funding, respectively. Cyclical components are obtained with a Christiano-Fitzgerald band-pass filter with a frequency band of 8-30 years.
*Sources*: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

# Domestic systemic risk indicator (d-SRI)



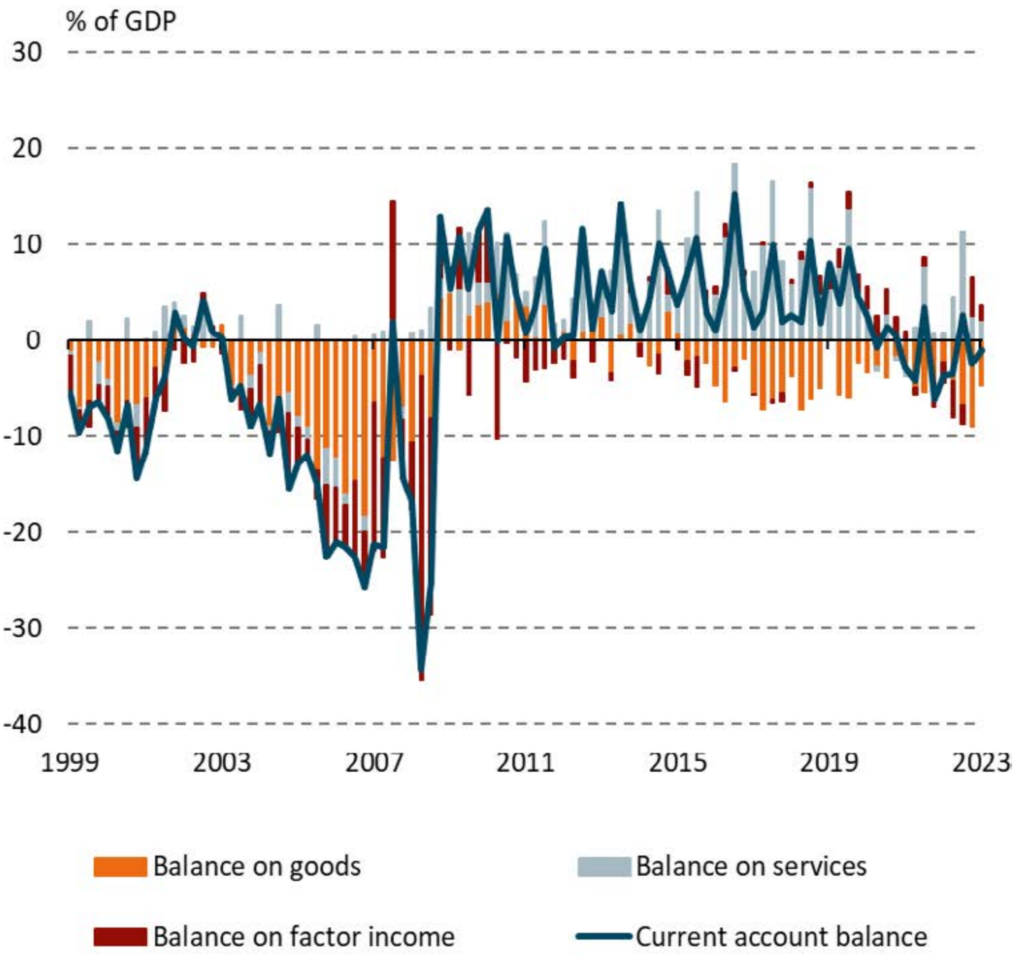

For the debt service-to-income ratio, data is lacking from Q1 2020 and onwards. The same value is repeated from that time to minimize the structural break in the indicator.
*Sources*: Statistics Iceland, Central Bank of Iceland..

## Domestic financial conditions



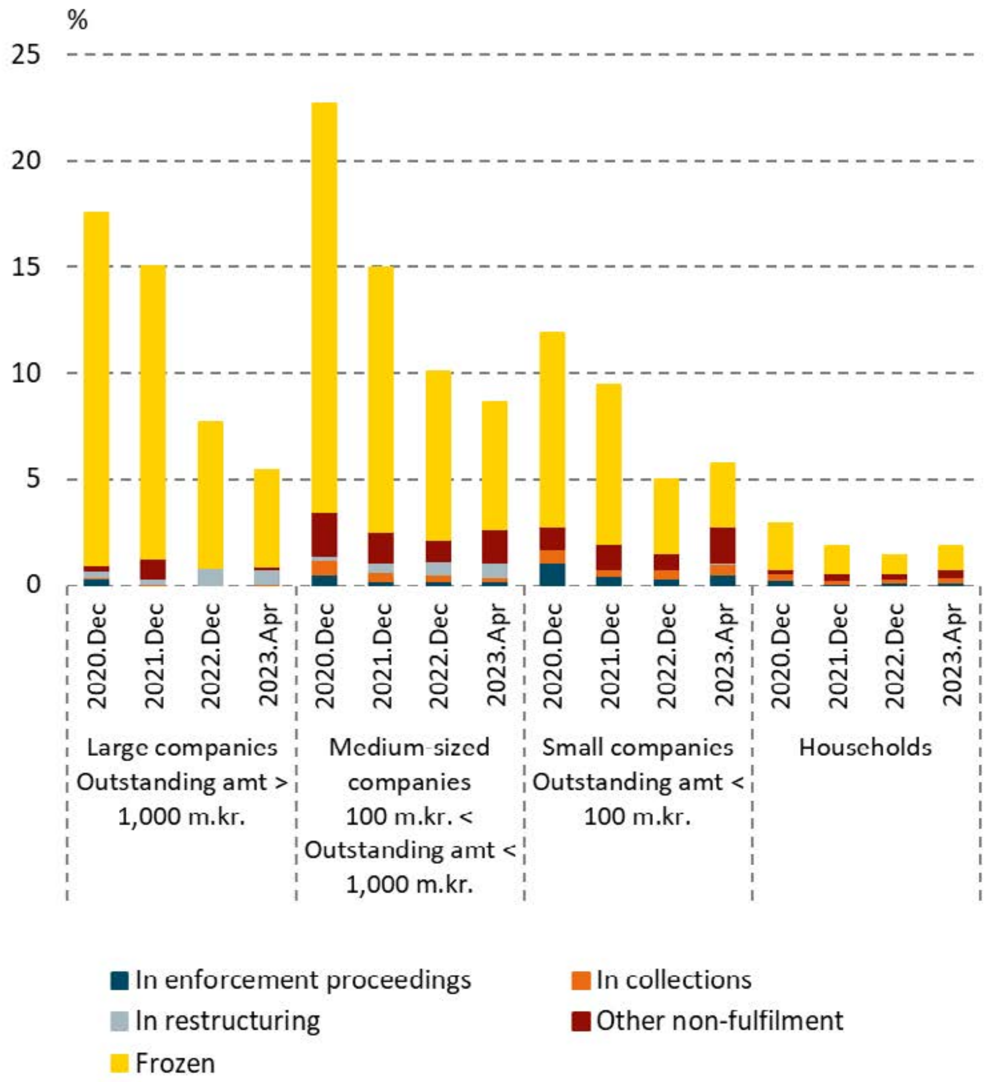

The financial conditions indicator consists of the first three principal components of selected indicators of financial conditions, scaled so that the mean is 0 and the standard deviation is 1. A lower index value indicates a deterioration in financial conditions. The estimation period is 2002-2023. Data for April is estimated.
*Sources*: Housing and Construction Authority, Nasdaq OMX Iceland, Statistics Iceland, Central Bank of Iceland..

# Current account balance



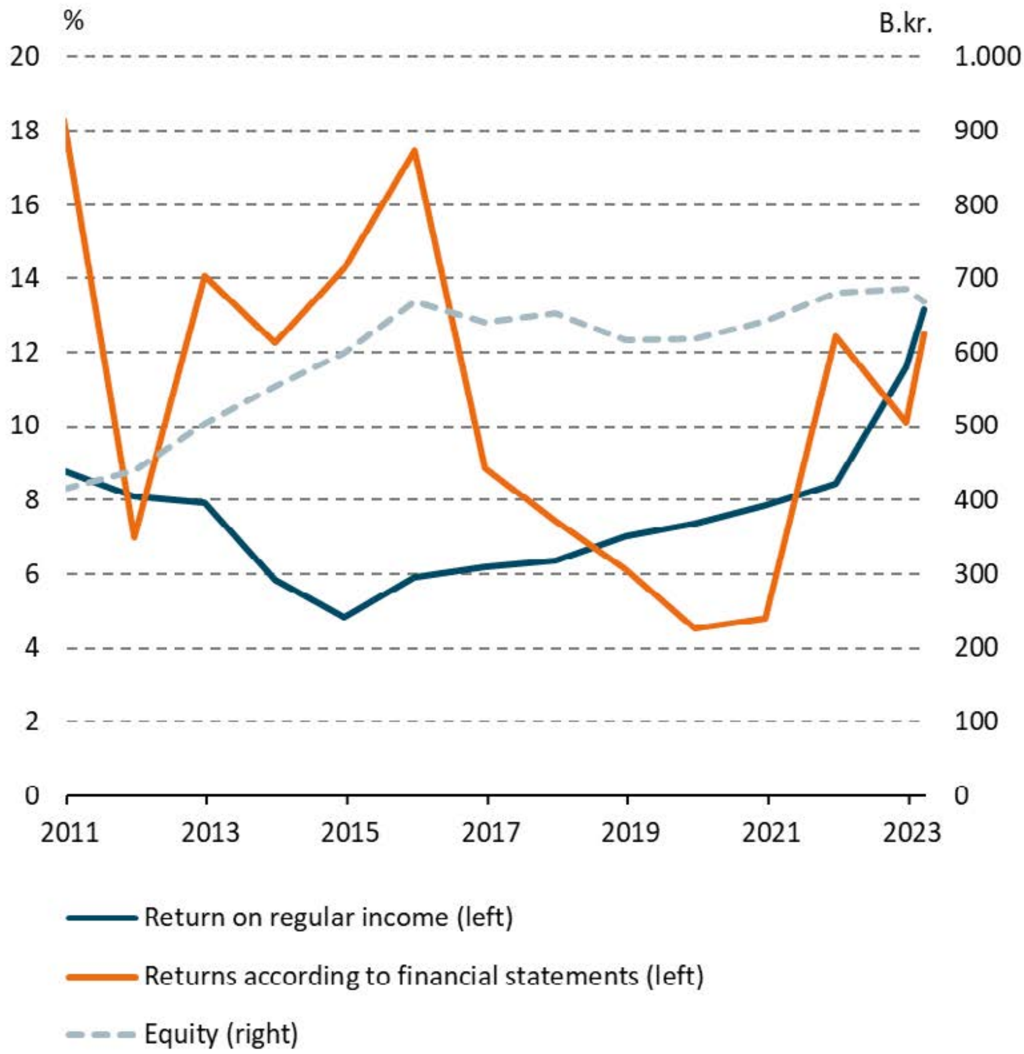

The effects of failed banks on factor income and the balance on services from Q4/2008 to Q4/2016 are ignored. From 2009 through 2012, the effect of Actavis on the balance on income is also ignored, owing to inaccurate data during the period. Secondary income is included in factor income.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Status of non-performing loans, by borrower and type of impairment




Cross-default nonperforming loans, share of each business size category. Domestic systemically important banks, parent companies, book value.
*Source*: Central Bank of Iceland.

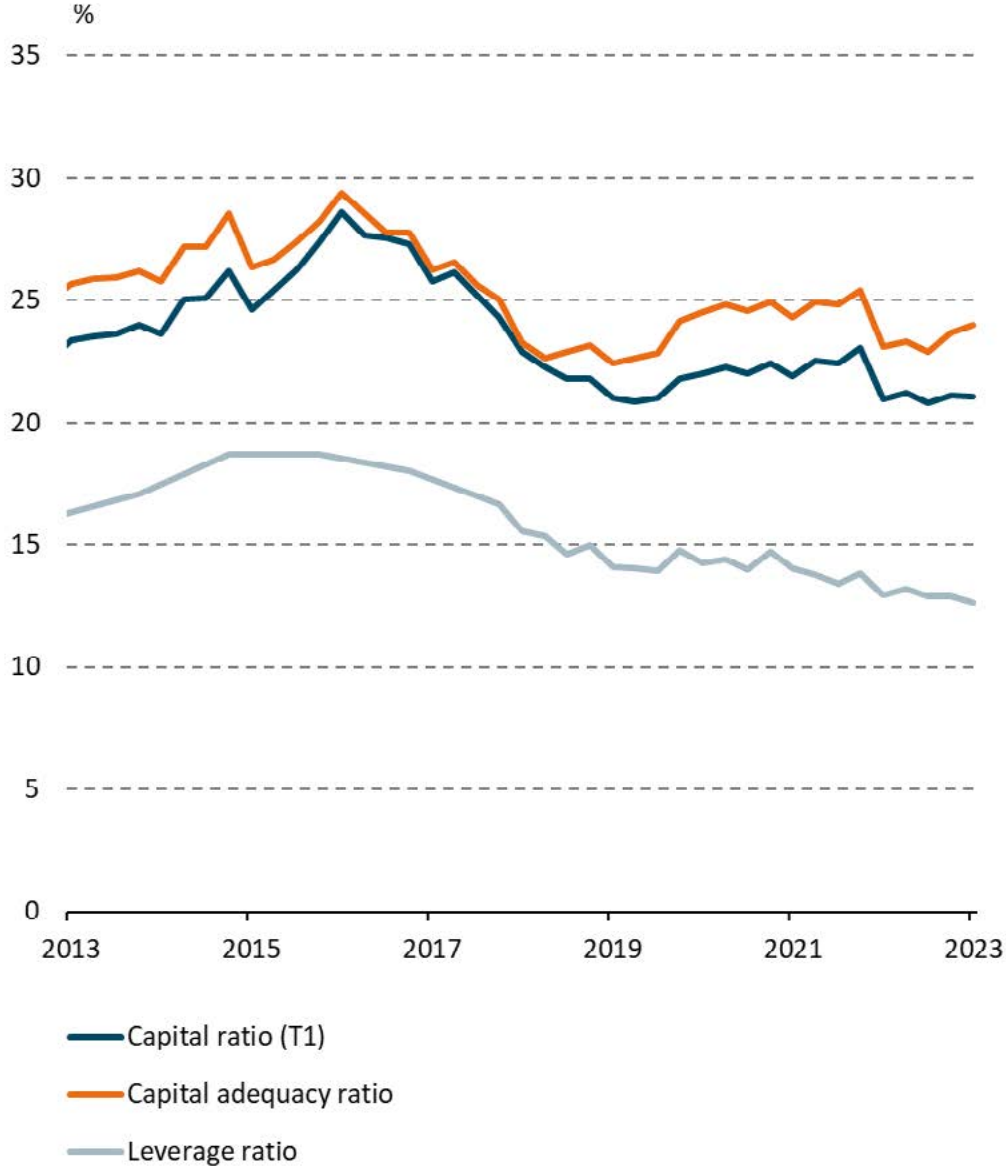
## D-SIB: Returns




Returns are calculated on average equity, consolidated figures. The return on regular income is based on net interest income and fee/commission income net of regular expenses. The tax rate is 20% and is based on average equity. Valitor is excluded in 2017-2020.
*Sources*: Commercial banks' financial statements.


Domestic systematically important banks, consolidated figures. Annualised Q1 2023 data.
*Sources*: Commercial banks' financial statements.

## D-SIB: Capital and leverage ratios




Domestic systemically important bank, consolidated figures.
*Sources*: Commercial banks' financial statements.

SEÐLABANKI ÍSLANDS

# Systemic operational resilience

## Delivery of payment services in the face of evolving cyber threats

Nordic Cyber in Finance
September 2023

Gunnar Jakobsson
Deputy Governor Central Bank of Iceland

## Payments

- Most common legal contract made by individuals
- Resiliency applies to the entire financial infrastructure
- Significant focus by macro- and microprudential authorities
- BIS CPMI / EBA & ICT supervision / EU & DORA

## 48 hours this summer

- Last June Killnet, Anonymous Sudan and REvil released a video
- Threat to take down the European Banking System in the next 48 hours
- Hitting back at Europe for its role in helping Ukraine in the war with Russia

## Why are central banks focused on it?

- Responsibility to promote a safe domestic and cross-border payment intermediation
- Disruptions or failures of payment services have the potential to pose a threat to financial stability
- Central Bank of Iceland has following responsibilities: a) operator of payment systems, b) oversight of payment infrastructure systemwide, c) microprudential supervision, d) catalyst

## ESRB and cyber risk

- February 2020: Systemic cyber risk (report)
- December 2021: Pan-European coordination (recommendation)
- January 2022:  Mitigating systemic cyber risk (report)
- February 2023: Advancing macroprudential tools for cyber resilience

## Systematic resilience vs systematic robustness

- Both are important to mitigate cyber risk
- Reselience: the ability to rebound
- Robustness: the ability to resist
- Forces: Complexity, innovation, weakest link, limited resources, scale, digitization, vertical integration

## Five areas of focus

- Policy & strategy
- Monitoring & identification
- Communication & coordination
- Command & control
- Diversification & resiliency testing

# Central Bank updates resolution plans for systemically important banks

19 October 2023

The Central Bank resolution authority has updated the resolution plans for Iceland's three systemically important banks – Arion Bank, Íslandsbanki, and Landsbankinn. The plans cover the execution of bank resolution in the event that their financial position deteriorates to the point that they are deemed failing or likely to fail.

Should a systemically important bank fail, the resolution plan assumes that it will be possible to resolve it quickly and securely, and without funding from the Treasury or the Central Bank. Resolution is intended to ensure that households and businesses continue to have unrestricted access to critical functions, thereby supporting financial stability in Iceland.

Concurrent with updating the resolution plans, the resolution authority also took decisions on the banks' minimum requirement for own funds and eligible liabilities (MREL), as is provided for in the Act on Resolution of Credit Institutions and Investment Firms, no. 70/2020. The MREL requirements are based on the Central Bank's MREL policy. They are intended to support resolution plans and ensure that it will be possible to resolve banks that are failing or likely to fail. The three systemically important banks must comply with their MREL requirements at all time.

The systemically important banks' resolution plans are prepared in accordance with Act no. 70/2020 and the rules and regulations adopted on the basis of that Act. Each resolution plan is based on the assessment of the resolvability of the bank in question, which is made at the same time as and for the purposes of drawing up the resolution plan. This assessment involves analysing the activities of the bank concerned and providing a rationale for the method to be used if the bank should fail, in light of the resolution objectives. Among the main objectives are to minimise the impact of a bank's failure on its customers, to minimise reliance on public support as well as avoiding a significant adverse effect on the financial system.

Further information on the activities of the resolution authority and on bank resolution can be found on the Central Bank of Iceland website.

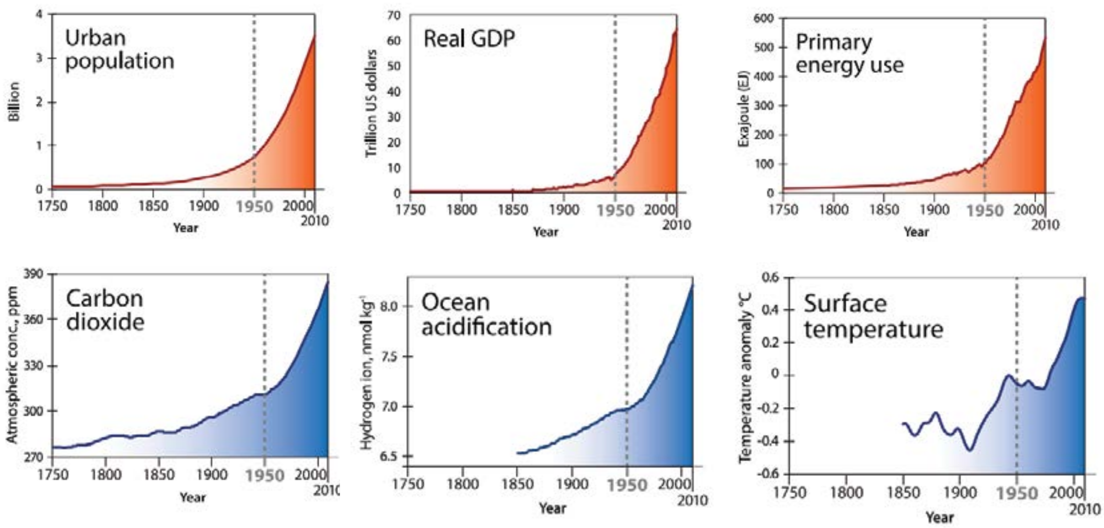
Samfélagsleg ábyrgð í sjávarútvegi
2.–3. NÓVEMBER Í HÖRPU

# Í átt að sjálfbærni og áhrif á fjármálastöðugleika


Gunnar Jakobsson
Varaseðlabankastjóri fjármálastöðugleika
Seðlabanki Íslands


SJÁVARÚTVEGS RÁÐSTEFNAN 2023

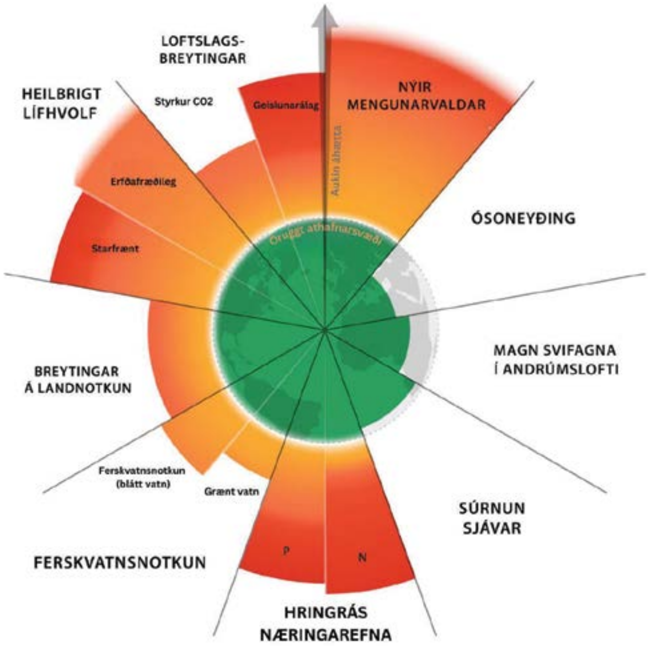
## Hröðunin mikla




Steffen et al. 2015

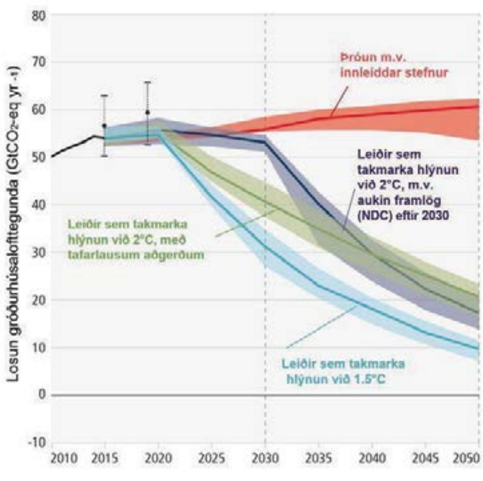
# Þolmörk Jarðar

- Loftslagsbreytingar eru eitt af 9 skilgreindum þolmörkum Jarðar
- Höfum nú þegar farið yfir 6 af þessum þolmörkum




Stockholm Resilience Centre, Johan Rockström, 2009 (þýð. Sævar Helgi Bragason)

# Óbreytt ástand: 2,4-2,8°C hlýnun 1,5°C ennþá möguleiki




IPCC AR6, 2022 (mynd frá Veðurstofu Íslands)

## Seðlabankinn og sjálfbærni

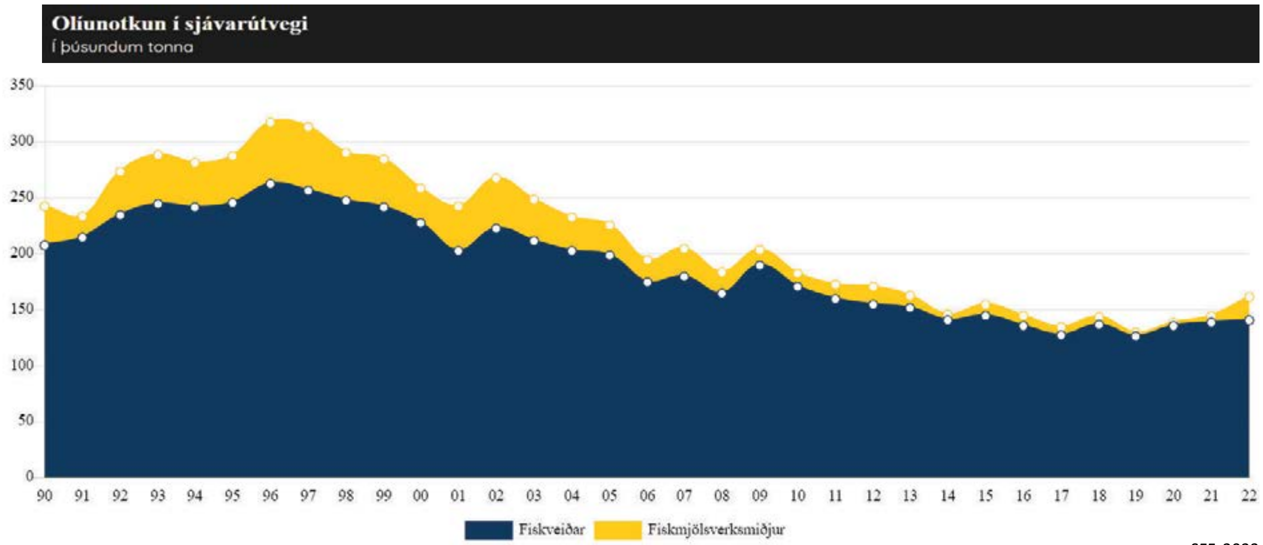
Fjármálaeftirlit – sjálfbærnitengd áhætta hluti af eftirliti, m.a. með tilkomu SFRD og EU Taxonomy

Peningastefna – áhrif loftslagsbreytinga og loftslagsaðgerða á verðbólgu og miðlun peningastefnu

Fjármálastöðugleiki – gjaldeyrisforði og sviðsmyndagreiningar

Rekstur – draga úr losun frá eigin rekstri og stuðla að bindingu

## Heildarlosun tæplega helmingi minni á undanförnum árum en hún var undir lok síðustu aldar




SFF, 2023

## Þrítugföldun á 30 árum!

- 20% aukning í framleiðni þorskflaka
- Þrítugföld aukning í nýtingu aukaafurða
- 80% af þorski nýtt að jafnaði


SFF, 2023

## Tvær gerðir loftslagstengdrar áhættu

Raunlæg áhætta – vegna loftslagsbreytinganna sjálfra

Umbreytingaráhætta – vegna loftslagsaðgerða


ClimateWorks Foundation, 2021
(myndir aðlagaðar)

## Raunlæg áhætta

-> vegna afleiðinga loftslagsbreytinganna sjálfra

- Hlýnun sjávar: hlýsjávartegundir auka útbreiðslu en stofnstærðir og útbreiðsla kaldsjávartegunda dregst saman, aðrar tegundir taka sér bólfestu sem gætu haft áhrif á lífríkið (t.d. steinkrabbi, sindraskel)
- Súrnun sjávar: almennt neikvæð áhrif líkt og á kalkmyndandi lífríki og fiska. Getur valdið hruni í stofnstærðum ákveðinna lífvera

## Umbreytingaráhætta

-> vegna loftslagsaðgerða

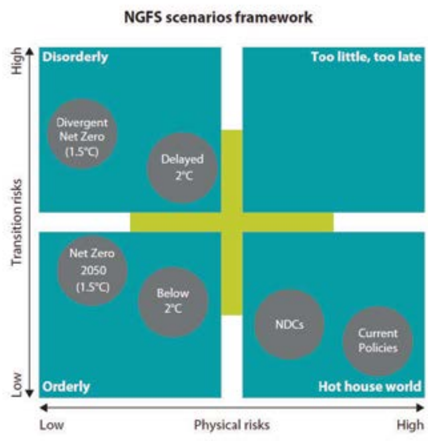
- Breytingar á lögum og reglugerðum
- Kröfur um að skipta yfir í loftslagsvæna tækni og innviði
- Orðsporsáhætta fyrir íslenskt atvinnulíf
- Breytingar á neysluhegðun og viðhorfi neytenda

## Fjármálastöðugleiki og loftslagssviðsmyndir

- Loftslagstengd áhætta mun fela í sér áskorun fyrir sjávarútveginn, fjármálakerfið og hagkerfið í heild sinni
- Loftslagssviðsmyndir gera ráð fyrir mismunandi þróun umbreytingaráhættu og raunlægrar áhættu

## Sviðsmyndir NGFS

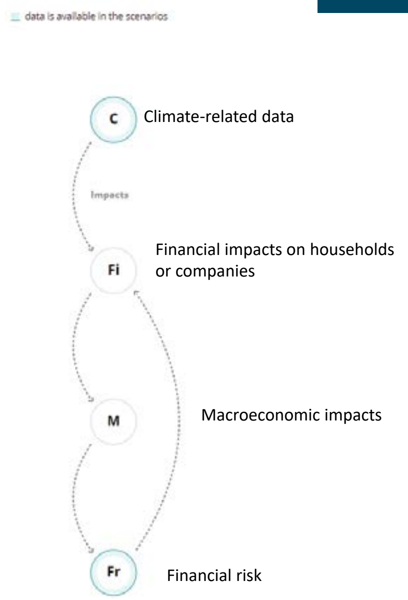
- Allt í allt 4 sviðsmyndir sem byggja á að markmiðum Parísarsamkomulagsins sé náð
- Tvær sem sýna skipulega (orderly) umbreytingu
- Tvær sýna óskipulega (disorderly) umbreytingu
- Tvær sem byggja á taumlausri hlýnun (hot house world) og að markmiðum samkomulagsins sé ekki náð
  - Landsframlög einstakra ríkja (NDC)
  - Núverandi stefnur (current policies)




Positioning of scenarios is approximate, based on an assessment of physical and transition risks out to 2100.

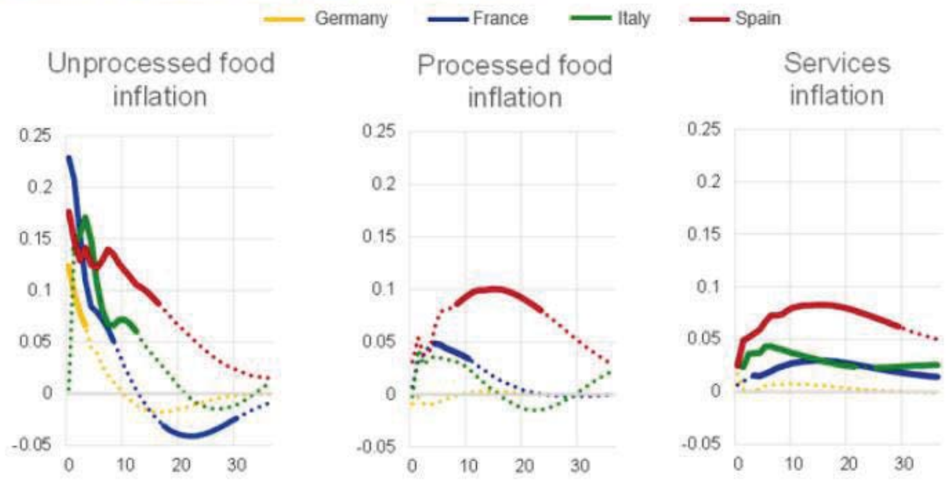
## Sviðsmyndagreining í hnotskurn

- Loftslagstengd gögn
  - Ítarlegar upplýsingar um orkunotkun, landnotkun, losun, hitastig o.fl. er að finna innan sviðsmyndanna
- Fjárhagsleg áhrif á heimili og/eða fyrirtæki
  - Mismunandi sviðsmyndir munu hafa mismunandi áhrif á heimili og fyrirtæki vegna staðsetningar og eiginleika




## Hækkun meðalhitastigs og verðbólga í Evrópu

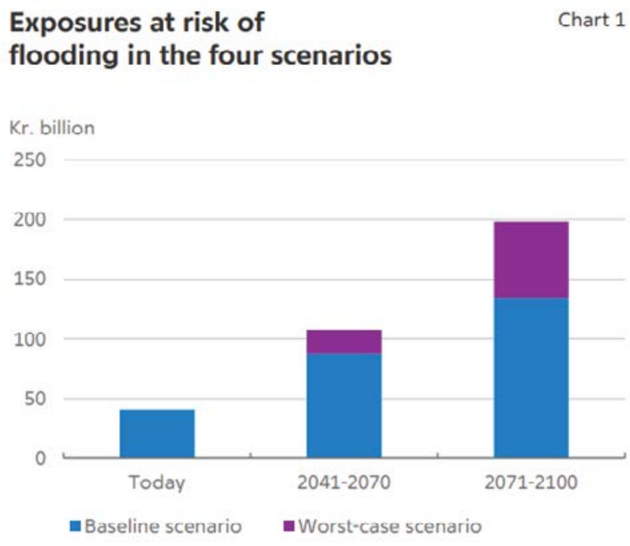
(x-axis: months after the shock; y-axis: percentage points)




Evrópski seðlabankinn, 2023

# Hækkun yfirborðs sjávar og fasteignamarkaðurinn í Danmörku

- Danskar lánastofnanir útsettar fyrir umtalsverðri áhættu vegna veðs í fasteignum sem gætu verið í flóðahættu í framtíðinni
- 840 milljarðar ISK, allt að 4000 milljarðar ISK við lok aldar.




Danski seðlabankinn, 2021

## 1. Markmið, áhættuþættir & haghafar

- Kerfislæg áhætta eða áhrif á hagkerfið
- Val á áhættuþáttum

## 2. Hönnun sviðsmynda, forsendur

- Áhrif á aflabrögð og þar með landsframleiðslu og hagvöxt
- Áhrif á skuldastöðu ríkissjóðs og lánshæfismat ríkisins
- Möguleikar á auknu atvinnuleysi og gjaldþroti sjávarútvegsfyrirtækja

## 3. Mat á efnahagslegum og fjárhagslegum áhrifum

- Aukið atvinnuleysi -> greiðsluerfiðleikar lántakenda fasteignalána banka og lífeyrissjóða
- Verðfall skuldabréfa og hlutabréfa -> skerðing lífeyrisréttinda
- Gjaldþrot sjávarútvegsfyrirtækja -> neikvæð áhrif á lánasafn bankanna

## 4. Beiting og miðlun

- Vekja fjármálafyrirtæki og aðra hagaðila til vitundar um veikleika í efnahagsreikningum og möguleg áhrif á fjármálastöðugleika
- Niðurstöður notaðar í eftirliti
- Aðstoð við vinnu stjórnvalda í stefnumótun

## Skref 3: umbreytingaráhætta fyrir bankakerfið

Tafla 1 Brún fyrirtækjalán í árslok 2021

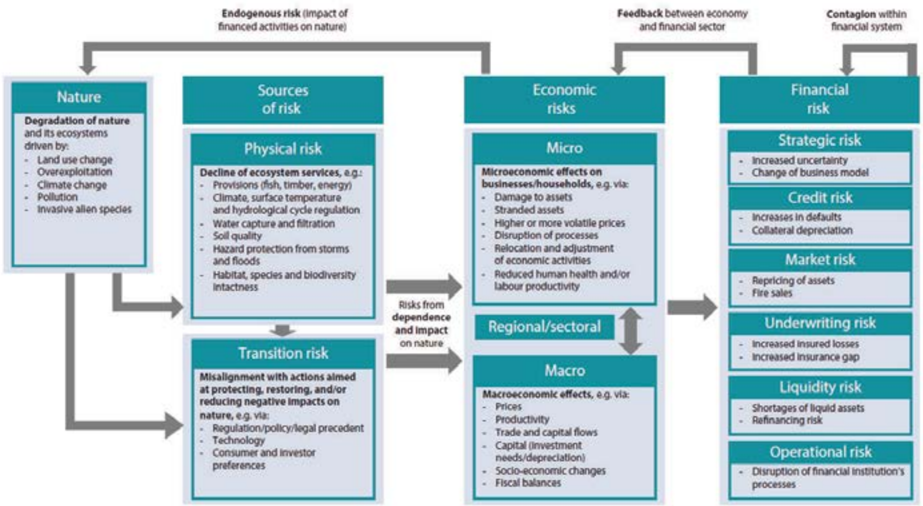
| ISAT | Atvinnugrein | Hlutdeild í brúnum lánum | Hlutdeild í heildarlánum til fyrirtækja |
|---|---|---|---|
| A03 | Fiskveiðar og fiskeldi | 80,0% | 7,2% |
| H50 | Flutningar á sjó og vatnaleiðum | 10,2% | 0,9% |
| C24 | Framleiðsla málma | 4,4% | 0,4% |
| | Aðrar brúnar atvinnugreinar | 5,4% | 0,5% |
| | Samtals | | 9,0% |

## Í átt að sjálfbærni

- Snemmbúnar og skipulagðar aðgerðir lágmarka umbreytingaráhættu og draga úr raunlægri áhættu
  - Fiskveiðistjórnun, minni olíunotkun og losun vegna kælimiðla og úrgangs
  - Aukin hringrás (úrgangur, veiðarfæri, umbúðir)
- Aukin upplýsingagjöf og gagnsæi liður í að draga úr áhættu
  - Skýrar áætlanir um endurnýjun fiskiskipaflotans
  - Víðtæk og samfelld vöktun
  - Aukin sjálfbærniupplýsingagjöf

## Takk fyrir

## Flutningsleiðir náttúrutengdrar áhættu



1 December 2023

# Memorandum

*To:* Financial Stability Committee
*From:* Central Bank of Iceland

***Re:* Background to the decision on the countercyclical capital buffer**

The Central Bank of Iceland Financial Stability Committee's (FSN) decision from March 15, 2023 to increase the countercyclical capital buffer (CCyB) from 2.0% to 2.5% will take effect on 16 March 2024. Analyses of cyclical systemic risk indicate that it has increased in recent years and is now near or above its historical average. The main drivers of the increase are the surge in real estate prices since the beginning of the pandemic, persistent inflation, and interest rate hikes, which affect debt service burdens and repayment capacity. Conditions in foreign credit markets improved for the Icelandic banks in Q3, after having been tight for a period of time. The banks took advantage of market conditions and refinanced foreign-denominated bonds, thereby reducing their refinancing risk. Spreads have widened somewhat again in Q4. Their returns have been solid thus far in 2023, and impairment is limited. The banks' capital position remains strong. Increased capital shores up financial system resilience and better enables the system to withstand shocks. Increasing the CCyB creates the scope to lower it again later if circumstances permit.

According to the Act on Financial Undertakings, the CCyB for exposures in Iceland shall generally range between 0% and 2.5%. It may exceed 2.5%, however, if the risk factors underlying the FSN's assessment warrant a higher buffer rate.[1]

## Recent economic developments and outlook

The domestic economy remains tight, and GDP growth is driven mainly by tourism. Even so, in Q3, year-on-year GDP growth fell to 1.1%, and private consumption contracted by 1.7% in real terms. Unemployment is close to its historical low, and there are signs that it has now bottomed out. The monetary stance has been tightened, and inflation has eased slightly. Nevertheless, inflation remains high, and the outlook is for a more gradual disinflation process in 2024 than was previously envisioned. Rising interest rates have increased debt service burdens, and persistent inflation has impeded real wage growth. The seismic activity on the Reykjanes peninsula has exacerbated domestic economic uncertainty. The scenarios

[1] cf. Article 85(a), Paragraph 3 and Article 85(b), Paragraph 1 of the Act on Financial Undertakings, no. 161/2002.

currently considered the most likely will probably have limited impact, although some borrowers' situation is both difficult and highly uncertain. Globally, GDP growth looks set to be muted in 2023 and 2024, but the situation is uncertain. Global inflation has fallen considerably in recent months, but underlying inflation has fallen more slowly, and the outlook is for central bank interest rates to remain high.

**Private sector debt**

At the end of September 2023, household debt had fallen 2.1% year-on-year in real terms but had grown in nominal terms by 5.8%, down from 6.7% nominal growth in June. Excluding the effects of the indexation component of indexed loans, nominal growth measured 2.1%. Just under half of household debt is indexed to the CPI. Net new credit system mortgage lending to households has picked up in recent months. Nevertheless, the total stock of new loans is still somewhat below its long-term average, as new lending was sharply lower from year-end 2022 through spring 2023.

With rising nominal interest rates, debt service on new lending and existing variable-rate loans has increased, particularly on non-indexed loans. This alone weakens demand for credit, but in addition, the Central Bank's rules capping debt service-to-income ratios have grown more stringent with rising interest rates. Household demand for indexed loans – both new loans and refinancing of previously existing debt – has grown markedly in recent months. Because indexed loans generally have a lower debt service burden early in the loan period than comparable non-indexed loans do, they can provide households some shelter from the rising interest burden accompanying interest rate hikes. Indexed loans are growing as a share of the outstanding household mortgage stock, measuring 49% in September, up from 47% in June. This trend can be expected to continue while nominal interest rates remain high.

Household debt totalled 75.5% of GDP and 145.7% of disposable income at the end of September. Both ratios have been on the decline in the recent term, and the COVID-era spike in the debt-to-GDP ratio in the prevailing low interest rate environment has largely reversed.

Growth in domestic corporate debt has lost pace in the past several months.[2] As of September 2023, businesses' domestic debt had fallen in real terms by 0.9% year-on-year, whereas in June it had risen by 1.6%. The banks' net new lending to businesses has eased. Issuance of new indexed corporate loans has increased, particularly loans to real estate companies

[2] Domestic debt owed by non-financial companies comprises debt to domestic financial institutions in the form of loans and bonds. Total debt includes domestic debt plus debt owed to foreign financial institutions and marketable bonds issued abroad by non-financial companies.

and construction firms. At the end of September, total corporate debt equalled 75.5% of GDP, which is low in historical context.

On the whole, private sector debt has been relatively stable in real terms over the past two years. As of September, it equalled 151.6% of GDP, its lowest since 1998. The past few years' changes in the debt ratio have been driven primarily by fluctuations in GDP.

Arrears on loans granted to households and businesses by the systemically important banks are low in historical terms but have been rising slowly in 2023 to date. The facility-level non-performing loan (NPL) ratio on loans to households was 0.85% at the end of September and had increased by 0.15% year-to-date.[3] As of end-October, 1.4% of loans to households were frozen, as compared with 0.9% at the beginning of the year.[4] The corporate NPL ratio was 2.4% at the end of September, and as before, arrears were most pronounced among companies in the accommodation and food services industry, at 5.7%. The share of frozen corporate loans has fallen somewhat in 2023, to 2.8% by the end of October. It is assumed that tighter financial conditions will continue to show in increased arrears, but in this context, it should be noted that arrears can come to the fore with a time lag.

**Real estate market**

Real house prices have risen in the past three months, after having fallen somewhat over the first seven months of the year. The capital area house price index, which measures real prices in greater Reykjavík, continues to fall year-on-year – by 4.6% at the end of October. The past few months' rise in house prices was somewhat unexpected, as the number of homes advertised for sale has increased rapidly since mid-2022. At the end of November, some 4,700 residential properties were listed for sale, as compared with 2,400 at the turn of the year and a mere 1,000 at the April 2022 trough. In the first ten months of 2023, housing market turnover contracted in real terms by 17% year-on-year in greater Reykjavík, and by marginally more than that elsewhere in the country. The contraction in turnover during this period was broadly similar for condominium housing and detached housing.

House prices remain high relative to fundamentals, indicating a significant imbalance in the market. In greater Reykjavík, prices were 7.4% above their estimated long-term trend at the end of October.

The commercial real estate (CRE) price index, which captures real prices in the capital area, rose by 7.7% year-on-year in Q3, to a full 17% above its estimated long-term trend. The index implies that as yet, interest rate

[3] The facility-level non-performing loan ratio is calculated according to European Banking Authority (EBA) standards. Under this method, a customer's loan is classified as non-performing if it is in arrears by 90 days or more, or if the borrower is deemed unlikely to pay their obligations when due.
[4] Figures on frozen loans are compiled using the cross-default method.

hikes have not had a strong negative impact on the CRE market. In the first nine months of 2023, turnover in registered CRE transactions in greater Reykjavík contracted in real terms by 56% between years, but it had been historically strong over the same period in 2022. The large CRE firms' operating performance has fluctuated widely in recent quarters, owing to changes in investment asset valuations. The companies wrote down their investment asset values in Q3, after a large upward revaluation in Q2. Returns on investment assets measured 5.7% in Q3, slightly higher than in the same quarter of 2022. The calculated risk premium declined by 1.2 percentage points over this period, however, owing to a rise in Treasury bond yields, which puts downward pressure on CRE prices, all else being equal.

**The banks**

The domestic systemically important banks' (D-SIB) net interest income continued to rise year-on-year in the first nine months of 2023, owing mainly to balance sheet growth and higher returns on liquid assets. Higher interest rates, credit growth, a turnaround in net financial income, and limited impairment have strengthened the banks' operating performance in the recent term. Their return on equity measured 11.8% in the first nine months of 2023, up from 10.4% for the same period a year earlier.

The banks' impairment account currently stands at a historically low 0.73% of their loan portfolio. It is important that the banks be forward-looking in recognising impairment in accordance with current accounting rules. The banks' cross-default NPL ratio rose in the first nine months of the year, on both household and corporate loans.[5] Their facility-level NPL ratio measured 1.6% in Q3, as compared with 1.4% at the turn of the year.[6] Rising interest rates and increased financing costs have an adverse effect on loan quality.

In general, it can be said that signs of increased financial distress among debtors are limited, as the employment level is high and economic activity is brisk. Some segments of the economy are more vulnerable than others, however, particularly those that have been hit by significant cost increases, such as restaurants and other companies in the services sector. Rising input prices, wage costs, and rent have put pressure on many companies' operations, and financing costs are up sharply as well.

The banks' domestic market-based funding is homogeneous and is limited almost entirely to covered bonds. Conditions in foreign credit markets have been challenging for quite a while, but in the third quarter this year they developed favourably, and credit spreads on the banks' foreign bond issues

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[5] Under the cross-default method, all of a borrower's loans are considered non-performing if one loan is frozen or in arrears by 90 days or more, or if the borrower is deemed unlikely to pay their obligations when due.
[6] The facility-level non-performing loan ratio is calculated in accordance with EBA standards.

narrowed markedly. The banks used the more favourable conditions to issue foreign-denominated bonds on more favourable terms than before, thereby reducing their refinancing risk. The credit spreads have widened again in the forth quarter. The buyer group for the banks' unsecured bond issues in both Icelandic krónur and foreign currencies needs to be broadened.

The D-SIBs' combined capital ratio was 24.0% at the end of Q3, after rising by 0.3 percentage points since the turn of the year. Taking into account the increase in the CCyB rate to 2.5% in March 2024, the banks' capital ratios are 3.2-4.1% above the overall required ratio after its increase.

**Overall assessment of cyclical systemic risk**

Financial conditions have grown markedly tighter this year, but a statistical assessment does not indicate that they are unusually tight in historical terms. Interest rates have risen swiftly, and domestic inflation has proven persistent. Private sector credit growth has been limited overall, and the credit-to-GDP ratio remains below its long-term trend. It is expected to keep declining if credit growth remains moderate and the GDP growth outlook positive.

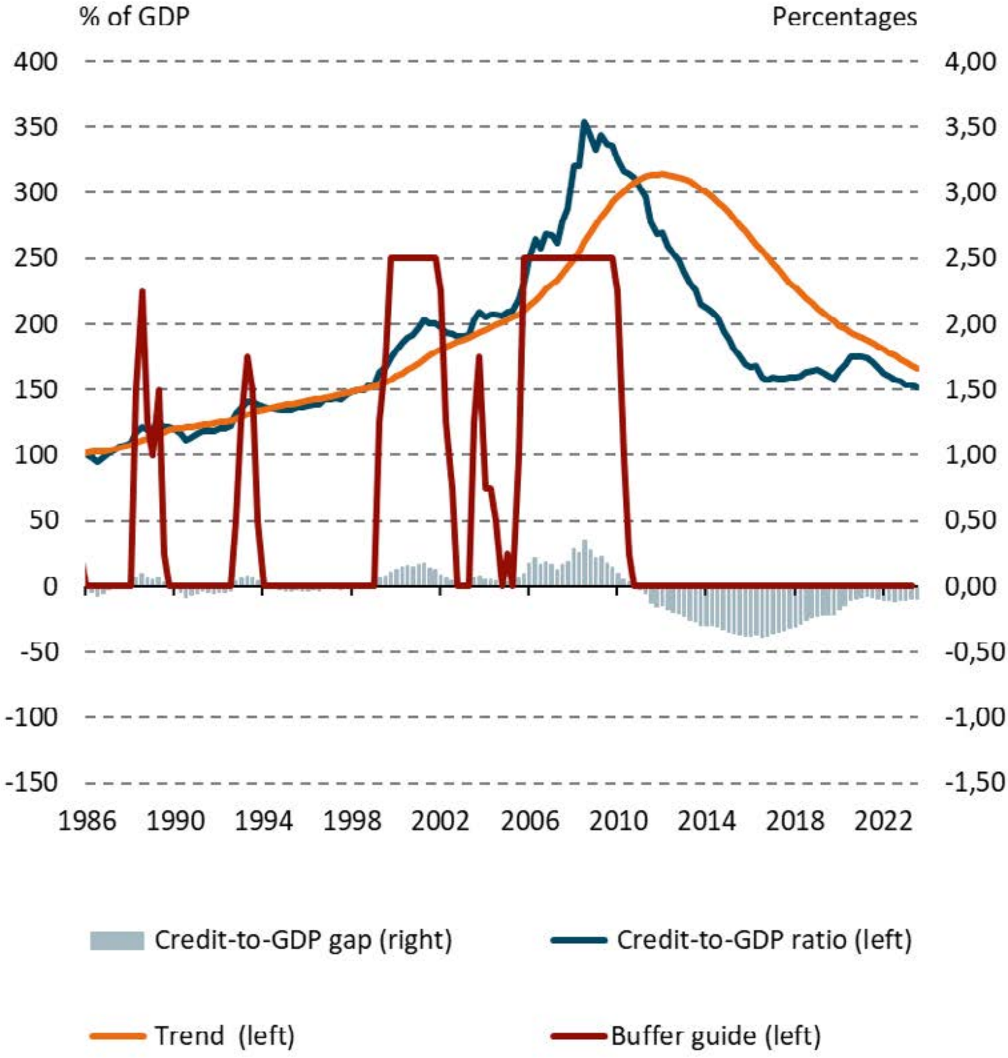
The combined effect of rising interest rates and tighter borrower-based measures has slowed the rise in house prices and somewhat mitigated imbalances in the market. The number of properties for sale has risen, and the average time-to-sale has grown longer. Significant imbalances remain, however, between house prices and fundamentals, and the likelihood of a price correction grows as financing costs increase.

The banks' core operations have been strong, and their access to credit markets improved in recent months. Credit spreads on their foreign-denominated bond issues have fallen somewhat in H2, after a surge in H1.

A composite measure of the financial cycle indicated a continued upward phase in Q3/2023. The upward cycle was driven by all sub-cycles. The housing cycle has lost pace slightly, whereas the funding cycle has picked up a bit. The drop in real house prices in greater Reykjavík over the past twelve months is not yet reflected in the assessment of the medium-term cycle. The domestic systemic risk indicator (d-SRI) declined in Q3, for the seventh quarter in a row. Developments during the quarter were due in particular to falling real share prices and positive developments in the current account. The indicator is just below its historical average. The decline is driven by the fall in the private sector debt-to-GDP ratio and a shrinking current account deficit. The overall assessment suggests that the accumulation of cyclical systemic risk has slowed in H2/2023.

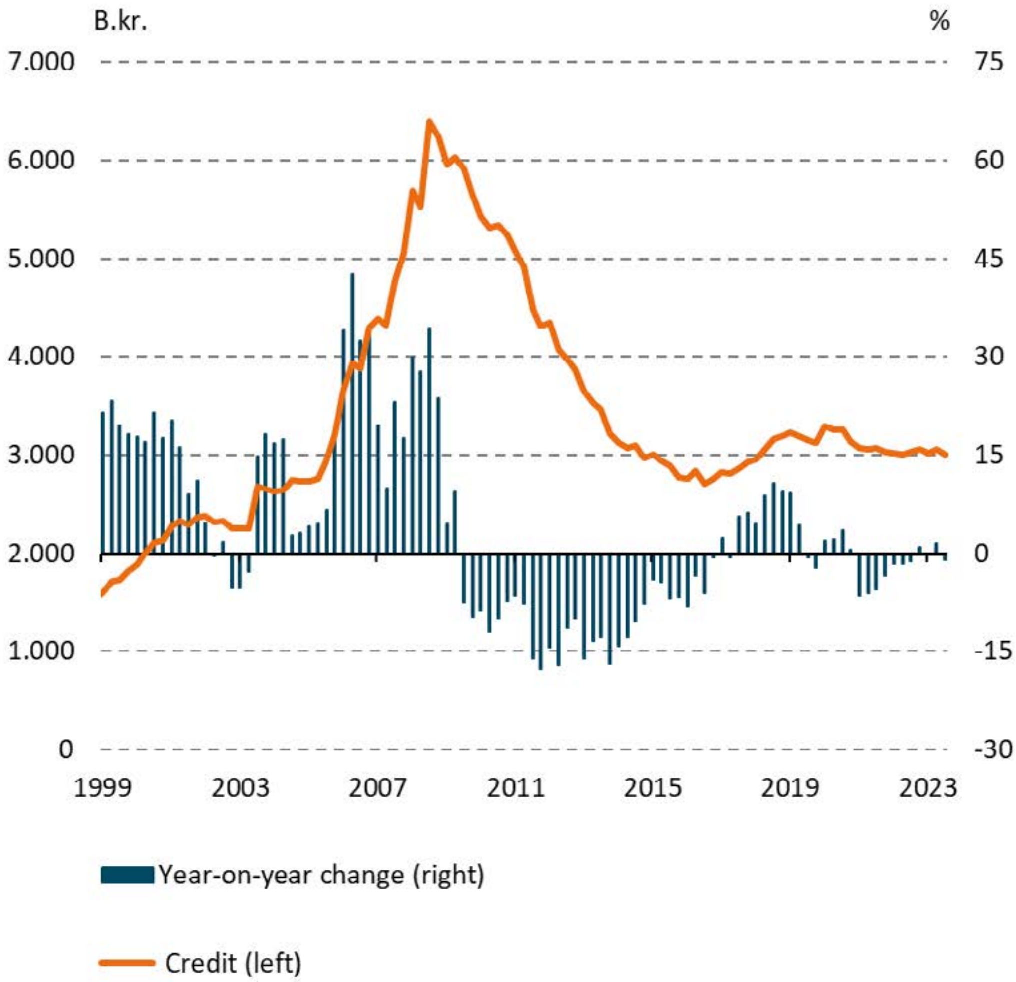
**Appendix – Charts**

## Credit-to-GDP ratio, gap and buffer guide



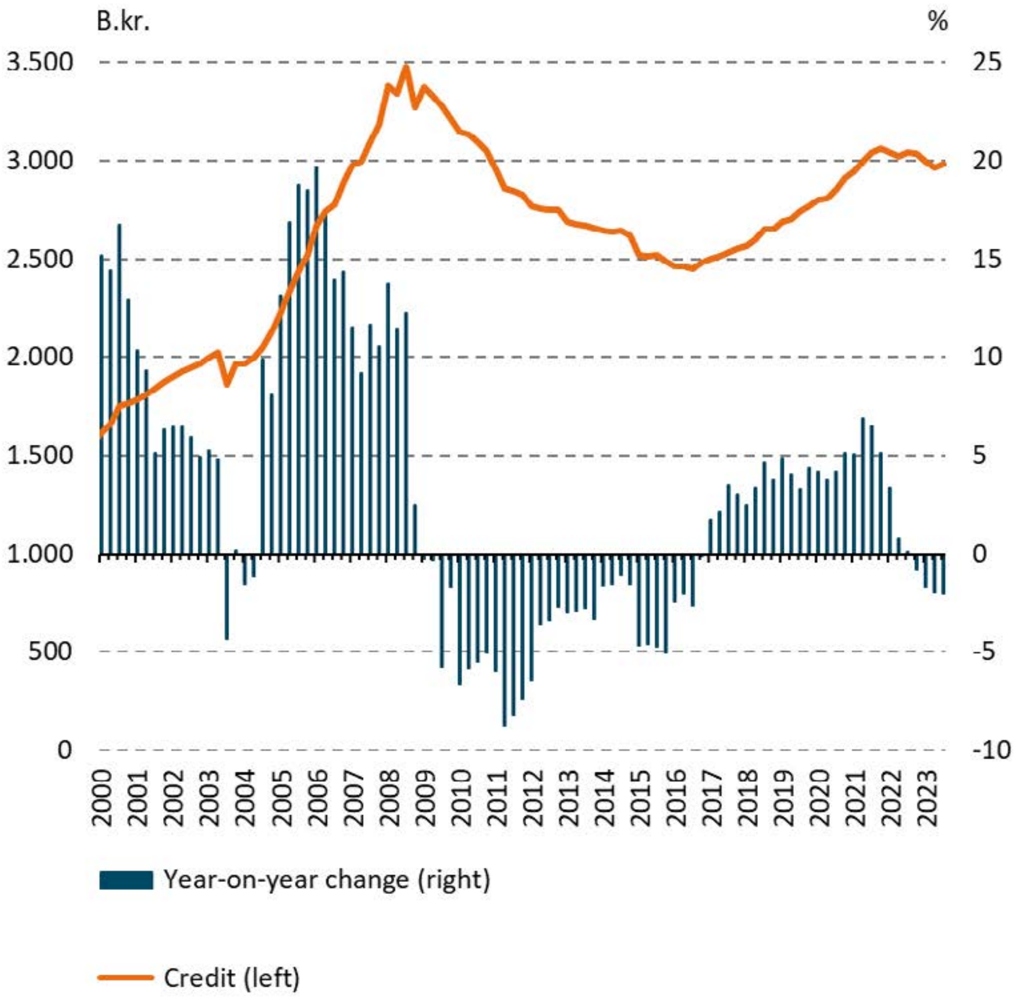

Total credit to households and firms, at claim value, as a percentage of the last four quarters GDP. The trend component is obtained with a one-sided Hodrick-Prescott filter with λ=400.000.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Real credit to firms



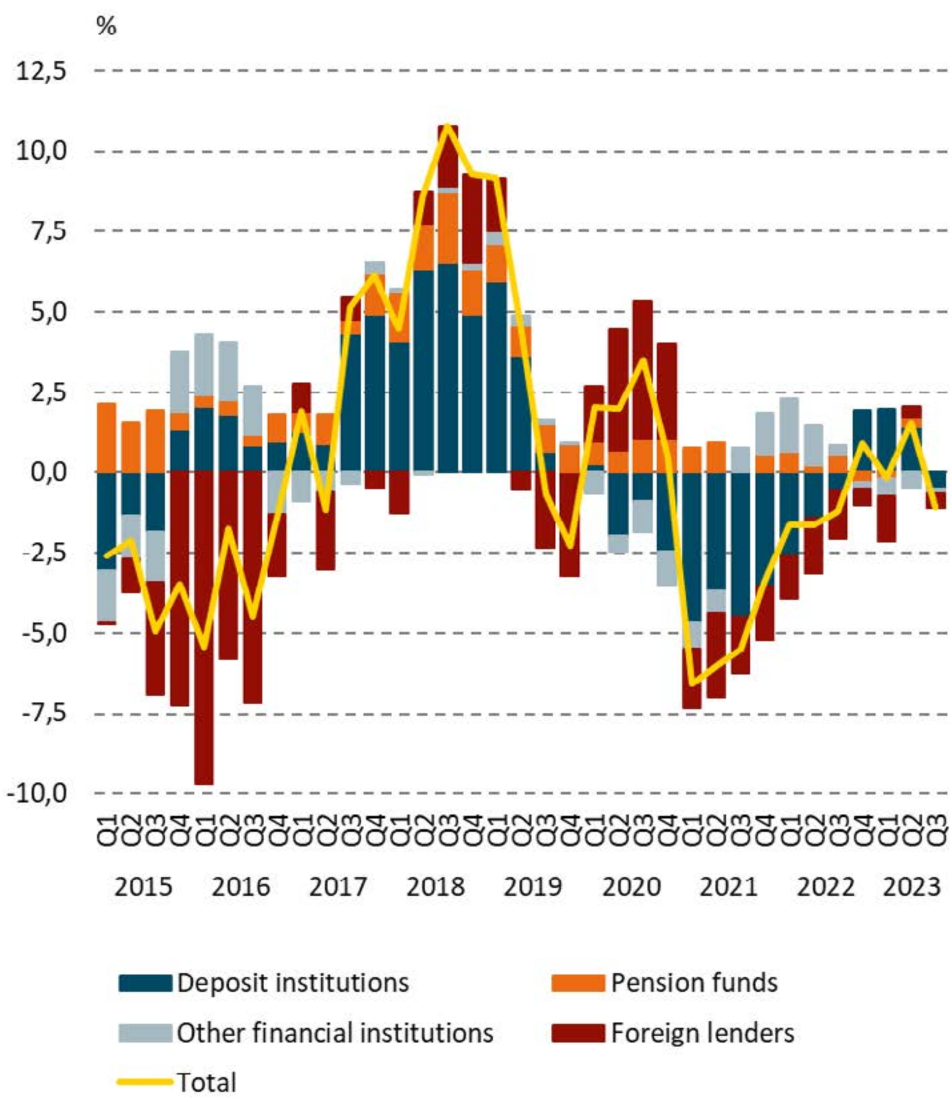

Claim value of credit to non-financial firms, at constant prices. Deflated with the consumer price index.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Real household credit growth



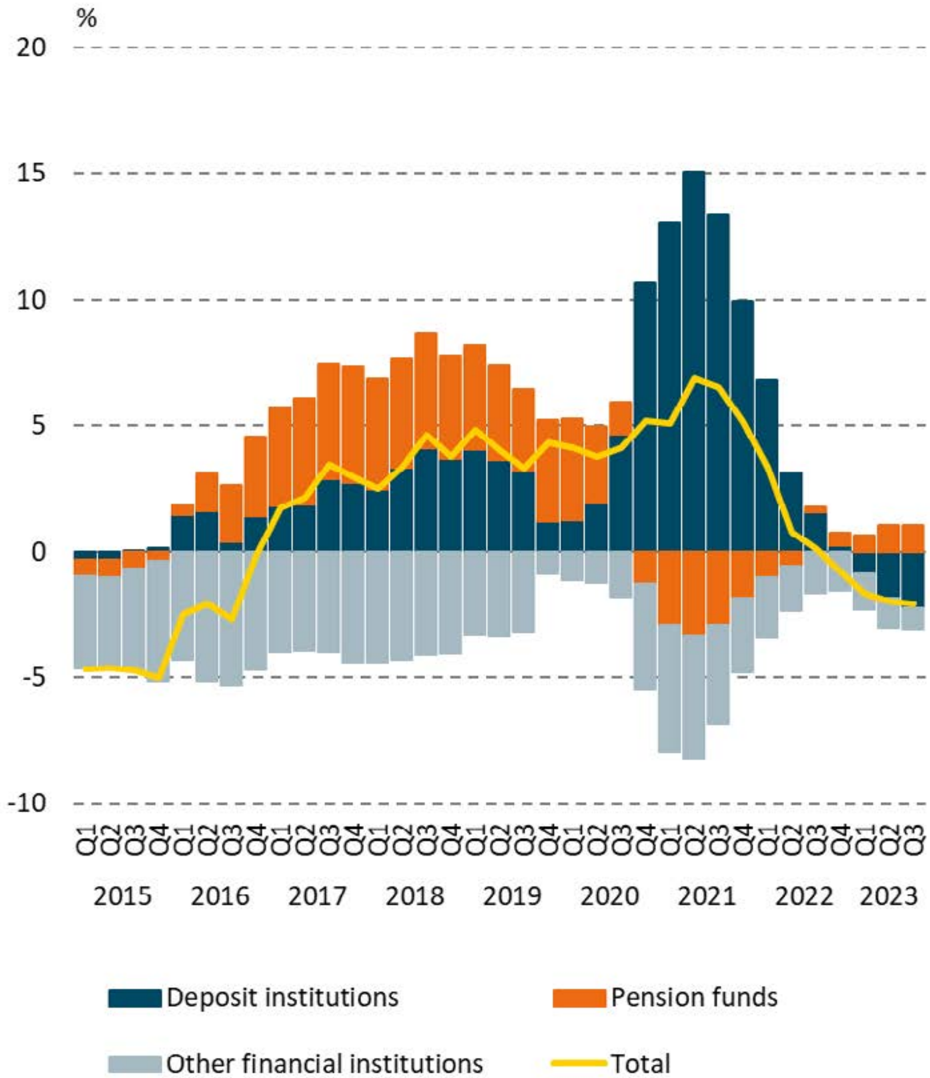

Claim value of total credit to households, at constant prices. Deflated with the consumer price index.
*Sources:* Statistics Iceland, Central Bank of Iceland.

## Corporate debt real growth disaggregated by lender type



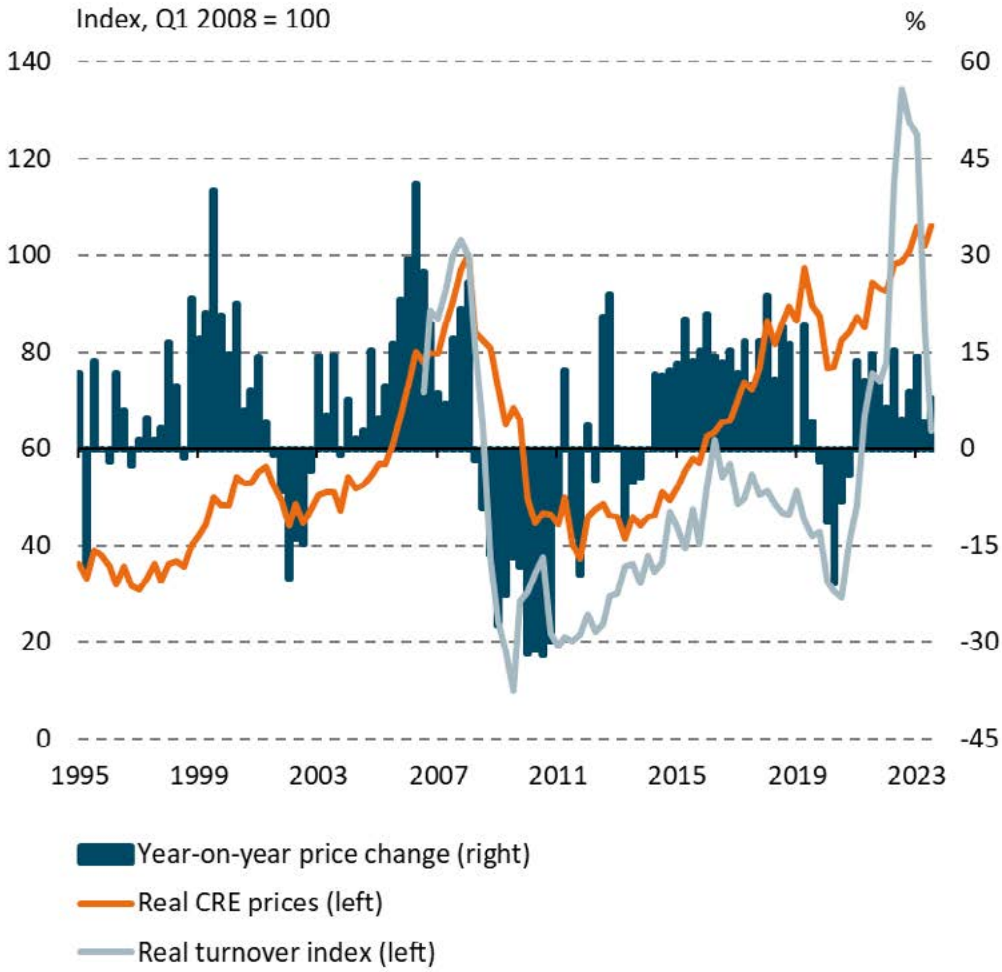

Claim value, deflated with the CPI, year-on-year change in aggregate and contribution of each lender type.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Household debt disaggregated by lender type



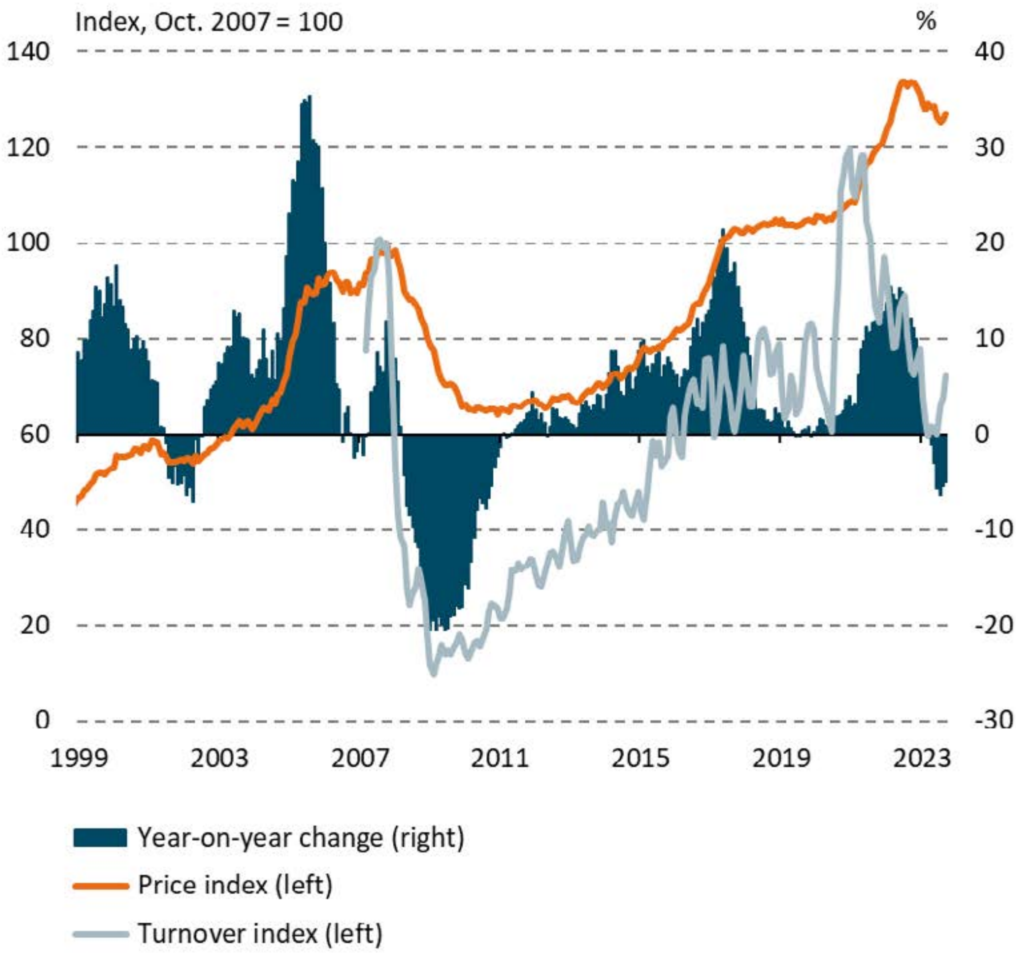

Real year-on-year change. Debt to financial institutions and issued marketable bonds.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Real commercial property prices and turnover in the capital area



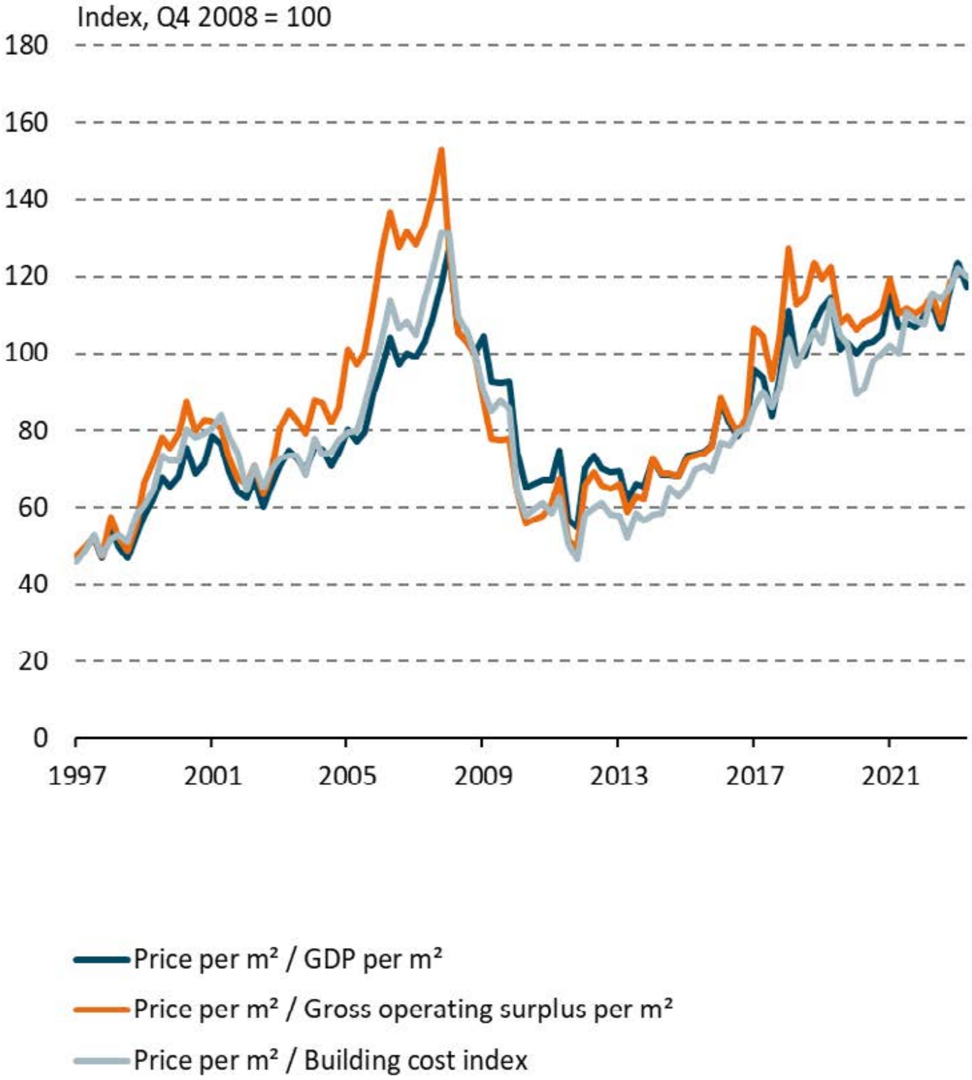

CRE price index, deflated with the CPI. The index shows the weighted average price of industrial, retail, and office space. The turnover index, deflated with the CPI, shows a four-quarter moving average. The most recent observations are preliminary.
*Sources*: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

## Real house prices and turnover in the capital area



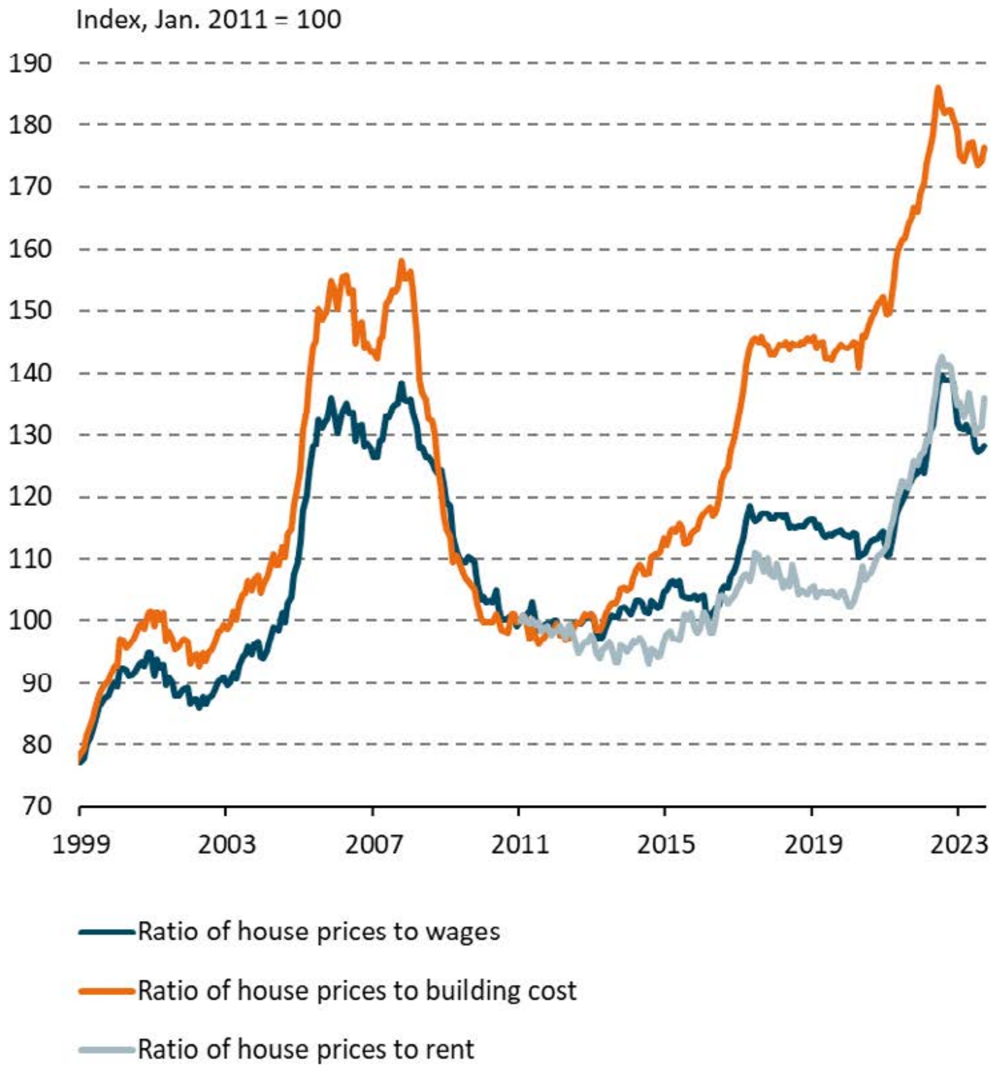

Capital area house price index, deflated with the consumer price index. The turnover index shows three-month average turnover, deflated with the consumer price index. The turnover data are linearly interpolated in 2Q/2015 to correct for a strike at the Reykjavík Commissioner's office.
*Sources:* Registers Iceland, Statistics Iceland, Central Bank of Iceland.

## Commercial property price ratios



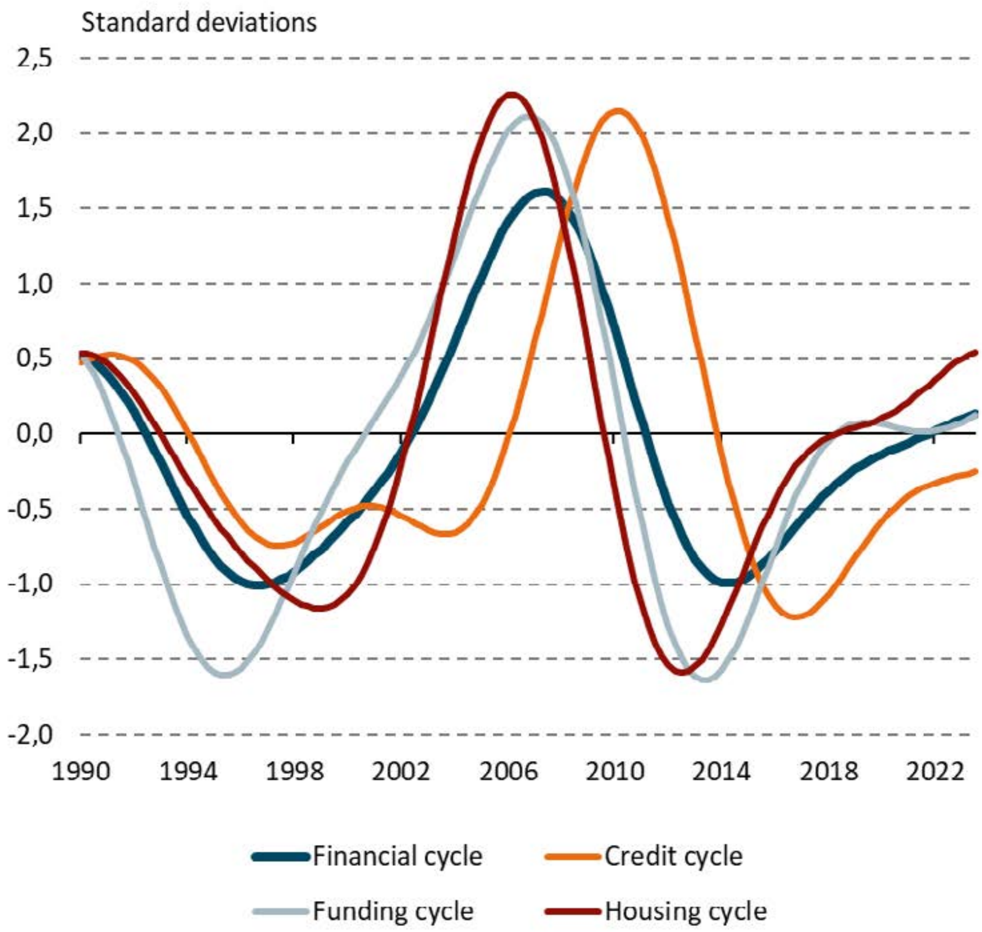

Annual data for gross operating surplus are non-linearly interpolated.
Annual data for the CRE stock are linearly interpolated.
*Sources*: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

## Capital area house prices and determining factors




*Sources*: Registers Iceland, Statistics Iceland.

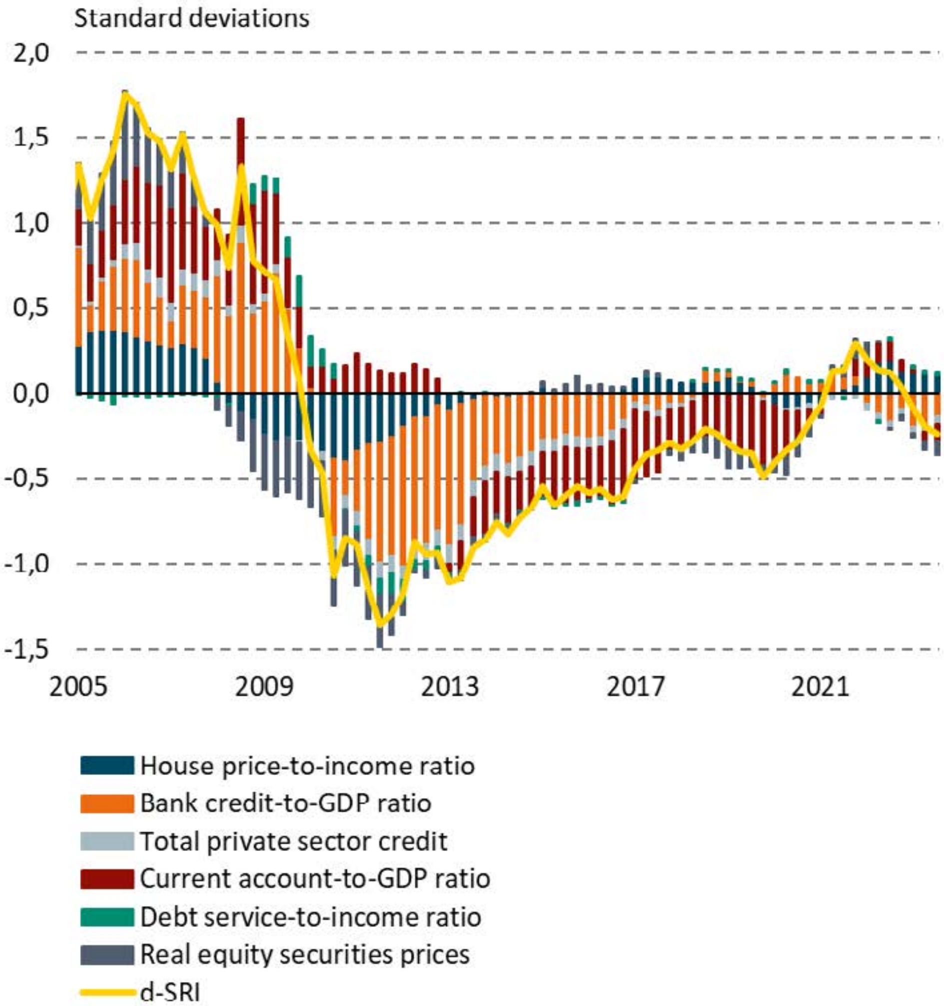
## Financial cycle and subcycles




The financial cycle, the blue line, is a simple average of the subcycles. Each subcycle is a simple average of cyclical components from variables related to credit, housing, and bank funding, respectively. Cyclical components are obtained with a Christiano-Fitzgerald band-pass filter with a frequency band of 8-30 years.

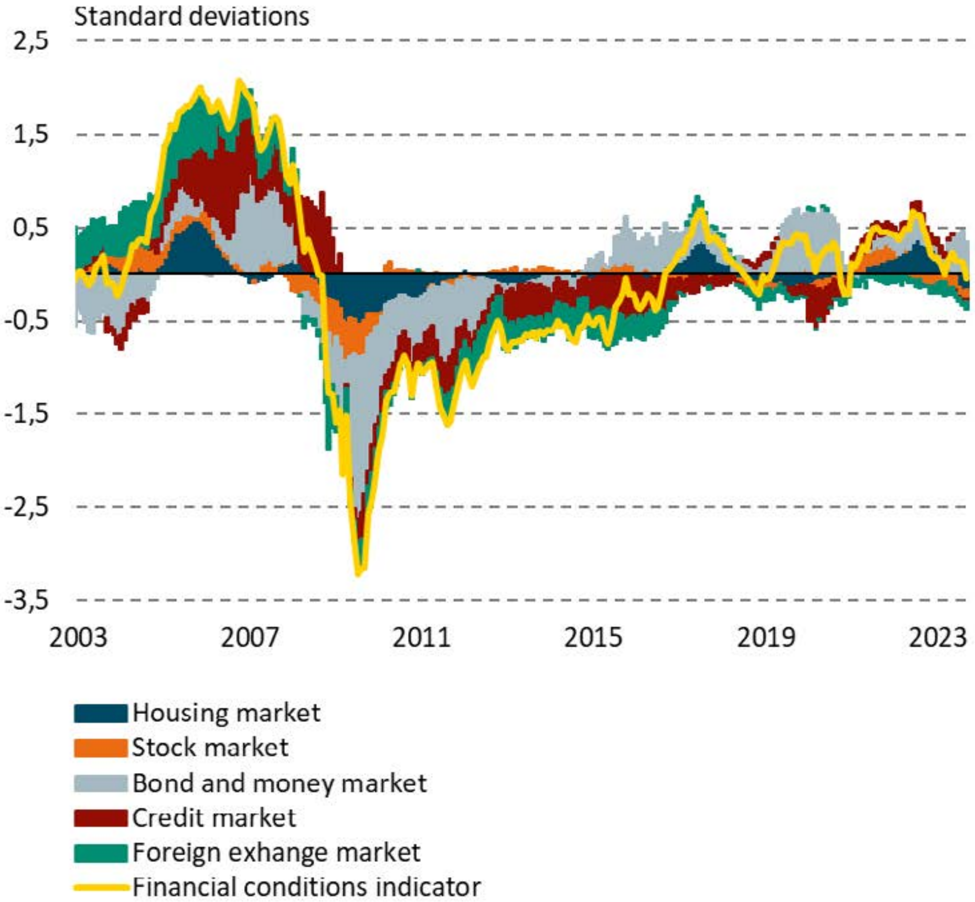
*Sources*: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

## Domestic systemic risk indicator (d-SRI)



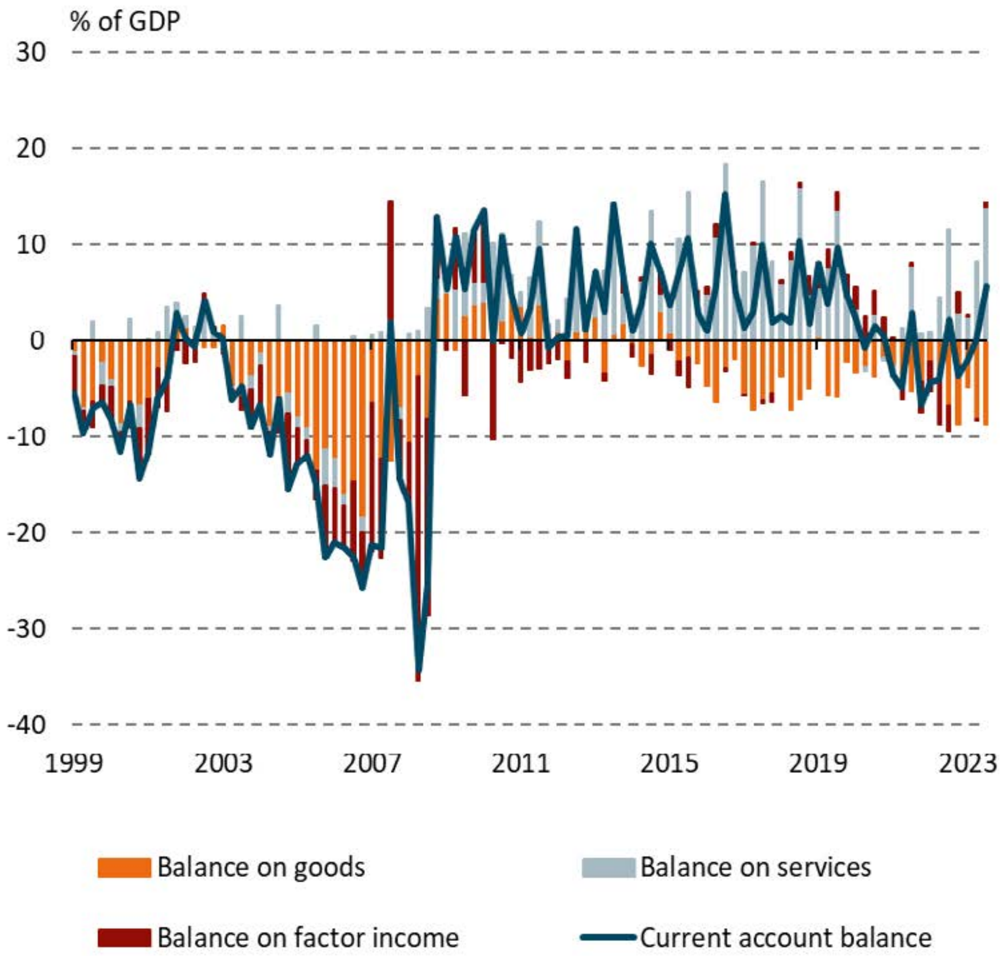

For the debt service-to-income ratio, data is lacking from Q1 2020 and onwards. The same value is repeated from that time to minimize the structural break in the indicator.
*Sources*: Statistics Iceland, Central Bank of Iceland..

## Domestic financial conditions



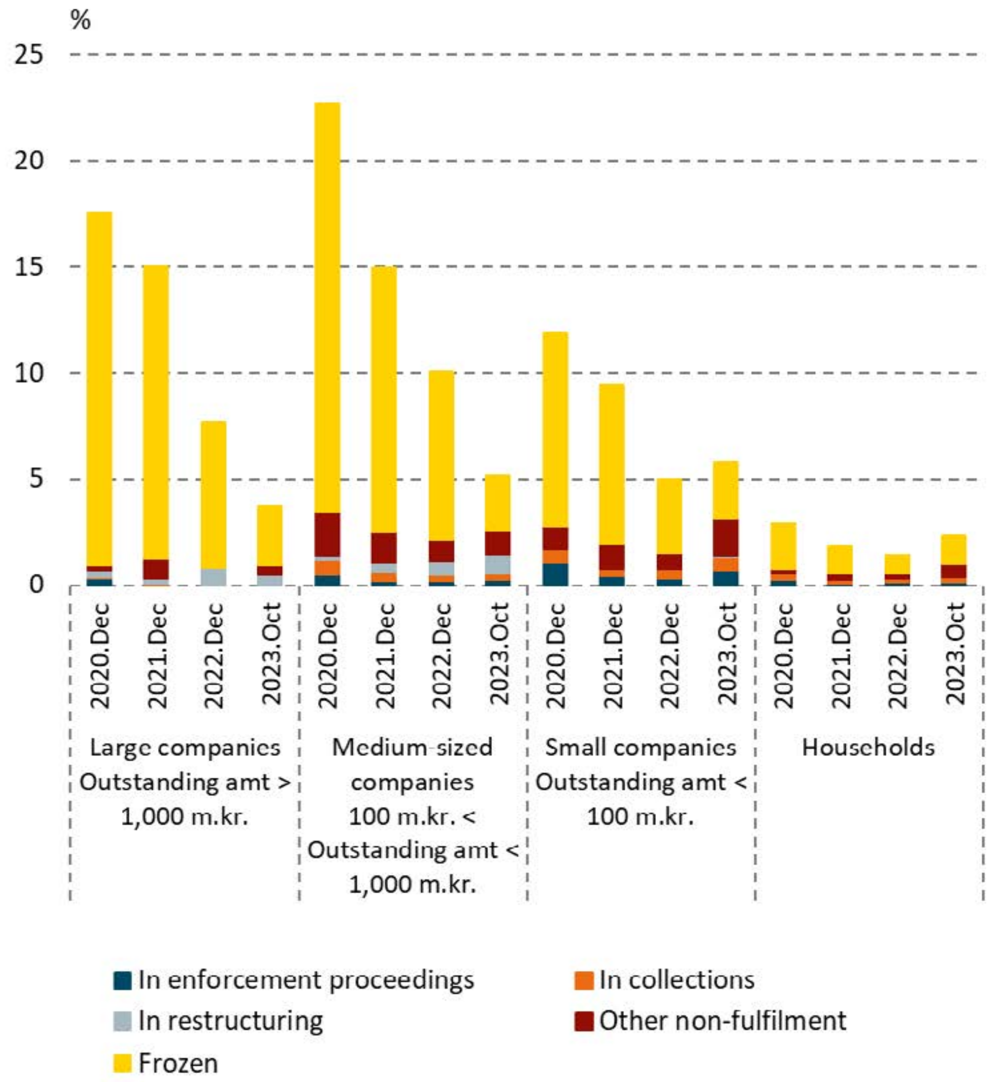

The financial conditions indicator consists of the first three principal components of selected indicators of financial conditions, scaled so that the mean is 0 and the standard deviation is 1. A lower index value indicates a deterioration in financial conditions. The estimation period is 2002-2023. *Sources*: Housing and Construction Authority, Nasdaq OMX Iceland, Statistics Iceland, Central Bank of Iceland.

## Current account balance



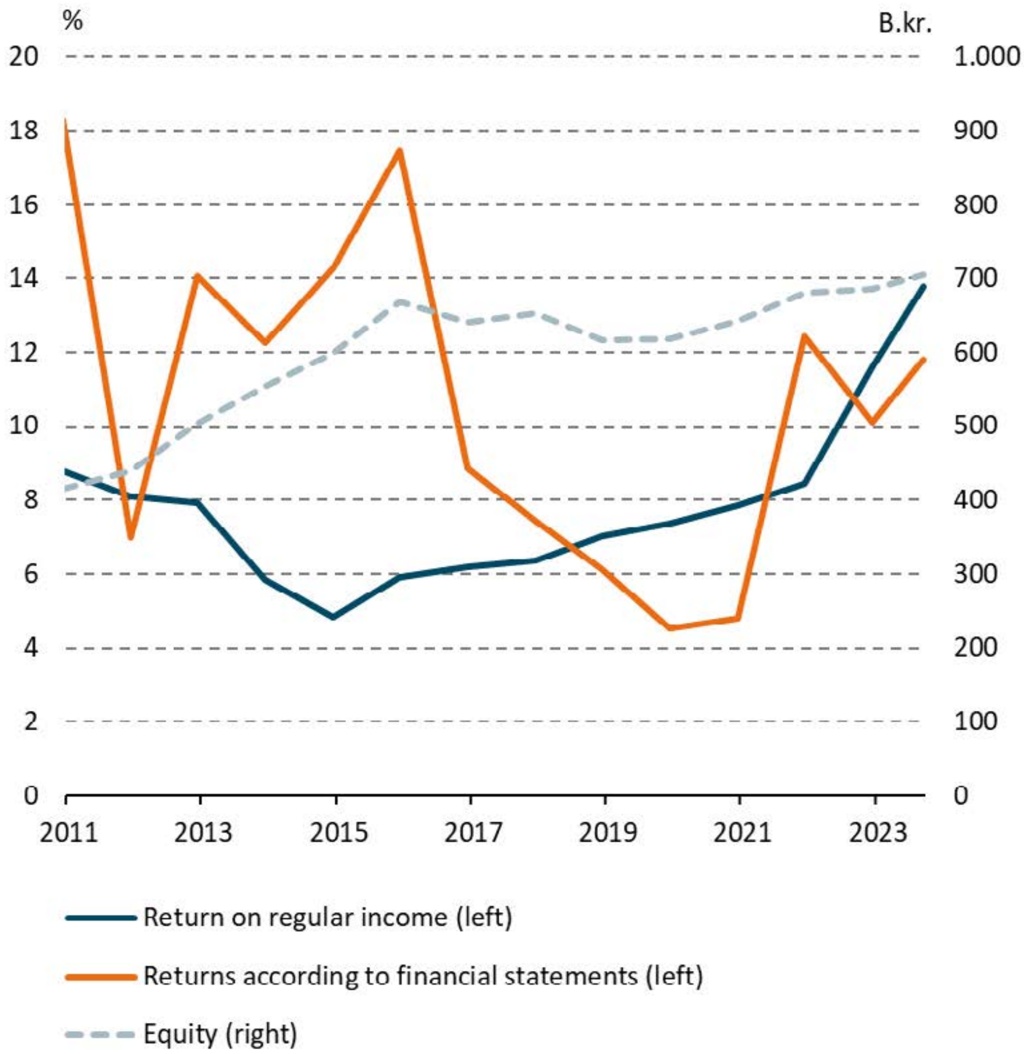

The effects of failed banks on factor income and the balance on services from Q4/2008 to Q4/2016 are ignored. From 2009 through 2012, the effect of Actavis on the balance on income is also ignored, owing to inaccurate data during the period. Secondary income is included in factor income.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Status of non-performing loans, by borrower and type of impairment



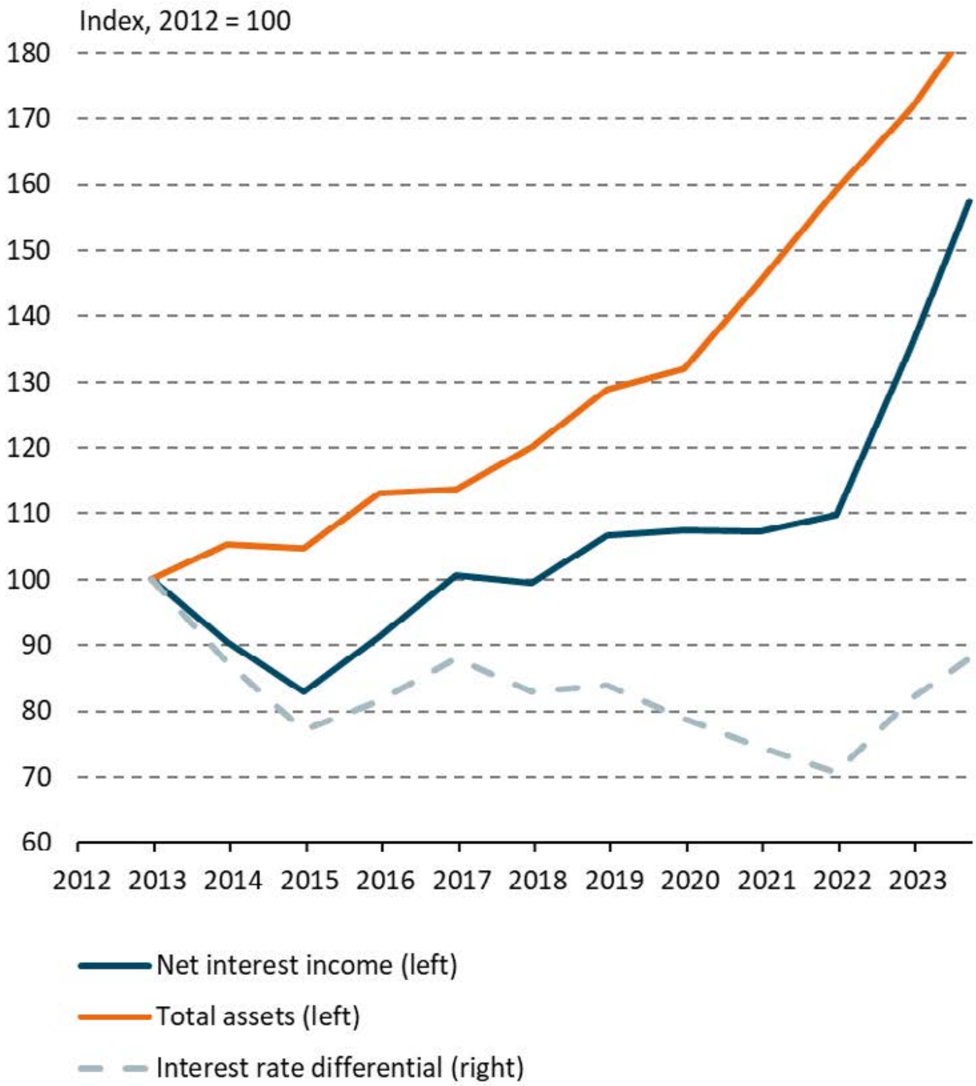

Cross-default non-performing loans, share of loans within each category. Domestic systemically important banks, parent companies, book value.
*Source*: Central Bank of Iceland.

## D-SIB: Returns



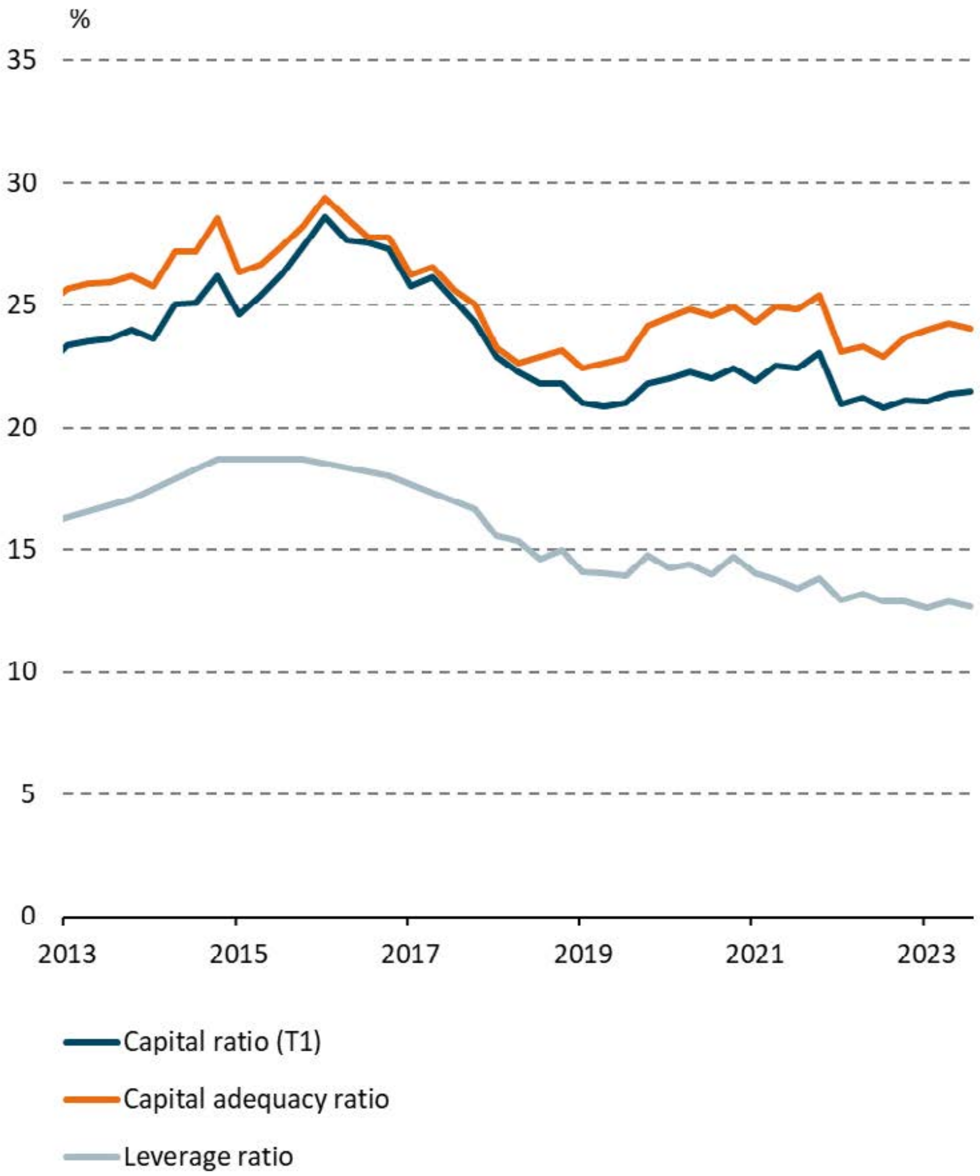

Returns are calculated on average equity, consolidated figures. The return on regular income is based on net interest income and fee/commission income net of regular expenses. The tax rate is 20% and is based on average equity. Valitor is excluded in 2017-2020.
*Sources*: Commercial banks' financial statements.

# D-SIB: Net interest income, interest expense and interest rate differential




Domestic systematically important banks, consolidated figures. Yearly data. 2023 figures are annualised Q3 data.
*Sources*: Commercial banks' financial statements.

## D-SIB: Capital and leverage ratios




Domestic systemically important bank, consolidated figures.
*Sources*: Commercial banks' financial statements.

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