



2022

REPORT

FINANCIAL STABILITY COMMITTEE REPORT TO PARLIAMENT



REPORT

FINANCIAL STABILITY COMMITTEE REPORT TO
PARLIAMENT FOR 2022

16 February 2023

Accompanying documents

This report is accompanied by the following documents

Statements of the Financial Stability Committee from March through December 2022	10
Minutes of Financial Stability Committee meetings from March through December 2022	14
Press release announcing the Financial Stability Committee's decision to open a liquidity window and discontinue the special temporary credit facility due to COVID, dated 14 January 2022	47
Speech delivered by the Deputy Governor for Financial Stability at a National Bioethics Committee symposium on climate change, 22 March 2022 (in Icelandic)	48
Press release on amendments to rules on derivatives trading, dated 7 April 2022	52
Press release on amendments to the rules on maximum loan-to-value ratios and maximum debt service-to-income ratios for consumer mortgages, dated 15 June 2022	53
Memorandum on the background to the decision on the countercyclical capital buffer, dated 8 June 2022	54
Speech on financial stability, delivered by the Deputy Governor for Financial Stability at Arion Bank, 22 June 2022 (in Icelandic)	76
Press release announcing that the European Systemic Risk Board (ESRB) had issued a warning on increased vulnerabilities in the European financial system that could jeopardise financial stability, dated 29 September 2022 (in Icelandic)	89
Netöryggismál í brennidepli á viðsjárverðum tímum [Cybersecurity in the spotlight during uncertain times] (in Icelandic). Article by the Deputy Governor for Financial Stability and others, published in <i>Kalkofninn</i> on 30 September 2022	90
Memorandum on the background to the decision on the countercyclical capital buffer, dated 1 December 2022	93

Financial Stability Committee report to Parliament for 2022

The Central Bank of Iceland Financial Stability Committee (FSN) reports to Parliament on its work once a year. It is assumed that the report will be discussed in the Parliamentary committee of the Speaker's choosing.

In 2022, the FSN's third year of operation, the Committee held four formal meetings. Members of the Committee are Ásgeir Jónsson, Governor, who acts as chair; Gunnar Jakobsson, Deputy Governor for Financial Stability, who acts as vice-chair; Rannveig Sigurdardóttir, Deputy Governor for Monetary Policy; Unnur Gunnarsdóttir, 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 non-voting member with the right to address the meeting and present proposals.

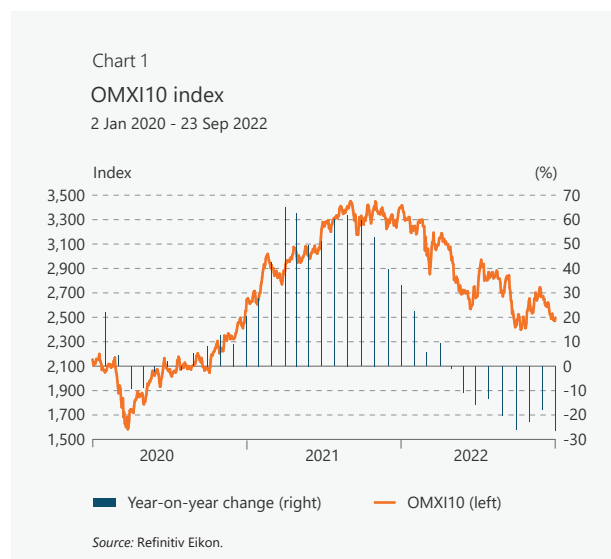
Financial stability

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 redistribute 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. The FSN's statements and minutes, enclosed with this report, contain the rationale for the Committee's decisions in 2022.

Developments in 2022

Asset markets were turbulent in 2022, concurrent with monetary and macroprudential tightening in Iceland and abroad. Public health restrictions due to the COVID-19 pandemic were lifted in late February, which had a positive impact on tourism and export revenues. Russia's invasion of Ukraine and the ensuing uncer-



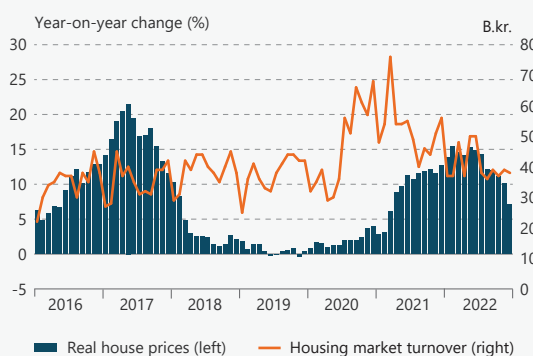
tainty in global markets strongly affected the inflation outlook and developments in the markets.

Nasdaq Iceland's OMXI10 index fell by 26.5% during the year, after rising by a third in 2021, and 14 of 22 companies on the Main List saw their share prices fall. Furthermore, bond yields rose during the year, in line with policy rate hikes and rising inflation expectations. The real estate market behaved very differently, however. The capital area house price index rose by 17.4% during the year (7.5% in real terms), as compared with 18.4% (11.9% in real terms) in 2021. Prices rose steeply early in the year but then lost momentum in H2, and the house price index fell month-on-month in November and December. Turnover in the market contracted by a fifth year-on-year in real terms, and the number of homes listed for sale roughly doubled over the course of the year. The capital area commercial real estate price index rose by 19.2% during the year (8.8%

in real terms), as compared with 16.2% (10.6% in real terms) in 2021. Turnover with commercial real estate rose markedly between years.

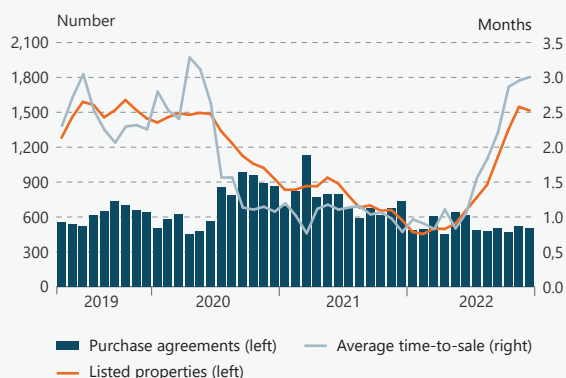
Growth in household credit eased as the year advanced and interest rates rose. Twelve-month real growth in household debt measured only 0.3% at the end of September 2022, as opposed to 6.5% a year earlier. Nevertheless, nominal growth remained robust, at 9.6%, about half of it due to price indexation on CPI-linked loans, which account for nearly half of household debt. The surge in indexation was fuelled by a near-doubling of inflation from 5.1% at year-end 2021 to its peak of 9.9% in July 2022. The ratio of household debt to disposable income declined during the year, as did the ratio of debt to GDP. The banks dominated the mortgage lending market, but as the year advanced the pension funds gained market share,

Chart 2
Real house prices and housing market turnover in greater Reykjavík¹



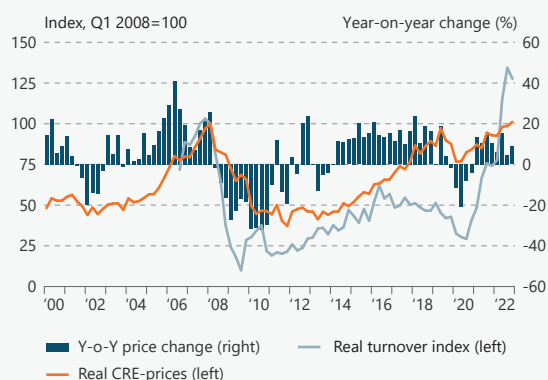
1. Housing market turnover, at constant December 2022 prices.
Sources: HMS, Statistics Iceland, Central Bank of Iceland.

Chart 3
Number of listed properties for sale, number of purchase agreements, and average time-to-sale in greater Reykjavík



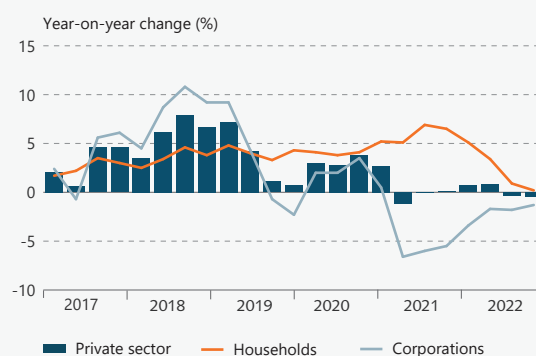
Sources: mbl.is real estate website, HMS, Central Bank of Iceland.

Chart 4
Real prices¹ and turnover² of CRE in the capital city area



1. CRE-price index, deflated with the CPI. The index shows a weighted average of industrial, retail and office prices. Latest observations are preliminary.
2. Turnover index, deflated with the CPI, shows a moving 4 quarter average.
Sources: HMS, Statistics Iceland, Central Bank of Iceland.

Chart 5
Private sector real credit growth¹

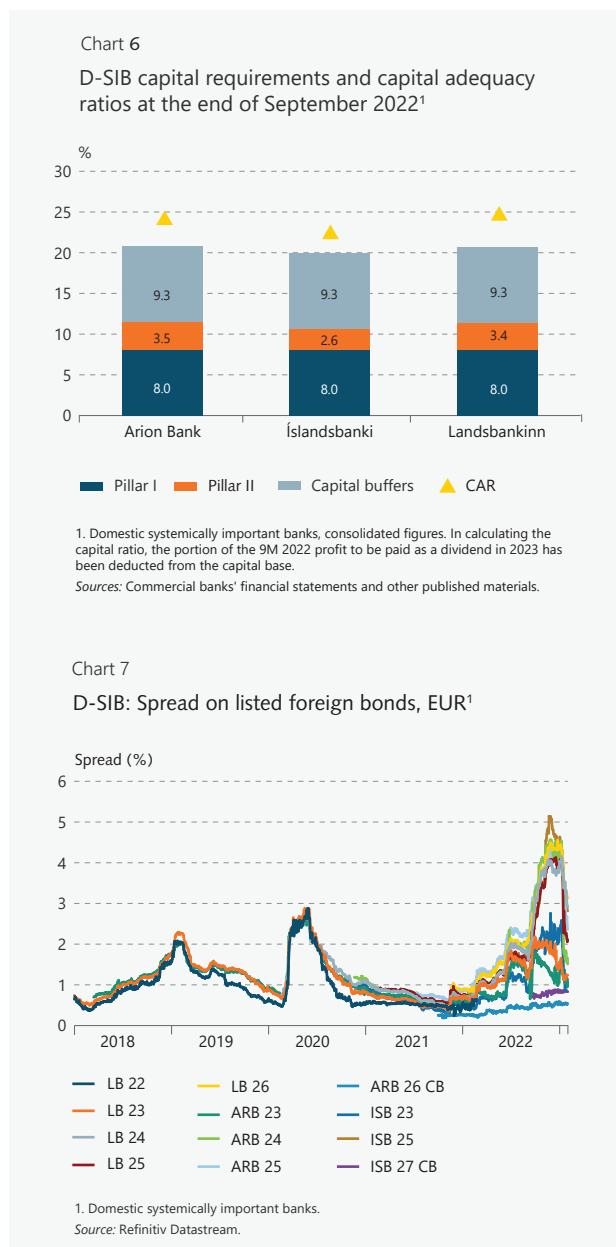


1. Lines show yearly growth rates. CPI-indexed credit at constant prices and foreign-denominated credit at constant exchange rates. Debt owed to financial institutions and bonds issued. Year-on-year change at constant prices. Public corporations are included.
Sources: Statistics Iceland, Central Bank of Iceland.

and households began seeking out indexed loans in response to rising interest rates. By September, net new indexed mortgage lending was positive for the first time since February 2020. The banks stepped up their corporate lending during the year, with the greatest increase in the construction and real estate sectors. Real growth in corporate lending remained negative at the end of September, however, at -1.6%, although it had increased by nearly 4 percentage points from the prior year. The ratio of corporate debt to GDP also fell during the period, to its lowest in decades.

to a significant profit in 2021. On the other hand, the interest rate spread on total assets widened to 2.81% in 2022 from 2.43% in 2021. Fees and commissions increased as well, in spite of difficult market conditions, and cost-cutting measures strengthened the banks' returns on core operations even further. The impairment ratio was 0.7% at year-end 2022, down from 1.0% at the end of 2021. Non-performing loan ratios declined during the year, in tandem with the strong economic recovery, particularly in tourism. At year-end 2022 it measured 0.7% of loans to individuals and 2.3% of corporate loans were classified as non-performing, down from 0.8% and 3.6%, respectively, in 2021. The banks' capital ratio averaged 23.7% at the end of September, after falling 1.7 percentage points year-on-year. The decline is due mainly to dividend payments, share buybacks, and balance sheet expansion.

The banks' year-end liquidity ratio in all currencies was 163%, well above the 100% minimum required under Central Bank liquidity rules. Liquid assets in excess of requirements declined by 38 b.kr. in 2022, to 235 b.kr. at the year-end. The banks' liquidity ratios fell somewhat early in the year but then rose again in the autumn, concurrent with their foreign bond issues. The banks' market funding in krónur was largely limited to covered bonds, although their new mortgage loans exceeded their covered bond issuance by far, as they had in 2021. The banks' increased share in the mortgage lending market was largely financed with deposits. Conditions in foreign funding markets deteriorated in 2022, and interest rate spreads on the banks' foreign issues rose steeply. Spreads spiked with Russia's invasion of Ukraine and then continued to rise slowly over the course of the year. By the end of 2022, they were higher than at the beginning of the pandemic. The banks issued foreign-denominated bonds for a total of 268 b.kr. in 2022, the majority of them covered bonds in euros. Interest rate spreads on those issues are far narrower than spreads on unsecured bond issues.

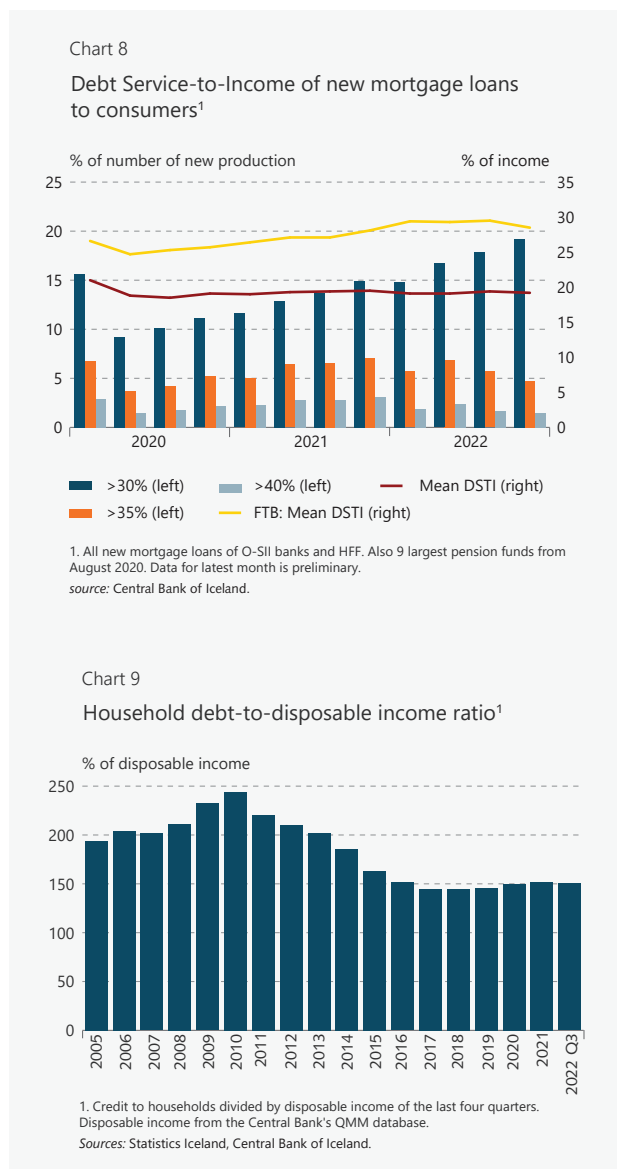


All three of the large systemically important banks generated strong profits in 2022. The banks' returns averaged 10.1%, as compared with 12.4% in 2021. The decline in returns in 2022 was due mainly to financial activities, which generated sizeable losses, as opposed

The Committee's decisions on borrower-based measures in 2022

The FSN discussed the real estate market at all of its meetings in 2022. In its March statement, the Committee noted that it considered the borrower-based measures appropriate, as the full effect of previous decisions had not yet come to the fore. In this context, the Committee pointed out that the rules capping debt service at 35% of disposable income (40% for first-time buyers) had taken effect in December 2021. Lenders had the flexibility to consider differences in

households' circumstances, with an exemption for 5% of total mortgage lending each quarter and a separate exemption for borrowers in financial distress.



Property prices had soared in June, deviating even more from fundamentals such as wage growth, building costs, and rent prices. Nevertheless, the increase was not driven as yet by overleveraging. The FSN was concerned about increased indebtedness, however, particularly among first-time buyers. Members discussed the lack of supply in the housing market. It emerged that the outlook was for housing demand to continue to outpace supply. Firms were reporting worker shortages, and the outlook was therefore for continued inward migration. Furthermore, a large generation of young people were entering the labour market. In order to preserve borrowers' and lenders' resilience, the FSN had decided at its June meeting to lower the maximum loan-to-value ratio for first-time

buyers from 90% to 85% but to hold it unchanged at 80% for other buyers. The Committee also decided to amend the Rules on Maximum Debt Service-to-Income Ratios for Mortgage Loans to Consumers to include a reference interest rate of 3% for indexed loans and 5.5% for non-indexed loans. The maximum loan period for the calculation of debt service was set at 25 years for indexed loans and 40 years for non-indexed loans.

In December, the FSN was of the view that tighter borrower-based measures and their interaction with higher interest rates would continue to reduce demand pressures in the market. In the Committee's opinion, systemic risk in the housing market was still moderate and households were resilient enough to absorb higher debt service. Although real disposable income had contracted in H2/2022, household debt measured about 150% of disposable income, which was low in historical context and somewhat lower than in the other Nordic countries. Debt service had increased in line with rising interest rates, particularly on non-indexed loans, which constituted just over half of total household debt. About 27% of consumer mortgages were non-indexed variable-rate loans, and the weighted average rate on such loans had risen to 8% by October. Higher interest rates could have some impact on households, but the FSN did not consider it likely that arrears would increase substantially, as the economic outlook was favourable and households should be able to refinance their mortgages to lighten their debt service burden if the need arises.

Committee decisions in 2022

The Committee made no changes to capital buffers on financial institutions in 2022. The FSN reviews the countercyclical capital buffer rate (CCyB) on a quarterly basis. The main purpose of the 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. At its meetings in 2022, the Committee held the CCyB unchanged at 2%, as its September 2021 decision to increase the buffer rate from 0% to 2% took effect a year later, in September 2022. According to the minutes of the FSN's meetings, the systemically important banks are highly resilient, as can be seen, for example, in their strong capital and liquidity position.

In March 2022, the FSN decided to hold the systemic risk buffer unchanged at 3% for all deposit-taking institutions' domestic exposures. The systemic risk buffer is applied on the basis of persistent systemic risk relating to homogeneity and underlying risk in the

Icelandic economy. Such systemic risk is considered non-cyclical, or built-in, and the buffer rate is reviewed every two years.

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 amended the rules on derivatives trading to exclude transactions between domestic commercial banks from the restrictions on derivatives trading. The restriction on domestic commercial banks' derivatives transactions involving the Icelandic króna is unchanged from the previous rules, and the total permissible exposure in such transactions is still restricted. In the interest of safeguarding financial stability, the rules impose limits on the total amount of individual commercial banks' derivatives transactions. The gross forward foreign currency position may not at any time exceed 50% of the capital base of the commercial bank in question, and the position vis-à-vis each counterparty is limited to 10% of the capital base. The FSN considered the experience of the rules to have been positive. The derivatives market was more active than before and there were more diverse possibilities for derivatives trading, which had led to an increase in the number of both counterparties and trades.

Furthermore, in its statements from 2022, 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 in 2022. Retail payment intermediation in Iceland is characterised by widespread use of payment cards, which rely on foreign infrastructure owned by international payment card conglomerates. In the FSN's view, this entails risk – for instance, if overseas internet connections are disrupted or if the owners of such systems decide to stop doing business with Iceland. Payment intermediation is less stable and less efficient in Iceland than in the Nordic countries. The FSN encouraged the Government and the Bank to place strong emphasis on taking the lead in policy setting and bringing about the changes necessary for effective and secure payment intermediation. The Central Bank's Forum for the Future was introduced to the Committee in December. The Forum includes representatives from domestic deposit institutions, the Ministry of Finance and Economic Affairs, and the Central Bank. In the near future, the Forum for the Future will consider and make decisions on the next steps towards implementing a domestic payment solution. Furthermore, at the FSN's meetings, it emerged that reported cyberattacks had grown in number and were increasingly directed at important infrastructure. The Committee noted that it might prove necessary to strengthen the statutory framework for financial market infrastructure still further and expand the Bank's authorisations to adopt rules. It was necessary to guarantee information flows and consultation among all stakeholders in this area.

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 Financial Stability Committee 16 March 2022

The state of financial stability is favourable, and the systemically important banks are highly resilient. Their capital and liquidity are well above regulatory minima, giving them ample scope to support households and businesses.

In 2022, the economic recovery will probably be weaker than was previously expected, owing to the pandemic and the Russian invasion of Ukraine, particularly if the war drags on.

Icelandic households are generally well positioned, and household credit growth has eased. Real disposable income has been rising year by year, and households' equity position has grown stronger. Unemployment has fallen and the labour participation rate has risen. Households' sound position will better enable them to cover higher debt service if interest rates rise further, and they have access to various types of mortgages in order to react to inflation. Arrears have declined since the onset of the pandemic and now account for less than 1% of the banks' loans to households.

Many companies were not adversely affected by the pandemic, but those that suffered severe revenue losses are still vulnerable. It is vital that the banking system continues to work on restructuring their debt.

In its quarterly review of the countercyclical capital buffer (CCyB), the Financial Stability Committee (FSN) has decided to hold the buffer unchanged. The decision taken in September 2021 to increase the buffer from 0% to 2% will take effect at the end of September 2022. The Committee has also decided to hold the systemic risk buffer unchanged at 3%.

Developments in the real estate market and household indebtedness are monitored closely. The FSN considers the current stance regarding borrower-based measures sufficient, as the effects of previous decisions have not yet come fully to the fore.

The FSN stresses the importance of safeguarding Iceland's cybersecurity and the operational security of telecommunications and financial market infrastructure. The current situation underscores how vital it is to bolster resilience in payment intermediation and expedite the implementation of an independent domestic retail payment solution. The Committee reiterates that it is critical for operators to guarantee payment system security and business continuity.

The Financial Stability 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 Financial Stability Committee 15 June 2022

The systemically important banks are highly resilient at present. Their capital and liquidity are well above regulatory minima. It is vital to ensure that growing economic activity is not accompanied by unwarranted risk appetite and excess lending growth, which could cut into financial system resilience. If the global economic recovery suffers a setback, it could affect financial stability in Iceland.

Real estate prices have risen still higher this year and have deviated noticeably from fundamentals such as wages, building costs, and rent prices. In order to safeguard the resilience of borrowers and lenders alike, and in view of the current circumstances, the Financial Stability Committee (FSN) has decided to lower the maximum loan-to-value (LTV) ratio on mortgage loans to first-time buyers from 90% to 85%. The maximum LTV ratio is held unchanged for other buyers. The Committee has also decided to establish a reference interest rate for the calculation of debt service in the Rules on Maximum Debt Service-to-Income Ratios for Mortgage Loans to Consumers. The reference rate will be a minimum of 3% for indexed mortgages and 5.5% for non-indexed mortgages. Furthermore, the FSN has decided to shorten the maximum loan term used to calculate debt service on indexed loans to 25 years. The changes in the debt service-to-income (DSTI) ratio are intended to increase borrowers' risk awareness when they select from among loan types, as the debt service burden on indexed loans is relatively lighter early on and then grows heavier over the term of the loan. The objective of the above-specified measures is to limit the accumulation of systemic risk in the financial system.

In addition, the FSN has decided to hold the countercyclical capital buffer unchanged. The decision taken in September 2021 to increase the buffer from 0% to 2% will take effect at the end of September 2022.

The Financial Stability Committee reiterates the importance of enhancing security in domestic payment intermediation and expediting the implementation of an independent retail payment solution.

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 Financial Stability Committee 28 September 2022

The global economic outlook has deteriorated recently, which could adversely affect the Icelandic economy. Inflation in trading partner countries is at its highest in decades, and central banks have resorted to steep policy rate hikes. Furthermore, the war in Ukraine has pushed energy prices upwards in Europe and has, along with other factors, exacerbated uncertainty. As a result, risks to financial stability in Iceland have increased because of worsening external conditions and the balance of risk is tilted to the downside.

The systemically important banks are highly resilient. Their capital and liquidity position are strong. The Central Bank of Iceland stress test for 2022 shows that the banks are well prepared to respond to external economic shocks and simultaneously support households and businesses.

Icelandic real estate prices have soared and have deviated widely from fundamentals. The rise has largely been equity-driven, and household debt levels have kept pace with income in recent years. The application of borrower-based measures in the housing market has reduced issuance of new high-risk loans, contributed to increase equity ratio, and safeguarded new borrowers debt service capacity. These measures, together with interest rate hikes, have eased tensions in the market.

Increased external uncertainty highlights the importance of maintaining the resilience of the Icelandic financial system. Iceland is better positioned than many of its trading partner countries, but a vigilance is required to preserve financial stability.

The Financial Stability Committee decided to hold the countercyclical capital buffer unchanged. The decision taken in September 2021 to increase the buffer from 0% to 2% will take effect tomorrow, 29 September 2022.

The Committee stresses the importance of bolstering security in domestic payment intermediation so as to guarantee business continuity, partly in view of growing cyberthreats. Steps have been taken towards the development of an independent domestic retail payment solution, which is highly important in the current situation.

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 December 2022

The global economic outlook is highly uncertain, and global economic development could adversely affect the Icelandic economy in the coming term. Inflation is high in Iceland's main trading partner countries, and central banks there have continued to tighten their monetary policy stance, which has worsened the outlook for financial stability. Conditions in foreign capital markets are challenging for domestic financial institutions. Furthermore, growing domestic demand has led to a wider current account deficit. Risks to financial stability in Iceland have therefore increased.

The systemically important banks are highly resilient. Their capital and liquidity are strong. The banks are well prepared to respond to external economic shocks and support households and businesses.

Imbalances in the housing market have receded in recent months, concurrent with increased supply of properties for sale and a lengthening of the average time-to-sale. The imposition of borrower-based measures has mitigated risky new lending and fostered higher equity ratios.

The Financial Stability Committee (FSN) has completed its annual review of systemically important financial institutions and the capital buffer for systemic importance (O-SII buffer). Based on European Banking Authority methodology, the FSN has confirmed the systemic importance of Arion Bank, Íslandsbanki, and Landsbankinn. The Committee has decided to hold the O-SII buffer unchanged at 2% for all exposures.

In its quarterly review of the countercyclical capital buffer (CCyB), the FSN has decided to hold the buffer unchanged at 2%.

The Committee discussed the importance of increasing efficiency and security in domestic electronic payment intermediation so as to ensure business continuity. Steps have been taken towards an independent domestic retail payment solution, which is important in terms of both efficiency and risk, including the risk due to continuously growing cyberthreats.

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.



MINUTES

FINANCIAL STABILITY COMMITTEE



2022

March
12th meeting
Published 8 April

Minutes of the Financial Stability Committee meeting

March 2022 (12th meeting)

Published 8 April 2022

The Financial Stability Committee (FSN) takes decisions on the application of the Central 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 redistribute 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 direct 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 the state of financial stability.

The meeting of 14-15 March 2022 began with presentations and a discussion of economic developments and prospects and the state of the financial system. The Committee discussed the current situation and outlook for financial stability and the principal risk factors, such as economic developments, risks faced by financial institutions and the financial system, developments in domestic financial markets, household and corporate debt, the real estate market, and financial institutions' capital position. The Committee also discussed the security and efficiency of financial market infrastructure and its importance for financial system stability, particularly in view of elevated cybersecurity risk and the war in Europe. Furthermore, it discussed the report prepared by the appraisal committee tasked with assessing the experience gained from the work of the Bank's three committees in 2020-2021.

In its quarterly review of the countercyclical capital buffer (CCyB), the FSN decided to hold the buffer unchanged, as it had decided in September 2021 to increase the buffer from 0% to 2%, effective at the end of September 2022. The FSN also decided to hold the systemic risk buffer unchanged at 3% for deposit-taking institutions' domestic exposures. The Committee approved amendments to the Rules on Derivatives Transactions, no. 765/2021, as transactions between Icelandic banks are exempt from restrictions on derivatives trading. Furthermore, the FSN decided to amend its Rules of Procedure so that the Committee will no longer be involved in decisions pertaining to the resolution authority.

Committee members agreed unanimously that it was of vital importance that the Government and Central Bank place strong emphasis on Iceland's cybersecurity, the operational security of telecommunications infrastructure, and the connection between telecommunications infrastructure the operational security of financial market infrastructure. The FSN stresses the importance of safeguarding Iceland's cybersecurity and the operational security of telecommunications and financial market infrastructure. The current situation underscores how vital it is to bolster resilience in domestic

payment intermediation and expedite the implementation of an independent retail payment solution. The Committee reiterates that it is critical for operators to guarantee payment system security and business continuity.

Analysis of financial stability

The Committee considered the financial system to be highly resilient and the state of financial stability favourable. The economic outlook had worsened and uncertainty had escalated following Russia's invasion of Ukraine. The outlook indicated that economic sanctions and higher energy and commodity prices would slow down the global economic recovery, and the inflation outlook had deteriorated. It was uncertain how much direct and indirect effect the invasion would have on the domestic economy, but poorer prospects for GDP growth and inflation in trading partner countries suggested that there would probably be some impact. Higher inflation, higher oil prices, and reduced purchasing power in advanced economies could cut into international travel; however, prospects for marine product exports were good. The Committee was of the view that the strength of the banking system and Iceland's healthy balance of payments would mitigate the adverse effects of increased global uncertainty on the economy and financial system.

Banking system resilience

The FSN was of the opinion that the systemically important banks were highly resilient. Their capital and liquidity positions are well above regulatory minima, giving them ample scope to support households and businesses. The three banks generated a profit of 81 b.kr. in 2021, and their liquidity in excess of requirements totalled 255 b.kr. as of end-January. According to the Central Bank's most recent stress tests of their liquidity position, the banks can withstand significant outflows of deposits. Their capital increased by 39 b.kr. year-on-year in spite of dividend payments and share buybacks in 2021, and their combined capital ratio was 26.7% at the end of the year. Credit spreads on the banks' foreign bond issues had risen following Russia's invasion of Ukraine. Spreads on comparable issues of foreign banks had risen as well. The banks' foreign refinancing risk was considered limited, however, because of their strong liquidity position. Nevertheless, the Committee considered it important to continue keeping abreast of developments in global capital markets.

Arrears on banking system loans to both households and businesses declined in 2021. At the end of the year, non-performing loans accounted for 3.4% of corporate loans from the systemically important banks, and 12.1% of corporate loans were frozen at the end of January 2022. In the services sector, however, some 34% of loans were frozen. Household arrears have declined since the beginning of the pandemic. At the end of 2021, 0.8% of bank loans to households were non-performing, which is low in both historical and international context.

Private sector debt

Growth in household debt had eased in recent months, from 10% in nominal terms and 5.1% in real terms as of November 2021 to 10% in nominal terms and 4.1% in real terms as of January 2022. In the Committee's opinion, households' position is generally good, which should better enable them to cover higher debt service if interest rates rise further. Households also have access to various types of mortgages in order to react to inflation. Real wages had risen, unemployment was down, the labour participation rate had increased, and households' equity position had improved.

Growth in corporate debt had picked up marginally. In real terms, growth was still negative, but in price- and exchange rate-adjusted terms, it measured 1.8% at the end of 2021. This trend could be attributed mainly to increased issuance of marketable bonds and an increase in alternative investment

funds' corporate lending. Corporate financing had shifted increasingly from the banking system to market-based financing and other lenders, particularly alternative investment funds.

Asset prices

The FSN reviewed the situation in the real estate market. There were signs that the imbalances between supply and demand in the residential housing market had widened. Committee members were concerned about limited housing supply and steeply rising house prices. Surging prices would be most detrimental to first-time buyers and could increase household debt over time. The number of properties advertised for sale in the capital area had fallen by nearly 69% since year-end 2019, to the lowest level since data collection began in 2006. In February, the average time-to-sale was less than 30 days. The rise in the capital area house price index had continued to accelerate, and at the end of January the year-on-year increase measured 13.8% in real terms (20.3% in nominal terms). Turnover in the market had subsided in January but remained strong relative to the pre-pandemic period. The deviation of house prices from underlying economic fundamentals had widened even further since the Committee's last meeting. Their deviation from long-term trend widened by 11.5 percentage points year-on-year in January, its largest upward deviation from trend since 2008.

The construction market was relatively lively last year in historical terms. A total of 2,900 new residential properties had been assigned 2021 as their construction year, including 1,800 in the capital area. The number of new fully finished flats had declined slightly year-on-year, however, even though the number completed over a single year was historically high.

Committee members discussed the reduction last summer in maximum loan-to-value (LTV) ratios on residential mortgages (from 85% to 80%), noting that it had begun to have an effect: most buyers' LTV ratios had fallen, although first-time buyers' LTV ratios had risen alongside the rise in house prices. First-time buyers' average debt service-to-income (DSTI) ratio had therefore risen in recent quarters. Committee members were of the view that the impact of the rules capping DSTI ratios, which had taken effect in December, had yet to come more fully to the fore, and that the effect would grow stronger as the monetary stance tightened. All else being equal, the rules should bring about less indebtedness and should slow the pace of house price inflation.

The commercial real estate (CRE) price index, which measures real prices in the capital area, rose by 11.1% year-on-year in 2021 and had returned to its pre-pandemic level. Turnover in registered CRE purchase transactions had increased by 82% year-on-year in real terms, reaching its highest single-year value since 2007. The adverse impact of the pandemic had been short-lived, and the market was therefore relatively strong.

The FSN was of the opinion that there were indications of a house price bubble that could grow further in the coming term, but that there did not appear to be grounds for the same concerns about the CRE market.

Global investors had shifted increasingly to safer assets. Foreign share prices had fallen, although the decline had reversed in part before the FSN's meeting.

The price of listed Icelandic companies' shares had also fallen, as had share prices around the world. From 24 February, when Russia invaded Ukraine, until 10 March, the OMXI10 index had fallen by 8%. Alongside these declines, the deviation of share prices from their long-term trend had narrowed. The breakeven inflation rate in the bond market had risen year-to-date, in line with higher inflation and a bleaker inflation outlook. Demand for indexed Treasury bonds had therefore grown, and had increased still further after the Russian invasion of Ukraine, and yields on the bonds had therefore fallen swiftly.

Exchange rate of the króna and international reserves

The króna had appreciated by 4.4% from the beginning of the year until the invasion of Ukraine began, but had depreciated by 4% thereafter. The Central Bank had bought foreign currency for 11 b.kr. and sold currency for 10 b.kr., intervening in the market to mitigate exchange rate volatility as it deemed warranted. Turnover in the interbank foreign exchange market increased in February, while in January it was broadly at the pre-pandemic level. There had been a marked increase in derivatives contracts involving the króna against foreign currency, and the commercial banks' counterparties in such contracts had grown in number. The commercial banks' net forward foreign currency position had increased accordingly. In some instances, exporters had hedged against the appreciation of the króna, but after the Rules on Derivatives Transactions were amended in mid-2021, there was discernible position-taking with or against the króna. Exchange rate developments had therefore been more expectations-driven than before.

The pension funds' net foreign currency purchases amounted to 53 b.kr. in 2021, broadly the same as in the previous year. In the first two months of 2022, they had bought currency for 7.4 b.kr. As of year-end 2021, foreign-denominated assets accounted for 37% of the pension funds' total assets.

The Central Bank's international reserves totalled around 900 b.kr. at the end of February 2022, and the ratio of the reserves to the International Monetary Fund's (IMF) reserve adequacy metric (RAM) was 145% at the end of 2021. The FSN was of the view that the reserves were ample, and that they were large enough to enable the Central Bank to respond to unforeseen events that could otherwise undermine financial and economic stability.

The financial cycle

The rise in the financial cycle had accelerated between FSN meetings, which could indicate an increase in cyclical systemic risk. House prices have been rising for a protracted period of time, and the housing cycle is stronger than before. Even though all of the sub-cycles were in an upward phase, the financial cycle was still slightly below its long-term average. Estimating the impact of the financial cycle on economic developments in terms of growth-at-risk showed increased severity of potential economic shocks in comparison with year-end 2019, which indicates growing systemic risk.

Financial market infrastructure

Options for an independent domestic retail payment solution were discussed, based on an analysis carried out by a Central Bank working group in the months beforehand. Settlement of nearly all domestic payment card transactions is routed through foreign systems, which entails risks if international internet connections were to be disrupted or if the owners of the systems in question decide to stop doing business with Iceland. The working group's assessment of the options was discussed from the standpoint of security, cost-effectiveness, and efficiency, and the FSN agreed that work on the adoption of a domestic retail payment solution should be expedited.

The Committee received regular information from the Central Bank's interbank system, in the form of risk indicators for financial market infrastructure. The functionality of the new interbank system better enables the Central Bank to carry out its oversight and risk assessment role in the area of financial market infrastructure, which is also useful for assessing potential weaknesses and operational bottlenecks in domestic payment intermediation.

Committee members agreed unanimously that it was of vital importance 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. It was necessary to guarantee information flows and consultation among all stakeholders in this area.

Systemic risk buffer

The systemic risk buffer is applied on the basis of persistent systemic risk relating to homogeneity and underlying risk in the Icelandic economy. Such systemic risk is considered non-cyclical, or built-in, and the buffer value is reviewed every two years. Because of the Icelandic economy's vulnerability to shocks, as is reflected in wider fluctuations in economic variables than in many other economies, the systemic risk buffer is set at 3% and applies to all of the deposit-taking institutions' domestic exposures.

The Committee discussed the key changes in the legal framework for the systemic risk buffer following the incorporation of CRD V into Icelandic law, which is planned for later this year. Among other things, the changes entail sharpening the purpose of the systemic risk buffer and its interaction with other capital requirements, and the possibility of applying the buffer to specified exposures. Following the discussion, the Governor proposed that the systemic risk buffer be held unchanged at 3% on the domestic exposures of financial institutions authorised to accept deposits. The proposal was approved unanimously.

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. This scope was used in March 2020, when the buffer was lifted at the beginning of the pandemic. Increasing the CCyB can have the side effect of slowing down credit growth during an upswing.

In September 2021, when the buffer was increased again, with an effective date of September 2022, the FSN was of the opinion that cyclical systemic risk had returned to its pre-pandemic level. The pandemic has had a limited impact on the financial system as a whole, and debt write-offs have been less than previously expected. Loan quality had generally improved and arrears declined, particularly to include household arrears, which now account for less than 1% of the banks' household loan portfolio. The measures taken by the Central Bank and the Government delivered results and mitigated the negative economic impact of the pandemic on households and the business community in Iceland. FSN members agreed that the banking system was highly resilient. Returns were strong, and capital and liquidity ratios were well above regulatory minima. As a result, the banking system was well prepared to continue restructuring corporate debt and to address increased arrears if they should develop. A higher CCyB value would not affect this.

In preparation for further discussion, the Committee had held an extraordinary meeting on 3 March 2022, and reviewed both the financial institutions' capital buffer requirements and the risks they are intended to address. The Committee also discussed what a neutral CCyB value might be, and how the buffer was applied in other countries, particularly with a view to its neutral value.

The FSN reviewed developments in cyclical systemic risk since its previous meeting and discussed the formulation of a long-term strategy for the CCyB and its interaction with other capital buffers. Members discussed the strategies of the European countries that have specified an equilibrium CCyB value, as well as the strategies of other European countries regarding capital requirements as a whole. They also discussed the rationale for a positive neutral buffer value and whether that rationale was applicable for Iceland, with a view to the structure of the economy, the position of the financial system, and the Central Bank's objective of promoting financial stability. Members agreed to continue this

work and the related discussion, but they were of the opinion that there was no reason at present to make further changes to the CCyB.

Following the discussion, the Governor proposed that the countercyclical capital buffer be held unchanged, and the proposal was approved unanimously.

Rules on commercial banks' derivatives transactions

Among other provisions in the new Foreign Exchange Act, which entered into force in June 2021, restrictions on derivatives transactions involving the Icelandic króna were lifted, whereas such transactions had previously required prior approval from the Central Bank. At the same time, the FSN approved the Rules on Derivatives Transactions, no. 765/2021. In the interest of safeguarding financial stability, the Rules impose limits on individual commercial banks' total exposure to derivatives transactions. The gross forward foreign currency position may not at any time exceed 50% of the capital base of the commercial bank in question, and the position vis-à-vis each counterparty is limited to 10% of the capital base. The FSN considered the experience of the Rules to have been positive. The derivatives market was more active than before, and there were more diverse possibilities for derivatives trading than before, which had led to an increase in the number of both counterparties and trades. The commercial banks' gross position (excluding bank-to-bank transactions) had risen from 12% of their capital base to 19% since the rules had taken effect. FSN members agreed that there was no need to review the cap on the gross forward position at this time, but they considered the notification requirement in the Rules unnecessarily onerous. Furthermore, from the standpoint of financial stability, there was no need to include derivatives transactions between domestic banks with the forward position of each party concerned. It should be noted that the Central Bank has access to information on all trades, as it did before. The main objective of the Rules was to place certain limitations on the derivatives market by controlling the total scope of derivatives transactions involving krónur.

Following the discussion, the Governor proposed that Rules no. 765/2021 be amended so as to increase the limits for notification requirements to 1.5 b.kr. and 3 b.kr., and to exclude derivatives transactions between domestic commercial banks from the forward position of each bank. The Governor's proposal was approved unanimously. Committee members agreed that the amendments would not affect the main purpose of the Rules, as the total scope of domestic commercial banks' derivatives transactions would be the same as before.

Appraisal committee report on experience gained from the work of the Central Bank committees and matters relating to the resolution authority

The Committee discussed the report from the appraisal committee appointed to assess the experience of the work of the Central Bank committees in 2020-2021. The report pointed out, among other things, that the interactions between the resolution authority and the Bank's committees should be reviewed so as to ensure that the division of tasks was clear and in accordance with the law, and to ensure that decisions can be taken efficiently when circumstances require it. The appraisal committee also pointed out that there was no explicit statutory authority for entrusting the Financial Stability Committee with decision-making powers relating to the resolution authority, which are explained more fully and provided for in Article 2.7 of the FSN's Rules of Procedure. Members discussed this and considered it appropriate to delete Article 2.7 from its Rules of Procedure.

Following the discussion, the Governor proposed that Article 2.7 be deleted from the Financial Stability Committee's Rules of Procedure. The Governor's proposal was approved unanimously.

At the end of the meeting, the Committee approved the statement for publication on the morning of 16 March 2022.

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

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 Bank's Financial Stability Department; Eggert Th. Thórarinsson, Deputy Director of the Financial Stability Department; Gudrún S. Gunnarsdóttir, Deputy Director of the Bank's General Secretariat; and Guðrídur Lilla Sigurdardóttir, Specialist with the Financial Stability Department, were present for the entire meeting. In addition, several Bank staff members attended part of the meeting.

Rósa Björk Sveinsdóttir wrote the minutes



MINUTES

FINANCIAL STABILITY COMMITTEE



2022

June
13th meeting
Published 1 July

Minutes of the Financial Stability Committee meeting

June 2022 (13th meeting)

Published: 1 July 2022

The Financial Stability Committee (FSN) takes decisions on the application of the Central 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 redistribute 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 the state of financial stability.

The meeting of 13-14 June 2022 began with presentations and a discussion of economic developments and prospects and the state of the financial system. The Committee discussed the current situation and outlook for financial stability and the principal risks to financial stability, such as economic developments, risks faced by financial institutions and the financial system, developments in domestic financial markets, household and corporate debt, the real estate market, and financial institutions' capital and liquidity. The Committee also discussed the security and efficacy of financial market infrastructure and its importance for financial system stability. The Committee received information on resolution plans for the systemically important banks and on the preparation of an official financial stability policy, on which the Financial Stability Council is currently working.

The FSN decided to lower the maximum loan-to-value (LTV) ratio on mortgage loans to first-time buyers from 90% to 85% but to keep the ratio for other buyers unchanged at 80%. The Committee also decided to set a reference interest rate for the calculation of debt service in the Rules on Maximum Debt Service-to-Income Ratios for Mortgage Loans to Consumers. The reference rate is set at a minimum of 3% for indexed mortgages and 5.5% for non-indexed mortgages. Furthermore, the Committee decided to shorten the maximum loan period used to calculate debt service on indexed loans to 25 years. In its quarterly review of the countercyclical capital buffer (CCyB), the FSN decided to hold the buffer unchanged, as it had decided in September 2021 to increase the buffer from 0% to 2%, effective at the end of September 2022.

The Committee reiterated the importance of enhancing security in domestic payment intermediation and expediting the implementation of an independent retail payment solution.

Analysis of financial stability

The Committee considered the financial system to be on a solid footing and the state of financial stability to be good. Figures from Statistics Iceland for Q1/2022 showed that GDP growth was robust, and considerably stronger than the Bank had forecast in May. Data from the labour market indicated that the market was tightening. Unemployment had continued to fall since the FSN's last meeting, and the number of employed persons had risen. Demand for labour was strong. More than half of executives surveyed considered their companies short-staffed, and job vacancy numbers were high in virtually all sectors, although particularly in tourism and construction. The outlook for the tourism industry had improved rapidly in recent months, although it was uncertain how quickly companies in the sector would be able to expand their operations to keep pace with demand. The deteriorating inflation outlook, rising oil prices, and reduced purchasing power in key trading partner countries could cut into exports over the course of the year. The FSN was of the opinion that the economic recovery, the strong position of the banking system, and the recent rise in real wages were likely to boost households' resilience against shocks and mitigate the adverse effects of elevated global economic uncertainty on the domestic economy and financial system. The FSN's concerns about the real estate market had grown stronger between meetings, however, and the Committee was of the opinion that the risk of overleveraging alongside rapidly rising property prices had increased, which could have a negative impact on financial stability in the event of an economic downturn or a severe drop in property prices.

Banking system resilience

In the FSN's opinion, the systemically important banks are highly resilient. Their capital and liquidity are well above regulatory minima, giving them ample scope to support households and businesses. The three banks generated a profit of 14.2 b.kr. in Q/2022, and their liquidity in excess of requirements totalled 149 b.kr. as of end-April. Their liquidity ratios had fallen somewhat in recent months, mainly because of dividend payments and share buybacks. For the same reasons, their capital ratios also fell somewhat in Q1. Credit spreads on the banks' foreign issues had continued to rise in recent months, although spreads on comparable issues from foreign banks and done so as well, owing to the significant deterioration in global bond markets. The banks' near-term foreign refinancing risk was considered limited, however, because of their strong liquidity position. The first results of the Central Bank's annual stress test of the systemically important banks, which will be published this autumn, suggest that they are in a very strong position.

Operations and equity

The systemically important banks' operations were favourable in Q1/2022. Their return on equity was 8.9%, some 2.4 percentage points lower than in the same quarter of 2021. Net interest income was 29 b.kr. during the quarter, an increase of 4.8 b.kr. year-on-year, or 20%. Income from fees and commissions totalled 9.3 b.kr., a year-on-year increase of 13%. The systemically important banks' regular income – i.e., net interest income plus fees and commissions – has never been higher in a single quarter. A higher interest rate level widened the interest rate spread on total assets by 0.24 percentage points year-on-year, to 2.6% during the quarter.

The systemically important banks' expenses in Q1/2022 totalled 18.4 b.kr., an increase of 0.2 b.kr. between years. Because expenses were virtually unchanged while regular income increased 18% year-on-year, underlying operations strengthened between years.

Dividend payments and share buybacks totalled 59.2 b.kr. during the quarter, and dividend payments weighed heaviest in the more than two percentage point decline in the banks' capital ratios during the period. After adjusting for Íslandsbanki's planned 15 b.kr. share buyback and Arion Bank and Landsbankinn's dividend payments next year, their capital ratio lay in the 22.2-24.3% range at the end of March. The ratio was 0.5-1.5 percentage points above Central Bank requirements, after adjusting for management buffers and the increase in the CCyB.

Households' non-performing loan (NPL) ratios continued to decline, and household arrears are at an all-time low. Corporate arrears also continued to decline, as did the value of loans classified as forbore and performing. The position of firms that had needed forbearance measures due to the pandemic had therefore grown stronger.

Private sector debt

Real growth in household debt had slowed since the FSN's last meeting, from 4.1% in January to 2.5% in April. Nominal growth was still significant, however, at nearly 10%. The debt-to-GDP ratio fell in Q1, but the ratio of debt to disposable income rose marginally. Both ratios were still low in historical context. Growth in household debt was still driven by mortgage lending growth, although there were indications that other household debt was on the rise. Households were generally in a strong position, and key indicators suggested a positive trend. Nominal and real wages had continued to grow, unemployment had declined to 4.5% by April, and household arrears were low and had fallen since the Committee's last meeting.

Borrowers choose increasingly to fix mortgage interest rates for up to five years, and as of April, 54% of all mortgages and 67% of new mortgages bore fixed rates, as compared with 44% of all loans in April 2021. The ratio of indexed loans to new mortgage loans had risen in recent months, from 18% in April 2021 to 33% by April 2022.

The Committee discussed the new official property valuation, which had risen by an average of 19.9% nationwide. Some credit institutions had begun issuing loans based on the new valuation, even though it does not take effect until 1 January 2023.

Corporate credit growth had gained pace slightly since the last FSN meeting. In real terms, growth in corporate debt was still negative in Q1/2022, however, whereas in both nominal and price- and exchange rate-adjusted terms, it measured 4.5%. The change in developments in corporate debt is due mainly to an increase in credit institution lending to companies during the early months of the year.

The face value of loans issued by the systemically important banks to the tourism sector had remained relatively stable, with year-on-year growth measuring 2.1% in nominal terms and 3.7% at constant exchange rates at the end of Q1.

Asset prices

The FSN reviewed the situation in the real estate market, as it emerged that there were still severe imbalances between supply and demand. Prices had risen far in excess of fundamentals since spring 2021, and the Committee was of the opinion that the probability of stagnation or a correction of real prices had risen. It came to light that nominal property prices had risen by an average of 2.1% month-on-month in the past six months, and in April, prices measured 22.3% higher than in April 2021. Excess demand for housing had grown nationwide, and the price of both multi-family and single-family homes had therefore risen sharply in all regions. In the weeks prior to the Committee meeting, however, indicators of growing supply had begun to surface and the number of properties advertised for sale had risen marginally, although the average time-to-sale was still very short, at less than 30 days.

A relatively large number of new housing units had been built in 2019-2021. Indicators implied that the supply of newly constructed homes would be smaller than previously estimated. As a result, new housing supply – in greater Reykjavík and elsewhere – would be markedly smaller in 2022 than in the past three years. Committee members were concerned about the limited supply of residential housing. The tally conducted by the Federation of Icelandic Industries suggested, however, that the supply of new fully finished properties would increase again in 2023.

The FSN discussed the impact of the new rules providing for borrower-based measures in the housing market. The loan quality of new consumer mortgages had improved somewhat since the rules on maximum LTV ratios had been tightened just under a year earlier. Loans issued to borrowers other than first-time buyers and bearing an LTV ratio over 80% had declined markedly in number. The number of borrowers with a debt service-to-income (DSTI) ratio above 35% had also declined quarter-on-quarter in Q1/2022, after the rules capping the DSTI ratio took effect in December 2021. Among first-time buyers, however, the average DSTI ratio had risen somewhat, to nearly 30% in Q1/2022. The FSN discussed the adverse effects of rising house prices on first-time buyers who had been forced to take on higher debt service in order to enter the market. The risk was that increased debt among these borrowers could dilute their resilience against a potential setback in the property market.

The commercial real estate (CRE) price index, a measure of real CRE prices in greater Reykjavík, had fallen marginally in the past two quarters, although the twelve-month rise in the index still measured 6.3% at the end of Q1. In terms of the face value of registered purchase contracts, capital area housing market turnover had been relatively strong in historical context over the past two years. In real terms, turnover was up 38% year-on-year over the first four months of 2022.

The FSN was of the opinion that indications of a house price bubble could be in place, but that there did not appear to be grounds for the same concerns about the CRE market.

The price of listed Icelandic companies' shares had fallen, in keeping with the pattern seen widely abroad. The OMXI10 index had fallen by 13% since the Committee's last meeting, and by just over 20% year-to-date. Yields on both indexed and nominal Treasury bonds had continued to rise between FSN meetings. The breakeven inflation rate in the bond market had been well above the inflation target after having peaked shortly after Russia invaded Ukraine.

Exchange rate of the króna and international reserves

The króna had appreciated more or less uninterrupted since mid-March 2022, after having weakened rather abruptly in the wake of the invasion of Ukraine. The foreign exchange market had been quite stable and fluctuations had been moderate. Turnover in the interbank foreign exchange market had declined but was still above the 2019 average. As a result, the Central Bank had not needed to intervene much in the market, apart from large transactions in April, when the Bank bought foreign currency in direct trades in response to capital inflows relating to foreign investments in Treasury bonds. The pension funds had stepped up their net foreign currency purchases. In May 2022, the funds bought foreign currency for 17 b.kr., the largest single-month total since the Bank began collecting monthly data on the pension funds' foreign exchange transactions in 2017.

The current account deficit measured 50 b.kr. in Q1/2022. Net export revenues from tourism increased year-on-year but were still somewhat lower than before the COVID-19 pandemic. The income account showed a deficit for the second quarter in a row. It was offset somewhat by a surplus of just under 1 b.kr. on goods trade excluding ships and aircraft, which has been in deficit in recent years.

The financial cycle and cyclical systemic risk

A composite measure of financial cycles indicated an average level of cyclical systemic risk at present, although risk had increased since the FSN's last meeting. The housing cycle was increasingly the driver of the financial cycle, reflecting the steep rise in house prices in recent years. The credit cycle, however, showed the fastest increase, although credit growth had been modest overall in recent months. Even so, the credit cycle was at a low level, indicating that private sector debt was still manageable. This is because of the financial cycle indicator's emphasis on medium-long cycles, with short-term trends having little impact.

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 latter indicated that cyclical systemic risk was somewhat above average at present and had increased in the past two years, owing mainly to the flip from a large current account surplus to a deficit and to rising asset prices. The d-SRI fell marginally in Q1/2022, however, the first decline in two years. It was considered likely to continue falling in coming quarters, owing to the decline in share prices in Q2 to date, the ongoing brisk economic recovery, and the tighter monetary and macroprudential policy stance.

Rules on LTV and DSTI ratios

The Committee expressed concerns about the current state of the housing market. Members considered the tightening of borrower-based measures in 2021 an important move. Although house prices had surged in the recent term, the increase was generally not driven by excessive leverage. Household debt measured about 155% of disposable income, which is lower than in the other Nordic countries and low in historical context. Even though inflation was high, disposable income had increased, the number of employed persons had risen, and unemployment had fallen, while the economic outlook was good. Members noted, however, that debt levels were still rising, particularly among first-time buyers. They were concerned about the supply shortage in the housing market, which remained significant. It emerged that the outlook was for housing demand to continue to outpace supply. It was mentioned that there was a labour shortage, indicating that immigration would continue, and that a large cohort of young people was entering the housing market.

Demand for indexed mortgages had increased in tandem with the worsening inflation outlook. Negative real rates had prompted lenders to reduce their indexed lending rates, which were more than ½ a percentage point lower than when the FSN had approved the DSTI rules in September 2021. At the same time, interest rates on non-indexed loans had risen by nearly 2 percentage points. As a result, households were more likely to seek out indexed loans so as to reduce debt service in the short run. Committee members were of the view that this could be risky. Interest rates on indexed loans had fallen steeply in the past year and were historically low. The Committee considered it important to ensure that households did not become overleveraged on the basis of assumptions that in all likelihood would not stand the test of time. Furthermore, the debt service burden on indexed loans was proportionally lighter early on but grew heavier over the term of the loan. Inflation would be added directly to the loan principal, potentially eroding highly leveraged borrowers' resilience.

Committee members discussed the impact of the rules and were of the opinion that they had affected debt levels and debt service. Too little time had passed since their entry into effect, however, for the full impact of the rules to have come to the fore. It was unlikely that interest rates would remain low

in the long run. As a result, it was appropriate to set a floor for interest rates for the calculation of debt services, so as to safeguard households' long-term resilience.

Following discussion by the Committee, the Governor proposed introducing a reference interest rate for the calculation of debt service in the Rules on Maximum Debt Service-to-Income Ratios for Mortgage Loans to Consumers. The reference rate would be a minimum of 3% for indexed mortgages and 5.5% for non-indexed mortgages, and the maximum loan term used to calculate debt service on an indexed loan would be shortened to 25 years. The changes in the DSTI ratio are intended to increase borrowers' awareness when they select from among loan types, thereby bolstering lenders' and borrowers' resilience. All members voted in favour of the Governor's proposal and agreed that the rules thus amended should take effect immediately. The new Rules on Maximum Debt Service-to-Income Ratios for Mortgage Loans to Consumers, no. 701/2022, were approved unanimously by FSN members.

Committee members discussed the pros and cons of lowering the LTV ratio. Borrower-based measures were intended to reduce the risk of excessive leverage and were an element in safeguarding the resilience of lenders, borrowers, and the financial system as a whole. Under the current circumstances, with house prices and inflation surging and the monetary stance growing tighter, it was more likely that house price inflation would ease and that real house prices would fall. Committee members were of the opinion that under these circumstances, a 90% LTV ratio [for first-time buyers] was risky for both lenders and borrowers. As a result, it was advisable to lower the maximum LTV ratio for first-time buyers from 90% to 85% but hold it unchanged at 80% for other buyers. It emerged in the discussion that no credit institutions were advertising an LTV ratio higher than 85% for first-time buyers; however, loan data showed that some first-timers had borrowed more than 85% of the property value. The data showed that in Q1/2022, 19% of first-time buyers had had an LTV ratio higher than 85%. This represented 2.6% of the face value of new mortgage loans.

The Governor then proposed that the Rules on Maximum Loan-to-Value Ratios for Consumer Mortgages be amended so as to lower the LTV ratio on first-time buyers' mortgages from 90% to 85%, but to hold the ratio for other buyers unchanged. In view of the situation in the housing market, all Committee members voted in favour of the Governor's proposal. Members considered tightening the rules an important means of safeguarding lenders' and borrowers' resilience, as it seemed probable that house prices could deviate even further from fundamentals such as wages, construction costs, and rent prices. The new Rules on Maximum Loan-to-Value Ratios for Mortgage Loans to Consumers, no. 702/2022, were approved unanimously by the Committee.

Financial market infrastructure

One of the Central Bank of Iceland's roles is to promote an active and secure financial system, including domestic and cross-border payment intermediation. The Committee was given a presentation on the next steps in implementing an independent domestic retail payment solution. The presentation was based on an analysis of the available options, carried out by a working group of Central Bank employees. It emerged that netting and settlement of nearly all domestic payment card transactions was routed through foreign systems, which entailed risks; for instance, if international internet connections were disrupted or if the owners of the systems in question stopped doing business with Iceland. The Committee also discussed the costs associated with payment intermediation, which are higher in Iceland than elsewhere in the Nordic region. Payment intermediation is both less economical and less secure in Iceland than in the other Nordic countries, and the Committee considered it vital to

expedite the introduction of a domestic retail payment solution. Discussions about the process of implementing an independent domestic retail payment system will be referred to the Forum for the Future, whose role is to shape the vision and priorities for development of core financial market infrastructure in Iceland. In addition to the Central Bank, deposit-taking financial institutions and the Ministry of Finance and Economic Affairs have representatives on the Forum.

The Committee received information from the Central Bank's interbank system, in the form of risk indicators for financial market infrastructure. The Bank uses the new system in order to maintain an overview of and assess risk associated with financial market infrastructure. The system is also useful for assessing potential weaknesses and operational bottlenecks in domestic payment intermediation.

The Committee was also given a presentation on operational security of financial market infrastructure. It was noted in discussions that the Central Bank has broad authorisations to set policy and adopt rules on financial market infrastructure. The Bank can impose certain basic security requirements in order to guarantee the security of payment intermediation infrastructure. It might prove necessary to strengthen the statutory framework for financial market infrastructure still further, however, and expand the Bank's authorisations to adopt rules. It was necessary to guarantee information flows and consultation among all stakeholders in this area. The FSN agreed that it was important for the Government and the Bank to place strong emphasis on taking the lead in policy setting and bringing about the changes necessary for effective and secure payment intermediation.

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. This scope was used in March 2020, when the buffer was lifted at the beginning of the pandemic. In September 2021, when the buffer was increased again to 2% (with an effective date of September 2022), the FSN was of the opinion that cyclical systemic risk was certainly no less than before the pandemic struck.

Indicators of the systemic risk level suggest that it is close to the average of recent years but is rising. Loan quality has generally improved and arrears have declined, particularly to include household arrears, which now account for less than 1% of the household loan portfolio. The measures taken by the Central Bank and the Government during the pandemic delivered results and mitigated the negative economic impact on households and the business community in Iceland. FSN members agreed that the banking system was on a solid footing. Resilience appeared to be sufficient in terms of the systemic risk level. Returns were strong, and capital and liquidity ratios were well above regulatory minima. As a result, the banking system was well prepared to continue restructuring corporate debt.

The Committee discussed the economic outlook, which had improved, and the outlook for tourism, which was good. The Committee's concerns about lending to the tourism sector had diminished, and the systemic risk that was of particular concern now stemmed from the real estate market. The Committee agreed to examine the CCyB closely at its meeting in September 2022.

Following the discussion, the Governor proposed that the countercyclical capital buffer be held unchanged, and the proposal was approved unanimously.

Material third countries

According to Article 86(d), Paragraph 3 of the Act on Financial Undertakings, no. 161/2002, the Central Bank of Iceland is authorised to set rules specifying a CCyB value for financial institutions' exposures

vis-à-vis countries outside the European Economic Area (EEA), known as third countries, subject to prior approval from the FSN. According to European Systemic Risk Board Recommendation ESRB/2015/1, EEA states shall identify third countries of material importance vis-à-vis their own financial systems. If a third country is assessed to be of material importance, the EEA state in question shall monitor the financial markets in that country, particularly as regards excessive credit growth.

The ESRB's methodology for identifying material third countries, presented at the meeting, is based on three risk indicators, or exposure metrics: risk-weighted assets, original exposures, and defaulted exposures originating in the third country concerned. The Committee was given a presentation of other EEA states' methodologies for identifying material third countries. It was proposed at the meeting that the ESRB methodology be used, but with a few modifications: the exposure threshold would be set at 2% instead of 1%, defaulted exposures would be assigned a lower weight than the other two metrics, and expert opinion would determine the final decision on third country materiality. The FSN unanimously approved the proposed methodology for assessing third countries. It will be used as a reference for the identification of material third countries that may warrant the activation of a CCyB. According to the approved methodology, no third country is currently identified as material, but materiality will be reviewed on an annual basis.

At the end of the meeting, the Committee approved the statement for publication on the morning of 15 June 2022.

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, 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 Bank's Financial Stability Department; Eggert Th. Thórarinsson, Deputy Director of the Financial Stability Department; Gudrún S. Gunnarsdóttir, Deputy Director of the Bank's General Secretariat; and Gudrídur Lilla Sigurdardóttir, Specialist with the Financial Stability Department, were present for the entire meeting. In addition, several Bank staff members attended part of the meeting.

Rósa Björk Sveinsdóttir wrote the minutes.



MINUTES

FINANCIAL STABILITY COMMITTEE



2022

SEPTEMBER
14th meeting
Published 26 October
2022

Minutes of the Financial Stability Committee meeting

September 2022 (14th meeting)

Published: 26 October 2022

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 redistribute 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 22 and 26-27 September 2022, there were presentations and discussions of economic developments and prospects and the state of the financial system. The Committee discussed the current situation and outlook for financial stability and the principal risks to financial stability, such as economic developments, risks faced by 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, and financial institutions' capital position.

In addition, the FSN discussed amendments to the Act on Financial Undertakings and the possible implications for decisions on capital buffers. The Committee was given a presentation on methodology used to assess systemically important financial institutions. The Committee then discussed the security and efficacy of financial market infrastructure and its importance for financial system stability. The FSN was also informed that the European Systemic Risk Board (ESRB) had decided to issue a warning on increased risk in the European financial system, which threaten financial stability.

In its quarterly review of the countercyclical capital buffer (CCyB), the FSN decided to hold the buffer unchanged, as it had decided in September 2021 to increase the buffer from 0% to 2%, effective 29 September 2022.

The Committee stressed the importance of bolstering security in domestic payment intermediation so as to guarantee business continuity, partly in view of growing cyberthreats. Steps have been taken towards developing an independent domestic retail payment solution.

Analysis of financial stability

The global economic outlook had deteriorated and grown more uncertain since the FSN's June meeting, particularly in Europe. Trading partner inflation had risen, and the monetary and macroprudential

stance had been tightened. Asset prices had fallen, and systemic risk had mounted and was still growing in Europe. Concerns had increased about the impact of energy shortages in Europe on households and businesses, and access to credit had tightened. As a result, market conditions had deteriorated, and credit spreads on the Icelandic banks' foreign bond issues had therefore risen. Furthermore, there was considerable uncertainty about how demand for travel to Iceland would develop during the coming winter, owing to the poorer economic outlook among Iceland's trading partners. As a result, risks to financial stability in Iceland had grown because of worsening external conditions – a trend that was likely to continue. In the FSN's opinion, however, the systemically important banks were highly resilient, pressures in asset markets had eased, and private sector debt was relatively low. On the other hand, increased external uncertainty highlighted the importance of maintaining the resilience of the Icelandic financial system.

ESRB warning

The FSN was informed of the European Systemic Risk Board's (ESRB) decision to issue a warning on increased risk in the European financial system, which was considered a potential threat to financial stability. The ESRB's warning focused in particular on three factors: First, rising energy prices and possible energy cutbacks could have a severely negative impact on the economic outlook and put significant pressure on households' and businesses' debt service capacity. Second, falling asset prices and increased price volatility could put strain on financial institutions' and other entities' liquidity and lead to an even further deterioration in financial conditions. Third, the worsening economic outlook could lead to loan losses for financial institutions and erode their profitability.

The Committee was of the view that the situation in Iceland was better in most respects than elsewhere in Europe, but that a high level of vigilance was required to preserve financial stability. The Icelandic financial system is well positioned with respect to the risks emphasised by the ESRB, although there was certainly the possibility of contagion if the risks identified in the ESRB warning should materialise in Europe.

Other risks mentioned in the warning included the increased frequency of cyberattacks and the high level of public indebtedness in many European countries. The warning was published after the ESRB meeting of 22 September 2022. It was the first time since its inception in 2010 that the ESRB had issued a warning on increased vulnerabilities in the European financial system.

Banking system resilience

In the FSN's opinion, the domestic systemically important banks (D-SIB) are highly resilient. Their capital and liquidity are above regulatory minima, giving them ample scope to support households and businesses. The banks' liquidity had declined during the year, particularly in foreign currencies, and as of August, their liquidity in excess of regulatory requirements was 213 b.kr., or 61 b.kr. less than at the beginning of the year. Increased lending, dividend payments, and bond maturities were the main causes of the decline in liquidity. The banks' domestic bond issuance had been limited in the first nine months of 2022, and net covered bond issuance had contracted year-on-year. Deposit growth had lost pace as well. Foreign funding conditions had deteriorated in the recent term, and credit spreads on the banks' foreign-denominated bonds had risen. There were no remaining foreign maturities in 2022, and year-2023 maturities totalled 144 b.kr.

The D-SIBs' operations were strong in H1/2022, and their return on equity was 10%, somewhat lower than for the same period in 2021. Their net interest income and commissions/fees increased by 18% year-on-year over this period, owing in part to wider interest rate spreads concurrent with rising interest rates. Income from interest, commissions, and fees totalled an all-time high of 80 b.kr. The D-SIBs'

operating expenses had declined marginally between years, and their core operations therefore strengthened markedly in H1/2022. The household non-performing loan ratio had continued to fall. It measured 0.8% and had seldom been this low. Corporate non-performing loan ratios had kept falling as well.

The results of the Central Bank's annual stress test of the systemically important banks showed that the banks are well equipped to withstand external shocks while continuing to provide financing to households and businesses.

Private sector debt

Growth in household debt had slowed down and, in real terms, was marginally negative in July. Nominal growth remained significant, however, at 9.8%, and was driven to an increasing degree by the effects of indexation on price-indexed loans. The ratio of household debt to disposable income had fallen to 155% in Q2, which is low in historical context. The household debt-to-GDP ratio was also low in historical context. Higher interest rates and tighter borrower-based measures had dampened demand for mortgage loans, and growth in net new mortgage lending was broadly similar to the pre-pandemic rate.

Households were generally well positioned, unemployment was low, and wages had risen steeply in the past two years. Growth in real disposable income had slowed to just over 1% at the end of Q2 (in terms of the CPI). Household arrears declined in Q2, although debt service had increased in line with rising interest rates, particularly on non-indexed loans, which constituted just over half of total household debt. About 27% of consumer mortgages were non-indexed and bore variable interest rates. It emerged that interest rates on just over 28% of household mortgages, which currently bear fixed rates and are non-indexed, will be up for review in 2024 and 2025. All else being equal, this will cause a significant increase in those households' debt service burden.

Household debt service had increased, particularly among those who had taken new mortgage loans after the beginning of 2020. Around 15% of borrowers who had taken new loans during that period had seen their debt service increase by more than 40,000 kr. per month relative to the initial amount, while in nearly 60% of cases, debt service had increased by less than 10,000 kr. per month. Several factors have prevented debt service from rising more for such a large group of borrowers, including fixed interest rates, a fixed-payment loan format, and composite loans featuring indexed and non-indexed components. These borrowers' debt service-to-income ratios had generally risen since they took their loans, but only modestly in comparison with wages over the period.

Real growth in corporate debt was negative for the sixth quarter in a row, by 2.5% at the end of Q2. Corporate debt measured 80.5% of GDP, its lowest since 1998. Nevertheless, nominal growth in the D-SIBs' corporate lending had gained momentum as the year progressed, while corporate bond issuance and corporate borrowing from alternative investment funds had grown modestly between years.

The Committee was therefore of the opinion that on balance, it appeared that households and businesses should be well equipped to withstand the uncertainty currently prevailing in the economy.

Asset prices

The first signs of cooling in the housing market emerged during the summer. The number of homes for sale nationwide grew rapidly, from 1,000 in May to over 2,000 by September. Price hikes had lost pace in recent months, the number of purchase agreements had fallen, and the average time-to-sale had grown longer. The deviation of house prices from fundamentals had widened significantly since the Committee's last meeting, however. The FSN was of the view that tighter borrower-based measures

and the interaction between those measures and interest rate hikes had eased tension in the real estate market.

As a result, systemic risk in the housing market was moderate given the current economic conditions. The FSN noted that in several countries, nominal house prices had fallen concurrent with rising mortgage lending rates and reduced market activity. Developments in these countries resembled those in Iceland in many ways. In the FSN's opinion, the likelihood of stagnation or a correction in house prices had increased significantly.

The commercial real estate (CRE) price index had risen rapidly and was close to its pre-pandemic peak. The index had risen 15.3% year-on-year at the end of Q2 and was now nearly 18% above its estimated long-term trend. The rise in the index still appeared to be driven by demand, partly as a result of increased corporate revenues. Turnover in registered CRE transactions had increased markedly, and as of end-June, twelve-month turnover was at its highest since measurements were introduced in 2006.

The price of listed Icelandic companies' shares had fallen, in keeping with the pattern seen widely abroad. The OMXI10 index had fallen by 18% since the Committee's last meeting, and by just over 25% year-to-date. The biggest drop, nearly 45% in 2022 to date, was in the price of Marel shares, which account for just over a fourth of the index. Turnover with listed shares had increased by 10% year-on-year over the first eight months of 2022, and the trade count had increased by 21.5% between years. Nominal Treasury bond yields had risen rapidly early in the year, particularly on short-term bonds, but they fell slightly after the Central Bank's June interest rate decision and had held broadly at that level over the summer. The breakeven inflation rate in the bond market had declined after the June interest rate decision and the FSN's June decision to tighten borrower-based measures.

Exchange rate of the króna and international reserves

The króna had depreciated by 0.5% since the FSN's June meeting, owing in particular to the appreciation of the US dollar versus the króna, as the króna had also appreciated against most other currencies. The foreign exchange market had been stable in recent months, but volatility increased somewhat in September, and the Central Bank intervened twice and sold foreign currency for a total of 6 b.kr. The Bank had last intervened in the market in May 2022.

The interest rate differential with abroad had widened, particularly the short-term differential, but was still far narrower than it had been in 2015-2016. Capital flows relating to foreign investment were well balanced, although a few large transactions had taken place in Q3. Inflows for new investment in Iceland therefore appeared to have been offset by outflows. The pension funds' foreign investment was broadly the same as in the same period of 2021, but because of falling asset prices abroad and the appreciation of the króna, their foreign asset ratio had fallen to 35% of total assets by July, as opposed to 38% at the end of 2021.

Iceland's net international investment position had fallen by 16 percentage points in 2022 to date, to 24% of GDP at the end of Q2. Although the decline was due mainly to the appreciation of the króna and falling foreign asset prices, there was also a current account deficit of 84 b.kr. in H1/2022. The international reserves totalled 25% of GDP at the end of June, and the ratio of the reserves to the IMF's reserve adequacy metric (RAM) was 136%, after falling by a total of 15 percentage points since end-2019.

The financial cycle and cyclical systemic risk

A composite measure of financial cycles indicated an average level of cyclical systemic risk at present, although risk had increased marginally since the FSN's last meeting. The financial cycle had been driven

by the housing cycle, owing to the steep rise in house prices in the recent term. The composite domestic systemic risk indicator (d-SRI) signalled that cyclical systemic risk was slightly above average after having risen in the previous two years, owing mainly to the flip from a large current account surplus to a deficit and to demand pressures in the real estate market. Countervailing factors were modest credit growth, strong GDP growth, and falling share prices. The d-SRI fell marginally in Q2, however, for the second quarter in a row. It was considered relatively likely to keep falling in coming quarters, owing to the decline in share prices in Q3 to date, reduced demand pressures in the real estate market, and the prospect of a smaller current account deficit.

Amendments to the Act on Financial Undertakings

The FSN was given a presentation on amendments made to the Act on Financial Undertakings, which now authorises an increase in the capital buffer for systemic importance (O-SII buffer) from 2% to 3%. With the passage of the amending legislation, the implementation of two Capital Requirements Directives (CRD IV and CRD V) was completed and Chapter X of the Act (on capital buffers) reorganised. Other substantive changes were of lesser importance.

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.

Indicators of the systemic risk level suggest that it is close to the average of recent years. Loan quality has generally improved and arrears have fallen for both households and businesses. Household indebtedness was very modest relative to disposable income, and the private sector debt level was low, both in historical context and relative to neighbouring countries. FSN members agreed that the banking system was on a solid footing. Banking system resilience appeared to be sufficient in terms of the systemic risk level. Returns were strong, and capital and liquidity ratios were well above regulatory minima. As a result, the banking system was well prepared to continue restructuring corporate debt where necessary.

The FSN discussed the ESRB's warning and the rapidly deteriorating economic outlook in trading partner countries. Market conditions were highly uncertain, and financing costs were rising swiftly. The banking system's market funding had become costlier than before. FSN members agreed that banking system liquidity and credit growth should be closely monitored. The Committee also agreed to discuss capital buffers and their interactions with one another at the December meeting.

Following the discussion, the Governor proposed that the countercyclical capital buffer be held unchanged, 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 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 principal roles is to promote a safe and effective financial system, including domestic and cross-border payment intermediation. The Committee received information on risk indicators from the Central Bank's interbank system. The Bank uses the indicators to maintain an overview of and assess risk associated with financial market infrastructure. The indicators are also useful for assessing potential weaknesses and operational bottlenecks in domestic payment intermediation. The interbank system has operated smoothly, and no serious incidents have been recorded in 2022.

The results of a recent survey of individuals' payment behaviour were presented to the Committee. Over 98% of individuals use electronic payment instruments when they shop, with payment cards or solutions installed in smart devices still the dominant means of payment. Use of cash has declined since the previous survey. The FSN considered it important to continue working towards ensuring the operational security of electronic retail payment intermediation.

Efforts have been made to strengthen Iceland's framework for financial market infrastructure, and it was recently decided to adopt an Icelandic rulebook based on European standards from the European Payments Council, which is an important step towards further development of financial market infrastructure.

The FSN received information indicating that reported cyberattacks had grown in number and were increasingly directed at important infrastructure. It was noted that the Central Bank had broad authorisations to set policy and adopt rules on financial market infrastructure. The Bank would impose certain basic security requirements in order to guarantee the security of the infrastructure for payment intermediation. It was necessary to consider whether the statutory framework for financial market infrastructure should be strengthened and the Central Bank's power to set rules in this area augmented. The Committee agreed on the importance of bolstering security in domestic payment intermediation so as to guarantee business continuity, in view of growing cyberthreats, among other factors.

At the end of the meeting, the Committee approved the statement for publication on the morning of 28 September 2022.

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

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 Bank's Financial Stability Department; Eggert Th. Thórarinsson, Deputy Director 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.



MINUTES

FINANCIAL STABILITY COMMITTEE



2022

DECEMBER
15th meeting
Published 4 January 2023

Minutes of the Central Bank of Iceland Financial Stability Committee meeting

December 2022 (15th meeting)

Published: 4 January 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 redistribute risk 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 direct 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 1 and 5-6 December 2022, 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 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 ÍL Fund. The Bank's assessment and analysis of climate risk scenarios was also presented to the Committee.

The FSN completed its annual assessment to identify systemically important financial institutions and determine 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 rate unchanged at 2% for all exposures. The Committee also received information on the Governor's key decisions in matters pertaining to the Resolution Authority and related statutory amendments.

In its quarterly review of the countercyclical capital buffer (CCyB), the FSN decided to hold the buffer rate unchanged at 2%.

The FSN also reiterated the importance of continuing the ongoing work relating to a domestic retail payment solution, with the aim of enhancing the security of domestic payment intermediation.

Analysis of financial stability

Global GDP growth had slowed still further, and the economic outlook for Iceland's main trading partners had worsened since the Committee's September meeting. Trading partner inflation had risen, and the monetary and macroprudential stance had been tightened in many economies. Real estate prices had fallen in many trading partner countries, and household purchasing power was on the decline; therefore, risk relating to financial stability had increased. On the other hand, indicators implied that inflation had peaked in the US, and share prices in foreign markets had begun to rise. The global economic outlook remained highly uncertain, and developments abroad could adversely affect the Icelandic economy in the coming term.

In the FSN's opinion, the systemically important banks were highly resilient. Imbalances in the housing market had receded and private sector arrears were at a historical low; furthermore, the household debt-to-income ratio had not risen during the pandemic. The overall financial position of Icelandic households and firms was therefore good, and the application of macroprudential tools had supported financial stability in the wake of the pandemic. The Bank's November forecast assumes that GDP growth will be stronger than previously estimated, driven in particular by robust private consumption, which has, among other things, given rise to the expectation of a current account deficit measuring 2% in 2022 and widening over the course of the forecast horizon. The FSN was of the view that the current account deficit, poorer funding terms, and cybersecurity posed the main risks to financial stability. Furthermore, the Committee is of the opinion that stagnation or a correction of house prices is still quite likely.

Banking system resilience

In the FSN's opinion, the domestic systemically important banks (D-SIB) are highly resilient. Their capital and liquidity are above regulatory thresholds. The banks' liquidity had grown stronger between meetings, owing to an increase in term deposits and foreign bond issues, and was nearly 300 b.kr. above the regulatory minimum at the end of October. Foreign funding conditions had deteriorated, however, and credit spreads on the banks' foreign-denominated bonds had risen. There were no remaining foreign-denominated bond maturities for the rest of the year, while year-2023 maturities totalled 126 b.kr. (just over 160 b.kr. if call-in provisions are exercised). Domestic bond issuance had been limited during the year, and net covered bond issuance in krónur had been negative in 2022 to date. The D-SIBs' capital ratio lay between 21.4% and 24.2% at the end of September, or 1.5-3.4 percentage points above the Central Bank minimum. It had fallen by 2.5 percentage points thus far in 2022, primarily because of dividend payments, but also due to share buybacks.

The D-SIBs' operations were favourable in the first nine months of the year, with a return on equity of 10.3%, which is 2.2 percentage points less than for the same period in 2021. Interest income and fees and commissions increased by a fifth year-on-year, to an all-time high of 124 b.kr. for the first nine months of 2022, partly because of balance sheet expansion and a widening interest rate spread in line with rising interest rates. The D-SIBs' net income from financial activities was negative by 12 b.kr. over this period, in a marked year-on-year change driven mainly by the fall in share prices. Total income over the first nine months therefore declined year-on-year, although operating expenses have fallen as well.

Household arrears had continued to fall, to a post-crisis low of 0.7% at the end of September. Corporate arrears had declined as well, and companies that had needed forbearance measures because of the pandemic have grown considerably stronger in the recent term. A large share of the companies with forborne loans had already begun to make payments on them, and the banks expect that by the turn of the year, or thereabouts, a large share of these loans will no longer be classified as forborne.

Private sector debt

Growth in household debt measured 9.6% in nominal terms in Q3/2022, or 0.2% in inflation-adjusted terms. Price indexation on indexed loans explains just under half of the nominal growth rate. Higher interest rates and tighter borrower-based measures had dampened demand for mortgage loans, and growth in net new mortgage lending was broadly similar to the pre-pandemic rate. The pension funds have increased their share of the mortgage lending market once again, and household demand for indexed loans has grown. Even so, the majority of net new mortgage loans were non-indexed.

The average loan-to-value (LTV) ratio on new mortgage loans had fallen, both overall and for first-time buyers, and the share of issued loans with a high LTV ratio had fallen as well. The average debt service-to-income (DSTI) ratio had been broadly stable overall but had been rising among first-time buyers, in line with rising mortgage lending rates. New rules on debt service calculation took effect this past summer, and the first data suggest that they played a part in slowing down [growth in] debt, as was intended.

Households were generally well positioned, unemployment was low, and wages had risen markedly in recent years, although real disposable income had contracted in H2/2022. Furthermore, GDP growth was strong, and the ratio of household debt to disposable income was low in both historical and international context. Debt service had increased in line with rising interest rates, particularly on non-indexed loans, which constituted just over half of total household debt. About 27% of consumer mortgages were non-indexed variable-rate loans, and the weighted average rate on such loans had risen to 8% by October. Higher interest rates could have some impact on households, but the FSN did not consider it likely that arrears would increase substantially, as households should be able to refinance their mortgages to lighten their debt service burden if the need arises.

Real growth in corporate debt was negative for the eighth quarter in a row, by 2.5% at the end of Q3. Corporate debt measured 80.5% of GDP, its lowest since 1998. Nevertheless, nominal growth in the D-SIBs' corporate lending had gained pace over the course of the year, particularly in lending to construction and services firms. Corporate bond issues and alternative investment fund lending to companies had grown modestly year-on-year.

Asset prices

Real estate market activity had subsided and tensions in the market had eased. Turnover was broadly back to the pre-pandemic level in real terms, but slightly below the average for the past five years. The number of properties advertised for sale had increased, and newly constructed homes were flowing steadily into the market. The year-on-year increase in house prices had therefore continued to lose pace, to 21.5% in nominal terms and 11% in real terms as of October. The Committee noted that it would take time for reduced housing market activity to show fully in house prices. The house price index was calculated based on the past three months' purchase contracts and was not quality-adjusted. The deviation of house prices from their long-term trend had narrowed slightly in recent months. Furthermore, the deviation of prices from building costs and rent prices appeared to have peaked. The FSN was of the view that tighter borrower-based measures and their interaction with higher interest rates would reduce demand pressures in the market. In the Committee's opinion, systemic risk in the housing market was still moderate.

The price of listed Icelandic companies' shares had risen between meetings, in keeping with the pattern seen widely abroad. The OMXI10 index had risen by 6% since the Committee's last meeting, and by just over 25% year-to-date. Equity market turnover on the exchange had increased by 7% over the same period. Nominal Treasury bond yields had risen since end-September, in tandem with Central

Bank interest rate hikes. There was little difference between long- and short-term yields, which could indicate that market agents do not expect interest rates to rise further.

Exchange rate of the króna

The króna had depreciated by 5.5% since the Committee's September meeting, mainly because of the sizeable deficit on goods trade, although the banks' forward currency position had declined by a total of 46 b.kr. in September and October, presumably due to changed expectations about the exchange rate. The Central Bank intervened three times in the interbank foreign exchange market in November, selling currency for just under 5 b.kr. 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 current account deficit for the first three quarters of 2022 totalled 65 b.kr. The tourism sector experienced a rebound, but the goods account deficit had widened over the course of the year. Preliminary goods trade figures suggest that the Q4 deficit on goods trade will be Iceland's largest single-quarter deficit relative to GDP since 2008. A continuing current account deficit could lead to a further depreciation of the króna.

The pension funds had stepped up their foreign currency purchases in recent months, and their average turnover in autumn 2022 was similar to that in 2019. Closer scrutiny of the pension funds' day-to-day foreign currency transactions shows that the funds primarily bought currency when the króna was appreciating within the month, indicating that they buy currency mainly when there is a surfeit in the market, thereby mitigating volatility. Capital flows due to inward foreign investment were positive by 68 b.kr. over the first ten months of the year and had been affected by several large foreign direct investments undertaken in recent months.

The financial cycle and cyclical systemic risk

A composite measure of financial cycles indicated an average level of cyclical systemic risk at present, although risk had increased marginally since the FSN's last meeting. The financial cycle had been driven by the housing cycle, owing to the steep rise in house prices in the recent term. The composite domestic systemic risk indicator (d-SRI) signalled that cyclical systemic risk was close to its average. It had fallen marginally for three consecutive quarters, particularly because the banks' private sector lending growth had not kept pace with GDP.

Pension funds and the ÍL Fund

The Committee was given a presentation on the pension funds' 2023 investment strategies, asset composition, and returns. After having generated annual real returns of close to 10% in 2019-2021, the outlook is for their mutual pension divisions to record negative returns in 2022, owing mainly to falling share prices.

The funds' investment strategies show that they have differing asset composition targets for the coming year, particularly as regards investments in Treasury bonds and foreign assets. The strategies take account of future payment flows, the economic outlook, risk appetite, and risk tolerance. The funds aim to increase their share of foreign assets by 3½ percentage points relative to total assets in 2023 but reduce the weight of Treasury bills and bonds. This reflects the impact of the Ministry of Finance and Economic Affairs' announcement of its intention to assess the future of the ÍL Fund and look for ways to wind it up. The deviation band in the pension funds' 2023 investment strategy is therefore wider for Treasury securities because of uncertainty about the fate of the ÍL Fund. The FSN was also

given a presentation on the Ministry of Finance and Economic Affairs' report on the fund, which was introduced before Parliament, and discussed the potential impact on the pension funds.

Climate risk

Central banks have placed increased focus on analysing the risks associated with climate change, which has begun to have a direct impact on central banks' and financial supervisors' policy-making. This applies both to growing risk of climate-related events – for instance, increased risk of flooding and its impact on financial system loan quality – and the risk associated with governments' adaptation measures – i.e., incentives for energy transition and their impact on funding. Calls on central banks to assess the effects of climate risk on financial stability and to monitor this risk have therefore become firmer. The Central Bank of Iceland has participated actively in the work of the Network for Greening the Financial System (NGFS), an international network of central banks and financial supervisors, in the past two years.

The FSN was given a presentation on the work currently underway within the Central Bank on climate-related scenario analysis. The Bank plans to carry out a scenario analysis of the three systemically important banks' credit risk and publish the initial findings in the coming year. The scenario analysis will be based on NGFS scenarios, Central Bank data, and other data and models, as applicable.

Resolvability of systemically important financial institutions

The Resolution Authority presented the Governor's key decisions in matters relating to its activities since the last presentation to the FSN. Resolution plans for the D-SIBs have been completed and approved. Furthermore, Act no. 48/2022 has entered into force. The Act centres on funding for the Resolution Fund, among other things. Moreover, a new definition of eligible liabilities (for MREL) took effect upon the entry into force of CRR II. In addition, the principal regulatory amendments that lie ahead were presented, particularly those pertaining to the implementation of BRRD II.

Decisions of the Financial Stability Committee

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.

Indicators of the cyclical systemic risk level suggest that it is close to the average of recent years. Loan quality has generally improved and arrears have fallen for both households and businesses. Household indebtedness was very modest relative to disposable income, and the private sector debt level was low in historical context and lower than in neighbouring countries. FSN members agreed that the banking system was on a solid footing. It appeared sufficiently resilient in terms of systemic risk, and capital and liquidity ratios were well above statutory minima. Based on financial institutions' position and the current risk level, it can be concluded that the countercyclical capital buffer (CCyB) is at an appropriate level.

The Committee discussed uncertainty in the markets and the rise in funding costs. The banking system's market funding had therefore become costlier than before. FSN members agreed that banking system liquidity and funding should be closely monitored.

Following the discussion, the Governor proposed that the countercyclical capital buffer be held unchanged, and the proposal was approved unanimously.

Systemically important financial institutions

The assessment of the systemically important financial institutions, based on European Banking Authority (EBA) methodology, was presented to the Committee. Underlying the assessment are indicators pertaining to size, importance, complexity, and interconnectedness. The Committee then discussed systemically important financial institutions in the Nordic region. Concentration among financial institutions was greater in Iceland and Finland than in the other Nordic countries, while institutions in the region ranged in size from 4% to 234% of GDP, and from 2% to 68% of the domestic banking 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.

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 unchanged at 2% on all exposures at the parent company level and on a consolidated basis. The proposal was approved unanimously. The combined capital buffers on Iceland's systemically important banks equal 9.5% following the increase in the CCyB at the end of September 2022. They are the highest in the Nordic-Baltic region apart from Norway, where they range from 9.5% to 10.5%.

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 is ongoing, including the implementation of an Icelandic rulebook based on European standards from the European Payments Council (EPC), which will foster operational security and greater consistency in the execution and settlement of payments in deposit and interbank accounts in the financial system.

The Central Bank plays a key role in domestic payment intermediation as the owner and operator of the Icelandic deposit institutions' interbank system, which is the foundation for payments between accounts with domestic deposit institutions. Retail payment intermediation in Iceland is characterised by widespread use of payment cards, which rely on foreign infrastructure owned by international payment card conglomerates. Because over 90% of all retail payments are routed through this infrastructure, it is vital to find ways to boost system resilience and satisfy the requirements of the National Security Council. The FSN was of the opinion that doing so would enhance security relating to domestic retail payment intermediation, particularly as regards cybersecurity and business continuity. The Committee was informed that the Central Bank's Forum for the Future, which includes representatives from domestic deposit institutions, the Ministry of Finance and Economic Affairs, and the Bank, will soon discuss and decide on proposals for the next steps towards implementing a domestic retail payment solution.

The Committee was given a presentation on risk indicators from the Bank's interbank system. The interbank system has operated smoothly, and no serious incidents have been recorded in 2022. A review was conducted of the commercial banks' turnover, payments between the banks, and which banks conduct the most transactions with the Central Bank. The banks' intraday settlement time is in good order, with around 70% of all transactions (in terms of amount) typically completed around noon.

The FSN also received a presentation on turnover among entities licensed to operate as virtual currency providers.

It was noted in discussions that the Central Bank had broad authorisations to set policy and adopt rules on financial market infrastructure. The Bank could impose certain basic security requirements in order to guarantee the security of the infrastructure for payment intermediation. There was a need to continue exploring and assessing whether the statutory framework for financial market infrastructure should be strengthened and the Central Bank's power to set rules in this area augmented, particularly as regards important and systemically important entities and infrastructure. As before, the Committee agreed on the importance of bolstering security in domestic payment intermediation so as to guarantee business continuity, partly in view of growing cyberthreats.

At the end of the meeting, the Committee approved the statement for publication on the morning of 7 December 2022.

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

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 Bank's Financial Stability Department; Eggert Th. Thórarinsson, Deputy Director 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.

14 January 2022

Opening of liquidity window and discontinuation of special temporary collateralised loan facility due to COVID-19

At its most recent meeting, the Central Bank of Iceland Financial Stability Committee (FSN) decided to recommend that the Bank open a liquidity window to which its counterparties will have access in case they experience an unexpected, temporary need for liquidity that could affect financial stability. Thus, this does not represent conventional liquidity provision for monetary policy purposes.

In accordance with the FSN's decision, counterparties will be authorised, from 12 January 2022 onwards, to take 14-day collateralised loans at an interest rate 0.5 percentage points above the Bank's seven-day collateralised lending rate. Interest rates on loans in the liquidity window will be variable, and based on Central Bank rates at any given time. It will be possible to apply for the loans on Wednesdays, the regular weekly transaction days for Central Bank facilities. Central Bank counterparties may apply for a loan of up to 5 b.kr. versus collateral included in the Bank's list of assets deemed eligible as collateral for Central Bank facilities. Counterparties will be prohibited from taking loans if they simultaneously hold term deposits with the Bank. It will not be possible to apply for a new loan before the previous loan has matured.

At the same time the liquidity window is opened, the special temporary collateralised loan facility established at the beginning of the COVID-19 pandemic – cf. the [8 April 2020 statements from the Financial Stability Committee and the Monetary Policy Committee](#) – will no longer be offered. Furthermore, the Temporary Provision laid down in Rules no. 345/2020 amending the Rules on Central Bank of Iceland Facilities for Financial Undertakings, [no. 1200/2019](#) (in Icelandic), which was adopted in connection with the two Committees' statements, shall expire. At the same time, amendments are made to Article 10 of the Rules as regards financial collateral arrangements for Central Bank facilities. It will still be possible to use specified loan portfolios as collateral, subject to a haircut, as well as other assets included in the Central Bank's list of eligible collateral, in order to secure collateralised loans in the liquidity window.

Further information will be contained in the terms and conditions to be sent to Central Bank counterparties.



Seðlabanki Íslands og loftslagsbreytingar

Gunnar Jakobsson, varaseðlabankastjóri fjármálastöðugleika

Málstofa vísindanefndar um loftslagsbreytingar
22. mars 2022

Mark Carney – „Breaking the tragedy of the horizon“

„The challenges currently posed by climate change pale in significance compared with what might come. The far-sighted amongst you are anticipating broader global impacts on property, migration and political stability, as well as food and water security.“

„... catastrophic impacts of climate change will be felt beyond the traditional horizons of most actors – imposing a cost on future generations that the current generation has no direct incentive to fix.“

“While there is still time to act, the window of opportunity is finite and shrinking.“

“By managing what gets measured, we can break the Tragedy of the Horizon.“



NGFS – „Call for Action“ 2019 – Sex ráð til Seðlabanka

Loftslagsáhætta hluti af þjóðhagsvarúð	Sjálfbærni í eigin eignastýringu
Samræmd gagnasöfn og nýting þeirra	Öflun og miðlun þekkingar
Krafa um og stöðlun upplýsingagjafar	Flokkunarreglur fyrir græna áhættu



Hlutverk og umboð Seðlabanka Íslands

„stuðla að stöðugu verðlagi, fjármálastöðugleika og traustri og öruggri fjármálastarfsemi“

„varðveita gjaldeyrisforða og stuðla að virku og öruggu fjármálakerfi“

„stuðla að framgangi stefnu ríkisstjórnarinnar í efnahagsmálum [...] ekki ganga gegn markmiðum bankans“

Loftslagsáhætta er raunveruleg og vaxandi og mun hafa áhrif á stöðugt verðlag, fjármálastöðugleika og öryggi fjármálakerfisins. Væri beinlínis óábyrgt að taka ekki tillit til hennar í starfsemi Seðlabankans.

Greiningar Seðlabanka og haglíkön þurfa í auknum mæli að taka tillit til umbreytingar- og raunáhættu sem stafa frá breytingum í loftslagi og aðgerðum stjórnvalda til að draga úr áhrifum þeirra breytinga

Umbreytingar- og raunáhætta loftslagsbreytinga mun hafa áhrif á gæði eignasafna fjármálafyrirtækja og getur þannig veikt viðnámsþrótt þeirra en þróa þarf sviðsmyndir og álagspróf til að meta slíkt

Upplýsingagjöf fjármálafyrirtækja er undirstaða greininga og gagnsæi á áhrifum loftslagsáhættu og þarf fjármálaeftirlit að tryggja hana auk heilbrigðra viðskiptahátta við grænkun fjármálakerfisins

Æskilegt er að taka tillit til loftslagsáhættu við framkvæmd peningastefnu, meðal annars með því að setja viðmið varðandi efnahagsreikning Seðlabankans og stýringu gjaldeyrisforðans



Skuldbindingar Seðlabankans (COP26)

- DRAGA ÚR SÓTSPORI UM 40% FYRIR 2030 OG STEFNIR AÐ KOLEFNISHLUTLEYSI
- SETJA FRAM LEIÐBEININGAR FYRIR EFTIRLITSSKYLDA AÐILA
- EFLA SKILNING Á LOFTSLAGSÁHÆTTU FJÁRMÁLAFYRIRTÆKJA
- ÞRÓA LOFTSLAGSÁHÆTTU ÁLAGSPRÓF FJÁRMÁLAMARKAÐA
- ÞRÓA LOFTSLAGSÁHÆTTU VIÐMIÐ FYRIR VARÐVEISLU GJALDEYRISFORÐANS
- MIÐLA ÞEKKINGU SINNI OG ÚR ALÞJÓÐLEGU SAMSTARFI TIL HAGADILA
- AUKA FÆRNI OG ÞEKKINGU STARFSFÓLKS Á LOFTSLAGSTENGÐUM ÁHÆTTUÞÁTTUM



Snertifletir Seðlabankans við loftslagsáhættu

Fjármálastöðugleiki

- Sviðsmyndagreining loftslagsáhættu
- Álagspróf til að greina og meta áhættu fjármálakerfis
- Þróun þjóðhagsvarúðartækja
- Meta áhrif á greiðslumiðlun og öruggt fjármálalíf

Fjármálaeftirlit

- Áhættuflokkun og stöðluð upplýsingagjöf
- Áhættustefna og traustir stjórnarhættir
- Góðir viðskiptahættir og lágmörkun grænþvottar
- Samráð og væntingastjórnun

Peningastefna

- Samspil loftslagsáhættu og haglíkana
- Áhættuþættir magnbundinnar íhlutunar
- Neikvæð skimun á fjárfestingum gjaldeyrisforða
- Mismunur á vaxtastigi eftir veðandlagi

Eigin rekstur

- Greining og viðbragð við kolefnisspori bankans
- Loftslagsstefna og lágmörkun kolefnisspors
- Upplýsingagjöf og mælingar



Dæmi um skilgreind verkefni framundan

- Skuldbindingar tengdar COP26-yfirlýsingu Seðlabanka Íslands
- Fjármálaeftirlit:
 - Samtal um væntingar
 - **Málstofur með eftirlitsskyldum aðilum** – 2 stórar gerðir á leiðinni og viljum vera undirbúin
 - Eftirlit með loftslagsáhættu banka
- Fjármálastöðugleiki:
 - **Samstarf um sviðsmyndagreiningu**
 - **Fyrsta kynslóð álagsprófa**
- Peningastefna:
 - **Þekkingarstofnun – samstarf um greiningu**
- Eigin starfsemi:
 - **Loftslagsáætlun/aðgerðaáætlun/grænu skrefin**
 - **Sjálfbærnisráðgjafi og kafli í ársskýrslu**
 - Vettvangur þvert á svið bankans
 - Fundaröð ytri aðila
 - Samstarf norrænna seðlabanka



Að mörgu að huga á vegferð okkar



Langtímahugsun



Lærdómskúrfa



Hvatar



Óvæntar afleiðingar



Central Bank amends rules on derivatives trading

7 April 2022

The Central Bank of Iceland has amended the Rules on Derivatives Transactions in which the Icelandic króna is Specified in a Contract Against Foreign Currency. The amendments pertain to interbank transactions and the thresholds for notification of derivatives trades to the Central Bank. The amended Rules have been published in the Law and Ministerial Gazette [Stjórnartíðindi] as Rules [no. 412/2022](#) and will take effect tomorrow, 8 April 2022. The Rules were approved by the Financial Stability Committee at its last meeting.

The amendments are of two main types: on the one hand, transactions between two domestic commercial banks are no longer included with the forward foreign currency position according to the Rules; and on the other hand, the thresholds for notification of derivatives transactions to the Central Bank have been increased. They are intended to make the execution of derivatives more efficient.

The restriction on domestic commercial banks' derivatives transactions involving the Icelandic króna is unchanged from the previous Rules, and the total permissible exposure in such transactions is still restricted. Therefore, the forward foreign currency position of each commercial bank vis-à-vis each individual counterparty may not be positive or negative by more than 10% of the capital base, and the gross forward foreign currency position (the sum of the forward positions vis-à-vis each counterparties) shall not exceed 50% of the capital base of the commercial bank in question.

Rules on maximum LTV and DSTI ratios

15 June 2022

Two new sets of Central Bank rules were published in the Law and Ministerial Gazette [Stjórnartíðindi] today: the Rules on Maximum Loan-to-Value Ratios for Mortgage Loans to Consumers, no. 702/2022, and the Rules on Maximum Debt Service-to-Income Ratios for Mortgage Loans to Consumers, no. 701/2022. The Rules were approved at a meeting of the Central Bank Financial Stability Committee on 14 June 2022 and take effect tomorrow, 16 June 2022. At the same time, the previous Rules on Maximum Loan-to-Value Ratios for Mortgage Loans to Consumers, no. 778/2021, and the previous Rules on Maximum Debt Service-to-Income Ratios for Mortgage Loans to Consumers, no. 1268/2021, shall cease to apply.

With the new Rules on Maximum Loan-to-Value Ratios for Consumer Mortgages, the maximum loan-to-value ratio for first-time buyers has been lowered from 90% to 85% of the market value of the underlying property. The new Rules on Maximum Debt Service-to-Income Ratios for Mortgage Loans to Consumers introduce a minimum interest rate to be used to calculate the maximum ratio of debt service to income. Henceforth, the calculation shall be based on either the contractual interest rate or the minimum rate provided for in the Rules (5.5% for non-indexed loans and 3% for indexed loans), whichever is higher. A change has also been made to the maximum loan maturity used to calculate the debt service-to-income ratio for indexed loans.

It should be noted that the new Rules apply to mortgage loan agreements made after the Rules take effect.

The rules will be translated into English, but the Icelandic version is here:

[Reglur um hámark greiðslubyrðar fasteignalána í hlutfalli við tekjur neytenda, nr. 701/2022](#)

[Reglur um hámark veðsetningarhlutfalls fasteignalána til neytenda, nr. 702/2022](#)



8 June 2022

Memorandum

To: Financial Stability Committee

From: Central Bank of Iceland

Re: Background to the decision on the countercyclical capital buffer

At its meeting on 29 September 2021, the Central Bank of Iceland Financial Stability Committee (FSN) decided to increase the countercyclical capital buffer (CCyB) on financial institutions from 0% to 2%, effective 29 September 2022. The CCyB had been lowered to 0% in March 2020, as is described in the Financial Stability Committee (FSN) statement of 18 March 2020.¹ Increased capital shores up financial system resilience and better enables the system to withstand financial shocks. Raising the CCyB gives the FSN the scope to lower it again later if warranted.

GDP growth has now taken hold after the COVID-associated contraction, and the outlook is for discernible demand pressures in the economy in the coming term. Steps must be taken to ensure that the rapid economic recovery is not accompanied by excess growth in cyclical systemic risk; e.g., with excess credit growth and unsustainable asset price increases. This is no less applicable when there is widespread risk of a setback in the economic recovery because of swiftly rising inflation in many economies and the monetary tightening required in response to it.

Private sector debt

The effects of tighter macroprudential and monetary policy on household debt have begun to emerge. Real twelve-month growth in household debt measured 3.4% at the end of March 2022, down from 7.0% in mid-2021. It had contracted slightly year-to-date in real terms, owing to reduced mortgage debt, which declined by just under half a percentage point. This was the first time since late 2016 that households' mortgage debt had declined quarter-on-quarter in real terms. The contraction stems mainly from slower growth in deposit institution lending. At the same time, other household debt has begun to grow in real terms, after having shrunk for many years.

¹ See the Central Bank of Iceland's memorandum of 18 March 2020: https://www.seðlabanki.is/library/Skraarsafn/Fjarmalastodugleiki/Minnisblad_sveiflu_jofnunarauki_18mars2020.pdf

With rising nominal interest rates, debt service on new loans and existing variable-rate loans has increased somewhat in recent months, reducing the demanded volume of credit. Rules on borrower-based measures, which entailed caps on loan-to-value (LTV) and debt service-to-income (DSTI) ratios, were also tightened last year, as a response to rapidly rising house prices and deteriorating loan quality. This is offset by the fact that in spite of rising nominal interest rates, higher inflation means that real rates on new non-indexed mortgage loans are still negative in most cases. As a result, it is still considered favourable for those who satisfy the tighter borrowing conditions to finance home purchases with non-indexed loans. Furthermore, real rates on indexed mortgages, while positive, are at a historical low. Low or negative real rates are therefore still driving demand for new mortgages, while the borrower-based measures provide some counterweight.

At the end of March 2022, corporate debt had fallen in real terms by 2% year-on-year. In price- and exchange rate-adjusted terms, however, corporate debt grew by 4.5%, owing to considerable appreciation of the króna during the quarter. New corporate lending has increased markedly in recent months.

The non-performing loan (NPL) ratio on loans to individuals is falling, measuring 0.8% at the end of March. About 0.8% of household loans were frozen at that time, after a decline of nearly half a percentage point since the turn of the year. The corporate NPL ratio has fallen significantly in recent months and measured 2.9% at the end of March. Arrears were most pronounced among companies in hotel and restaurant operations, or 6.3%. The share of frozen corporate loans was 11.3% at the end of April and has been falling continuously since the beginning of 2021.

Real estate market

In April 2022, the capital area house price index had risen by 14.1% year-on-year in real terms. At that time, the increase since the onset of the pandemic measured nearly one-fourth, and the index was nearly 20% above its estimated long-term trend. House prices have risen rapidly outside the capital area as well, or by 12.3% year-on-year in real terms as of May 2022.

Housing market turnover has contracted somewhat in recent months and, in real terms, is now broadly similar to the level seen during the years preceding the pandemic. The ratio of house prices to fundamentals is now very high. As of April, the ratio of the capital area house price index to the general wage index had risen by 13% year-on-year, and the ratio of the house price index to the rent price index had risen accordingly. The ratio vis-à-vis the building cost index had risen by just over 14% over the same period. Since the beginning of 2020, the ratio

of house prices to building costs has risen by nearly one-fourth, and the ratio to rent prices has risen nearly a third.

The rise in house prices over and above fundamentals indicates significant imbalances in the housing market and growing systemic risk. In July, the FSN tightened the Rules on Maximum Loan-to-Value Ratios for Consumer Mortgages, and in September it adopted rules capping DSTI ratios. The latter rules took effect on 1 December 2021. These measures, together with interest rate hikes, have already begun to affect housing market demand through their impact on mortgage supply. This is reflected in weaker lending growth and slightly improved overall loan quality of new mortgages in recent months. First-time buyers are still taking on increased risk, however, as the borrower-based measures are less stringent for them than for other buyers.

The capital area commercial real estate (CRE) price index rose in real terms by 6.3% year-on-year in Q1/2022 but has declined marginally in the past half-year.² It is now 13% above its long-term trend. Turnover in registered CRE purchase agreements increased in real terms by more than one-fifth year-on-year in Q1/2022 and was high in historical context. The combined amount of CRE-backed loans issued by the domestic systemically important banks (D-SIB) and Kvikabanki contracted by 7.4% in real terms in 2021, and unhedged and poorly hedged risk contracted as well, according to the distribution of LTV ratios on such loans as of end-2021.³ The effects of the pandemic on the large CRE firms' earnings reports have tapered off, and the most recent reports show positive valuation changes in investment assets. Their annualised return on investment assets was 5.3% in Q1/2022, or 4.8 percentage points above the risk-free reference rate, which is on the high side in historical context. The real estate firms' equity ratios have been rising, and their LTV ratios have been falling. Their liquidity has deteriorated in the past half-year, however, not least because of large payments on long-term debt over the coming year, which have been transferred into the reference period for their current ratio and cash flow ratio. Nevertheless, there is scope for refinancing, owing to ample collateral capacity. According to this, there are few signs of bubble formation in the CRE market, although prices are relatively high.

The banks

In 2021, the banks' interest rate spreads narrowed somewhat relative to previous years, but they widened marginally in Q1/2022, in line with the rising Central Bank key rate. Falling interest rates led to a change in

² The CRE price index is based on the weighted average of industrial, retail, and office property.

³ In this context, combined CRE-backed loans do not include loans to companies in fishing, agriculture, and transport and transit, as their non-CRE collateral generally weighs heavier than the real estate does.

the composition of the D-SIBs' loan portfolio over the past two years, with non-indexed mortgages accounting for a larger share. The pace of this change has now slowed significantly. Because of rising interest rates, the banks' net interest income grew somewhat in Q1 despite slower growth in total assets. The return on core operations, which is based on interest income and fees and commissions, is the banks' first line of defence against a drop in the capital ratio due to loan losses and other shocks to their operations. As a result, low interest rates can undermine financial stability in the long run. With cost-cutting measures, the banks have been able to strengthen their return on core operations, which measured 8.4% in 2021 and rose further in Q1/2022, to 10%.

Impairment of the banks' loan portfolios is based on expectations of future credit losses and recovery. In 2020, the large commercial banks recorded loan impairment ranging from 0.61% to 0.94%. As a result, in the first nine months of 2021, the banks reversed a portion the impairment entered in 2020, or 0.26-0.51% of the loan portfolio. Firms in the tourism sector have grown stronger, and pandemic-related uncertainty has receded markedly. On the other hand, uncertainty is still more pronounced than usual, owing to the war in Ukraine and high inflation. During the first three months of 2022, one of the D-SIBs recognised impairment in the amount of 0.05% of the loan portfolio, while the other two continued to reverse impairment in the amount of 0.04% and 0.05%, respectively, of the portfolio.

The D-SIBs' capital ratio declined by 1.8 percentage points in Q1/2022, to 23.1% at the end of March.⁴ Their individual capital ratios are 4.5-5 percentage points above the overall requirement. As a result, the banks have the flexibility to comply with the previously announced CCyB increase to 2%, which takes effect on 29 September 2022.

Overall assessment of cyclical systemic risk

Total private sector credit growth has been modest in recent quarters, although developments have differed between households and businesses. The debt-to-GDP ratio has risen strongly since the onset of the pandemic, in part because of the contraction in GDP, but it has begun to fall again, owing in large part to the subsequent surge in GDP. The debt-to-GDP ratio can be expected to continue falling if GDP forecasts for the next two years are borne out.⁵

The rise in house prices in the recent term is not sustainable in the long run and cannot continue at the current pace without a subsequent

⁴ Adjusted for proposed dividend payments and share buybacks. This also includes Íslandsbanki's share buyback in the amount of 15 b.kr., according to its Q1/2022 interim financial statements.

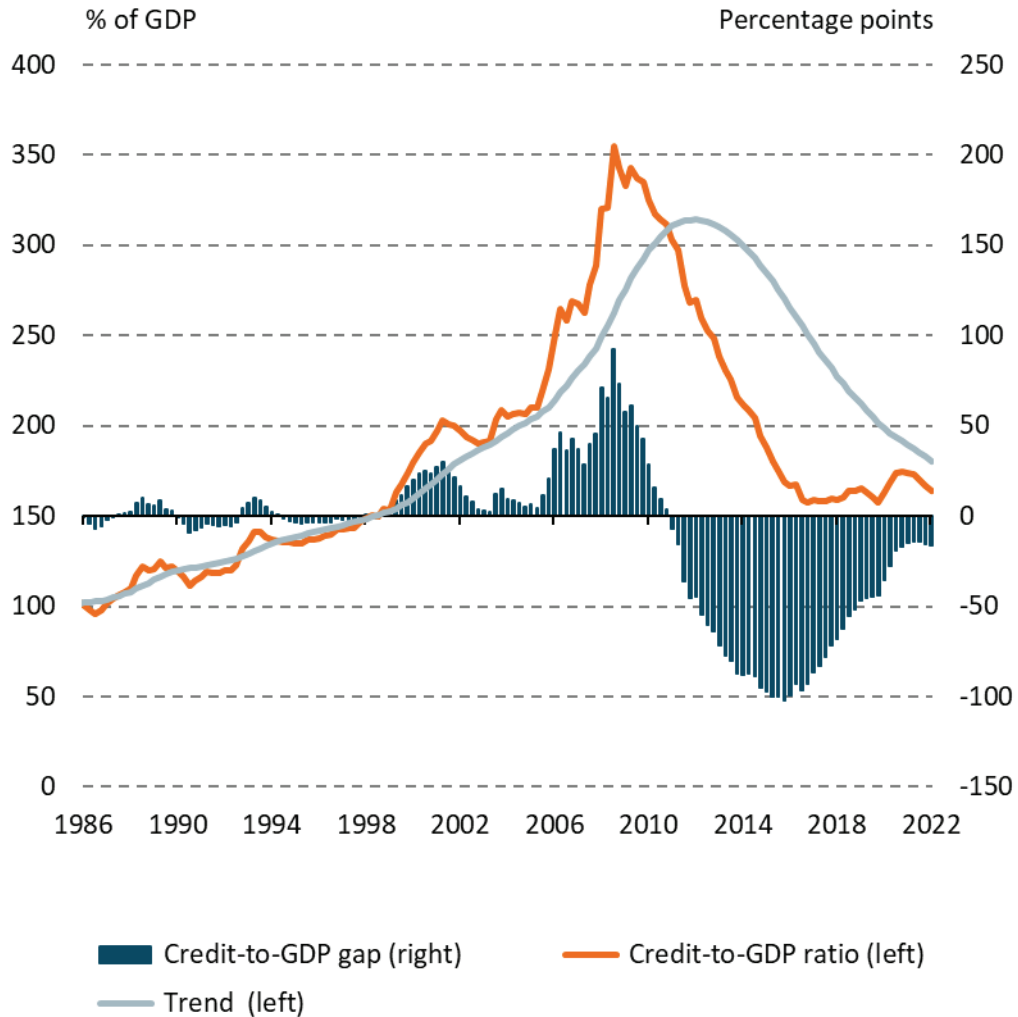
⁵ The ratio of private sector debt – i.e., households and non-financial companies – to GDP.

correction. The pace of house price inflation is likely to ease somewhat in the near future, with rising interest rates and the effects of borrower-based measures.

Composite indicators that are intended to present a comprehensive view of developments in the financial cycle show signs of a marginal increase in cyclical systemic risk. The statistical presentation of the financial cycle is now at its long-term average. The upward cycle is driven by fluctuations in house prices and the debt cycle, although it is offset by the fact that the debt cycle is still at a low position. The indicator for domestic systemic risk(d-SRI) is now somewhat above average after rising steeply since the beginning of the pandemic.

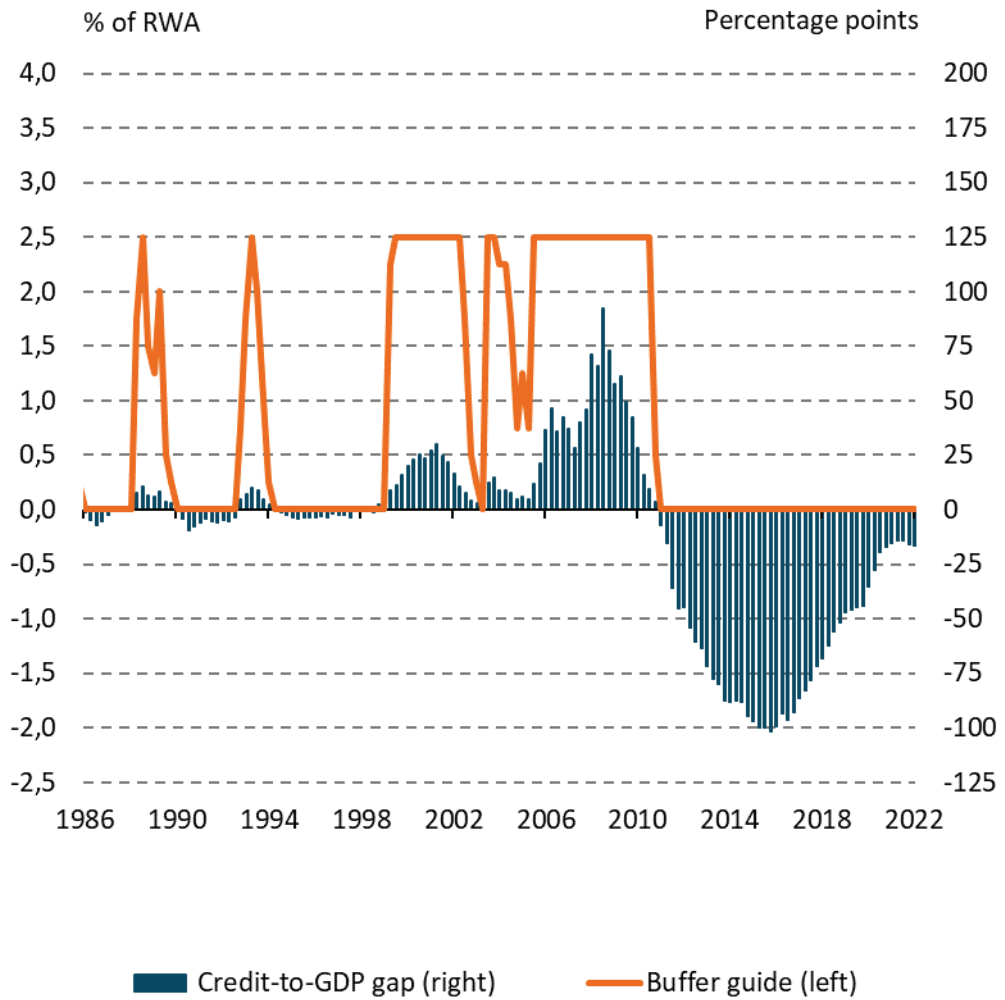
Appendix – Charts

The credit-to-GDP gap



Claim value of total credit to households and firms as a share of GDP. The trend component is obtained with a one-sided HP-filter with $\lambda=400.000$.
Sources: Statistics Iceland, Central Bank of Iceland.

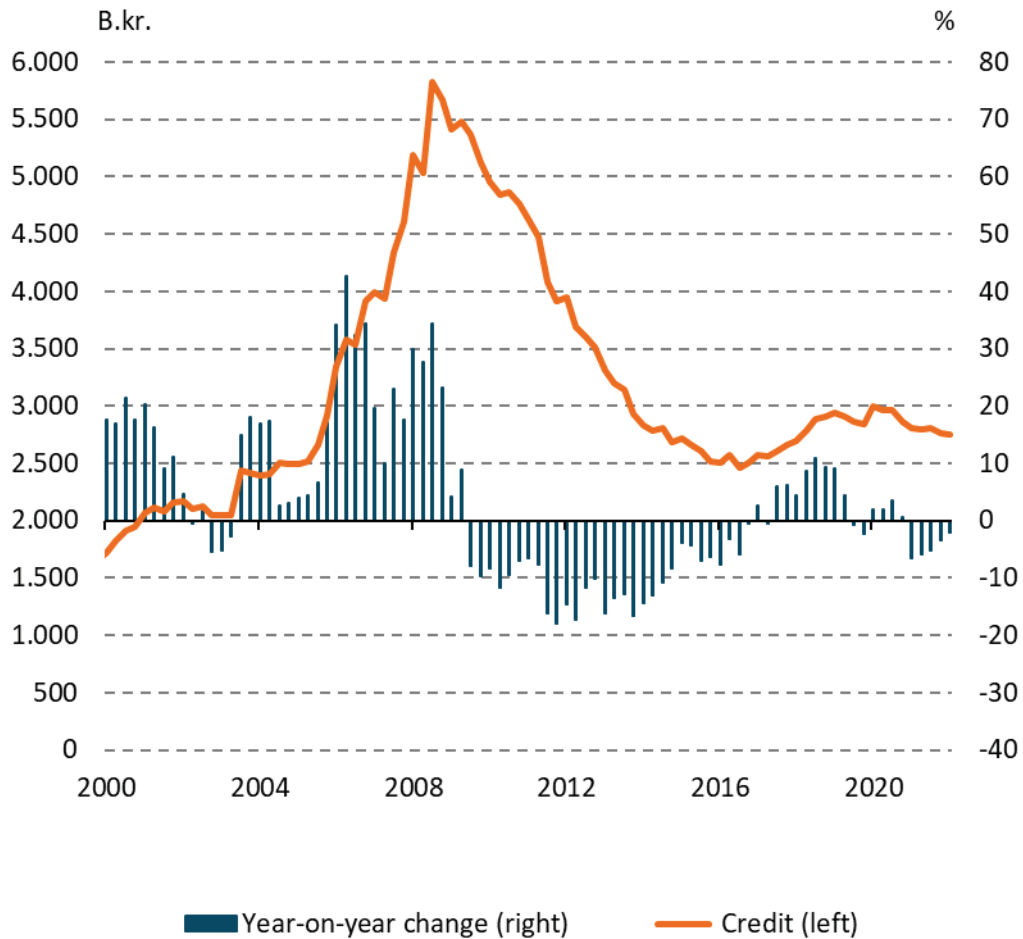
The buffer guide



The buffer guide is a simple function of the credit-to-GDP gap, which is the deviation of the credit-to-GDP ratio from its long term trend.

Sources: Statistics Iceland, Central Bank of Iceland.

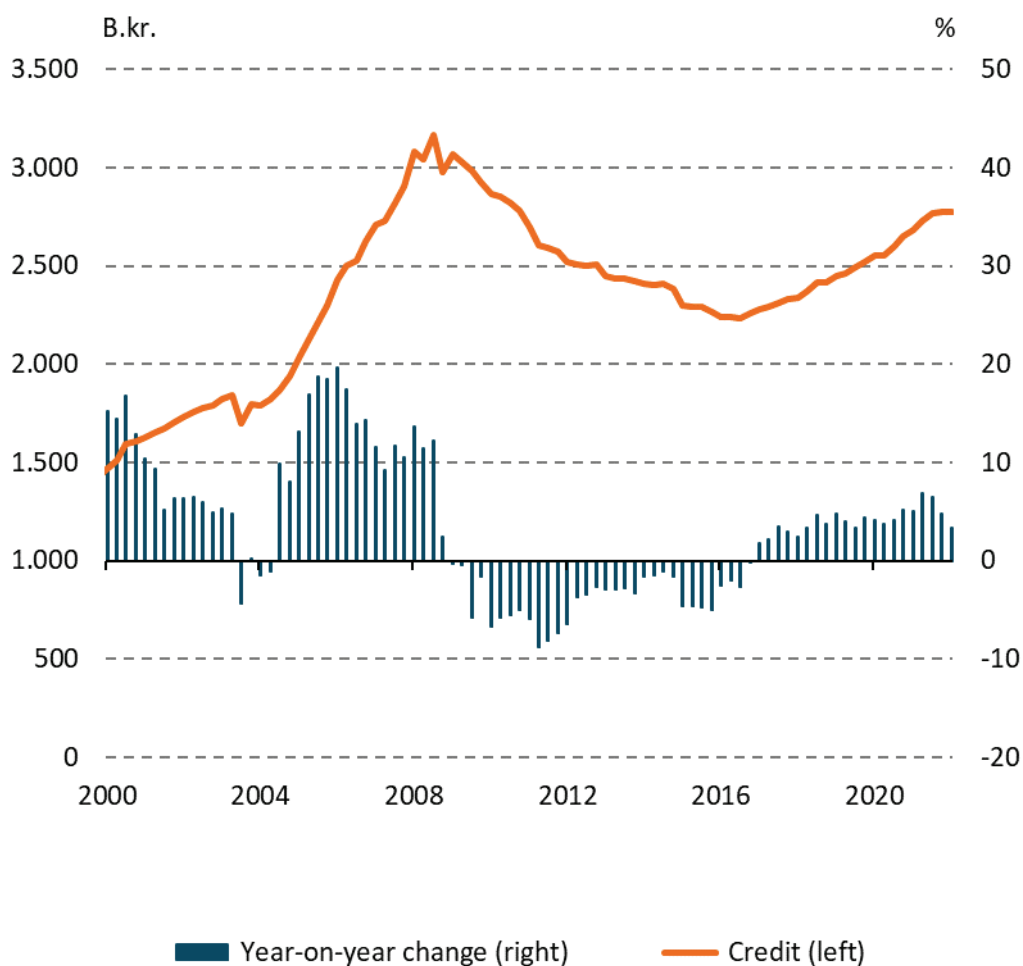
Real corporate credit growth



Claim value of credit to non-financial firms, at constant prices. Deflated with the consumer price index.

Sources: Statistics Iceland, Central Bank of Iceland.

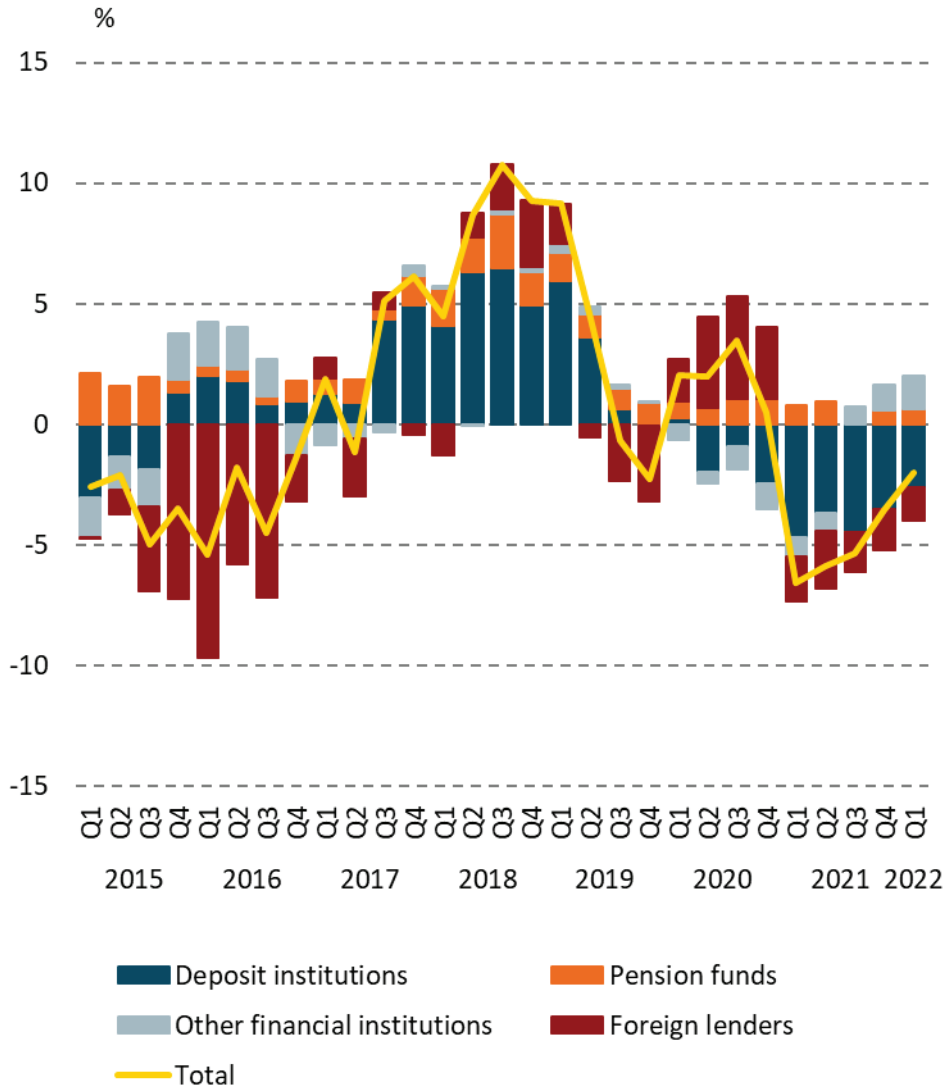
Real household credit growth



Claim value of total credit to households, at constant prices. Deflated with the consumer price index.

Sources: Statistics Iceland, Central Bank of Iceland.

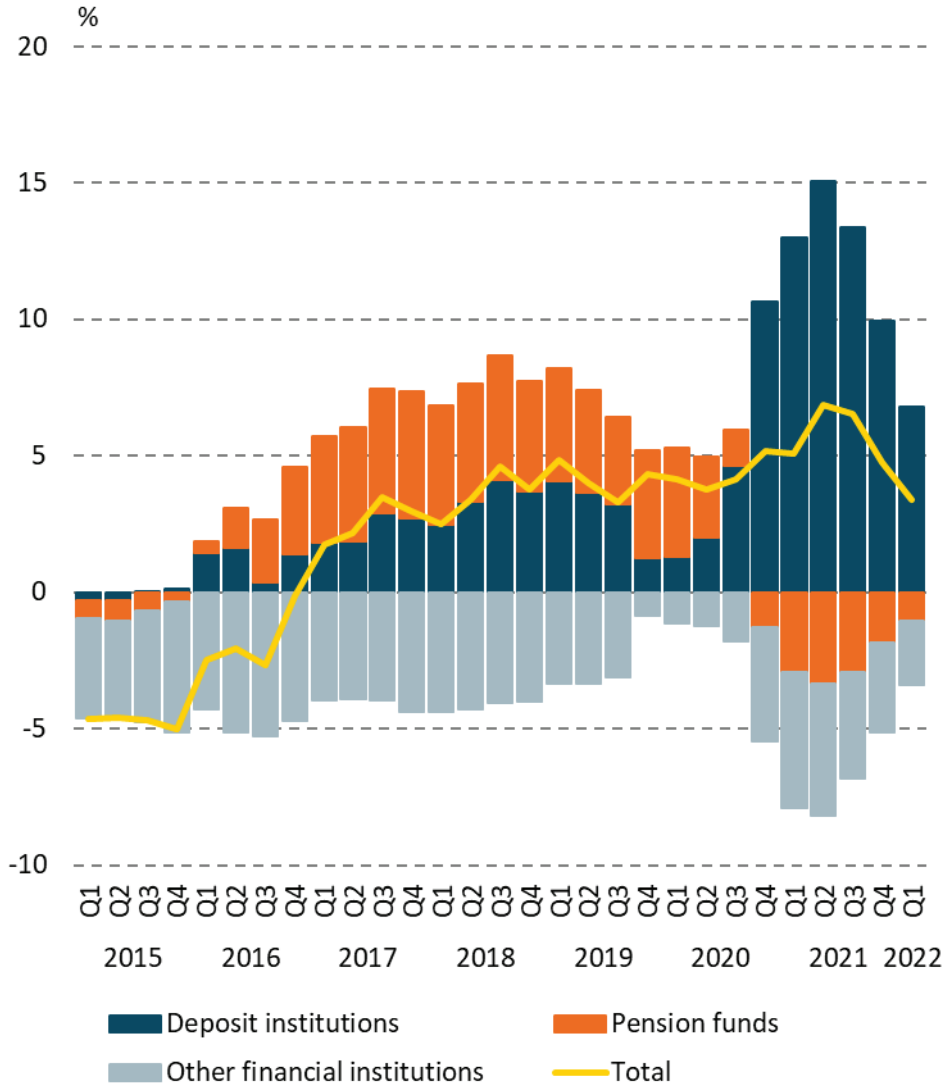
Corporate debt, by lender type



Real year-on-year change. Debt to financial institutions and issued marketable bonds.

Sources: Statistics Iceland, Central Bank of Iceland.

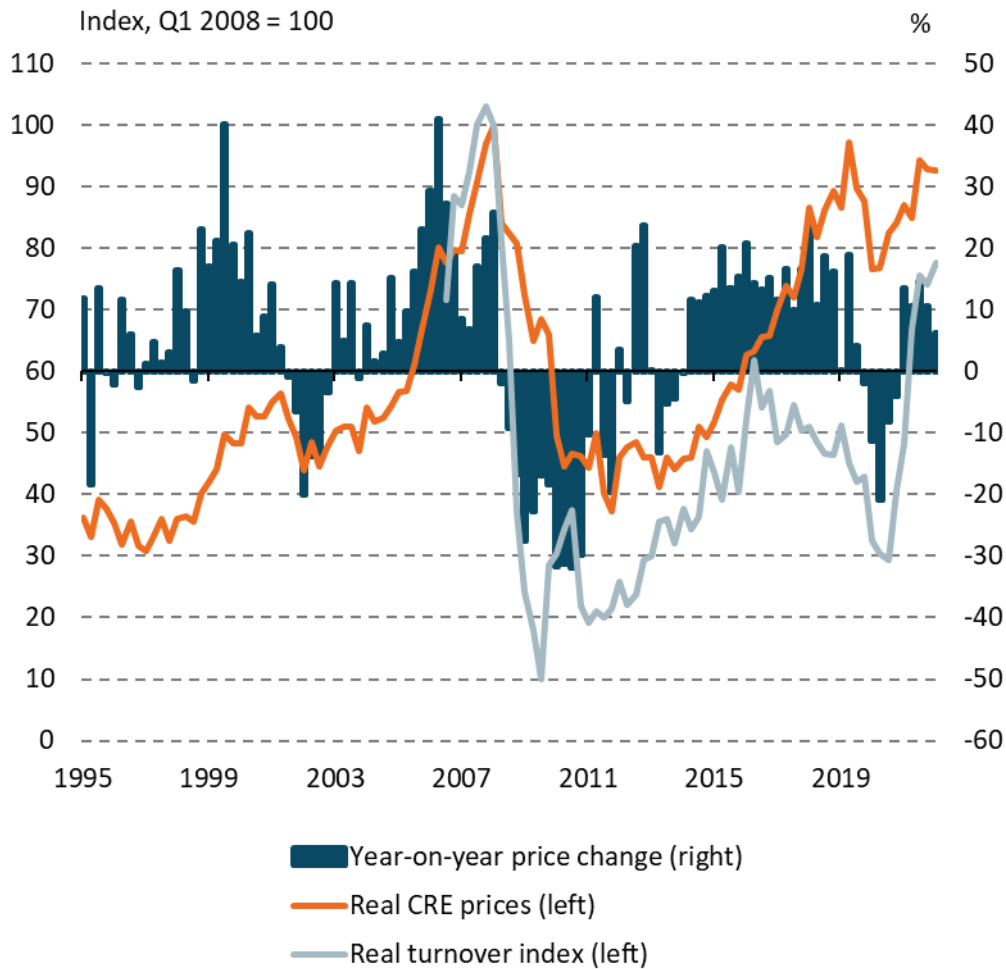
Household debt, by lender type



Real year-on-year change. Debt to financial institutions and issued marketable bonds.

Sources: Statistics Iceland, Central Bank of Iceland.

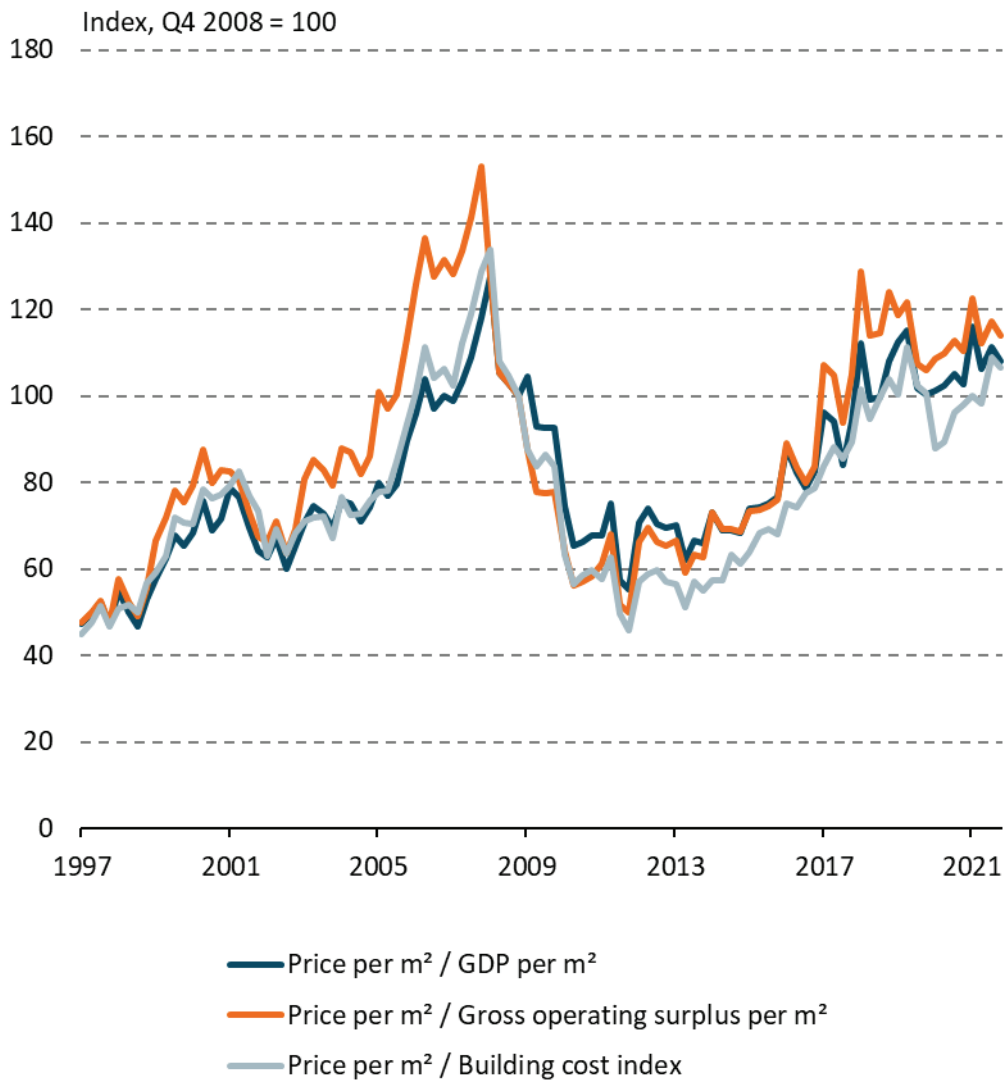
Real commercial property prices and turnover in the capital area



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.

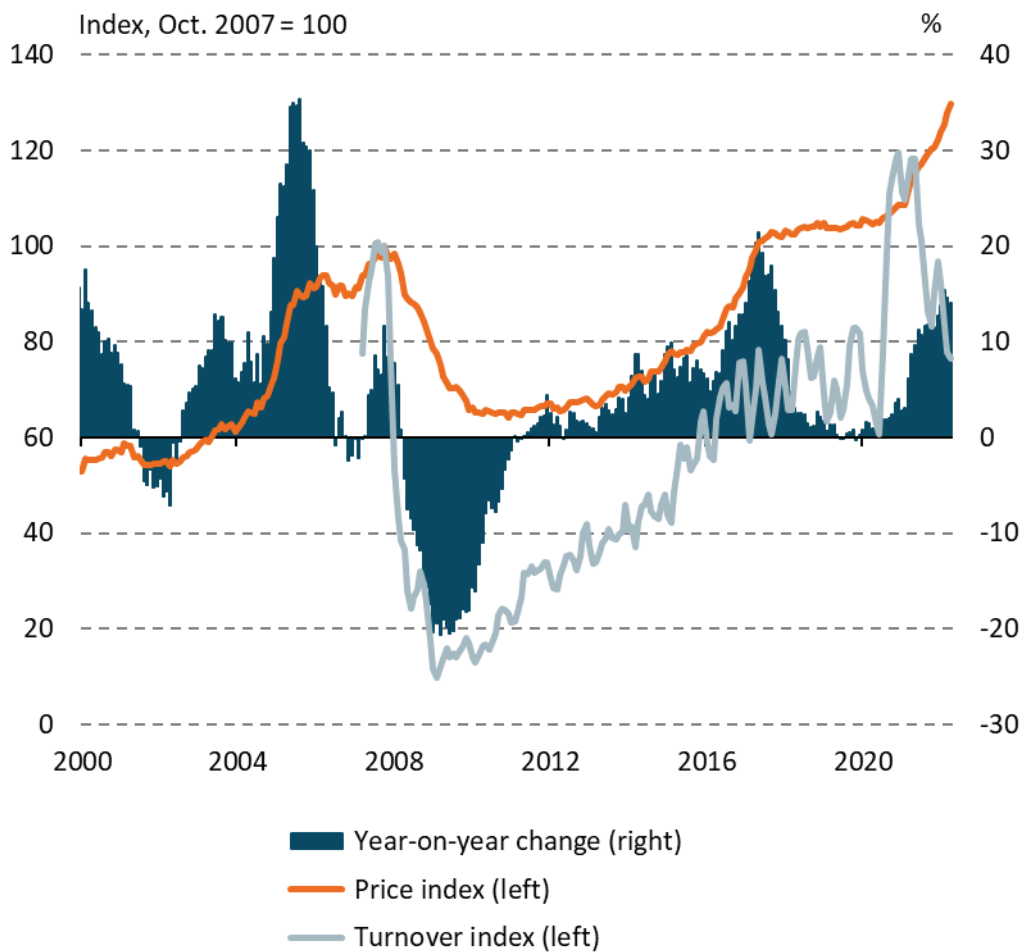
Commercial property price ratios



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.

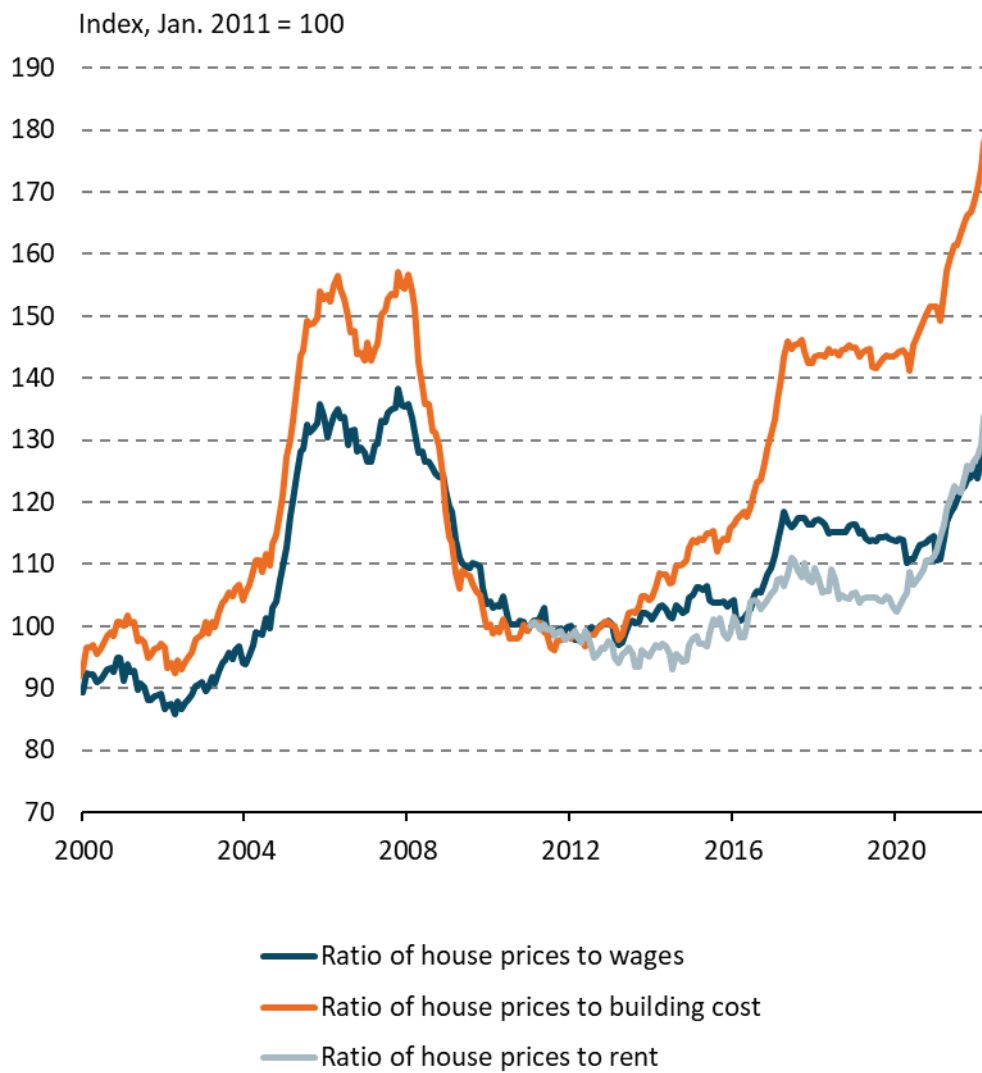
Real house prices and turnover in the capital area



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.

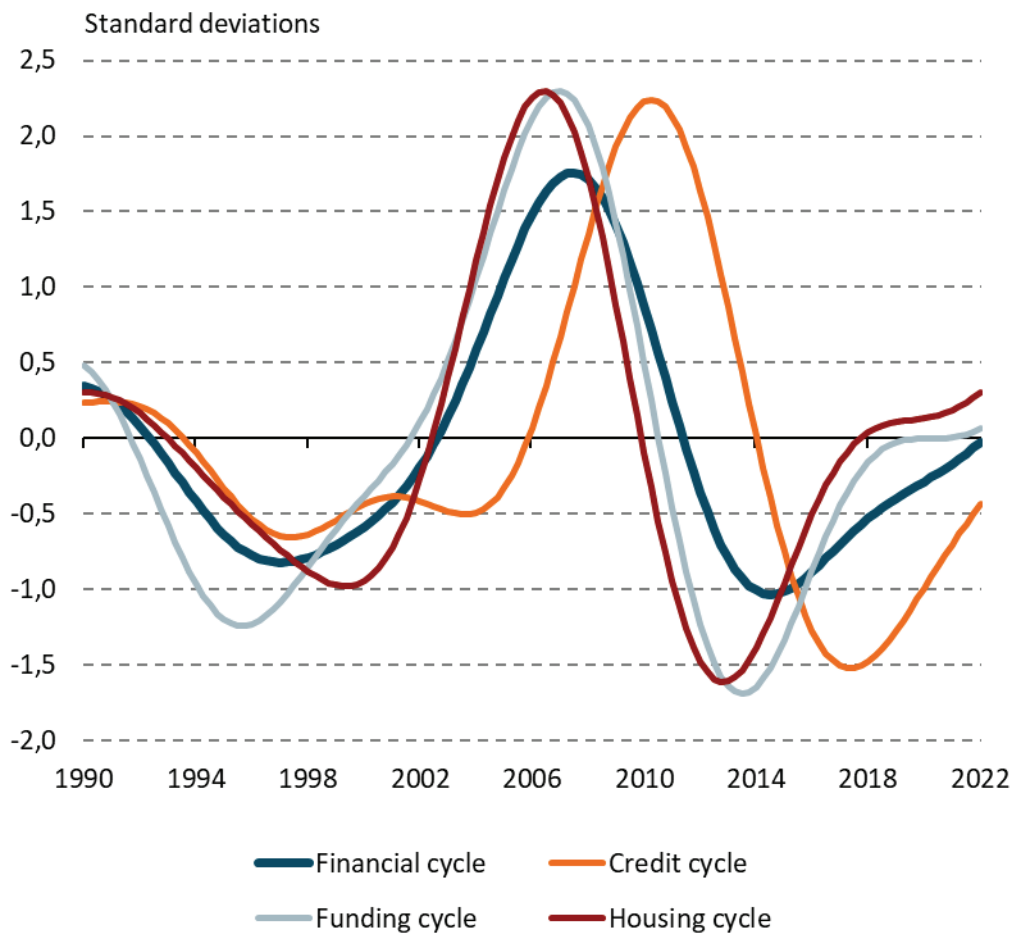
Sources: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

Capital area house prices and determining factors



Sources: Registers Iceland, Statistics Iceland.

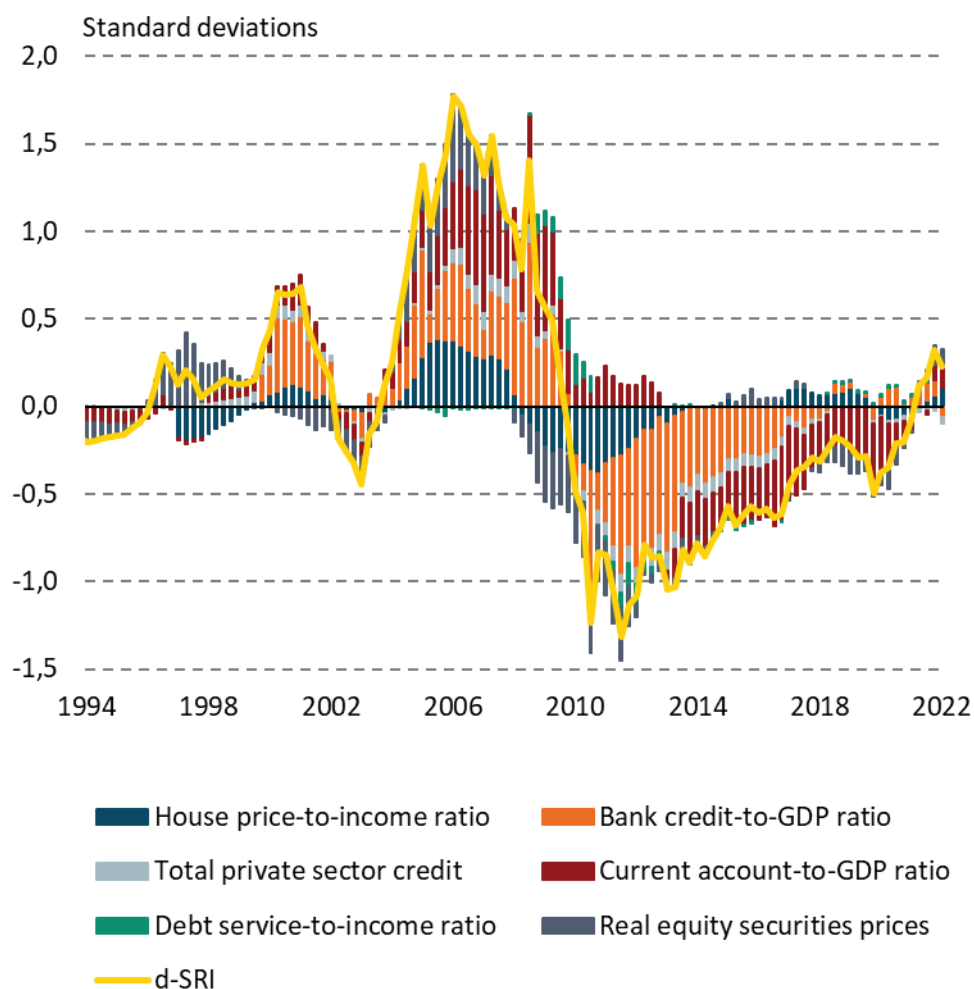
Financial cycle and subcycles



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.

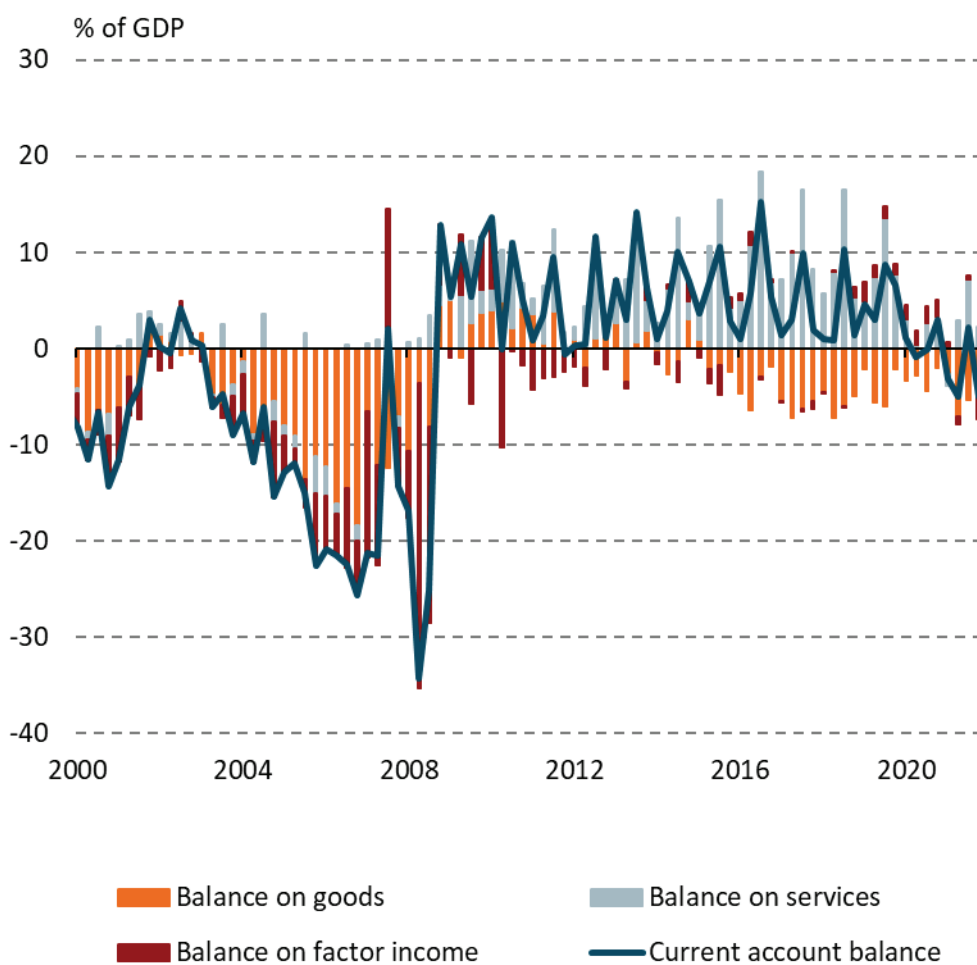
Domestic systemic risk indicator (d-SRI)



For the debt service-to-income ratio, estimates of debt service are used for Q1 2020 and onwards.

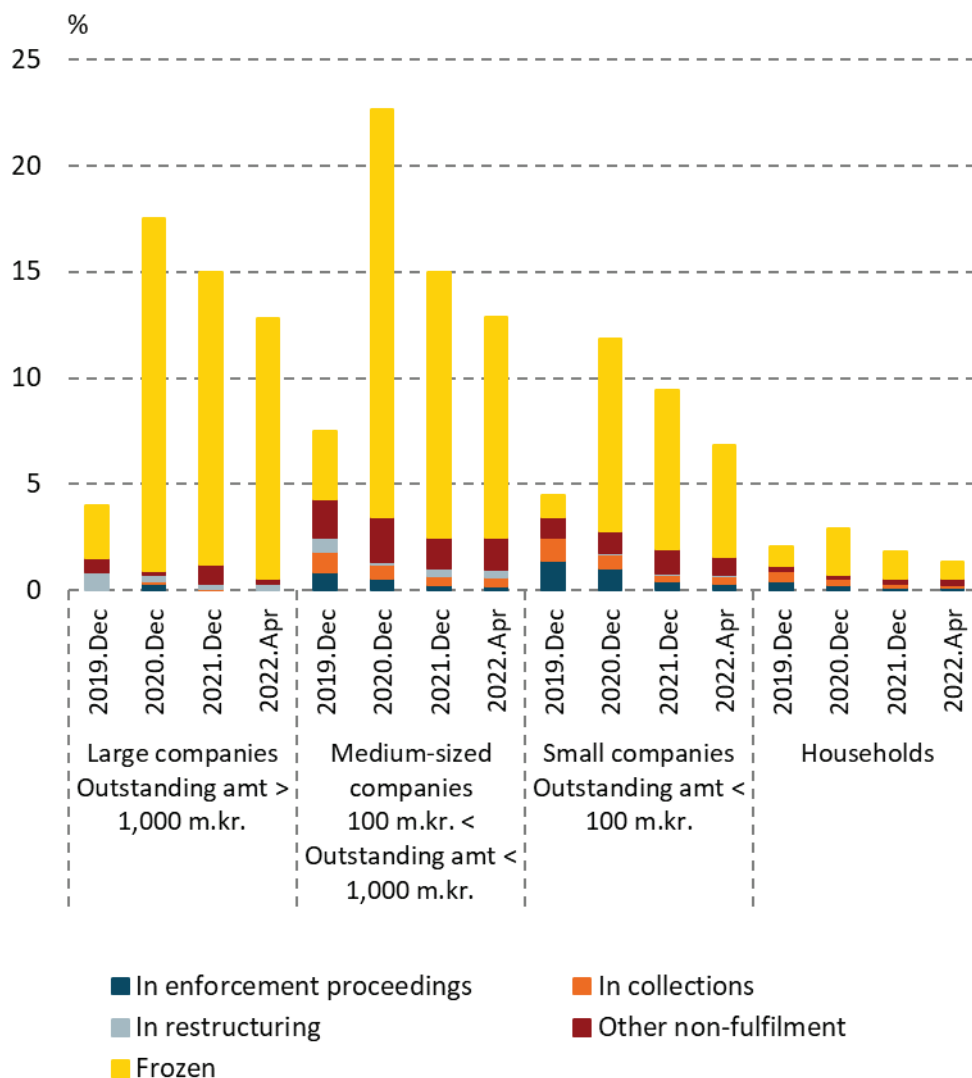
Sources: Statistics Iceland, Central Bank of Iceland..

Current account balance



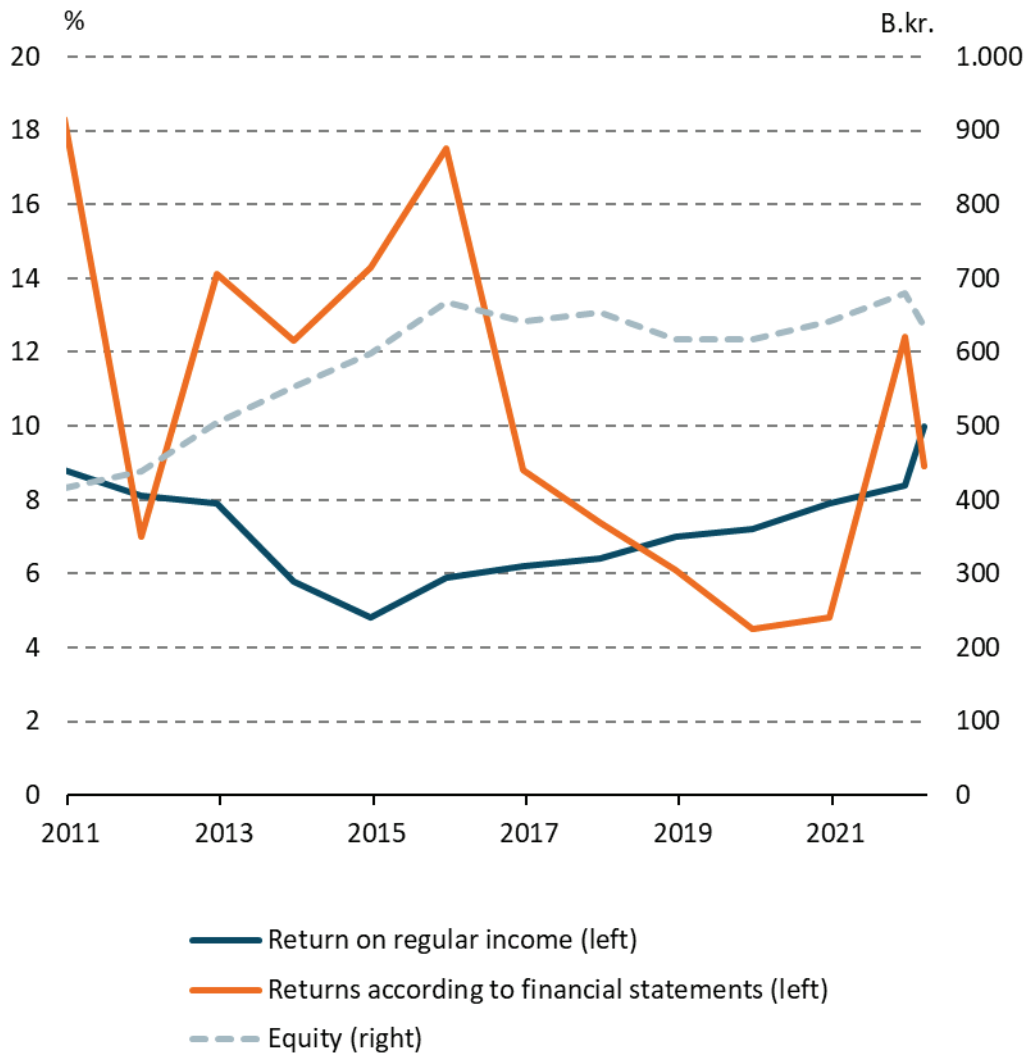
The effects of failed banks on factor income and the balance on services from Q4/2008 to Q4/2016 are ignored. From 2009 through 2012, the effect of Actavis on the balance on income is also ignored, owing to inaccurate data during the period. Secondary income is included in factor income.
Sources: Statistics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

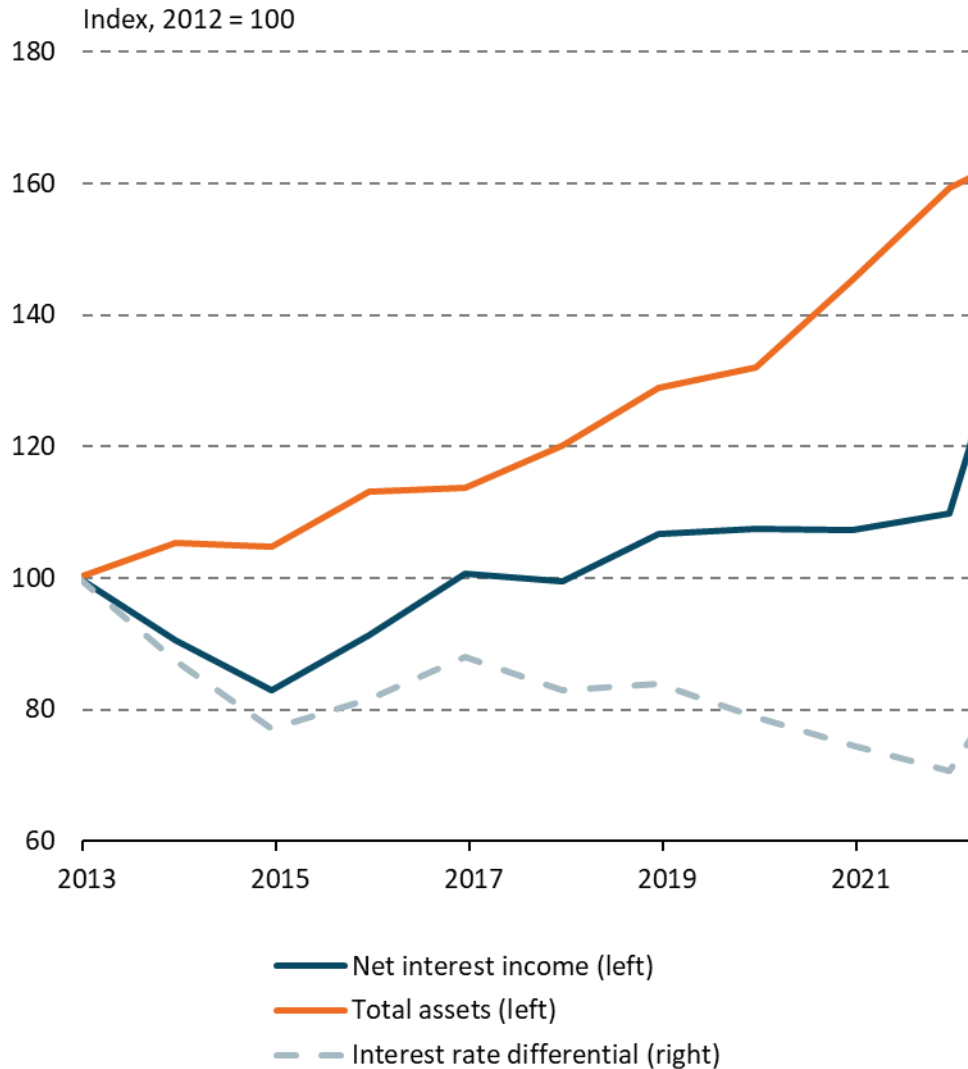
D-SIB: Returns



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 and Borgun in 2020.

Sources: Commercial banks' financial statements.

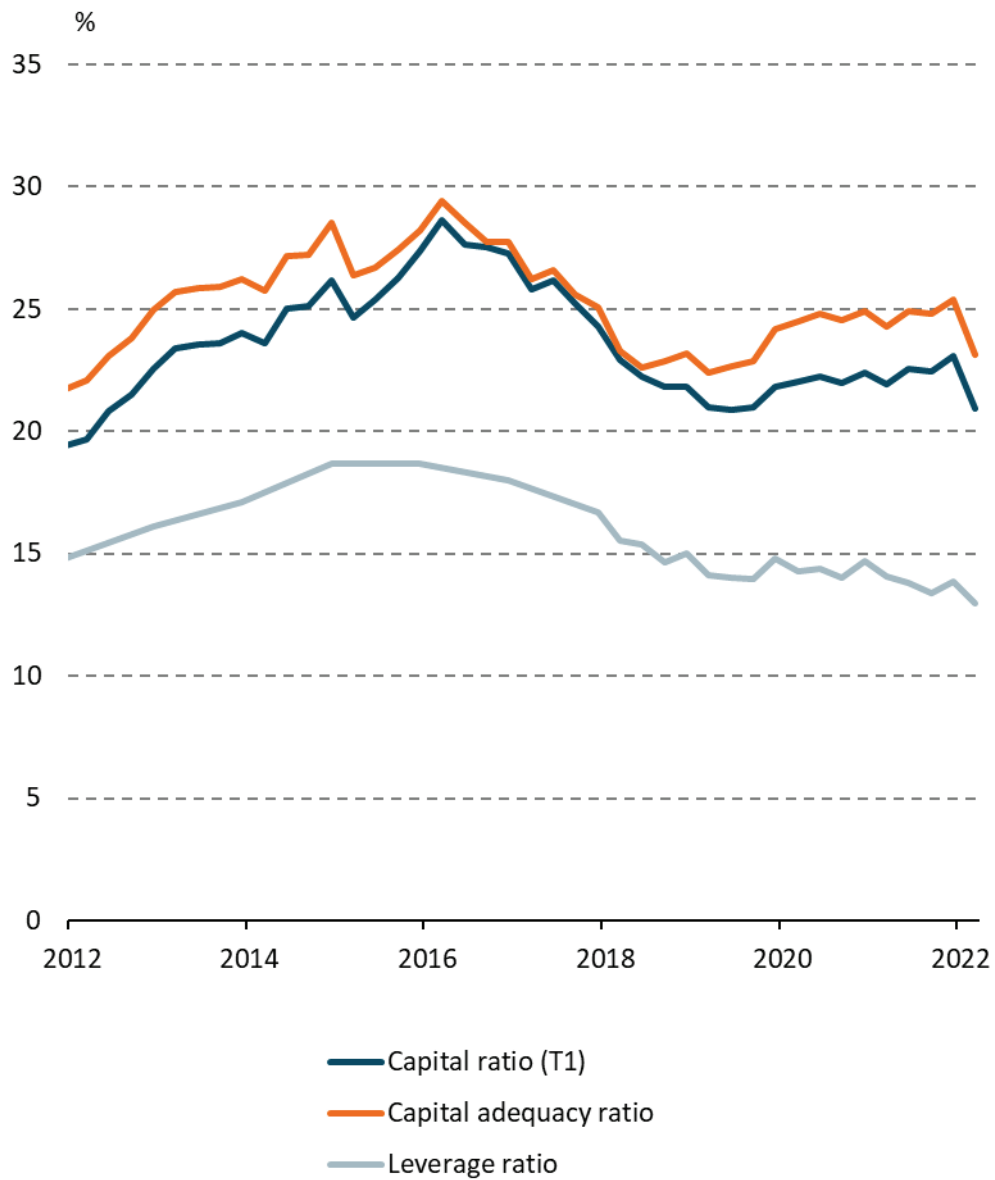
D-SIB: Net interest income, interest expense and interest rate differential



Domestic systematically important banks, consolidated figures. Annualised FNM 2021 data.

Sources: Commercial banks' financial statements.

D-SIB: Capital and leverage ratios



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

Fjármálastöðugleiki

Arion banki
22. júní 2022

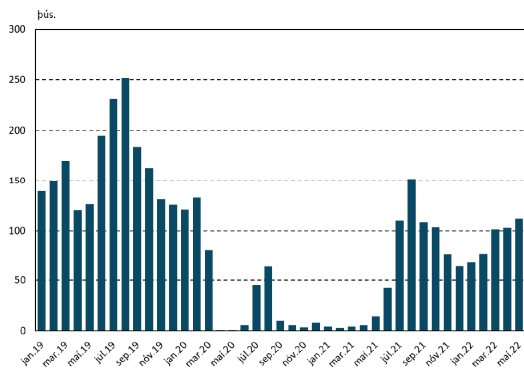


Almennt

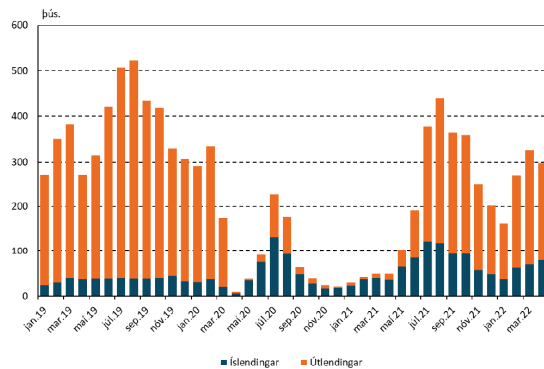
Ferðapjónustan tekið hratt við sér

- Mikil aukning í fjölda ferðamanna á síðustu mánuðum
 - Fjöldi í apríl og maí um 87% af fjöldanum í sömu mánuðum 2019
- Gistinætur á hótélum í apríl 9% fleiri en í sama mánuði 2019
 - Nýting hótélherbergja sambærileg og í apríl 2019

Fjöldi ferðamanna eftir mánuðum



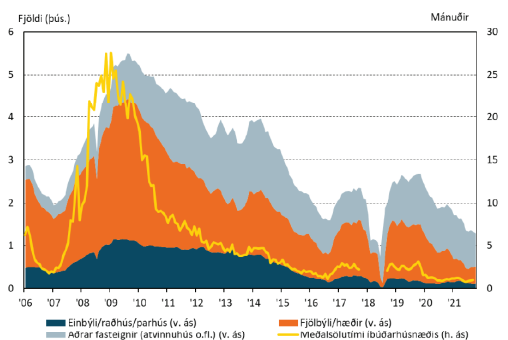
Fjöldi gistinátta á hótélum



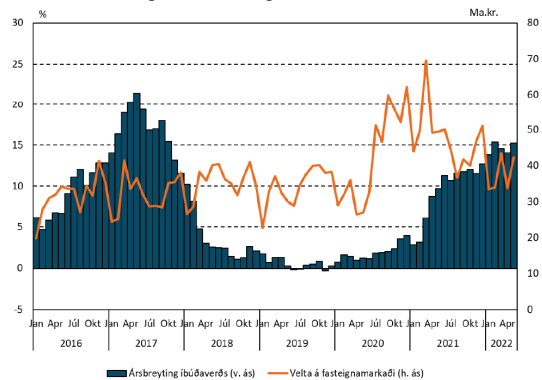
Ójafnvægi á íbúðamarkaði enn mikið

- Eftirspurn er langt umfram framboð á markaðnum: Meðalsölutími húsnæðis mjög stuttur
- Vísibendingar um aukið framboð allra síðustu vikur
- Veltan hefur minnkað en er þó enn töluverð og verð hækkar hratt

Auglýstar fasteignir á höfuðborgarsvæðinu og meðalsölutími birgða



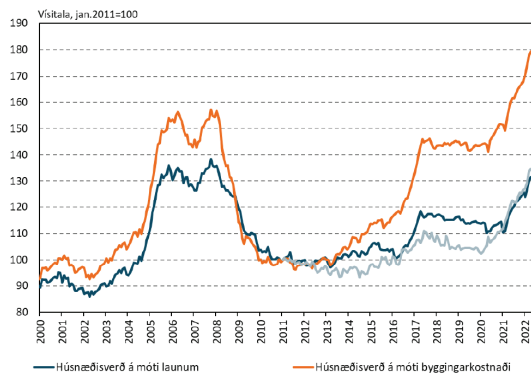
Raunvirði íbúða og velta á höfuðborgarsvæðinu¹



Misvægi verðs og ákvarðandi þátta aukist

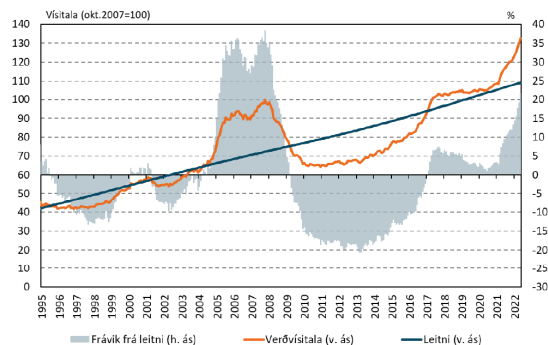
- Líkur á stöðnun raunverðs húsnæðis eða leiðréttingu þess hafa aukist
- Frávik frá langtímaleitni sýnir að verðið er rúmlega 20% umfram langtímaleitni - fór hæst 38% yfir leitni árið 2007

Húsnæðisverð á höfuðborgarsvæðinu og ákvarðandi þættir



Heimildir: Hagstofa Íslands, Þjóðskrár Íslands.

Frávik fasteignaverðs á höfuðborgarsvæðinu frá langtímaleitni¹

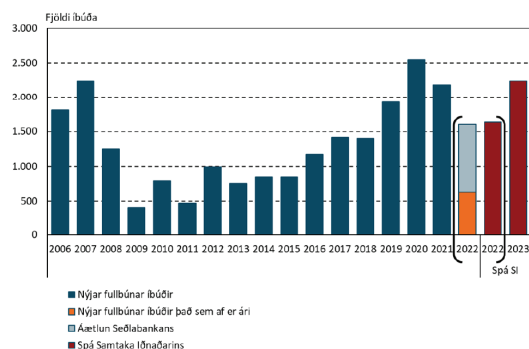


1. Verðvísitala sýnir breytingu á höfuðborgarsvæðinu, rannvirkt með vísitölu meyvæðis. Leitni er fundin með Hodrick-Prescott síu með sléttunartíðni 32.400.000, í samræmi við Fann, M.O. og Uhle, H. (2002). Notes on adjusting the Hodrick-Prescott filter for infrequency of observations. *Review of Economic and Statistics*.
Heimildir: Hagstofa Íslands, Þjóðskrár Íslands.

Dregur úr framboði nýbygginga á þessu ári

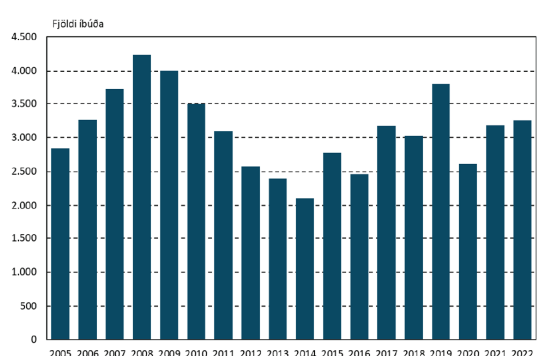
- Útlit fyrir minna framboð í ár af nýbyggingum
- Spár gera ráð fyrir að horfur batni á næsta ári

Nýjar fullbúnar íbúðir á höfuðborgarsvæðinu¹



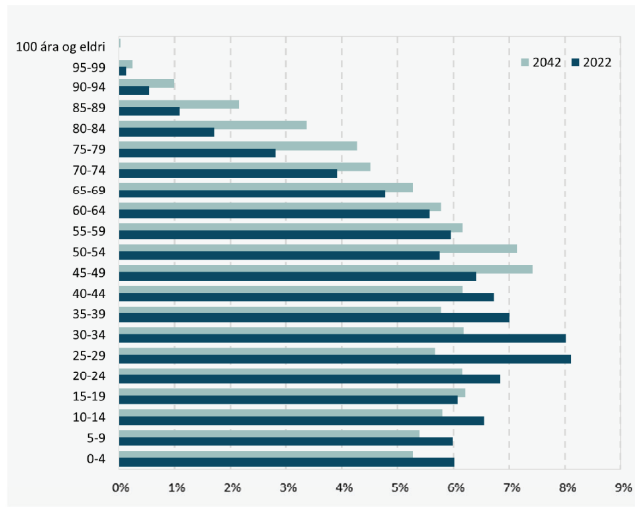
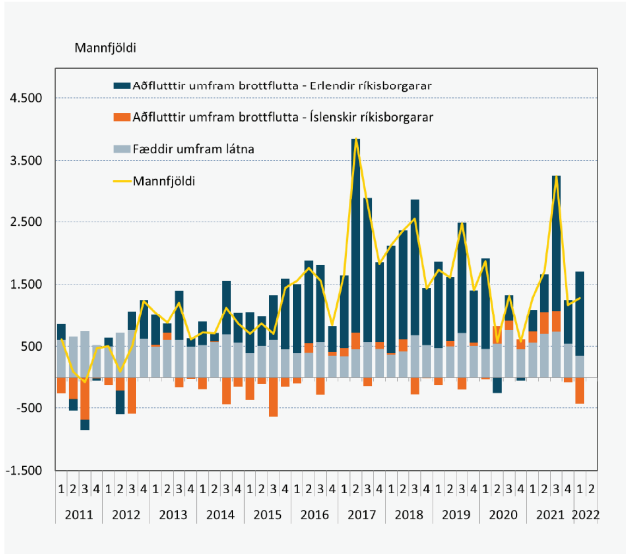
1. Fullbúnar íbúðir eru taldar sem íbúðir á matsstigi 7 og 8. Fjöldi fyrir árið 2022 í heild er metinn út frá fjölda íbúða sem lokað var að byggja fyrir lok maí.
Heimildir: Þjóðskrár Íslands, Seðlabanki Íslands.

Ófullbúnar íbúðir á höfuðborgarsvæðinu¹



1. Fjöldi í lok árs. Fjöldi árið 2022 miðast við lok maí.
Heimild: Þjóðskrár Íslands.

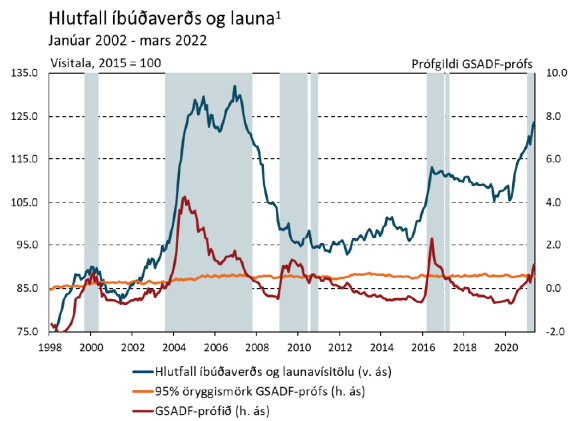
Fyrstu kaupendur fyrirferðamiklir á markaði



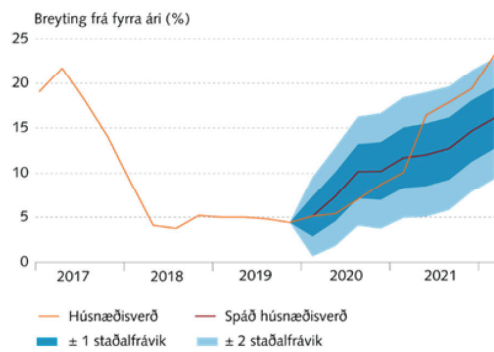
Bóla?



- GSADF prófið bendir til verðbólú á markaði þegar íbúðaverð sem hlutfall af launavísitölu er skoðað
- Húsnæðisverð tveimur staðalfrávikum umfram spáð húsnæðisverð



Raunverulegt og spáð húsnæðisverð¹ 1. ársfj. 2017 - 1. ársfj. 2022

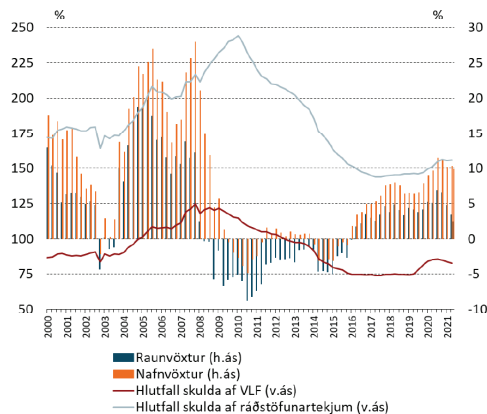


¹ Spáð ársbreyting húsnæðisverðs út frá kvikri (e. dynamic) spá frá 1. ársfj. 2020 til 1. ársfj. 2022 með húsnæðisverðsjöfnu áþekktri húsnæðisverðsjöfnu þjóðhagslíkans Seðlabankans metinni fyrir tímabilið 3. ársfj. 2001 - 4. ársfj. 2017.
Heimildir: Þjóðskrá Íslands, Seðlabanki Íslands.

Hægir á skuldavexti heimila

- Hægt hefur á raunvexti skulda heimila – en nafnvöxtur er áfram hár
 - Raunvöxtur 2,5% í apríl (4,1% í jan '22)
 - Nafnvöxtur 9,9% í apríl (10,0% í jan '22)
- Hlutfall skulda á móti VLF var 82,4% í lok 1. ársfjórðungs 2022
 - Lækkaði milli fjórðunga úr 83,7%
- Hlutfall skulda á móti ráðstöfunartekjum hækkaði lítillega á 1. ársfjórðungi
 - Er enn lágt í sögulegu samhengi.
- Skuldavöxtur er enn drifinn áfram af vexti í íbúðalánum

Þróun skulda heimila¹

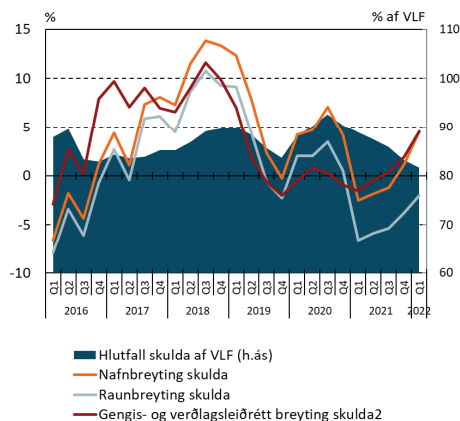


1. Skuldir heimila við innlend fjármálfyrirtæki. Gögn á 2F 2022 fyrir skuldavöxt eru fyrir apríl. Ráðstöfunartekjur á Q1 2022 eru byggðar á mati úr QMM-líkani Seðlabankans. Heimildir: Hagstofa Íslands, Seðlabanki Íslands.

Skuldavöxtur fyrirtækja tekur við sér

- Skuldavöxtur fyrirtækja fer hækkandi:
 - Raunbreyting -2% í lok 1F 2022 (-3,5% 4F '21)
 - Nafnbreyting 4,5% (1,5%)
 - Gengis- og verðlagsleiðr. 4,5% (1,9%)
- Hlutfall skulda á móti VLF mældist 81,6% og fer lækkandi
- Útlán bankanna til fyrirtækja jukust um 66 ma.kr. á fyrstu 4 mánuðum ársins
 - Þ.a. 17 ma.kr. vegna endurflokkunar
- Áfram vöxtur í útlánnum fagjáfrestasjóða en hægari taktur er í útgáfum fyrirtækjaskuldabréfa

Þróun skulda fyrirtækja¹

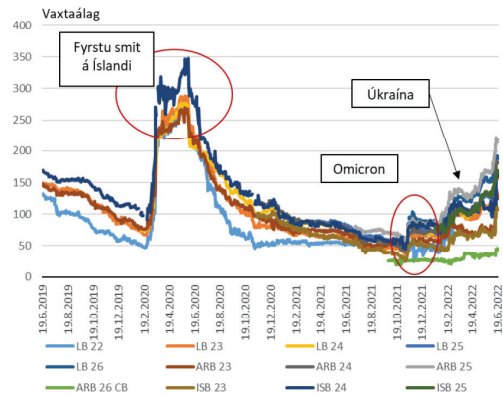


1. Línur sýna breytingu á ársgrundvelli. 2. Verðtryggðar skuldir á föstu verðlagi og gengisbundnar á föstu gengi. Heimildir: Hagstofa Íslands, Seðlabanki Íslands.

Vaxtaálag hækkar enn

- Vaxtaálag á erlendar útgáfur bankanna tók að hækka í febrúar samhliða innrás Rússlands í Úkraínu
- Álagið á sambærilegum útgáfum erlendra banka hefur líka verið að hækka
- Dýrara hefur verið fyrir banka að gefa út „senior unsecured“ bréf en markaðir fyrir CB útgáfur hafa verið opnir

KMB: Vaxtaálag á skráðum erlendum skuldabréfum viðskiptabankanna í evrum síðastu 3 ár¹

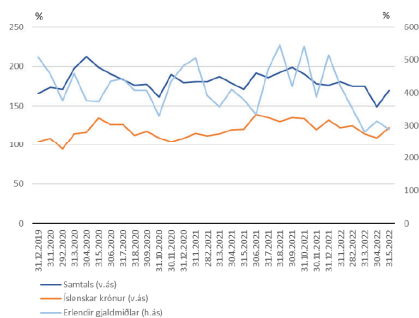


1. Vaxtaálag á viðmiðunarkúrfu skuldabréfa í evrum.
Heimild: Refinitiv Datastream.

Lausafjárstaðan á svipuðum stað og í byrjun Covid

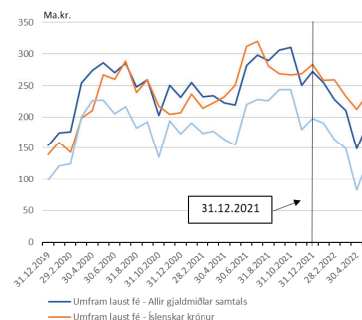
- Lausafjárhlutföll bankanna hafa lækkað nokkuð á árinu fyrir alla gjaldmiðla samtals og íslenskar krónur
- Ástæður fyrir lækkunir á árinu er aukinn útlánavöxtur, arðgreiðslur, útgreiðsla innlána og gjalddagar skuldabréfa
- Lausafjárstaðan getur verið viðkvæm fyrir miklum/hröðum útlánavexti, breytingu á samsetningu innlánaafns bankanna ef gengur á innlánaþarnað einstaklinga og lítilla fyrirtækja

KMB: Lausafjárhlutfall frá lok árs 2019



1. Samstæður kerfislega mikilvægra banka.
Heimild: Seðlabanki Íslands.

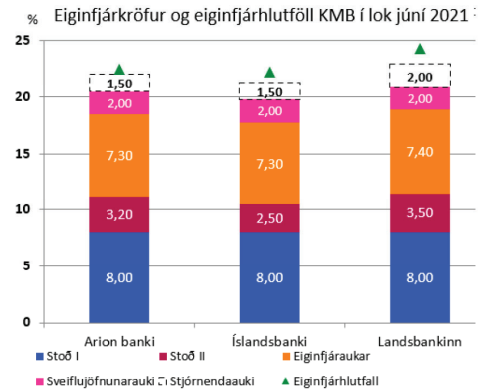
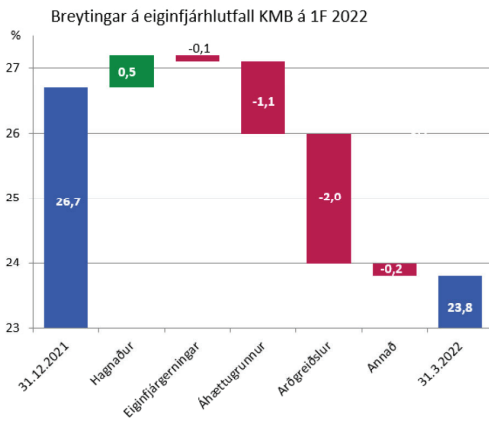
KMB: Þróun á lausu fé umfram lágmarkskröfur¹



1. Samstæður kerfislega mikilvægra banka.
Heimild: Seðlabanki Íslands.

Eiginfjárhlutfall lækkar nokkuð

- Eiginfjárhlutfall KMB var 23,8% í lok mars sl. og lækkar um 2,9 prósentur miðað við síðustu áramót
- Eiginfjárhlutfall 0,5-1,5 prósentum yfir kröfum Sí a.t.t. sveiflujöfnunar- og stjórnendaauka



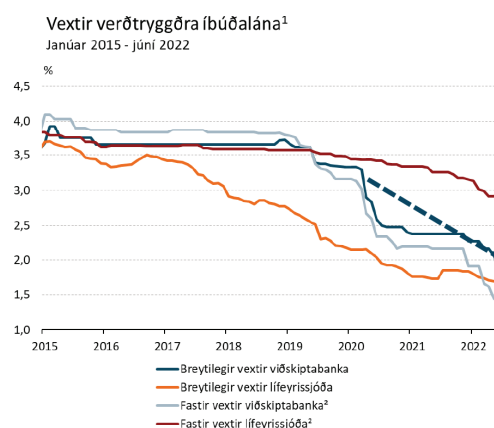
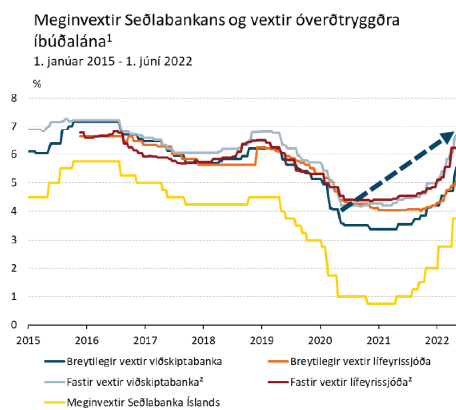
Breytingar á lánþegaskilyrðum

Samantekt

- 4% nýrra útlána á F1 yfir 80% LTV - 10% áður en LTV var lækkað
- Tæplega 5% lánveitinga á F1 er með DSTI umfram reglur – 7% áður en reglurnar voru settar
- Fastir óverðtryggðir vextir banka hafa hækkað um 2,1 prósentu og fastir verðtryggðir lækkað um 0,75 prósentur frá septemberfundi nefndarinnar
- Greiðslubyrði á milljón hefur farið úr 4500 kr. í 5800 kr. fyrir óverðtryggð lán með föstum vöxtum (40 ár) og úr 4000 kr. í 3500 kr. fyrir verðtryggð lán (30 ár)
- Spár gera ráð fyrir því að vextir óverðtryggðra lána haldi áfram að hækka → greiðslubyrðarmunur á lánsformunum gæti aukist áfram
- Fasteignaverð hefur hækkað um 18,7% síðan nefndin þrengdi að LTV í júní og 14,6% síðan nefndi setti DSTI í september

Þróun auglýstra vaxta á fasteignalánnum

- Óverðtryggðir vextir hækkað verulega síðustu mánuði
- Verðtryggðir vextir leitað niður á sama tíma



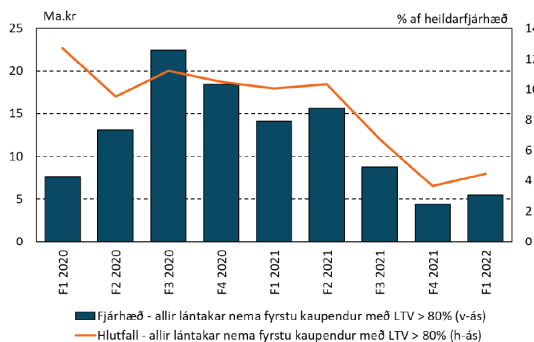
1. Einfalt meðaltal lægstu vaxta. 2. Vextir fastir frá 5 árum og allt upp í allan lánstímann.

Heimildir: Almenni Lsj., Arion banki, Festa Lsj., Frjálsi Lsj., Gildi Lsj., Íslandsbanki, Landsbankinn, Lífsverk, Lsj. verslunarmanna, LSR, Söfnunarsjóður lífeyrisréttinda, Seðlabanki Íslands.

Núverandi staða takmarkana

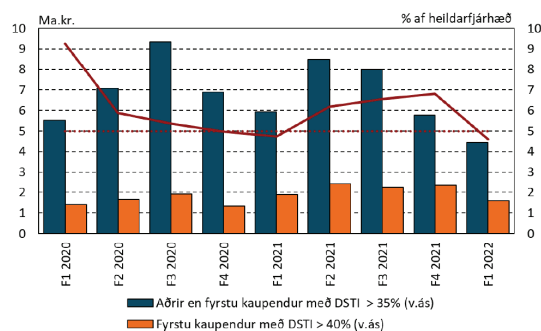
- Um 4% af fjárhæð nýrra lánveitinga með LTV > 80%
- Tæplega 5% af fjárhæð nýrra lána með DSTI umfram reglur á F1 2022
- LTV reglur bindandi en DSTI reglur líklega ekki ef undanþága væri nýtt

Ný fasteignalán til neytenda með háa veðsetningu¹



1. Byggt á gögnum frá KMB og HMS, en einnig 9 stærstu lífeyrissjóða frá ágúst 2020. *Gögn fyrir nýjasta mánuðinn eru bráðabirgðagögn.
 Heimild: Seðlabanki Íslands.

Áhrif reglna um hámark greiðslubyrðar¹



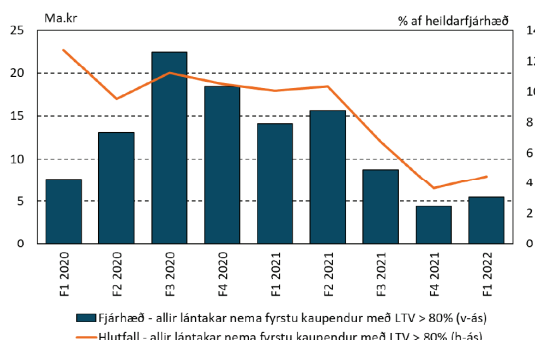
1. Dreifingin byggir á gögnum frá KMB og HMS, en einnig 9 stærstu lífeyrissjóða frá ágúst 2020. Byggt á reiknireglum í reglum nr. 1268/2021 um hámark greiðslubyrðar. Nýjustu gildi eru bráðabirgðagögn.
 Heimild: Seðlabanki Íslands.

Hámark veðsetningarhlutfalls

Staða takmarkana fyrir breytingar

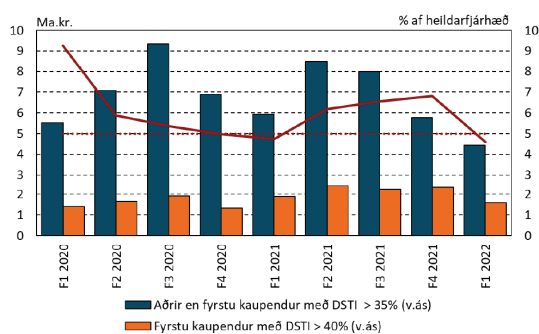
- Um 4% af fjárhæð nýrra lánveitinga með LTV > 80%
- Tæplega 5% af fjárhæð nýrra lána með DSTI umfram reglur á F1 2022
- LTV reglur bindandi en DSTI reglur líklega ekki ef undanþága væri nýtt

Ný fasteignalán til neytenda með háa veðsetningu¹



1. Byggir á gögnum frá KMB og HMS, en einnig 9 stærstu lífeyrissjóða frá ágúst 2020. *Gögn fyrir nýjasta mánuðinn eru bráðabirgðagögn. Heimild: Seðlabanki Íslands.

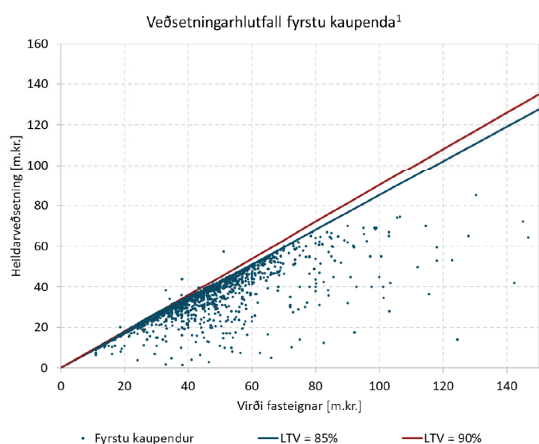
Áhrif reglna um hámark greiðslubyrðar¹



1. Dreifingin byggir á gögnum frá KMB og HMS, en einnig 9 stærstu lífeyrissjóða frá ágúst 2020. Byggt á reikningreglum í reglum nr. 1268/2021 um hámark greiðslubyrðar. Nýjustu gildi eru bráðabirgðagögn. Heimild: Seðlabanki Íslands

Lækkun hámarks veðsetningar fyrstu kaupenda

- Við núverandi aðstæður á fasteignamarkaði er 90% veðsetning mjög áhættusöm
- Nauðsynlegt að tryggja viðnámsprótt fyrstu kaupenda
- Samræmi við framkvæmd á markaði
- Hámark veðsetningar fyrstu kaupenda lækkað úr 90% í 85%



1. Byggir á gögnum frá KMB, HMS og níu stærstu lífeyrissjóðum. Lán veitt á tímabilinu september 2021 til og með apríl 2022. Heimild: Seðlabanki Íslands

Veðsetningarhlutföll í Evrópu

- Flest lönd Evrópu með almennt hámark veðsetningarhlutfalls á bilinu 80-90%
- Ekkert land sett lægra hámark en 80% fyrir almenna lántaka
- Lægra hámark hefur þó verið notað fyrir:
 - Annað heimili (e. secondary home)
 - Húsnæði til útleigu (e. Buy-to-Let)
 - Ef tekin eru lán í FX (til óvarinna lántaka)

Land	Gildi	Athugasemdir
Tékkland	90%	80% fyrir þá sem eru 36 ára eða eldri.
Ísland	80%	90% fyrir fyrstu kaupendur.
Finnland	85%	95% fyrir fyrstu kaupendur. Loan-to-collateral en ekki LTV.
Lettland	90%	95% hámark á lánnum með ríkisábyrgð. 70% á lán vegna húsnæðis til útleigu (e. buy-to-let).
Noregur	85%	60% fyrir annað heimili (e. secondary home) í Osló, viðbótar tryggingar eru teknar gildar.
Lúxemborg	90%	100% fyrir fyrstu kaupendur – 80% fyrir annað heimili og húsnæði til útleigu.
Kýpur	80%	70% fyrir annað heimili og húsnæði til útleigu.
Portúgal	90%	80% fyrir annað en húsnæði til eigin nota.
Slóvakía	80%	20% af nýjum lánnum mega þó vera með LTV að 90%.
Belgía	90%	35% undanþága fyrir fyrstu kaupendur og 20% fyrir aðra. 80% LTV fyrir húsnæði til útleigu (10% undanþága en ekki yfir 90% LTV).
Slóvenía	80%	Tilmæli
Austurríki	80%	Tilmæli
Írland	80%	90% fyrir fyrstu kaupendur og 70% fyrir húsnæði til útleigu með 10% undanþága.
Eistland	85%	15% undanþága.
Liechtenstein	80%	Einhverjar undantekningar frá hámarki.
Lítháen	85%	
Holland	100%	
Pólland	85%	Getur farið upp í 90% ef það er gild trygging fyrir þessum auka 5% - t.d. bankainnstæður eða ríkisskuldabréf.
Rúmenía	85%	80% fyrir lán í erlendum gjaldmiðli sem eru varin og 60% fyrir óvarin lán í erlendum gjaldmiðli.
Svíþjóð	85%	

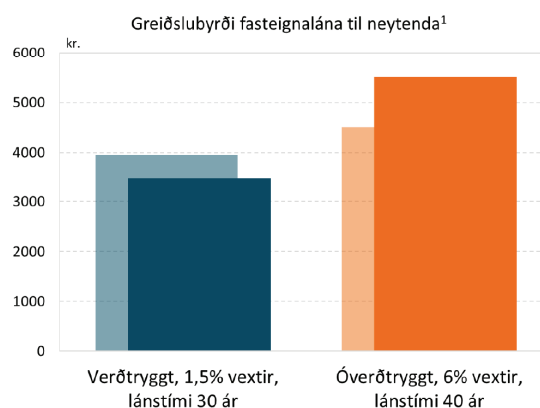
Greiðslubyrðarhlutfallið

Samantekt

- Í september sl:
 - Nefndin taldi ekki tímabært að setja vaxtaviðmið heldur að bíða þar til vextir óverðtryggðra lána hefðu hækkað
 - Brýnt að vera ekki með reglur sem hvetja til lántöku með einu lánsformi fremur en öðru
- Töluvert ójafnvægi hefur nú myndast milli lánsforma
 - Greiðslubyrði mun léttari á verðtryggðri húsnæðisfjármögnun
 - Þekkt að kerfisáhætta getur aukist í lággildi vaxta og raungerst þegar vextir fara hækkandi á ný
- Með samspili þess að setja á vaxtaviðmið og breyta lánstíma í útreikningum á DSTI er hægt að draga úr hættu á uppsöfnun kerfisáhættu
 - Enn frekari jarðtenging á greiðslubyrðarhlutfallinu
 - Möguleg hliðaráhrif; hægja á verðhækkunum og skuldsetningu – ætti að auðvelda fyrstu kaupendum og tekjulágum að komast inn á markaðinn til lengri tíma

Lágir vextir verðtryggðra lána

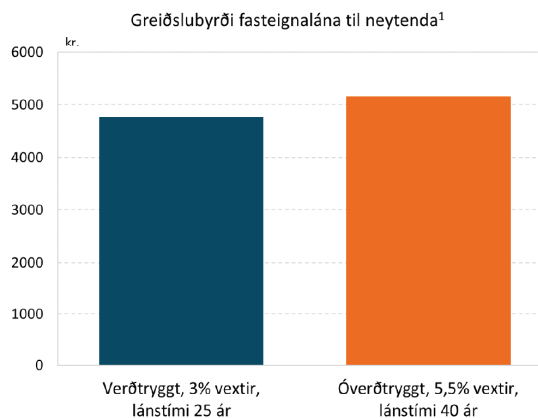
- Óvenjulágir verðtryggðir vextir skapa hvata til ósjálfbærrar skuldsetningar
- Kjör sem munu ólíklega halda til lengri tíma
- Aukin skuldsetning heimila samhliða miklum verðhækkunum á húsnæðismarkaði getur aukið á kerfisáhættu



1. Greiðslubyrði á hverja milljón m.v. jafngreiðslulán. Skuggasúlur sýna greiðslubyrði m.v. 2,5% verðtryggða vexti annars vegar og 4,5% óverðtryggða vexti hins vegar, sem er nálægt beirri stöðu sem uppi var þegar reglur um hámark greiðslubyrði voru settar í lok september 2021.
Heimild: Seðlabanki Íslands

Lágmarksviðmið um vexti bætt inn í reglur og viðmiðunarlánstími verðtryggðra lána lækkaður

- **Vaxtaviðmið** við útreikning á greiðslubyrði í reglum um hámark greiðslubyrðar:
 - Samningsvextir
 - Þó að lágmarki 3% fyrir verðtryggð lán og 5,5% fyrir óverðtryggð lán
- Myndar vaxtagólf þegar vextir mismunandi lánaforma eru mjög lágir
- **Hámarkslánstími lækkaður í 25 ár fyrir verðtryggð lán** við útreikning á greiðslubyrði í reglum um hámark greiðslubyrðar



1. Greiðslubyrði á hverja milljón m.v. jafngreiðslulán.

Heimild: Seðlabanki Íslands

Evrópska kerfisáhætturáðið varar við aukinni kerfisáhættu **29. september 2022**

Evrópska kerfisáhætturáðið (ESRB) hefur gefið út viðvörun um aukna áhættu í fjármálakerfi Evrópu sem gæti ógnað fjármálastöðugleika. Ráðið komst að þessari niðurstöðu á fundi sínum 22. þessa mánaðar. Þar segir að kerfisáhætta hafi aukist og fari enn vaxandi í Evrópu og hvetur ráðið til þess að viðbúnaður í fjármálakerfinu verði tryggður eða aukinn þannig að það geti áfram stutt við heimili og fyrirtæki ef áhættan raungerist. Fjármálafyrirtæki eru hvött til þess að treysta viðnámsprótt sinn með því að viðhalda nægu eigin fé.

Tilfni viðvörunarinnar eru þær afleiðingar sem stríðið í Úkraínu, nýleg veirufarsótt og tengdir þættir hafa haft á efnahagshorfur í álfunni. Þrálát verðbólga og þrengra aðgengi að fjármálamörkuðum gætu ef allt fer á versta veg haft þau áhrif á fjármálakerfið að stöðugleika verði ógnað.

Sjá nánar: [Viðvörun ESRB um veikleika í fjármálakerfi ESB.](#)

Netöryggismál í brennidepli á viðsjárverðum tímum

Netöryggismál eru hvarvetna í brennidepli en árlega valda tölvu- og netárásir almenningi, fyrirtækjum og stofnunum miklum fjárhagslegum skaða og óþægindum. Af skýrslum Alþjóðaeftahagsráðsins (e. World Economic Forum, WEF) undanfarin ár má sjá að stofnunin metur netárásir meðal alvarlegustu ógna sem steðja að heimsbyggðinni. Kemur það vart á óvart enda sýna tölur að netárásur fjölga stöðugt frá ári til árs bæði hér á landi og á heimsvísu.

Netárásur fjölga

Af ársyfirliti netöryggissveitarinnar (CERT-IS) fyrir árið 2021 má sjá að veruleg aukning hefur orðið á atvikatilkynningum til sveitarinnar frá árinu á undan, þær voru 266 árið 2020 en 598 árið 2021. Langmest var um svindl- eða svikatilkynningar, þ.e. vegna netveiða þar sem reynt er að komast yfir viðkvæmar upplýsingar, t.d. kortanúmer eða lykilorð.

Netárásaraðferðir síbreytilegar

Netárásur fjölga ekki aðeins heldur eru aðferðirnar sem beitt er við framkvæmd þeirra síbreytilegar og að verða þróaðri, ef svo má að orði komast, sem gerir þolendum þeirra sífellt erfiðara um vik að verjast þeim. Hér á landi varð t.d. nýlega atvik þar sem viðskiptamenn eins af stóru viðskiptabönkunum voru grunlausir lokkaðir inn á það sem virtist vera ósvikin innskráningarsíða fyrir netbanka en reyndist hins vegar vera fölsuð.

Fjármálakerfið útsett fyrir netárásur

Í samanburði við aðrar greinar hagkerfisins er fjármálakerfið sérlega útsett fyrir netárásur. Mikil aukning hefur orðið í álagsárásur (e. Distributed Denial of Service attacks, DDoS), á íslenska fjármálainnviði en DDoS-árásir trufla aðgang að þjónustu yfir internetið. Árásir þessar geta haft verulega truflandi áhrif á íslenska greiðslumiðlun og jafnvel gert hana óvirka. Dæmi eru t.d. um síendurteknar álagsárásir á fjármálafyrirtæki hér á landi sem þeim tókst að verjast vikum saman þar til álagið varð of mikið og afleiðingarnar þær að öll greiðslukort í landinu urðu fyrirvaralaust ónothæf. Skjót og samhæfð viðbrögð urðu þó til þess að halda áhrifunum í lágmarki en vegna mikillar greiðslukortanotkunar landsmanna í viðskiptum má segja að þau verði þó nánast strax töluverð. Þrátt fyrir tilraunir ýmissa sérfræðinga var hvorki hægt að greina hver stóð að baki þeim árásum sem hér er sagt frá né tilgang þeirra en það á gjarnan við þegar DDoS-árásir eru annars vegar.

Breytt landslag netárása

Landslag netárása hefur sömuleiðis tekið talsverðum breytingum í seinni tíð. Mörg dæmi eru undanfarin ár um alvarlegar netárásir sem m.a. hafa beinst að lykilstofnunum ríkja og mikilvægum innviðum. Nefna má netárásir á norska stórþingið (n. Stortinget) 2020 og 2021 og á hugbúnað stórrar olíuleiðslu (e. Colonial Pipeline) í Bandaríkjunum 2021 sem olli því að dreifing stöðvaðist í nokkra daga og hafði víðtæk áhrif á austurströnd Bandaríkjanna. Þá má nefna spillihugbúnaðinn sem árið 2020 var komið fyrir í Orion kerfi SolarWinds, sem er notað m.a. af öllum helstu stjórnsýslustofnunum vestanhafs, en uppgötvaðist ekki fyrr en löngu síðar. Loks má nefna RagnarLocker gagnagísatökubúnaðinn (e. ransomware) sem hefur samkvæmt skýrslu alríkislögreglu Bandaríkjanna (FBI) fyrr á þessu ári haft áhrif

á fjölda fyrirtækja sem starfa á sviði mikilvægra innviða, þ.m.t. í orku-, fjármála- og upplýsingatækni-geiranum.

Netárásir hluti af nútímahernaði

Óhjákvæmilegt er að nefna hér innrás Rússa í Úkraínu en stríðið þar sýnir glögglega að netárásir eru orðnar hluti af nútímahernaði og að skotmörk í slíkum hernaði eru gjarnan stjórnsýslustofnanir og mikilvægir innviðir með það að markmiði að valda sem mestum samfélagslegum skaða. Í aðdraganda innrásarinnar greindi netöryggisstofnun Úkraínu frá því að landið sætti stöðugri netárás, m.a. með þeim afleiðingum að ýmsar vefsíður stjórnvalda væru óvirkar, t.d. þingsins, ráðuneyta og öryggisþjónustu ríkisins auk banka. Um líkt leyti voruðu ýmsar fjölþjóðastofnanir, þ.m.t. Seðlabanki Evrópu, fjármálastofnanir við því að búast mætti við netárásum rússneskra stjórnvalda kæmi til innrásar, sem svari Rússa við þeim þvingunaraðgerðum sem þau höfðu hótad. Þær þvinganir sem Rússland hefur verið beitt í kjölfar innrásarinnar hafa m.a. beinst að rússneskum fjármálastofnunum og seðlabanka landsins. Fela þær það t.d. í sér að öllum helstu bönkum landsins er meinaður aðgangur að SWIFT-samskiptakerfinu þannig að ekki er hægt að framkvæma eða taka við greiðslum yfir landamæri með aðkomu kerfisins og eignir rússneska seðlabankans erlendis hafa verið frystar. Líkt og varað hafði verið við hafa þessar þvingunaraðgerðir leitt til stóraukins fjölda netárása með uppruna í Rússlandi, ýmist fullframinna eða hótana um að þær séu yfirvofandi, t.d. á evrópskar fjármálastofnanir.

Vitundarvakning um heim allan

Eðli máls samkvæmt hefur ástandið í Úkraínu kallað á mikla vitundarvakningu stjórnvalda um heim allan og gert það að verkum að hvarvetna á Vesturlöndum hafa öryggis- og varnarmálastefnur ríkja og þjóðarbandalaga verið endurskoðaðar eða boðad að svo muni verða í náninni framtíð og að áhersla á þjóðaröryggismál verði stóraukin.

Áhersla seðlabanka, þ.m.t. Seðlabanka Íslands, á netöryggismál

Hvarvetna hafa seðlabankar undanfarin ár lagt ríka áherslu á netöryggismál enda vel meðvitaðir um að stórfelldar eða ítregaðar netárásir geta verið til þess fallnar að raska eða hafa neikvæð áhrif á fjármála-stöðugleika en að slíkum stöðugleika ber þeim að stuðla. Þá gegna þeir lykilhlutverki þegar kemur að því að stuðla að virku og öruggu fjármálakerfi, þ.m.t. greiðslumiðlun bæði innanlands og yfir landamæri. Seðlabanki Íslands hefur ekki látið sitt eftir liggja þegar kemur áherslum á netöryggismál en auk framangreinds gegnir fjármálaeftirlit Seðlabankans mikilvægu hlutverki sem snýr að eftirliti með fjármálamarkaðnum, þ.m.t. vegna áhættu við rekstur upplýsingakerfa eftirlitsskyldra aðila. Nýlega birti Seðlabankinn rit um stefnumarkandi áherslur við eftirlit á fjármálamarkaði á tímabilinu 2022-2024. Í ljósi þróunarinnar þarf ekki að koma á óvart að öryggi á sviði net- og upplýsingatækni er þar efst á blaði.

Líkt og áður segir hefur Seðlabanki Íslands ekki látið sitt eftir liggja í málaflokknum, bæði sem eigandi kerfislega mikilvægasta fjármálainnviðar landsins (millibankagreiðslukerfisins, MBK) og vegna lögbundins hlutverks bankans, sömuleiðis sem hvataaðili um breytingar til aukins árangurs (e. catalyst role) á þessu sviði. Undir forystu Seðlabankans er rekinn samstarfsvettvangur hér á landi um rekstraröryggi fjármálainnviða (SURF) en einnig hefur Seðlabankinn gerst aðili að Nordic Financial CERT. Hvoru tveggja þykir nú þegar hafa sannað mikilvægi sitt og gildi. Þá á Seðlabankinn nú áheyrnarfulltrúa í netöryggisráði stjórnvalda og hefur sömuleiðis tengilið við þjóðaröryggisráð.

Aukið samstarf lykill að árangri

Ekki síst á þeim viðsjárverðu tímum sem við nú lifum má sýnt vera að seðlabankar, eftirlitsaðilar og fjármálakerfið allt munu leggja verulega aukna áherslu á netöryggismál, þ.m.t. hvernig efla megi varnir

enn frekar og vinna að auknu samstarfi í málaflokknum bæði innanlands og yfir landamæri og sömu-
leiðis þverfaglega.

Fimmta netöryggisráðstefna seðlabanka Norðurlandanna – haldin í dag af Seðlabanka Íslands í Hörpu

Seðlabankar Norðurlandanna hafa frá árinu 2017 haldið árlega sérstaka netöryggisráðstefnu í því skyni
að skapa sem víðast vitundarvakningu og auka þekkingu á netöryggismálum, einkum fyrir þá sem starfa
innan fjármálakerfisins en einnig þverfaglega. Til hennar hefur verið boðið bæði innlendum og
erlendum sérfræðingum þ.m.t. úr fræðasamfélaginu, starfsmönnum seðlabanka, fjármála- og fjar-
skiptafyrirtækja auk ýmissa fulltrúa stjórnarsýslunnar, sem einkum bera ábyrgð á eða starfa á sviði net-
öryggismála. Ráðstefnan er því víðtækur vettvangur fyrir sérfræðinga á sviði upplýsingaöryggis og hefur
almennt verið mjög vel sótt.

Ráðstefnan í ár er haldin í dag í Hörpunni, í boði Seðlabanka Íslands. Viðfangsefni hennar nú snýr að
netöryggi frá sjónarhóli fjármálastöðugleika og þjóðaröryggi, með fjármálainnviði og skýjalausnir til
hliðsjónar. Dagskrá ráðstefnunnar í ár er áhugaverð og munu bæði innlendir og erlendir sérfræðingar
koma fram. Má hér t.d. nefna Pervin Dadashova, framkvæmdastjóra fjármálastöðugleika hjá seðla-
banka Úkraínu. Samhliða allsherjarinnrás Rússlands í Úkraínu fylgdu umfangsmiklar netárásir á helstu
innviði landsins, þar á meðal helstu fjármálainnviði. Pervin mun fjalla um viðbrögð seðlabanka Úkraínu
og hver áhrifin á fjármálastöðugleika voru í slíku neyðarástandi. Marcus Murray, sérfræðingur í net-
öryggismálum og stofnandi Truesec Group, mun einnig fjalla um netárásir á úkraínska innviði í víðara
sambhengi og hvernig þeim er í auknum mæli beint gegn bandamönnum Úkraínu. Þá mun Phil Venables,
upplýsingaöryggisstjóri Google Cloud, miðla reynslu sinni úr heimi upplýsingaöryggis en Phil hefur
komið víða við í þeim efnum, meðal annars hjá Goldman Sachs, en hann þjónar einnig í ráðgjafaráði
Bidens Bandaríkjaforseta um vísinda- og tæknimál. Ásamt þeim munu fjölmargir innlendir og erlendir
sérfræðingar á vettvangi upplýsingaöryggis, löggæslu, fjármálamarkaða og seðlabanka halda erindi og
taka þátt í pallborðsumræðum.

Höfundar: *Gunnar Jakobsson, varaseðlabankastjóri fjármálastöðugleika, Ómar Þór Eyjólfsson, sér-
fræðingur á sviði fjármálastöðugleika, og Stefán Rafn Sigurbjörnsson, upplýsingafulltrúi á skrifstofu
bankastjóra.*



1 December 2022

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 29 September 2021 to increase the countercyclical capital buffer (CCyB) on financial institutions from 0% to 2% took effect on 29 September 2022. The increase was based on the Committee's assessment that cyclical systemic risk was at least at the level seen before the spread of the pandemic, as asset prices had risen rapidly alongside an increase in household debt. The CCyB requirement is now at the same level as it was when the pandemic began to spread in Iceland. Increased capital strengthens financial system resilience and better enables the system to withstand financial shocks. Raising the CCyB gives the FSN the scope to lower it again later if warranted.

The economy rebounded successfully after the pandemic, and strong GDP growth in 2022 has been driven by rising private consumption and favourable developments in the tourism industry. The global output growth outlook has deteriorated, however, and global risks are at an unusually high level. Inflation has risen steeply in all of Iceland's main trading partner countries, and the monetary stance has been tightened. Furthermore, risk has accumulated in trading partner countries in recent years, owing to increasing debt levels and rising asset prices. Adverse developments in global markets could affect financial stability in Iceland, and worsening financial conditions abroad have already tightened Icelandic financial institutions' access to foreign credit markets.

Private sector debt

Twelve-month real growth in household debt measured 0.2% at the end of September, as compared with 5.1% at the beginning of the year. Nominal growth in debt is still relatively strong, however, at 9.6% in September, after having fallen slightly in the past twelve months. A rising share of nominal growth is due to indexation on index-linked loans, which account for just under half of household debt. The pace of new lending is now similar to that seen before the pandemic, and the

credit system's net new mortgage lending to households has developed broadly in line with housing market turnover.

With rising nominal interest rates, debt service on new loans and existing variable-rate loans has increased, particularly on non-indexed loans. This reduces demand for credit. Rules on borrower-based measures, which entailed caps on loan-to-value (LTV) and debt service-to-income (DSTI) ratios, were also tightened in response to rapidly rising house prices and deteriorating loan quality. This is offset by the fact that in spite of rising nominal interest rates, higher inflation means that real rates on new non-indexed mortgage loans are still negative. Furthermore, real rates on indexed mortgages are historically low. Low or negative real rates are therefore still driving demand for new mortgages, while the borrower-based measures provide some counterweight. Household demand for indexed loans has grown in recent months, as these loans generally have a lower debt service burden in the early part of the loan period than comparable non-indexed loans do. In August, net new indexed lending to households was positive within the month for the first time since before the pandemic. Even so, the majority of net new mortgage loans issued in September were non-indexed.

Household debt came to 79.9% of GDP and 150.4% of disposable income at the end of September. Both of these ratios have been falling since mid-2021, although the debt-to-GDP ratio has fallen slightly more, partly because of strong GDP growth during the period.

By the end of September 2022, corporate debt had fallen in real terms by 1.3% year-on-year. In price- and exchange rate-adjusted terms, it had grown by 6%. Corporate credit growth has gathered pace during the year. This is due mainly to an increase in the commercial banks' corporate lending. Cumulative net new loans to companies in the first ten months of 2022 totalled just over 257 b.kr., a substantial increase relative to previous years. If lending continues to grow at this pace, growth in corporate debt will keep increasing in coming months, all else being equal.

Arrears on loans from the systemically important banks to individuals and businesses are historically low. The non-performing loan (NPL) ratio on loans to individuals is still falling, measuring 0.75% at the end of Q3/2022. Just over 0.8% of household loans were frozen in October. The corporate NPL ratio was 2.4% in Q3, after falling by nearly half a percentage point between quarters. As before, arrears are greatest among companies in the hospitality industry, at 7.2%, although the ratio fell by 1.5 percentage points quarter-on-quarter. The share of frozen corporate loans was 7.4% at the end of October and is also declining.

Real estate market

The rise in house prices has eased in recent months. In October 2022, the capital area house price index had risen by 11.1% year-on-year in real terms, as compared with 15.3% in May. The same trend has been seen in regional Iceland, where the year-on-year increase also measured 11.1% in October. Housing market turnover has continued to contract in recent months and, in real terms, is now broadly similar to the level seen during the years preceding the pandemic. Furthermore, the number of flats available for sale has risen, and the average time-to-sale has grown longer.

The ratio of house prices to fundamentals is still very high, however. As of October, the ratio of the capital area house price index to the general wage index had risen by 12.6% year-on-year, and the ratio of the house price index to the rent price index had risen by 14.4%. The ratio vis-à-vis the building cost index had risen by 9.4% over the same period. The rise in house prices over and above fundamentals indicates significant imbalances in the housing market and the associated systemic risk. Indicators suggest, however, that imbalances are no longer accumulating. In June 2021, the FSN lowered the maximum loan-to-value (LTV) ratio on consumer mortgages, and in September 2021 it adopted rules capping debt service-to-income (DSTI) ratios, which took effect on 1 December 2021. In June 2022, the Committee lowered the maximum LTV ratio for first-time buyers and tightened the rules on DSTI ratios by introducing a minimum interest rate into the calculation of the ratio. These measures, together with interest rate hikes, have affected demand in the housing market. This is reflected in weaker lending growth and slightly improved overall loan quality of new mortgages in recent months. First-time buyers are still taking on increased risk, however, as the borrower-based measures are less stringent for them than for other buyers.

Turnover in registered commercial real estate (CRE) purchase agreements increased in real terms by more than one-fifth year-on-year in Q1/2022 and was high in historical context. The large CRE firms' operations have been quite successful recently, although rising interest rates negatively affected their operating results in Q3. Returns on investment assets measured a historically high 5.5% during the quarter. Positive valuation adjustments of investment assets are still a large item in the companies' operations, however, although increased financing costs in the assessment of fair value have counteracted this trend recently. The companies' equity ratios and LTV ratios have been broadly unchanged over the past twelve months. However, their liquidity has deteriorated in 2022 to date, their combined interest coverage ratio has fallen due to increased indexation on their debt, and large long-term loan maturities in the coming twelve months have lowered their current ratios and cash flow ratios. Nevertheless, they have scope for refinancing, owing to ample collateral capacity.

The banks

The banks' interest rate spreads had widened year-on-year in Q3, in line with the increase in the Central Bank's key rate. High interest rates, inflation, and credit growth in the recent term have strengthened the return on their core operations, which measured 15% in Q3, as opposed to 11.3% at year-end 2021. The return on core operations, which is based on interest income and fees and commissions, is the banks' first line of defence against a drop in the capital ratio due to loan losses and other shocks to their operations.

By now, the banks have reversed a large share of the precautionary contributions they made to their impairment accounts because of the pandemic. The impairment of their loan portfolios is based on expected future losses and recoveries. The cross-default non-performing ratio on the banks' loans to customers was 4.8% in October, as compared with 9% a year earlier.¹ The facility-level non-performing loan ratio on their loans to customers was only 1.3% and had fallen by nearly a percentage point between years.² Tourism companies' position has strengthened with the rise in foreign visitor numbers, and the total for this year is expected to be on a par with that in 2016. Uncertainty in the sector has increased somewhat, however, partly because of adverse economic developments in key trading partner countries, which could cut into demand for tourism services further ahead. Pulling in the opposite direction are a weaker króna and lower oil prices.

Because of adverse developments in foreign markets and growing uncertainty, conditions in capital markets have deteriorated. The banks' access to foreign credit has grown tighter, and credit spreads on their foreign-denominated bonds have risen rapidly. There are no remaining foreign maturities in 2022, and year-2023 maturities total 120 b.kr. If conditions remain challenging, the banks could end up taking on additional risk in connection with funding.

The systemically important banks' capital ratio was 22.8% at the end of Q3, or 1.9 percentage points lower than at the same time in 2021. Following the increase in the CCyB to 2%, the banks' capital ratios are 1.5-3.5% above the overall required ratio.

Overall assessment of cyclical systemic risk

¹ 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.

² The facility-level non-performing loan ratio is calculated in accordance with EBA standards.

Private sector credit growth has been relatively modest in the recent past. Developments continue to diverge between households and businesses, however. Corporate credit growth has picked up somewhat, while household credit growth has lost pace. The debt-to-GDP ratio is now slightly higher than before the pandemic, after surging in 2020, mainly because of the contraction in GDP. It then fell once again, primarily because GDP began growing swiftly. It is expected to keep declining if credit growth remains moderate.³

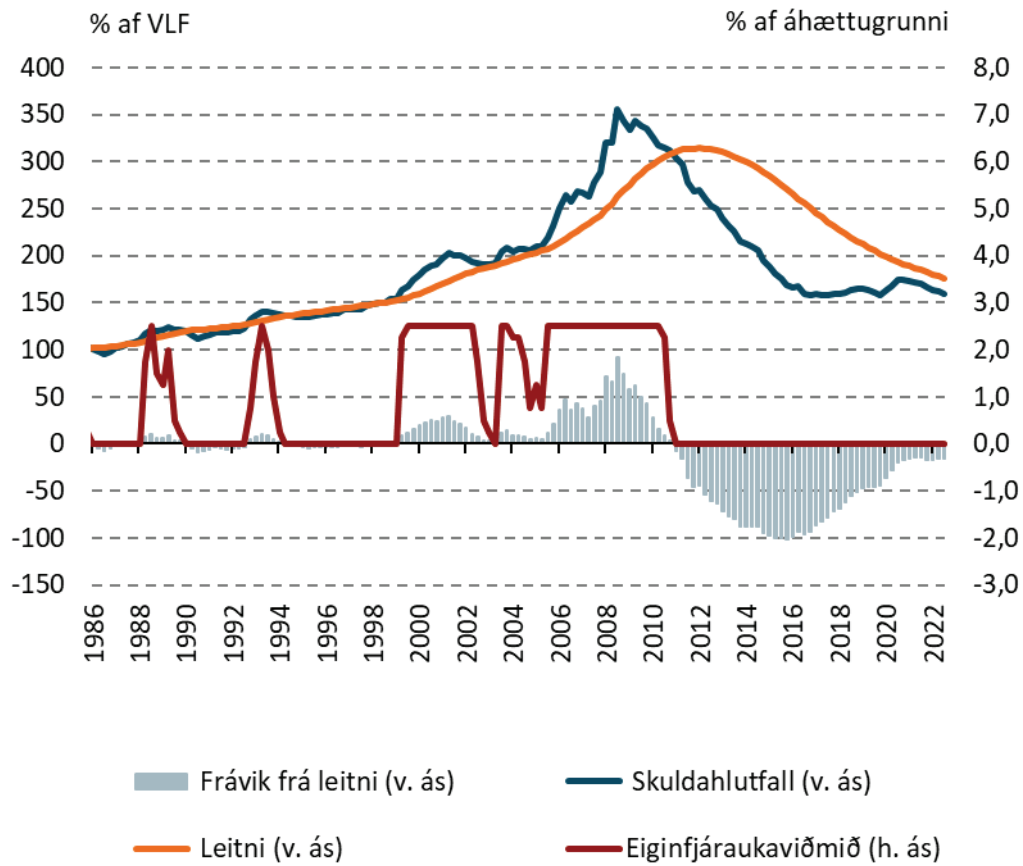
The combined effects of higher interest rates and tighter borrower-based measures have contained the rise in house prices. It is likely that house price inflation has peaked, and indicators imply that imbalances are no longer accumulating. Significant imbalances remain, however, and there is some likelihood of a correction in prices.

The statistical presentation of the financial cycle indicated that the financial cycle was still rising in Q3. The upward cycle is driven by fluctuations in house prices and the debt cycle, although it is offset by the fact that the debt cycle is still at a low position. The domestic systemic risk indicator (d-SRI) has been falling this year and is now just above its average. The decline is driven by the fall in the private sector debt-to-GDP ratio.

³ The ratio of private sector debt – i.e., households and non-financial companies – to GDP.

Appendix – Charts

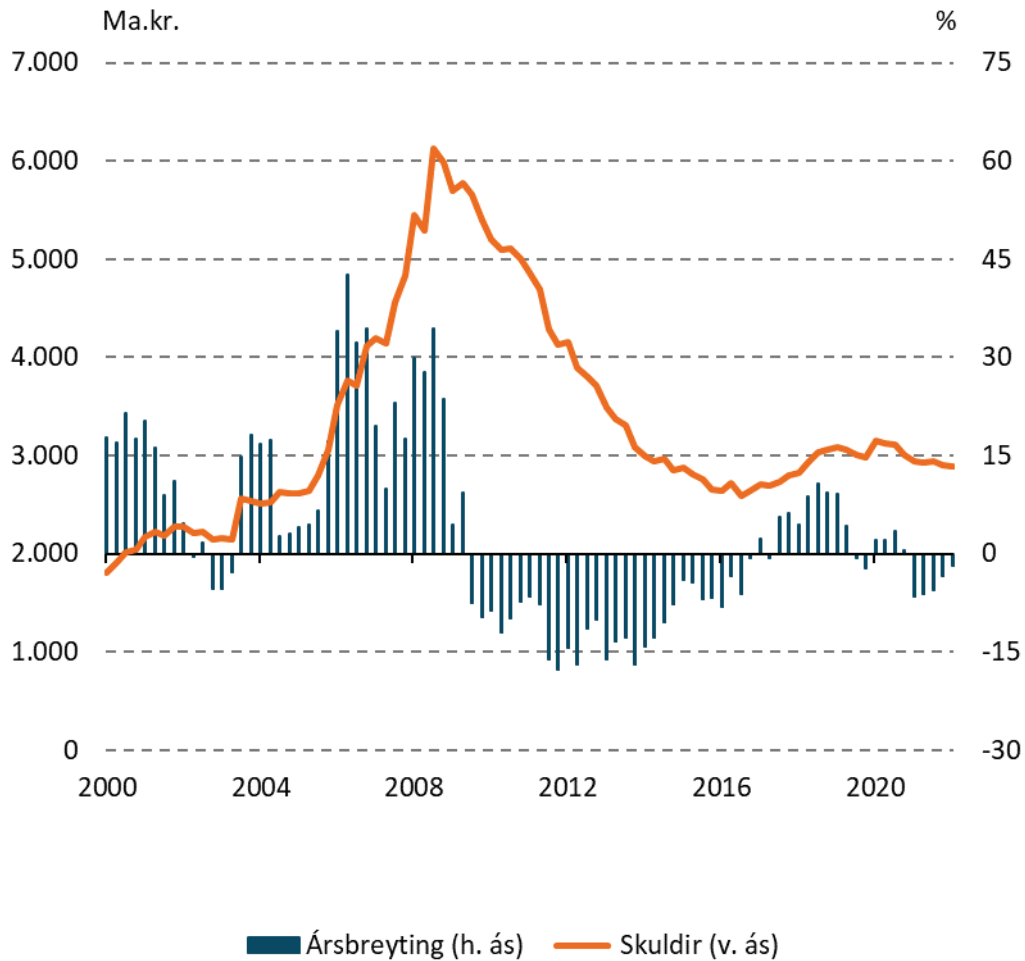
Skuldahlutfall, frávik frá leitni og eiginfjárukaviðmið¹



1. Heildarskuldir heimila og fyrirtækja að kröfuvirði, í hlutfalli við verga landsframleiðslu síðustu fjögurra ársfjórðunga. Leitni er fundin með einhliða HP-síu með sléttunarstikann $\lambda=400.000$.

Heimildir: Hagstofa Íslands, Seðlabanki Íslands.

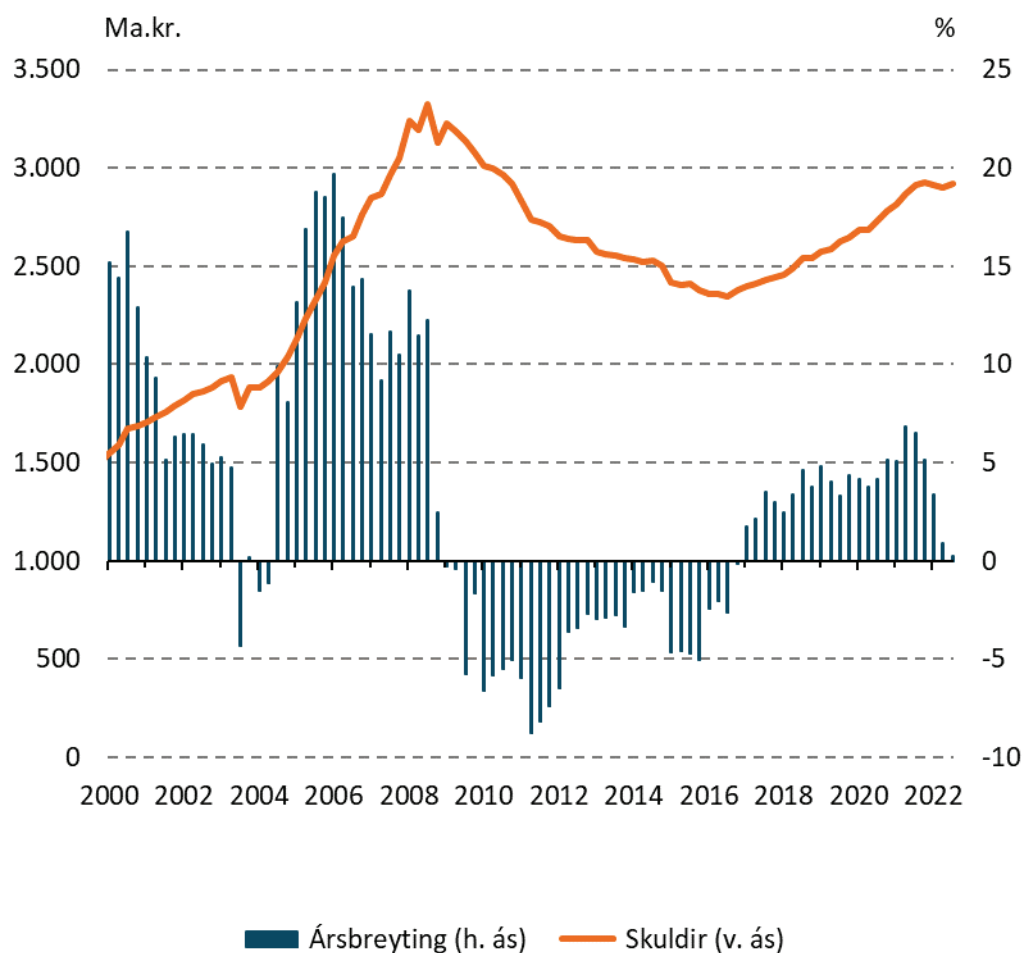
Raunvirði skulda fyrirtækja



Skuldir fyrirtækja að kröfuvirði, á verðlagi nýjustu mælingar. Raunvirtar með vísitölu neysluverðs.

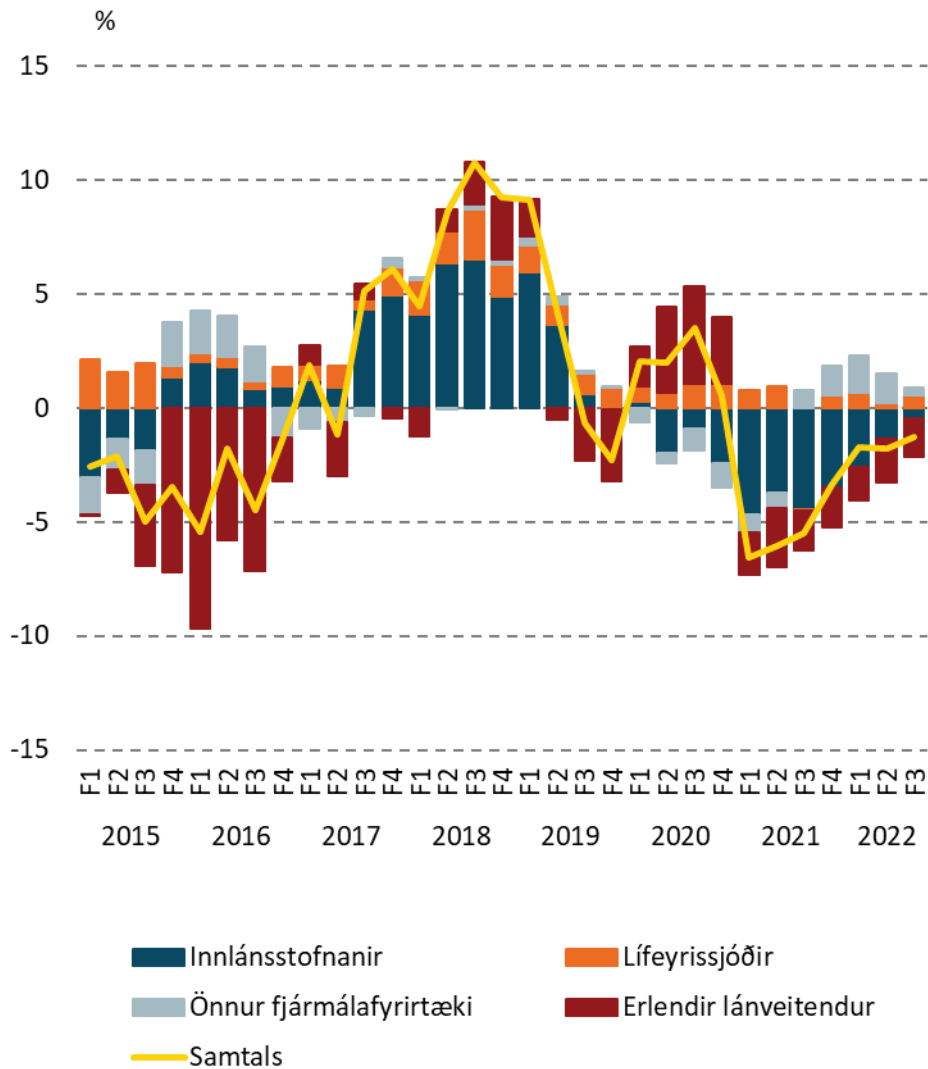
Heimildir: Hagstofa Íslands, Seðlabanki Íslands.

Raunvirði skulda heimila



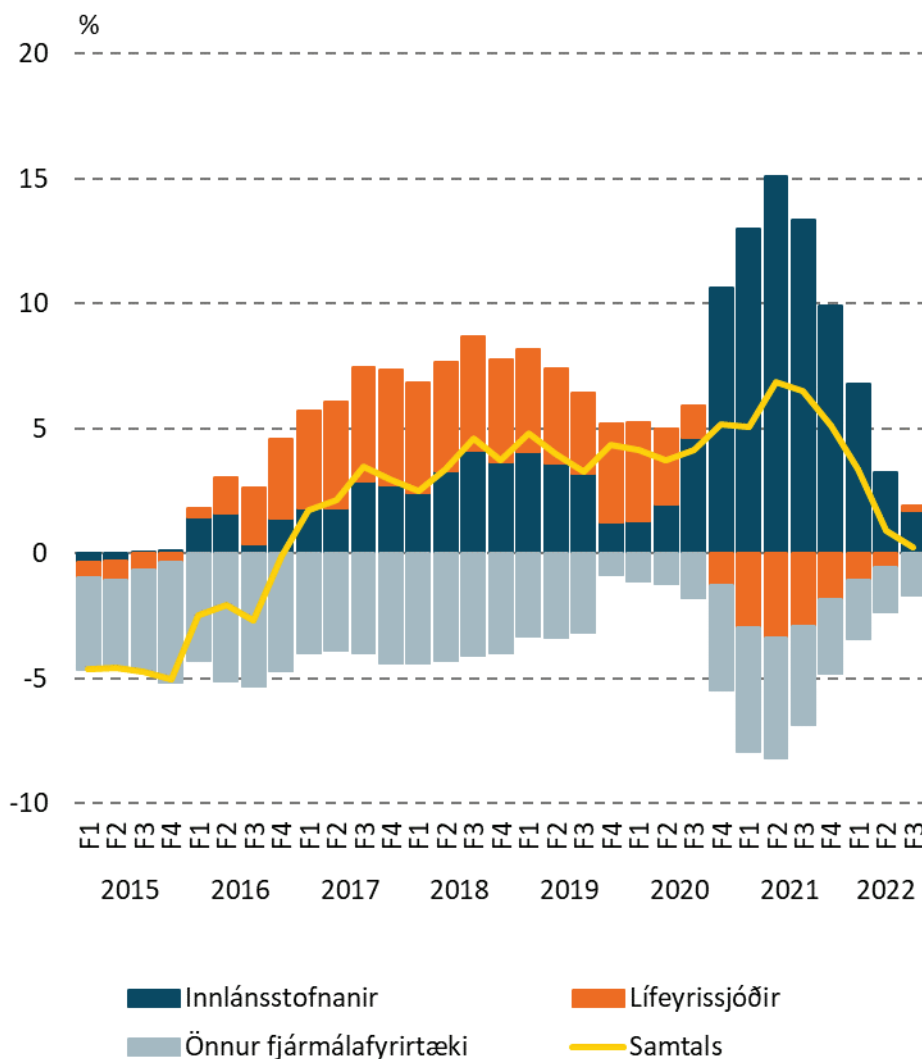
Skuldir heimila að kröfuvirði, á verðlagi nýjustu mælingar. Raunvirtar með vísitölu neysluverðs.
Heimildir: Hagstofa Íslands, Seðlabanki Íslands.

Þróun skulda atvinnufyrirtækja brotin niður á lánveitendur



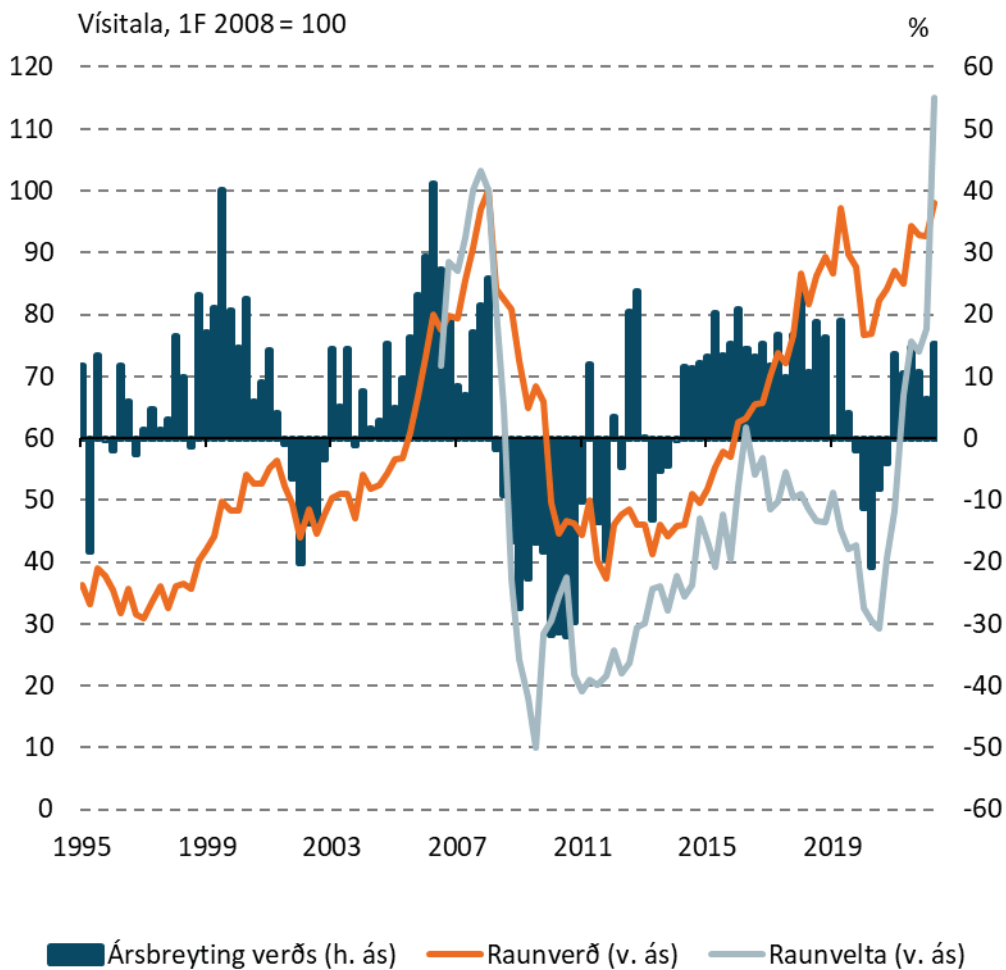
Heildarskuldir fyrirtækja að kröfuvirði, raunvirtar með vísitölu neysluverðs. Raunbreyting á milli ára og framlag hvers flokks lánveitenda til hennar. Heimildir: Hagstofa Íslands, Seðlabanki Íslands.

Próun skulda heimila brotin niður á lánveitendur



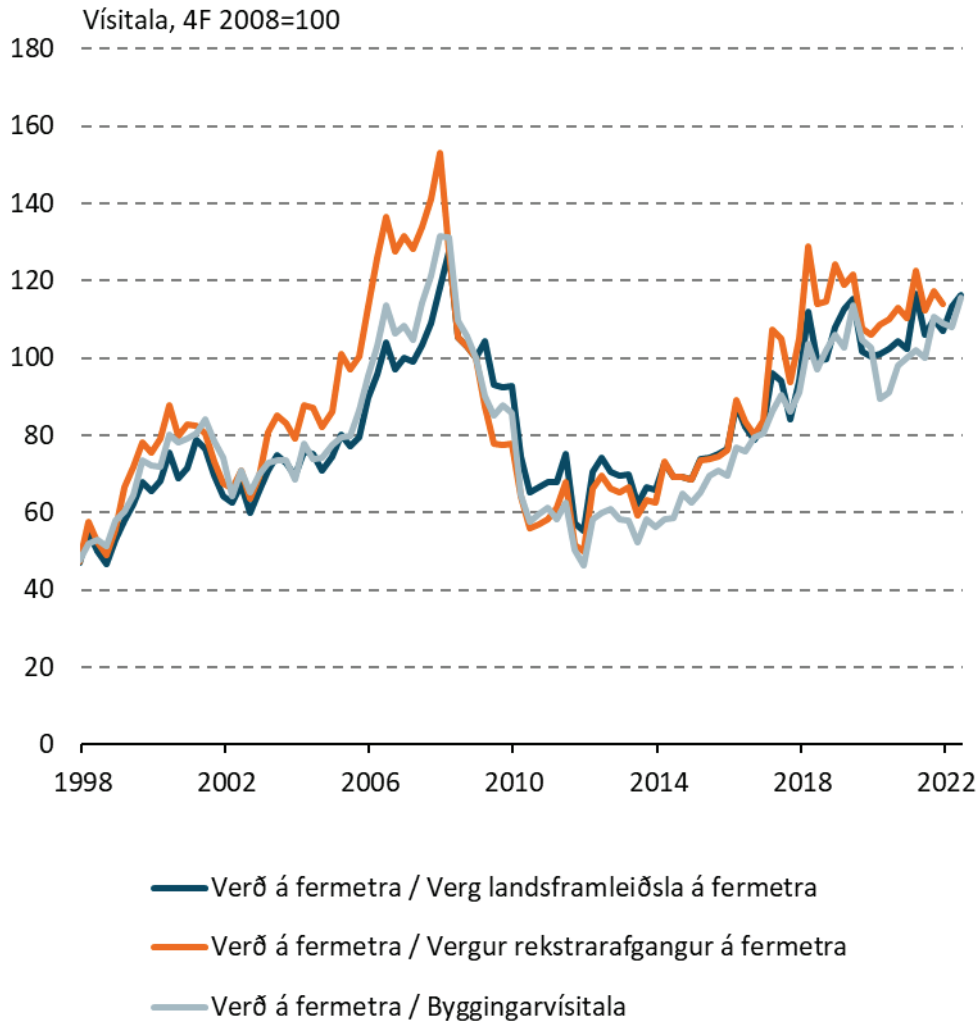
Heildarskuldir heimila að kröfuvirði, raunvirtar með vísitölu neysluverðs. Raunbreyting á milli ára og framlag hvers flokks lánveitenda til hennar. Heimildir: Hagstofa Íslands, Seðlabanki Íslands.

Raunverð og -velta atvinnuhúsnæðis á höfuðborgarsvæðinu



Verðvísitala raunvirt með vísitölu neysluverðs. Vísitalan byggir á vegnu meðaltali iðnaðar-, verslunar- og skrifstofuhúsnæðis. Veltuvísitala sýnir meðaltal raunvirtrar veltu síðustu fjögurra ársfjórðunga. Nýjustu gildi eru til bráðabirgða.
Heimildir: Hagstofa Íslands, Þjóðskrá Íslands, Seðlabanki Íslands.

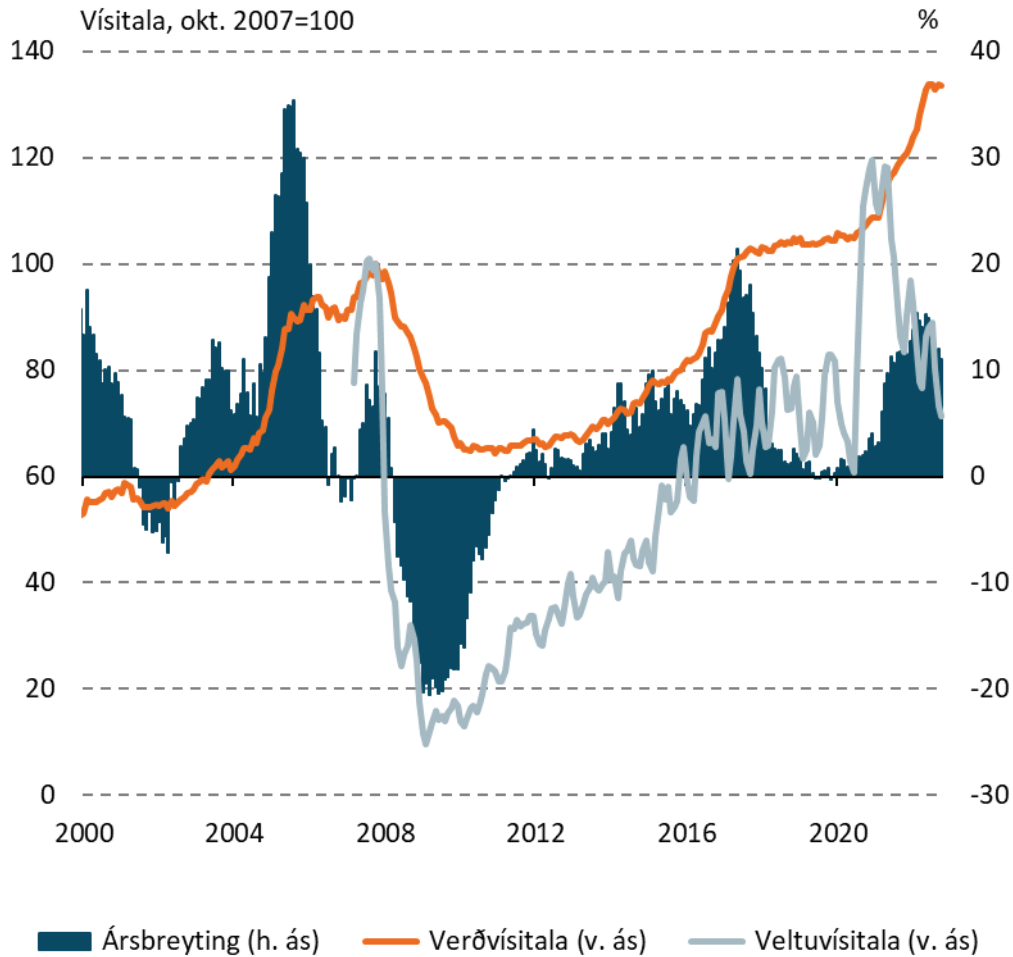
Verðhlutföll atvinnuhúsnæðis



Árleg gögn um vergan rekstrarafgang eru tengd yfir ársfjórðunga með ólínulegri aðferð. Árleg gögn um atvinnuhúsnæðisstofn eru tengd línulega yfir ársfjórðunga.

Heimildir: Hagstofa Íslands, Þjóðskrá Íslands, Seðlabanki Íslands.

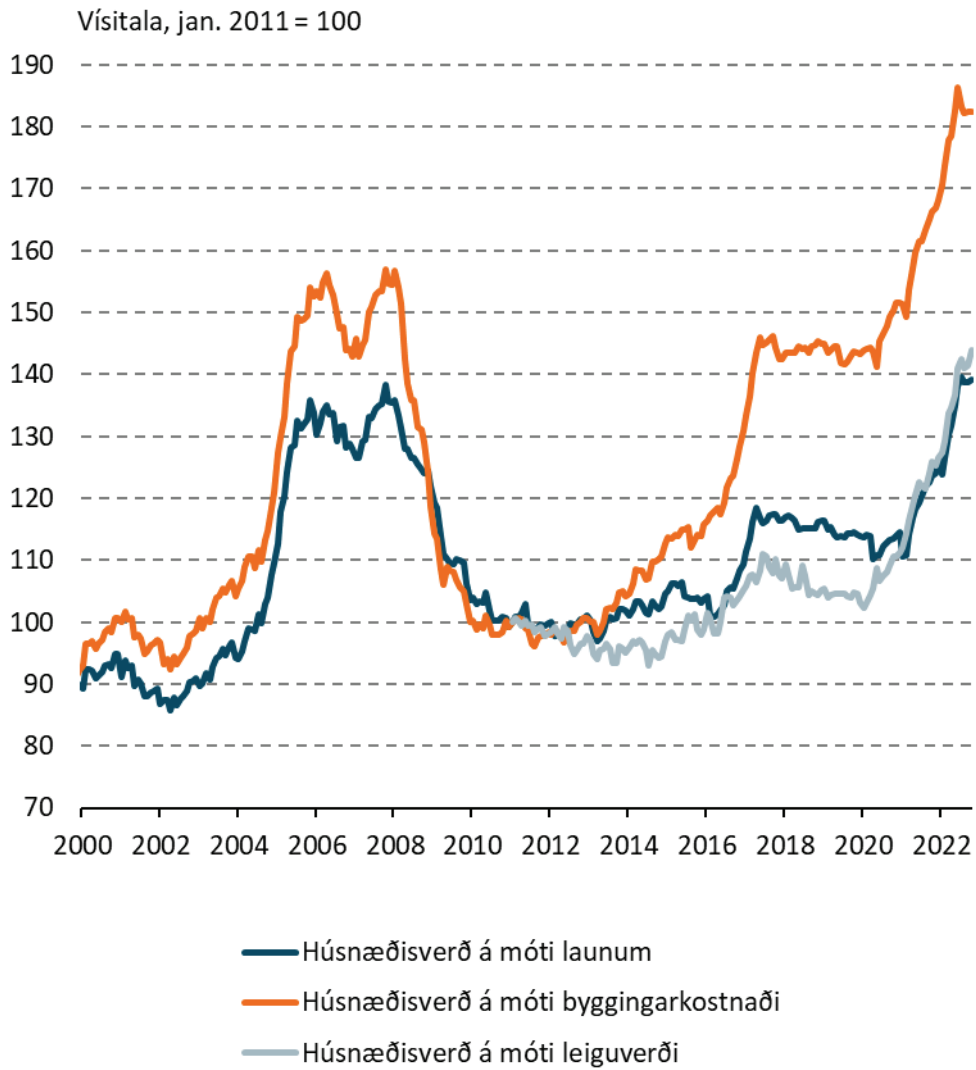
Raunverð og raunvelta á íbúðamarkaði höfuðborgarsvæðisins



Vísitala íbúðaverðs á höfuðborgarsvæðinu, raunvirt með vísitölu neysluverðs. Veltuvísitala sýnir þriggja mánaða hlaupandi meðaltal veltu, sem raunvirt hefur verið með vísitölu neysluverðs.

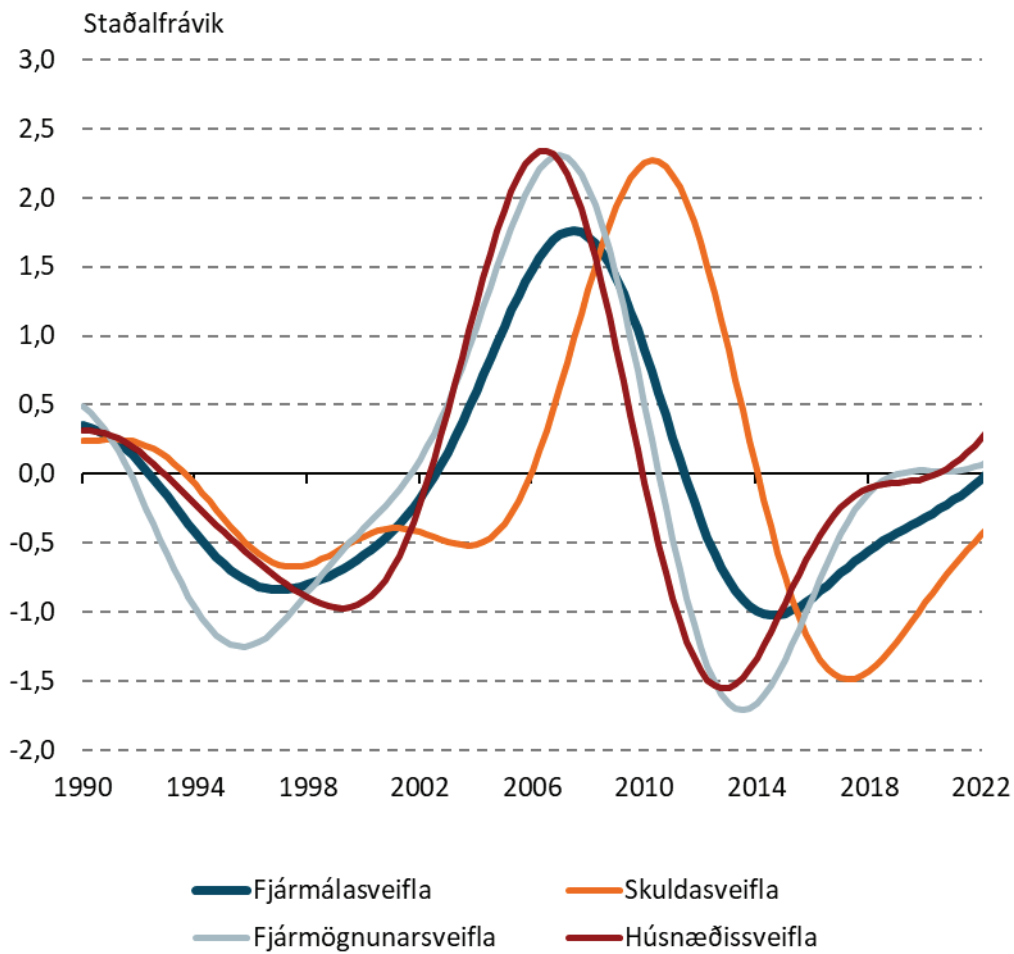
Heimildir: Hagstofa Íslands, Þjóðskrá Íslands, Seðlabanki Íslands.

Húsnæðisverð á höfuðborgarsvæðinu og ákvarðandi þættir



Heimildir: Hagstofa Íslands, Þjóðskrá Íslands.

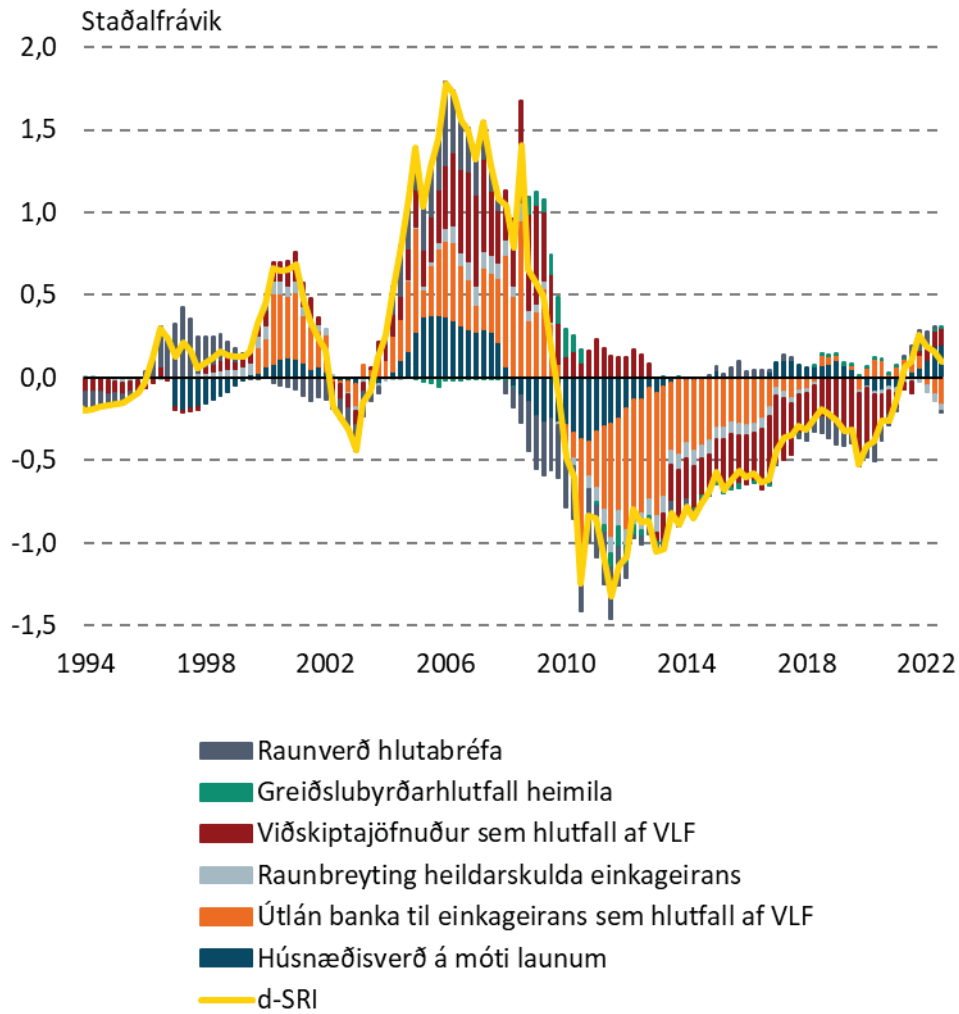
Fjármálasveifla og undirþættir hennar



Fjármálasveiflan, bláa línan, er einfalt meðaltal undirþáttanna. Hver undirþáttur er einfalt meðaltal sveiflupátta úr breytum sem tengjast skuldum, húsnæðisverði og fjármögnun banka. Sveiflupættirnir eru fundnir með Christiano-Fitzgerald tíðnisú með tíðnisviðið 8-30 ár.

Heimildir: Hagstofa Íslands, Þjóðskrá Íslands, Seðlabanki Íslands.

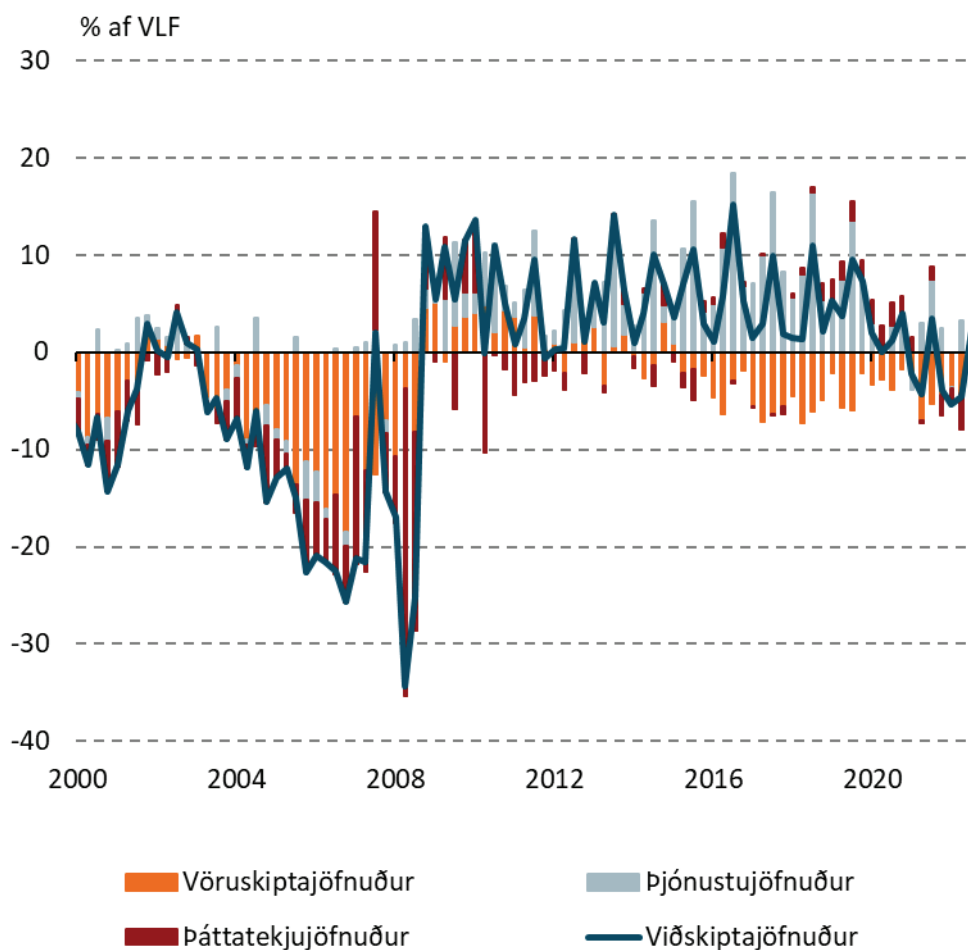
Samsettur vísir fyrir sveiflutengda kerfisáhættu (d-SRI)



Spágildi eru notuð frá og með Q3 2020 fyrir greiðslur, að baki greiðslubyrðarhlutfalli heimila.

Heimildir: Hagstofa Íslands, Seðlabanki Íslands.

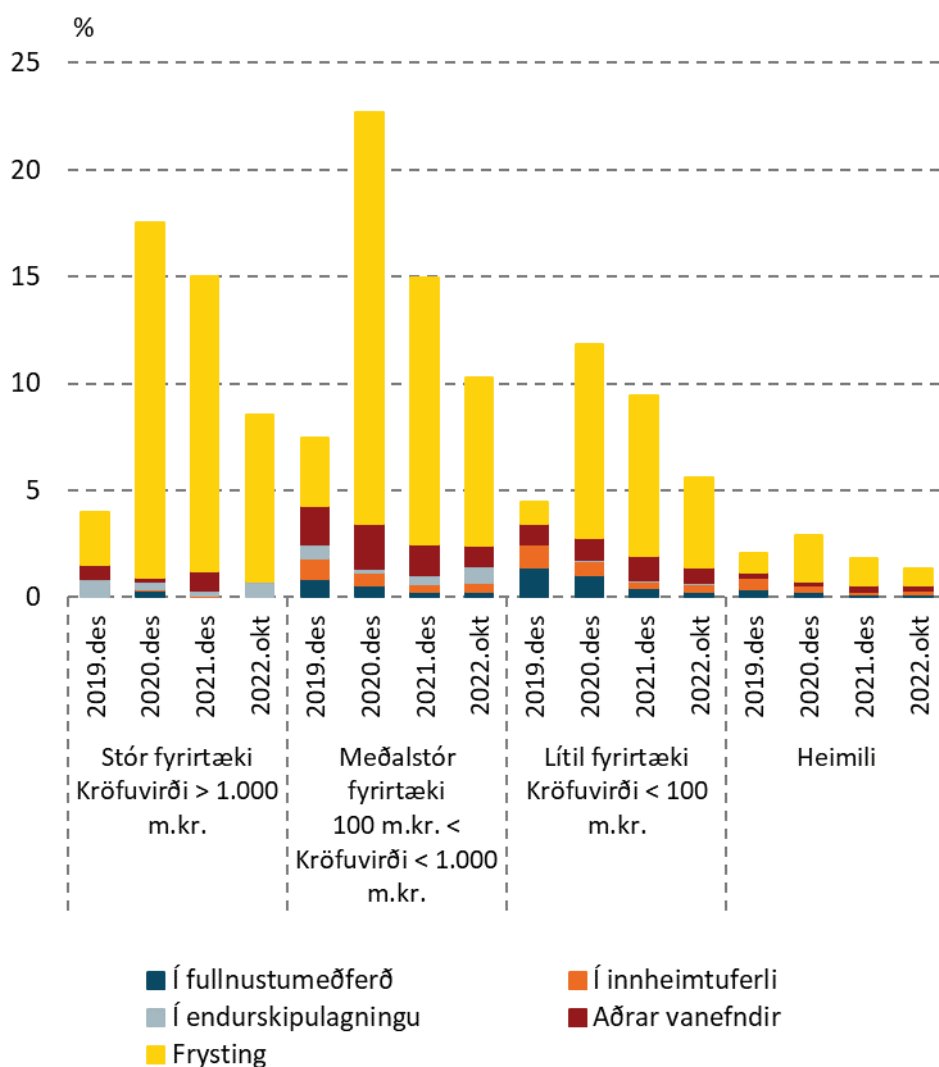
Viðskiptajöfnuður



Miðað er við undirliggjandi viðskiptajöfnuð tímabilið 4F2008-4F2016, þar sem leiðrétt er fyrir áhrifum gömlu bankanna á þáttatekjur og óbeint mælda fjármálaþjónustu. Tímabilið 2009-2012 var þáttatekujöfnuður einnig leiðréttur fyrir áhrifum Actavis vegna ónákvæmra gagna á tímabilinu. Þáttatekujöfnuður tekur til frumþáttatekna og rekstrarframlaga.

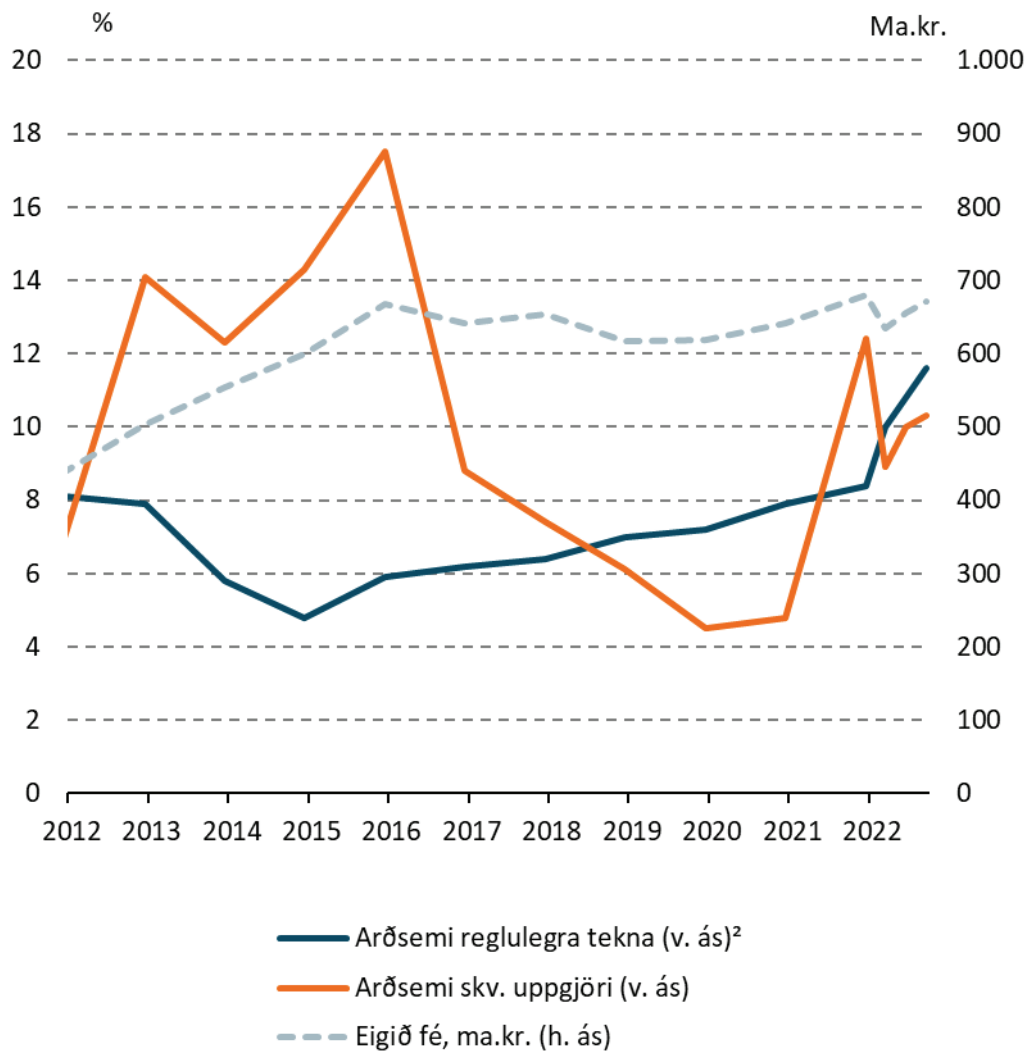
Heimildir: Hagstofa Íslands, Seðlabanki Íslands.

Staða vanefnda útlána eftir lántaka og tegund vanefnda



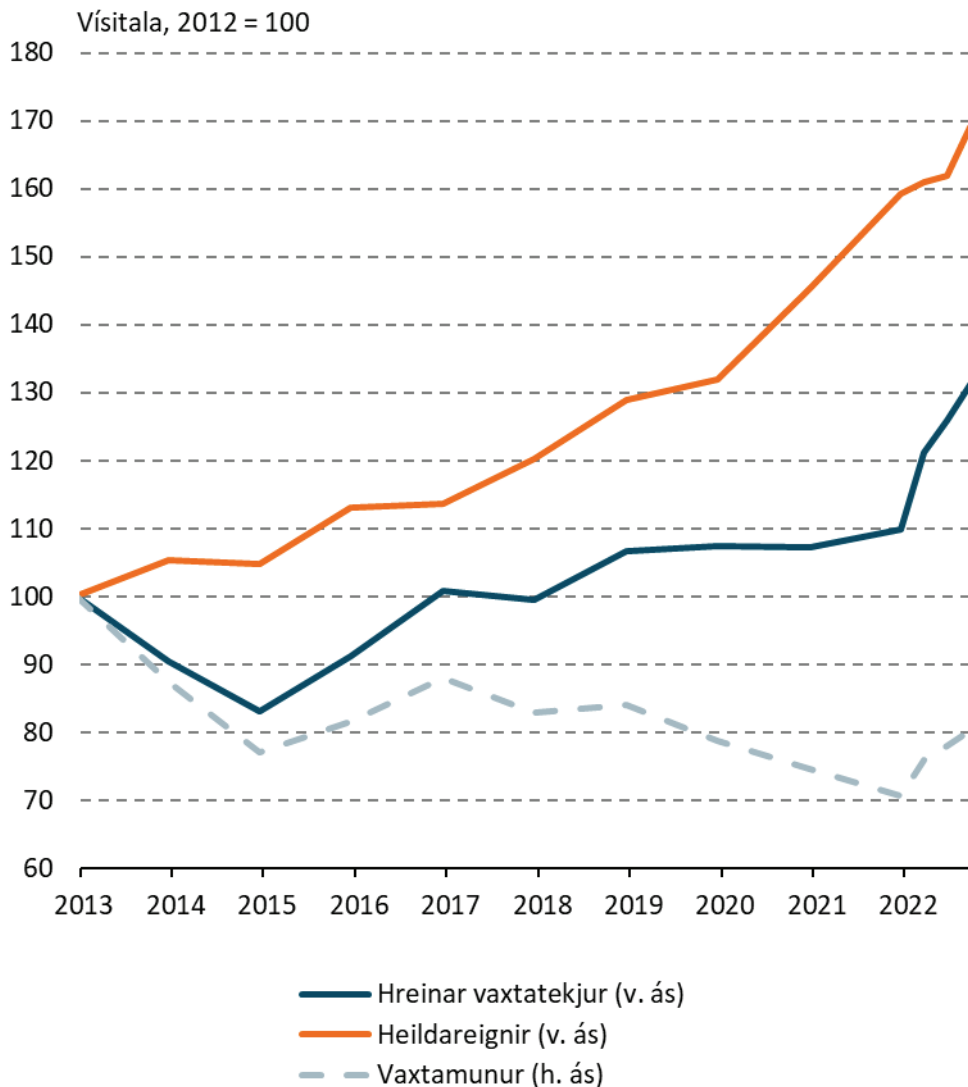
Vanskil samkvæmt lánþegaaðferð, hlutfall útlánnum til hvers stærðarflokks. Kerfislega mikilvægir bankar, móðurfélög, bókfært virði.
Heimild: Seðlabanki Íslands.

KMB: Arðsemi



Arðsemi er reiknuð út miðað við meðalstöðu eigin fjár. Samstæður kerfislega mikilvægra banka. Valitor undanskilið árin 2017-2020. Arðsemi reglulegra tekna miðast við hreinar vaxta- og þóknunartekjur að frádregnum reglulegum kostnaði. Skatthlutfall er 20% og miðað er við meðalstöðu eigin fjár.
 Heimildir: Árs- og árshlutareikningar viðskiptabanka.

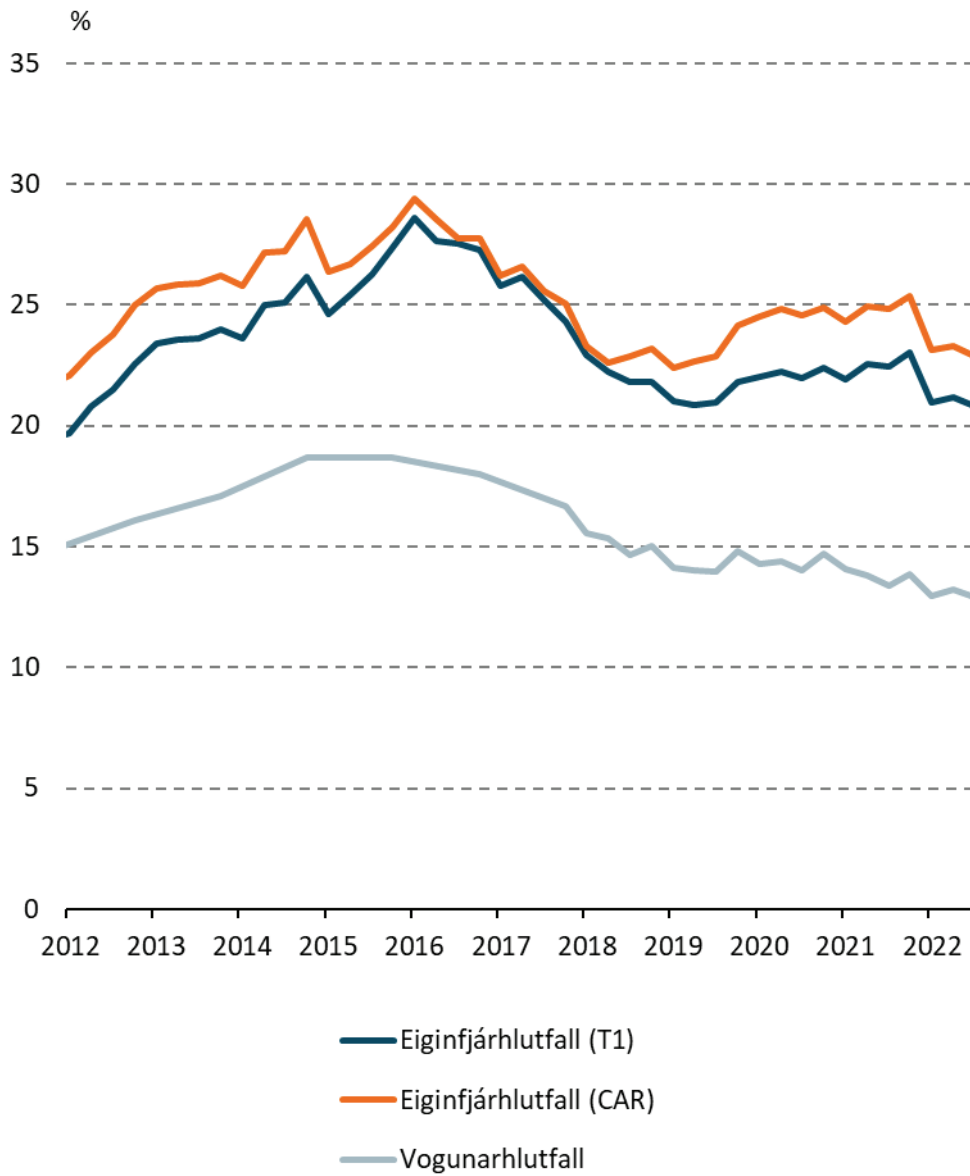
KMB: Hreinar vaxtatekjur, vaxtagjöld og vaxtamunur



Samstæður kerfislega mikilvægra banka. Hreinar vaxtatekjur á 1. ársfjórðungi 2022 færðar á ársgrundvöll.

Heimildir: Árs- og árshlutareikningar viðskiptabanka.

KMB: Eiginfjár- og vogunarhlutföll



Samstæður kerfislega mikilvægra banka.
Heimildir: Árs- og árshlutareikningar bankanna.

