



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.sedlabanki.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.

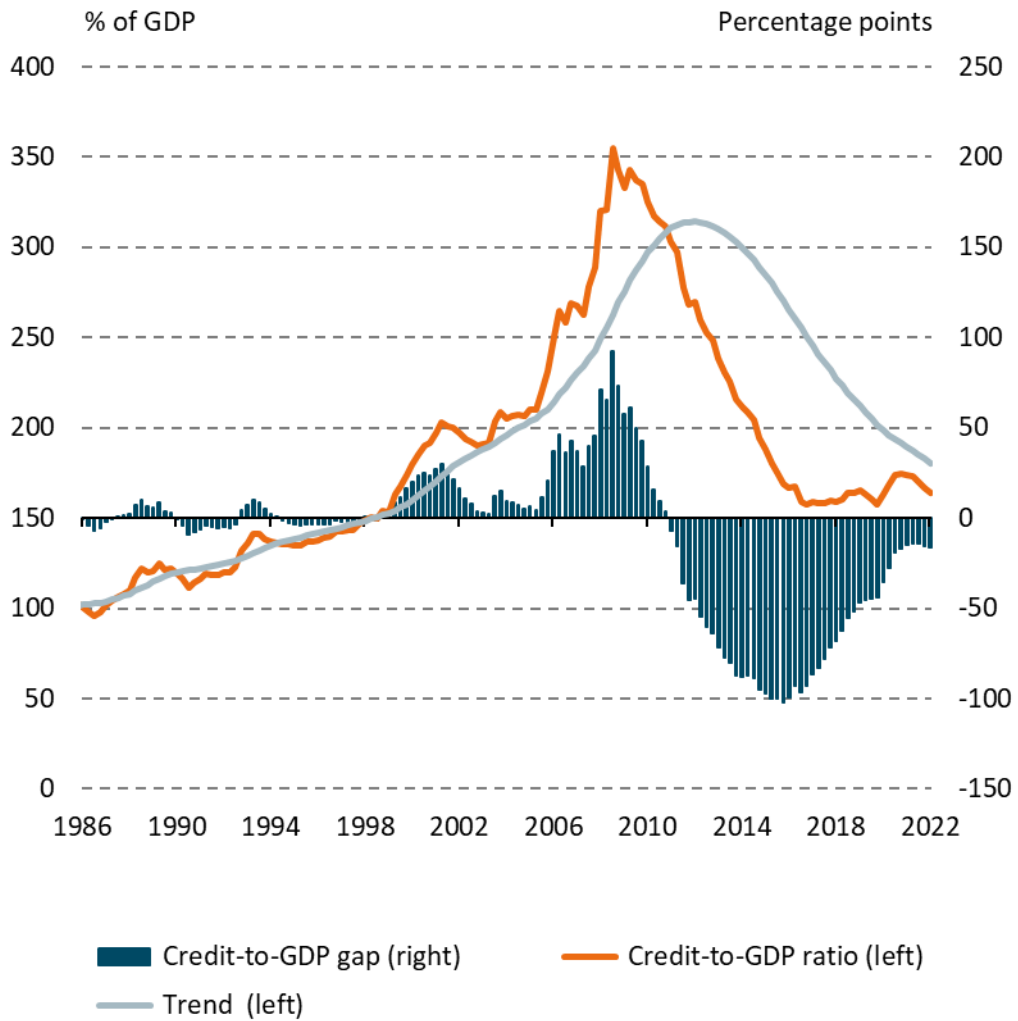
⁵ The ratio of private sector debt – i.e., households and non-financial companies – to GDP.

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.

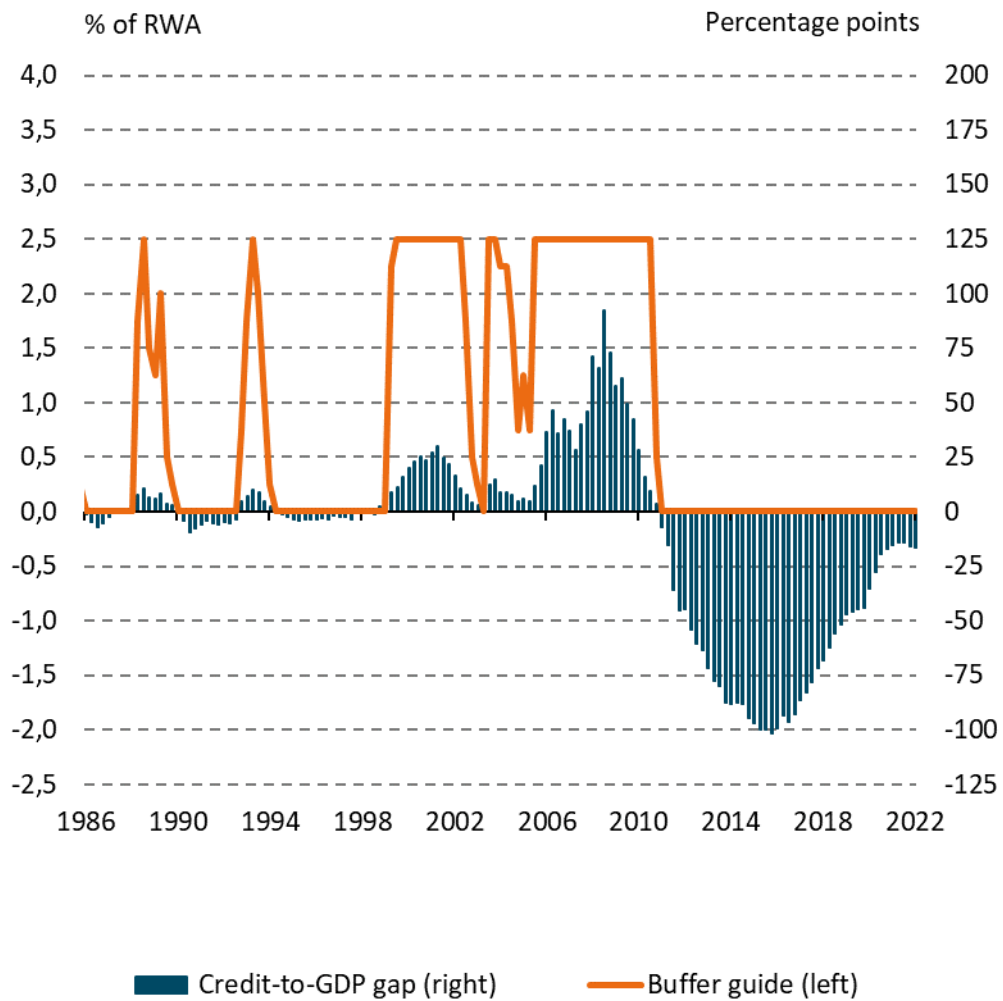
Appendix – Charts

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.

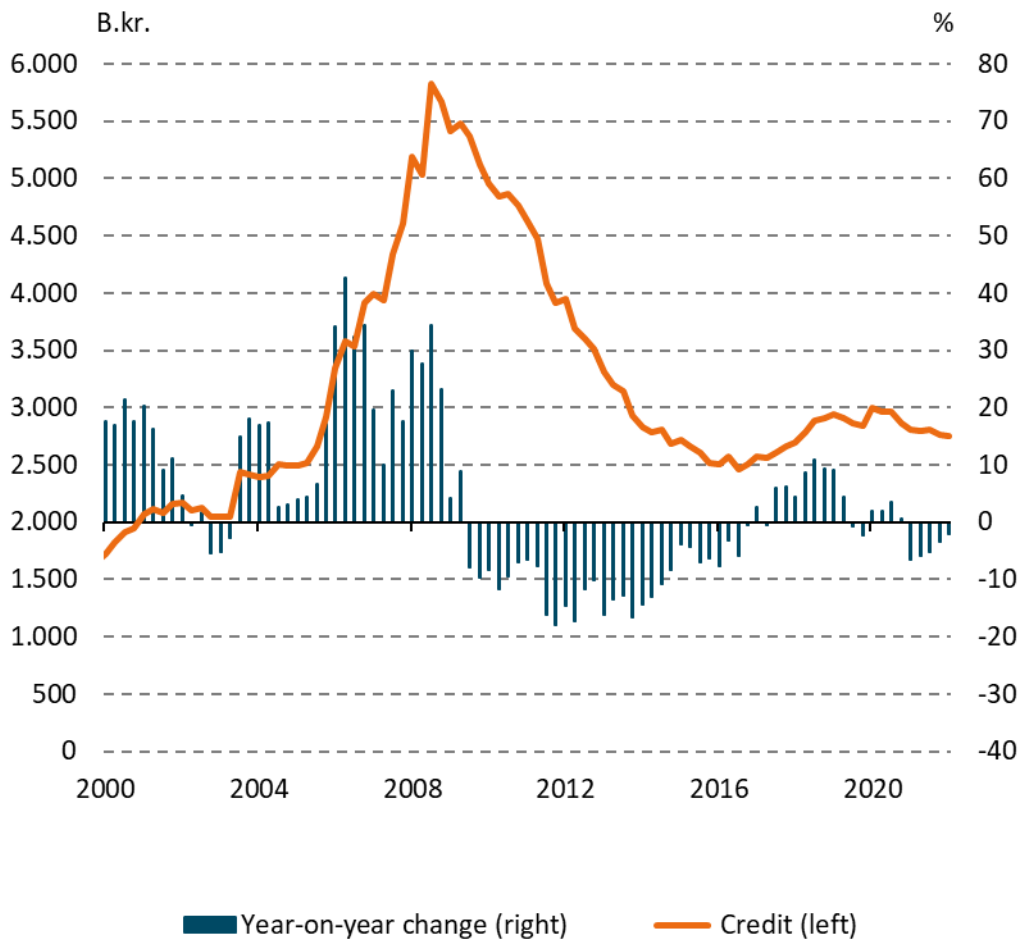
The buffer guide



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.

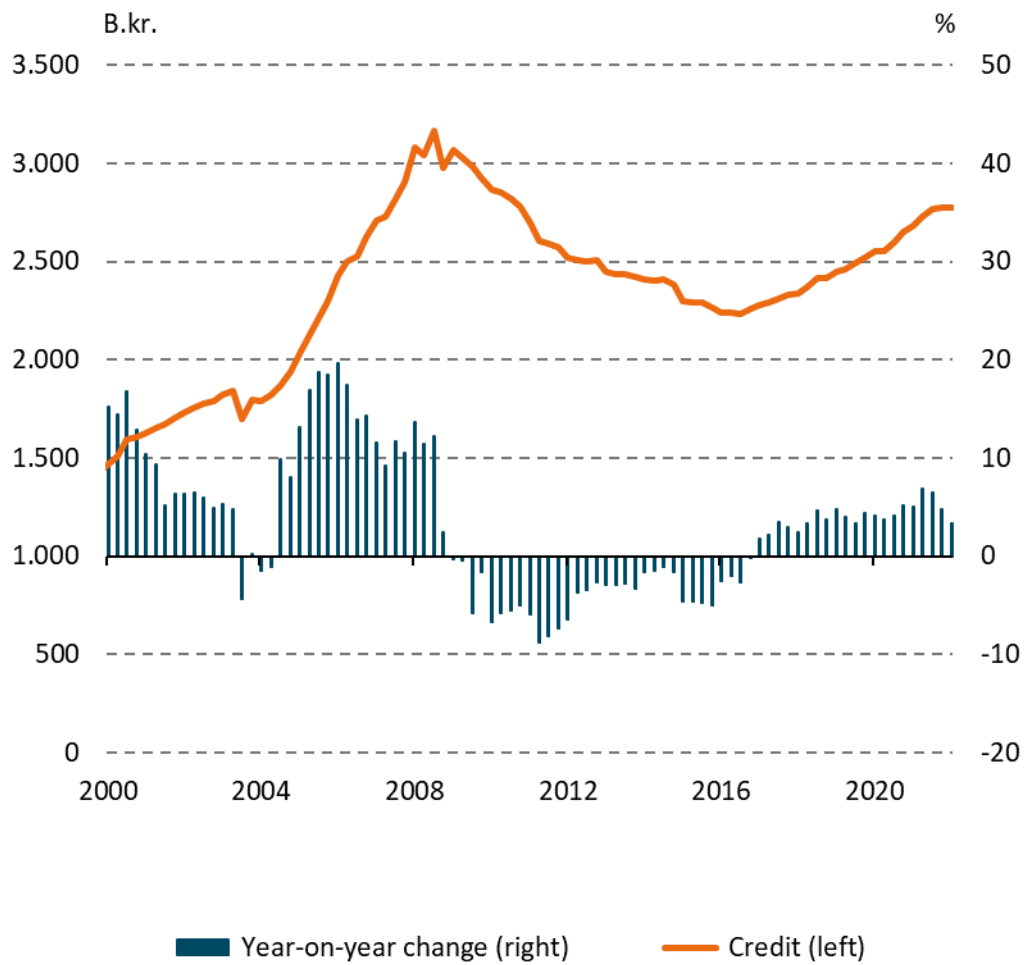
Real corporate credit growth



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

Sources: Statistics Iceland, Central Bank of Iceland.

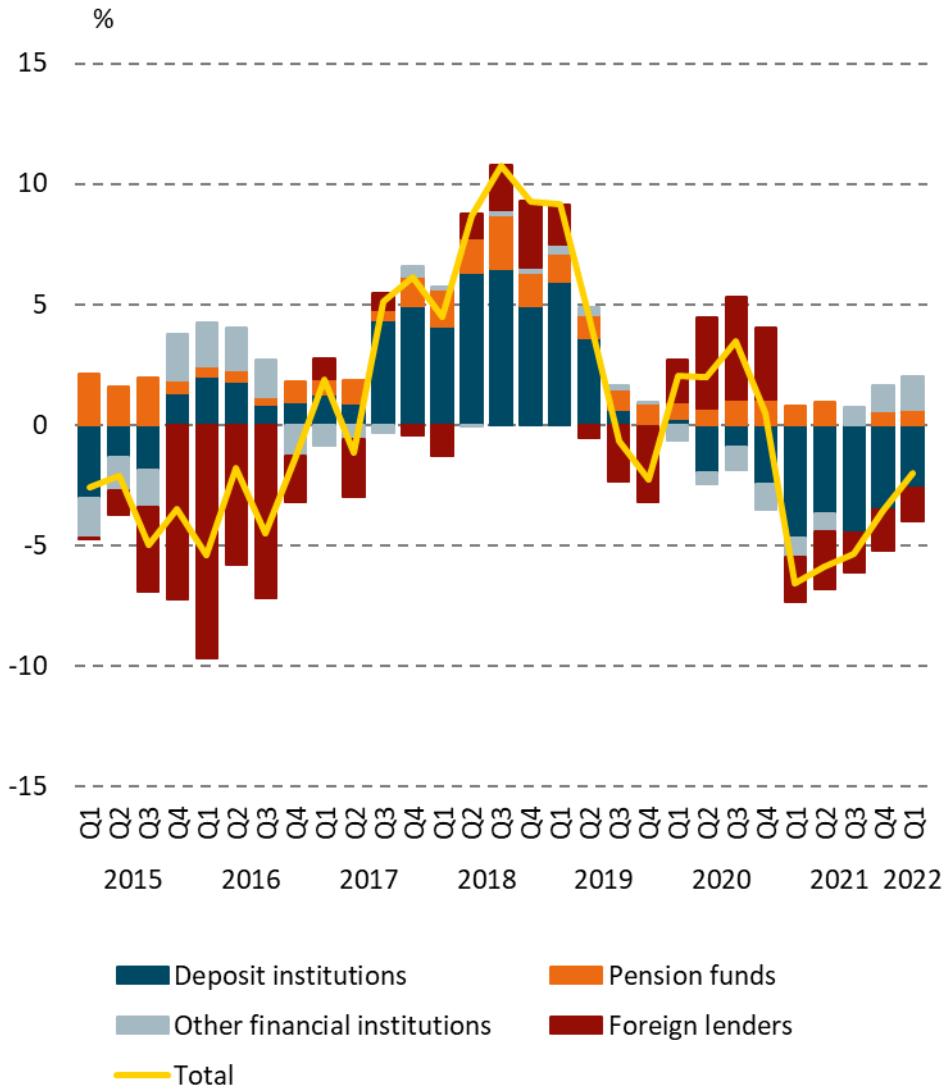
Real household credit growth



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

Sources: Statistics Iceland, Central Bank of Iceland.

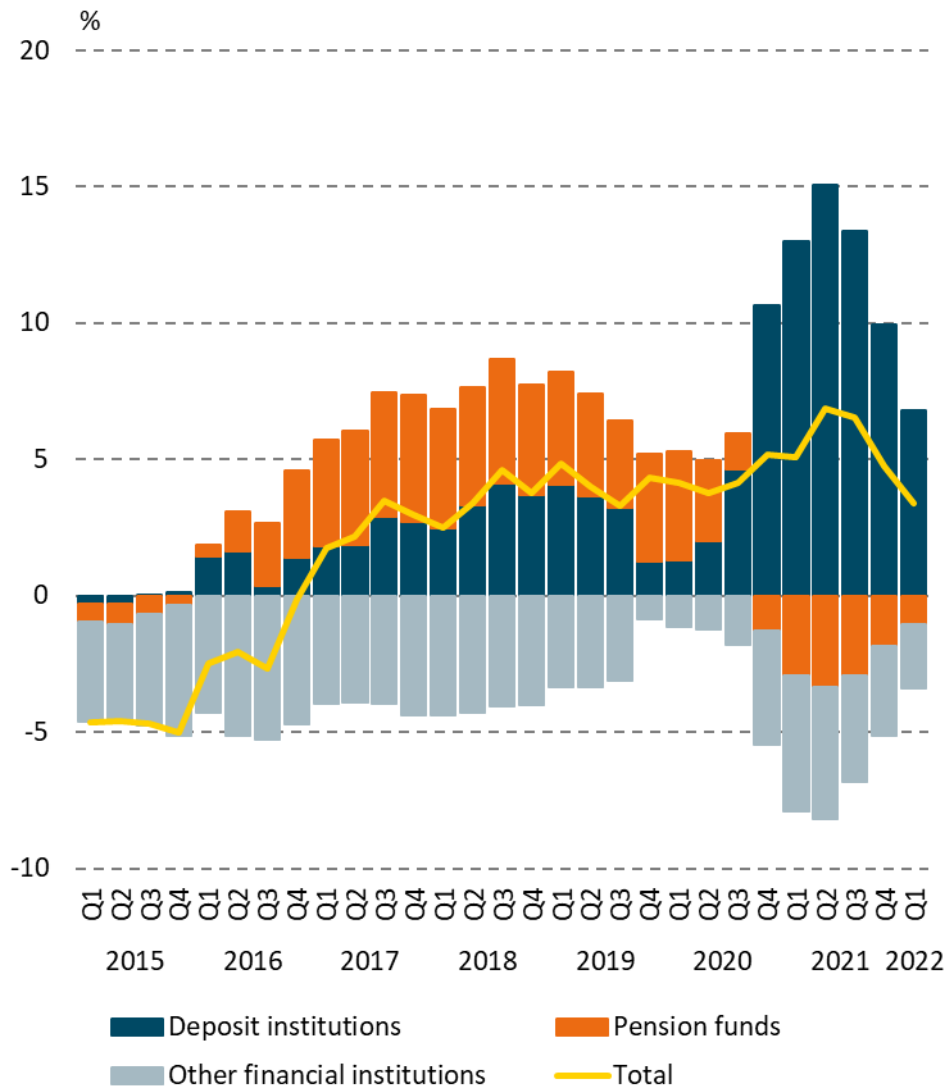
Corporate debt, by lender type



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

Sources: Statistics Iceland, Central Bank of Iceland.

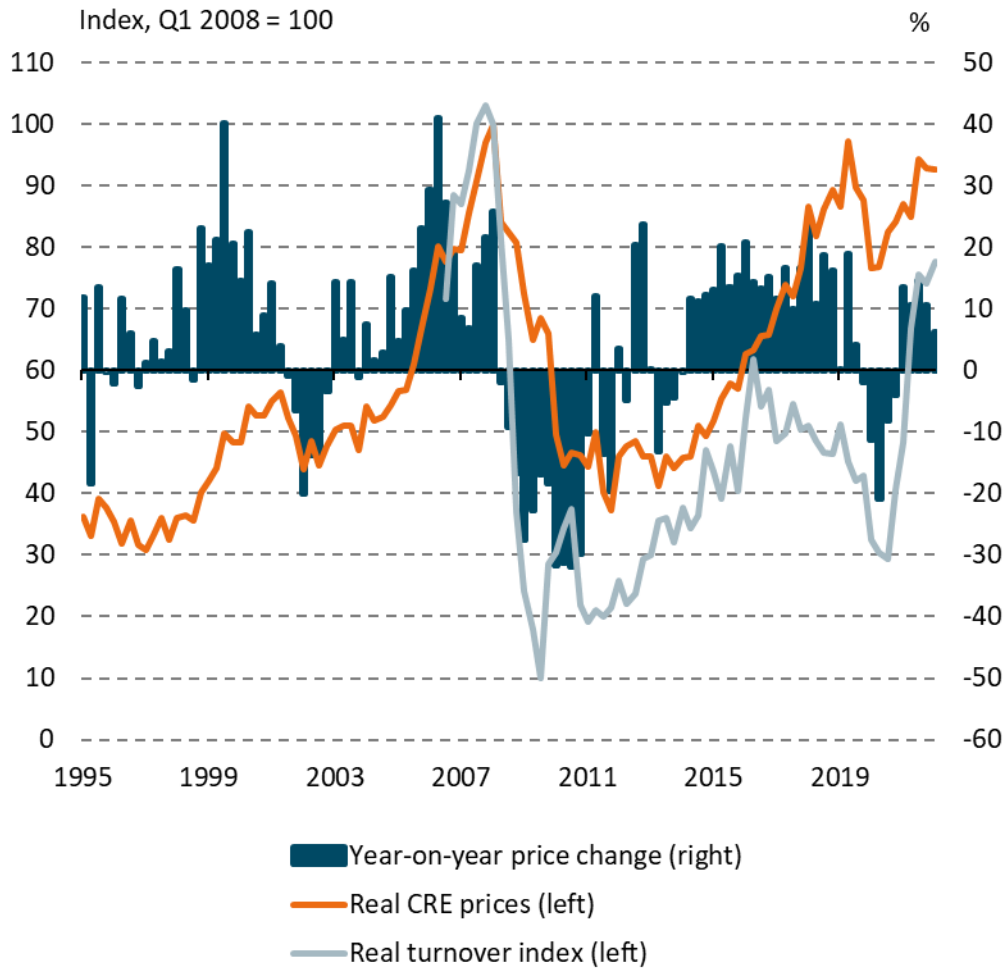
Household debt, by lender type



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

Sources: Statistics Iceland, Central Bank of Iceland.

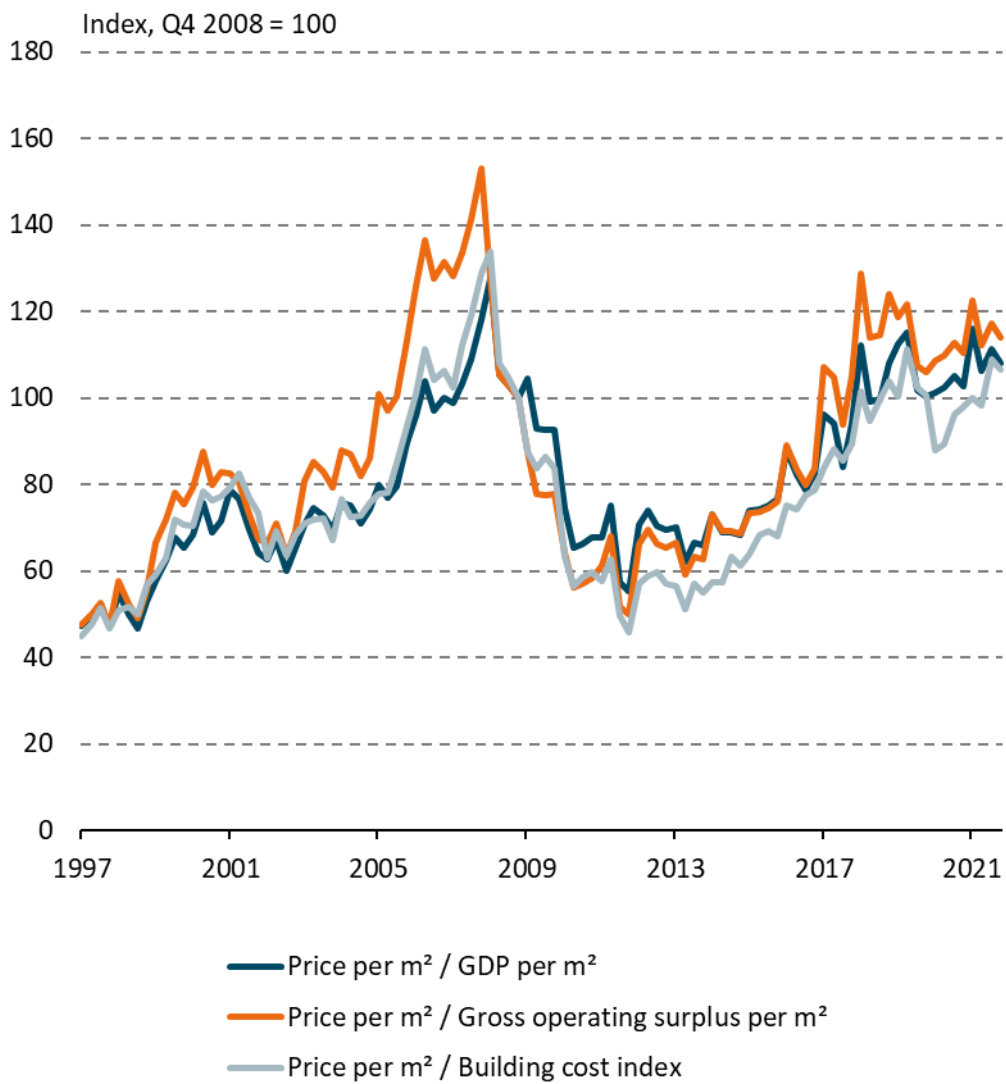
Real commercial property prices and turnover in the capital area



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.

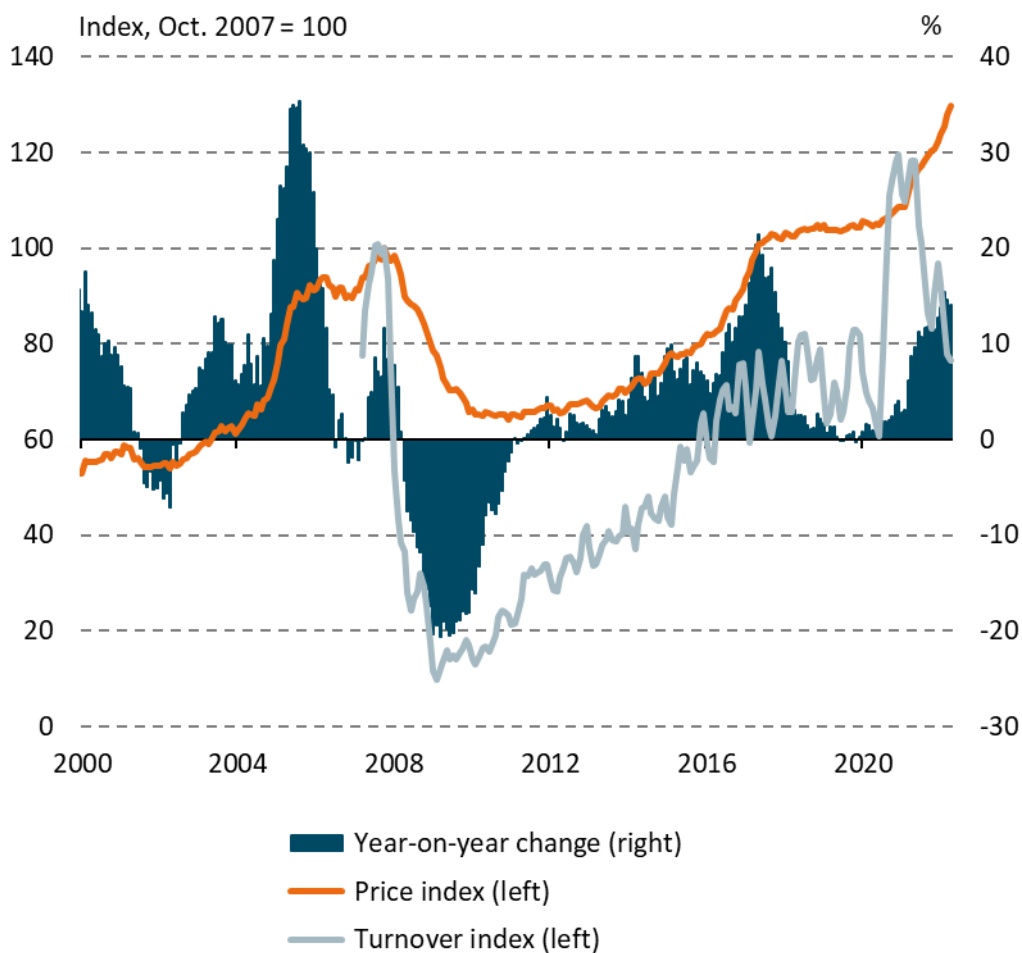
Commercial property price ratios



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.

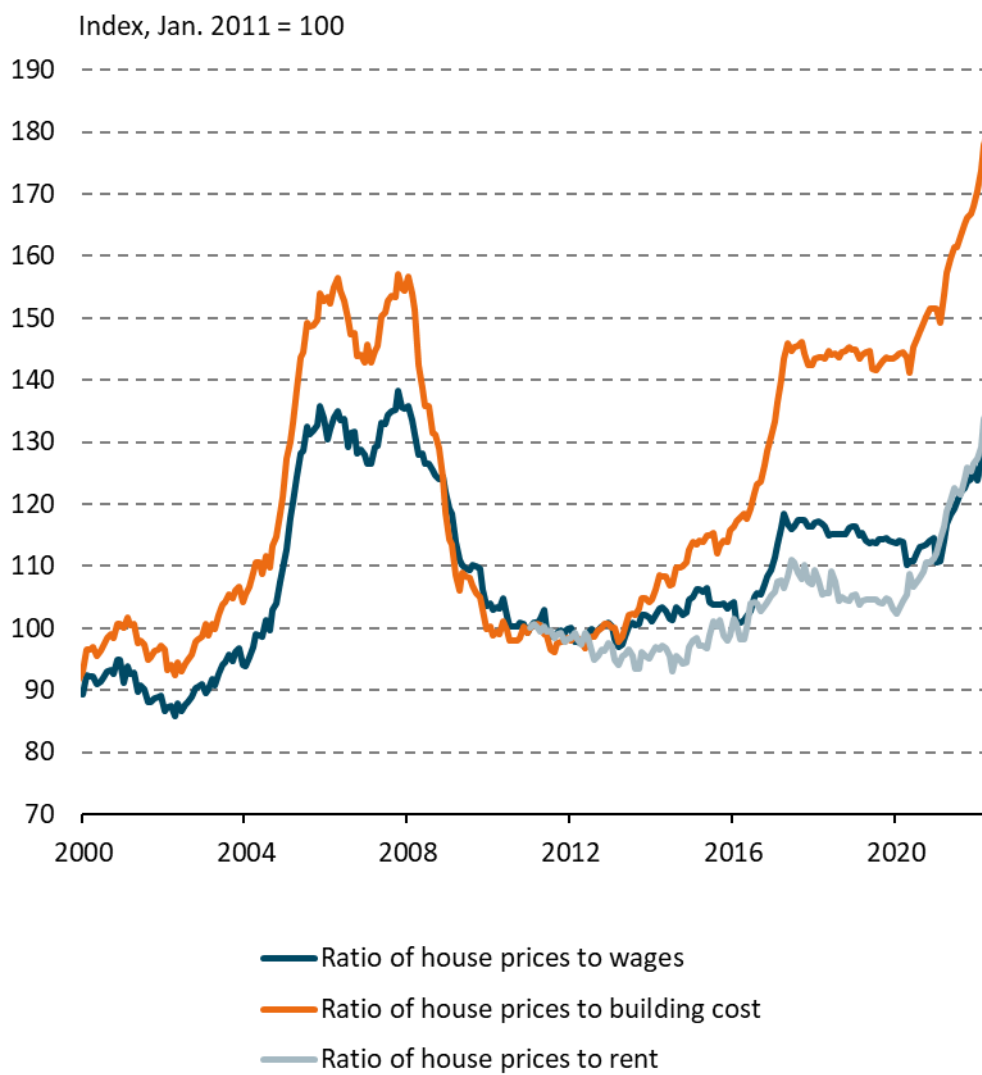
Real house prices and turnover in the capital area



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.

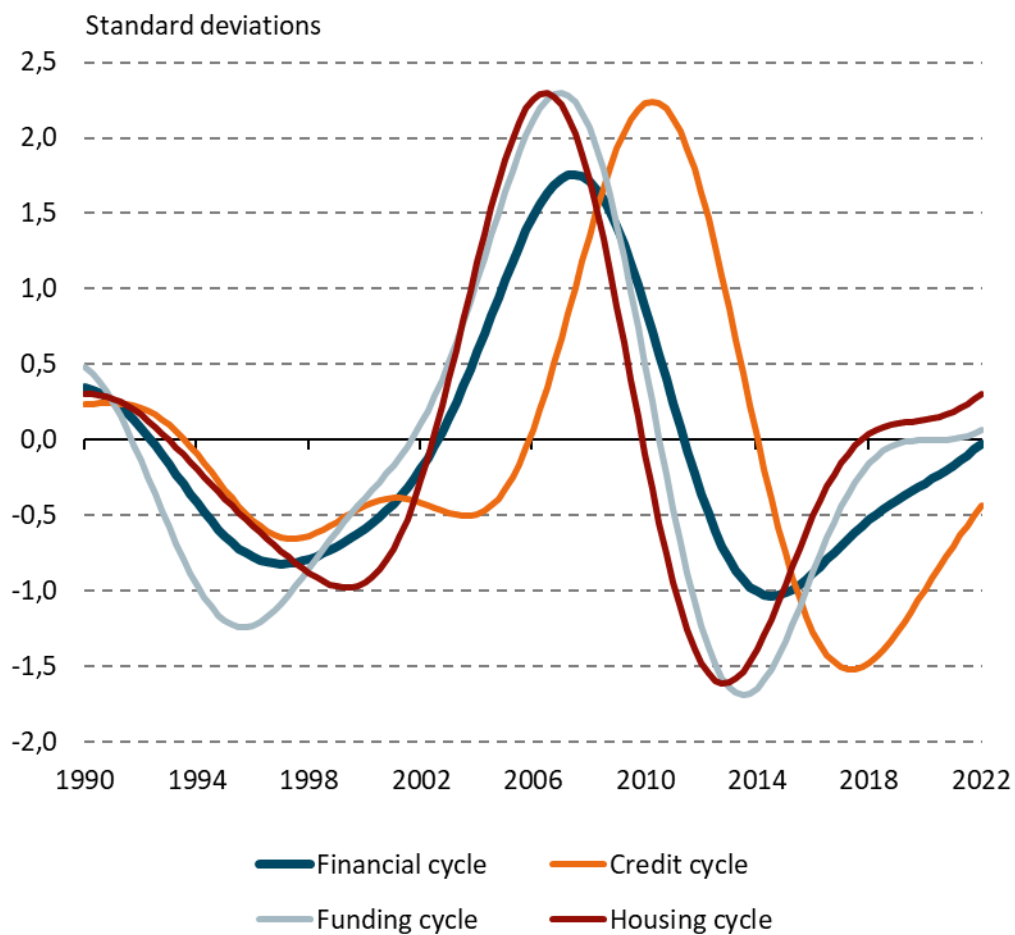
Sources: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

Capital area house prices and determining factors



Sources: Registers Iceland, Statistics Iceland.

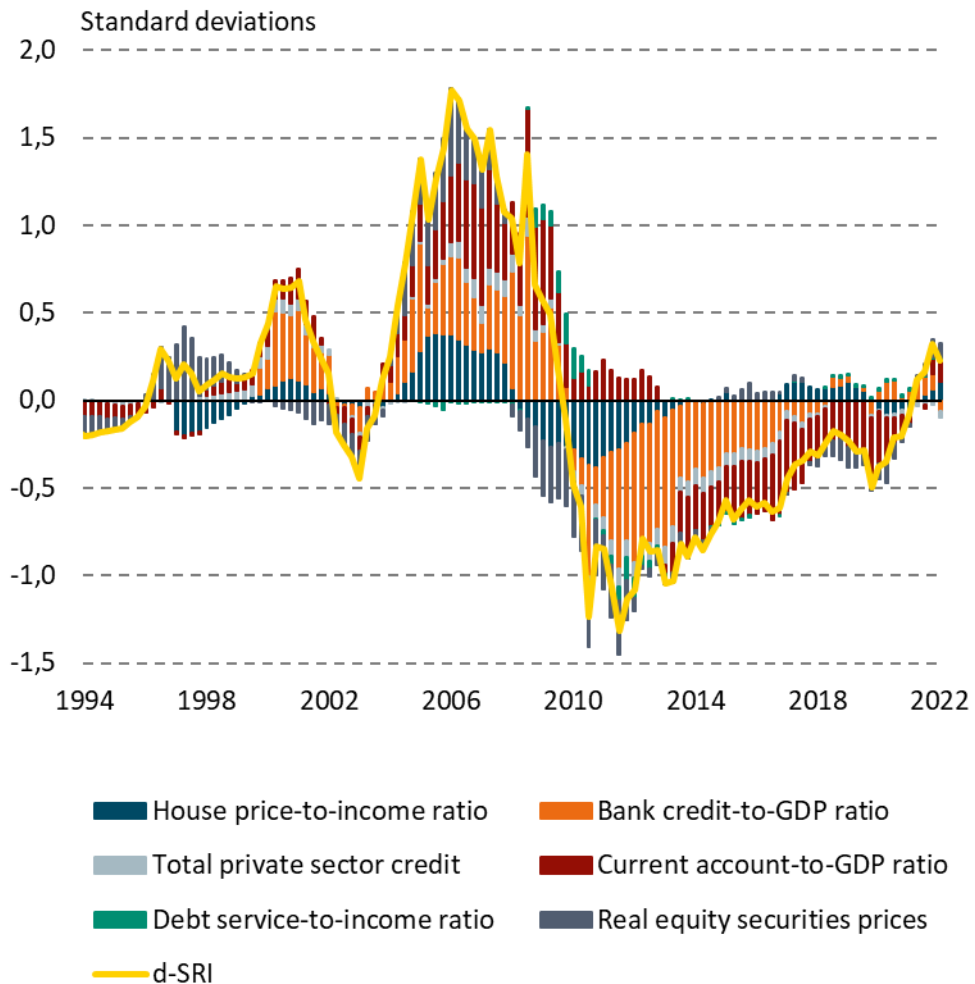
Financial cycle and subcycles



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.

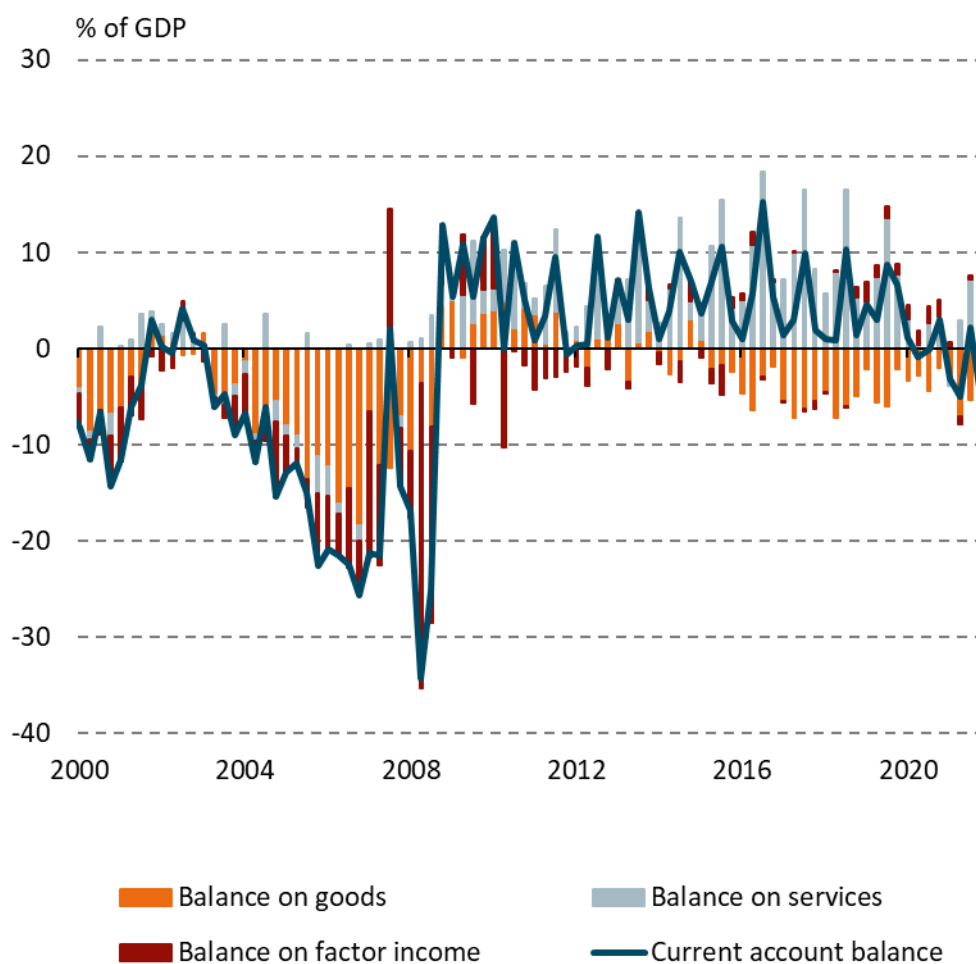
Domestic systemic risk indicator (d-SRI)



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

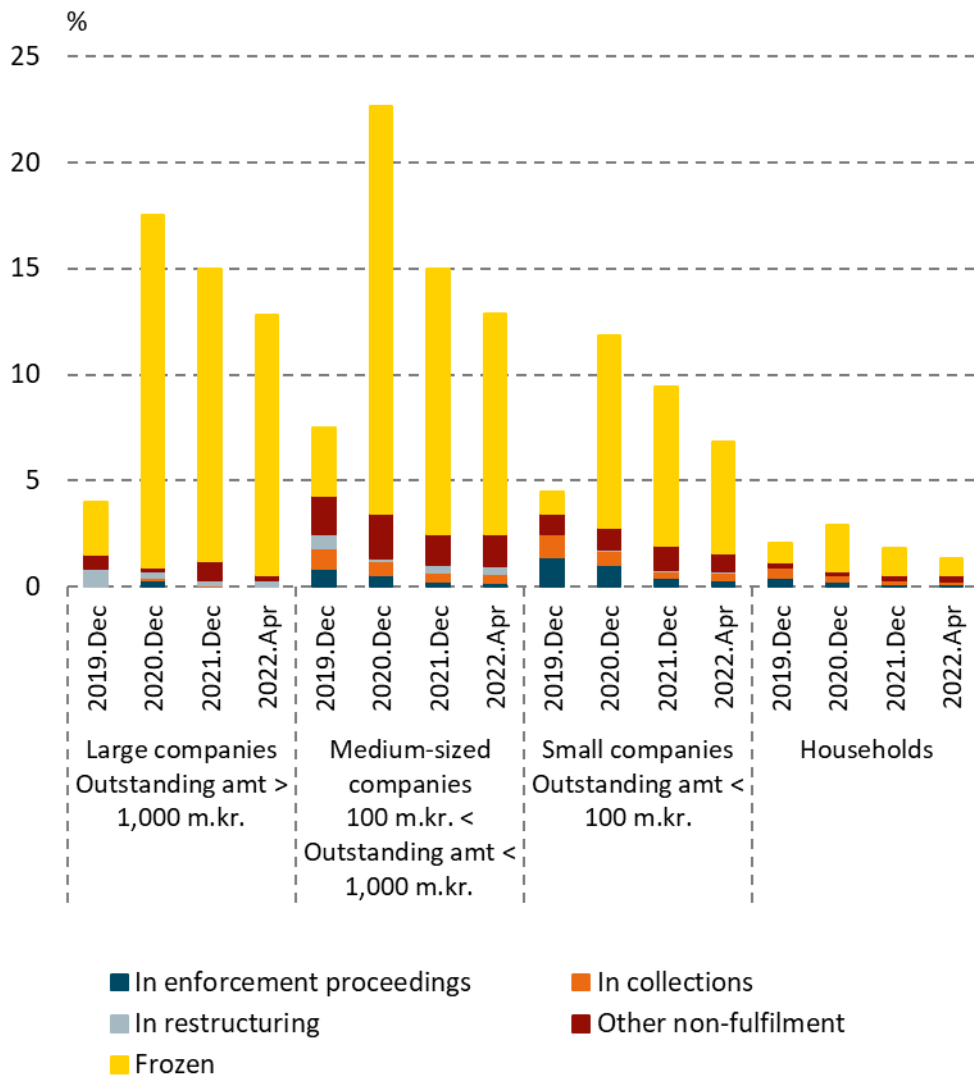
Sources: Statistics Iceland, Central Bank of Iceland..

Current account balance



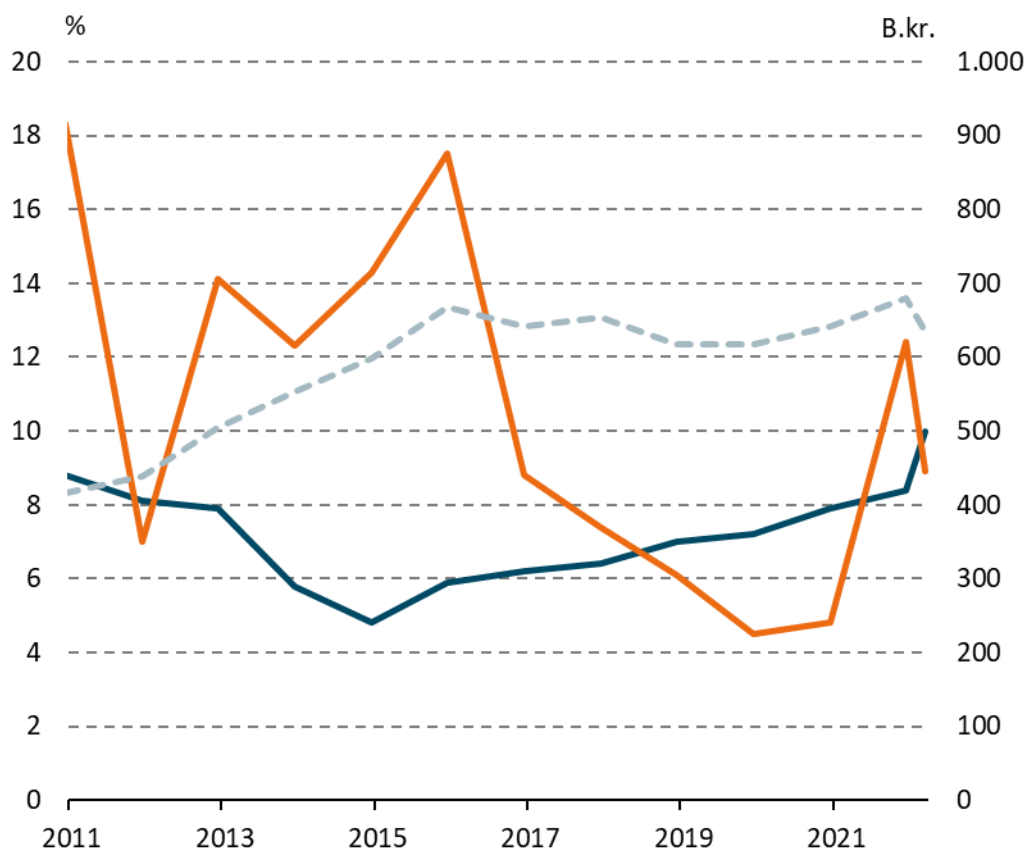
The effects of failed banks on factor income and the balance on services from Q4/2008 to Q4/2016 are ignored. From 2009 through 2012, the effect of Actavis on the balance on income is also ignored, owing to inaccurate data during the period. Secondary income is included in factor income.
Sources: Statistics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

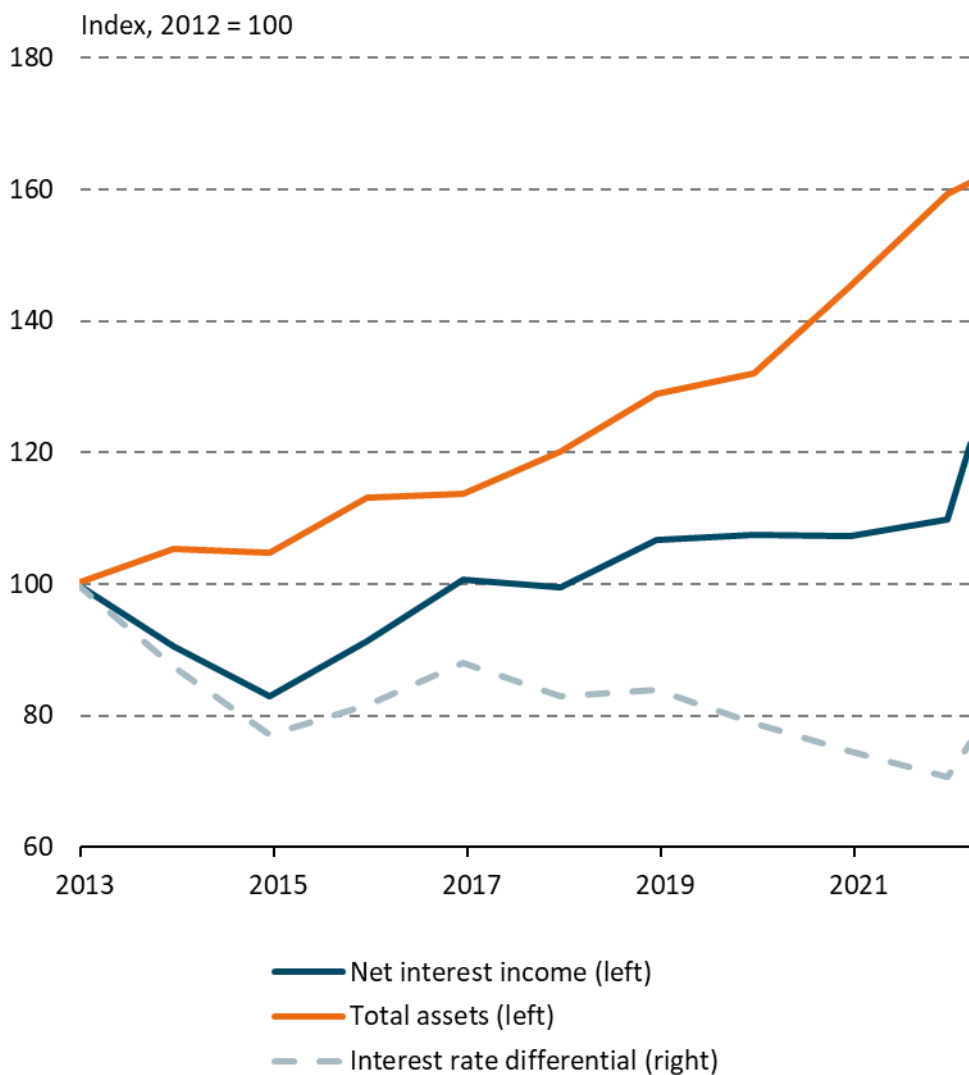


- Return on regular income (left)
- Returns according to financial statements (left)
- - - Equity (right)

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.

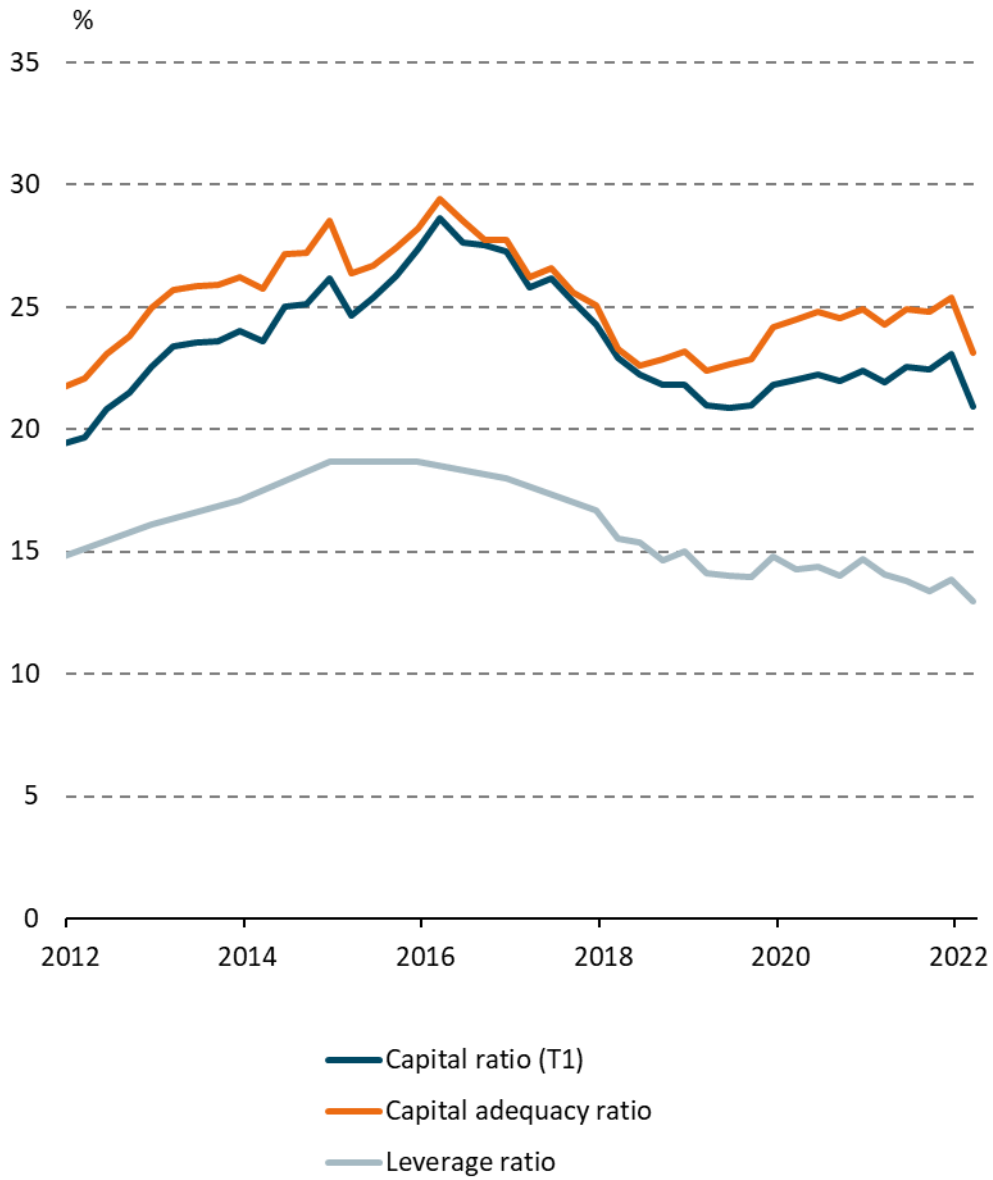
D-SIB: Net interest income, interest expense and interest rate differential



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.