3 December 2021

# 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 in September 2022. The Committee was of the view that the combination of rapidly rising asset prices and increased household debt had raised cyclical systemic risk to at least the level seen in early 2020, before the pandemic began to spread. The CCyB had been lowered to 0% in March 2020, as is described in the FSN statement of 18 March 2020.

Increased capital shores up financial system resilience and better enables the system to withstand financial shocks. Increasing the CCyB creates the scope to lower it again later if systemic risk calls for it. The domestic economy has recovered more rapidly from last year's contraction than forecasts had assumed. It is important 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.[1]

## Private sector debt

Households continue to have ready access to credit. Twelve-month real growth in household debt measured 6.5% at the end of September. Favourable interest rates continue to drive demand for new mortgages, while refinancing of older mortgages debt has eased. The commercial banks have continued to increase their share in the household mortgage market at the expense of other lenders, particularly the ÍL Fund and the pension funds. Debt service-to-income (DSTI) ratios have risen in the recent term, in tandem with rapidly rising house prices and higher interest rates, indicating increased risk, particularly for first-time buyers. First-time buyers' loan-to-value (LTV) ratios have risen as well.

By the end of September 2021, corporate debt had fallen in real terms by 5.5% year-on-year. The appreciation of the króna over that period

[1] See the Central Bank of Iceland's memorandum of 18 March 2020: https://www.sedlabanki.is/library/Skraarsafn/Fjarmalastodugleiki/Minnisblad_sveiflujofnunarauki_18mars2020.pdf

strongly affected corporate debt, more than a third of which is denominated in foreign currencies. In price- and exchange rate-adjusted terms, growth in corporate debt measured 0.1%. New corporate lending has increased marginally in recent months, but demand for business loans still appears to be limited. There have been signs of a stronger shift in corporate lending from the banking system to other lenders, but the scale of non-bank lending is still relatively small.

The facility-level non-performing loan (NPL) ratio on loans to individuals has fallen marginally, measuring 1.3% at the end of September. The share of frozen loans to individuals is falling as well, and about 1.6% of such loans are frozen at present. The NPL ratio on corporate loans has been broadly unchanged in 2021 to date, measuring 4.5% at the end of September. However, 15.1% of corporate loans were frozen (40% in the services sector) at the end of September, although the ratio has been declining gradually since the turn of the year.

## Real estate market

The rise in the capital area house price index continues to accelerate, and at the end of October the year-on-year increase measured 12.1% in real terms. Market turnover has contracted slightly in recent months, however, mainly because of limited supply. House prices have soared relative to underlying determinants such as building costs and rent prices since mid-2020. The ratio of house prices to wages also started to rise in April and has increased somewhat since then.

The rise in house prices over and above their determinants indicates growing 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, can be expected to curtail demand in the housing market. Housing supply is limited, however, and it is unclear when the market will rebalance.

The capital area commercial real estate (CRE) price index rose sharply in Q3, after having held relatively stable in H1/2021.[2] Turnover in the market contracted between quarters but was nevertheless about 129% higher in real terms than in Q3/2020. 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. The firms' cash flows have increased again, after declining in 2020.

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

## The banks

The banks' interest rate spreads narrowed after the Central Bank lowered the key rate in 2020, mainly because they had limited leeway to lower rates on the funding side. Lower interest rates have also led to changes in the composition of the systemically important banks' loan portfolios, and this has tended to narrow their interest rate spreads; i.e., there has been a marked increase in the share of non-indexed mortgages, which generally bear lower real interest than other loans do. The banks' net interest income has held relatively stable in the recent term, however, as growth in the loan portfolio has counterbalanced the smaller interest rate spread. The banks' income from fees and commissions has grown significantly this year, as the banks have worked systematically to bolster it; however, developments in asset markets have been positive as well. 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. But with cost-cutting measures, the banks have managed to strengthen their return on core operations, and their interest rate spreads could widen again as the Central Bank's key rate rises, thereby strengthening the banks even further.

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%. The economy has rebounded more strongly than expected thus far in 2021, and uncertainty about distressed companies' position has receded. As a result, in the first nine months of this year, the banks reversed a portion the impairment entered in 2020, or 0.26% of the loan portfolio.

At the end of September, the systemically important banks' capital ratio was 24.8%, or 0.1 percentage points lower than at the turn of the year. In calculating the capital ratio, the portion of 9m/2021 profit to be paid as a dividend in 2022, or 32.5 b.kr., has been deducted from the capital base. The banks' capital ratios are 6-7 percentage points above the minimum required by the Central Bank. As a result, the banks have ample scope for the increase in the CCyB to 2% as of September 2022.

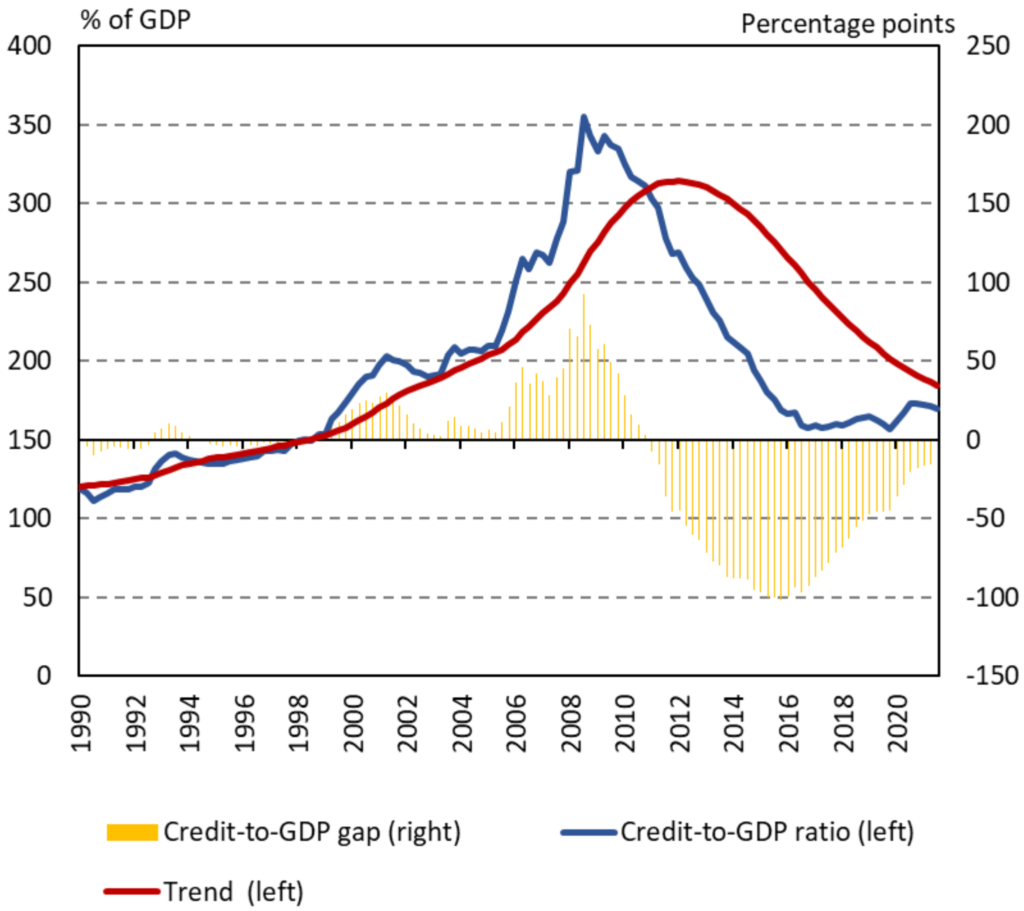
## Overall assessment of cyclical systemic risk

Overall, credit growth in the private sector has been modest in recent quarters, although developments have differed between households and businesses. The debt-to-GDP ratio rose strongly after 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.[3]

Composite indicators that are intended to present a comprehensive view of developments in the financial cycle show signs of an increase in cyclical systemic risk. The statistical presentation of the financial cycle is close to its long-term average, as is the cyclical systemic risk indicator, after rising steadily following the onset of the pandemic.

**Appendix – Charts**

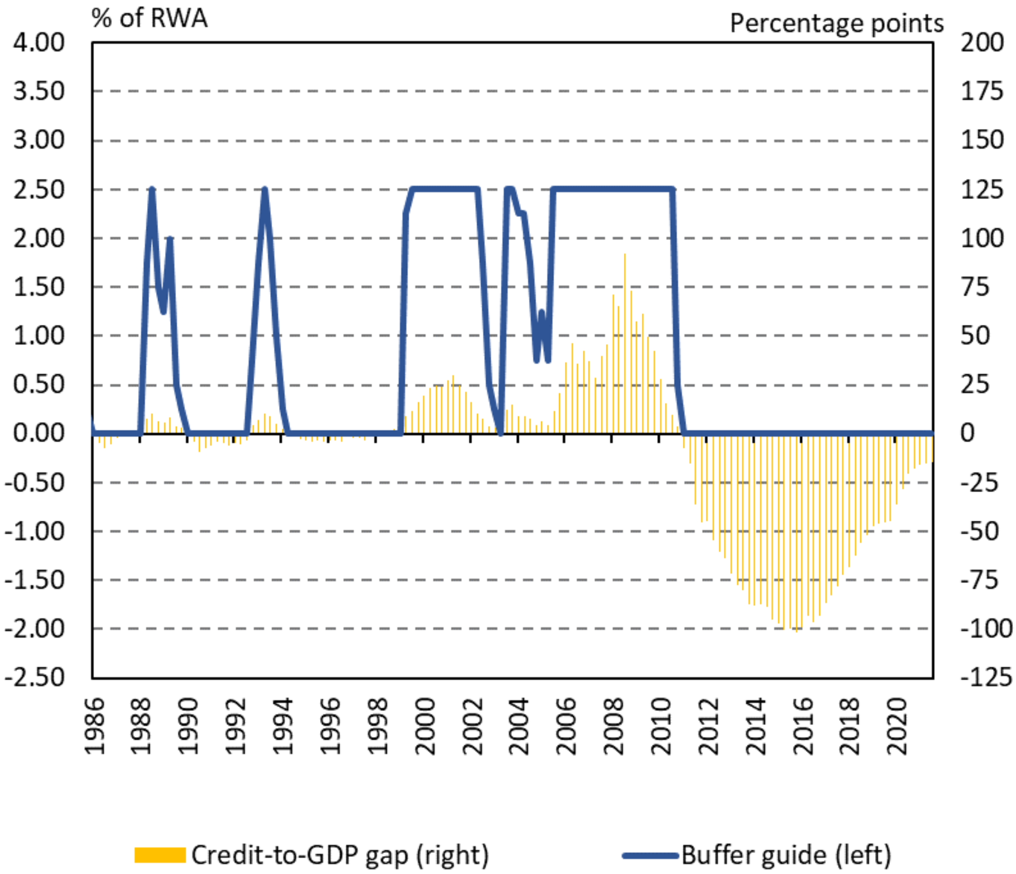
The credit-to-GDP gap




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 λ=400.000.
*Sources*: Statistics Iceland, Central Bank of Iceland.

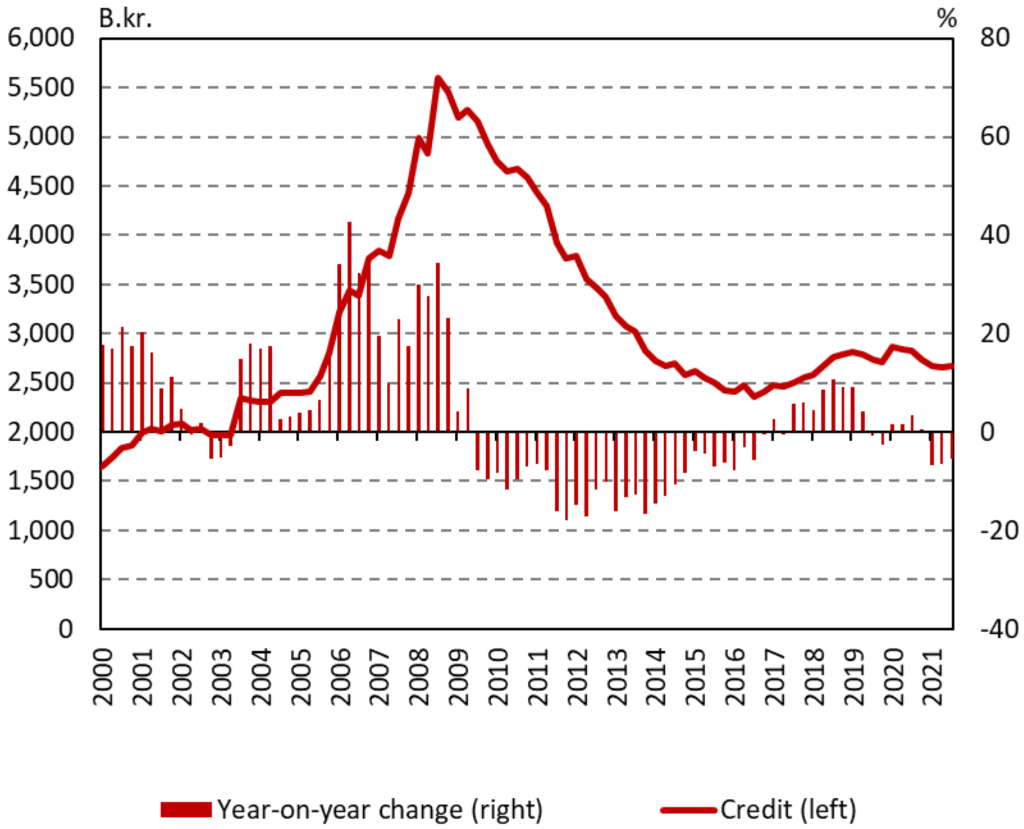
[3] The ratio of private sector debt – i.e., households and non-financial companies – to GDP.

## The buffer guide



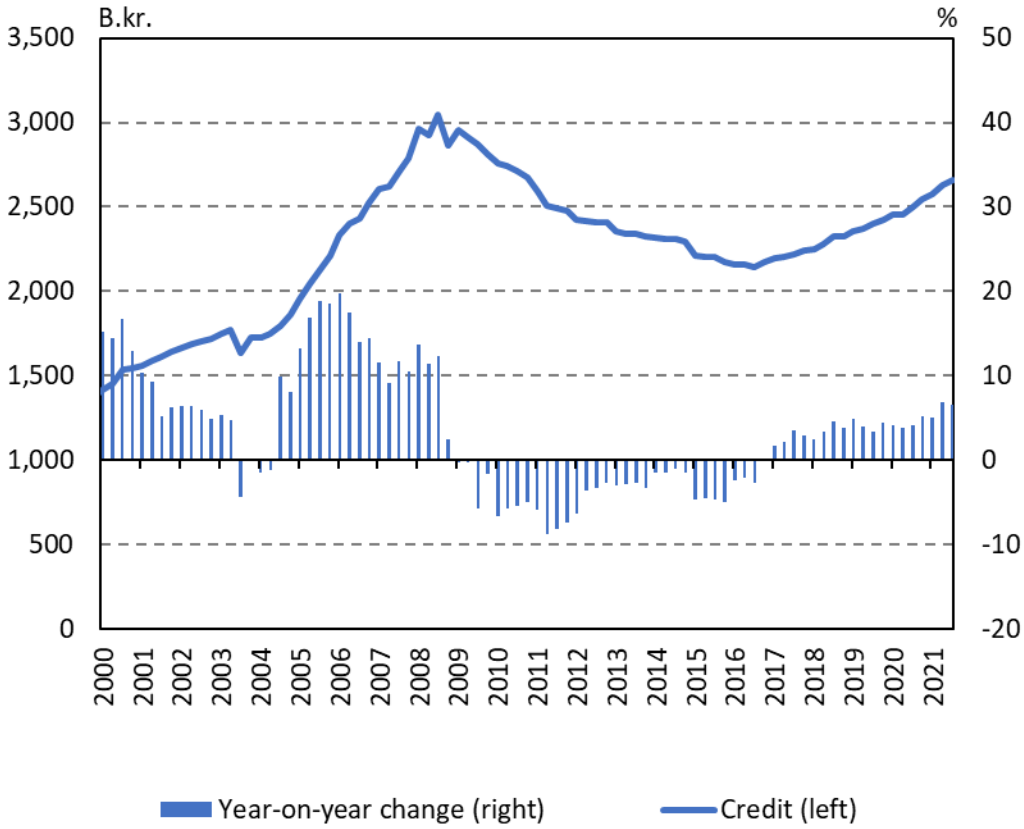

The buffer guide is a simple function of the credit-to-GDP gap, which is the deviation of the credit-to-GDP ratio from its long term trend.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Real corporate credit growth[1]



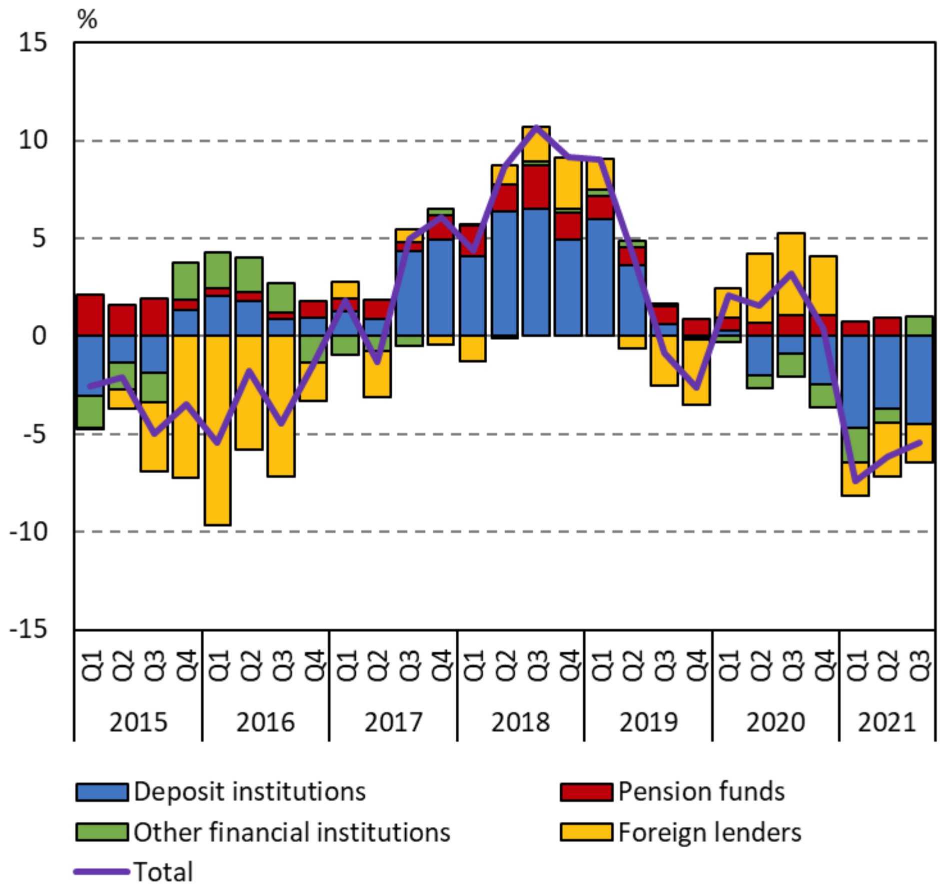

1. Claim value of credit to non-financial firms, at constant prices. Deflated with the consumer price index.
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Real household credit growth[1]




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

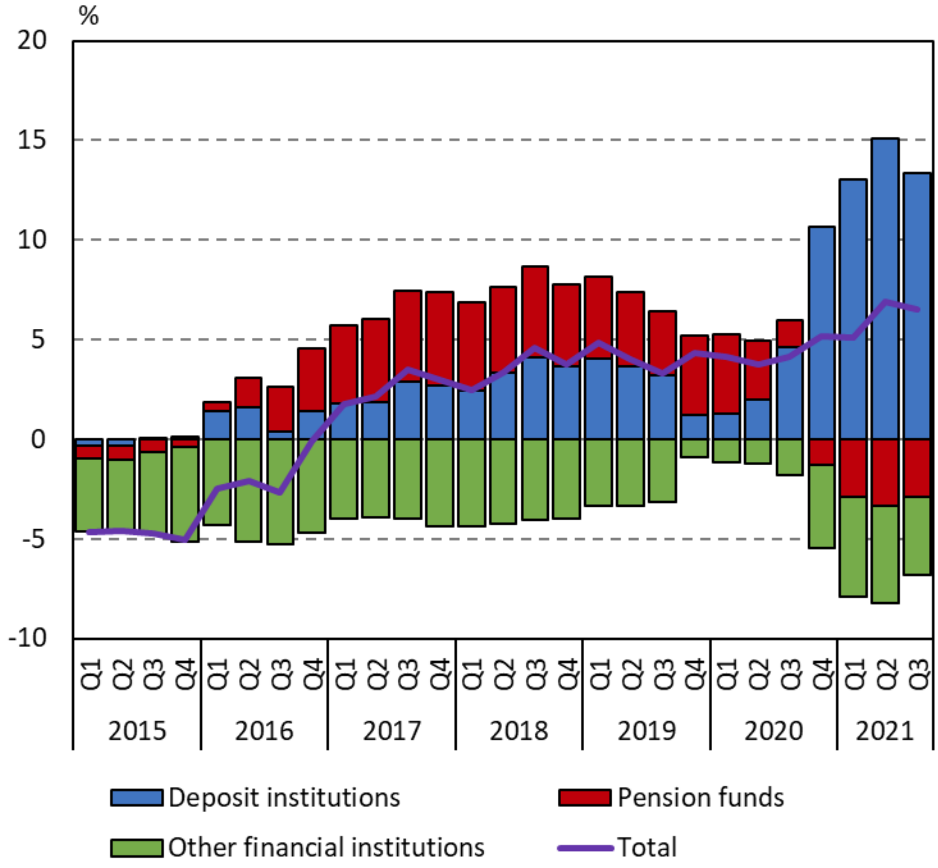
# Corporate debt, by lender[1]




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

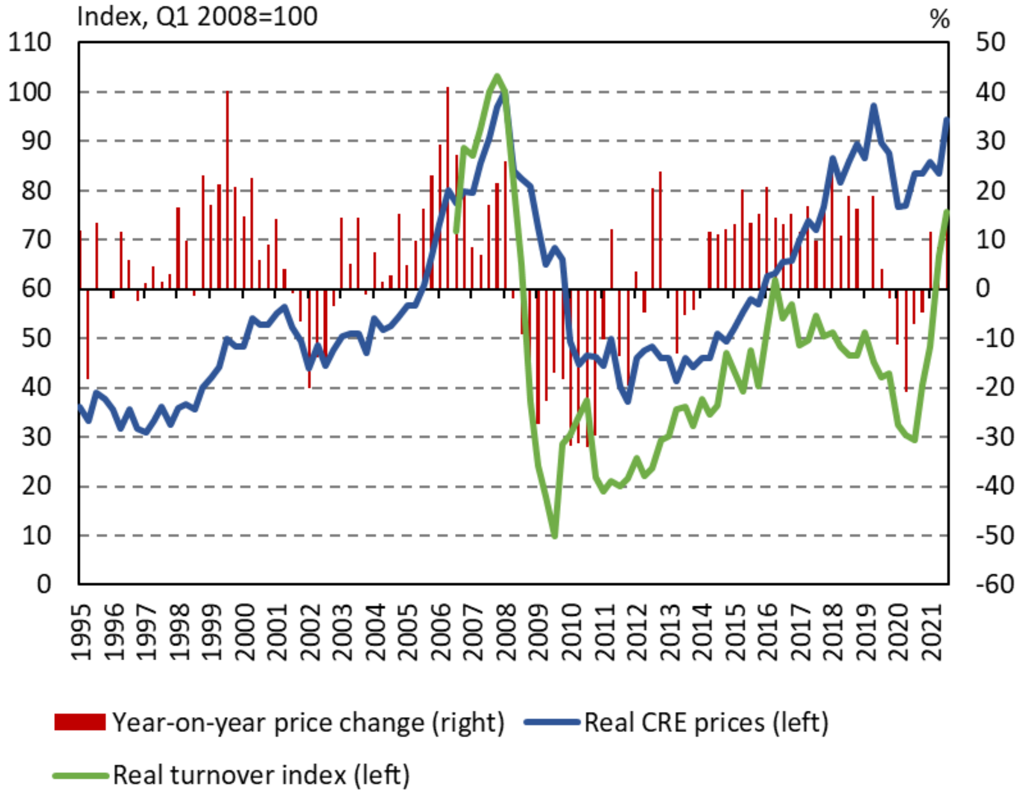
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Household debt, by lender[1]



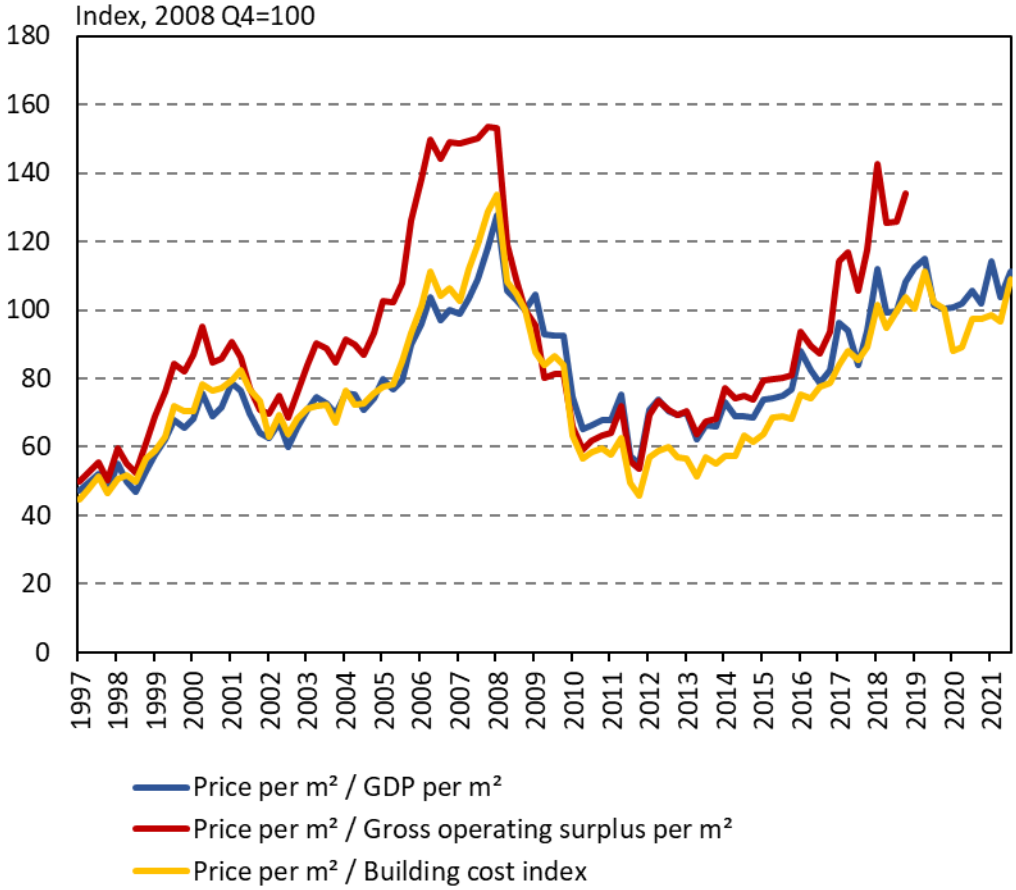

1. Real year-on-year change. Debt to financial institutions and issued marketable bo
*Sources*: Statistics Iceland, Central Bank of Iceland.

## Real commercial property prices[1] and turnover[2] in the capital area



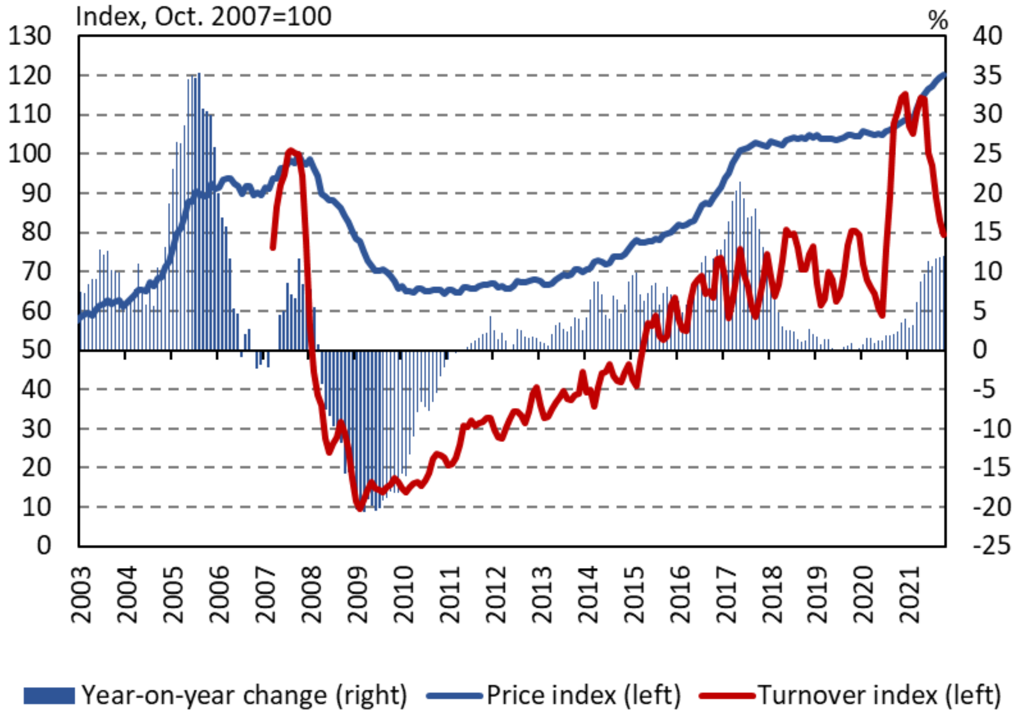

1. CRE price index, deflated with the CPI. The index shows the weighted average pri
of industrial, retail, and office space. 2. The turnover index, deflated with the CPI,
shows a four-quarter moving average. The most recent observations are preliminary
*Sources*: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

## Commercial property price ratios[1,2]




1. Annual data for gross operating surplus are non-linearly interpolated. 2. Annual data for the CRE stock are linearly interpolated.
*Sources*: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

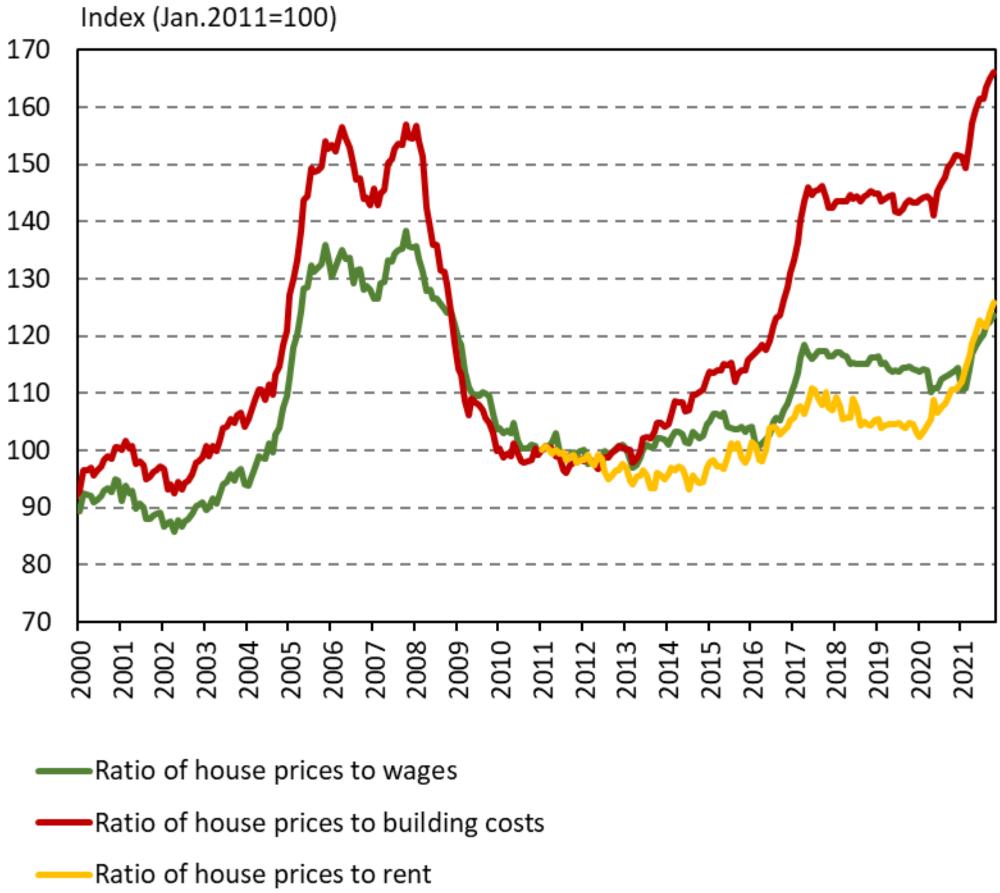
# Real house prices and turnover in the capital area[1]




1. Capital area house price index, deflated with the consumer price index. The 9% threshold is taken from Laina, Nyholm & Sarlin (2015). 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.

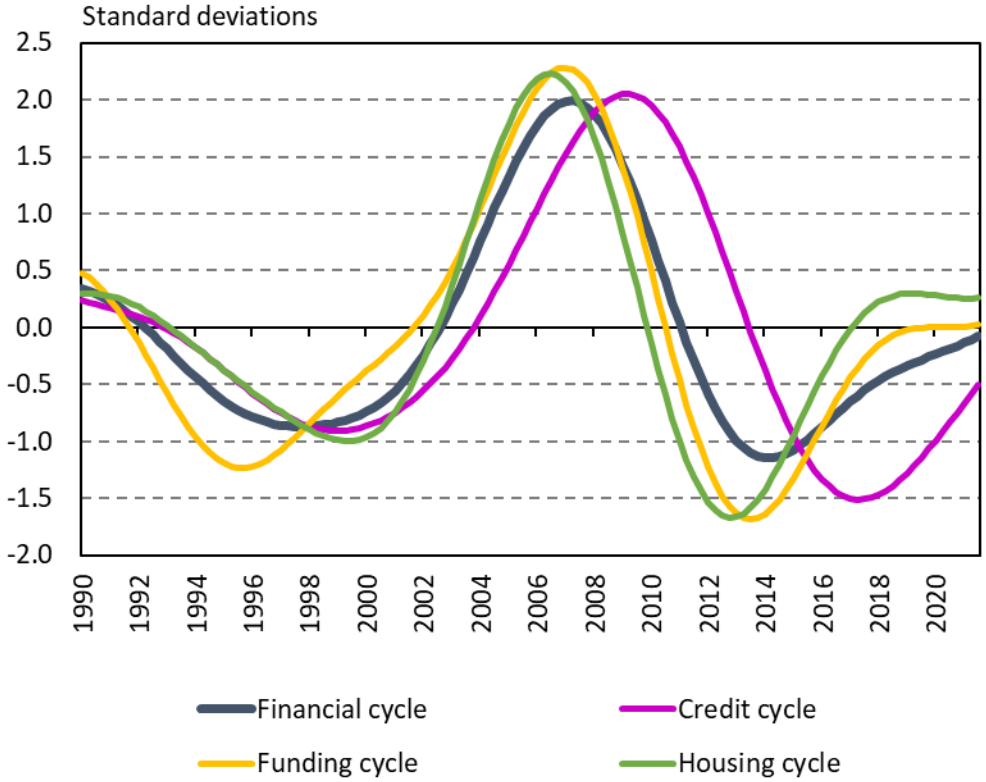
*Sources:* Registers Iceland, Statistics Iceland, Central Bank of Iceland.

# Capital area house prices and their determinants



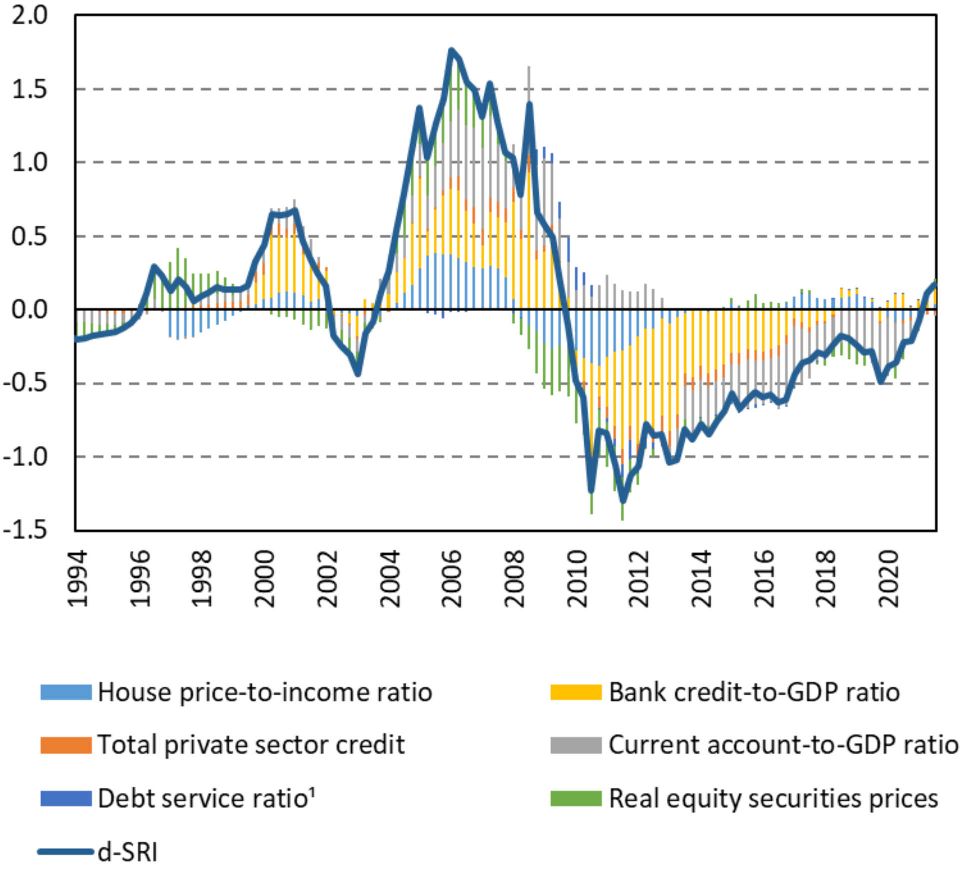

*Sources*: Registers Iceland, Statistics Iceland.

## Financial cycle and subcycles[1]



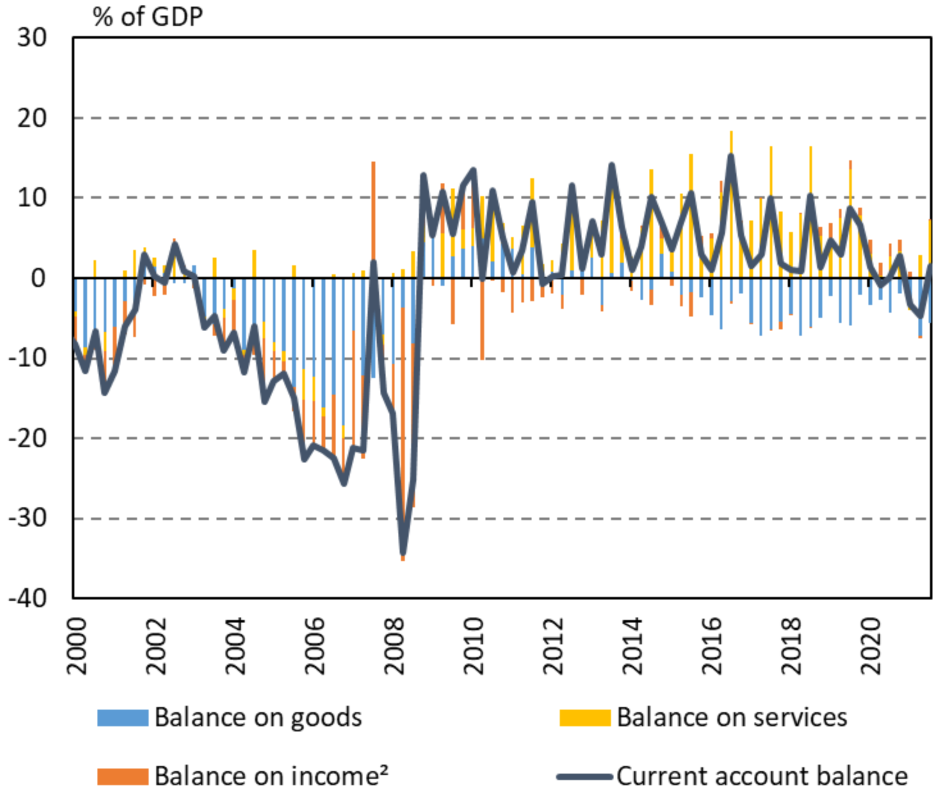

1. The financial cycle itself, the blue line, is the simple average of the subcycles. Each subcycle is the simple average of cyclical components from variables related to credit, housing, and bank funding, respectively. Cyclical components are obtained with a Christiano-Fitzgerald band-pass filter with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

Cyclical systemic risk indicator (d-SRI)



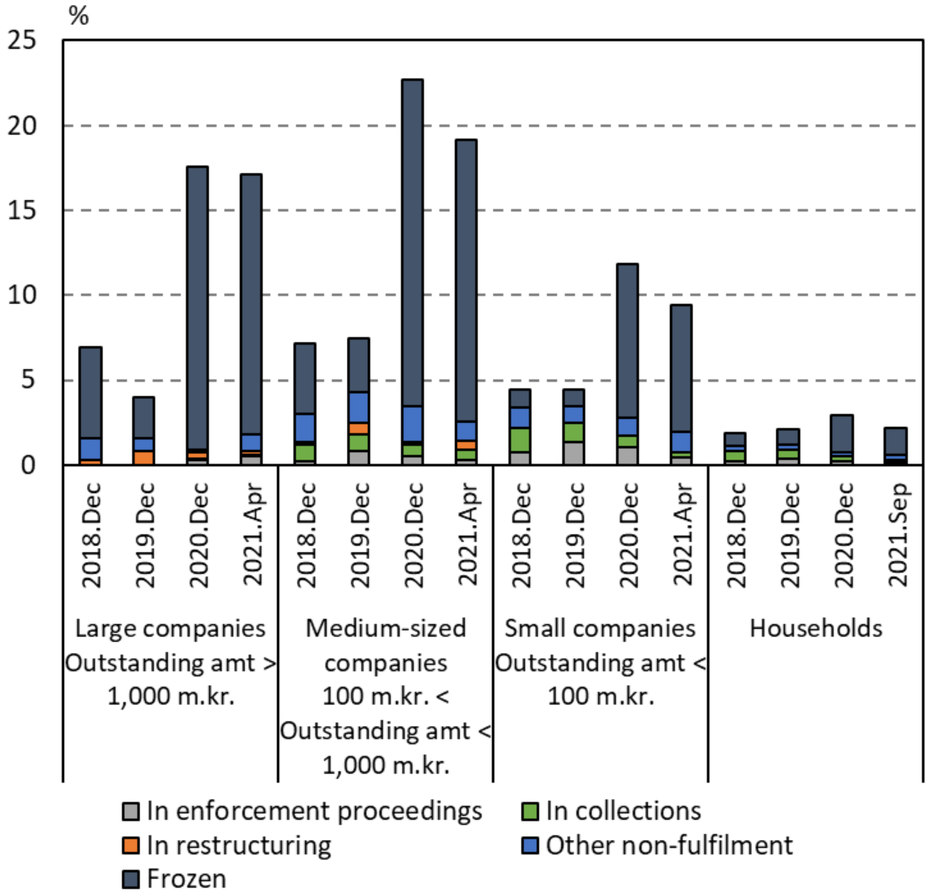

1. Estimates are used for Q1 2020 and onwards.
*Sources*: Statistics Iceland, Central Bank of Iceland.

# Current account balance[1]



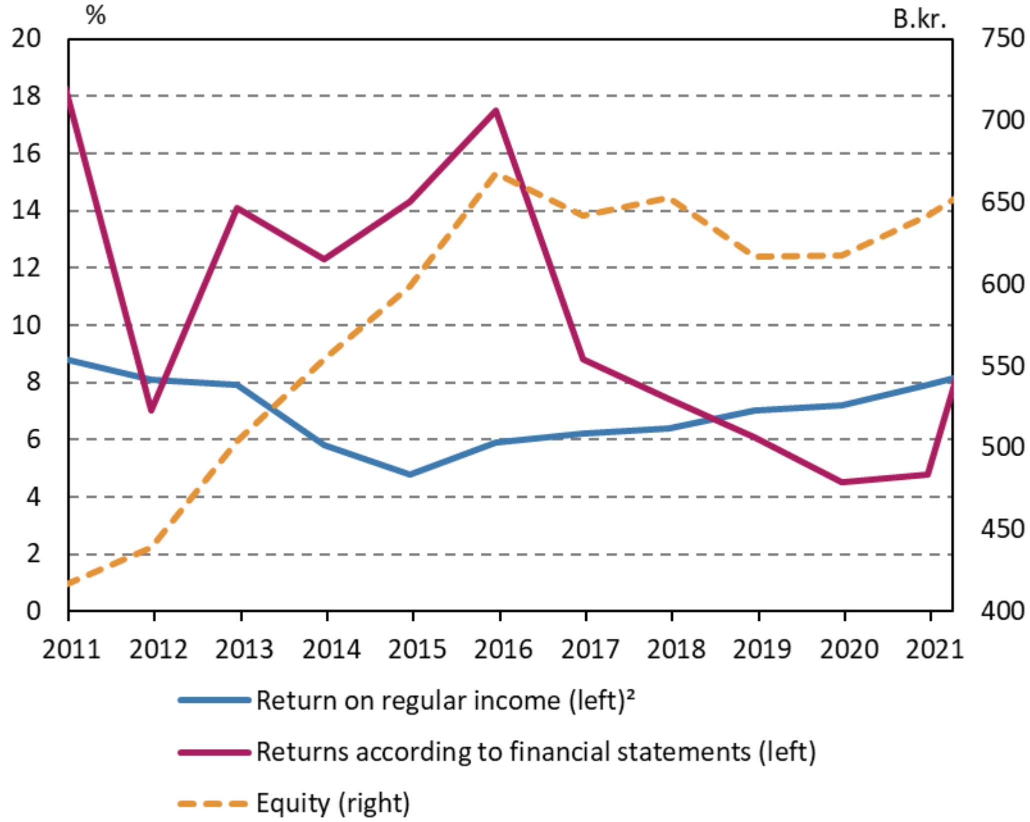

1. The effects of the old banks on factor income and the balance on services from Q4/2008 to Q4/2016 are ignored. From 2009 through 2012, the effect of Actavis on the balance on income is also ignored, owing to inaccurate data during the period.
2. Secondary income is included in factor income.
*Sources*: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

## D-SIB: Status of non-performing loans, by borrower and type of default[1]



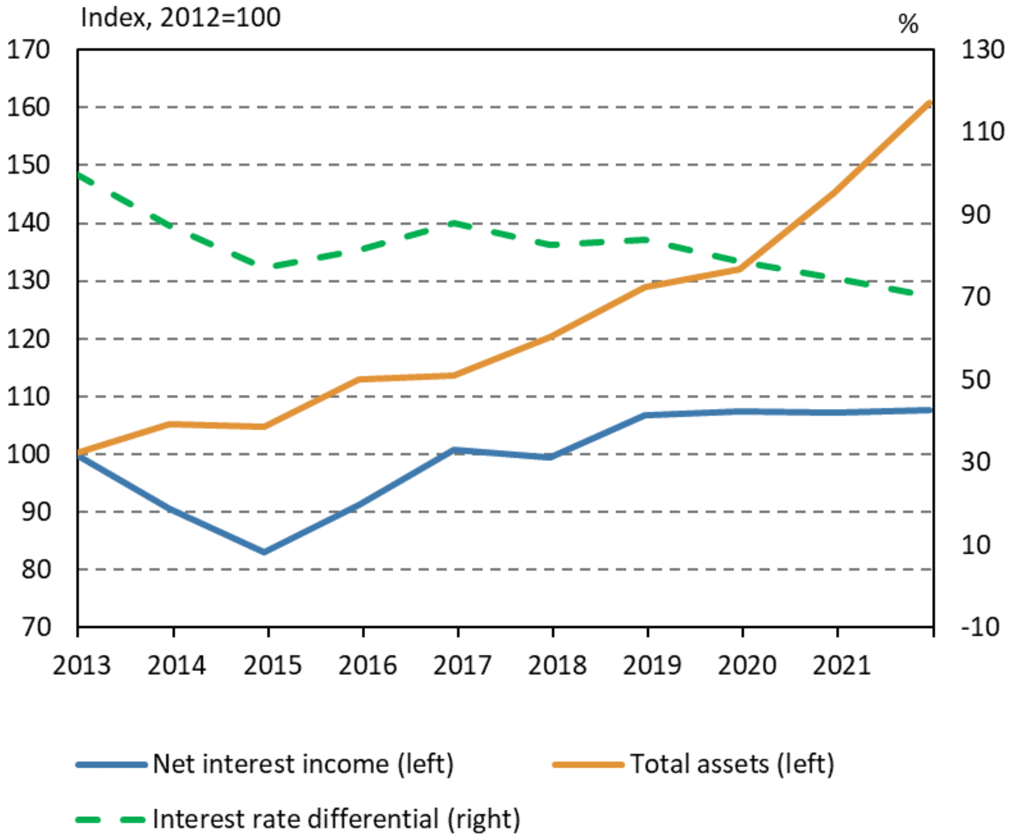

1. Share of non-performing loans to each business size category. Parent companies, book value. D-SIB: Domestic systemically important banks.
*Source*: Central Bank of Iceland.

# D-SIB: Returns[1]



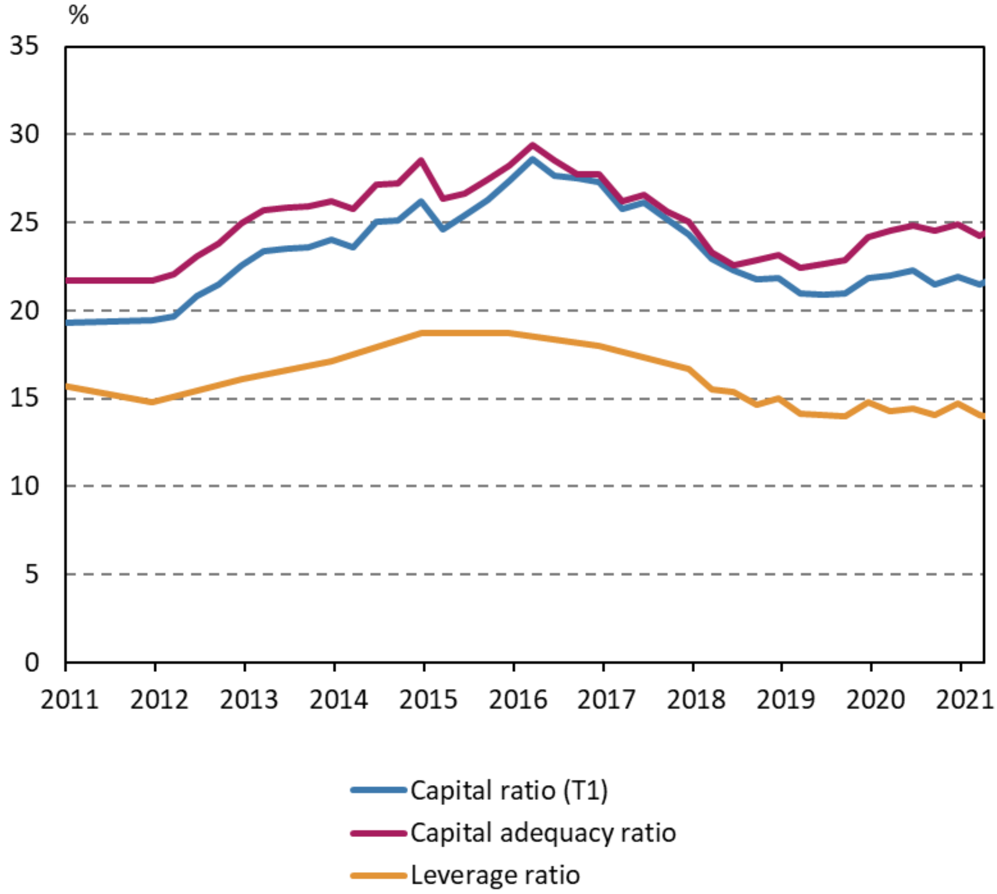

1.Returns are calculated on average equity. Domestic systemically important banks, consolidated figures. 2. The return on regular income is based on net interest incom and fee/commission income net of regular expenses. The tax rate is 20% and is base on average equity. Valitor is excluded in 2017-2020 and Borgun in 2020.
*Sources*: Commercial banks' financial statements.

## D-SIB: Net interest income, interest expense and interest rate differential[1,2]




1. Domestic systematically important banks, consolidated figures. 2. Annualised FNM 2021 data.
*Sources*: Commercial banks' financial statements.

# D-SIB: Capital and leverage ratios[1]




1. Consolidated figures.
*Sources*: Commercial banks' financial statements.