24 March 2021

Memorandum

To: Financial Stability Committee
From: Central Bank of Iceland

Re: Background to the decision on the countercyclical capital buffer

On 18 March 2020, the countercyclical capital buffer was lifted because of the high level of uncertainty about developments in arrears and impairment following the spread of the pandemic in Iceland. It was considered important to mitigate the adverse impact of this on intermediation of credit. With that decision, the commercial banks' scope to maintain lending activity alongside restructuring of loan portfolios increased markedly. It is likely that lifting the countercyclical capital buffer played a role in maintaining households' and many firms' access to credit; for instance, the banks' household lending has grown significantly in recent months.

The Central Bank's actions make the financial system better able to support the economy strongly once the situation improves. It is important to ensure that cyclical systemic risk does not increase unduly – i.e., with excessive credit growth and unsustainable asset price hikes – when the economy begins to recover. It is vital to monitor the financial cycle closely – including asset prices, debt levels, and related variables – and to raise the countercyclical capital buffer again if cyclical systemic risk increases.[1]

Credit market

Firms' debt to domestic financial institutions contracted somewhat in real terms in 2020, while the price- and exchange rate-adjusted credit stock grew marginally because of increased foreign debt and the depreciation of the króna. Over a third of total corporate debt is denominated in foreign currencies; therefore, the depreciation of the króna exaggerates nominal credit growth figures. At the end of 2020, twelve-month real growth in corporate debt measured 0.4%, while price- and exchange rate-adjusted growth measured -1.0%.

Households continue to have ready access to credit. Twelve-month real growth in household debt measured 4.7% at the end of December. Favourable terms on new mortgages have given households an incentive

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[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

to refinance. The commercial banks have increased their share in the household mortgage market at the expense of other lenders, particularly the Housing and Construction Authority's IL Fund. Loan-to-value ratios and debt service ratios on new bank loans have fallen, and indicators of credit quality have generally been positive. Therefore, expanding loan books need not be a sign of increased systemic risk.

Virtually no loans are in pandemic-related moratorium at present. Those loans were not considered non-performing. The ratio of non-performing loans (NPL) to individuals,[2] including frozen loans, rose from 2.1% of total lending at the end of 2019 to 2.9% by end-February 2021. The NPL ratio for corporate loans has risen much more steeply, from 4.8% to 18.3%. It is visibly highest in the tourism sector. Arrears can be expected to increase even further if the economic shock drags on or the recovery is weak.

Real estate market

The capital area house price index continued to rise in early 2021, and by the end of February it had increased by 3.1% in real terms. Market turnover has surged in recent months, and the average time-to-sale for listed properties has grown shorter. Interest rate cuts appear to have buoyed up the market. The ratios of prices to determinants such as construction costs and rent prices have risen since the beginning of 2020 and are high in historical context.[3] At the same time, the ratio of house prices to the wage index has remained unchanged and is closer to its historical average than the other ratios are.

The commercial real estate (CRE) market recovered in H2/2020, after a steep drop in prices in H1. In Q4/2020, the capital area CRE price index [4]had fallen by 4.2% year-on-year, and turnover for the year was down 5% relative to 2019. There is still a significant supply of guest accommodation under construction, but growth in other CRE has been modest in the past year.

Banking market

The banks' credit spreads have narrowed with reductions in the Central Bank's key rate. Because non-indexed sight deposit rates are close to zero in most cases, the banks have little scope to lower their funding

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

[3] This is due in part to the decline in the rent price index from mid-2019 onwards, owing to increased supply, as many flats previously rented to tourists became available in the long-term rental market.

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

costs. Profits on core operations are the banks' first line of defence against falling capital ratios due to loan losses and other shocks to their operations. Low interest rates could therefore undermine financial stability in the long run.

The impairment in the banks' asset portfolios is based on expected credit losses and recoveries. In 2020, the large commercial banks recorded loan impairment ranging from 0.61% to 0.94%. This wide range, which was even wider in H1/2020, is a sign of the high level of uncertainty about near-term economic developments.

It is not clear whether the impact on the banks' capital position has come fully to the fore, but until now it has been insignificant; therefore, the banks' capital position is virtually unchanged since the onset of the pandemic. Because the countercyclical capital buffer has been lowered to 0%, they have even more excess capital than they did at the beginning of 2020.

Overall assessment of cyclical systemic risk

Credit growth in and of itself has been moderate thus far, but risk indicators that place debt in the context of GDP show a significant increase. This could reverse quickly, however, if GDP growth rebounds strongly. As a consequence, the debt ratio, which has risen by 15.5 percentage points between years, does not necessarily give cause for concern when considered in this light, as it is well below its long-term trend.[5]

Composite indicators that are intended to present a comprehensive view of developments do not show clear signs of an increase in cyclical systemic risk. A statistical presentation of the financial cycle suggests a flatter upward curve than during the last three years, when the countercyclical capital buffer was being built up.

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

Appendix – Charts

The credit-to-GDP gap

% of GDP

Percentage points

Credit-to-GDP gap (right) ——Credit-to-GDP ratio (left) ——Trend (left)
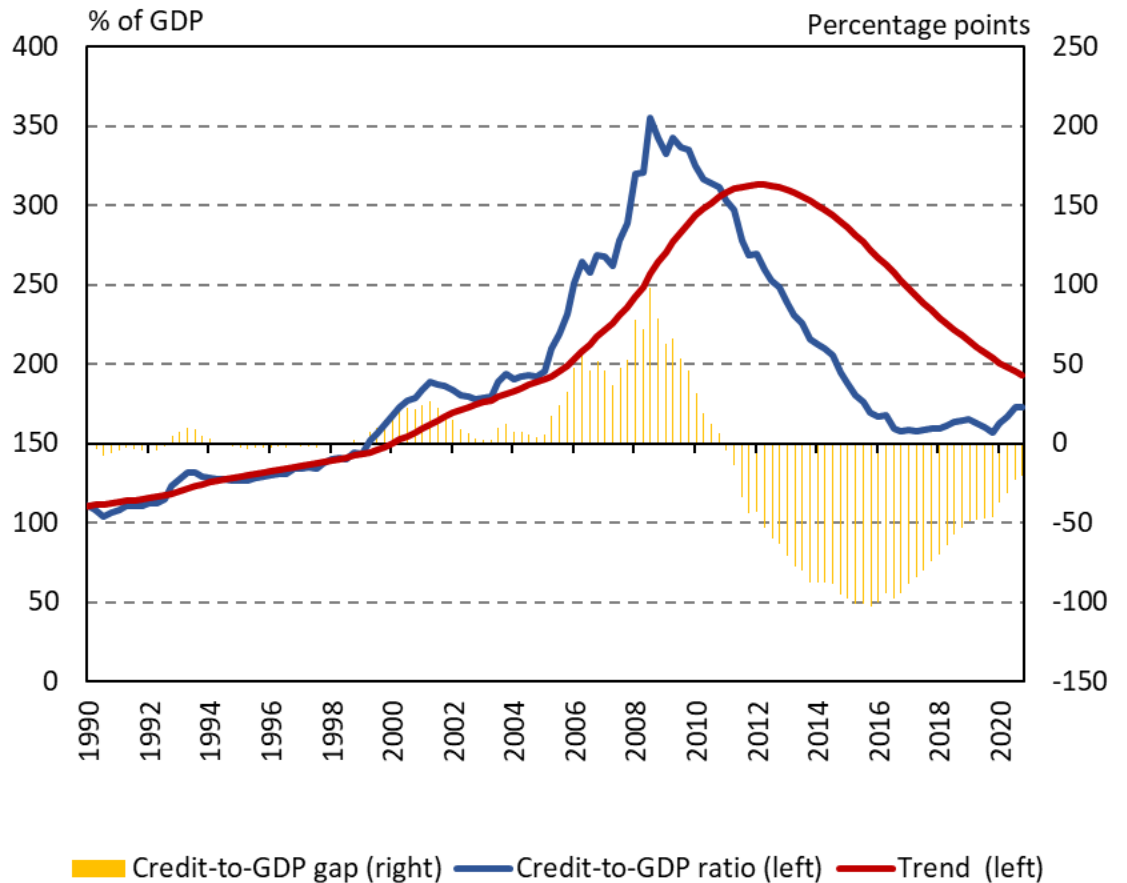
Claim value of total credit to households and firms as a share of GDP. The trend component is obtained with a one-sided HP-filter with λ=400.000.
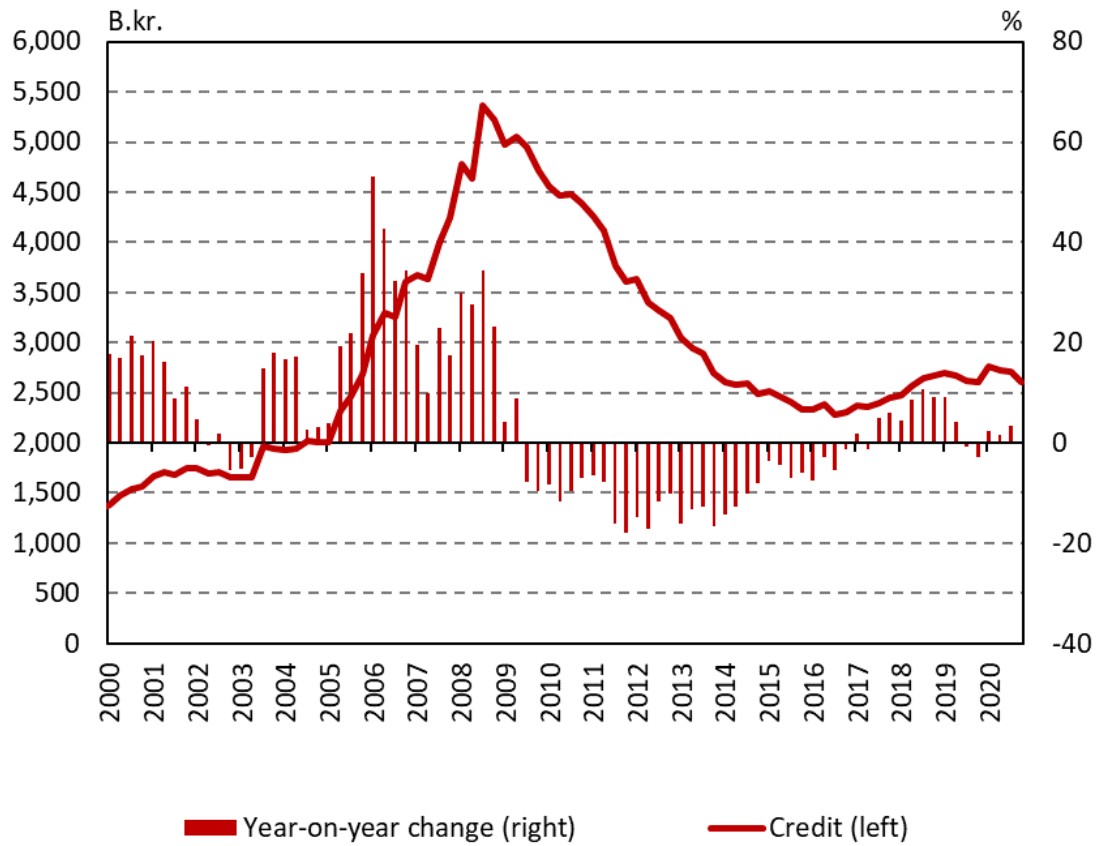*Sources*: Statistics Iceland, Central Bank of Iceland.

The buffer guide

% of RWA   Percentage points

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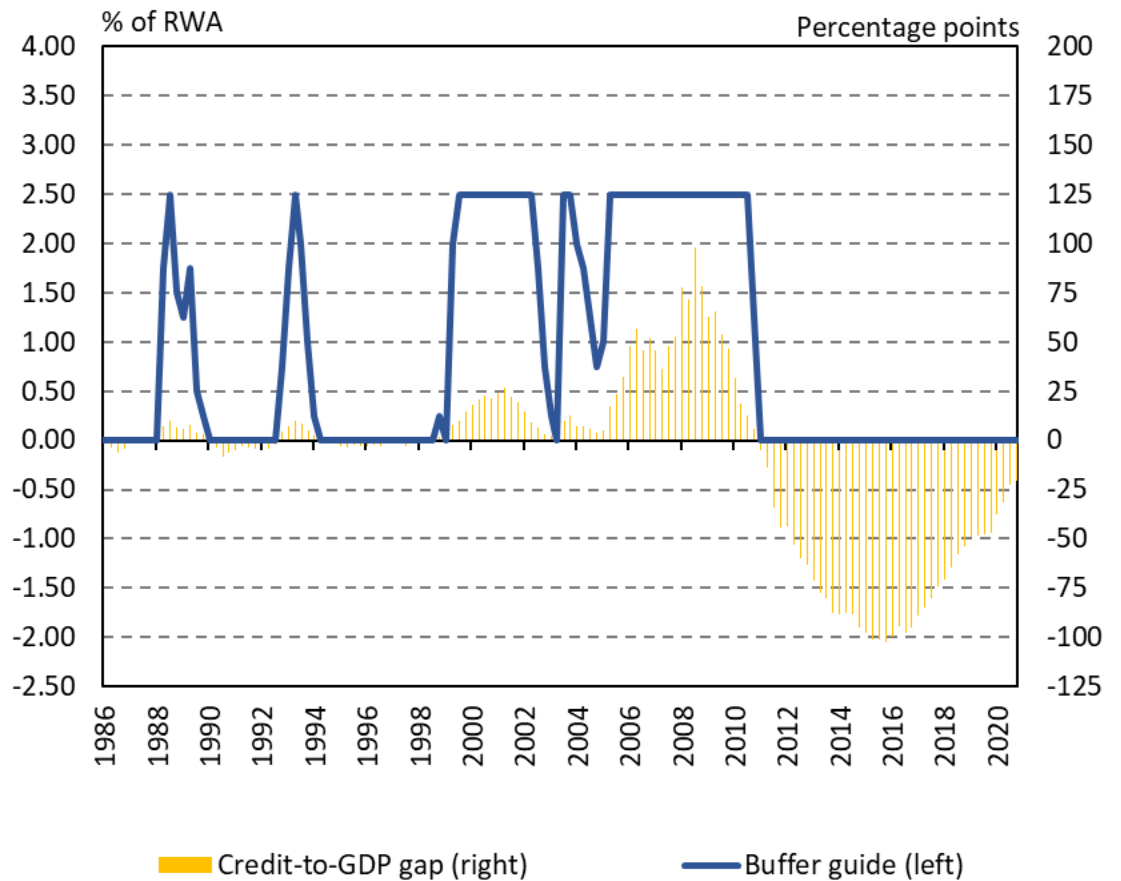
The buffer guide is a simple function of the credit-to-GDP gap, which is the deviation of the credit-to-GDP ratio from its long-term trend.
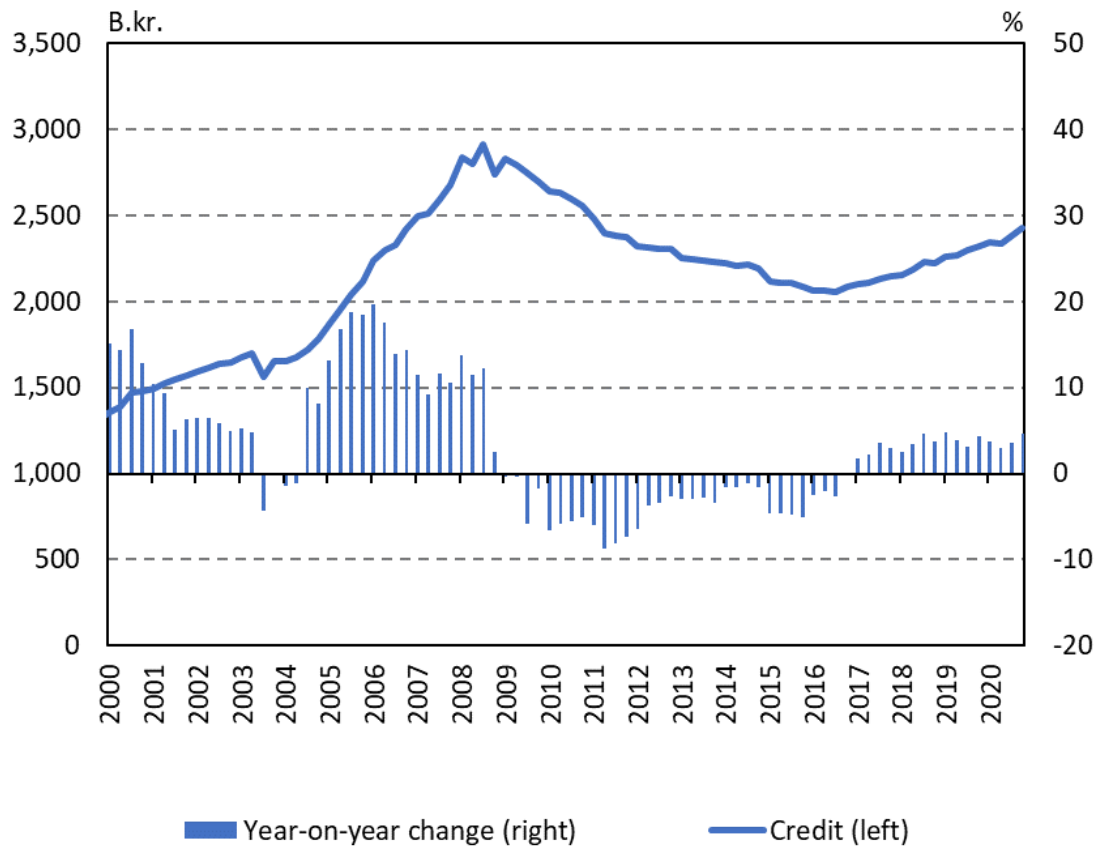*Sources*: Statistics Iceland, Central Bank of Iceland.

Real corporate credit growth[1]

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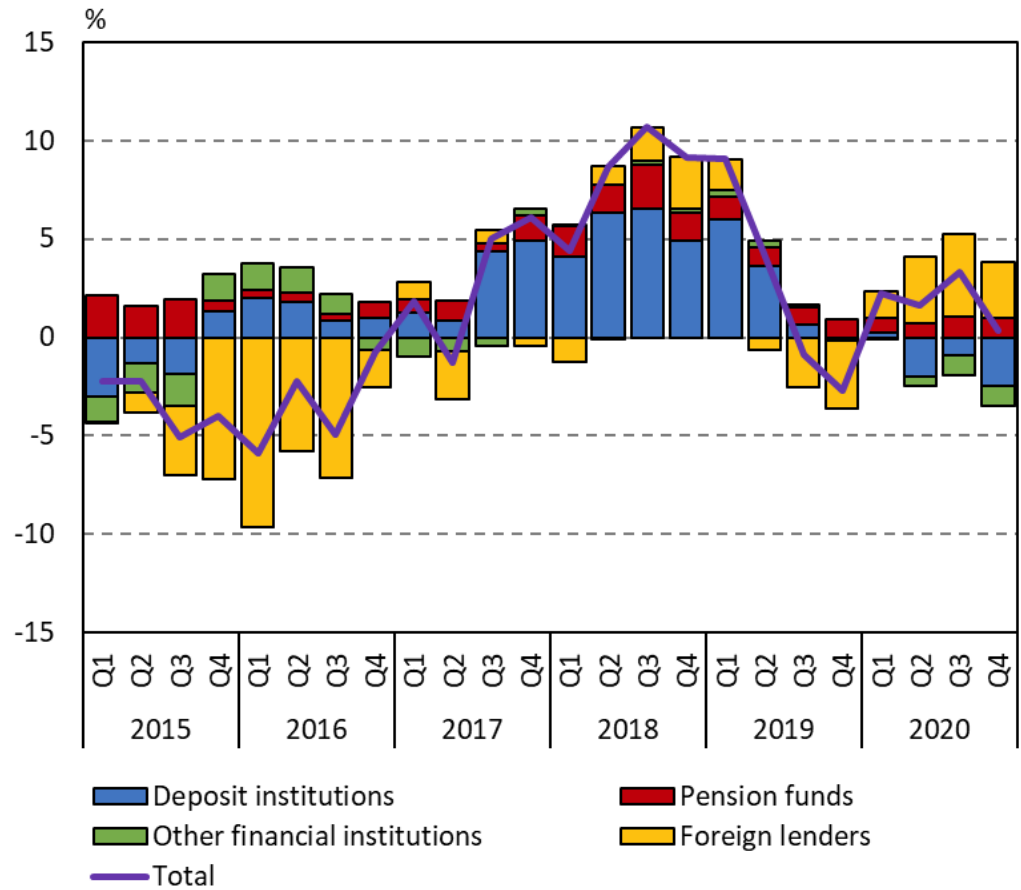*Sources*: Statistics Iceland, Central Bank of Iceland.

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.

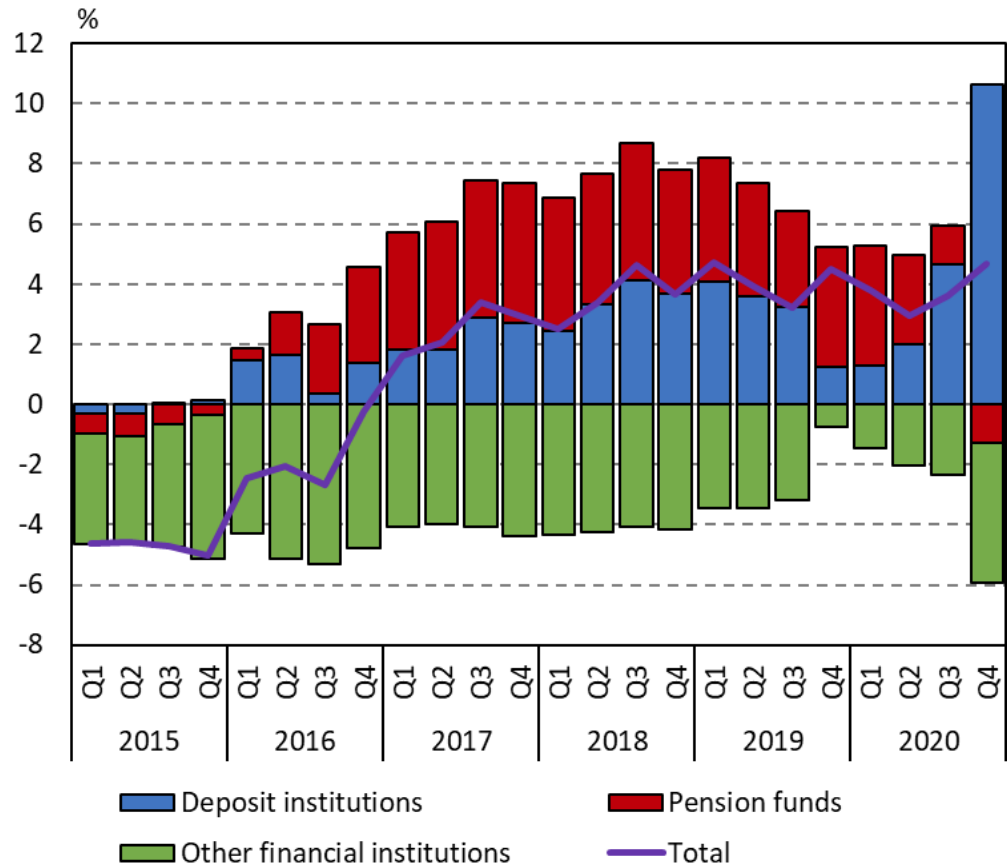# Corporate debt, by lender[1]

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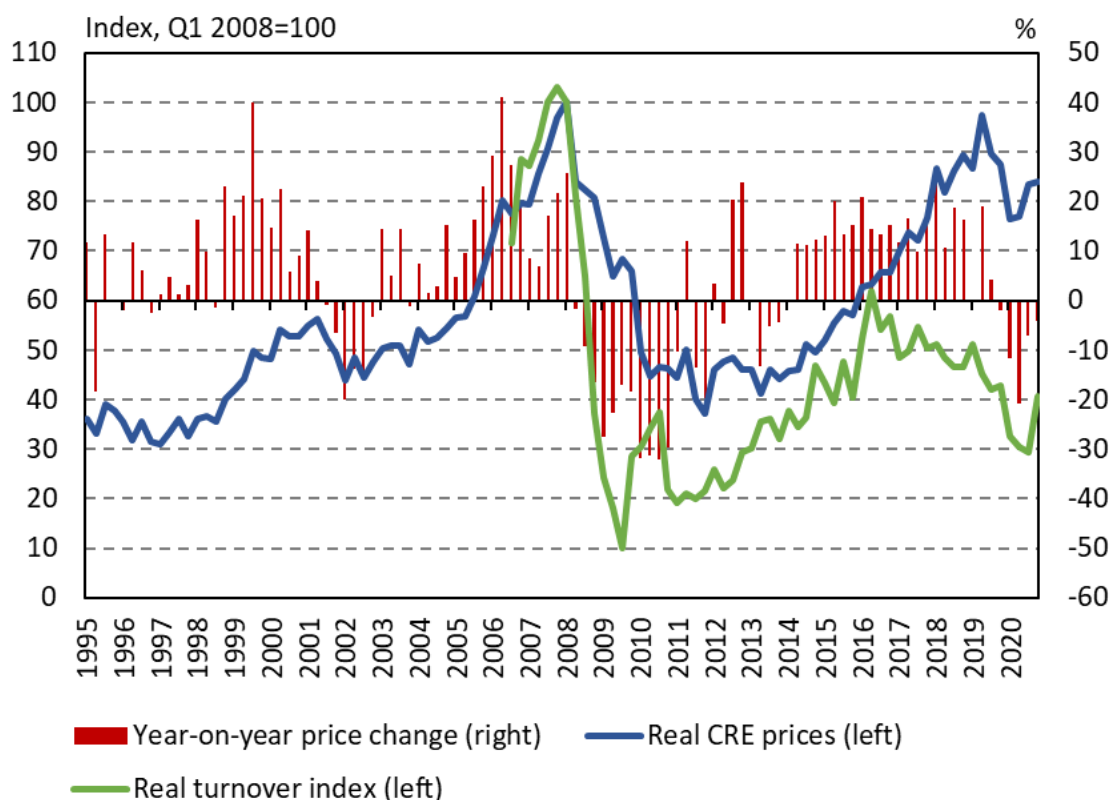*Sources*: Statistics Iceland, Central Bank of Iceland.

Household debt, by lender[1]

Legend:
- Deposit institutions (blue)
- Pension funds (red)
- Other financial institutions (green)
- Total (purple line)

X-axis: Q1 Q2 Q3 Q4 for 2015, 2016, 2017, 2018, 2019, 2020

Y-axis: % from -8 to 12

1. Real year-on-year change. Debt to financial institutions and issued marketable bonds. The data through Q4/2020 are affected by the HFF's Q4/2019 purchase of a 50 b.kr. loan portfolio from Arion bank.
*Sources*: Statistics Iceland, Central Bank of Iceland.

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

Index, Q1 2008=100   %

Legend:
- ■ Year-on-year price change (right)
- ── Real CRE prices (left)
- ── Real turnover index (left)

1. CRE price index, deflated with the CPI. The index shows the weighted average price 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.
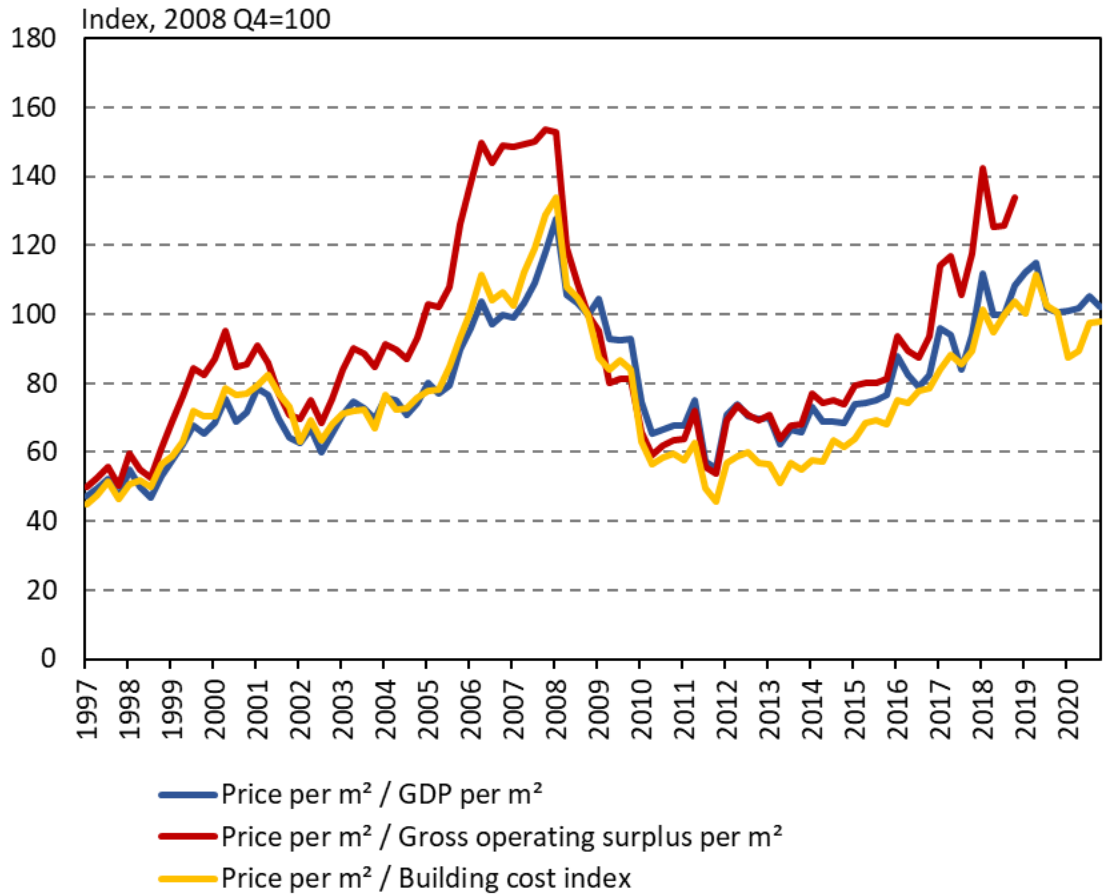
Real house prices and turnover in the capital area[1]

Legend: Year-on-year change (right) — Price index (left) — Turnover index (left)

Index, Oct. 2007=100

%
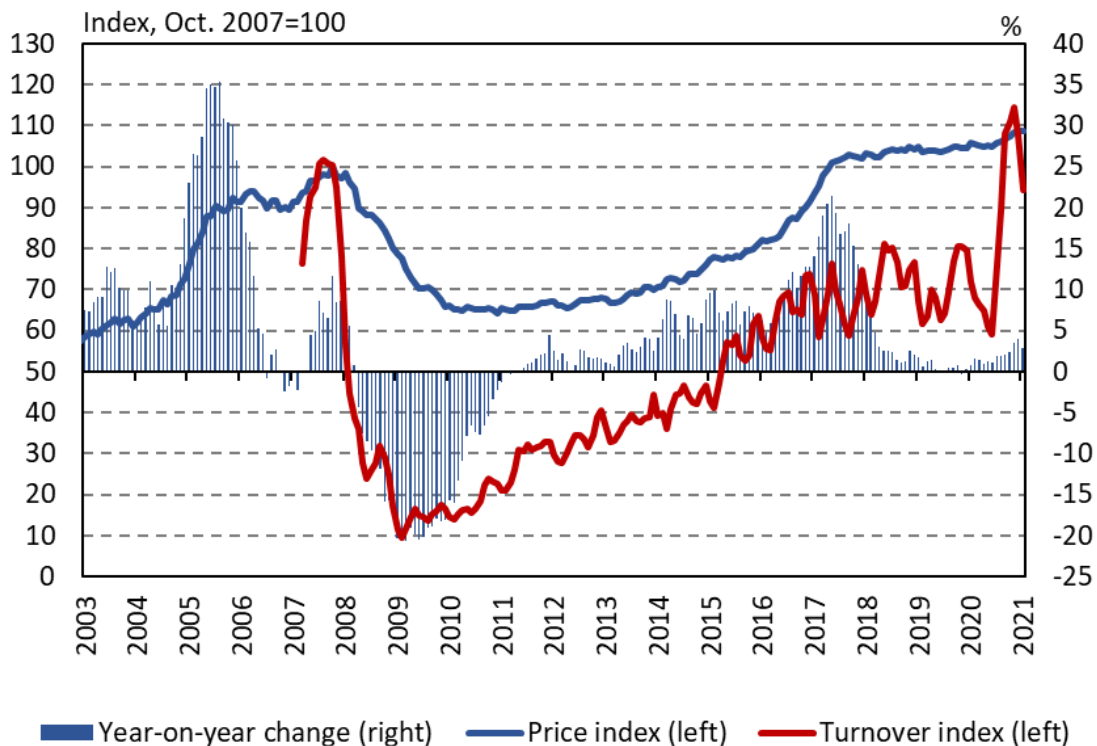
1. Capital area house price index, deflated with the consumer price index. The 9% threshold is taken from Laina, Nyholm & Sarlin (2015). The turnover index shows three-month average turnover, deflated with the consumer price index. The turnover data are linearly interpolated in 2Q/2015 to correct for a strike at the Reykjavík Commissioner's office.
Sources: Registers Iceland, Statistics Iceland, Central Bank of Iceland.
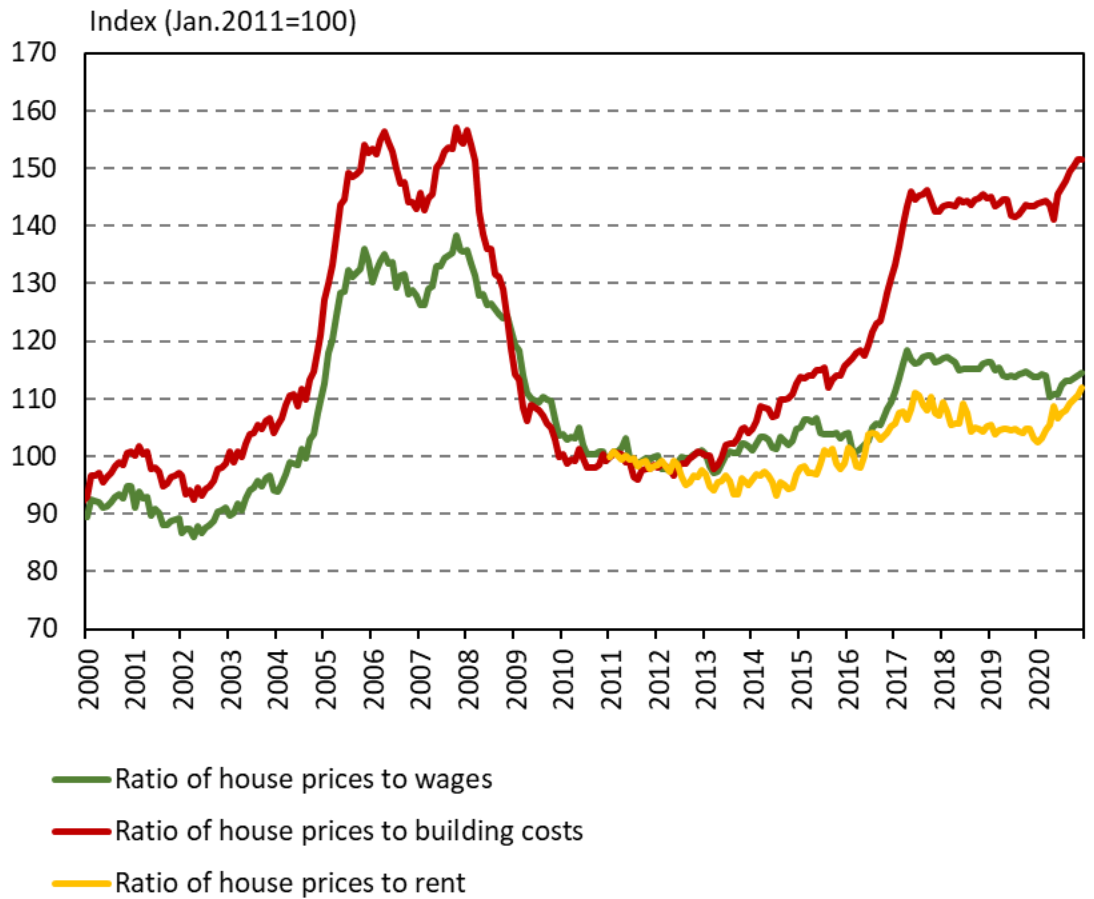
Commercial property price ratios[1,2]

Index, 2008 Q4=100

- Price per m² / GDP per m²
- Price per m² / Gross operating surplus per m²
- Price per m² / Building cost index

1. Annual data for gross operating surplus are non-linearly interpolated. 2. Annual data for the CRE stock are linearly interpolated.
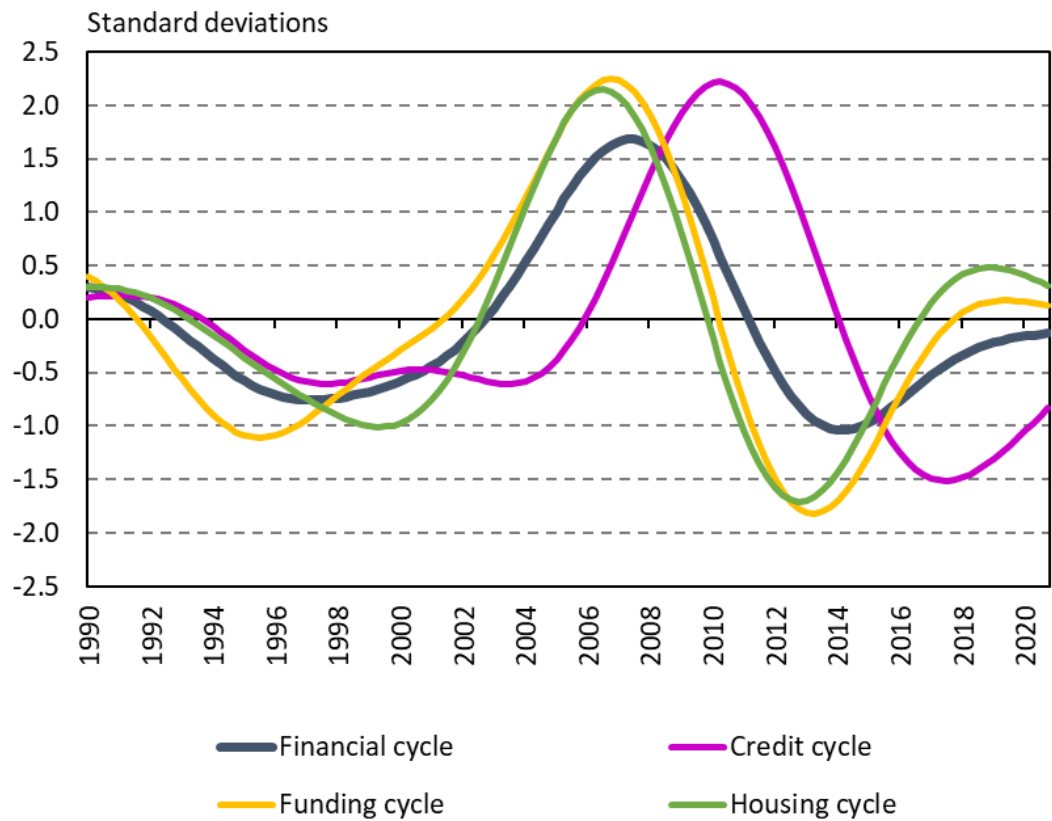*Sources*: Registers Iceland, Statistics Iceland, Central Bank of Iceland.
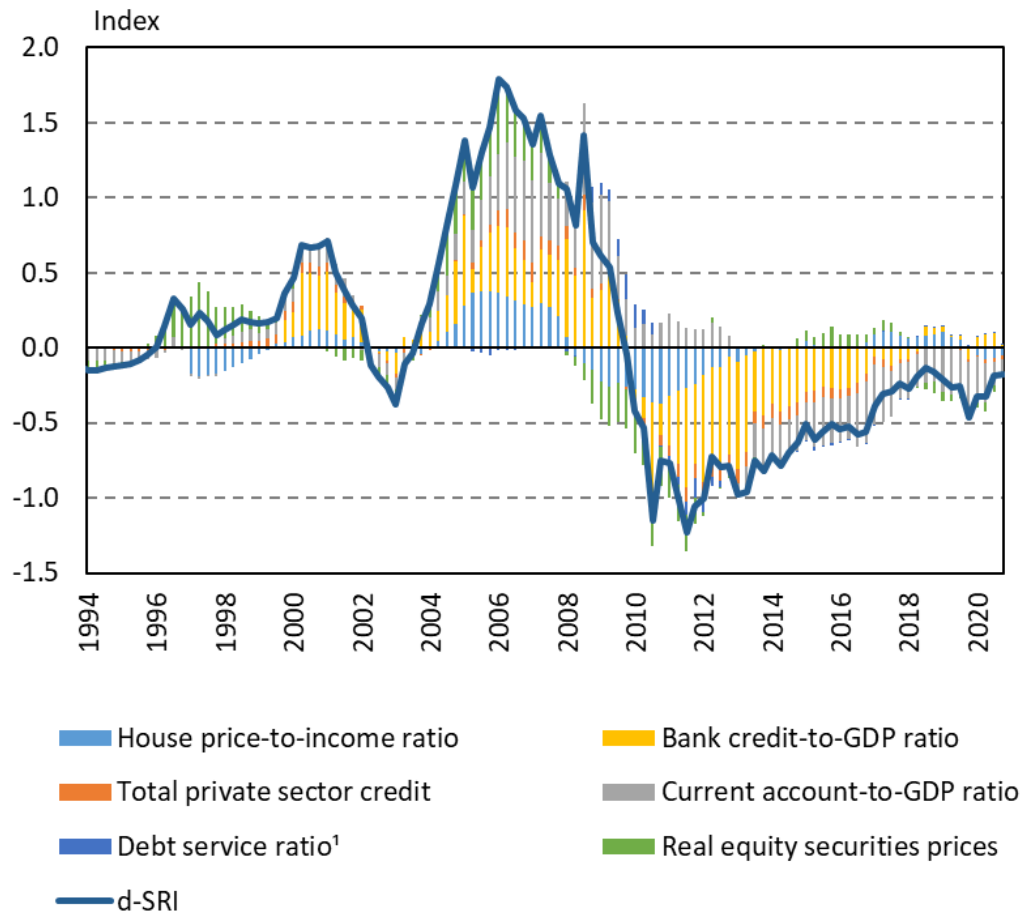
Capital area house prices and their determinants

Index (Jan.2011=100)

- ── Ratio of house prices to wages
- ── Ratio of house prices to building costs
- ── Ratio of house prices to rent

Sources: Registers Iceland, Statistics Iceland.

Financial cycle and subcycles[1]

Standard deviations

- Financial cycle
- Credit cycle
- Funding cycle
- Housing cycle

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)

Index

Legend:
- House price-to-income ratio
- Total private sector credit
- Debt service ratio[1]
- d-SRI
- Bank credit-to-GDP ratio
- Current account-to-GDP ratio
- Real equity securities prices

1. Estimates are used for 2020.
Sources: Statistics Iceland, Central Bank of Iceland.

Current account balance[1]

% of GDP

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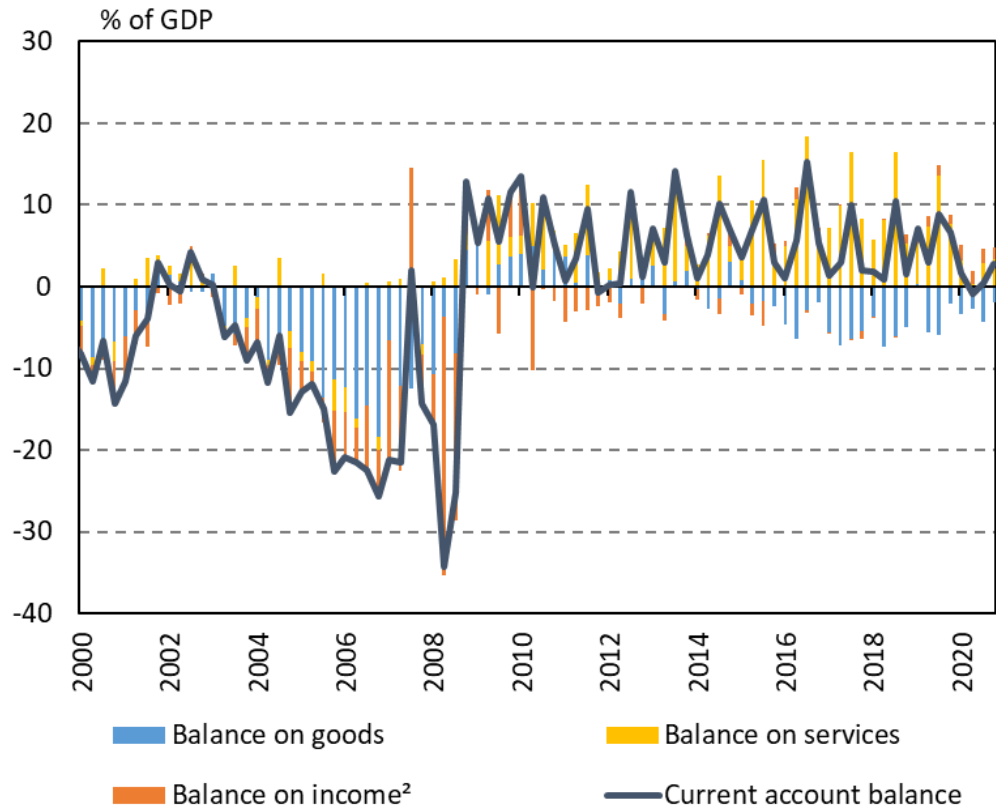
1. The effects of the old banks on factor income and the balance on services from Q4/2008 to Q4/2016 are ignored. From 2009 through 2012, the effect of Actavis on the balance on income is also ignored, owing to inaccurate data during the period.
2. Secondary income is included in factor income.
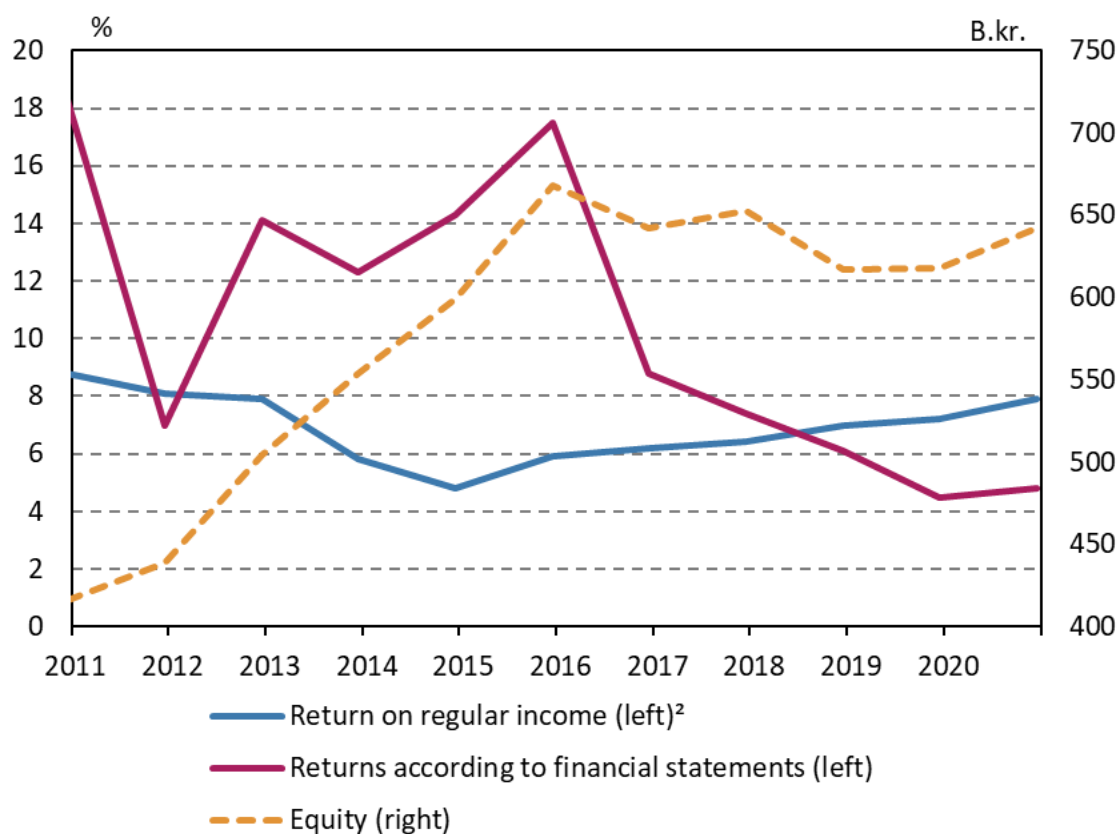*Sources*: Statistics Iceland, Central Bank of Iceland.

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

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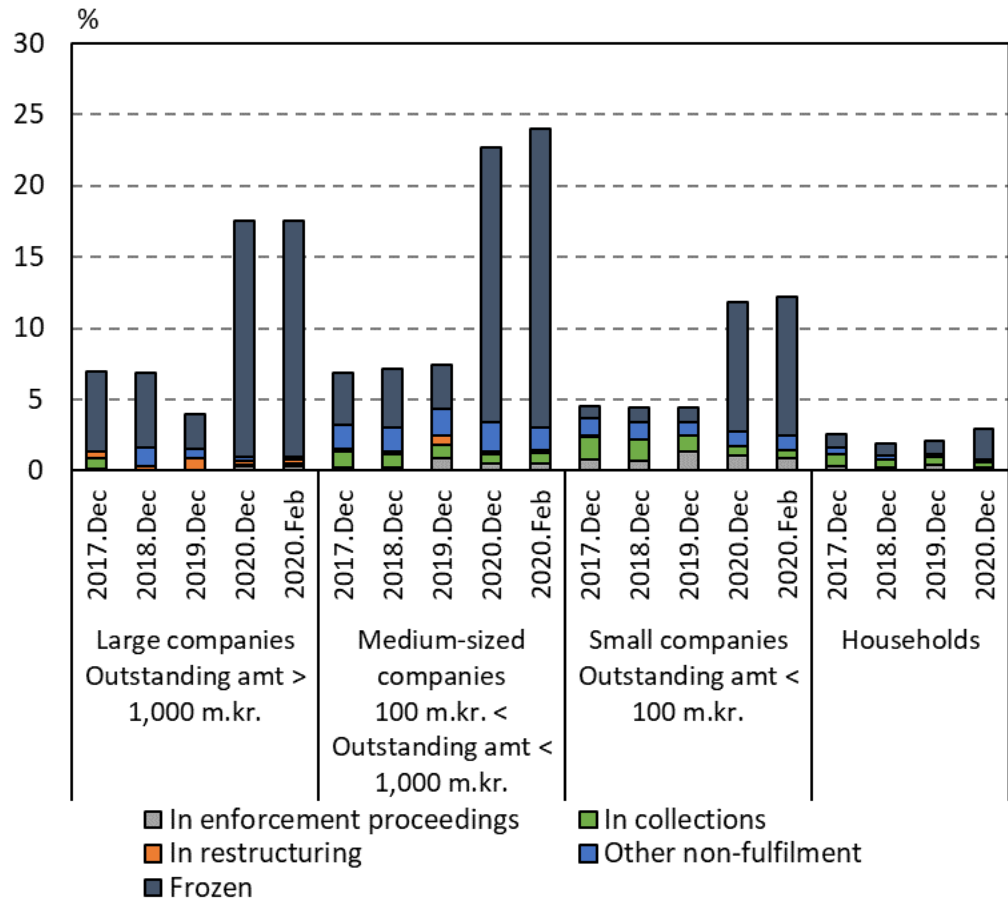
1. Share of non-performing loans to each business size category. Parent companies, book value. D-SIB: Domestic systemically important banks.
*Source*: Central Bank of Iceland.

D-SIB: Returns[1]

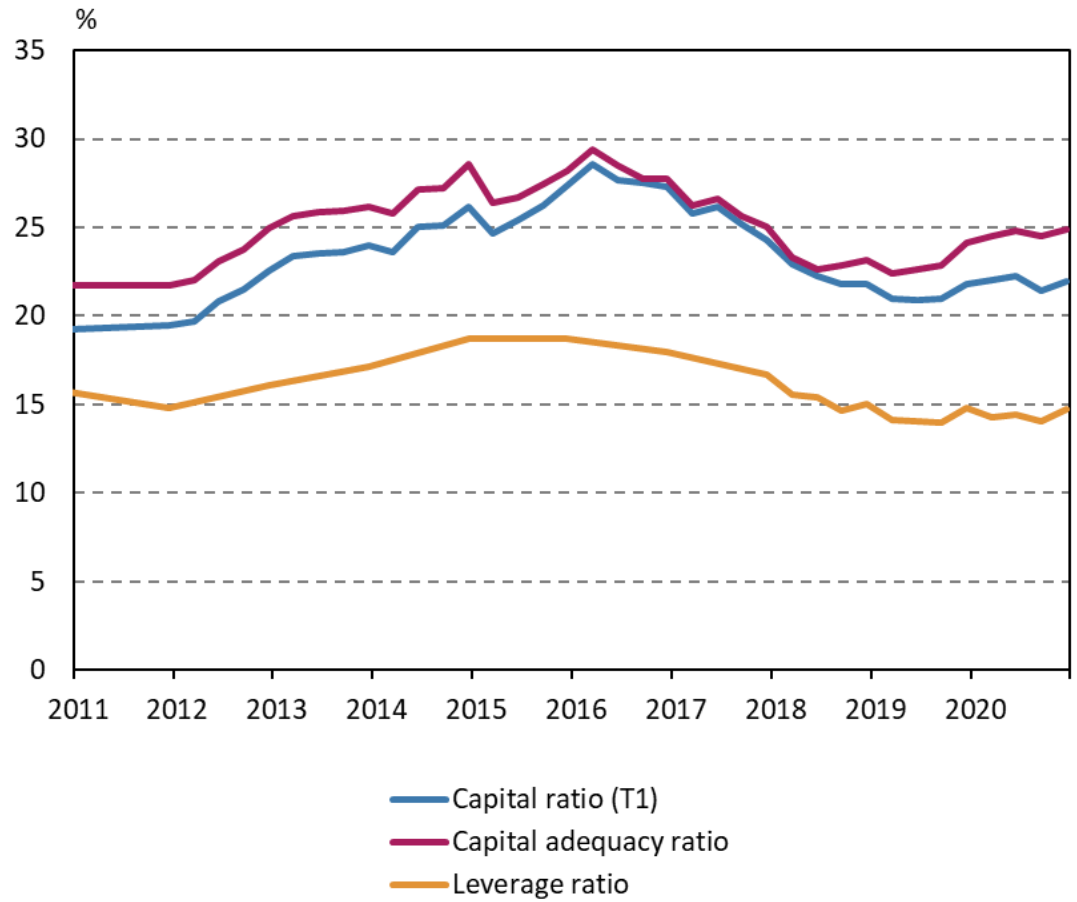

1.Returns are calculated on average equity. Domestic systemically important banks, consolidated figures. 2. The return on regular income is based on net interest income and fee/commission income net of regular expenses. The tax rate is 20% and is based on average equity. Valitor is excluded in 2017-2020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

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

Index, 2012=100   %

—— Net interest income (left)   —— Total assets (left)

– – Interest rate differential (right)
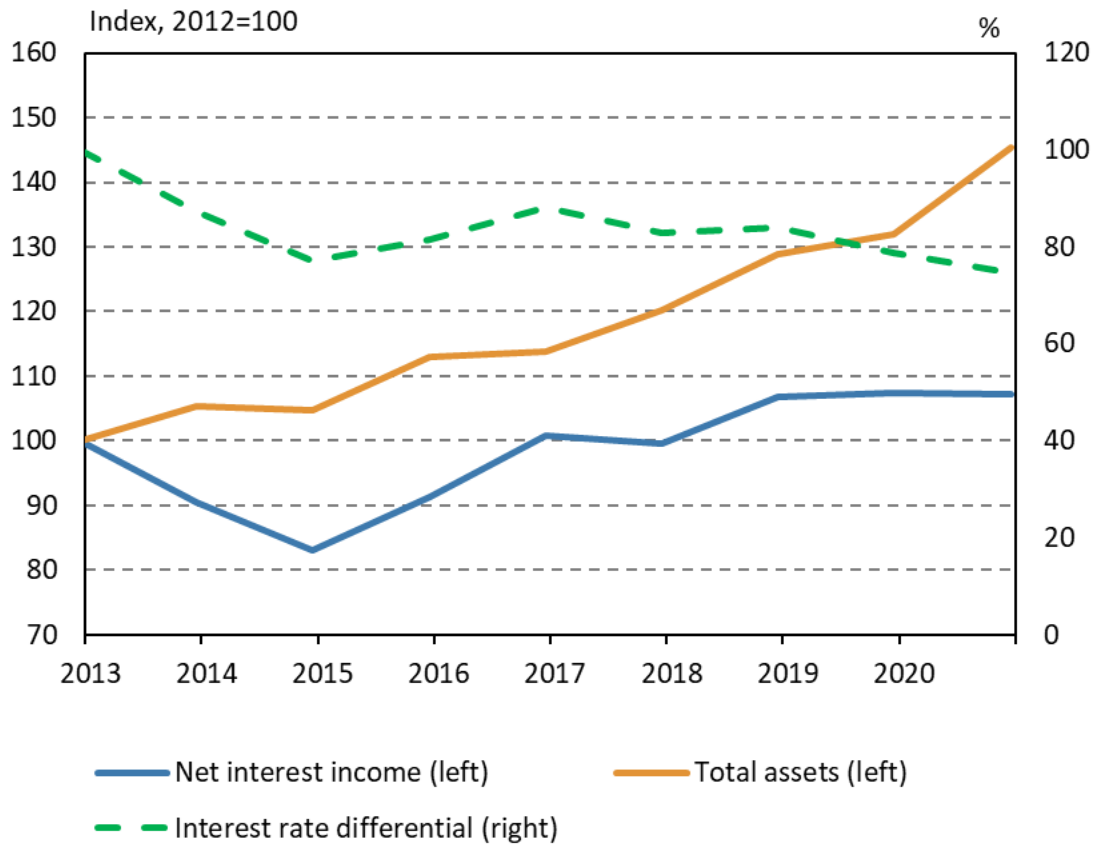
1. Domestic systematically important banks, consolidated figures.
Sources: Commercial banks' financial statements.

D-SIB: Capital and leverage ratios[1]

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