

## III Monetary policy and domestic financial markets

The Central Bank's key interest rate has fallen since August, but its real rate is broadly unchanged. Market agents expect the key rate to fall still further next year, and long-term rates are at a historical low. After depreciating in autumn 2018, the króna has been relatively stable in 2019 to date. Growth in broad money has eased, as has growth in both household lending and, in particular, corporate lending. The rise in house prices has lost pace and real estate market turnover has declined. The private sector debt ratio has risen slightly but is low in historical context. Lending rates offered to households and businesses have improved recently, but mortgage lending requirements have grown more stringent in some instances, and firms' access to financing appears to have tightened. Households' and businesses' financial conditions have therefore improved, but their access to credit appears more limited than before.

### Monetary policy

#### The Central Bank's key rate has fallen since May ...

The Central Bank of Iceland's Monetary Policy Committee (MPC) has lowered the Bank's interest rates by 1.25 percentage points in four increments since May. Central Bank rates are at their lowest since March 2001, when the inflation-targeting regime was adopted (see Box 1). Prior to the publication of this *Monetary Bulletin*, the Bank's key interest rate – the rate on seven-day term deposits – was 3.25% (Chart III-1). Accepted rates in auctions of bills issued by the Treasury and the banks have developed in line with the Bank's key rate, as have rates in the interbank market for krónur, although trading in the market has been sparse year-to-date.

#### ... but the Bank's real rate has been broadly unchanged in the recent term

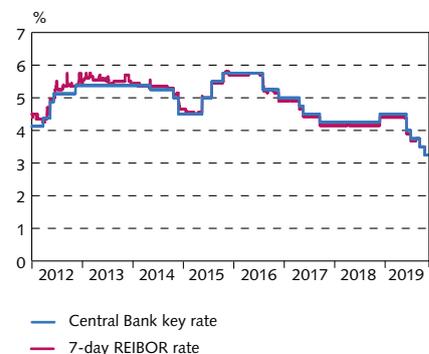
The Bank's real rate fell when the monetary easing phase began in May, but it has been broadly unchanged since then, as the Bank's nominal interest rates have fallen in tandem with the decline in inflation and inflation expectations (Table III-1). The Bank's real rate in

Table III-1 The monetary stance (%)

	Current stance (1 Nov. '19)	Change from MB 2019/3 (23 Aug. '19)	Change from MB 2018/4 (2 Nov. '18)
Real interest rate in terms of: <sup>1</sup>			
Twelve-month inflation	0.4	-0.2	-1.0
Corporate inflation expectations (one-year)	0.7	0.0	-0.5
Household inflation expectations (one-year)	0.2	0.4	-0.5
Market inflation expectations (one-year) <sup>2</sup>	0.8	0.0	0.2
One-year breakeven inflation rate <sup>3</sup>	0.7	0.0	0.4
Central Bank inflation forecast <sup>4</sup>	1.0	-0.2	0.2
Average	0.7	0.1	-0.1

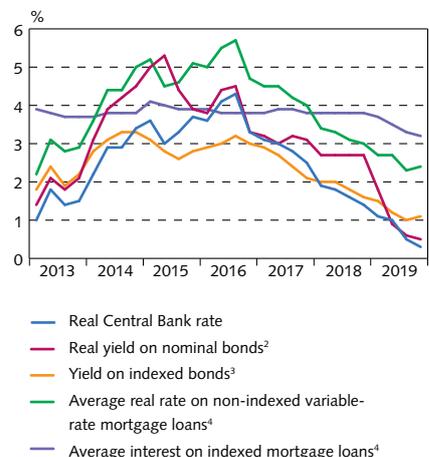
1. The nominal rate on financial institutions' seven-day term deposits with the Central Bank. 2. Based on survey of market participants' expectations. 3. The breakeven inflation rate one year ahead, based on the spread between one-year interest rates according to the estimated yield curve for nominal and indexed Icelandic Treasury bonds (five-day moving average). 4. The Central Bank forecast of twelve-month inflation four quarters ahead. Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-1  
Central Bank of Iceland key interest rate and short-term interest rates<sup>1</sup>  
2 January 2012 - 1 November 2019



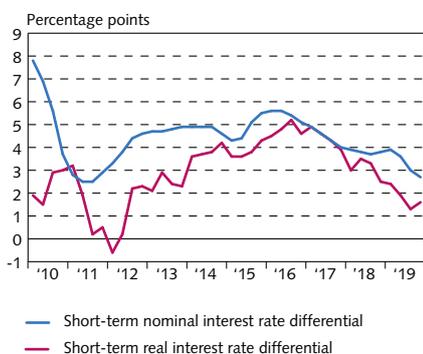
1. The Central Bank's key interest rate is defined as follows: the 7-day collateralised lending rate (until 31 March 2009), the rate on deposit institutions' current accounts with the Central Bank (1 April 2009 - 30 September 2009), the average of the current account rate and the rate on 28-day certificates of deposit (1 October 2009 - 20 May 2014), and the rate on 7-day term deposits (from 21 May 2014 onwards). Source: Central Bank of Iceland.

Chart III-2  
Real Central Bank interest rate and real market rates<sup>1</sup>  
Q1/2013 - Q4/2019



1. Based on data through 1 November 2019. 2. Five-year rate based on estimated nominal yield curve. 3. Five-year rate based on estimated real yield curve. 4. Simple average of lowest lending rates from the three largest commercial banks. Fixed-rate period of five years or more on indexed mortgage loans. Source: Central Bank of Iceland.

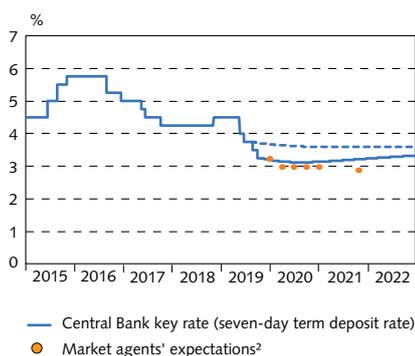
Chart III-3  
Interest rate differential with main trading partners<sup>1</sup>  
Q1/2010 - Q4/2019



1. The difference between the Central Bank of Iceland's key interest rate and the weighted average key rate in Iceland's main trading partner countries. Real rates are based on current twelve-month inflation. Based on data through 1 November 2019. Central Bank baseline forecast for Q4/2019.

Sources: Thomson Reuters, Central Bank of Iceland.

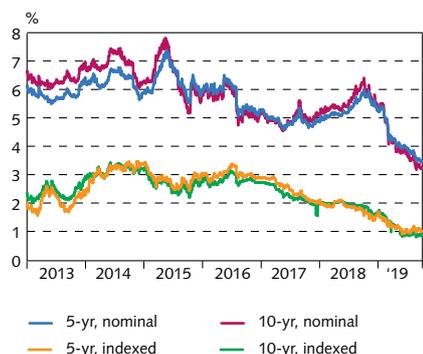
Chart III-4  
Central Bank of Iceland key interest rate and expected development<sup>1</sup>  
1 January 2015 - 31 December 2022



1. The Central Bank's key interest rate and Treasury bond yields were used to estimate the yield curve. Broken lines show forward market interest rates prior to MB 2019/3. 2. Estimated from the median response in the Central Bank's survey of market agents' expectations concerning the collateralised lending rate. The survey was carried out during the period 21-23 October 2019.

Source: Central Bank of Iceland.

Chart III-5  
Government-guaranteed bond yields<sup>1</sup>  
2 January 2013 - 1 November 2019



1. Based on the zero-coupon yield curve, estimated with the Nelson-Siegel method, using money market interest rates and government-guaranteed bonds.

Source: Central Bank of Iceland.

terms of the average of various measures of inflation and one-year inflation expectations is now 0.7%, and 0.4% in terms of current twelve-month inflation. Other real rates have generally moved in line with the Bank's real rate (Chart III-2).

### Interest rate differential with abroad has narrowed

The differential between domestic and foreign nominal interest rates has narrowed considerably since H1, as domestic rates have fallen. The difference between the Bank's key rate and the trade-weighted average nominal rate of other central banks is now 2.7 percentage points, its smallest since 2011 (Chart III-3). The real interest rate differential has also narrowed in line with the decline in domestic real rates, falling by 0.9 percentage points since Q4/2018, and is at its smallest since H1/2012.

### Market agents expect further rate cuts in 2020

According to the Bank's quarterly survey of market agents' inflation expectations, carried out in late October, respondents expect the Bank's key rate to remain unchanged through the end of this year. They expect the Bank to lower the key rate by 0.25 percentage points early in 2020 and then keep it unchanged at 3% through the year-end (Chart III-4). This is a change from the survey conducted in August, when they expected the key rate to remain unchanged at 3.25% through end-2020. Forward interest rates suggest that the Bank's key rate will hold steady at 3.25%, however.

### Market interest rates and risk premia

#### Long-term interest rates fall still further

Yields on nominal Treasury bonds began falling late in 2018 and have continued to slide in 2019 to date. Yields have fallen on both short and long bonds, and the yield curve has been relatively flat since August. The yield on ten-year nominal Treasury bonds was 3.3% just before this *Monetary Bulletin* went to press; therefore, it has fallen by about 2.3 percentage points year-to-date (Chart III-5). Long-term indexed rates have fallen as well, and the yield on ten-year indexed Treasury bonds was about 0.9%, after falling by 0.7 percentage points since the beginning of the year. In the wake of the decline in bond market rates this year, long-term interest rates, both nominal and indexed, are at a historical low (see Box 1). The drop in long-term rates reflects both market agents' pessimism about the GDP growth outlook and the decline in inflation expectations, as the breakeven inflation rate in the bond market (i.e., the spread between nominal and indexed bond market rates) has fallen steeply (see Chapter VI).

#### Risk premium on Treasury foreign obligations broadly unchanged

Measures of the risk premium on Treasury foreign obligations are broadly unchanged, and rating agencies Fitch and Standard & Poor's affirmed Iceland's sovereign ratings with a stable outlook earlier this year. The CDS spread on Treasury obligations is now 0.8 percentage points. By the same token, the interest premium on the domestic commercial banks' international bond issues has changed little in recent months.

## Exchange rate of the króna

### Inflows for new investment broadly as in 2018

In 2019 to date, net capital inflows for new investment (excluding reinvestment) have totalled about 29 b.kr., roughly the same as over the same period in 2018 (Chart III-6). This year's inflows have been mainly for equity securities purchases. Inflows into the bond market have been limited, however, although they increased briefly after the special reserve requirement on foreign-denominated inflows was lowered to zero in March. Outflows deriving from new investment have also stemmed primarily from sales of listed equities. The pension funds have continued to invest in foreign securities this year, in line with their investment strategies, but this does not seem to have weakened the króna to any significant degree.

### The króna has been relatively stable recently

The króna depreciated in autumn 2018, following news of airline WOW Air's financing difficulties and because of the deterioration in terms of trade. At the same time, signs of increased pessimism about the economic outlook and the outcome of wage negotiations began to come to the fore. The króna held relatively stable in H1/2019 despite WOW Air's collapse and concerns about a sudden economic slide. It has remained reasonably stable this autumn after a spate of fluctuations during the summer and is now 0.7% weaker than at the time of the August *Monetary Bulletin* (Chart III-7). Since August, the Central Bank has intervened in the foreign exchange market once, buying foreign currency for roughly 2 b.kr., or about 8% of market turnover for the period.

### Market agents expect the króna to remain broadly stable

According to the Bank's survey of market agents' expectations, carried out in late October, respondents expect the króna to be virtually unchanged against the euro in October 2020, and marginally weaker in two years' time. This is in line with their responses to a comparable survey taken in August. The dispersion in market agents' responses has diminished since the turn of the year, possibly indicating that survey respondents consider the exchange rate outlook less uncertain now than it was last autumn (see Chapter I).

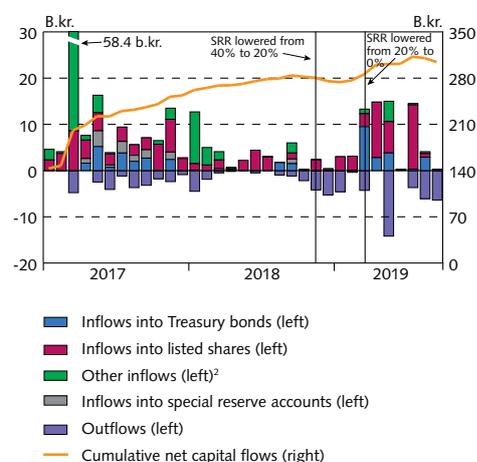
## Money holdings and lending

### Annual growth in M3 has eased ...

Broad money (M3) grew by 5½% year-on-year in Q3, less than in H2/2018 and early in 2019 (Chart III-8). The past few years' strong growth in money holdings is due in large part to an increase in household deposits, as households have accumulated considerable savings alongside the steep rise in income in recent years. Since the summer, however, growth in deposits has eased, measuring just under 7½% year-on-year in Q3, well below the past two years' annual average of 10%.

Chart III-6

Capital flows due to registered new investments<sup>1</sup>  
January 2017 - September 2019



1. Investment commencing after 31 October 2009 and based on new inflows of foreign currency that is converted to domestic currency at a financial institution in Iceland. 2. Other inflows in March 2017 derive almost entirely from non-residents' acquisition of a holding in a domestic commercial bank.

Source: Central Bank of Iceland.

Chart III-7

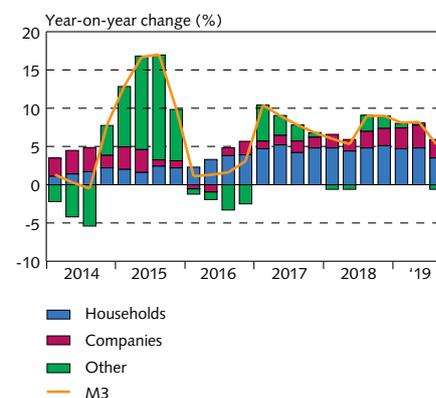
Exchange rate of the króna<sup>1</sup>  
2 January 2014 - 1 November 2019



1. Price of foreign currency in krónur (narrow trade index).  
Source: Central Bank of Iceland.

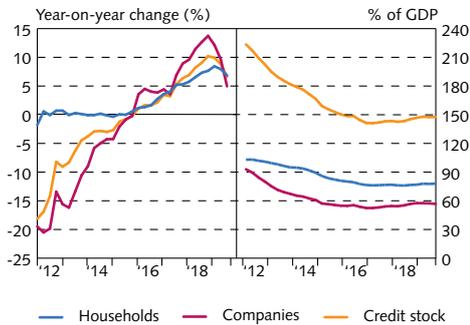
Chart III-8

Money holdings<sup>1</sup>  
Q1/2014 - Q3/2019



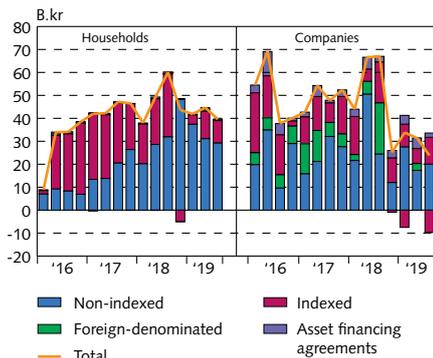
1. M3 is adjusted for deposits of failed financial institutions. Companies include non-financial companies and non-profit institutions serving households. Other includes financial companies and municipalities.  
Source: Central Bank of Iceland.

Chart III-9  
Credit system lending to resident borrowers<sup>1</sup>  
Q1/2012 - Q3/2019



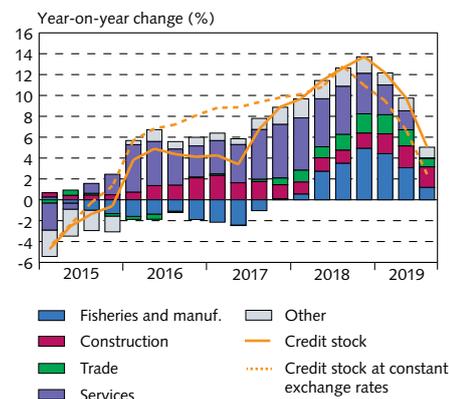
1. Credit stock adjusted for reclassification and effect of Government debt relief measures. Excluding loans to deposit institutions, failed financial institutions, and the government. Businesses include non-financial companies and non-profit institutions serving households. Q3/2019 figures are Central Bank estimates.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-10  
Net new lending to households and non-financial companies<sup>1</sup>  
Q1/2016 - Q3/2019



1. Loans from deposit institutions, Housing Financing Fund, and pension funds. The large-scale retirement of household loans in Q1/2016 is due to the Government's debt relief measures.  
Source: Central Bank of Iceland.

Chart III-11  
Credit system lending to non-financial companies<sup>1</sup>  
Q1/2015 - Q3/2019



1. Excluding loans from failed financial institutions. The foreign-denominated credit stock is calculated using the September 2019 trade-weighted exchange rate index value.  
Source: Central Bank of Iceland.

### ... and lending growth has eased as well ...

Growth in credit system lending to domestic borrowers has lost pace, after surging for two years and peaking at over 10% year-on-year in late 2018. The credit stock is estimated to have grown by 6½% in Q3, although as a share of GDP it has changed very little in the past three years (Chart III-9).

### ... primarily because of weaker growth in corporate lending

Beginning in 2016, there was a steep rise in corporate lending, which peaked at 13½% year-on-year in late 2018 (Chart III-9). Now, however, alongside a broader slowdown in the economy, the year-on-year growth rate has eased to 5% as of Q3, owing to a significant decline in net new loans (Chart III-10). In particular, growth in lending to services companies has slowed in the wake of setbacks in the tourism industry (Chart III-11). Growth in credit system lending to construction companies has remained relatively robust, however, even though real estate market activity has slowed. In spite of this slowdown in credit system lending, firms do not seem to be turning increasingly to bond issuance for financing, as this option is available only to a segment of the corporate market.

### Household lending growth has also lost pace

Reduced turnover in the housing market has coincided with some easing in household lending growth, which measured just under 7% year-on-year in Q3 (Chart III-9). Net new lending to households has been broadly stable year-to-date, after increasing in 2018 (Chart III-10). There has been little increase in short-term loans to households, as their balance sheets are generally strong at present.

## Asset prices and financial conditions

### Real house prices virtually unchanged between years ...

House prices in the capital area rose by 3.5% year-on-year in September. The pace of the annual increase has slowed virtually without interruption from its May 2017 peak of 24%. Developments in the recent term can be traced to more sluggish overall economic activity and households' greater caution about spending, compounded by an increase in the number of properties for sale and under construction. From the beginning of 2018 through this October, house prices in regional Iceland rose faster than those in the capital region (Chart III-12). High prices per square metre in greater Reykjavík may well have stimulated demand for housing elsewhere, particularly in communities on the outskirts of the capital area, but the slowdown in activity has become more widespread recently. The number of purchase agreements registered nationwide fell by 5.7% year-on-year in the first nine months of 2019, including a 3.5% decline in contracts for new construction.

### ... but near-term developments are somewhat uncertain

In Q3, real house prices were nearly 60% above the early 2010 trough (Chart III-13). As has been discussed in previous issues of *Monetary Bulletin*, demand for housing soared in the interim, driven mostly by

strong population growth, a steep rise in households' disposable income, and increased short-term rentals to tourists. The supply of new housing grew slowly over this period. The price increases of the past few years were not driven by a surge in lending to households, however, as house prices have developed increasingly in line with income and building costs. Now the rise in real house prices has halted, and the ratio of prices to these determinants has fallen. It is somewhat uncertain how house prices will develop in the coming term. Wages have risen somewhat, and mortgage lending rates are more favourable in the wake of Central Bank rate cuts, but lending requirements have been tightened (see below). Furthermore, it is unknown how long the contraction in tourism will last. The supply of new housing is still large, although there are signs that growth in residential investment is easing (see Chapter IV). There is also considerable uncertainty about planned Government measures in the mortgage lending market and the impact they will have.

### Share prices up in 2019 to date

The Nasdaq OMXI10 index is broadly unchanged since the August *Monetary Bulletin* but about 26% higher than in early November 2018. Developments have been driven mainly by the rise in Marel shares, which weigh heaviest in the index. They surged in price in H1/2019, in part because of the company's planned listing on the exchange in Amsterdam. Since this summer, share prices have fallen in all sectors, led by real estate and financial firms; however, prices have picked up since mid-October (Chart III-14). Total trading in equities on Nasdaq Iceland amounted to 447 b.kr. over the first nine months of the year, a substantial increase over the same period in 2018.

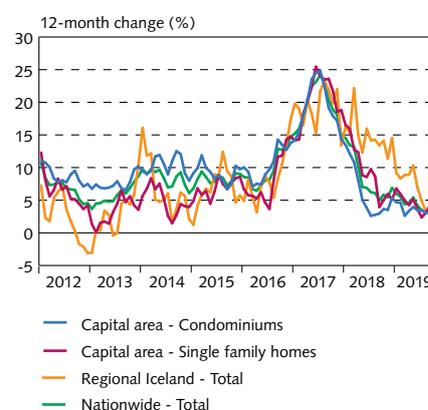
### Private sector debt ratio still historically low ...

Private sector debt totalled 162% of GDP in mid-2019 (Chart III-15). Corporate debt, which had risen by just under 7% in nominal terms since mid-2018, totalled 87% of GDP. Corporate debt to domestic financial institutions grew most, whereas debt to foreign financial institutions and foreign-owned marketable bonds declined. At mid-year, household debt had risen just under 8% in nominal terms since mid-2018, but as a share of GDP it is broadly unchanged year-on-year.

### ... and corporate insolvencies have declined

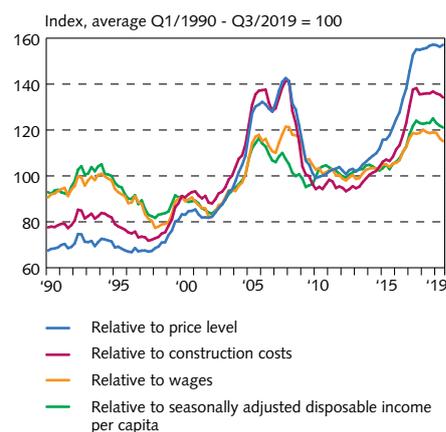
Non-performing household loans from the three largest commercial banks and the Housing Financing Fund (HFF) accounted for 2.3% of total loans at the end of September, broadly the same as in September 2018. The number of individuals on the CreditInfo default register fell by 1% over the same period. The share of corporate loans in arrears has continued to fall, to 4.6% by September, a reduction of 1.8 percentage points between years. The number of firms on the default register declined early in the year and bottomed out in late May. Since then, it has risen again, although at the end of September it was nearly 1% lower than at the same time in 2018. Corporate insolvencies have declined in number by a fourth between years. The number of new company registrations is now broadly the same as it was a year ago.

Chart III-12  
Market price of residential housing  
January 2012 - October 2019



Source: Statistics Iceland.

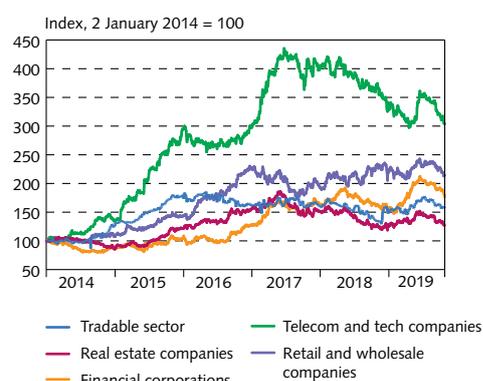
Chart III-13  
House prices relative to price level, construction costs, wages, and income<sup>1</sup>  
Q1/1990 - Q3/2019



1. The ratio of house prices to the CPI, the building cost index, the wage index, and disposable income per capita (based on the working-age population).

Sources: Statistics Iceland, Central Bank of Iceland.

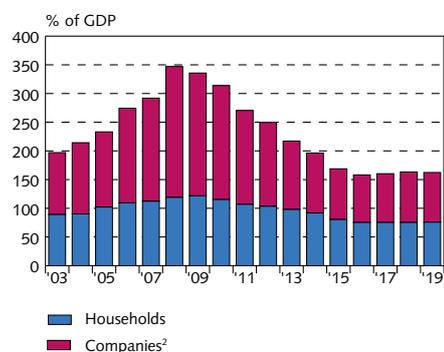
Chart III-14  
Share prices by sector<sup>1</sup>  
2 January 2014 - 1 November 2019



1. Average change in share price of listed companies in selected sectors, adjusted for dividend payments and share capital reductions.

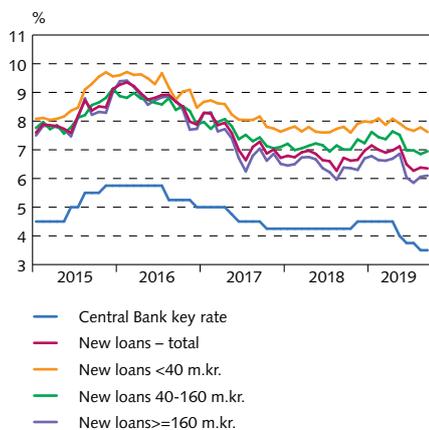
Source: Nasdaq Iceland.

Chart III-15  
Household and non-financial corporate debt  
2003-2019<sup>1</sup>



1. Debt owed to financial undertakings and market bonds issued. 2. All companies except financial institutions and holding companies. Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-16  
Key rate and non-indexed corporate  
lending rates<sup>1</sup>  
January 2015 - September 2019



1. Large commercial banks' non-indexed variable lending rates, weighted average, by loan amount. Source: Central Bank of Iceland.

### Lending rates have declined, but access to credit has tightened

The commercial banks' non-indexed mortgage lending rates have fallen by nearly 1 percentage point since May, concurrent with Central Bank rate cuts. The banks' indexed mortgage lending rates have fallen as well, to an all-time low of around 3.3%. Pension fund rates have developed in a broadly similar manner. In general, deposit interest rates have moved in line with the Central Bank's rate reductions, apart from sight deposits, which now bear interest rates close to 0% in most cases. The impact of Central Bank rate cuts on household debt service can probably be felt earlier now than in the past, as more lenders than before offer variable-rate loans, and the imposition of the cap on lending fees in 2016 has made it easier for borrowers to take advantage of lower interest rates and refinance older debt. That said, some of the commercial banks have placed restrictions on loan-to-value ratios, particularly for refinancing. The largest pension funds have done likewise, lowering maximum loan-to-value ratios for residential mortgages from 75% to 70%, and one of the large pension funds recently tightened its lending rules. Presumably, the pension funds have done this because the weight of loans to fund members is approaching the benchmark in their investment strategy. As a result, households' access to mortgage loans has tightened marginally, but there are no signs that access to other financing has changed.

Businesses, like households, have benefited from more favourable interest rates in the recent term. Most new corporate loans in Icelandic krónur are nominal variable-rate loans, whose average interest rate has fallen by 0.8 percentage points since May (Chart III-16). A further breakdown by loan amount and maturity reveals a similar trend. On the other hand, it appears that firms have less access to credit than before. To an extent, this is probably due to changes in the domestic economy, but it may also reflect increased liquidity difficulties at some financial institutions.