III Monetary policy and domestic financial markets

The Central Bank's key interest rate has been lowered since the August *Monetary Bulletin* and has only once been lower since the inflation target was adopted in 2001. The Bank's real rate has fallen as well, and the monetary stance is similar to that in mid-2015. In general, other market rates have fallen in line with Central Bank rates, and the interest rate differential with abroad has narrowed. Capital inflows into the domestic bond market have continued since April but are still relatively modest. The risk premium on Treasury obligations is broadly unchanged and is at its lowest since 2008. The exchange rate of the króna has risen slightly since year-end 2016, and exchange rate volatility has subsided after an increase following the liberalisation of the capital controls. Growth in broad money has remained strong, and credit growth has picked up, albeit from a low level. House prices have risen steeply, although the pace of the increase has eased since the beginning of summer. At the same time, share prices have fallen. Households' and businesses' equity position has continued to improve as have private sector financial conditions.

Monetary policy

The Central Bank's nominal interest rates have declined …

The Central Bank Monetary Policy Committee (MPC) decided at its August meeting to keep the Bank's interest rates unchanged but lowered them by 0.25 percentage points at the October meeting. Prior to the publication of this *Monetary Bulletin*, the Bank's key interest rate – the rate on seven-day term deposits – was 4.25%. Interest rates have been lowered by 1.5 percentage points since August 2016, to their second-lowest since the adoption of the inflation target in 2001 (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. Interbank market turnover has increased year-to-date, and the share of seven-day loans has increased at the expense of overnight transactions.

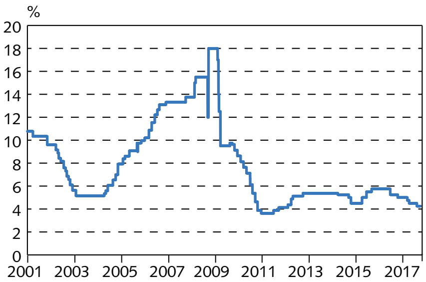
… as has the Bank's real rate

The monetary stance has eased in the recent term, alongside the decline in the key rate. Short-term inflation expectations have inched upwards, although they still appear well aligned with the Bank's inflation target (for further discussion, see Chapter VI). The Bank's real rate in terms of the average of various measures of inflation and inflation expectations is now 1.8% (Table III-1), the lowest in approximately two years. It has fallen by 0.5 percentage points since August and by 1.4 percentage points since August 2016. The Bank's real rate has also fallen in terms of current twelve-month inflation. It is now 2.3%, the lowest since February 2014, and has fallen by half since August 2016. In the main, this decline in the Bank's real rate has been transmitted to real market rates (Chart III-2). As discussed below, it has been transmitted least to credit institutions' indexed lending rates, although rates on indexed variable-rate loans offered by many of the pension

Chart III-1

Central Bank of Iceland key interest rate[1]

Daily data 3 January 2001 - 10 November 2017

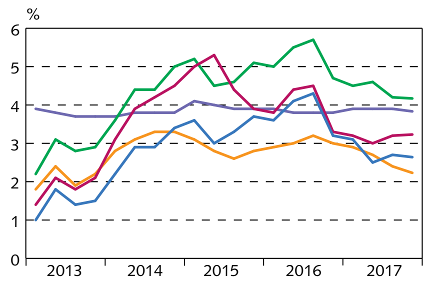


1. The Central Bank's key interest rate is defined as follows: the 7-day collateralised lending rate (until 31 March 2009), the rate on deposit institutions' current accounts with the Central Bank (1 April 2009 - 30 September 2009), the average of the current account rate and the rate on 28-day certificates 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[1]

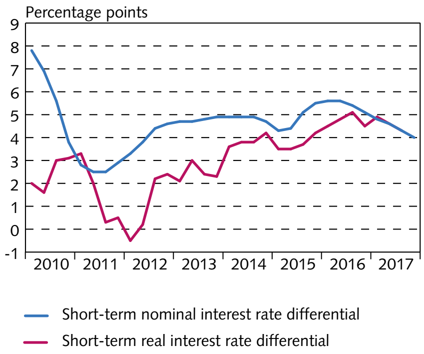
Q1/2013 - Q4/2017[2]



- Real Central Bank rate
- Real yield on nominal bonds[3]
- Yield on indexed bonds[4]
- Average real rate on non-indexed variable-rate mortgage loans[5]
- Average rate on indexed mortgage loans[5]

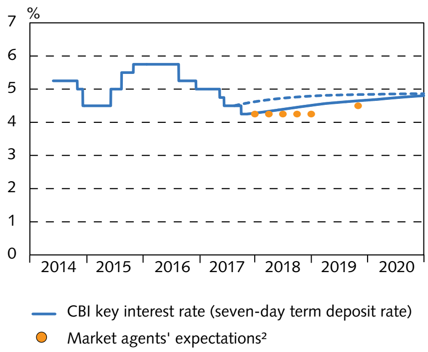
1. In terms of twelve-month inflation. 2. Based on data until 10 November 2017. 3. Five-year rate from the estimated nominal yield curve. 4. Five-year rate from the estimated real yield curve. 5. Simple average lowest lending rates from the three largest commercial banks. Fixed-rate period of five years or more on indexed mortgage loans.
Source: Central Bank of Iceland.

Chart III-3
Interest rate differential with main trading partners[1]
Q1/2010 - Q4/2017[2]



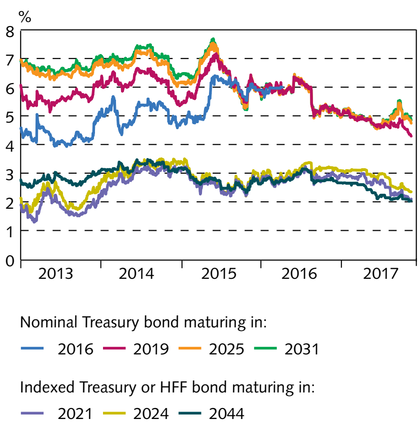
1. The difference between the Central Bank of Iceland's key interest rate and the weighted average key rate in Iceland's main trading partner countries. Real rates are based on twelve-month inflation. 2. Based on data until 10 November 2017
Sources: Thomson Reuters, Central Bank of Iceland.

Chart III-4
Central Bank of Iceland key interest rate and expected developments[1]
Daily data 1 June 2014 - 31 December 2020



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 since the last MB 2017/3. 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 30 October - 1 November 2017.
Source: Central Bank of Iceland.

Chart III-5
Nominal and indexed bond yields
Daily data 2 January 2013 - 10 November 2017



Source: Central Bank of Iceland.

funds have fallen. It therefore appears that the transmission mechanism of monetary policy along the interest rate channel is functioning normally.

Interest rate differential with abroad has narrowed still further

The nominal interest rate differential between Iceland and its main trading partners has narrowed in the recent term, in line with the decline in the Bank's key rate. It is now roughly where it was when Iceland's economic recovery began to firm up and its growth path began to diverge from that in trading partner countries (Chart III-3). The real interest rate spread in terms of current twelve-month inflation has also narrowed and is now similar to that in Q4/2015. The monetary stance therefore remains much tighter in Iceland than in other advanced economies, owing – as before – to different cyclical positions. Even though it appears that GDP growth has eased and the output gap narrowed this year, the output gap is still considerably larger in Iceland than in other developed countries. In Iceland, demand growth and wage increases have also been considerably stronger and unemployment lower.

Table III-1 The monetary stance (%)

Real interest rate in terms of:[1]	*Current stance (10 Nov. '17)*	*Change from MB 2017/3 (18 Aug. '17)*	*Change from MB 2016/4 (11 Nov. '16)*
Twelve-month inflation	2.3	-0.4	-1.1
Business inflation expectations (one-year)	1.8	-0.9	-1.4
Household inflation expectations (one-year)	1.2	-0.8	-1.5
Market inflation expectations (one-year)[2]	1.7	-0.4	-1.3
One-year breakeven inflation rate[3]	2.0	-0.3	-0.9
Central Bank inflation forecast[4]	1.5	-0.6	-1.3
Average	1.8	-0.5	-1.2

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 one-year breakeven inflation rate based on the difference between the nominal and indexed yield curves (five-day moving average). 4. The Central Bank forecast of twelve-month inflation four quarters ahead.
Source: Central Bank of Iceland.

Market agents expect unchanged interest rates

According to the Central Bank's quarterly market expectations survey, carried out in early November, respondents expect the Bank's key interest rate to remain unchanged at 4.25% through this and next year (Chart III-4). In two years' time survey participants expect the key rate to be 4.5%. Forward interest rates also suggest comparable results.

Market interest rates and risk premia

Bond market yields have fluctuated recently

Bond market yields are now somewhat lower than they were just before the publication of the August *Monetary Bulletin* (Chart III-5) but have fluctuated somewhat in the interim.[1] Yields on nominal Treasury bonds

1. The yield on the nominal Treasury bond maturing in 2019 has fallen more, however, and the interest rate differential versus other Treasury bonds has widened. Differing developments between the 2019 bond and other short-term Treasury bonds are likely due to changed market expectations stemming from the Treasury's plan to buy back the bond and the impact of that plan on the bond's pricing.

had risen by as much as 0.6 percentage points since mid-September 2017, apparently due in large part to the fall of the Government on 14 September. The increase was greatest at the long end of the yield curve, and the spread between long and short Treasury bonds widened by up to 0.5 percentage points. The rise reversed in part after the publication of the CPI in late September and further still after the Central Bank's rate cut in early October. The spread between short and long nominal Treasury bonds also reversed course, and the yield curve on the bonds is relatively flat once again. Yields on indexed Treasury and Housing Financing Fund (HFF) bonds fluctuated less markedly. The five- and ten-year breakeven inflation rate in the bond market therefore rose temporarily but is now 2½-3%, as it was in August. Yields on the commercial banks' covered bonds have developed similarly since August.

These movements in the bond market are probably due in large part to the temporary spike in the risk premium brought on by increased uncertainty following the fall of the Government, as well as to market agents' expectations that political uncertainty would prompt the MPC to keep the Bank's key rate higher than would otherwise be needed. It is also possible that inflation expectations have risen, but if they have, the Bank's recent survey among market agents indicates that the rise was temporary (see Chapter VI).

Capital inflows into the domestic bond market have continued but are still relatively modest

New inflows of foreign currency for new investment in the domestic bond market have been relatively stable since they resumed in April and are still less than before the Bank's capital flow management measure was activated in June 2016 (Chart III-6).[2] Inflows due to investments in the market total 26.4 b.kr. since April, of which 15.8 b.kr. was invested in Treasury bonds and 10.6 b.kr. deposited to special reserve accounts. At the same time, there has been an increase in outflows of capital previously invested in the bond market, to a total of 8.4 b.kr. Net inflows into domestic bonds have therefore totalled only 7.4 b.kr. since April (see Table 1 in Box 2). Inflows of capital into listed equity securities, which are not subject to the special reserve requirement, have remained broadly unchanged in the recent term, and inflows into other assets have declined.

Risk premium on Treasury obligations broadly unchanged

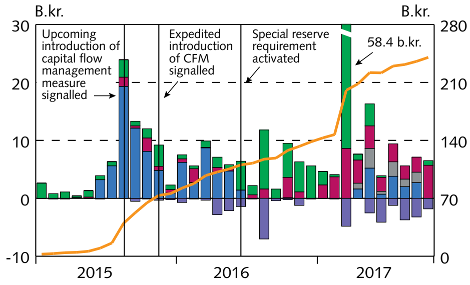
Measures of the risk premium on Treasury foreign obligations declined in the first half of the year, after Standard & Poor's upgraded the sovereign, to their lowest since the beginning of 2008 (Chart III-7). Since then, they have remained broadly unchanged even though Fitch Ratings upgraded the sovereign from BBB+ to A- in July, with a positive outlook. With this, all three agencies that assign credit ratings to the Republic of Iceland have given it A-level ratings. Interest rate premia on the domestic commercial banks' international bond issues have also declined during the year. Standard & Poor's recent upgrade of the three large commercial banks' ratings from BBB to BBB+, with a stable outlook, will probably tend to lower risk premia still further.

2. The capital flow management measure and its effects are discussed in Box 2.

Chart III-6

Capital flows due to registered new investments[1]

January 2015 - October 2017



Capital inflows into government bonds (left)
Capital inflows into listed shares (left)
Other capital inflows (left)[2]
Capital inflows into special reserve accounts (left)
Capital outflows (left)
Cumulative net capital flows (right)

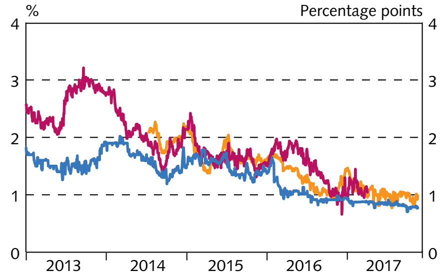
1. Investment commencing after 31 October 2009 and based on new inflows of foreign currency that is converted to domestic currency at a financial instititution in Iceland. For further information, see the Foreign Exchange Act, no. 87/1992. 2. Other inflows in March 2017 derive almost entirely from non-residents' acquisition of a holding in a domestic commercial bank.

Source: Central Bank of Iceland.

Chart III-7

Risk premia on Icelandic Treasury obligations

Daily data 2 January 2013 - 10 November 2017



CDS spread (left)[1]
Spread versus US Treasury bond (right)[2]
Spread versus German government bond (right)[3]

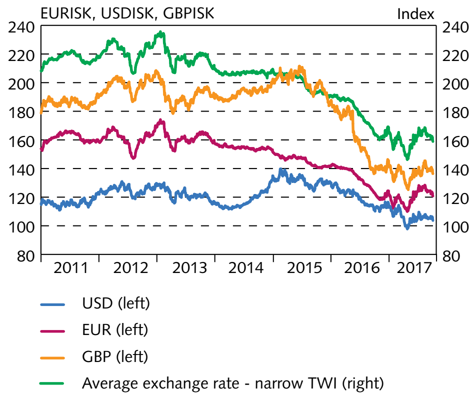
1. Five-year USD obligations. 2. USD bonds maturing in 2022.
3. Eurobonds maturing in 2020.

Source: Bloomberg.

Chart III-8

Exchange rate of foreign currencies against the króna

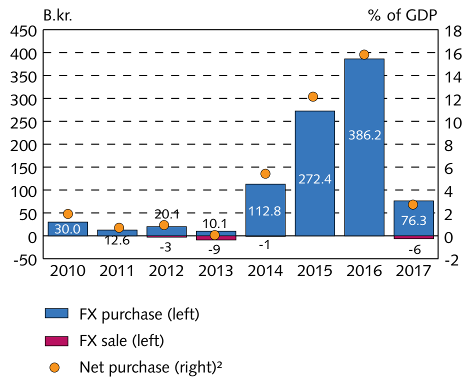
Daily data 3 January 2011 - 10 November 2017



Source: Central Bank of Iceland.

Chart III-9

Central Bank transaction in the Icelandic interbank foreign exchange market 2010-2017[1]



1. Based on data until 10 November 2017. 2. Central bank forecast for year-2017 GDP.
Sources: Statistics Iceland, Central Bank of Iceland.

Exchange rate of the króna

The króna has broadly stabilised after depreciating during the summer …

The exchange rate of the króna fell by 5.5% between quarters in Q3/2017. The current account surplus has narrowed in comparison with last year, and net outflows of non-reserve capital have increased, largely because of foreign debt reduction and an increase in foreign securities holdings, particularly by the pension funds.[3]

The exchange rate has risen by 1.8% year-to-date but is 4.5% higher in trade-weighted terms than it was just before the publication of the August *Monetary Bulletin* (Chart III-8). In the past few months, turnover in the foreign exchange market has been down slightly compared with the first half of the year, partly because the Central Bank's foreign currency purchases have been negligible since the beginning of summer. This is in line with the Bank's declared objective of discontinuing regular foreign currency purchases and intervening mainly to mitigate short-term exchange rate volatility. The Bank's net purchases totalled 69.9 b.kr. in the first ten months of the year, just over a fifth of its purchases over the same period in 2016 (Chart III-9). Exchange rate volatility increased somewhat at the beginning of this year, and further still after most of the capital controls were lifted this past March, but volatility has eased again (see Box 1).

… and market agents appear to expect an unchanged exchange rate in the near future

According to the Central Bank's quarterly survey of market agents' expectations, respondents expect the exchange rate of the króna to be virtually unchanged in one year's time. This is a slight change from the previous survey, conducted in August, whereas, in the surveys carried out previously, respondents had assumed a further appreciation.

Money holdings and lending

Deposit institutions' excess reserves have contracted marginally …

Banknotes and coin in circulation have increased in line with growth in nominal GDP, and the ratio has held stable at 2½-3% since 2010. Deposit institutions' excess reserves – that is, the balance on their current accounts with the Central Bank in excess of required reserves – have contracted marginally in recent months, however.

… but growth in broad money remains strong

Annual growth in broad money (M3) measured 8.3% in Q3 after adjusting for deposits held by the failed financial institutions, an annual growth rate similar to that in Q2. Furthermore, this was the third consecutive quarter to see growth in M3 exceed nominal GDP growth.

3. It should be borne in mind that foreign currency flows need not fully reflect movements in the financial account, owing to time lags between the foreign currency flows and offsetting transactions; for example, exporters can decide when export-related currency inflows take place. Furthermore, foreign exchange market transactions can take place between resident entities, in which case they do not appear in the financial account, which measures transactions between residents and non-residents. It is also possible that residents and non-residents settle transactions in krónur.

Growth in money holdings is more broadly based than before, as it is no longer due almost exclusively to increased household deposits, although they still weigh heavily in the annual increase in M3 (Chart III-10).

Lending to resident borrowers has picked up ...

Even though GDP growth has gained pace in recent years, lending to households and businesses has grown only modestly, while deposits have grown apace. It is possible that post-crisis debt restructuring and increased equity-based corporate financing play a part in this. Now, however, credit growth appears to be developing more in line with growth in deposits. Nominal credit system lending to domestic borrowers increased year-on-year by 5½% in Q3/2017, after adjusting for the Government's debt relief measures, as compared with about 3½% in the first two quarters of the year. The year-on-year increase was somewhat larger in Q3, or 6½%, if the stock of loans denominated in foreign currency is calculated at constant exchange rates (Chart III-11).

... corporate lending in particular ...

As before, credit growth during the year is due mainly to increased lending to households and non-financial companies. In nominal terms, credit system lending to non-financial companies grew by almost 7% year-on-year in Q3, the strongest growth rate since just after the financial crisis, and by 9½% if the stock of foreign-denominated loans is calculated at constant exchange rates. As in recent months, credit growth has been concentrated in loans to construction, real estate companies and tourism-related companies, where investment activity is greatest (see Chapter IV). Lending to the tourism industry has grown apace in recent years, and the sector's weight in the banks' loan portfolios now equals that of the fishing industry.

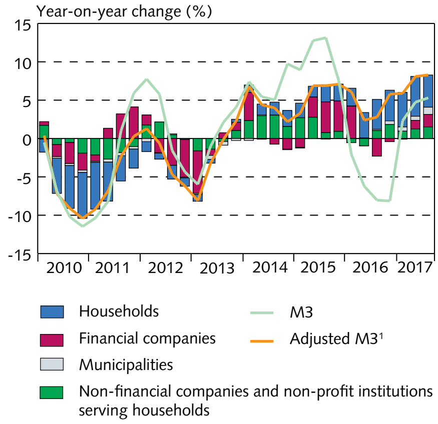
... but also lending to households

Lending to households has grown in the past year, led by the pension funds. After adjusting for the Government's debt reduction measures, the stock of credit system loans to households grew by almost 5½% year-on-year in Q3. Indexed loans remain the most common type of new lending to households; however, non-indexed loans from the commercial banks have increased in the past few months. Even though the pension funds have granted most of new loans in recent months, they only account for roughly 15% of the total stock of credit system lending to households. As is discussed in *Monetary Bulletin* 2016/4, the pension funds' loans to fund members constitute a relatively small share of their net assets in historical terms. At the same time that the pension funds are stepping up their foreign investment, issued loans to fund members have probably weighed heavily in many funds' cash flow. Loans to pension fund members, HFF bonds, and the pension funds' purchases of the commercial banks' covered bonds can be used as a measure of the funds' exposure to risk relating to residential housing. These loans now account for about a third of the pension funds' net assets, close to the average over the past ten years (Chart

Chart III-10

Money holdings

Q1/2010 - Q3/2017

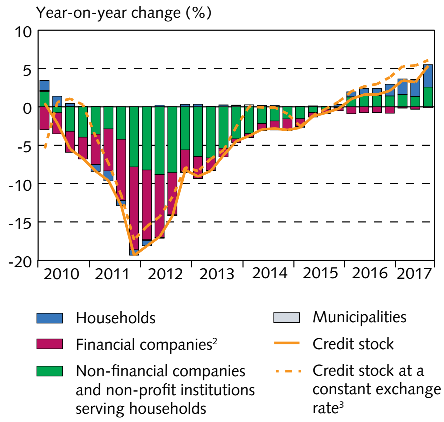


1. Adjusted for deposits of failed financial institutions.
Source: Central Bank of Iceland.

Chart III-11

Credit system lending to resident borrowers and sectoral contribution[1]

Q1/2010 - Q3/2017

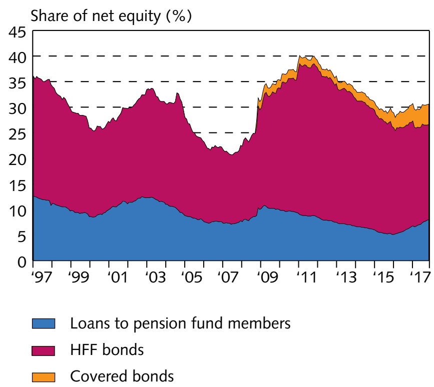


1. Credit stock adjusted for reclassification and Government debt relief measures. Only loans to pension fund members are included with pension funds. 2. Excluding loans to deposit institutions and failed financial institutions. 3. The foreign-denominated credit stock is calculated using the September 2017 trade-weighted exchange rate index value.
Source: Central Bank of Iceland.

Chart III-12

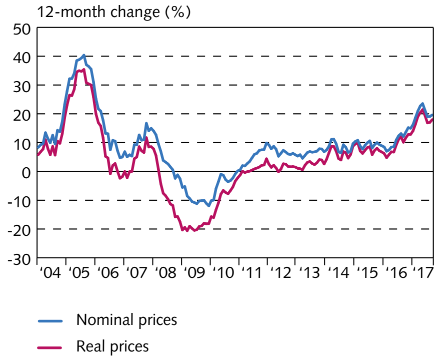
Pension fund financing in the housing market

January 1997 - September 2017



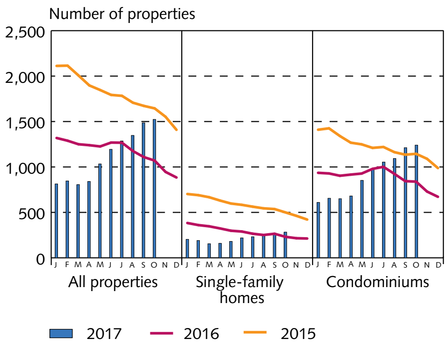
Source: Central Bank of Iceland.

Chart III-13
Capital area house prices
January 2004 - September 2017



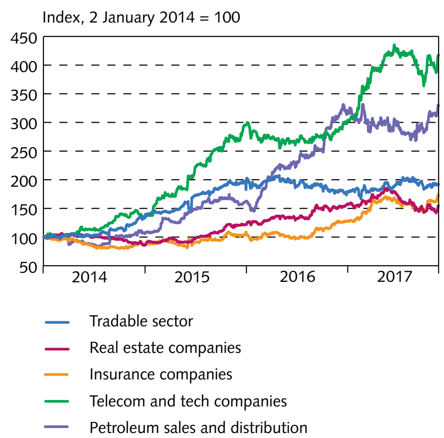
Sources: Registers Iceland, Statistics Iceland.

Chart III-14
Residential properties for sale in the capital area[1]
January 2015 - October 2017



1. Monthly average of advertisements on Morgunblaðið real estate website. The count is carried out by property code so as to avoid a repeat count of the same property.
Source: Morgunblaðið real estate website.

Chart III-15
Share prices by sector[1]
Daily data 2 January 2014 - 10 November 2017



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

III-12). The position of individual funds differs, however, and some of them have already tightened their borrowing terms.

Asset prices and financial conditions

House price inflation starting to ease …

House prices in the greater Reykjavík area were up 19.6% year-on-year in September, and rent rose by nearly 14%, according to figures from Registers Iceland. A limited supply of smaller flats coupled with increased demand, supported by higher real wages and job creation, fuelled a surge beginning in H2/2016, with the twelve-month increase peaking in May at 23.5% (Chart III-13). The number of properties for sale in the capital area has risen considerably since April, and there are signs that some newly built homes and smaller flats previously rented out to tourists are now on the market (Chart III-14). The increased number of properties for sale may also be due to a drop in demand, as the number of purchase agreements registered in the first nine months of 2017 was down by almost 12% year-on-year. The average time-to-sale for flats in the capital area was just over three months in September, after nearly doubling in a year. In comparison, the average time-to-sale was 19 months in 2010. These indicators imply that the rise in house prices could slow down in the near future.

As house prices have risen in the recent term, there have been growing imbalances between prices and their economic fundamentals. For example, real house prices are up by almost 50% since 2012, but as is discussed in Chapter I, the current upswing is in many ways unlike the one in 2001-2007. Labour income rose by similar amounts in the two periods, whereas credit growth differed greatly: the pre-crisis rise in house prices went hand-in-hand with a steep increase in household borrowing. This has not been the case in the current upswing, however: this time, households appear to have used their improved position to pay down debt.

… share prices have fallen in the recent term, after rising somewhat in H1/2017

The OMXI8 index is now 1.6% lower than it was when the August *Monetary Bulletin* was published. Share prices rose somewhat in H1 but began to fall in late summer, after the publication of Q2 earnings reports that were in line with or below market agents' expectations. They fell still further after the Government fell in September, although that decline reversed in part after the Central Bank lowered interest rates in October. Share prices in the tradable sector have fallen in recent months, while insurance and oil companies' shares have risen the most. Real estate companies' share prices rose after earnings reports were published in November but had fallen somewhat in the months beforehand, in the wake of indications of a slowdown in house price inflation (Chart III-15). Most newly published earnings reports for Q3 were largely in line with or slightly below market expectations.

Turnover in the Nasdaq Iceland main market totalled approximately 550 b.kr. over the first ten months of the year, about 13% more than over the same period in 2016. Foreign capital inflows into the domestic equity market have increased markedly this year (see Chart III-6), totalling nearly 40 b.kr. in the first ten months of 2017, as opposed to 11 b.kr. in 2016 as a whole.

Private sector debt ratio broadly unchanged in the recent term …

The corporate debt-to-GDP ratio has remained relatively stable at 83% since the beginning of 2016 (Chart III-16). In mid-2017, the household debt ratio was also broadly unchanged from 2016, at about 76%, although nominal household debt increased by 3.7% year-on-year in Q2. Private sector debt equalled 159% of estimated year-2017 GDP at mid-year, about 1 percentage point less than at the end of 2016.

… but private sector equity ratios continued to rise last year and have overtaken their pre-crisis peak

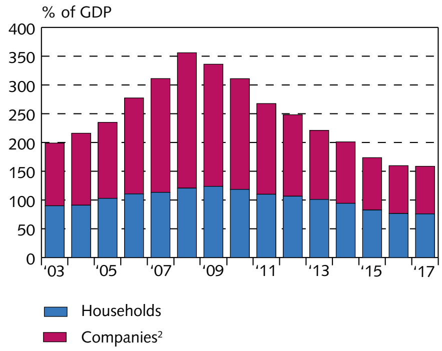
According to recently published figures from Statistics Iceland and figures from the Nasdaq CSD Iceland, household assets relative to GDP fell slightly in 2016, to 383% at the end of the year (207% excluding pension assets). Household net wealth – i.e., assets net of debt – continued to rise year-on-year, however, measuring 305% of GDP at the end of 2016. Households' equity ratio had therefore continue to rise, and by end-2016 it was about 3 percentage points above its pre-crisis peak (Chart III-17). The number of households with negative housing equity also declined in 2016, as did the number of households with an onerous debt position (Chart III-18). The number of households in such difficulties has fallen markedly from the 2010 peak and is now close to the 2005-2006 level. Firms' equity position has also improved recently, although the rise in their equity ratio eased slightly in 2016. According to figures from Statistics Iceland, firms' equity ratio was 42% at the end of 2016, up from 40% at year-end 2015, after having risen by an average of 4 percentage points per year since 2009. The ratio is now a full 11 percentage points above its pre-crisis peak and the improved equity position includes most sectors of the economy.

Household's non-performing loan ratio continues to fall, and corporate insolvencies are on the decline

The share of non-performing household loans from the three largest commercial banks and the HFF has fallen still further in recent months, to 3.2% of total loans at the end of September, down from 5.3% at the same time a year earlier. Furthermore, the number of individuals on the CreditInfo default register declined by 5% year-on-year in October. The share of corporate loans in arrears to credit institutions was 8.9% in September, however, and has been relatively stable between 8% and 9% over the past year. The number of firms on the default register fell by 5% year-on-year in October. The number of corporate insolvencies declined steeply year-on-year in the first three quarters, after having been unusually high in 2016 because of delayed registration caused by the 2015 strike among capital area Commissioners' employees (Chart III-19). Corporate insolvencies have also declined in comparison with previous years, however. New company registrations have declined slightly year-on-year as well.

Chart III-16

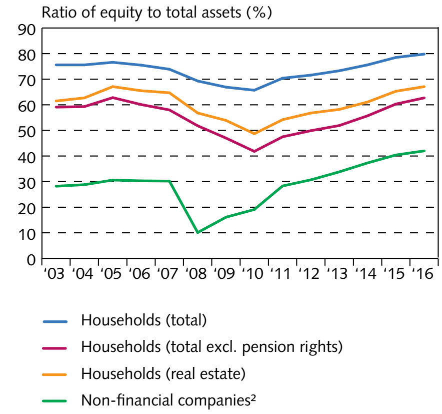
Household and non-financial corporate debt 2003-2017[1]



1. Debt owed to financial undertakings and market bonds issued. The 2017 figure is the end-June 2017 debt position as a share of year-2017 GDP as forecasted by the Central Bank. 2. Excluding financial institutions (which includes holding companies).
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-17

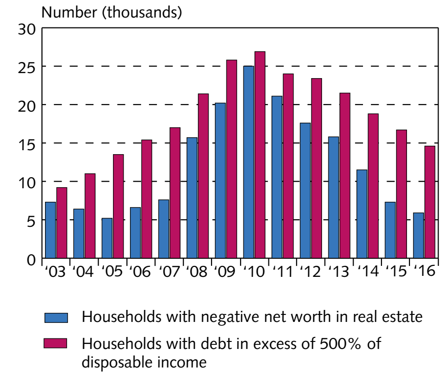
Household and corporate equity ratios 2003-2016[1]



1. According to income tax returns, apart from households' pension rights and securities assets other than equity, which are taken from Statistics Iceland's sectoral accounts. Equity assets are taken from Nasdaq CSD Iceland. 2. Companies excluding pharmaceuticals, financial, and insurance firms.
Sources: Statistics Iceland, Nasdaq CSD Iceland.

Chart III-18

Households with negative net worth in real estate and high debt 2003-2016

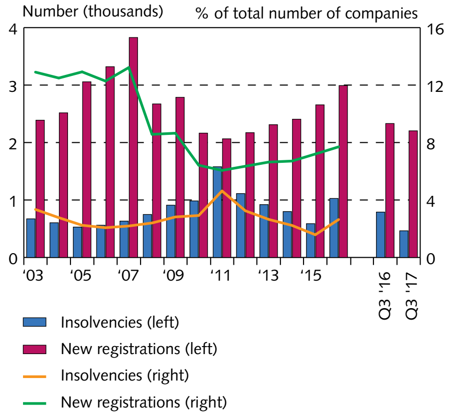


Source: Statistics Iceland.

Non-indexed lending rates have fallen in line with Central Bank rates

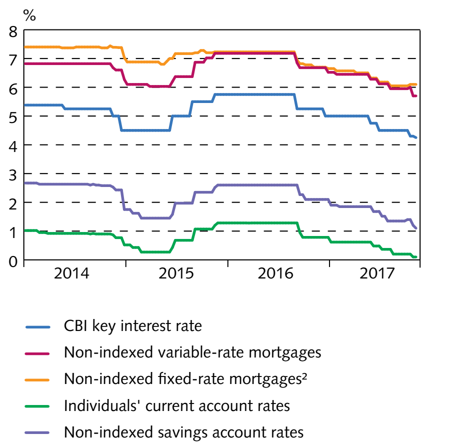
Overall, credit institutions' non-indexed deposit and lending rates have fallen in line with the Central Bank's rate cuts since August 2016 (Chart III-20). Interest rates on comparable indexed loans have remained unchanged in the recent term, however, apart from variable rates on some of the pension funds' loans to members, which have fallen by as much as 1 percentage point since August 2016. As before, pension fund loans bear somewhat lower interest rates than comparable loans from the commercial banks. Some of the pension funds have tightened their lending rules slightly in the recent past, including lowering maximum loan-to-value ratios and setting more stringent collateral requirements in cases involving refinancing of older loans.

Chart III-19
Corporate insolvencies and new company registrations 2003-2017



Source: Statistics Iceland.

Chart III-20
Central Bank of Iceland key interest rate and Commercial banks' rates[1]
1 January 2014 - 1 November 2017



1. Simple average of the lowest mortgage rates from Arion Bank, Íslandsbanki, Landsbankinn. 2. Rates are fixed for 3-5 years.
Sources: Arion Bank, Íslandsbanki, Landsbankinn, Central Bank of Iceland.