

Economic resilience as the cycle turns

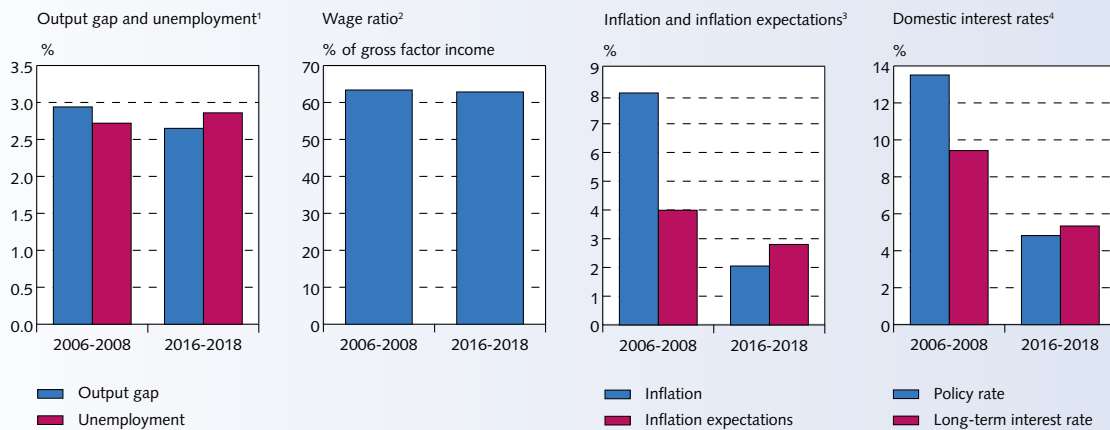
Box 2

Economic activity has begun to lose pace, and the outlook is for output to contract this year. In this context, it is worthwhile to examine how well prepared the economy is to face economic headwinds. Comparing the current economic situation with the run-up to the contraction that followed the 2008 financial crisis shows that households, businesses, and the economy as a whole are now much better prepared for an economic downturn.

Capacity pressures similar to those a decade ago ...

As can be seen in Chart 1, the output gap in 2016-2018 was similar in size to that in 2006-2008. Tension in the labour market was also comparable, as can be seen in the similarly low unemployment rate and high wage share during the two periods.

Chart 1
Output gap similar but inflation and interest rates lower



1. Output gap as % of potential output and unemployment (% of labour force) according to Statistics Iceland's labour force survey. 2. Wages and wage expenses as % of gross factor income. 3. Break-even inflation rate of five-year bonds. 4. The Central Bank's policy rate as defined in each period. The long-term interest rate is the 10-year interest rate on Government bonds, estimated from the yield curve.
Sources: Statistics Iceland, Central Bank of Iceland.

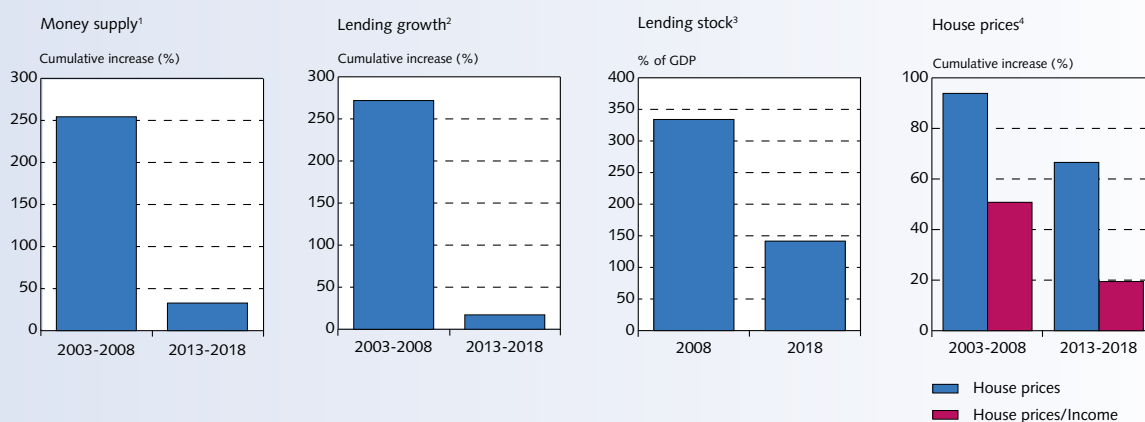
That said, even though demand pressures were comparable in the two periods, inflation has been much lower in recent years than at the end of the last upswing, averaging only 2% in the past three years, as opposed to 8% in 2006-2008. The greater price stability of the past few years can also be seen in long-term inflation expectations, which have been much lower in the more recent period, and closer to the Bank's inflation target than they were during the pre-crisis period. As a result, interest rates have been considerably lower than before the crisis, in terms of both long-term bond market rates and the Central Bank's key rate.

... but financial system imbalances are much less pronounced now ...

Among the main characteristics of the upswing leading into the financial crisis were the severe financial imbalances that had developed following the privatisation of a large share of the domestic banking system and the structural changes in the domestic mortgage market in the first half of the 2000s. As Chart 2 indicates, money balances soared, as did credit system lending growth. Although growth in both money and credit has gained pace in the recent term, it is nowhere near the level seen before the financial crisis. The credit-to-GDP ratio has actually risen very little in recent years and is now much lower than when the financial crisis struck.

House prices have risen in the past several years, although the pace has eased in recent months. The increase in 2013-2018, while

Chart 2
Financial system imbalances are much smaller than before the financial crisis



1. Growth in broad money (M3) in 2003-2008 and 2013-2018. For the latter period, figures are adjusted for deposits held by failed financial institutions. 2. Increase in total credit institution lending (adjusted for reclassification and Government debt relief measures) in 2003-2008 and 2013-2018. 3. Stock of credit institution loans as % of GDP. 4. House price increases and ratio of house prices to labour income (disposable after-tax income excluding capital gains) in 2003-2008 and 2013-2018.
Sources: Statistics Iceland, Central Bank of Iceland.

large, was still smaller than the one in 2003-2008. The difference between the two is even more visible when placed in context with the strong income growth of the past several years. Seen in this light, the recent surge in house prices is less indicative of bubble formation than the one occurring before the financial crisis.¹

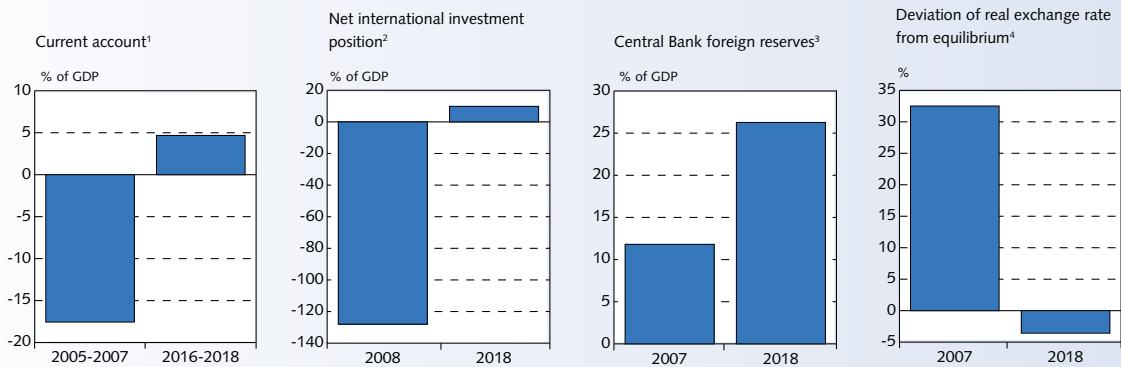
... and Iceland's external position is much more favourable now than a decade ago

One manifestation of the severe financial imbalances that developed during the run-up to the financial crisis was the enormous current account deficit, which peaked at 23% of GDP in 2006. Although the deficit narrowed somewhat during the years thereafter, it remained sizeable until the financial crisis struck, whereupon access to foreign credit to finance the deficit abruptly dried up. The past decade has been entirely different. Since 2009, Iceland has run a sizeable current account surplus that, in the past three years, has averaged just under 5% of GDP (Chart 3).

A dramatic turnaround can also be seen in Iceland's net external asset position. Due to a decades-long current account deficit, the country had amassed substantial external debt, and by end-2008 its net external asset position was negative by nearly 130% of GDP. Sizable current account surpluses and the Government's settlement with the failed bank estates means, however, that since 2016 the net position has been positive, with external assets exceeding external liabilities. In 2018, it was positive by nearly 10% of GDP. Over the same period, the Central Bank has accumulated international reserves that are funded domestically and are large enough to cover short-term liabilities. This is a major change from the pre-crisis situation, when the international reserves were much smaller.

1. The results of formal statistical testing leading to the same conclusion are discussed in Chapter I of *Monetary Bulletin* 2017/2. The assessment that financial imbalances are less pronounced now than they were a decade ago is also consistent with analysis of the domestic financial cycle. See, for example, Bjarni G. Einarsson, Kristófer Gunnlaugsson, Thorvaldur Tjörvi Ólafsson, and Thórarinn G. Pétursson (2016), "The Long history of financial boom-bust cycles in Iceland – Part II: Financial cycles", Central Bank of Iceland *Working Papers* no. 72, and Öundur P. Ragnarsson, Jón Magnús Hannesson, and Loftur Hreinsson (2019), "Financial cycles as early warning indicators: Lessons from the Nordic region", Central Bank of Iceland *Working Papers* no. 80.

Chart 3
Major change in the external position



1. Current account as % of GDP. 2. Net international investment position as % of GDP. 3. International reserves as % of GDP. 4. Deviation of real exchange rate from estimated equilibrium real exchange rate.

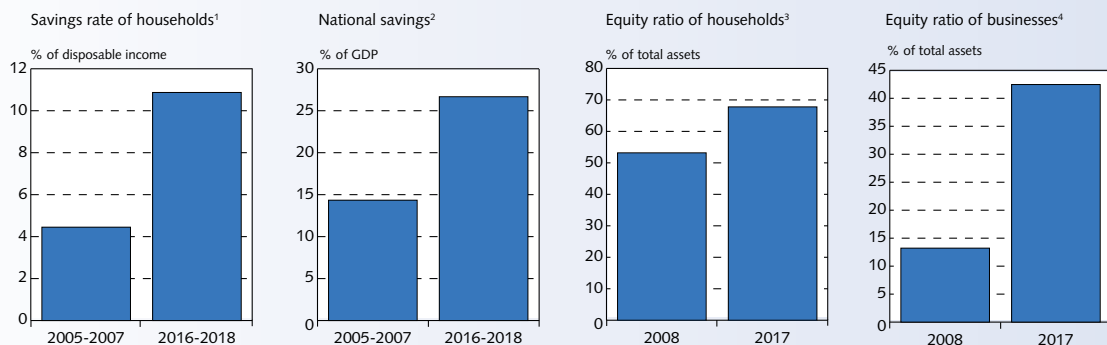
Sources: Statistics Iceland, Central Bank of Iceland.

This improved external balance is also reflected in exchange rate developments, which are now based more firmly on underlying economic fundamentals. During the run-up to the financial crisis, the króna appeared to be overvalued, as can be seen in a misalignment of roughly a third between the actual and equilibrium real exchange rates. Even though the real exchange rate has risen significantly in recent years, the deviation from its estimated equilibrium level has been less pronounced, and according to the Bank's most recent estimate, it may well have been slightly below its equilibrium level in 2018.

Saving has increased significantly, and households' and businesses' financial position has improved

Another manifestation of the sustained current account surplus and the turnaround in Iceland's net external asset position is increased domestic saving. During the run-up to the financial crisis, Icelandic households saved relatively little, and gross national saving – i.e., total saving by households, businesses, and the public sector – was at a historical low. Now the situation is entirely different, with households and the economy as a whole having stepped up saving despite strong spending growth in recent years (Chart 4). Because of this, together with the vast improvement in households' and businesses' equity position, the economy is much better prepared to withstand negative economic shocks than it was a decade ago.

Chart 4
Saving is up markedly and private sector equity ratios are strong



1. Household saving as % of disposable income. 2. National saving as % of GDP. 3. Household equity excluding pension claims as % of total assets according to tax returns; equity securities holdings according to financial accounts and Nasdaq CSD. 4. Businesses' equity excluding pharmaceuticals, financial services, and insurance companies as % of total assets.

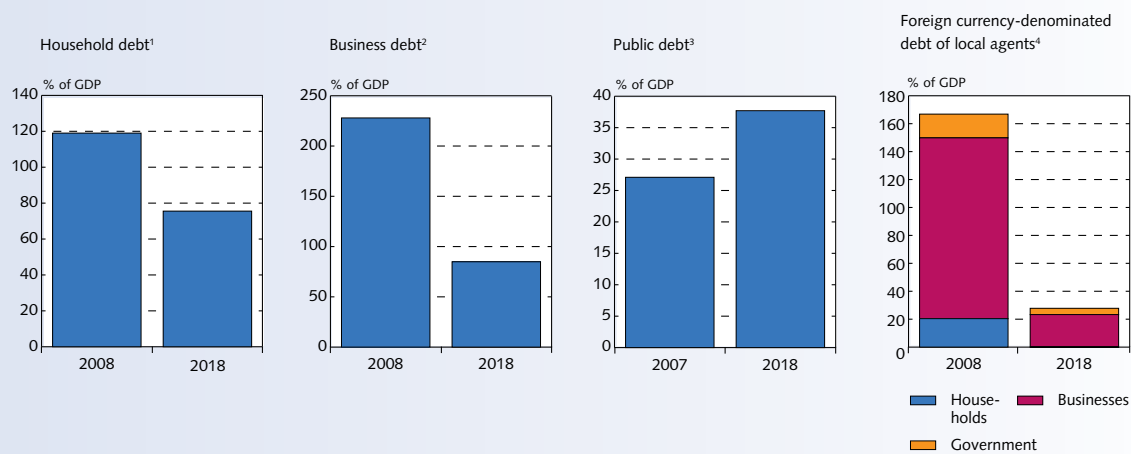
Sources: Nasdaq CSD, Statistics Iceland, Central Bank of Iceland.

Households and businesses have deleveraged and are now much less vulnerable to exchange rate fluctuations

As Chart 5 shows, private sector debt has fallen markedly from its pre-crisis level. At the end of 2018, household debt amounted to 75% of GDP, down from 120% of GDP at the end of 2008. Corporate debt has fallen even more, from 228% of GDP in 2008 to 88% of GDP in 2018. Unlike households and businesses, the public sector is now carrying more debt than it did a decade ago, which shows how severely the financial crisis affected public sector finances. The debt level has fallen quickly the recent term, though, and looks set to continue doing so in the years to come.

Chart 5

Sharp drop in private sector debt and foreign currency-denominated debt



1. Total household debt as % of GDP. 2. Total corporate debt (debt and issued bonds) as % of GDP. Businesses excluding financial services firms (including holding companies). 3. Gross public debt as % of GDP. 4. Foreign currency-denominated or exchange rate-linked debt as % of GDP. Businesses excluding financial services firms (including holding companies). Figures for 2008 are from September (households and businesses) and August (Government).

Sources: Statistics Iceland, Central Bank of Iceland.

Both private and public sectors have dramatically reduced their foreign currency-denominated debt. In 2008, households' foreign currency-denominated (or exchange rate-linked) debt amounted to just over 20% of GDP, whereas it is virtually non-existent today. Businesses' foreign currency-denominated debt measured 130% of GDP in 2008 but had fallen to 23% of GDP by year-end 2018 and, at present, is concentrated in the export sector, which receives foreign currency income. The public sector's foreign currency-denominated debt has fallen from 17% of GDP to just under 5% of GDP over the same period. As a result, public and private sector debt and balance sheets are much less exposed to an exchange rate depreciation than they were a decade ago.

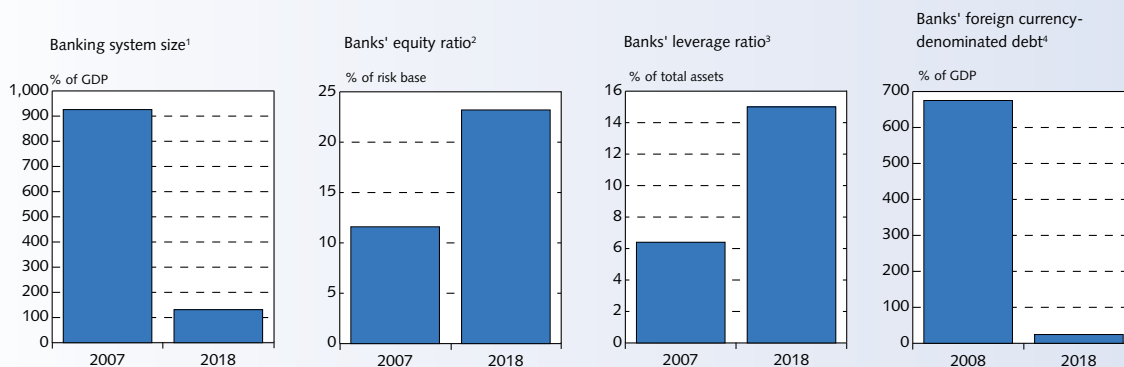
The domestic banking system has shrunk and is much more resilient than before

One of the main characteristics of the upswing in the run-up to the financial crisis was the enormous growth in the financial system and the body blow its collapse dealt to the domestic economy. As is the case with other economic indicators described here, the size and resilience of the financial system have changed radically. As a share of GDP, the banking system has shrunk to a size much closer to that typically found in other advanced economies (Chart 6). Shocks in the financial system are therefore much more manageable now than they were ten years ago.

In addition, the financial position of the banking system has changed so that the probability of severe shocks in the financial

system has diminished significantly. The capital position of the three largest banks has changed, and the banks are now much better prepared to face headwinds than they were before the crisis. The three banks' leverage ratio tells the same story, and it shows that risk-taking in the banking system is much more moderate than it was ten years ago. In addition, the banking system, like other sectors of the economy, has greatly reduced its foreign currency-denominated debt.

Chart 6
Banking system now much smaller and more resilient



1. Total deposit institution assets as % of GDP. 2. Consolidated equity ratio for the three largest commercial banks as % of risk base. 3. Equity base as % of total assets. 4. Foreign currency-denominated or exchange rate-linked debt as % of GDP. Figures for 2008 are from September.
Sources: Statistics Iceland, Central Bank of Iceland.

Summary

Although the economic outlook has deteriorated, there is limited risk of a shock comparable to the one that struck Iceland ten years ago. The financial crisis and the ensuing economic recession were coloured by the severe economic and financial imbalances that had built up during the prelude to the crisis, as could be seen in the large current account deficit and associated foreign debt, plus massive debt accumulation by households and businesses. Some of that debt was in foreign currencies, leaving borrowers severely exposed to the inevitable correction in the exchange rate, which had risen far more than was warranted by underlying fundamentals. When the shock struck, heavily leveraged households and businesses were ill equipped to face it. The vulnerability of the private sector was compounded by the collapse of the huge banking system, which had grown at a breakneck pace and taken on enormous risk.

Conditions today are very different, however. There is a sustained current account surplus, and external assets exceed external liabilities. Households and businesses have built up savings, deleveraged significantly, and repaired their balance sheets. As a result, they are much better prepared to withstand negative economic shocks. Foreign currency-denominated debt has also declined substantially, and the domestic banking system is on a much firmer footing than it was a decade ago.