



Central Bank of Iceland
Economics Department
11 January 2010

Iceland – current policy issues

The Icelandic economy experienced a currency and banking crisis in 2008, with the banking collapse turning out to be the largest in history relative to GDP. A sharp contraction in the real economy followed with inflation shooting up to more than 18% following the collapse of the currency. As a result, Iceland applied for financial assistance from the International Monetary Fund.

The scope for monetary policy to soften the contraction in the real economy has been limited due to the overriding goals of stabilising the currency while hard-hit domestic balance sheets are restructured and rebuilt, and getting inflation under control again. Although automatic stabilisers were allowed to work fully in 2009, the scope for fiscal policy to offset the contraction in private demand has also been limited due to the sharply deteriorating public debt position.

Macroeconomic developments have broadly played out as initially forecast, although the contraction in 2009 has proven to be smaller than initially feared. Although the recession has yet to bottom out, the recovery is expected to start early this year, but growth will be moderate over the medium term.

Background

The Icelandic economy has, on average, grown by roughly 2½% since the beginning of the 1990s, down from 4½% in the period 1970-1990 (Chart 1). Output, however, remains volatile, with the standard deviation of output growth remaining in the region of 3½-4% for the whole period.¹

After the high inflation period of the 1980s, came a period of relative exchange rate stability and rapid disinflation (Chart 2), supported by liberalisation of capital movements, opening of the economy and improvements in competitiveness (Chart 3).

Iceland adopted a formal inflation targeting framework in March 2001, after the previous exchange rate peg came under growing pressures in the late 1990s. The target was formulated

¹ The sample moments are somewhat affected by the large contraction in 2009: excluding 2009 gives a sample average of 3.3%, which is much closer to the estimated trend growth rate, and a standard deviation of 2.9%.

as a 2.5% point target for the twelve month change in consumer prices, with a $\pm 1.5\%$ threshold band.

Monetary policy succeeded in bringing inflation down to target in late 2002 after a short period of overshooting as a result of the depreciation of the króna following the exit from the exchange rate peg. However, inflation started to drift above target in late 2004 with ever-growing domestic imbalances creating new inflationary pressures. Inflation eventually moved outside the threshold band and has for the most part remained outside it since September 2005 (Chart 2).

The growing imbalances can mostly be traced directly or indirectly to government decisions: privatisation of the state-owned banks completed in 2003; large investment projects in the aluminium sector in 2003-6; large tax cuts at the same time; and structural changes in the domestic mortgage market in 2004 with new legislation allowing a big government-owned mortgage lender to offer higher loan-to-value ratios and to engage in more aggressive lending policies. This led to strong responses by the newly privatised commercial banks, resulting in increased competition through ever-lower mortgage rates and significantly easier access to credit. These domestic imbalances were further amplified by unusually low international interest rates and the rapid expansion of the Icelandic banks' balance sheets (Chart 4). A large consumption boom (Chart 5) and growing external imbalances (Chart 6) followed. In June 2008 the Icelandic banks' assets were roughly 200 billion US\$, or roughly ten times GDP, of which 41% were in foreign subsidiaries.

The responses of monetary policy to the growing domestic imbalances proved to be too timid and too late (Chart 7).

The currency and banking crisis

The dynamics in the build-up and aftermath of the Icelandic crisis are similar to many previous crises but the Icelandic crisis stands out in terms of its scale. The Icelandic banking system is the largest banking system, measured as percentage of GDP, ever to have collapsed (Chart 8), the level of indebtedness of the private sector is without precedence (Chart 8) and foreign currency debt is excessively high compared to other crises countries (Chart 9).

A key element of the overheating of the domestic economy and the boom-bust cycle was a large asset price bubble, fed by ample global liquidity and lax lending policies leading to a large appreciation of the króna and enormous increases in other asset prices (Charts 10 and 11).

Ever-increasing doubts concerning the viability of the domestic banking system and the deteriorating access to global liquidity led to a sudden stop of capital inflows in early 2008 as the FX-swap market, the main channel of inflows and an important wholesale funding market for the Icelandic banks, broke down. The sudden stop weakened the króna and pricked the domestic asset price bubble (Charts 10 and 11) and led to a sharp adjustment of domestic demand (Chart 5), on top of an unavoidable cyclical adjustment of the economy. The announcement of emergency swap agreements with other Nordic central banks in May 2008,

policy rate hikes and increased issuance of non-bank debt provided temporary support to the króna.

The Icelandic cross-border banks nevertheless collapsed shortly after the failure of Lehman Brothers in the panic of autumn of 2008 as their sources of foreign currency funding completely dried up and the capacity of the Icelandic authorities to substitute private FX funding with public funding was limited. Domestic financial markets seized up and entered a new and deeper state of crisis. The FX market dried up completely with the collapse of the banking system and the domestic market became disconnected from the offshore market where the króna continued to depreciate. Refinancing of the Central Bank was necessary due to financial losses in relation to its lending activity as the Bank had made active use of its balance sheet in its unsuccessful efforts to prevent the crisis.

The domestic economy entered a sharp recession following the banks' collapse. The most recent Central Bank of Iceland baseline forecast assumes an 8½% contraction in output in 2009, followed by a 2½% contraction this year before returning to modest growth rates in 2011-2012 (Chart 12). This, however, does not fully reflect the large adjustments in domestic expenditure, with private consumption collapsing by more than 16% in 2009 and close to 30% in 2008-2010. With investment also falling, partly due to the completion of large investment projects, domestic demand is projected to fall by close to 20% in 2009 and about 31% in 2008-2010.

This large adjustment of the real economy is also reflected in a sharp fall in employment levels and an enormous and unprecedented rise in the unemployment rate, with unemployment rising from roughly 1% in Q3/2008 to 8% in Q1/2009 (Chart 13). The unemployment rate is expected to continue to rise and peak in the middle of this year at roughly 10%. Employment is not, however, expected to increase again year-on-year until late 2011.

An important factor explaining why unemployment is not expected to rise even further, given the large contraction in domestic demand, is the composition of the adjustment in domestic expenditure. With a significant share of the reduction in private consumption directed towards imported durable goods (Chart 5), import penetration falls from a previously high level and leads to a large positive contribution to growth from net exports (Chart 12), resulting in a much smaller loss in output and jobs.

Also affecting this large trade contribution is the fact that Icelandic export volumes have not been hit by the global demand contraction to the same extent as in many other countries (Chart 14), with the global crisis mainly affecting Icelandic trade through deteriorating terms of trade (Chart 15). This expenditure switching towards the domestic economy and relatively robust exports are further facilitated by the large depreciation of the real exchange rate (Chart 3). The outlook for a continued low real exchange rate and favourable terms of trade developments will support an export led recovery of the economy and generate a significant trade, and eventually, current account surpluses to finance the large external debt of the economy (Chart 6).

Policy responses to the crisis

Iceland requested a two-year Stand-By-Arrangement with the International Monetary Fund (IMF) in the amount of US\$ 2.1 billion (1190% of quota) on 24 October 2008, which was accepted by the Fund's Board on 19 November 2008. This was soon followed by bilateral loan commitments from European neighbours amounting to US\$ 2.75 billion. This, together with other loan commitments and standing facilities, provides funding for the IMF program amounting to roughly US\$ 5 billion, or approximately 42% of Icelandic 2009 GDP at current exchange rates. In addition to this, the UK and the Netherlands have provided loans amounting to roughly another US\$ 5 billion to the Icelandic deposit insurance scheme, to cover payments of the minimum deposit guarantees to depositors in the online Icesave accounts of the UK and Netherlands branches of the failed Landsbanki.

With the króna depreciating by roughly 50% in trade-weighted terms and against the euro (Chart 16), domestic balance sheets took a huge blow, as households and businesses were not only heavily indebted but also had a large share of their debt denominated in foreign currency (Chart 17). The large depreciation thus came on top of a drastic reduction in the availability of credit, enormous losses of private wealth and large reduction in disposable income. This was further aggravated by a sharp rise in inflation, which peaked at 18½% in January 2009 (Chart 2), also hitting households' balance sheets through widespread use of financial indexation to inflation.

The centrepiece of the economic programme agreed upon by the Government, Central Bank and the IMF has therefore been to stabilise and support the currency in an attempt to protect vulnerable private sector balance sheets while the restructuring phase and the recovery of the economy takes place.

To support the currency in the wake of the currency crisis, the key policy rate of the Bank was initially hiked to 18%. Furthermore, temporary capital controls were introduced to stem the threat of massive capital flight from non-residents and residents alike. These measures to provide support for the currency have broadly proven successful, with the króna stabilising as the year progressed, albeit at a low level (Chart 3 and 16), supported by a gradually declining risk premia (Chart 18). Thus, the Central Bank has been able to start easing the monetary policy stance and gradual removal of the capital controls. The main refinancing rate at the Bank is currently down to 10%, whereas the deposit rate at the Bank is down to 8.5% (Chart 19).² The first step to easing the controls was taken in late October with abolition of restrictions on inflows and further plans to remove restrictions on outflows in sequenced steps have been made public.

In response to the liquidity crisis in 2008, the Central Bank's balance sheet expanded significantly as the Bank accepted ever-increasing types of collateral (Chart 20). This started earlier than experienced in other countries. The expansion of the balance sheet has also been greater than in most other countries as the balance sheet continued to expand up to the collapse of the commercial banks in October 2008. Since then the size of the balance sheet

² With ample liquidity in the financial system, the most important Bank rates have now become rates on deposits rather than lending rates.

has been broadly stable, with almost non-existing collateral lending being offset by systematic increases in the Bank's foreign reserves through the IMF programme, and seizure of assets that the failed banks had used as collateral.

Government finances have come under enormous constrain following the financial crisis. The general government balance has turned from a surplus of 5½% of GDP in 2007 to a deficit of 13½% a year later and more than 15% in 2009, as the Government had to refinance the banking system and the Central Bank and strengthen the foreign reserves of the Bank (Chart 21). The Government also experienced a large revenue fall with the collapse of domestic demand, asset prices and the real exchange rate and rising costs due to higher unemployment.

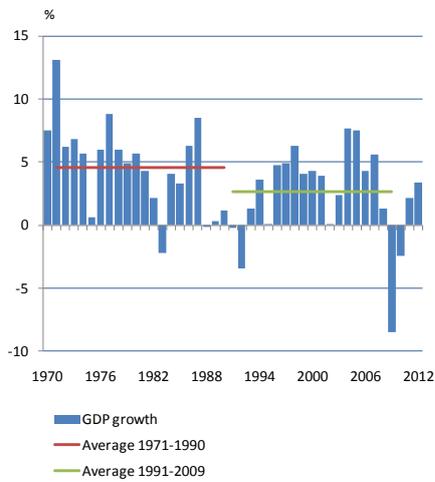
With Government debt low prior to the crisis, automatic stabilisers were allowed to work fully in 2009 in response to the crisis. However, the sharply deteriorating debt position of the Government allows very limited scope for further fiscal stimulus, with broad-based fiscal consolidation measures (including tax hikes and expenditure cuts) taking effect from this year to ensure a sustainable debt path (Chart 21). This limited scope for a fiscal stimulus has partly been replaced by allowing households to withdraw some of their third-pillar private pension savings, which many liquidity constrained households have benefitted from. The size of the scheme, in terms of GDP, is broadly similar to fiscal stimulus packages that many countries evoked in response to the crisis (Chart 22).

The economic outlook

Macroeconomic developments have broadly played out as expected, although the contraction in 2009 is turning out to be smaller than initially feared. The output contraction is assumed to have bottomed out in Q4/2009 and output is forecast to start recovering in Q1/2010, about two quarters later than among Iceland's main trading partners (Chart 23). Iceland's output contraction is therefore both more severe and more prolonged than among its trading partners. The recovery is initially driven by net trade but later on by a gradual recovery of private consumption (Charts 5 and 12). The outlook is obviously shrouded in uncertainty and the latest events in the Icesave-dispute could contribute to delaying the recovery.

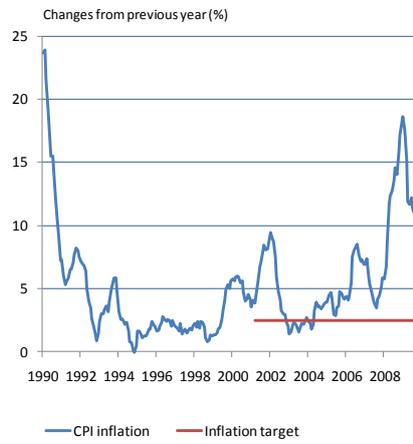
Inflation is forecast to continue to decline, especially from the latter half of this year (Chart 24). Inflation excluding indirect tax effects is projected to fall below target and remain quite low for some time if the króna remains stable or appreciates, as assumed in the baseline forecast. Headline inflation will, however, remain above target until the middle of 2011 due to increases in indirect taxes. The baseline forecast assumes that inflation returns back to target by the end of the forecast period, with interest rates continuing to fall until year-end 2010, before gradually returning to its neutral level.

Chart 1 GDP growth



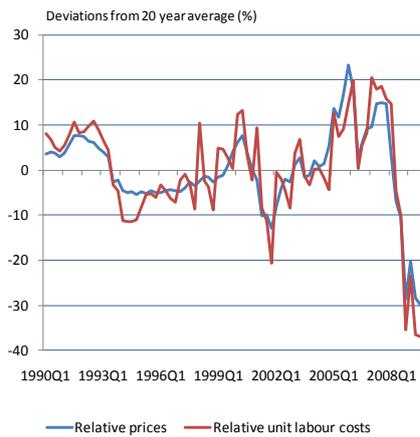
Source: Statistics Iceland, Central Bank of Iceland.

Chart 2 Inflation



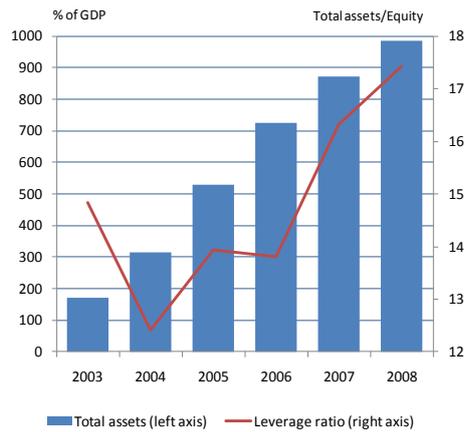
Source: Statistics Iceland.

Chart 3 Real exchange rate



Source: Central Bank of Iceland.

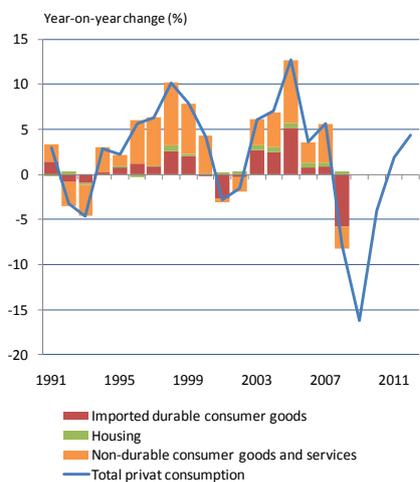
Chart 4 Banks' balance sheet expansion and leverage



Consolidated accounts of three largest commercial banks. 2008 data is end-June.

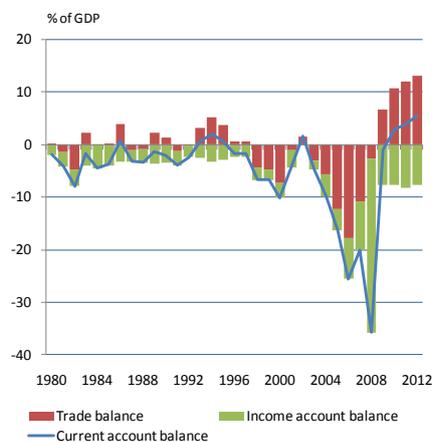
Source: Central Bank of Iceland.

Chart 5 Private consumption and contributions of its main components



Source: Statistics Iceland, Central Bank of Iceland.

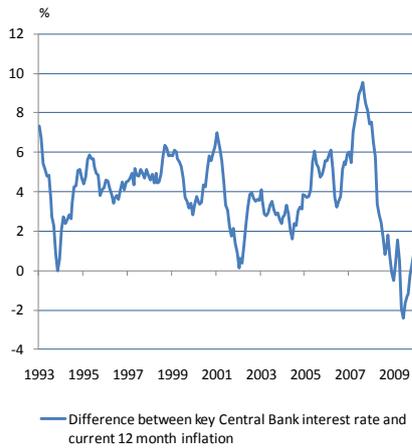
Chart 6 Current account balance components



From 2008 the income account balance measures the underlying balance, i.e. excluding the failed banks and adjusting for data problems concerning other large private corporations under financial restructuring.

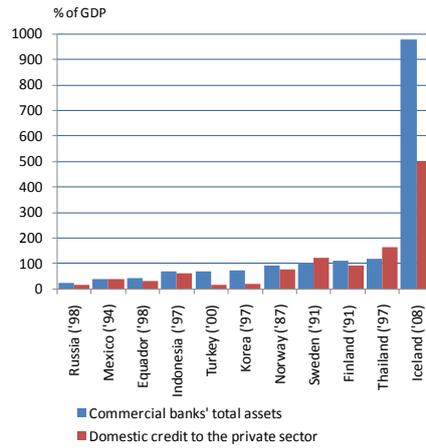
Source: Statistics Iceland, Central Bank of Iceland.

Chart 7 Real effective policy rate



Source: Central Bank of Iceland.

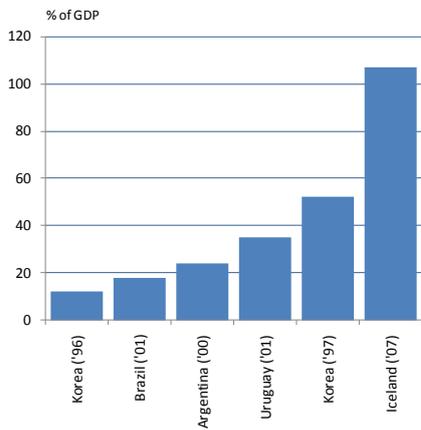
Chart 8 Comparison of various financial crises



The year in parentheses represents the onset of the crisis in the country concerned.

Source: Reuters EcoWin, Bank of England, Central Bank of Iceland.

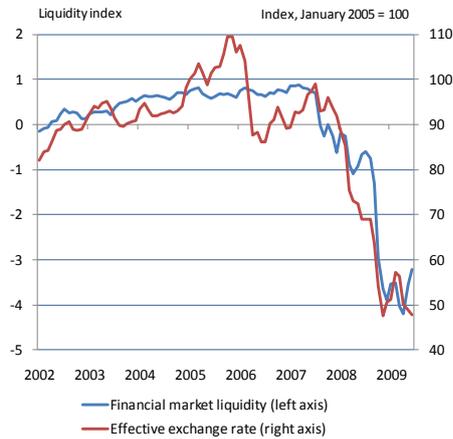
Chart 9 Corporate foreign-denominated debt a year before crisis



The year in parentheses represents the onset of the crisis in the country concerned.

Source: Rosenberg et al. (2005), Central Bank of Iceland.

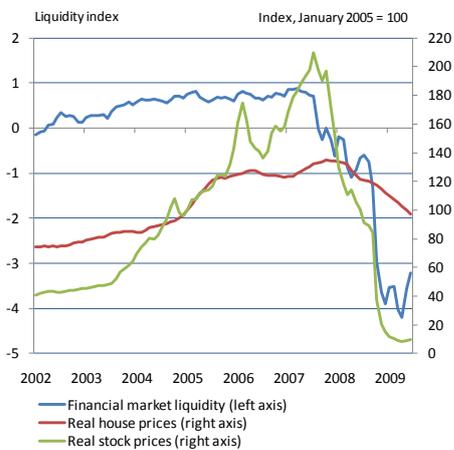
Chart 10 International financial market liquidity and the króna exchange rate



The liquidity index shows the number of standard deviations from the mean (exponential moving average) from a simple average of nine liquidity measures.

Source: Bank of England, Central Bank of Iceland.

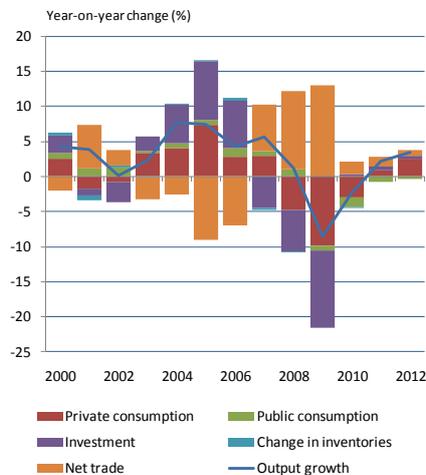
Chart 11 International financial market liquidity and Icelandic asset prices



The liquidity index shows the number of standard deviations from the mean (exponential moving average) from a simple average of nine liquidity measures.

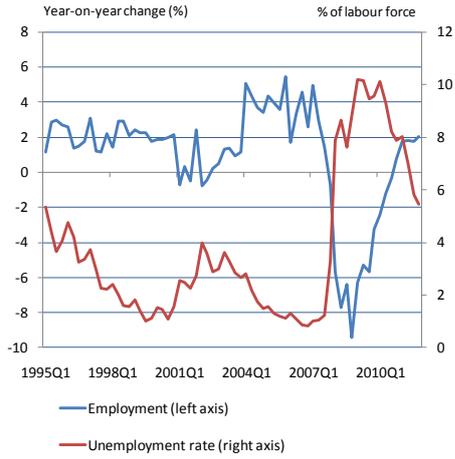
Source: Bank of England, Central Bank of Iceland.

Chart 12 Output growth and contribution of underlying components



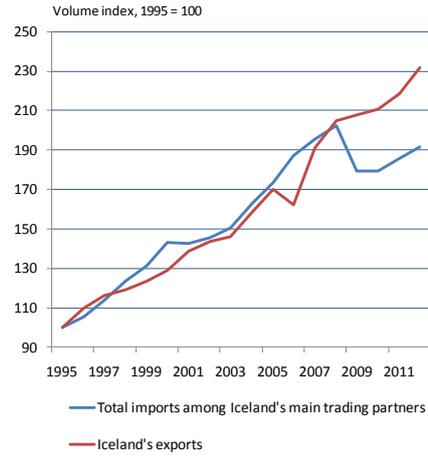
Source: Statistics Iceland, Central Bank of Iceland.

Chart 13 Employment growth and unemployment rate



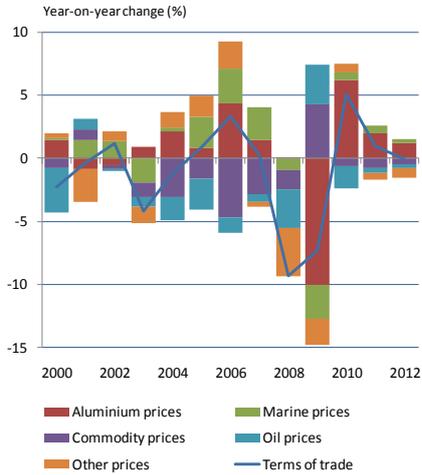
Source: Statistics Iceland, Directorate of labour, Central Bank of Iceland.

Chart 14 World trade and Icelandic exports



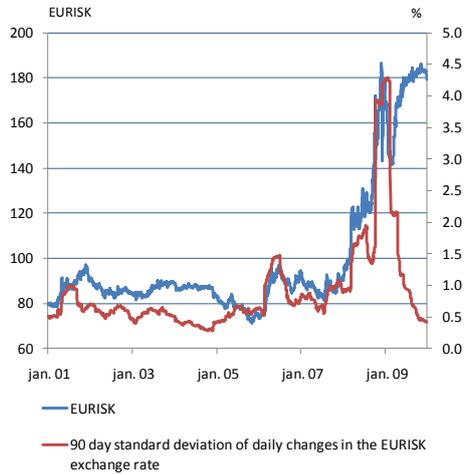
Source: OECD, Central Bank of Iceland.

Chart 15 Terms of trade and their main components



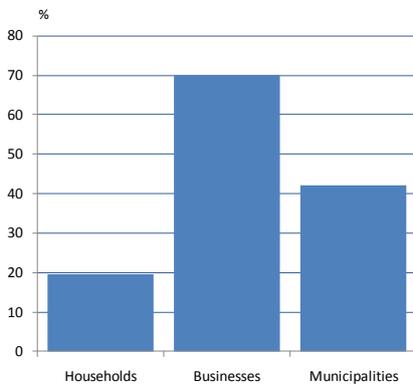
Source: Statistics Iceland, Central Bank of Iceland.

Chart 16 EURISK exchange rate



Source: Central Bank of Iceland.

Chart 17 Proportion of total foreign-denominated debt



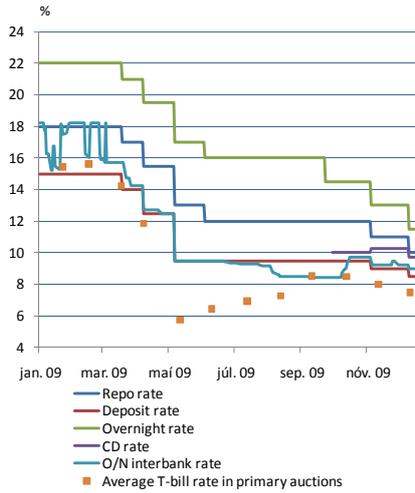
Source: Central Bank of Iceland.

Chart 18 CDS spread for Iceland



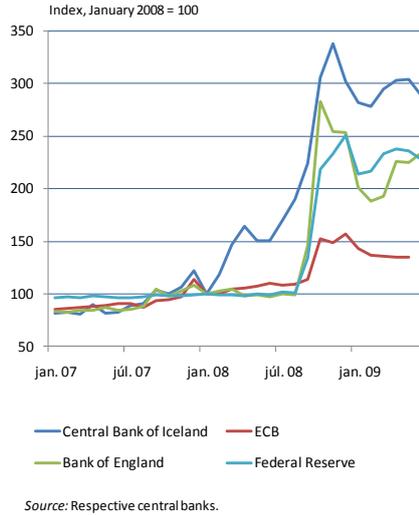
Source: Bloomberg.

Chart 19 CBol interest rate corridor and short-term market rates



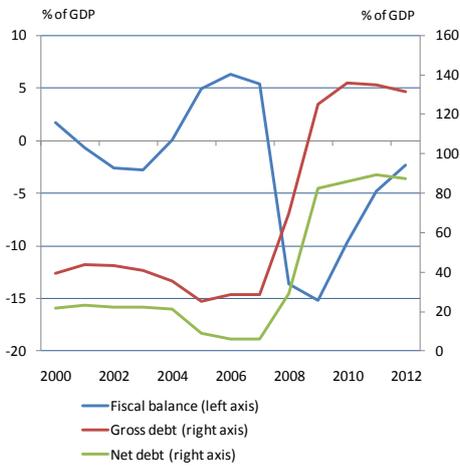
Source: Central Bank of Iceland.

Chart 20 Central Bank balance sheets



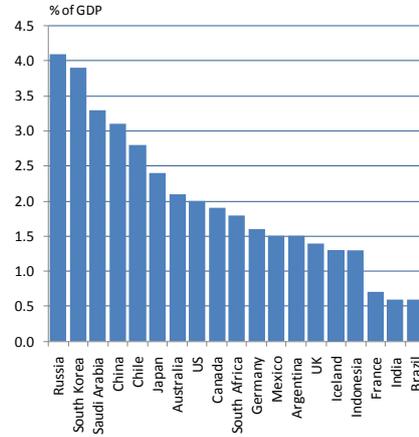
Source: Respective central banks.

Chart 21 Government finances



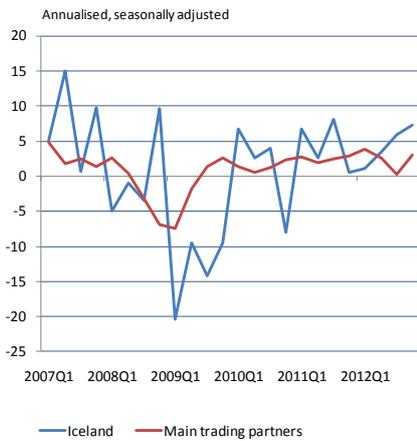
Source: Statistics Iceland, Ministry of Finance, Central Bank of Iceland.

Chart 22 Gross payments from private pension savings and special fiscal measures in various countries



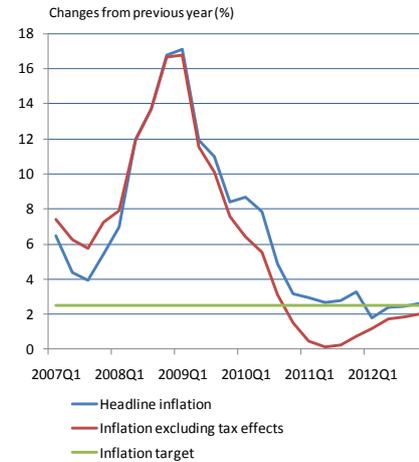
Source: Central Bank of Chile, Central Bank of Iceland.

Chart 23 Quarter-on-quarter GDP growth



Source: Statistics Iceland, OECD, Central Bank of Iceland.

Chart 24 Inflation including and excluding effects of indirect taxes



Source: Statistics Iceland, Central Bank of Iceland.