



Seðlabanki Íslands

Iceland: From boom to bust and back again

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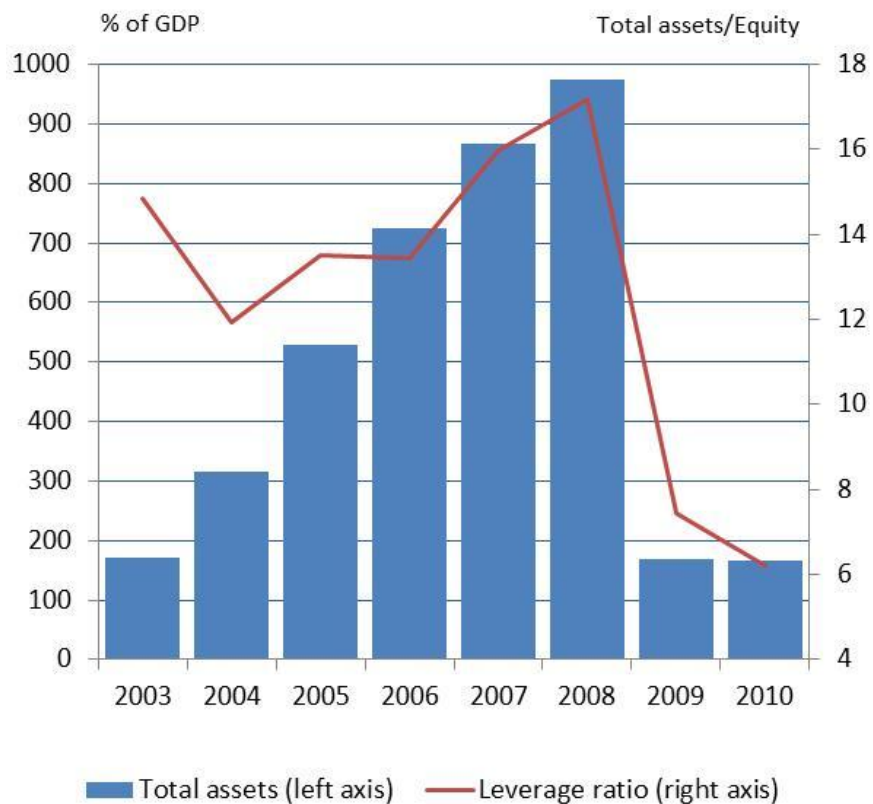
Background:

The build-up and unwinding of large imbalances

The rise and fall of an enormous banking system



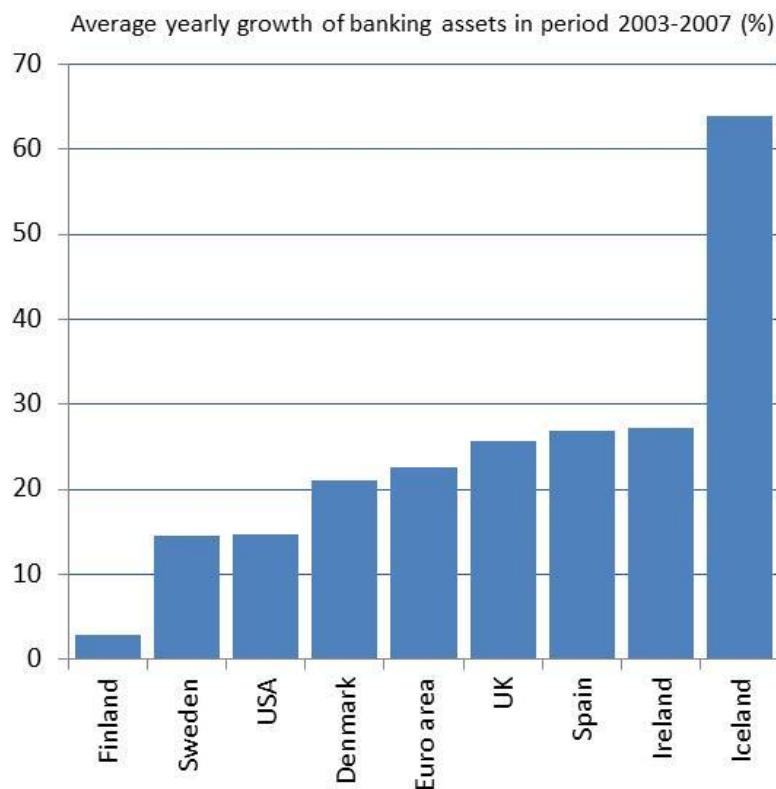
Banking system assets and leverage



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

Source: Central Bank of Iceland, Financial Supervisory Authority, Statistics Iceland.

Expansion of bank balance sheets in the run-up to the financial crisis

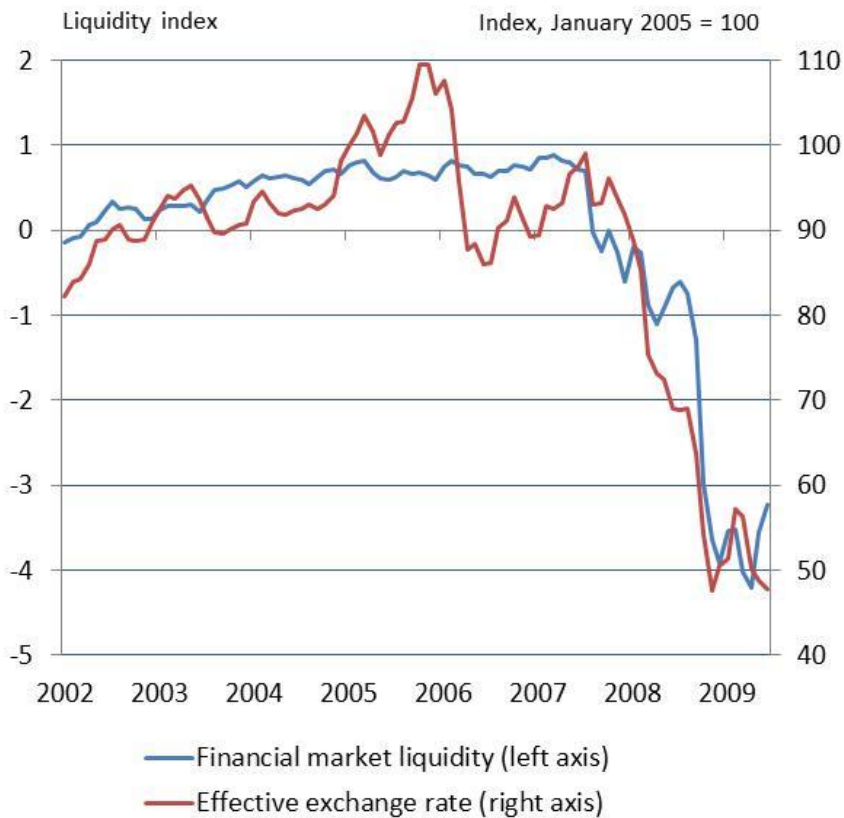


Source: IMF, Central Bank of Iceland.

An asset price boom-bust cycle

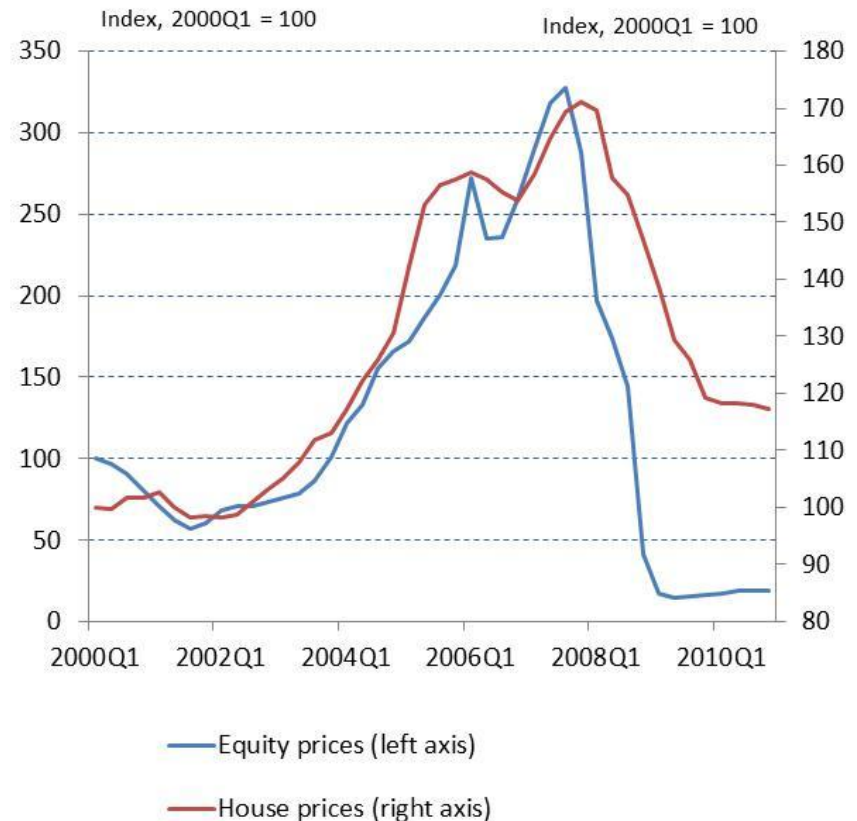


International financial market liquidity and the króna exchange rate



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

Real asset prices



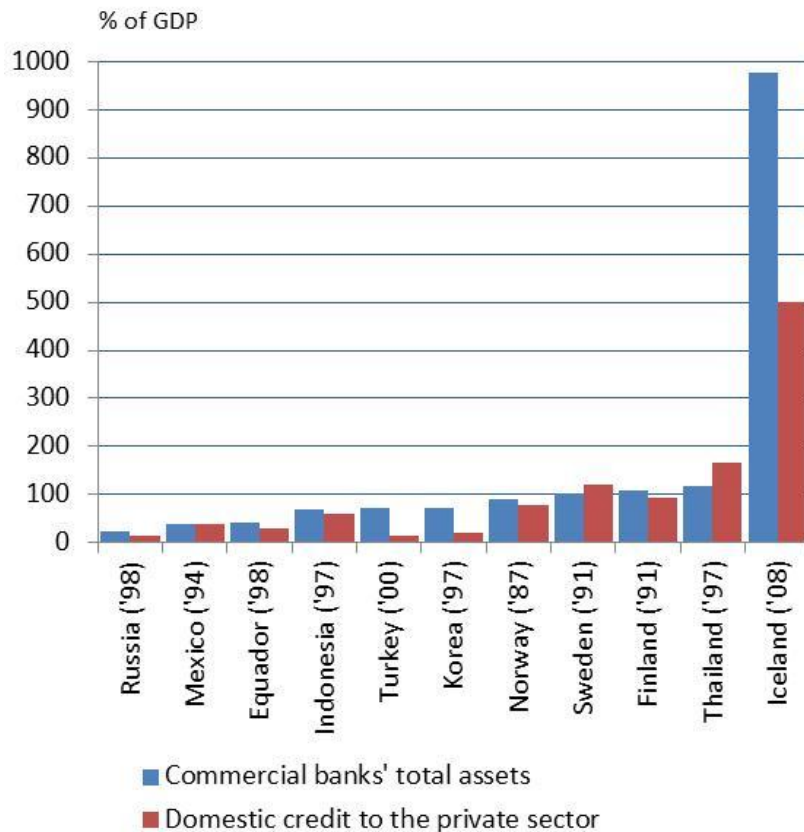
Source: Statistics Iceland, Central Bank of Iceland.

Source: Bank of England, Central Bank of Iceland.

High debt levels were accumulated with significant FX exposures



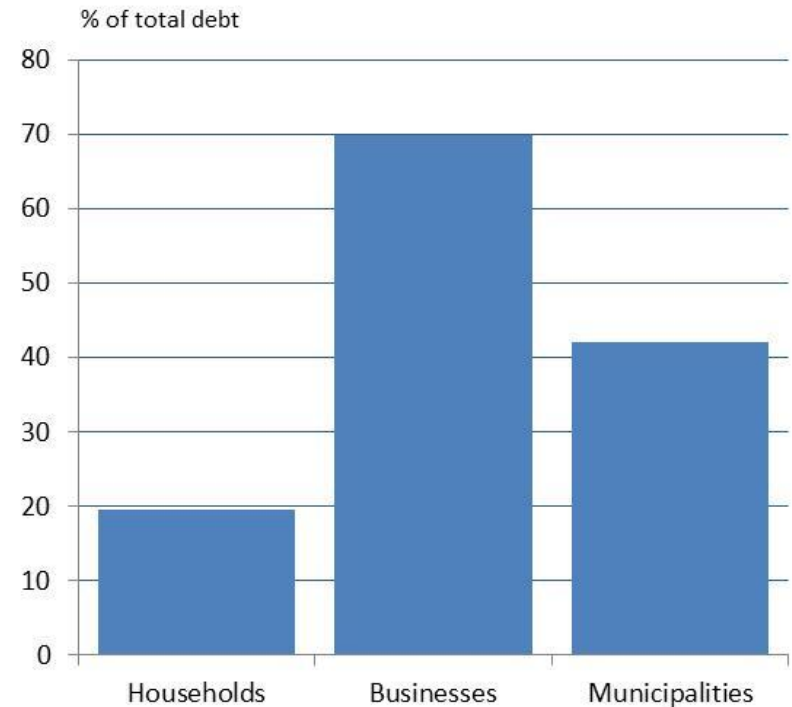
Bank assets and private sector debt in the run-up to the crisis



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

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

Proportion of total foreign-denominated debt

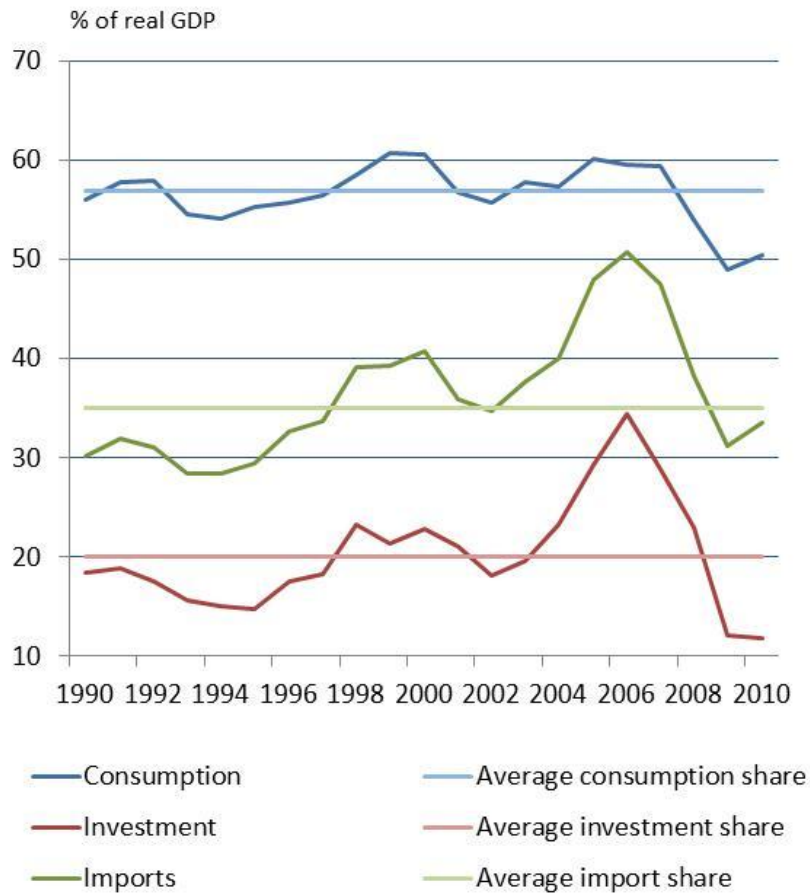


Source: Central Bank of Iceland.

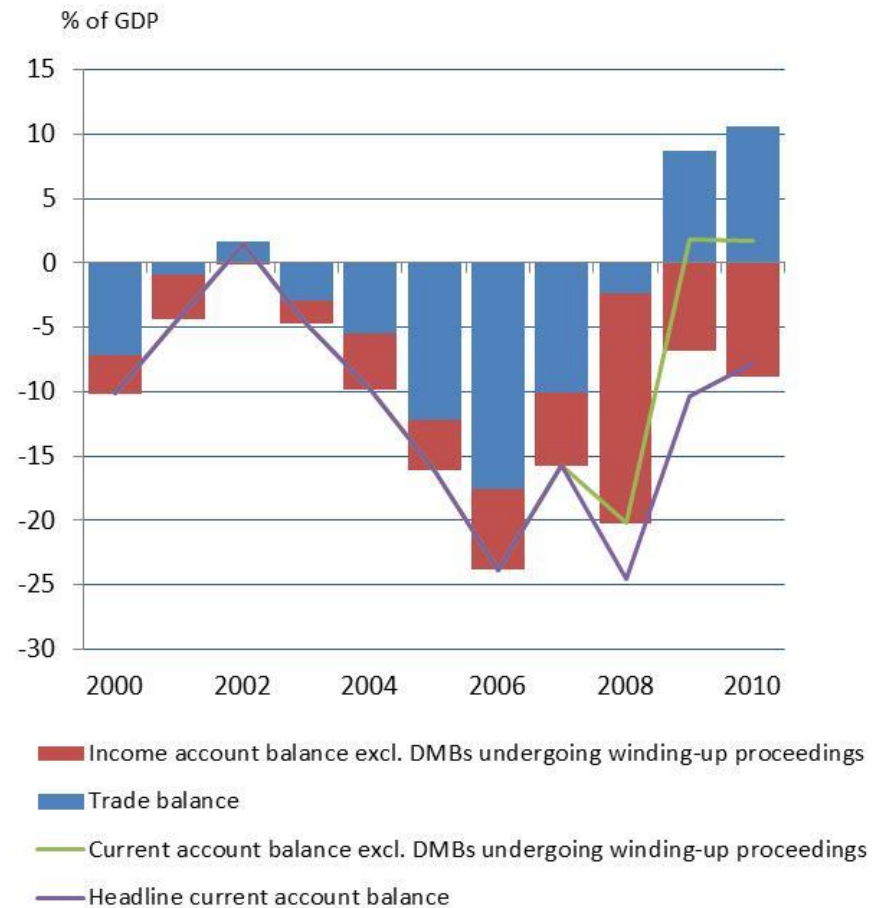
Huge imbalances build up and then unwind



Expenditure shares in GDP and 30 year average shares



Current account balance



Source: Statistics Iceland, Central Bank of Iceland.

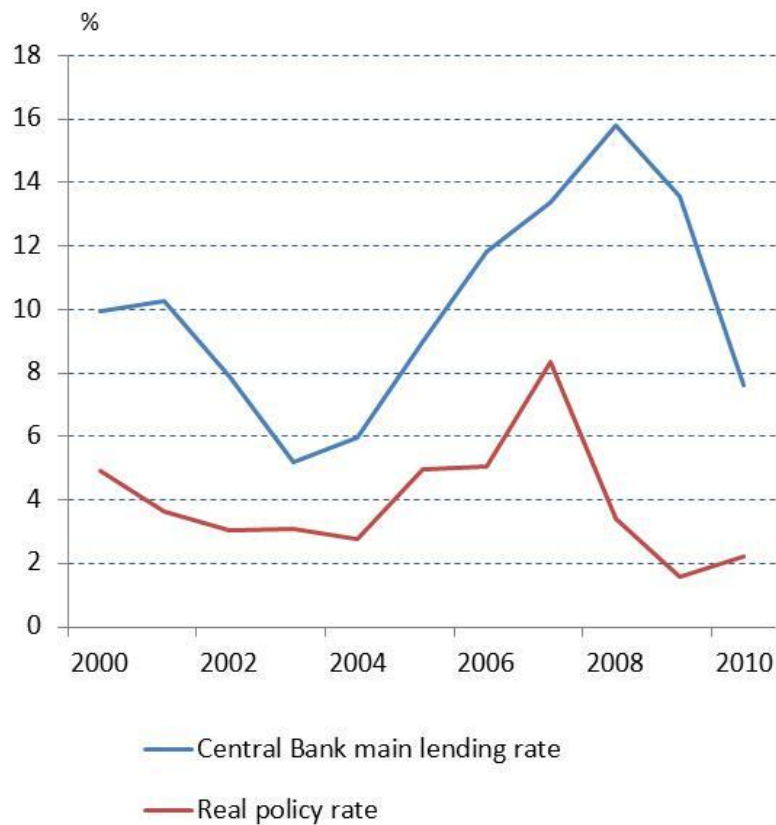
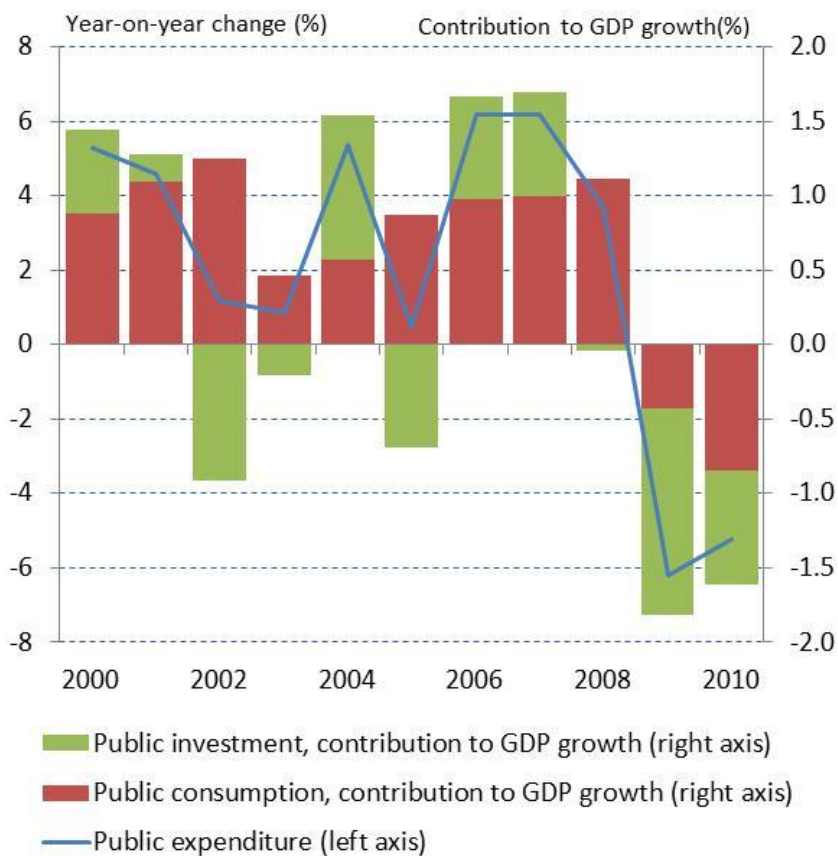
Source: Statistics Iceland, Central Bank of Iceland.

Policy responses proved insufficient and the policy mix inappropriate



Fiscal policy

Monetary policy



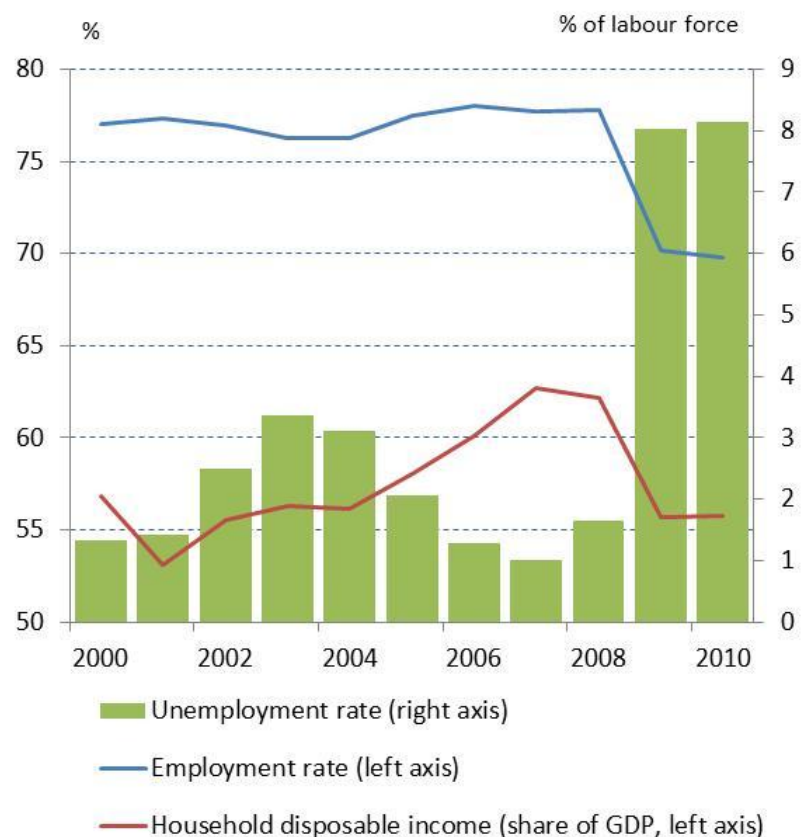
Source: Statistics Iceland, Central Bank of Iceland.

Source: Statistics Iceland, Central Bank of Iceland.

The collapse triggered a large adjustment in income and demand...

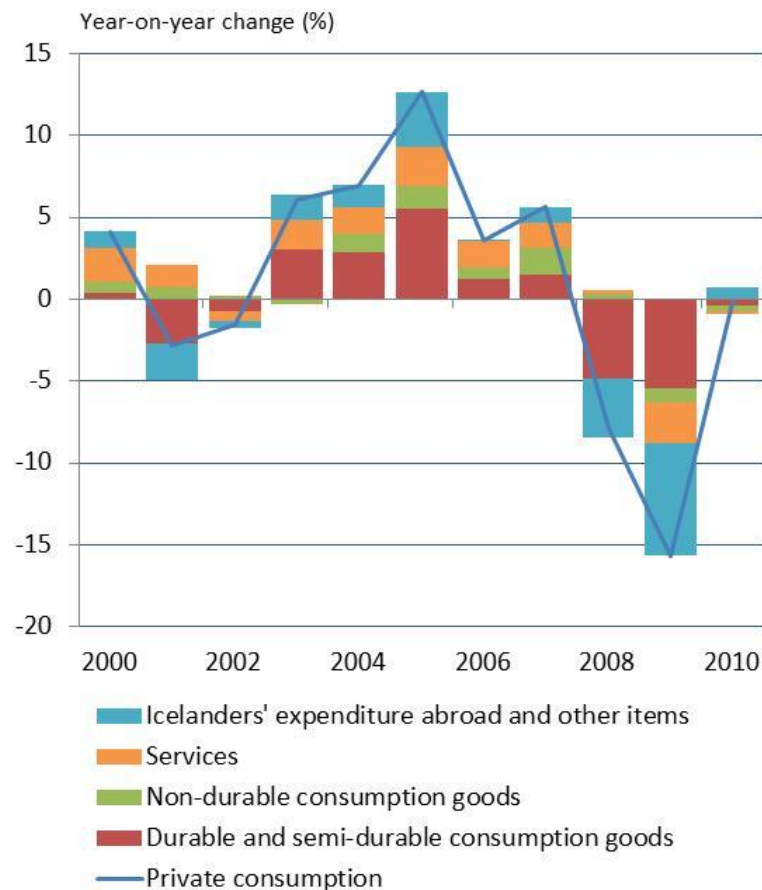


Disposable income, employment and unemployment



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

Private consumption and contributions of its main components



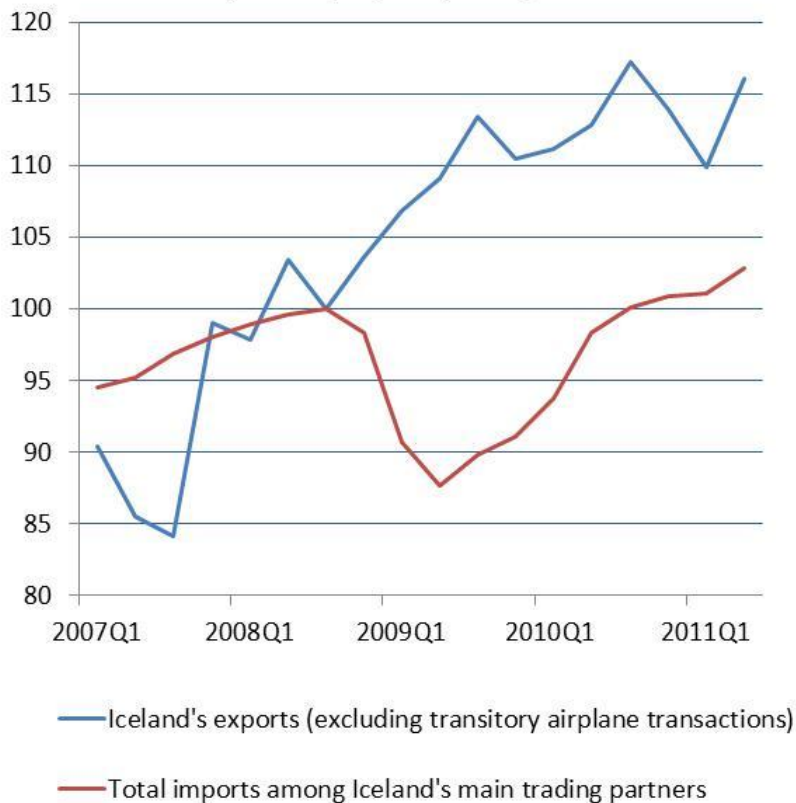
Source: Statistics Iceland.

... But net exports provided a buffer for output



World trade and Icelandic exports in the current crisis

Volume index (seasonally adjusted), 2008Q3 = 100



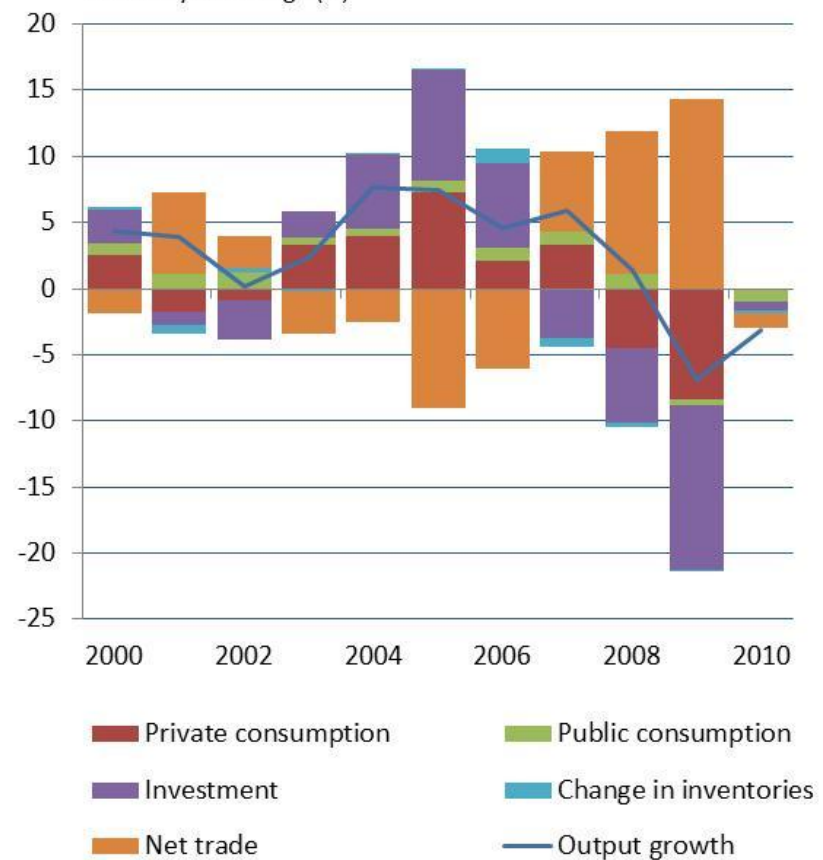
— Iceland's exports (excluding transitory airplane transactions)

— Total imports among Iceland's main trading partners

Source: OECD, Central Bank of Iceland.

Output growth and contribution of its main components

Year-on-year change (%)



■ Private consumption

■ Public consumption

■ Investment

■ Change in inventories

■ Net trade

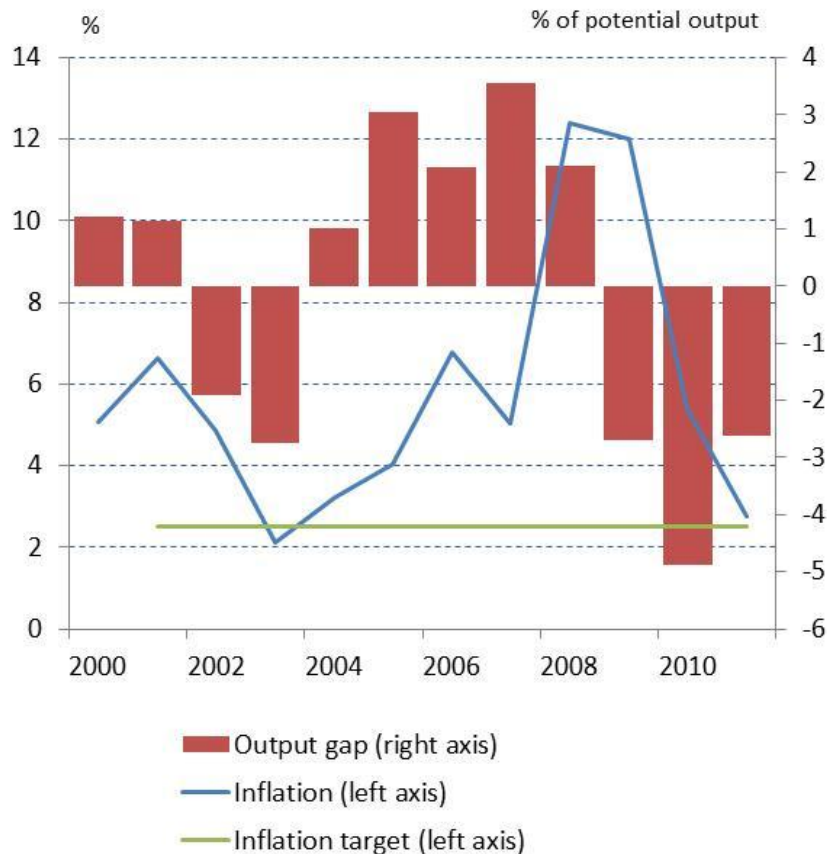
— Output growth

Source: Statistics Iceland.

Inflation was high pre-crisis but soared after the currency collapse

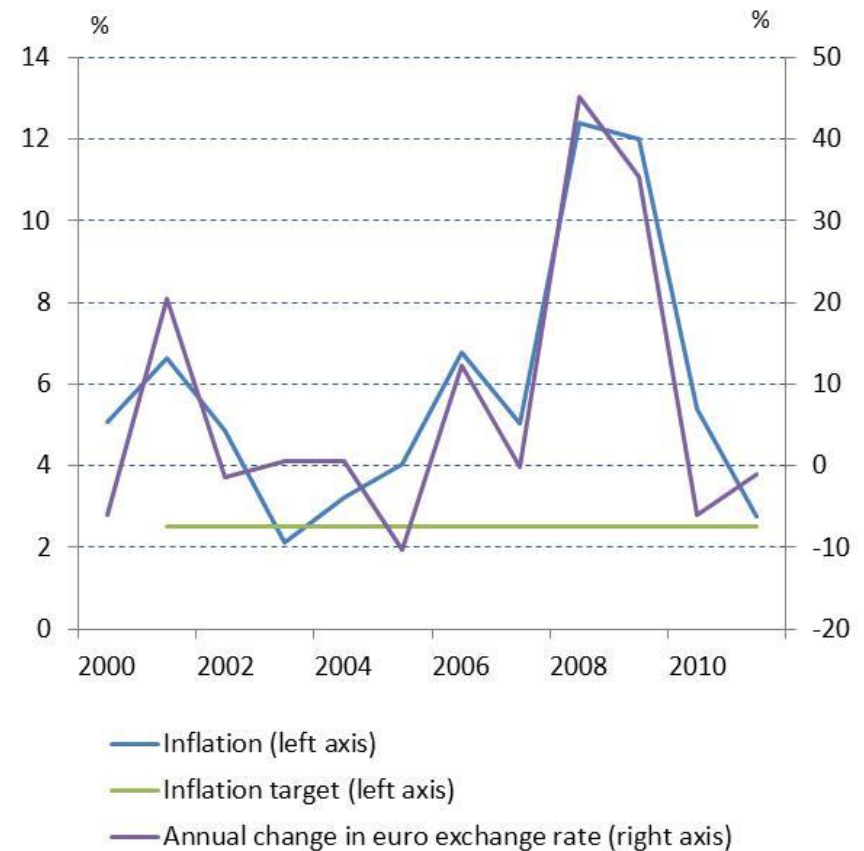


Inflation and domestic imbalances



Source: Statistics Iceland, Central Bank of Iceland.

Inflation and the exchange rate cycle

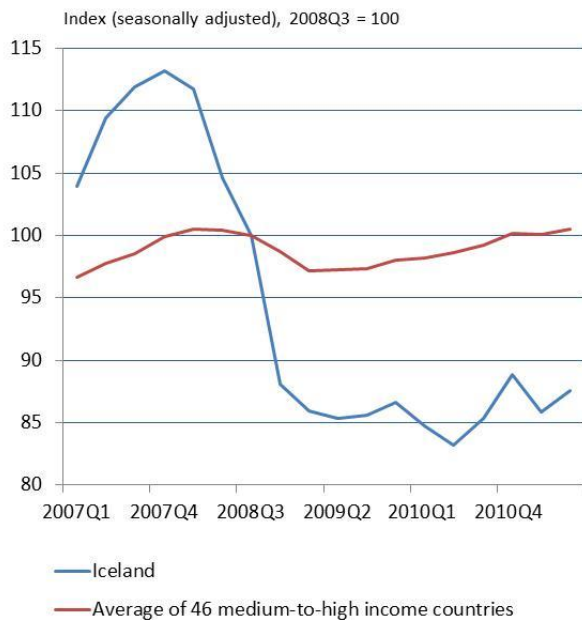


Source: Statistics Iceland, Central Bank of Iceland.

A large contraction in international comparison...

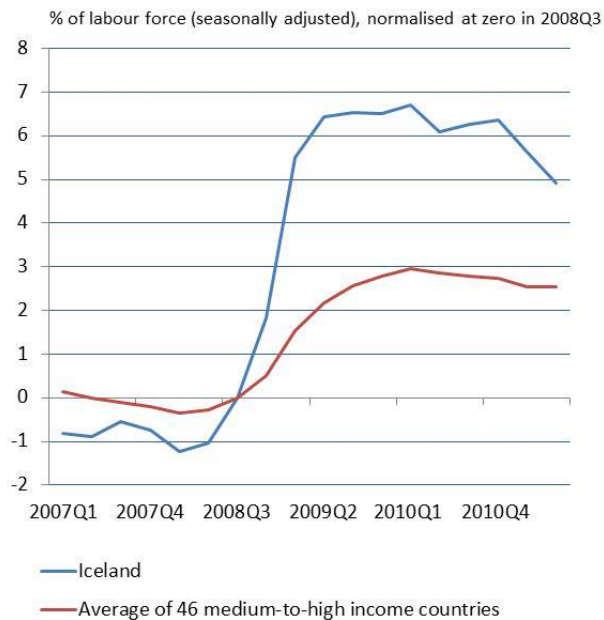


Consumption levels in current crisis



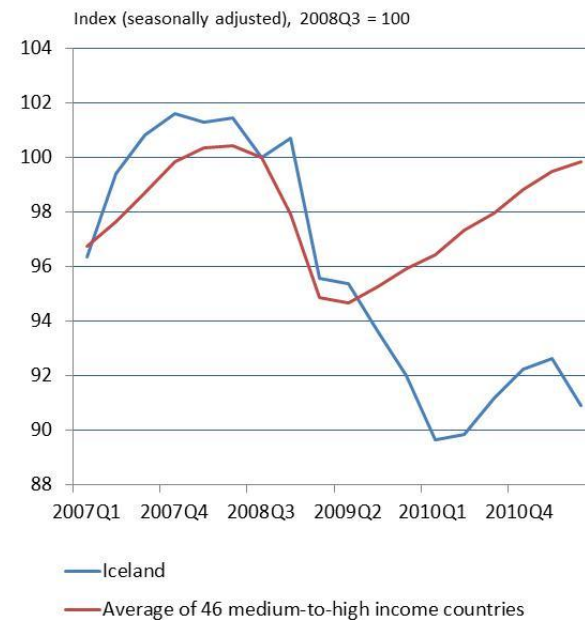
Source: Macrobonds, Eurostat, Central Bank of Iceland.

Unemployment rate in current crisis



Source: Macrobonds, OECD, Central Bank of Iceland.

GDP levels in current crisis



Source: Macrobonds, Eurostat, Central Bank of Iceland.

... and the direct fiscal costs are larger than in most other countries

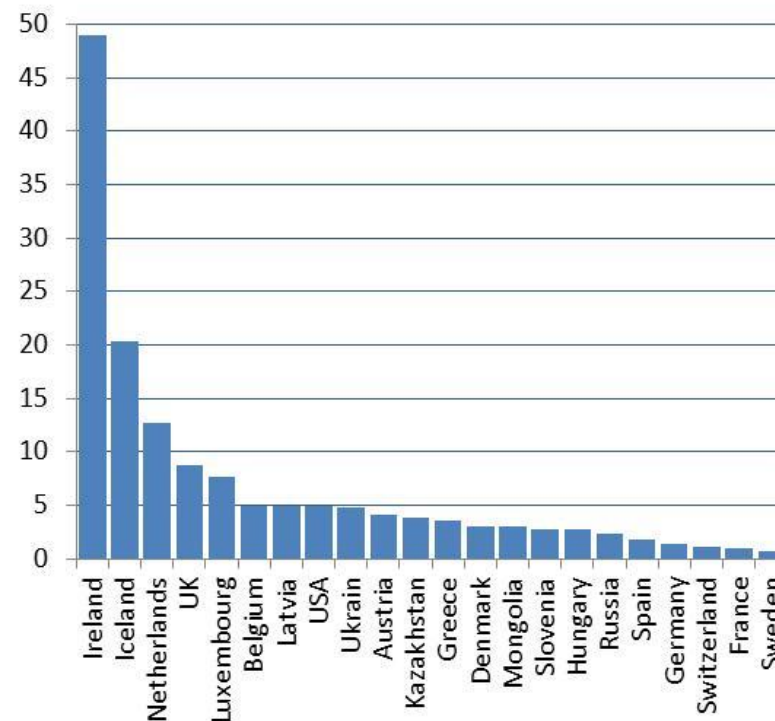


Composition of direct fiscal costs for Iceland (% of 2009 nominal GDP)

Losses on loans to failed banks made by Central Bank	11.1
Other losses on loans to failed banks	1.8
Net costs of recapitalisation of failed banks	3.8
Costs of recapitalisation of Housing Finance Fund	2.1
Costs of called loan guarantees	1.5
Total costs	20.3

Direct fiscal costs of the financial crisis over 2007-2009

% of 2009 nominal GDP



Sources: Laeven and Valencia (2010), "Resolution of banking crises: The good, the bad, and the ugly", IMF Working Paper, no. 10/146, and the OECD (2011) for Iceland and Ireland.



Post-crisis policy responses

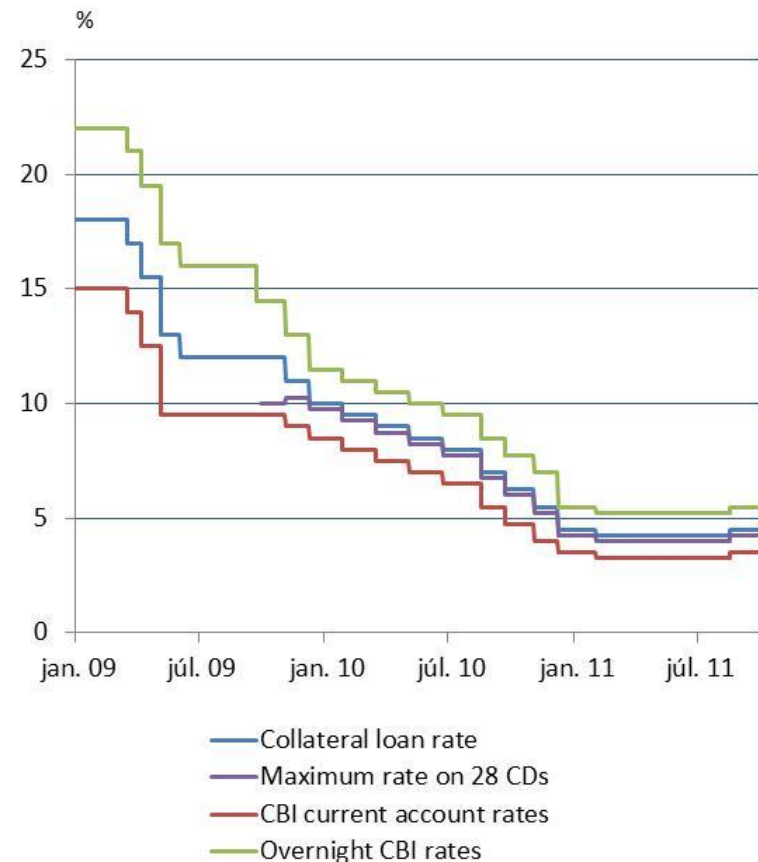
Monetary policy

Focus on stabilising currency and disinflation



- High debt and FX exposure meant that the ISK collapse wreaked havoc in domestic balance sheets
- Initial focus of monetary policy
 - Fostering stability of ISK while the restructuring and recovery of balance sheets takes place
 - Avoid disorderly capital outflows further weakening the ISK
- Using interest rate policy and capital controls
- Exchange rate stability and disinflation allowed for gradual easing of monetary policy

Central Bank of Iceland interest rates



Source: Central Bank of Iceland.

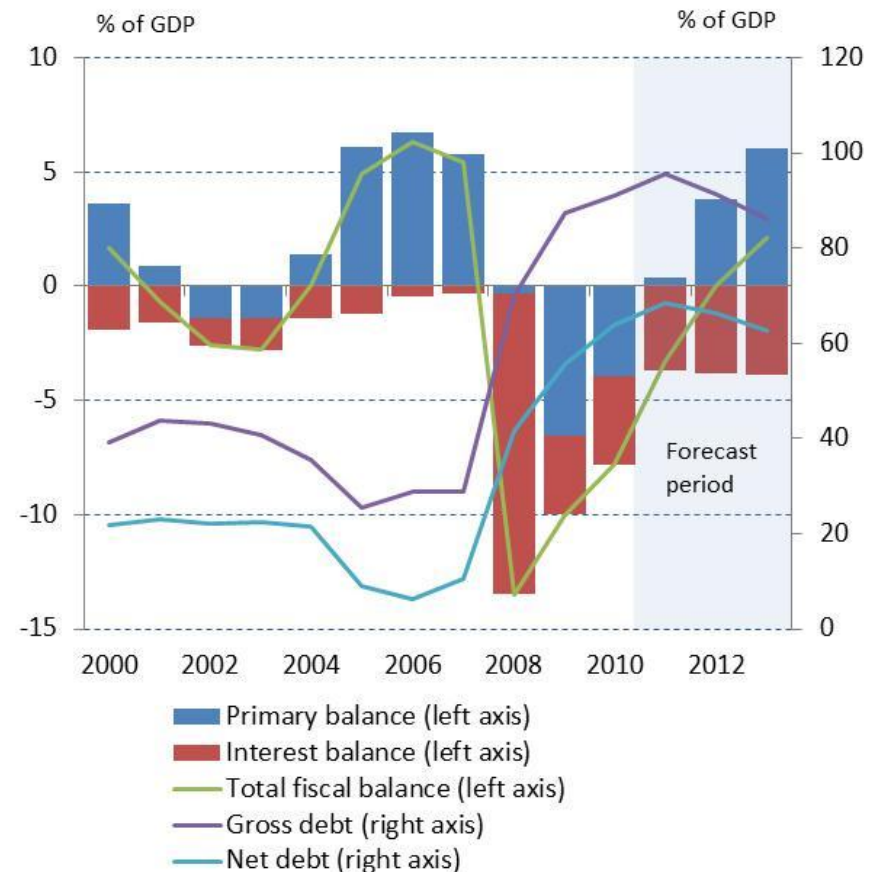
Fiscal policy

Consolidation to ensure debt sustainability



- Fundamental changes in Government finances
- The crisis led to a sharp reversal from surplus to deficit
 - 2007: +5.4% of GDP
 - 2008: -13½% of GDP
- Gross debt increased from below 30% of GDP in 2007 to 95% this year
- Expenditure cuts and increased taxes needed to ensure a gradual closing of the deficit and a sustainable debt path

Public sector finances



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



The economic outlook: The road to recovery

The króna has stabilised as risk premia has subsided



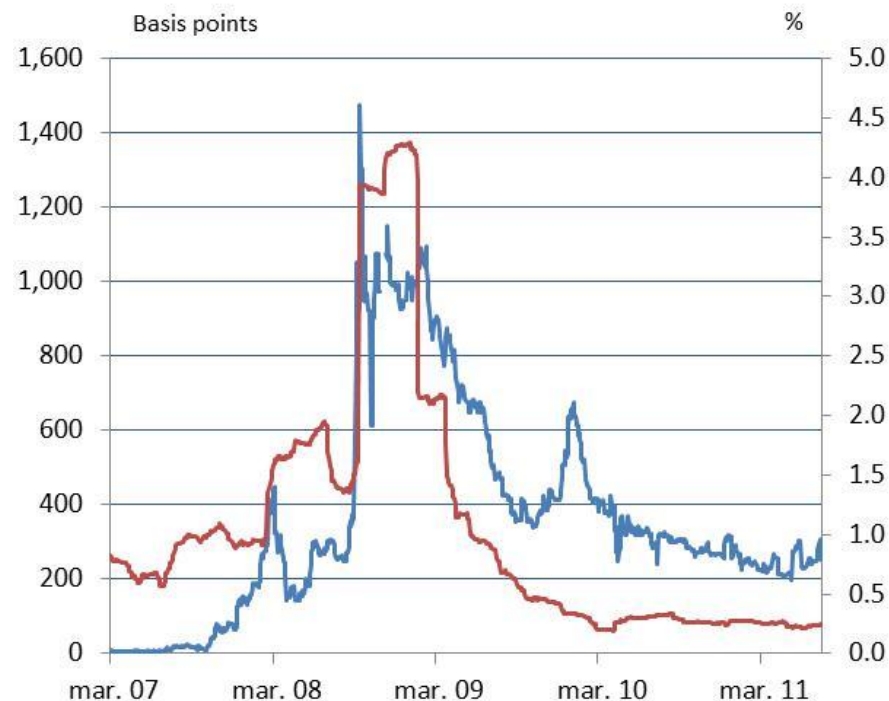
Exchange rate of the króna



- EURISK (left axis)
- 90 day standard deviation of daily changes in the EURISK exchange rate (right axis)

Source: Central Bank of Iceland.

CDS spread and exchange rate volatility



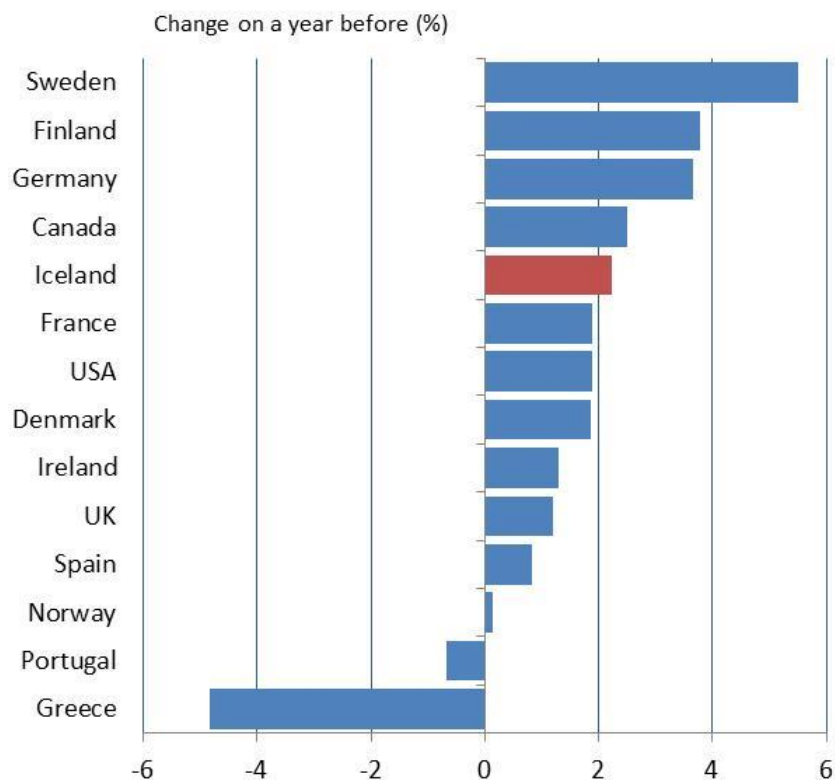
- CDS (left axis)
- 90 day standard deviation of daily changes in the EURISK exchange rate (right axis)

Source: Bloomberg.

A slow and gradual recovery has taken hold



Output growth in selected industrial countries first half of 2011

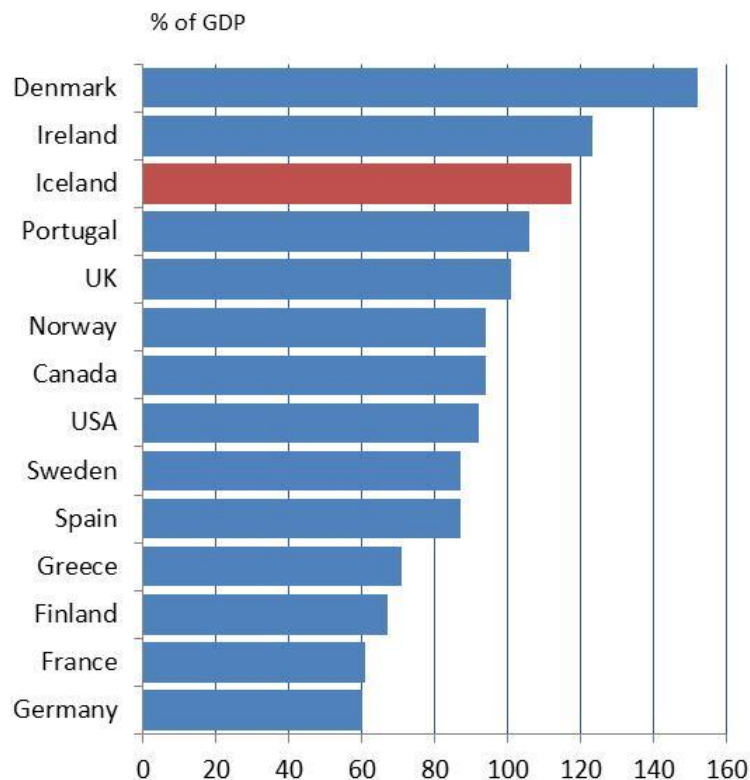


%	2011	2012	2013
Consumption	3.8	2.3	2.6
Investment	10.3	16.2	11.2
Domestic demand	4.0	2.6	3.6
Exports	1.9	1.5	3.5
GDP	2.8	1.6	3.7
Unemployment	7.1	6.2	5.8

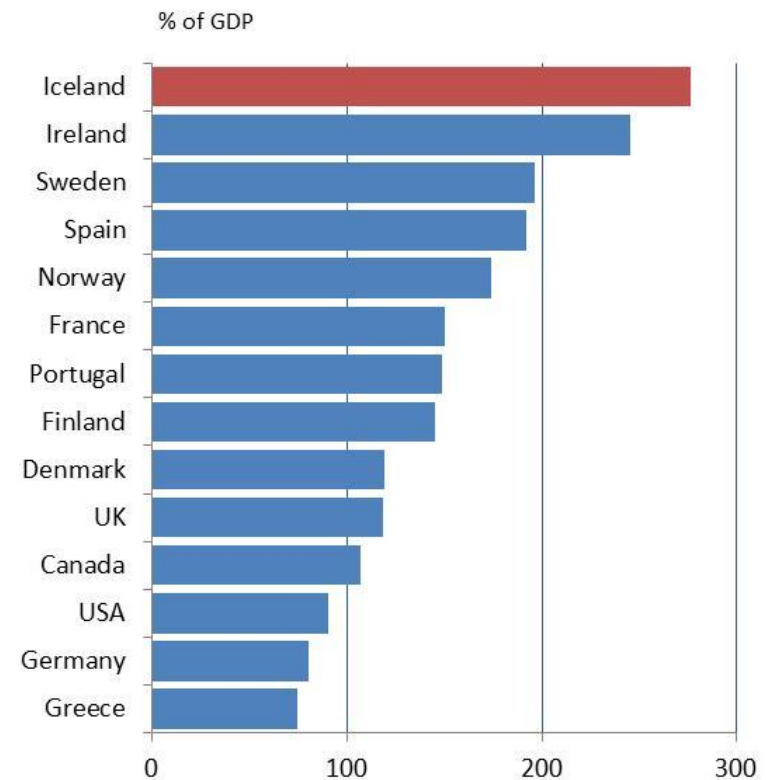
But challenges remain: Private sector debt levels are high...



Household gross debt in 2010



Corporate gross debt in 2010



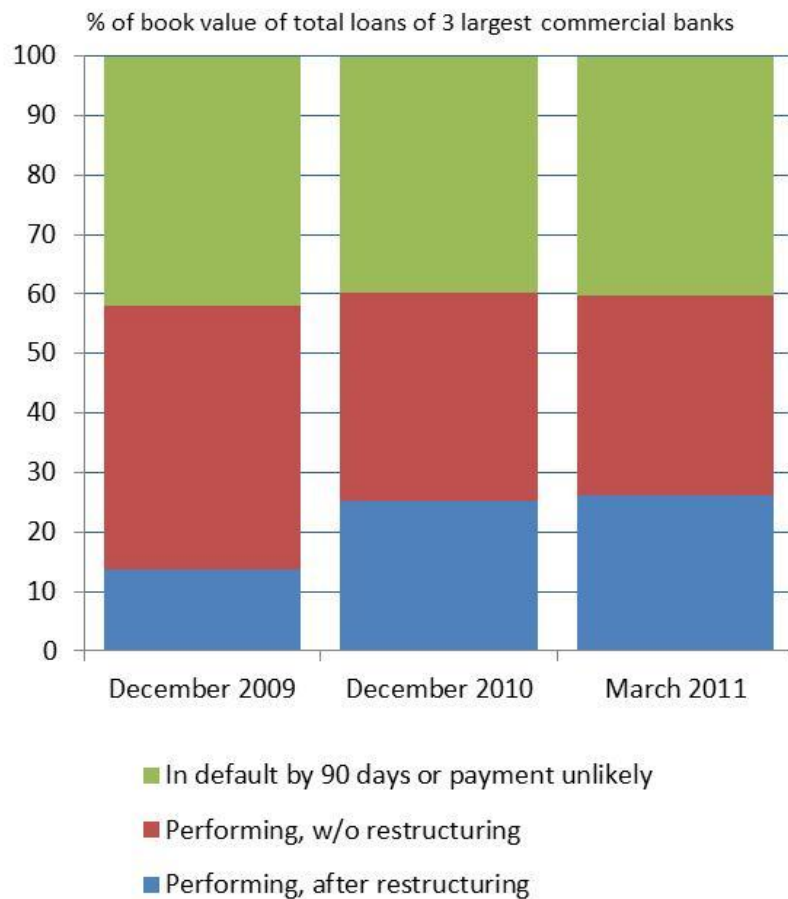
Sources: International Monetary Fund, Central Bank of Iceland and S. Cecchetti, M. Mohanty and F. Zampolli (2011). "The real effects of debt". BIS Working Papers, no. 352.

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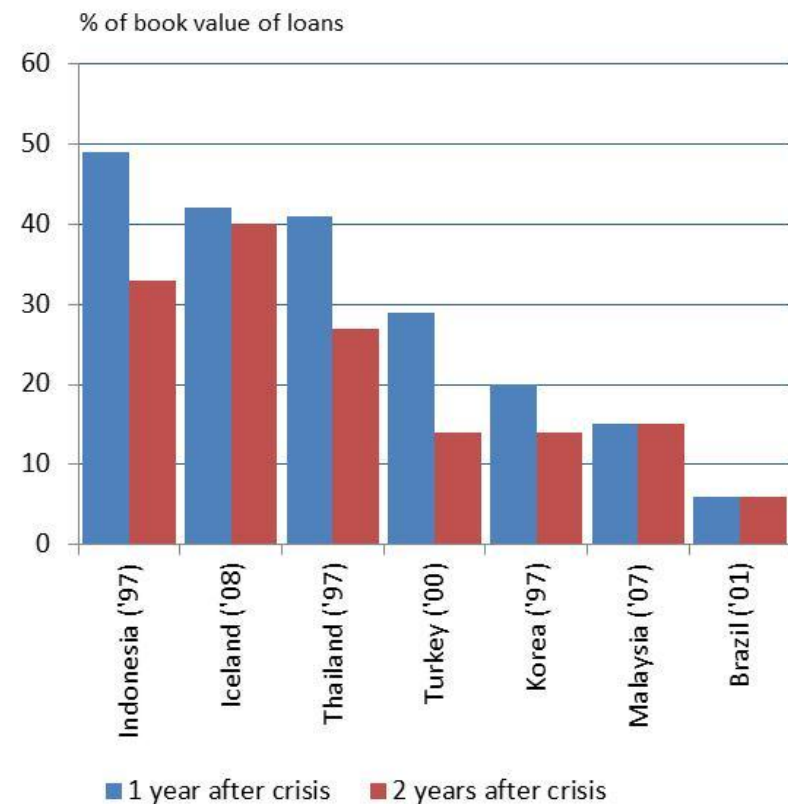
... Debt restructuring has progressed slowly...



Composition of loan book



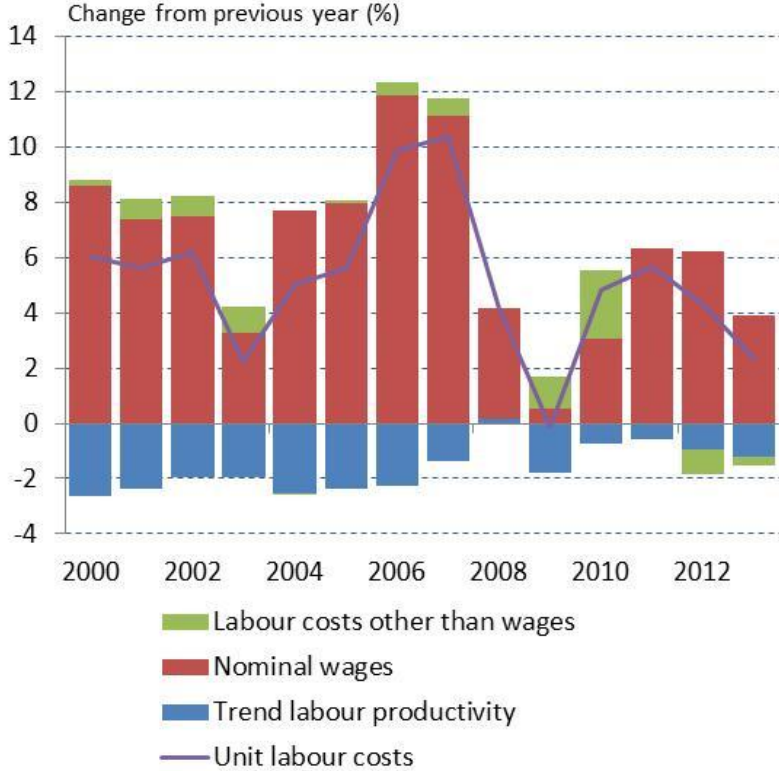
Share of non-performing corporate loans in selected post-crisis episodes



The year in parentheses represents the onset of the crisis in the country concerned. Values for Korea and Thailand refer to 2-3 years after the crisis.

... And inflation has started to rise again on the back of excessive wage increases

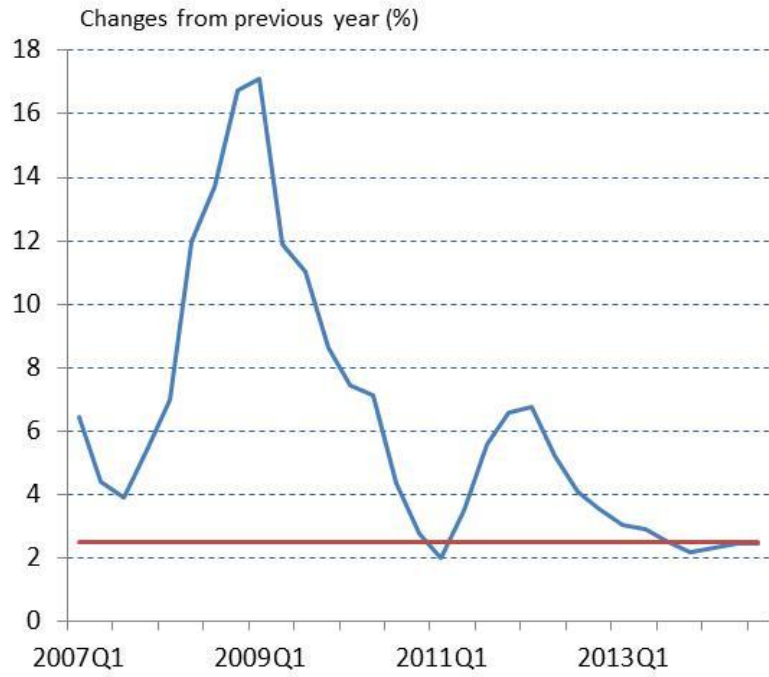
Unit labour costs and contributions of underlying components 2000 - 2013



Positive labour productivity growth is shown as a negative contribution to an increase in unit labour costs.

Sources: Statistics Iceland, Central Bank of Iceland.

Inflation outlook



Headline inflation Inflation target

Source: Statistics Iceland, Central Bank of Iceland.