



Central Bank of Iceland

# The Financial Crisis in Iceland: Policy responses and lessons to be learnt

---

Már Gudmundsson

Governor, Central Bank of Iceland

Banco de Portugal

Lisbon, 26 April 2012

# Outline



- The build-up to the crisis
- Crisis management and the policy response
- The recovery and current policy challenges
- Reflections on the lessons to be learnt and “the Icelandic model for dealing with a financial crisis”



# The recent Icelandic saga

Two separate but interrelated sub-stories:

1. Iceland's boom-bust cycle and problems with macroeconomic management in small, open, and financially integrated economies.
2. The rise and fall of three cross-border banks operating on the basis of EU legislation (the European "passport").

The two converged in a tragic grand finale in early October 2008, when Iceland's three commercial banks failed and were placed in special resolution regimes.

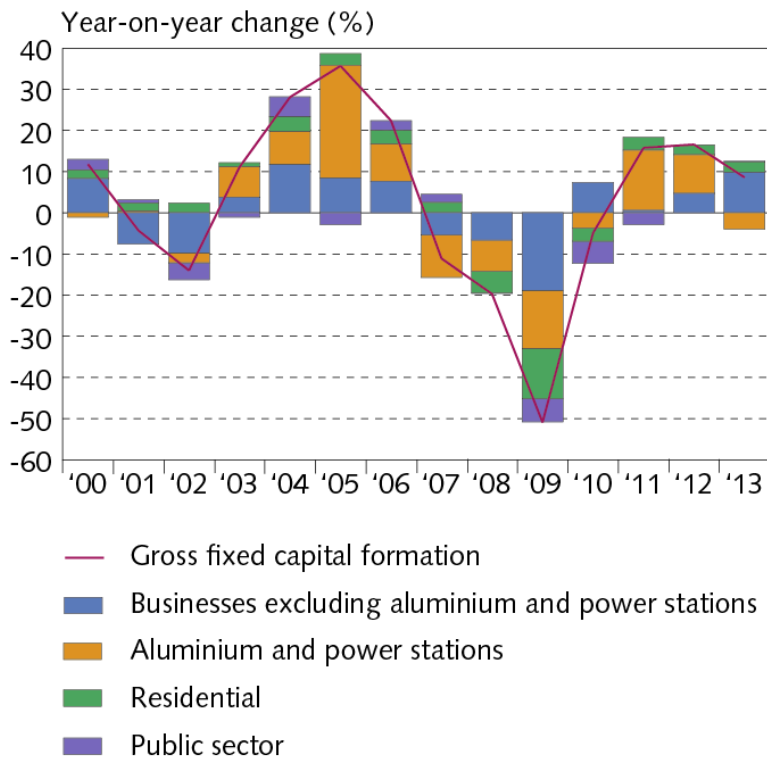


# The boom

# It began as a positive FDI shock



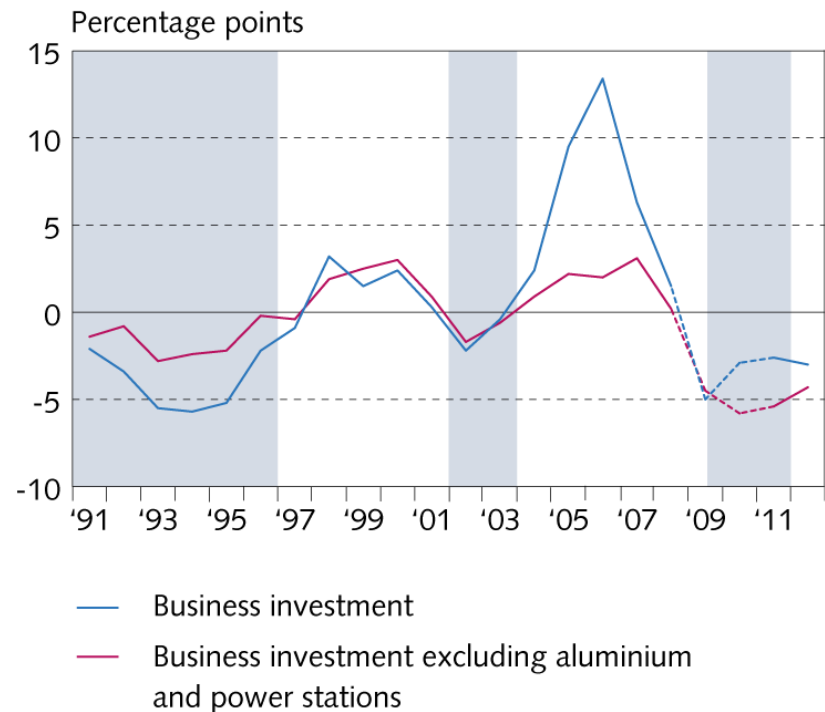
Gross fixed capital formation and contributions of its main components 2000-2013<sup>1</sup>



1. Central Bank baseline forecast 2011-2013.  
Sources: Statistics Iceland, Central Bank of Iceland.

Business investment as % of GDP 1991-2012<sup>1</sup>

Deviation from average for 1970-2007

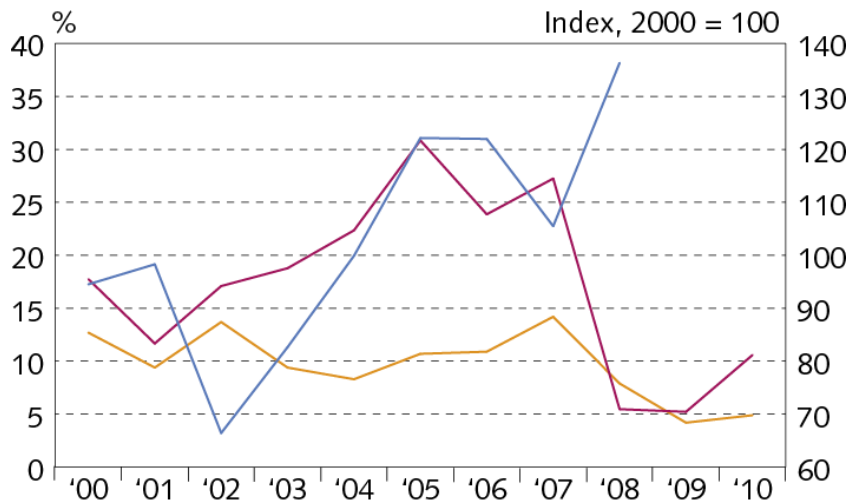


1. Central Bank baseline forecast 2009-2012. Shaded areas show periods with negative output gap.  
Sources: Statistics Iceland, Central Bank of Iceland.

# Developing into a credit boom and serious overheating



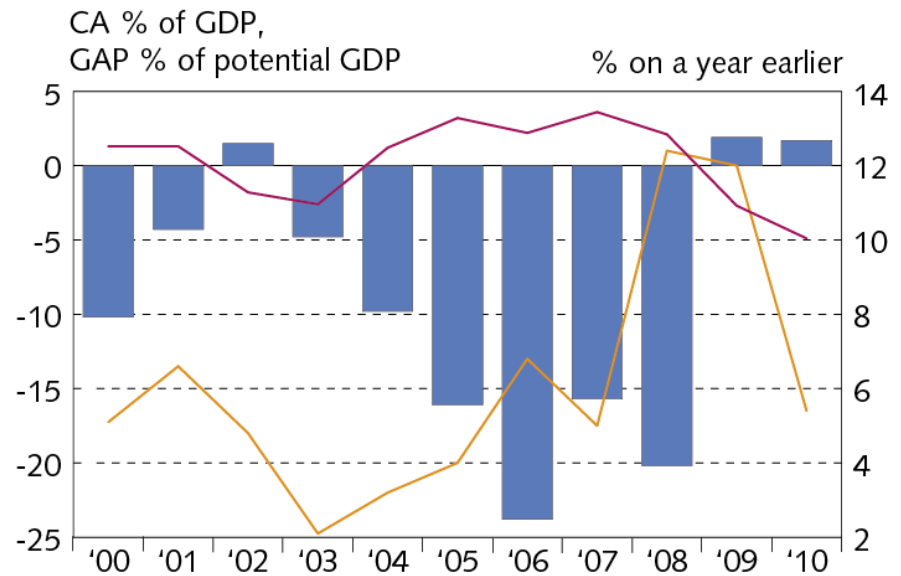
Credit growth, real exchange rate and real interest rates on non-indexed bank loans



- Credit growth (left)<sup>1</sup>
- Real exchange rate (right)
- Real interest rates (left)<sup>2</sup>

1. Latest figures for credit are from Q3 2008.  
 2. Real interest rates on non-indexed bank lending.  
 Sources: Statistics Iceland, Central Bank of Iceland.

Current account, output gap and inflation



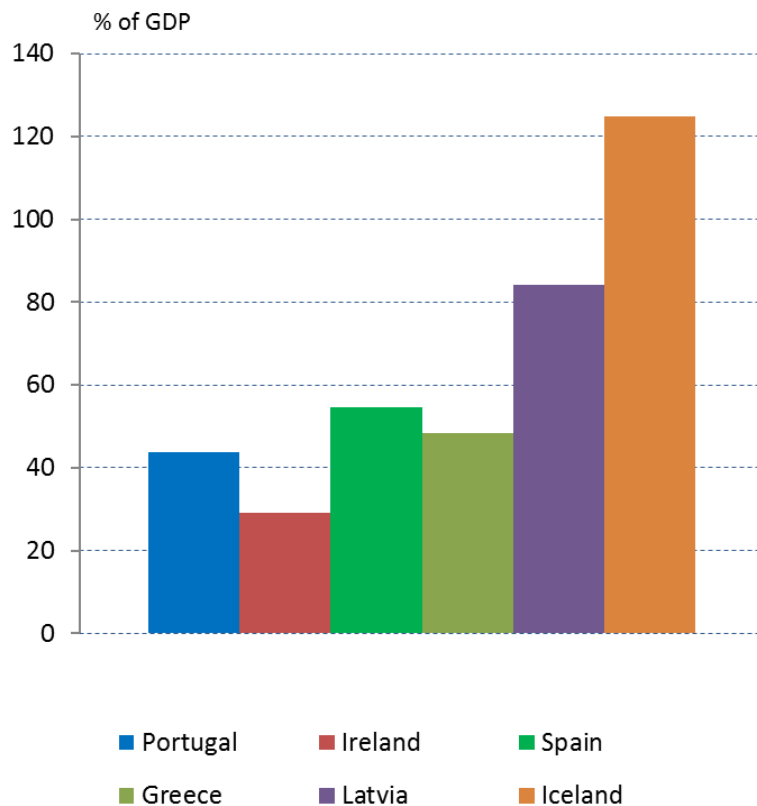
- Current account balance excl. DMBs undergoing winding-up proceedings (left)
- Output gap (left)
- Inflation (right)

Sources: Statistics Iceland, Central Bank of Iceland.

# Fuelled by strong capital inflows

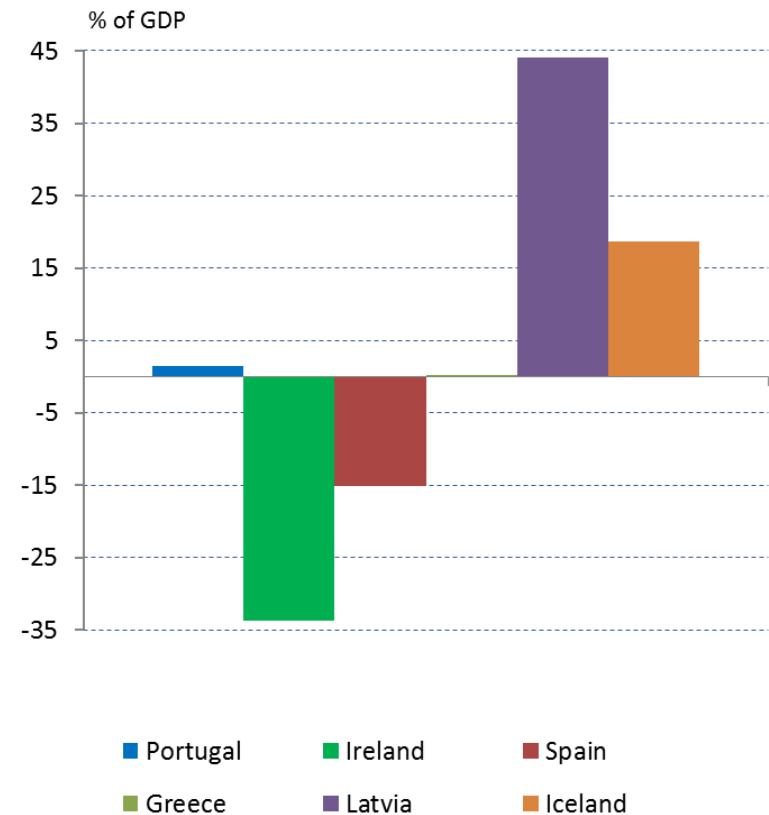


Net private capital inflows excluding FDI, cumulative 2002 - 2008



Sources: Various Central Banks websites.

Net FDI, cumulative 2002 - 2008

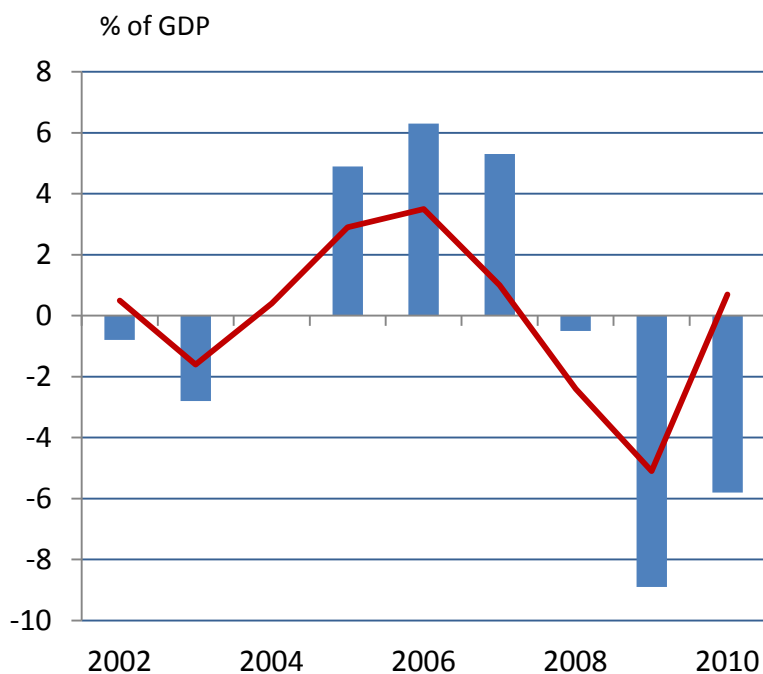


Sources: Various Central Banks websites.

# Fiscal policy was too loose and monetary policy overburdened



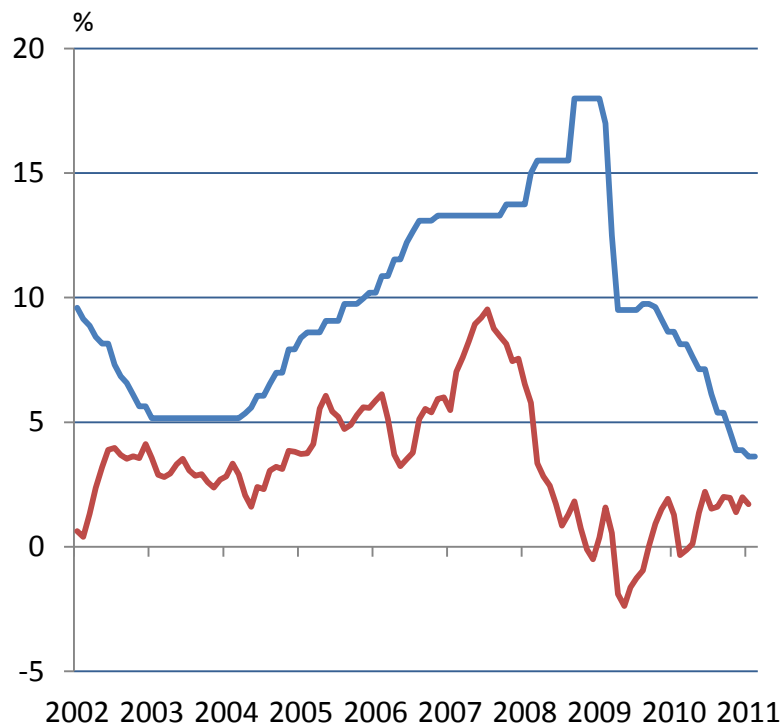
## General government balance



■ Overall balance  
— Cyclically adjusted

Sources: IMF, Statistics Iceland.

## Real and nominal policy rates



— Nominal policy rates  
— Real policy rates

Source: Central Bank of Iceland.





# The cross-border banks



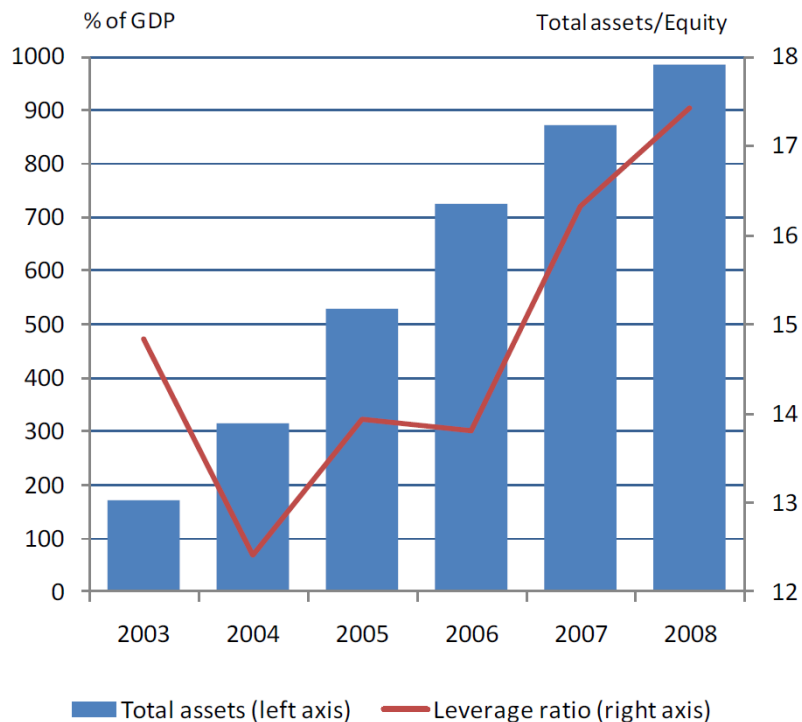
# The European Economic Area

- European “passport” for financial institutions headquartered in any country within the area
- Common legal and regulatory framework ...
- ... but supervision, safety net (e.g., deposit insurance and LOLR), and crisis management and resolution remained largely national.

# Expansion and geographic dispersion



Banks' balance sheet expansion and leverage



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

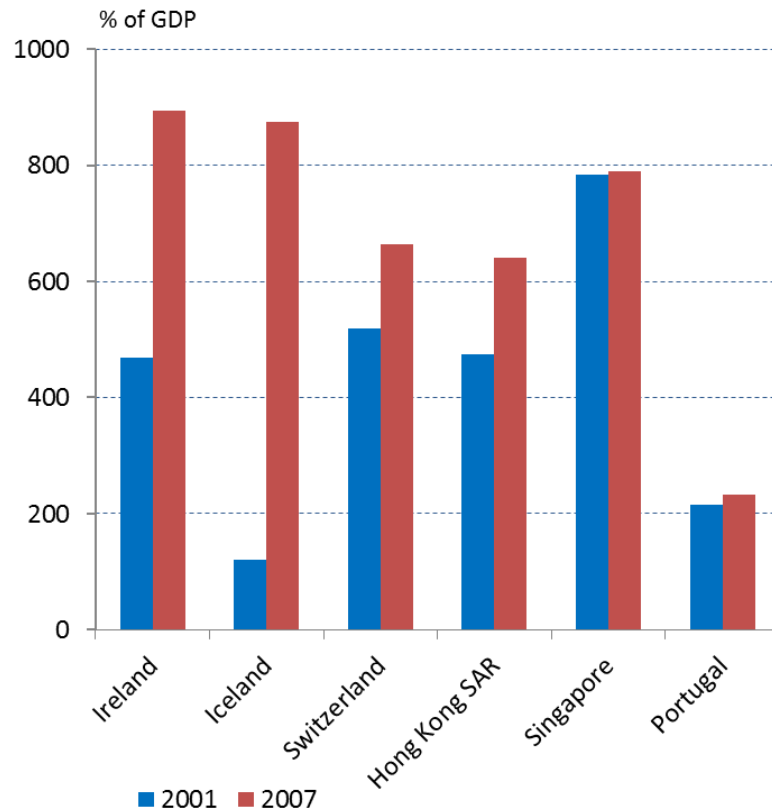
Source: Central Bank of Iceland.

- 41% of total assets in foreign subsidiaries
- 60% of total lending to non-residents
- 60% of income from foreign sources
- Over 2/3 of total lending and deposits in foreign currency
- Kaupthing – operated in 13 jurisdictions:

# Big banks in small countries

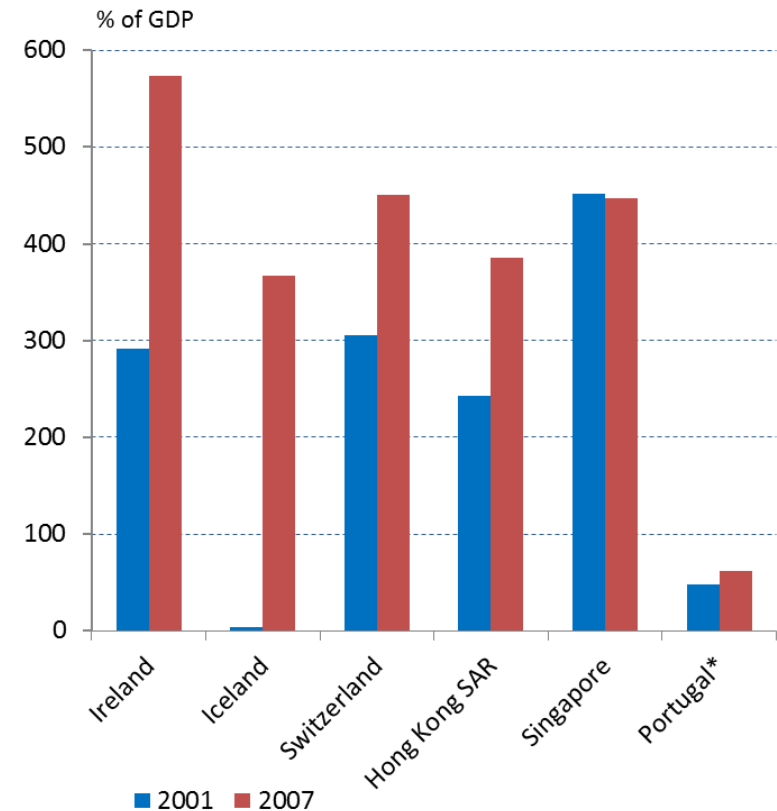


## Banking Assets



Sources: Country Authorities, WEO, IFS & IMF Staff Calculations.

## Banking Foreign Assets



\* 2002 instead of 2001.

Sources: Country Authorities, WEO, IFS & IMF Staff Calculations.



# The crisis hits in 2008

# Adjustment and three shocks

- Unusually large external and internal macroeconomic imbalances in 2005-2007.
- Their subsiding was bound to be associated with a significant slowdown, if not an outright recession (from 2006 onwards, the CBI consistently predicted a recession in 2009).
- Currency crisis in early 2008 (exchange rate fell by 26% in the first half).
- Collapse of the banking system in October 2008 (exchange rate fell by another 26% to year-end).
- Global contraction in Q4/2008 and the first half of 2009.



# Sudden stop and a run on FX liabilities

- The Icelandic banks were largely unable to refinance foreign currency liabilities after the outbreak of the international financial crisis in August 2007.
- Sudden stop in early 2008
- Run on FX liabilities of banks post-Lehman in late September 2008.

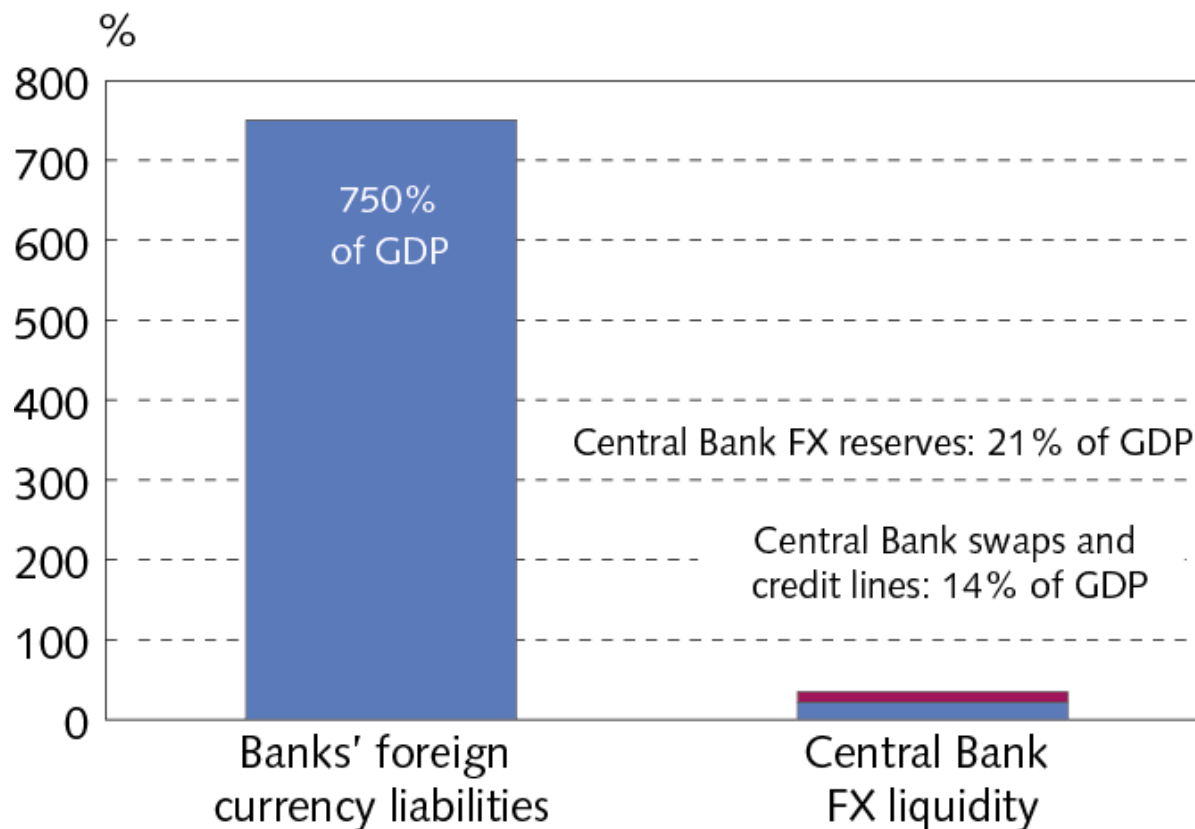
# Building defences

- The banks were in dire straits in early 2008 and faced massive rollover risk in terms of foreign currency liabilities.
- Authorities tried to negotiate swap lines, declined by ECB, BoE and Fed (told to go to the IMF), but negotiated € 1.5 m with Nordic countries in May.
- In May 2008, Parliament approved substantial foreign borrowing to boost FX reserves (€ 5 m, mostly unused).



# FX liquidity available to the Central Bank was dwarfed by the banks' FX liabilities

Banks' foreign currency liabilities and Central Bank FX reserves, September 2008





# The policy response

# Too big to save

- These were private banks.
- Their assets were in excess of 10x GDP, with around 2/3 of the balance sheet in foreign currencies.
- CB did some limited last-resort lending in FX.
- But in the absence of international cooperation, forced downsizing through resolution and winding-up was the only option.
- Guaranteeing the banking system would have been a disaster.

# Securing continued domestic payment and banking operations

- **Emergency Act:**
  - FME entrusted with broad-based intervention powers
  - Deposits given priority over other unsecured claims
  - Parliamentary approval of governmental capital injections
- Statement from the Government that all deposits in Iceland were guaranteed.
- Failing banks were placed in resolution regimes (became the property of (mostly foreign) creditors).
- Domestic banks were carved out of the failed banks (1.7 times GDP).
- Domestic payment systems functioned throughout.

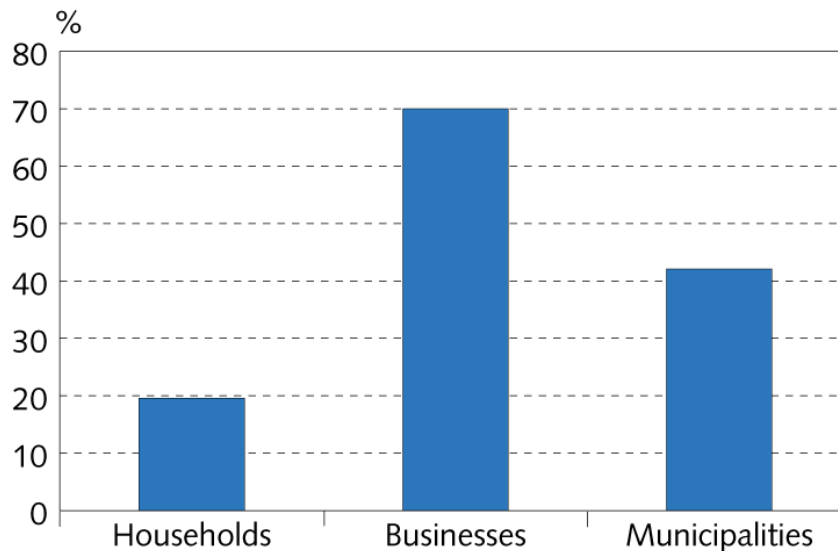
# Disorderly and partly hostile cross-border crisis management

- Lack of information sharing and co-operation across affected jurisdictions.
- Early sale of “good” assets at fire sale prices => recovery ratio for bond holders will be reduced.
- UK authorities froze and ring-fenced assets and closed Singer & Friedlander, bringing down Kaupthing – however, LOLR loan in Sweden and Iceland to Kaupthing.

# The crisis struck a heavily indebted private sector

- With a large share of foreign currency-denominated or foreign currency-linked debt.
- 75% of total household debt was price-indexed.

Proportion of total foreign-denominated debt<sup>1</sup>



1. Figures for households and municipalities are as of year-end 2008, and figures for businesses are as of June 2009.

Source: Central Bank of Iceland.



# IMF programme

- A Stand-by Arrangement was initiated in November 2008 (USD 2.1 bn)
- External financing from the IMF, the Nordic countries, Poland and the Faeroe Islands (USD 3 bn)
- Three key policy goals:
  - Exchange rate stability
  - Fiscal sustainability
  - Financial sector reconstruction
- Comprehensive capital controls a key element in the programme

# The recession

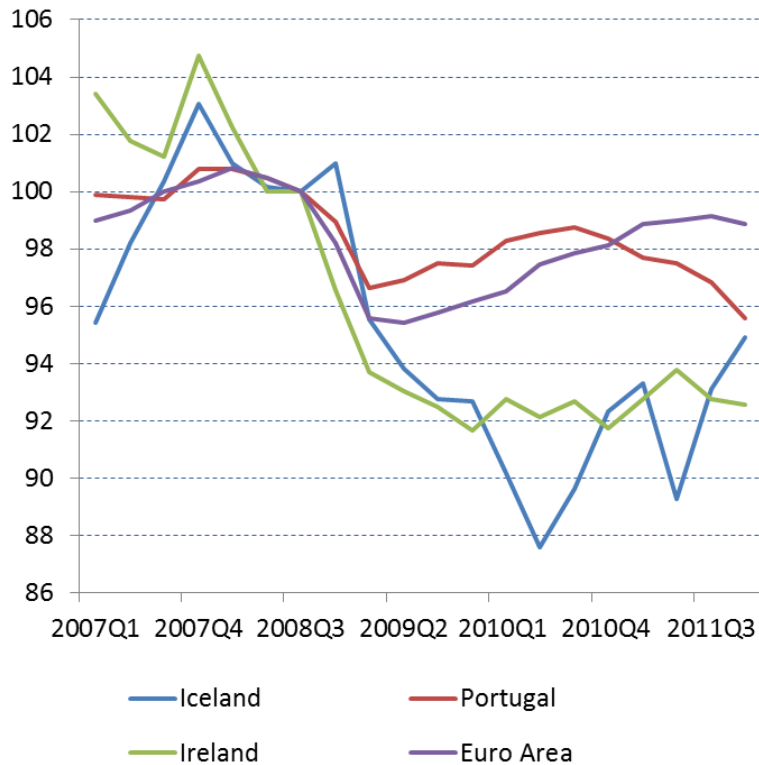


# The recession was deep in international comparison



GDP level  
Q1/2007 - Q4/2011

Index (seasonally adjusted), 2008Q3 = 100



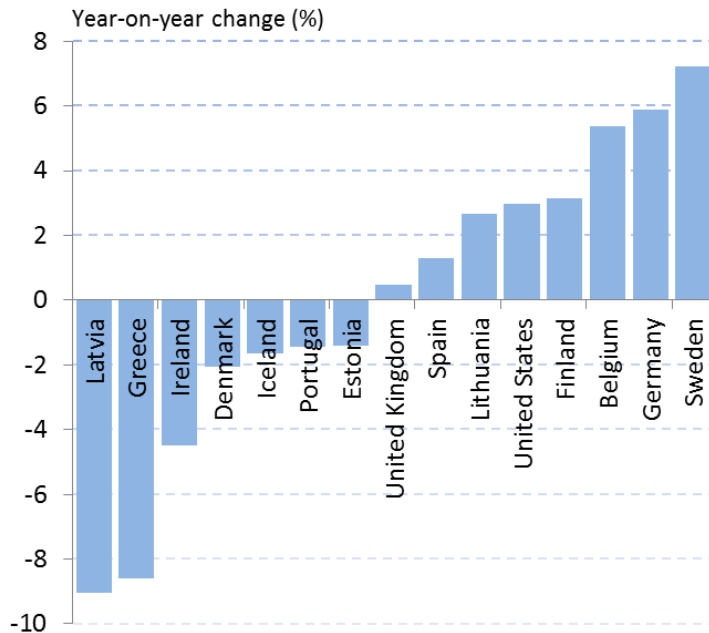
Source: Eurostat.

- GDP contracted by almost 12% from its peak in 2007Q4 to its trough in the first half of 2010
- But that was a decline from an overheated level

# But Iceland was not the hardest hit



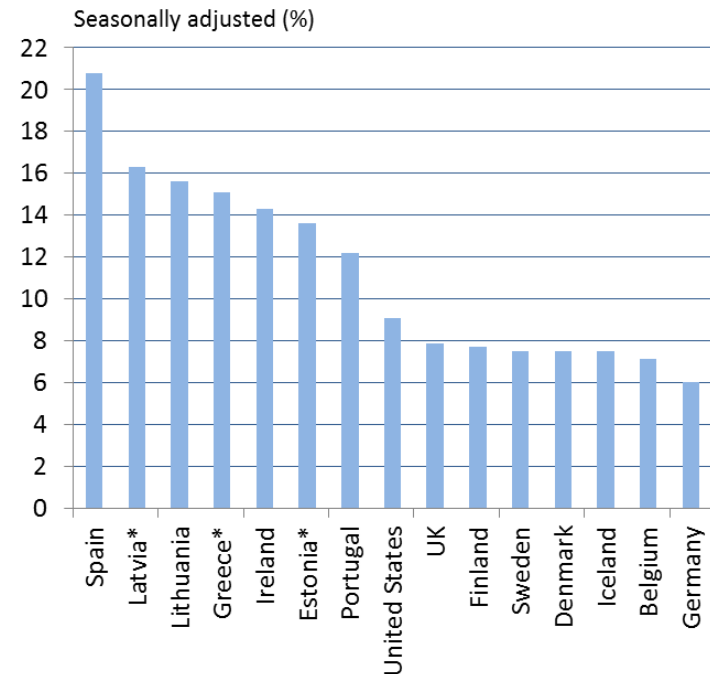
Percentage change in GDP from the average of 2005-2007 to 2011<sup>1</sup>



1. Based on forecasts for 2011.

Source: Eurostat, Global Insight, Statistics Iceland, Central Bank of Iceland.

Unemployment rate Q4/2011<sup>1</sup>



1. Data for countries with an asterisk are only available for Q3/2011.

Source: Macrobond, Central Bank of Iceland.



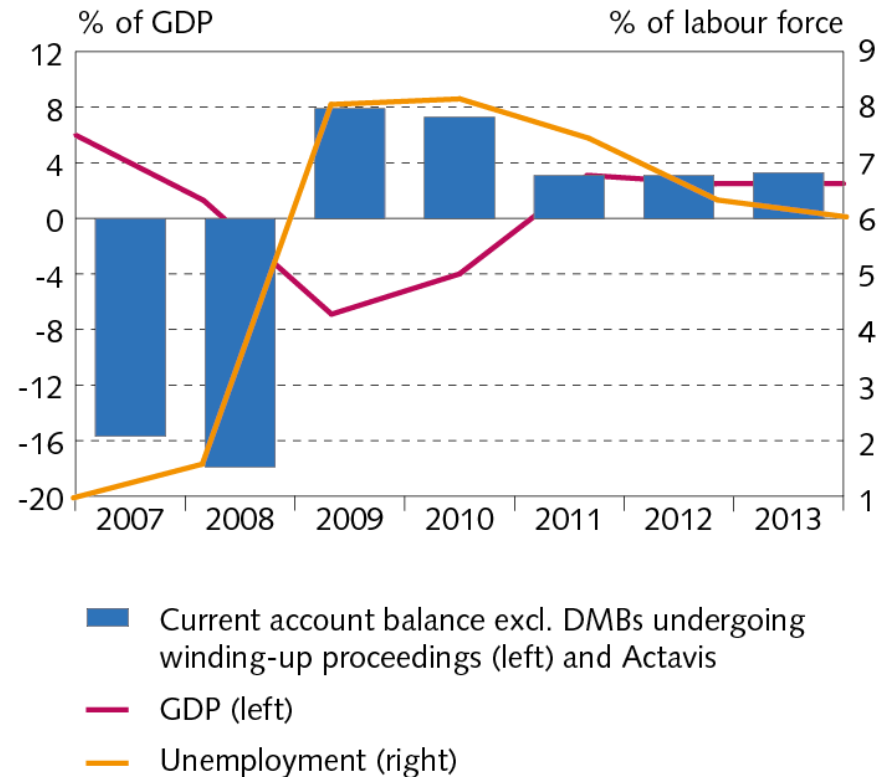
# Recovery and policy challenges

# Stabilisation and recovery



- Current account deficit of 25% of GDP in 2007 swung into a significant underlying surplus
- Exchange rate stabilised in the 2nd half of 2009 and appreciated in 2010
- Inflation and interest rates followed
- Recovery began in 2nd half 2010, 3%+ in 2011 and 2½% (f) 2012

Growth, current account balance and unemployment 2007-2013<sup>1</sup>

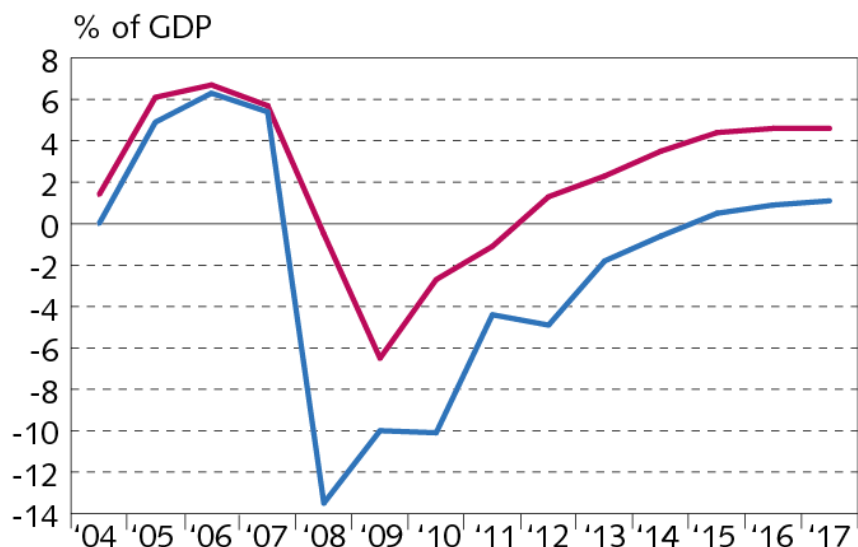


1. Central Bank of Iceland baseline forecast 2012-2013 from MB 2012/1.  
Sources: Statistics Iceland, Central Bank of Iceland.

# Fiscal consolidation is progressing



## General government balance 2004-2017

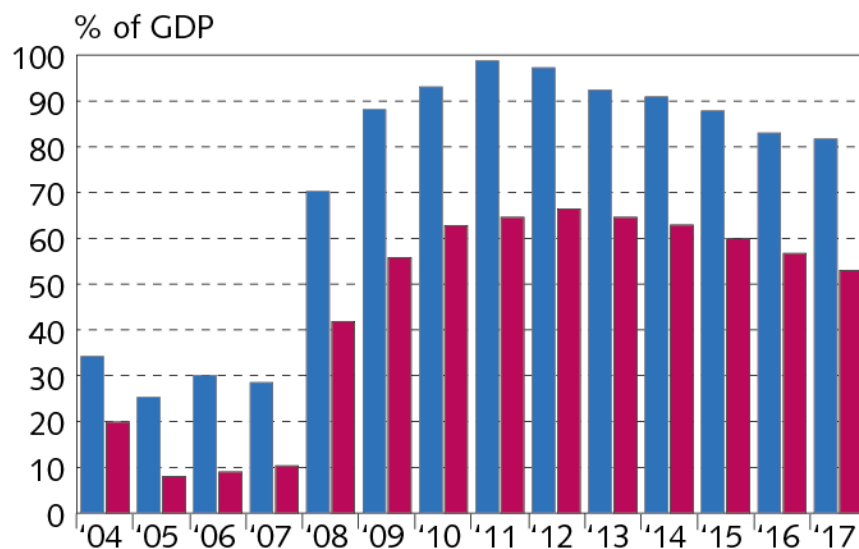


— General Government overall balance<sup>1</sup>  
 — General Government primary balance

1. Including Write-offs. IMF forecast for 2012-2017.

Sources: IMF, Statistics Iceland.

## General government debt ratios 2004-2017<sup>1</sup>



■ General Government gross debt  
 ■ General Government net debt

1. IMF forecast for 2012-2017.

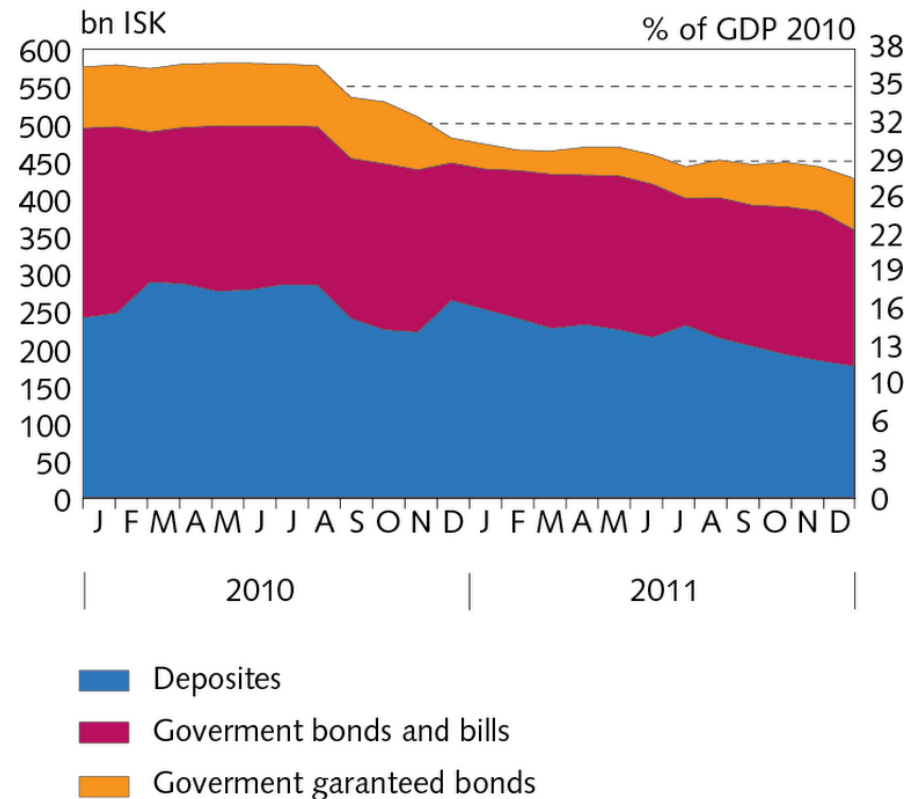
Sources: IMF, Statistics Iceland.

# Current policy challenges



- IMF programme finished in August 2011
- Key challenge is lifting controls on capital outflows – strategy in 2 phases - legal mandate expires end 2013
- Monetary policy is dealing with domestic inflation pressures (6½%)

Non-residents' ISK assets



Source: Central Bank of Iceland.



# Lessons to be learnt and reflections on the “Icelandic model”

# Macroeconomic management in small open economies



- Policy conflicts are very dangerous in small open and financially integrated economies.
- Do not be afraid of big government surpluses during booms.
- Traditional government balances only tell a partial story – look at all channels through which government policy affects demand.
- Current account deficits matter.



# Cross-border banking

- Cross-currency risk and maturity mismatches in terms of foreign currency (=> rollover risk) was underestimated prior to the crisis =>
- Under-regulated and insufficiently backed by capital or safety net facilities (e.g., LOLR).
- EU/EEA framework is flawed and entails particular risk for small countries outside the euro area.
- We need to move towards EU supervision, deposit insurance, crisis management and resolution regimes for cross-border banks. Domestic banks could remain within the national safety net.



# Exchange rate regime

- In Iceland, the floating exchange rate contributed to the problem but is also a part of the solution.
- Membership in the euro area would have prevented the currency crisis and greatly reduced the problem of FX balance sheets without LOLR => the banking crisis would have been less severe.
- This is a key factor behind Iceland's EU application.
- But you can still have a banking crisis and a sovereign debt crisis as recent experience has demonstrated!

# The Icelandic model?



- Useful recipe for others
- Allowing private banks to fail, but protecting retail depositors, not the bond holders, and ring-fencing the sovereign from the failing banks (limiting socialisation of private losses)
- Flexible exchange as a tool for adjustment
- Capital controls as a tool for stabilisation

# Allowing banks to fail?



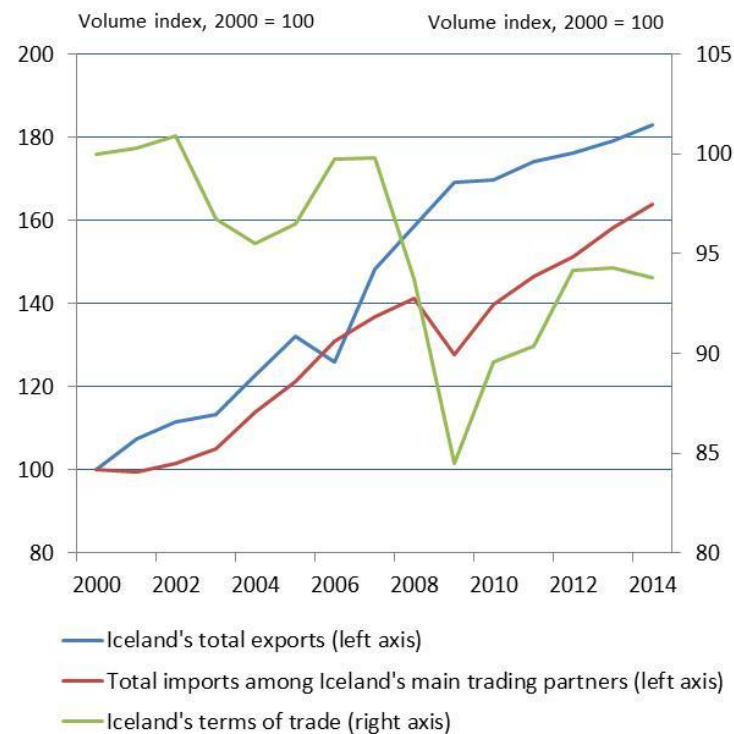
- Private banks that were too big to save for the Icelandic authorities
- Seen in terms of loss of asset values the burden of the fall of the banks was mostly born by foreign creditors (currently holding 85-90% of claim values on the old banks)
- The option will look different in bigger countries
- But it makes sense to ring-fence sovereigns from private banks as much as feasible
- And bailing out the bond-holders is certainly not a sacred principle!

# Flexible exchange rate?



- Part of the problem and part of the solution!?
- Supply constraints in the export sector
- Private sector debt directly and indirectly connected to the exchange rate
- Disequilibrium between the traded goods and non-traded goods sectors

Figure 8 Export volumes and terms of trade 2000-2014



Sources: OECD, Central Bank of Iceland.

# Capital controls?



- Capital controls were key in stabilising the exchange rate, facilitated the financing of the sovereign and the banks and provided room of manoeuvre for monetary policy to support the domestic economy
- But they might be more difficult to introduce in bigger, more complex and connected economies, and the costs might be higher
- Lifting them has also proved challenging and the microeconomic costs increase with time
- The jury is still out!