



27 April 2015

Iceland's crisis and recovery: facts, comparisons, and the lessons learned

**Már Guðmundsson, Governor of the Central Bank of Iceland,
speech at the Institute of International and European Affairs, 27
April 2015, Dublin**

Chairman, Ladies and Gentlemen,

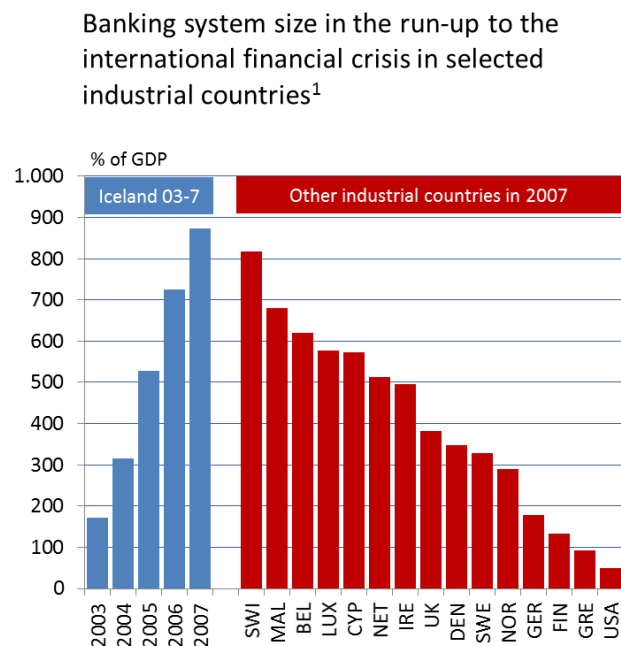
It gives me great pleasure to speak here at the Institute of International and European Affairs in Dublin about Iceland's crisis and recovery and some of the lessons that could be learned from this experience. This is not least because of our historical bonds and the affinity that I feel exists between our people, to which we can now add the common experience of being hard hit by the Great Financial Crisis.

It is well known that Iceland was the first advanced country to experience a full-scale banking crisis during the autumn of 2008, when its three big cross-border banks failed. It was also the first advanced country to go on an IMF programme. What is probably less well known is that at that point, Iceland was already on its way into a recession after an unsustainable boom and serious overheating during 2005-2007 and a currency crisis in the first half of 2008. The banking collapse and the associated wealth loss and further currency depreciation made the recession significantly worse, of course, as did the recession that hit the global economy in the fourth quarter of 2008. That autumn, two separate but interrelated sub-stories of the recent Icelandic saga converged in a tragic grand finale.

The first story was related to Iceland's boom-bust cycle and problems with macroeconomic management in small, open, and financially integrated economies. This is a story that has played out many times around the globe, and many of its elements have been seen before in Iceland. It might have been somewhat more extreme this time around, but it wasn't fundamentally different.

The second story was the rise and fall of three cross-border banks operating on the basis of EU legislation (the European “passport”). This story was much more unique, as it involved the first banking crisis in Europe since the EU single market was formed in the early 1990s.

Figure 1

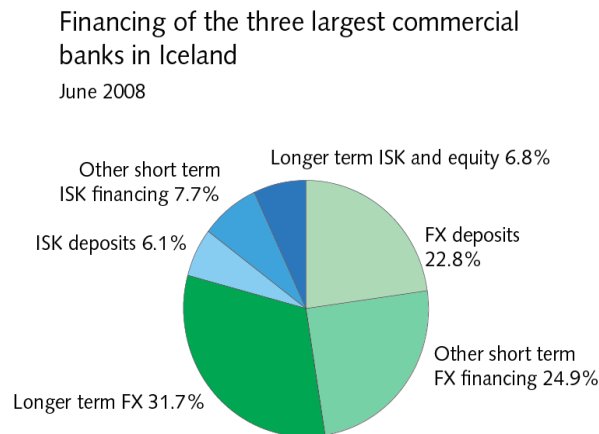


1. The figure shows the development in Iceland in 2003-2007 but the position in 2007 in other countries.

Sources: Central Bank of Iceland, Thorvarður Tjörvi Ólafsson and Thórarinn G. Pétursson (2011). Weathering the financial storm: The importance of fundamentals and flexibility. In *The Euro Area and the Financial Crisis*. Editors M. Bablavý, D. Cobham and L. Ódor. Cambridge University Press.

Let me turn first to the banking story. In a few years prior to the crisis, the banking system had expanded very rapidly, as you can see from Figure 1, making it one of the biggest in Europe relative to GDP. Most of this expansion was cross-border, and a significant part of it was really off-border, having little to do with Iceland, as both financing and investment took place abroad.

Figure 2



Sources: Banks interim consolidated accounts.

Towards the end, around two-thirds of the combined balance sheet of the three cross-border banks was denominated in foreign currency. On the liabilities side, the share of FX-denominated debt was actually higher, as can be seen from Figure 2, with almost half of the financing in the form of FX deposits and other short-term FX financing. The FX part of the balance sheet therefore had a significant maturity mismatch. However, there was no safety net of the type we have in a national setting, in the form of liquidity provision and lender-of-last-resort (LOLR) to back it up. It was an accident waiting to happen, and happen it did, with a vengeance, at the peak of the international financial crisis in autumn 2008, when there was a wholesale run on the FX financing of internationally active banks.

When the Icelandic authorities were dealing with the failing banks, they assumed, based on published CAD ratios and stress tests, that the banks were solvent. Now, however, we know that this was probably not truly the case, as there were hidden vulnerabilities in their capital positions. Be that as it may, with the solvency assumption in mind, the authorities tried to build defences against potential foreign currency liquidity problems at the banks by negotiating swap lines and tapping foreign capital markets – in both cases, with limited success.

Given the lack of international co-operation, the Icelandic authorities were forced to consider radical solutions. Although they were not necessarily articulated in full at the time, these solutions entailed several goals: to preserve a functioning domestic payment system, ring-fence the state in the case of bank failures, limit the socialisation of private sector losses, and create the conditions for rebuilding a domestic banking system.

The adopted solution was embedded in the so-called Emergency Act, which was passed by Parliament on 6 October 2008. The Emergency Act saved the domestic operations of the banking system by creating new banks, which involved carving domestic assets and liabilities out of the old, failing banks. The rest – and the much larger part – went into a resolution process.

In order to reverse the ongoing run on domestic deposits, a declaration was made that all deposits in Iceland were safe, but this did not include deposits in foreign branches. Furthermore, all deposits in Icelandic-headquartered banks were given priority over other unsecured claims, including in foreign branches. As regards the blanket guarantee, the distinction made between domestic deposits and foreign currency deposits in the banks' foreign branches added fuel to the fire of the so-called Icesave dispute about the settlement of deposit guarantees in the Dutch and British branches of one of the banks. But guaranteeing those deposits would never have been credible and might have bankrupted the Government had it been attempted. The deposits in question were in foreign currencies and amounted to 11½ billion euros — far in excess of Iceland's available FX liquidity at that time, as the sovereign was completely closed off from foreign capital markets. Furthermore, in economic terms, given that these deposits were used to a significant degree to finance illiquid assets outside Iceland, such a payment, if it had been possible, would have amounted to a net transfer of resources from Iceland to other countries – where the United Kingdom would have been prominent – at a time when Iceland was going through its deepest financial and economic crisis in the post-war period. That made no sense whatsoever! However, the preference given to deposits under the Emergency Act is a key element in the fact that recoveries on the failed banks' estates will cover deposit claims from the foreign branches in full.

In international discussion, there have been a number of misconceptions about this process. There have been claims that Iceland allowed its banking system to collapse, with what now seem reasonable results, and that others should consider doing the same. The fact is that Iceland kept the domestic part of its banking system running throughout, and at significant expense; otherwise, the consequences would have been dire. Some have claimed that the banks were nationalised. They were not. The failed private banks are private companies in winding-up proceedings governed by law. The Government fully recapitalised one of the new banks. The other two are private banks owned primarily by the estates of the old banks. Others have claimed that Iceland defaulted and got away with it. The opposite is true. The credit of the sovereign was preserved, and all debt obligations have been paid on time. Moreover, Iceland's investment-

grade credit ratings from Moody's and S&P were preserved throughout the crisis. This is why the sovereign has been able to tap international capital markets twice so far since the crisis struck.

You can see from this that the key characteristics of crisis management and bank resolution in Iceland were that shareholders lost all their equity, unsecured bond holders were bailed in, vital infrastructure elements of the domestic banking system were preserved, and deposits were given preference over other unsecured claims. Today this seems in many ways a standard approach, but it was not universally well received at the time.

On the whole, these measures were successful, which mitigated the effect of the banks' failure on the economy. The domestic payment system functioned more or less seamlessly throughout, and there was continuous access to deposits and basic banking services in Iceland. International payment flows were seriously affected, however, not least because of the freezing order imposed by the British authorities on Icelandic banks, but also because of general distrust among foreign counterparties.

Let me now turn to the macroeconomic part of the story. I will paint with a rather broad brush here, both because time is limited and because the issues are somewhat better understood. All the usual suspects were present during the build-up to the Icelandic crisis: very strong capital inflows fuelling a credit and asset price boom that subsequently turned into a bubble at the same time as the economy overheated and an unsustainable external position developed, as could be seen in a double-digit current account deficit. And macroeconomic and prudential policies were not up to the task. Quite the contrary: there was a policy conflict between monetary policy and the demand levers pulled by the Government, and the risks inherent in capital flows, FX balance sheets, and credit and asset price booms were left under-regulated and insufficiently supervised.

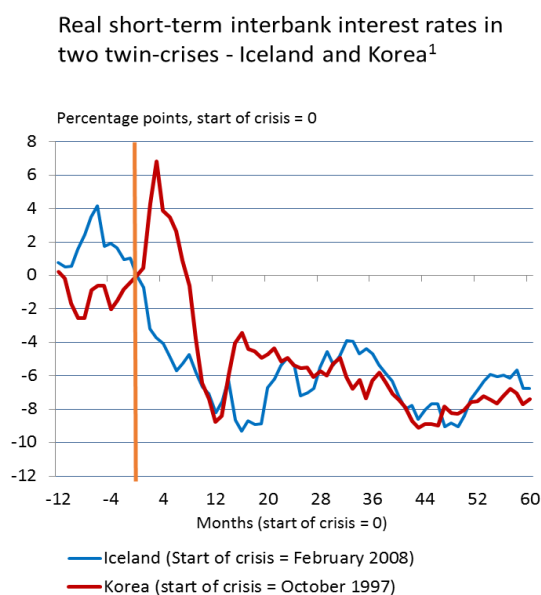
At a deeper level, the macroeconomic part of the story was related to three factors. The first factor centres on the complications that tend to arise with macroeconomic management as very small, open economies become more and more financially integrated. The second relates to the specific conditions of abundant, cheap credit at the global level. Third, major policy mistakes were made in Iceland, both of the type that would be deemed to be such in any book (such as giving an already overheated economy a demand stimulus), and those more closely related to the orthodoxy prevailing at the time: freely floating exchange rates, interest rate policy focusing mainly on low inflation in terms of goods and services, and good micro-supervision; and let the

markets do the rest. In the wake of the crisis, it is better appreciated that this view is deeply flawed.

The imbalances in the Icelandic economy in the years leading up to the crisis were in many ways enormous. The clearest manifestation is perhaps the current account deficit that averaged over 17% of GDP during the years 2005-2008. Both it and the large positive output gap were bound to correct – a process that was likely to be associated with a significant slowing of growth, if not an outright recession. As a matter of fact, the Central Bank of Iceland predicted more or less consistently from 2007 onwards that there would be a recession in Iceland in 2009. This projection had nothing to do with the collapse of the banks but everything to do with the known investment profile of big projects in the energy and aluminium sectors and the accumulating signs of a grossly overheated economy. This belies the common statement that forecasters never predict recessions!

The shocks that hit Iceland in 2008 and the imminent correction of unsustainable balances shaped macroeconomic developments in Iceland in the years that followed. But so did the policy responses, which took two main forms. The first was the crisis management regarding the failing banks, which I have already mentioned. The second was the economic programme developed by the Icelandic authorities in co-operation with the IMF. The IMF programme had three key goals: stabilisation of the exchange rate, fiscal sustainability, and reconstruction of the financial sector.

Figure 3



1. The currency crisis in Korea is assumed to have started in October 1997 when pressures on the won started to escalate. The currency crisis in Iceland is assumed to have started in February 2008 when the foreign exchange swap market collapsed.

Source: Macrobond, OECD.

Comprehensive capital controls were an important element in the programme, but their rationale was to help to stabilise the exchange rate in a situation where the currency had fallen more than 50% in 2008, where foreign króna positions that were a legacy of carry trade and capital inflows amounted to around 40% of GDP, and where a large fiscal deficit that had to be financed in the domestic market had developed. In this situation, the capital controls gave monetary policy more scope to focus on the domestic economy, as is demonstrated in Figure 3, which compares developments in short-term real interest rates during and after the currency and banking crises in Korea in 1997 and Iceland in 2008.

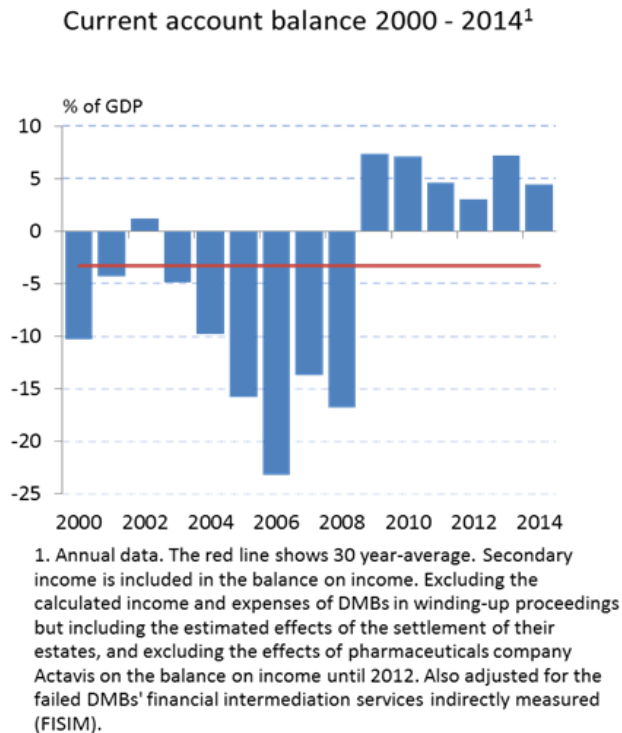
Figure 4



Iceland's recession was deep. But it was probably not as deep as many might have thought when they entertained the image of the total collapse of an entire banking sector, plus a major currency crisis. But then we should bear in mind the nature of the shocks. A significant part of the impact of the banking collapse was felt in other countries. Furthermore, the economic shocks disproportionately affected overblown sectors (banking and construction). Most of the export base was intact, however, and was subsequently boosted by the low real exchange rate. The real depreciation (see Figure 4) and the negative confidence effects of the crisis also contributed to lifting the saving

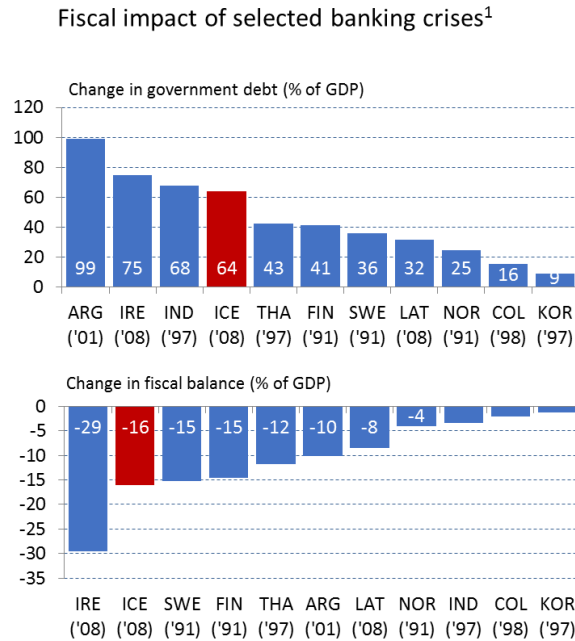
rate and compressing imports. The resultant adjustment in the current account can be seen in Figure 5. The double-digit deficits in the years before the crisis have been replaced by sizeable surpluses from 2009 to this day.

Figure 5



Iceland had significant fiscal surpluses in the years leading up to the crisis. As expected, the crisis had a big impact on government finances: through the direct fiscal costs of the banking crisis, the loss of tax revenue, and higher unemployment expenditures as the economy went into recession. This impact was big as can be seen on Figure 6 showing the direct and indirect impact of selected banking crises on government debt and fiscal balance. But yours was bigger!

Figure 6



1. Change in government fiscal balance between year T-1 and the post-crisis trough in years T and T+3 and change in government debt between year T-1 and the post crisis peak in years T and T+3. The countries are Argentina, Columbia, Finland, Iceland, Ireland, Indonesia, Korea, Latvia, Norway, Sweden, and Thailand. Year of start of crisis in parenthesis. Sources: IMF, Laven and Valencia (2008), Central Bank of Iceland.

A deficit on the central government amounting to 8% of GDP opened up in 2009. It had to be financed domestically. Capital controls helped in that respect. To build confidence and open external market access, a medium-term fiscal consolidation plan was implemented as a part of the programme with the IMF. In 2009, automatic stabilisers were mostly allowed to do their work, but in 2010 a phased deficit reduction plan set in, with a primary surplus targeted for 2012 and an overall surplus for 2014. This fiscal consolidation was sizeable in international comparison, as can be seen from Figure 7, but it did not derail the recovery that began around the middle of 2010. It helped that monetary policy could be relaxed over the course of 2010, as the closure of loopholes in the capital controls in late 2009 contributed to the stabilisation of the exchange rate.

Figure 7

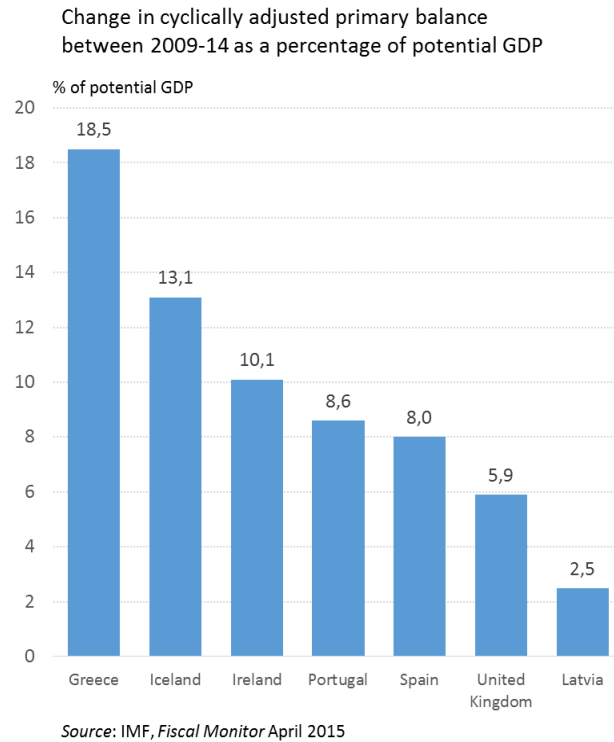


Figure 8

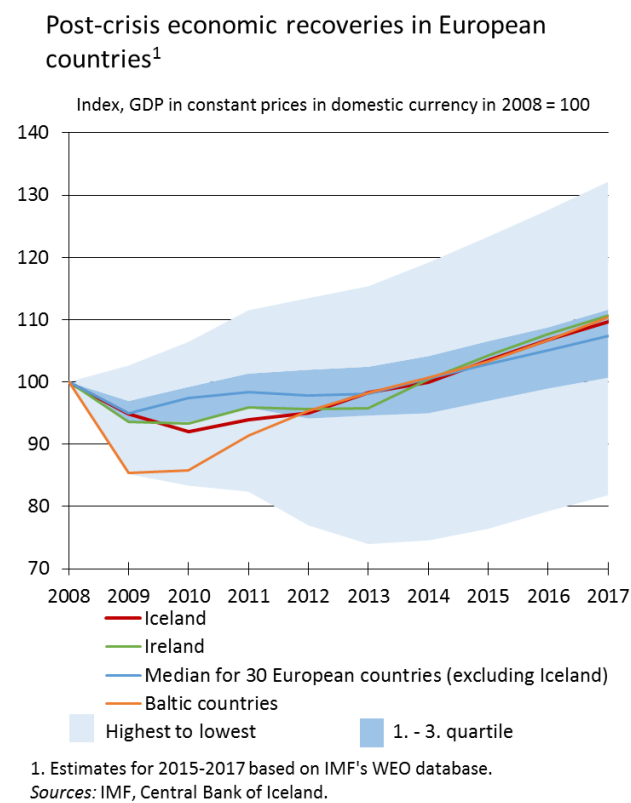
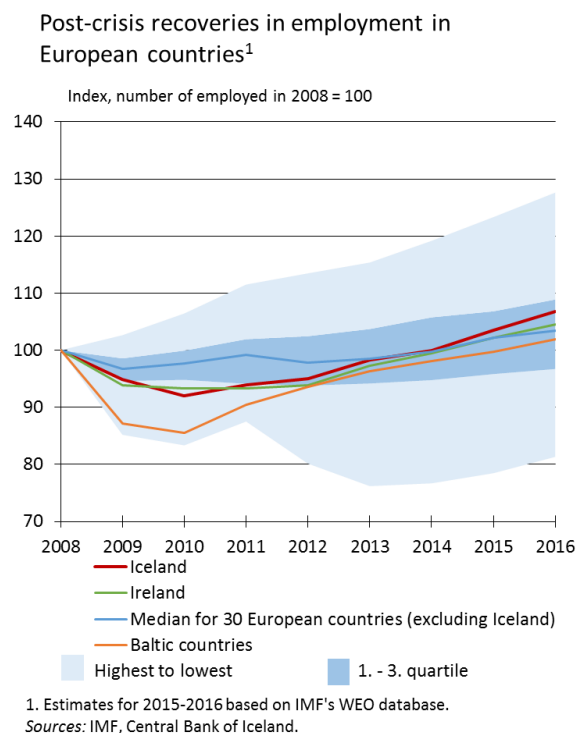


Figure 8 and 9 show developments in GDP and employment during the recession and subsequent recovery in Iceland, with predictions extending into 2017 for GDP and 2016 for employment. For comparison, it shows the distribution of the same for 30 other European countries, with Ireland highlighted. It shows that Iceland's recession, as well as Ireland's, was deeper than the median in Europe, but both countries have been doing better than the average during the recovery, especially lately and in the forecasts. Actually, there is relatively little difference between Iceland and Ireland by both measures, except that Iceland seems to be doing somewhat better lately in terms of employment growth. Iceland's performance would be even better if we looked at the unemployment rate, as labour supply is rather elastic, both internally and because of cross-border mobility.

Iceland lost just over 11% of output during the recession that ended in the first quarter of 2010. It will have probably more than gained that back by the first quarter of this year. Given developments in the supply side of the economy, the Central Bank's assessment is that almost all of the slack in the economy has been absorbed. Unlike the pre-crisis peak, the current level of output is therefore associated with a relatively well-balanced economy both internally and externally. In recent months, inflation has been below the target because of international developments, and there is a current account surplus, which allows the Central Bank to accumulate reserves without undermining the exchange rate.

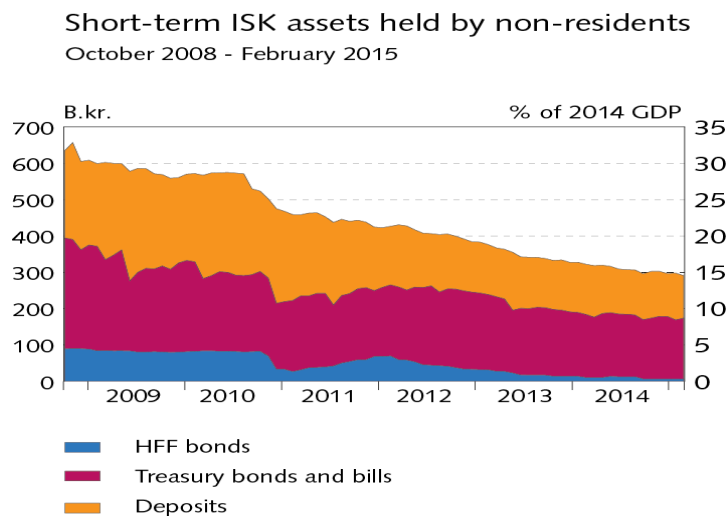
Figure 9



So is Iceland out of the woods? The answer is no. The financial crisis casts a long shadow. Both household and corporate debt levels have declined significantly, with the household debt-to-income ratio around the 2005 level and the corporate debt-to-GDP ratio at its lowest since mid-2004. But there are significant pockets of financial fragility, with some of the households that bought and borrowed at the peak of the market still facing very heavy debt service burdens. And even though public debt is now on a declining path relative to GDP, it is very high in historical terms, which remains a vulnerability.

The biggest legacy problem, though, is the capital controls. During the early stages of the crisis, the controls were helpful in stabilising the economy and providing the shelter needed to repair balance sheets and rebalance the economy. But over time – and increasingly, as the economy and the rest of the world recover – they begin to turn into obstacles to economic growth.

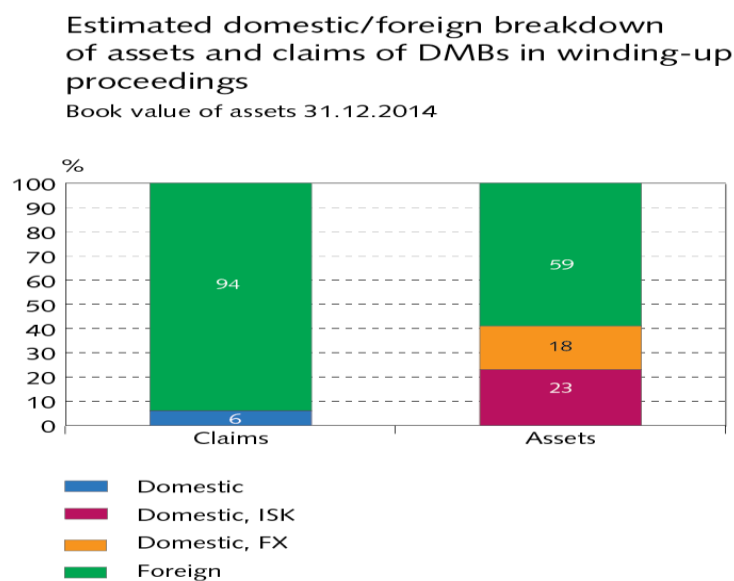
Figure 10



The problem is that there are big obstacles to speedy removal of the capital controls. First, we have short-term króna assets in the hands of foreign residents, so-called offshore krónur, which currently amount to 15% of GDP, after having been reduced by more than half since the capital controls were introduced (see Figure 10). But more importantly, we have domestic assets held by the estates of the old banks. This is a balance of payments problem, as 94% of the claims on these banks are foreign and only 6% domestic, whereas 41% of the assets are domestic, including 21% in krónur (See Figure 11). Taking into

account the part of these assets that are already financed in foreign currency, we get the result that unfinanced domestic assets that could revert to foreign residents with the unwinding of these estates will amount to 25% of GDP (see Figure 12). When considering the complication that this creates for Iceland, you should bear in mind that it is partly because the resolution of the third-largest bankruptcy in the history of mankind is taking place in one of the smallest countries in Europe.

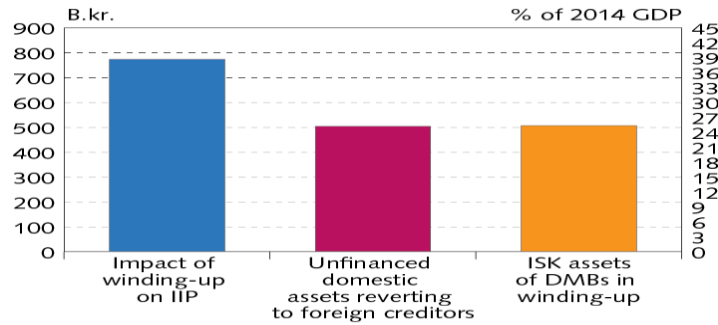
Figure 11



Therefore, potential outflows amounting to 40% of GDP might seek a speedy exit if we were to lift the capital controls tomorrow. If our relatively large FX reserves (30% of GDP) were our first line of defence, they would be wiped out completely, and then the exchange rate would give way, with potentially serious consequences for economic and financial stability in Iceland. We are currently working hard on solutions to this problem, and such solutions do exist. From a logical standpoint, the solution must take the form of either a significant reduction before early exit or a secure longer-term holding period before the controls are lifted.

Figure 12

Impact of calculated settlement of DMBs in winding-up proceedings on the IIP, unfinanced domestic assets reverting to foreign creditors and ISK assets¹
Book value of assets 31.12.2014



1. Assuming equal distribution of assets among creditors; no consideration is given to future tax payments or other issues pertaining to the settlement of the estates.
Sources: Claims lists and financial informations Glitnir, Kaupthing and LBI; Statistics Iceland, Central Bank of Iceland.

I am coming towards the end of my talk and will have to leave discussion of the lessons learned for the Q&A session. The list is long and includes the need to avoid policy conflicts in small, open, and financially integrated economies, to better regulate FX risk in domestic banking systems, to give up the dream of financial centres in small countries if they do not have access to credible and comprehensive international or regional safety nets, and to improve policy frameworks and tools in light of the experience that we have been through.

In Iceland, this process has gone past the talking stage: frameworks for monetary and financial stability policies have been improved, new prudential rules have been introduced, financial sector legislation has been amended, and supervision has been improved and strengthened. And there is more to come.

Thank you very much