Box IV-2

The Icelandic contraction and timing of recovery in international context

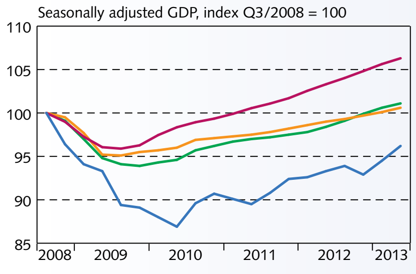
Economic recovery has begun in most countries and is well underway in many of them. In the US, recovery began in Q3/2009 and GDP is now just over 1% lower than in the latter half of 2008, at the beginning of the financial crisis (Chart 1). In the euro area, GDP growth began in Q3/2009 and has been strong so far in 2010; however, the outlook is for a slightly less robust second half. In the UK, GDP turned upwards near the end of 2009, but growth remains weak. In the Nordic region, the turnaround has been most decisive in Sweden, which recorded 4.7% quarter-on-quarter GDP growth in Q2/2010. Denmark is recovering strongly as well, and GDP growth is rapidly gaining momentum. In Norway and Finland, recovery began in Q3/2009.

The three Baltic countries are among those hit hardest by the crisis. GDP began growing in Q1 and Q2/2010 in Estonia and Lithuania, however, although they suffered a slight setback thereafter. The largest contraction occurred in Latvia, but recovery is expected to start there in the third quarter, as is it here in Iceland. Many other Eastern European countries suffered strong contractions as well, as did Ireland (Chart 2). In most of these countries, recovery began in Q1 or Q2/2010, however.

Recovery arrives later in Iceland

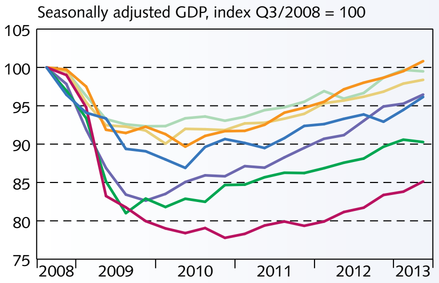
Iceland's banking and currency crisis is virtually unprecedented. Although the burden of the old banks' failure will be borne in large part by foreign creditors, the banks' collapse also made a profound impact on domestic private sector balance sheets, increased the

Chart 1
Economic recovery in international comparison
Q3/2008 - Q2/2013



Sources: Global Insight, Central Bank of Iceland.

Chart 2
Economic recovery in crisis countries
Q3/2008 - Q2/2013



Sources: Global Insight, Central Bank of Iceland.

magnitude of the economic adjustment, and delayed recovery beyond what other countries have generally experienced. In addition, there is an inevitable adjustment of demand in the wake of pre-crisis overheating.

According to the baseline forecast in this *Monetary Bulletin*, it appears that GDP bottomed out in Iceland in Q2/2010 and is now approximately 9% lower than it was just before the onset of the crisis. Thus the contraction lasted more than two years. According to the forecast, the outlook is for output to reach its pre-crisis level by year-end 2014. Clearly, though, there is also a permanent loss in potential output, currently estimated at approximately 5%.[1] On the whole, then, the contraction in Iceland was notably deeper than in most developed countries, yet it was not deeper than in the countries hardest hit by the crisis. Nonetheless, recovery has come later in Iceland than it has elsewhere.

Recession generally deeper following a twin crisis

Experience from previous financial crises shows that when an economy is struck by a twin banking and currency crisis, as Iceland has, the ensuing recession is inevitably deeper than it would otherwise be. Financial crises are generally accompanied by a substantial shift in production factors, which can be painful and take a long time. This adjustment is especially difficult in twin crises. In a twin crisis, a banking crisis – which generally deals domestic balance sheets a heavy blow and places great strain on domestic payment systems – and a currency crisis – which entails a sharp turnaround in capital inflows and a painful shift of the factors of production to the tradable sector – occur in tandem.[2] Because a banking crisis can magnify the short-term difficulties caused by currency depreciation and delay the shift of the factors of production to more profitable sectors, the economy's adjustment to a new real exchange rate level tends to be prolonged.

In a number of foreign studies, attempts have been made to measure the loss of production in the wake of banking and currency crises and the recession that ensues when such crises occur simultaneously. Hutchison and Noy (2005), for example, concluded that, over the two- to four-year average span of a recession, the GDP contraction caused by a currency crisis is in the 5-8% range, while a banking crisis generally causes an 8-10% contraction. When these crises coincide, however, the contraction is much steeper, or about 13-18% of GDP. The findings of Bordo *et al.* (2001) indicate that the GDP contraction following a twin crisis is greater than the combined loss caused by individually occurring banking and currency crises.

The adjustment in historical context

Recovery from a financial crisis is usually relatively rapid, with developments in major economic aggregates usually following a steep V-shaped path; in other words, a sharp contraction is usually followed by relatively swift recovery. An examination of the major financial crises occurring since the end of World War II reveals that the contraction in GDP, from peak to trough, lasts for an average of 1.7

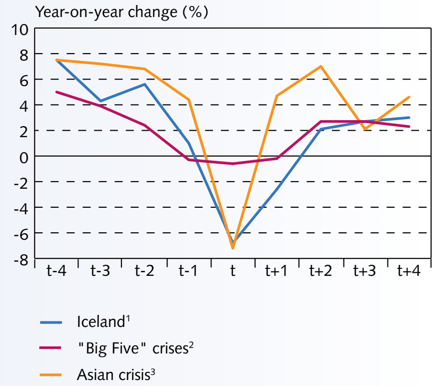
1. The estimate in loss of potential output is based on 3% trend growth of potential output from 2005, which is compared with forecasted potential output seven years after the onset of the crisis, in line with the standard approach for estimating loss of potential output. The loss of potential output in Iceland is markedly greater than that in other countries. According to the OECD, the loss of potential output in OECD countries as a whole is about 3-3½% (see OECD, *Economic Outlook*, November 2009).
2. For further discussion, see Box IV-1 in *Monetary Bulletin* 2008/3, pp. 24-26.

years.[3] The contraction was more protracted, however, during the Great Depression of the 1920s, which lasted about four years (see Reinhart and Rogoff, 2009). The length of the recession can also be expected to vary directly with the scope of the contraction, as in the current crisis.

This does not provide a complete picture of how deep a recession is, however, nor does it indicate clearly how quick recovery will be. Because contractions are often deep and sharp, it is more instructive to examine the pace at which a country's output returns to its pre-crisis level. In 14 major post-World War II financial crises, it took GDP an average of 4½ years to rise to pre-crisis levels (see Reinhart and Rogoff, 2009). The findings of Reinhart and Reinhart (2010) suggest that the adjustment could take even longer. During the decade after a financial crisis strikes, output growth is weaker and unemployment higher than in the decade preceding the crisis. Experience varies greatly, however, from country to country. For example, it took Japan and South Korea only two years to recover fully, while Colombia and Argentina were forced to wait eight years (Reinhart and Rogoff, 2009). The findings of Kannan (2010) also suggest that credit conditions can have a significant effect on how prolonged the contraction period will be. Access to credit is typically restricted following a financial crisis, which holds back industries relying on credit financing. Recovery can thus be slower than in the wake of other economic shocks.

All of this suggests that Iceland's post-crisis experience is quite typical. The contraction lasted for just above two years, and it will take about six years for GDP to recover its previous level, according to the baseline forecast in this *Monetary Bulletin*. Thus the recovery will be similar to those experienced by Indonesia and Thailand after the twin crisis that struck Asia in the late 1990s. It took Indonesia six years, and Thailand seven, to return to former GDP levels. As Chart 3 shows, the post-crisis contraction is similar in size to the average Asian crisis experience, but in Iceland, GDP has continued to contract in the second year following the crisis.

Chart 3
Output growth preceding and following crisis episodes



1. Iceland (2009). 2. Spain (1978), Norway (1988), Finland (1992), Sweden (1992) and Japan (1993). 3. Hong Kong (1998), Indonesia (1998), S-Korea (1998), Malaysia (1998), Philippines (1998), Thailand (1998).
Sources: OECD, Reuters EcoWin, Statistics Malaysia.

References

Bordo, M., B. Eichengreen, D. Klingebiel, and M. S. Martinez-Peria (2001), "Is the crisis problem growing more severe?" *Economic Policy*, 16, 53-82.

Hutchison, M. M., and I. Noy (2005), "How bad are twins? Output costs of currency and banking crises", *Journal of Money, Credit and Banking*, 37, 725-752.

Kannan, P., (2010), "Credit conditions and recoveries from recessions associated with financial crises", IMF Working Paper no. WP/10/83.

Reinhart, C. M., and V. R. Reinhart (2010), "After the fall", NBER Working Paper no. 16334.

Reinhart, C. M., and K. S. Rogoff (2009). *This Time is Different: Eight Centuries of Financial Folly*. Princeton: Princeton University Press.

3. These major post-World War II crises are: Finland (1991), Japan (1992), Norway (1987), Sweden (1991), Spain (1977), Argentina (2001), Colombia (1998), Indonesia (1997), Korea (1997), Philippines (1997), Malaysia (1997), Thailand (1997), and Mexico (1994).