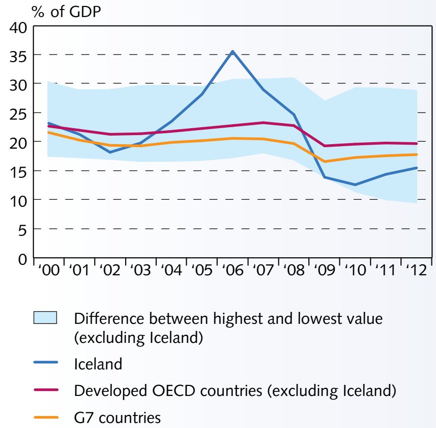
Box I-2

Investment in the aftermath of financial crises

Chart 1

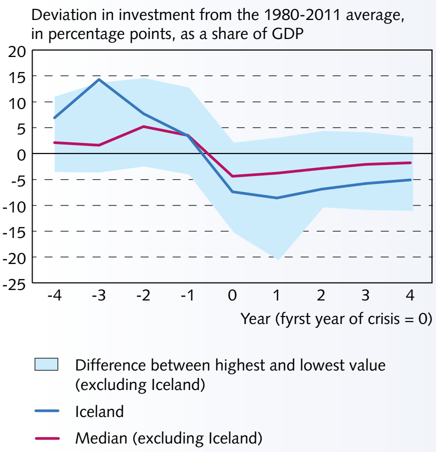
Investment in 24 developed OECD countries 2000-2012[1]



1. IMF forecast for 2012.
Source: IMF.

Chart 2

Post-crisis investment[1]



1. Investment as a share of GDP in Iceland and 15 other countries following severe financial crises. Names of countries and dates of crises can be found in Footnote 2 of Box I-1 in MB 2012/4. IMF forecast where applicable.
Source: IMF.

The banking and currency crisis caused a severe recession in the Icelandic economy, with elevated unemployment, declining real disposable income, and a large contraction in domestic demand and output. As has been described in previous issues of *Monetary Bulletin*, the contraction Iceland experienced during the crisis was greater by most measures than that in most other developed countries. This is not surprising, as the Icelandic economy is generally more volatile than other developed countries, and the economic and financial imbalances were unusually pronounced during the run-up to the crisis. Hence the domestic economy was highly vulnerable to a sudden stop of capital inflows, a currency depreciation, and the collapse of its banks (see Ólafsson and Pétursson, 2011).

Post-crisis developments in investment

The financial crisis also led to a steep contraction in the domestic investment level. As Chart 1 shows, investment as a share of GDP peaked during the upswing and then fell to 25% in 2008. It fell still further after the crisis, bottoming out at just under 13% of GDP in 2010. It rose by one percentage point last year and is projected to reach about 15% this year, according to the most recent forecasts from the Central Bank and the International Monetary Fund (IMF). It is still far from the 1980-2011 average of 21% of GDP, however, and is expected to remain below average throughout the forecast horizon.[1]

The low investment ratio is not a uniquely Icelandic phenomenon, however, even though Iceland's ratio is among the lowest among developed OECD countries (see Chart 1). Other countries with a low investment ratio include the UK and the US, which recorded ratios either side of 15% last year, and Ireland, with only 10%. At the same time, investment ratios have remained above historical averages in countries such as Canada and Sweden, both of which fared better during the financial crisis.

Comparison with other financial crises

Chart 2 gives a comparison of developments in Iceland's post-crisis investment ratio with that in 15 other countries that have suffered severe financial crises since 1970.[2] Developments in the investment ratio are shown as deviations from the 1980-2011 average. In the first full year after the crisis, Iceland's investment ratio was about 7½ percentage points below its historical average, whereas the other 15 countries' ratios deviated from their own historical averages by an average of 4½ percentage points. A year later, investment activity in Iceland declined still further, to 8½ percentage points below the average, while it inched upwards in the comparison group. As the chart shows, investment activity has increased more slowly in Iceland than in comparison countries on average; however, as the shaded portion of the chart indicates, Iceland lies within the range defined by the other countries' experience.

An examination of developments in investment in various countries reveals that Iceland closely resembles Thailand in this respect (Chart 3). Similar developments can also be seen in Finland, Ireland, and Malaysia. In all of these countries except Ireland, companies were heavily indebted in foreign currency, and a severe debt problem developed in the wake of a banking and currency crisis.

1. The small rise in the overall investment ratio reflects limited public investment and a low residential investment ratio. Business investment has recovered more strongly and is expected to reach its long-term average relative to GDP by the end of the forecast horizon, according to the Central Bank's baseline forecast.
2. Using the Laeven and Valencia (2008) definition of countries that have sustained systemic banking crises since 1970 (see also IMF, 2003, T. T. Ólafsson and T. G. Pétursson, 2011, and *Monetary Bulletin* 2008/3, p. 25). The 15 countries (in addition to Iceland) are (first year of crisis in parentheses): Argentina (2002), Brazil (1999), Ecuador (1999), Finland (1991), Iceland (2009), Indonesia (1998), Ireland (2009), Latvia (2009), Malaysia (1998), Mexico (1995), Philippines (1998), South Korea (1998), Sweden (1991), Thailand (1997), Turkey (2001), and Uruguay (2002).

The banking system was large relative to GDP in all of them. This close correlation between post-crisis developments in investment and pre-crisis debt accumulation can be seen clearly in Chart 4. As the chart indicates, the tendency towards a post-crisis contraction in investment correlates closely with the pre-crisis rise in indebtedness among businesses and households.

There could also be various other explanations for the relatively large decline in Iceland's investment ratio and the slow post-crisis recovery. The investment ratio was unusually high relative to the historical average in the run-up to the financial crisis, but as Chart 5 shows, a high pre-crisis investment level tends to go hand-in-hand with a steep decline in the investment ratio afterwards (see also IMF, 2009). Studies also show that the economic recovery following a twin banking and currency crisis like that in Iceland is usually much slower than the recovery from either a banking or currency crisis. For instance, the findings of Bordo *et al*. (2001) indicate that the economic contraction following a twin crisis is usually up to three times greater than that following a conventional banking crisis and that its duration is, on average, twice as long. Presumably, this is also reflected in a greater decline and slower recovery of the investment ratio.

Finally, Iceland's low investment ratio after the crisis must be viewed in the context of the weak world economy following the current global economic crisis, which has raised risk premia and reduced access to foreign funding for investment purposes, among other things. For instance, output growth among advanced countries has averaged ½% over the past four years, as opposed to just over 2%, on average, for the four years after the Nordic financial crisis in the early 1990s and about 3% following the Asian crisis in the late 1990s. The global economy is therefore much weaker now than when most of the other 15 comparison countries were facing their respective financial crises, and this overall weakness makes it much harder for individual countries to regain their strength.

Conclusion

The sharp contraction and slow recovery of investment in Iceland in the wake of the financial crisis must be viewed in light of the experience of other countries that have sustained severe banking and currency crises while having a large banking system and a heavily indebted private sector, particularly in foreign currency, and where the domestic recovery has faced global headwinds. Examples combining all of these characteristics are difficult to find, however. Many of these features could be found in some of the countries affected by the Asian and Nordic crises of the 1990s, but recovery was facilitated by a more robust global economy, which supported exports and eased access to foreign funding for investment activities.

On the whole, it appears that post-crisis developments in investment in Iceland have been broadly similar to those in other countries following similar crises, particularly in view of the magnitude of the crisis, the pace and scale of pre-crisis debt accumulation and high investment rate, and the simultaneous weakness of the global economy.

References

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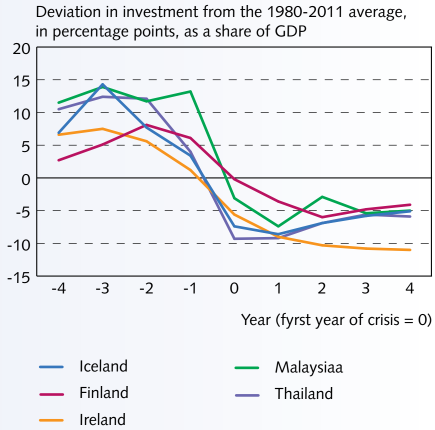
Chart 3

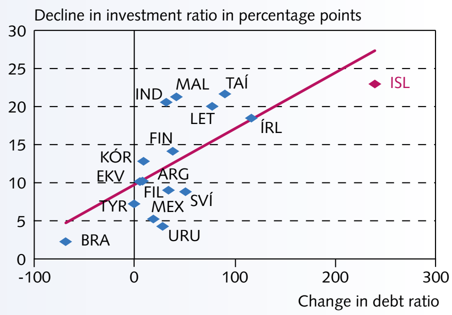
Post-crisis investment in several countries[1]



1. Investment as a share of GDP in Iceland and 15 other countries following severe financial crises. Names of countries and dates of crises can be found in Footnote 2 of Box I-1 in MB 2012/4. IMF forecast where applicable.
Source: IMF.

Chart 4

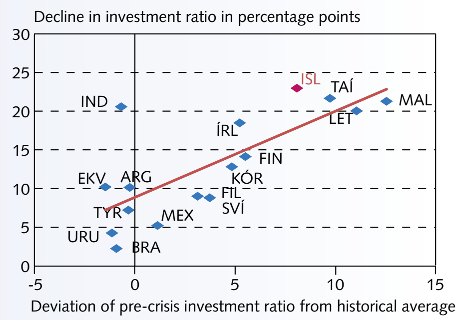
Post-crisis increase in debt and post-crisis developments in investment[1]



1. The decline in the investment ratio shows the change in investment relative to GDP from the peak during the 4-year period before the crisis to the post-crisis trough. The change in the debt ratio shows the change in private sector lending relative to GDP over a 10-year period prior to the crisis.
Sources: IMF, Macrobond, Central Bank of Iceland.

Chart 5

Scope of investment in the prelude to the crisis and post-crisis developments in investment[1]



1. Reduction in investment ratio shows the change in investment relative to GDP from the peak during the 4-year period in the prelude to the crisis to the post-crisis trough. The deviation in the pre-crisis investment ratio from the historical average shows the deviation in the average ratio over the 4 years prior to the crisis from the 1980-2011 average.
Sources: IMF, Macrobond, Central Bank of Iceland.