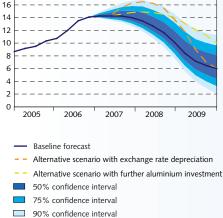
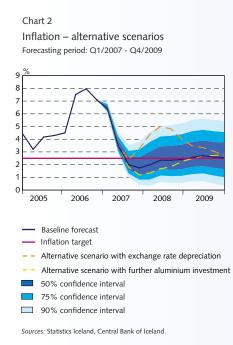
## Box IX-2

## Alternative scenarios

Chart 1 Policy rate – alternative scenarios Forecasting period: Q1/2007 - Q4/2009



Source: Central Bank of Iceland.



Economic developments will never unfold exactly as assumed in a baseline forecast and the deviations are often large. For this reason it is useful to analyse how sensitive the forecast results are to probable deviations in the development of various key economic aggregates. The number of potential sources of deviations from the baseline forecast is of course unlimited, but it is important to identify and assess the main sources of risk at any time. Alternative scenarios play an important role in the assessment of the risk profile of the baseline forecast.

## The monetary stance will need to be tightened if the króna depreciates by more than in the baseline forecast

As described in the main text, the current account deficit is at a record level and the outlook is for a considerably more gradual decline than was projected in previous forecasts, although the trade account will move to balance within the forecast horizon. Nonetheless, the króna is projected to remain fairly strong over the forecast horizon according to the baseline forecast, with its tight monetary stance. The risk of a significant depreciation of the króna beyond what is projected in baseline forecast, i.e. should global financial conditions become less favourable, must be considered substantial.

The alternative scenario assumes that the króna depreciates in the second half of 2007, when large amounts of króna-denominated bonds issued by foreign investors mature. The króna is assumed to depreciate by a total of 20% from the baseline forecast in Q3 and Q4/2007. At the same time, international investor risk aversion is assumed to increase, causing the spread on Icelandic residents' foreign liabilities to increase by 1.5 percentage points.

As Chart 1 shows, an immediate policy response is assumed from the Central Bank, which raises the policy rate to prevent expectations from rising with increasing inflation. The policy rate rises above 16% in the first half of 2008, before it begins to head back down. Nonetheless, it remains higher than in the baseline forecast until the second half of 2009.

Even a sharp rise in the policy rate does not suffice to prevent a temporary increase in inflation in the wake of the depreciation. Inflation is  $1\frac{1}{2}$  percentage points above the baseline forecast at the end of 2007 and peaks in mid-2008 at  $2\frac{1}{2}$  percentage points higher (see Chart 2). Subsequently, inflation gradually wanes and is back to the target at the end of 2009, roughly two years later than in the baseline forecast.

## A timely monetary policy response is needed to new investments in the aluminium and power sectors

The baseline forecast does not assume any further investment in the aluminium and power sectors within the forecast horizon. The Central Bank's policy has always been not to take such investments into account until there is a high probability that they will be realised, but to incorporate them into the risk profile for the forecast instead. However, if plans for large-scale investments materialise, demand for domestic factors of production would increase by considerably more than assumed in the baseline forecast. Inflation pressures would then be correspondingly higher, although possibly tempered by the stronger króna, at least initially.

To estimate the potential impact that further investments in the aluminium and power sectors would have on economic developments and monetary policy, the scenario assumes a 280 thousand-tonne expansion to the Straumsvík smelter and construction of a 240 thousand-tonne smelter in Helguvík in two phases of 120 thousand tonnes each. Total cost of smelter and power plant construction is estimated at 11 b.kr. in 2007, 45 b.kr. in 2008 and more than 100 b.kr. at the peak in 2009. Thus a total investment of more than 150 b.kr. is assumed over the forecast horizon until the end of 2009. However, total investment cost on the projects is estimated almost twice as high, at close to 290 b.kr. (roughly 25% of GDP in 2006), spread over the period 2007-2014 but mostly concentrated in 2008-2011 (accounting for 90% of the total cost). Increased labour use required by these investments is assumed to be 4,700 manyears over the forecast horizon, and more than 8,300 man-years in total, distributed across the construction schedule in roughly the same proportion as investment cost. Domestic and foreign cost is estimated to be divided roughly half and half, with a similar distribution between domestic and foreign labour. The data outline is largely based on plans announced by prospective developers.

This alternative scenario assumes an appreciation of the króna by roughly 5% when the investment plans are announced in mid-2007, and an immediate response from the Central Bank by raising the policy rate by 0.25 percentage points. The downward cycle of the policy rate, which is assumed in the baseline forecast to begin in Q4/2007, is delayed until mid-2008, by which time the policy rate is 2 percentage points higher than in the baseline forecast, at 15%. The alternative scenario also implies that, if the investments are made, it will not be possible to lower the policy rate as quickly as otherwise. Thus the policy rate is 14% at the end of 2008 and 10% at the end of 2009, instead of 6% in the baseline forecast. The investments therefore call for a much tighter monetary policy than assumed in the baseline forecast (see Chart 1).

A timely rise in the policy rate and an appreciation of the króna coinciding with the announcement of the investment plans imply that inflation will be reduced more rapidly than in the baseline forecast, to  $1\frac{1}{2}$ % early in 2008 (see Chart 2). Subsequently, however, it begins to climb again, as the level of investment is stepped up, and moves up to the inflation target at the end of 2008.