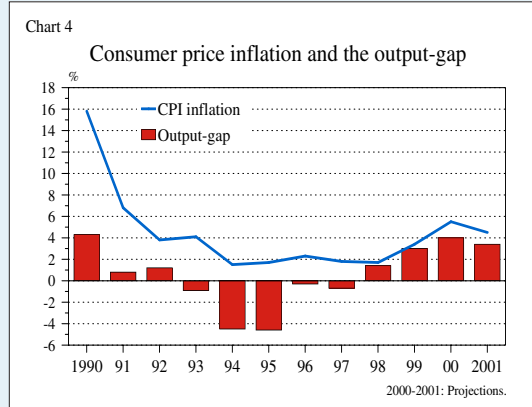


Box 1 The relationship between inflation and output-gap

Inflation forecasts by the Central Bank and others have been on the low side for the past year, reversing an opposite tendency in 1998. This prompts the question whether important parameters are lacking from the cost-push models which have been the principal forecasting tool, which could explain what is apparently a systemic deviation. Internationally, the utilization of domestic factors of production is often considered to be an important indicator of price developments. A higher utilization ratio of domestic factors of production increases the likelihood of price rises and vice versa. To quantify the relationship between utilization of domestic factors of production and inflation, statistical methods are commonly applied in order to assess how much production is compatible with efficient utilization of the factors of production, i.e. leaves them neither underutilized nor overutilized. The outcome of such measurements is, however, subject to considerable uncertainty. The accompanying chart shows an assessment of the output-gap for Iceland along with inflation developments since 1990.⁴

4. This is a structural vector autoregressive assessment of systemic shocks having a permanent impact on real GDP. See Már Gudmundsson, Þórarinn G. Pétursson and Arnór Sighvatsson (2000), "Optimal Exchange Rate Policy: The Case of Iceland" in *Macroeconomic Policy: Small Open Economies in an Era of Global Integration*, eds. Már Gudmundsson, Tryggvi Th. Herbertson and Gylfi Zoëga. Reykjavík: Háskólaútgáfan (pending publication) and Þórarinn G. Pétursson (2000), "Wage and Price Formation in a Small Open Economy: Evidence from Iceland," Central Bank of Iceland Economics Department, unpublished manuscript.



The chart shows that the output-gap fell during the contraction in 1988-1995, and became negative in the second part of that period. These conditions contributed to a downturn in inflation until 1999. During the subsequent recovery, previously underutilized capacity was gradually employed and the factors of production appear to have become fully utilized in 1997 or 1998 and overutilized afterwards. Since then, demand has exceeded production capacity and fuelled growing inflation. According to this assessment, utilization of the factors of production this year will be 4% above the normal level, although the output-gap will narrow somewhat from next year onwards.