## Box 5 The housing component of the CPI and monetary policy

Modern monetary policy is based on the desirability of maintaining relatively stable prices for the goods and services consumed by the public. Since housing is a major household expense item, the index by which the success of monetary policy is measured should preferably take due account of changes in the price of it. When monetary policy is based on a formal inflation target, the consumer price index is more often than not used as the target index. In several countries such as the UK and South Africa, the reference is the CPI excluding certain items. In all inflation-targeting countries, the monetary authorities monitor other indices and take them into account when formulating monetary policy. Statistics Iceland has also recently begun calculating core indices which are supposed to serve as a reference for monetary policy although inflation as measured by the CPI remains the official target.

It has recently been claimed that it would be natural to exclude housing cost from the target index for monetary policy. Several arguments can be put forward to support this view. Firstly, housing prices are difficult to measure. Housing is by no means a homogeneous good. Size, appearance, age and even location all play a part. It can likewise be pointed out that expectations and speculation often affect the prices of long-life assets such as housing, and are therefore more volatile than those of the goods and services that form the backbone of household consumption.

Secondly, as Thórarinn G. Pétursson points out in an article in Monetary Bulletin 2002/4 (p. 56), it is undesirable if the price of an important component of the CPI is directly determined by interest rates. In particular this applies if interest rates have a short-term direct effect on the index which is opposite to their general impact on prices. For this reason, the target index in the UK is the retail price index excluding mortgage payments. Statistics Iceland's methodology causes a general rise in interest rates to produce either an increase or a decrease in the "owner-equivalent rent" component. A rise in interest rates which forces up the yield on housing bonds will diminish the present discounted value of the down-payment on a housing purchase and of loans bearing real interest rates that are fixed or change sluggishly. This reduces the cash price of the housing. However, a rise in long-term interest rates also drives up real interest rates on longterm housing credit other than loans from the Housing Financing Fund. Such a rise affects the real interest value in the formula for effective rent given in Box 1. The aggregate impact of changes in interest rates on effective rent will depend on the weight of these different loans in housing sale agreements, the degree to which their real interest rates change, and the repayment period of the loans used to finance housing purchases compared to an estimated 80-year lifetime of the property.<sup>1</sup> Given the large proportion of housing loans bearing fixed or rigid interest today, a general rise in interest rates, with a corresponding impact on housing bond yields, is likely to produce a lower effective rent value.<sup>2</sup>

Thórarinn G. Pétursson (Monetary Bulletin 2002/4) has demonstrated the close correlation between twelve-month changes in the housing component of the CPI and future changes in the CPI. Two years on, the correlation is 67%. While this close correlation is not easy to explain, it is conceivable that housing prices rally quickly at the start of a cyclical upswing and soon fall back during a downswing. This does not appear to have happened in the recent recession, however. If this close correlation reflects normal economic behaviour, changes in the housing component of the CPI should provide an important instrument for forecasting changes in headline inflation. Thus in formulating monetary policy it is important to monitor the factors that determine the development of the housing component. A decision on whether to include the housing component in the target index in the first place, however, should take into account the other factors discussed above.

Here and elsewhere in this article, fixed prices are assumed in housing sale agreements. The impact of higher interest rates on prices in housing sale agreements operates in opposing directions. General demand will fall, yielding a lower price, while the production cost of capital-intensive goods also rises, forcing up the relative price of housing.

It should be noted that interest rates on different types of securities often change in different ways. Recently, the yield on housing bonds has often changed differently from other interest rates.