
Core inflation in the United Kingdom

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Measures of core inflation attempt to strip out the effect of temporary disturbances from headline inflation, to uncover the underlying rate of inflation. This article looks at a selection of core inflation measures that have been estimated for the United Kingdom. It also introduces a new measure based on the idea that persistence of disaggregated inflation rates matters when measuring core inflation. These different measures of core inflation are evaluated against a number of desirable criteria, as suggested by the literature, and in particular their correlation with future RPIX inflation.

There are various ways of attempting to strip out the effects of so-called noise or nuisance elements from headline inflation. A common approach is to ignore erratic items, like seasonal foods that are affected by temporary weather-related disturbances, or energy that is affected by oil price fluctuations, to obtain, for example, a measure of RPIX excluding food and energy. RPIY excludes indirect tax changes on the grounds that these have short-lived effects on the annual inflation rate, affecting it when they are implemented and a year later when they drop out of the calculation. A more sophisticated statistical approach is to ignore items with 'extreme' inflation rates, on the grounds that these are not representative of generalised movements in inflation—the so-called trimmed mean approach proposed by Bryan and Cecchetti.

A different approach to measuring core inflation, proposed by Alan Blinder, focuses on the durable or persistent component of the underlying price changes. Blinder argues that persistent price changes capture the ongoing element of price changes and so should contain more information about future inflation. Policy-makers need to form a judgment about future inflation because of the long lags between changes in interest rates and

changes in inflation. This paper reports a new persistence-weighted measure of core inflation for the United Kingdom based on this concept. The study uses the same underlying price data as in RPIX, but it weights individual-component inflation rates by their persistence over the past, instead of their expenditure weights. The idea is not to measure changes in the cost of living but instead to develop an indicator of future inflation that has a high signal-to-noise ratio.

The movement of the persistence-weighted measure over the early 1990s suggests that there was more momentum behind the inflationary pressures that built up during the late 1980s than was apparent in RPIX itself. It also suggests that disinflationary pressures were more intense in the second half of the 1990s, the index being consistently lower than RPIX since autumn 1996. This reflects the weakness of non-seasonal food, and clothing and footwear prices, where competitive pressures were intensified by the strength of sterling, the Asian crisis and global over-supply. These items have a high weight in a persistence-based core inflation measure.

In terms of predictive ability, the persistence-weighted measure outperforms most other core inflation measures in forecasting RPIX at short-term horizons. It also outperforms current RPIX as a predictor. RPIY seems to be a good predictor of RPIX as well, although the relationship is less stable over the second half of the 1990s than the first half. By contrast, RPIX excluding food and energy, and an estimate of the trimmed mean for the United Kingdom, are poor predictors over the sample period considered. One explanation is that they take no explicit account of the persistence of individual price changes in their construction and therefore they may exclude important information about underlying inflation.