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PRESS RELEASE

What inflation developments reveal about the Phillips curve: implications for monetary policy
(article for the December 2013 Economic Review)

Despite a recent fall, the level of inflation in the euro area has remained surprisingly stable in the wake of the current economic and financial crisis. Although inflation has declined somewhat, on average, it has not dropped to exceptionally low levels. This relative stable inflation pattern is striking in view of the depth and duration of the crisis. According to traditional economic theories and historical findings, inflation falls significantly in the event of a steep decline in economic activity. Recent developments, therefore, suggest that this traditional, cyclical pattern of inflation has become less marked nowadays.

The article seeks to determine the factors that explain the declining cyclicality of inflation dynamics. More specifically, it shows how the relative impact of the various determinants of inflation has changed over the years. To this end, a Phillips curve with time-varying parameters is estimated for the euro area over the period 1980-2013 using Kalman-Filtering and Bayesian techniques.

The estimation results suggest that the declining cyclicality of inflation is due to a combination of three factors. First, for the past three decades inflation has been increasingly driven by long-term inflation expectations and less by past inflation rates. Together with more firmly anchored inflation expectations, this phenomenon improves the anchoring of inflation to the policy objective. These findings can be compared with a monetary policy that, following the stagflation of the 1970s, was geared increasingly to the maintenance of price stability. Second, inflation in the euro area becomes more sensitive to import prices, a trend attributable partly to the increased openness of the euro area's economy. Finally, the slope of the Phillips curve declines as more recent periods are considered. The extant literature is ambiguous as to the source of the flattening of the Phillips curve. Some attribute that flattening to structural changes in the economy, such as globalisation, while others refer to changes in the conduct of monetary policy.

The observed changes in inflation dynamics could have a number of implications for the conduct of monetary policy. For instance, the finding relating to the better anchoring of inflation to the definition of price stability adopted by the central bank suggests that the effectiveness of the traditional interest rate channel of monetary policy has increased in recent decades. This is because in an environment where inflation and inflation expectations are fairly stable, the central bank can steer the real interest rate more effectively through its (nominal) policy rate. This increased effectiveness seems particularly useful when the nominal interest rate is close to its lower bound. The flattening of the Phillips curve also has implications for monetary policy. In the event of demand shocks, the flatter Phillips curve appears to reduce the information content of changes in inflation. In such a situation, small deviations from the inflation target may conceal considerable deviations of the real economy from its long-run equilibrium position. At the same time, the flatter Phillips curve increases the short-term trade-off between the stabilisation of inflation and economic activity in the event of supply shocks, creating the need for a detailed analysis of the nature of the shocks influencing inflation.

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