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The inflation–output volatility trade-off: a case where anti-inflation monetary policy turns out to be successful, a historical assessment

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Abstract

Over the period 1988–2000, the Greek monetary authorities seemed to have implemented a successful disinflation policy. The question, however, is whether this disinflation was optimal or not. This paper, through a theoretical model and the GMM approach, constructs an optimal policy frontier in terms of a trade-off between output and inflation variabilities. The frontier yields increases in the output variance when policymakers attempt to decrease inflation variances, and vice versa. The location of the actual monetary policy performance suggests a policy close to the frontier, implying a successful monetary policy.

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1. Introduction

It has been evident that certain central banks have set dual targets of minimising inflation and maximising employment, while for others a low inflation has been their sole target. The main objection to a sole inflation target is that it ignores the consequences of interest rate changes for output and unemployment. This

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difference embodies the philosophy that there is not any long-run output–inflation trade-off. Nevertheless, such a trade-off could exist in the short-run. In other words, the public refuses to accept that the central bank has the capacity to permanently affect economic activity (real income and unemployment) through monetary policy actions. However, the absence of a long-run trade-off between output and inflation does not provide any argument that monetary policy is totally unnecessary. There is an interesting debate about how the monetary authorities target inflation. If they try to keep inflation close to a target, then there will be a substantial increase in output and interest rates volatility. More specifically, if the output–inflation trade-off is convex then a lower level of output is associated with higher output volatility — since booms associated with accelerating inflation must be matched by bigger recessions to eliminate the extra inflation from the economy — which in turn tends to have adverse effects on investment and growth (Andres, Domenech, & Molinas, 1996). The presence of a short-run trade-off between the levels of output and inflation implies the presence of a long-run trade-off between the variances of output and inflation (Fuhrer, 1997; Taylor, 1994).

It is known that the monetary authorities find extremely difficult to simultaneously satisfy both their output and inflation targets. This difficulty arises from the fact that monetary policy is subject to various time control lags as well as to the fact that the economy is continuously subject to various supply and demand shocks. The best solution for the monetary authorities is to decide how fast they can correct any divergence of inflation from its target. In particular, they have two choices: first, to eliminate that divergence quickly and thus to achieve a low variance of inflation around its target as low as possible at the expense of a higher output variability (around its natural rate); alternatively, if they decide to maintain a low output volatility, they have to accept a higher inflation variability (around its target). In other words, the primary concern of the monetary authorities is not to reach optimal decisions through a trade-off between the levels of output and inflation, but between the volatilities of the two relevant variables around their targets. Such a policy menu represents the presence of an optimal policy frontier given certain relative weighting of these two goals (Ball, 1997; Bean, 1998). Policy is expected to be efficient only if the combination is being on the frontier. At the same time, an inflation target is still consistent with the selection of other points on the frontier. This could occur only if the inflation target is flexible; flexibility of inflation means that once the level of inflation diverges from its target, the monetary authorities do not act quickly to eliminate that divergence but they do it gradually in order to avoid any sharp fluctuations in output.

The goal of this paper is to investigate whether the institutional environment in Greece was conducive to choosing the right speed at which to return inflation to target. The answer is crucial since different speeds of adjustment have corresponding effects on output volatility and, thus, on growth. The legislation for the Bank of Greece (the central bank) mentioned, particularly after 1988, that low inflation was the primary goal of economic policy. The persistence to the inflation target emanated from the fact that the country had to satisfy the inflation criterion, set