ERSA Research Brief

South Africa’s inflation target band is appropriate – if judged against the implied welfare costs of inflation at these levels

Rangan Gupta and Josine Uwilingiye

Given the implied welfare costs of an inflation range of three to six percent, South Africa’s inflation target band is set at appropriate levels. In ”Measuring the welfare cost of inflation in South Africa”, (ERSA Working Paper No. 68) Rangan Gupta and Josine Uwilingiye estimate the welfare cost of this inflation range to be 0,34% to 0,67% of GDP. They argue that, although these costs are high compared with similar estimates done for the US and Canada, they are nevertheless reasonably low in absolute terms.

Gupta and Uwilingiwe’s modelling of the welfare costs of inflation is the first such exercise for South Africa. They suggest that it is important for any country where the central bank targets inflation – like South Africa – to measure the welfare cost of inflation. If it doesn’t match up to the inflation target, then there’s good reason to rethink the band of the target.

The authors employ the Johansen cointegration technique to estimate a long-run money demand relationship, using quarterly data from 1965 to 2007. Although the Bank targeted CPIX inflation during a portion of the period studied, the authors use CPI inflation; they find that CPI and CPIX data are highly correlated. Gupta and Uwilingiye established that the log-log specification of the money demand function created a better fit than the semi-log formulation.

They caution that there are limitations to the study’s welfare cost estimates, as it measures only welfare costs generated when positive nominal interest rates trigger distortions in money demand. The impact of higher inflation on decision making in an economy, and therefore on output levels and output growth, is not captured, nor is the effect of bracket creep in a tax system that is not adjusted for inflation.

Thus, given that a number of factors other than those examined in this study can contribute to the welfare costs of inflation, the authors point out that even greater welfare gains conceivably could be achieved in South Africa if the inflation target band were reduced to below the lower limit of three percent.