



Estimations of the natural rate of interest in Colombia

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Three methodologies to estimate the natural interest rate, NIR, are implemented for the Colombian economy. Two methods are statistical filters and the third involves some economic theory. The first method is based on unobserved components decomposition of the real interest rate and explores the statistical characteristics of the data. The second is a multivariate version of the Hodrick-Prescott filter augmented by an economic relationship, HPMV. The NIR in both cases is defined as the trend component of the market real interest rate; then, the NIR may be considered as a long-run real interest rate anchor for monetary policy. The third method consists in estimating a semi-structural model for a small open economy. In this case the NIR is defined as the interest rate that does not affect the output dynamics in the short run and assures output and inflation convergence to their long run equilibriums. This implies that the NIR is a medium-run anchor for monetary policy. Three features are observed in the dynamics of the NIR estimates for the period 2000-2009. The first part of the sample (2000-2003) shows a downward trend, followed by a period of stabilization and upward trend (2004-2008) and at the end of the sample the NIR start decreasing again. The NIR in the last quarter of the sample, 2009Q2, is around 3.1 in average.