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EXECUTIVE SUMMARY

MEASURING THE NATURAL RATE OF INTEREST IN BRAZIL

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This paper applies the Holston-Laubach-Williams methodology to estimate the natural rate of interest for Brazil.[1]

The natural or equilibrium real interest rate provides a benchmark for measuring the stance of monetary policy, with policy expansionary (contractionary) if the short-term real interest rate lies below (above) the natural rate.

Laubach and Williams (2003) introduced an equilibrium rate concept that is of a medium-run nature. Its derivation is based on a mixture of atheoretical time--series methods and a simple Keynesian-style model consisting of an aggregate demand relationship and a Phillips curve relationship. The equilibrium rate is modeled as the function of potential growth and some preference parameters, similar to a fully specified general equilibrium model without imposing the cross-equation restrictions of such models. Equilibrium rate, potential gross domestic product (GDP) growth, and preference parameters are unobserved variables. How much they move depends on technical parameters of the unobserved components time-series specification.

Herein, the natural rate is defined to be the real interest rate consistent with real GDP equaling its potential level (potential GDP) in the absence of transitory shocks to demand. Potential GDP, in turn, is defined to be the level of output consistent with stable price inflation, absent transitory shocks to supply. Thus, the natural rate of interest is the real interest rate consistent with stable inflation absent shocks to demand and supply.

Through our analysis we find a number of difficulties in estimating the natural rate of interest–even putting aside real time considerations, there are many reasons to be concerned about the robustness of natural rate of interest estimates.

REFERENCE

LAUBACH, T.; WILLIAMS, J. C. Measuring the natural rate of interest. **The Review of Economics and Statistics**, v. 85, n. 4, p. 1063-1070, 2003.

1. We use interchangeably the terms *natural rate of interest* and *equilibrium real rate of interest*.