Accepted Manuscript

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Kathryn Holston, Thomas Laubach, John C. Williams

PII: S0022-1996(17)30006-5
DOI: doi:10.1016/j.jinteco.2017.01.004
Reference: INEC 3018

To appear in: *Journal of International Economics*

Received date: 19 August 2016
Revised date: 16 December 2016
Accepted date: 2 January 2017

Measuring the Natural Rate of Interest: International Trends and Determinants*

Kathryn Holston Thomas Laubach
John C. Williams

January 7, 2017

Abstract

U.S. estimates of the natural rate of interest – the real short-term interest rate that would prevail absent transitory disturbances – have declined dramatically since the start of the global financial crisis. For example, estimates using the Laubach-Williams (2003) model indicate the natural rate in the United States fell to close to zero during the crisis and has remained there into 2016. Explanations for this decline include shifts in demographics, a slowdown in trend productivity growth, and global factors affecting real interest rates. This paper applies the Laubach-Williams methodology to the United States and three other advanced economies – Canada, the Euro Area, and the United Kingdom. We find that large declines in trend GDP growth and natural rates of interest have occurred over the past 25 years in all four economies. These country-by-country estimates are found to display a substantial amount of comovement over time, suggesting an important role for global factors in shaping trend growth and natural rates of interest.

JEL classification: C32, E43, E52, O40.

Keywords: natural rate of output, monetary policy rules, Kalman filter, trend growth.

*This paper has benefitted from comments by our discussants Emanuel Mönch and Kenneth West and other participants at the 2016 NBER ISOM conference as well as from discussions with Vasco Cúrdia, Marc Giannoni, Benjamin Johannsen, Oscar Jorda, Elmar Mertens, and Edward Nelson. We also thank representatives from the European Central Bank for making available the Area-Wide Model database and the Bank of England for sharing results from their DSGE model. The views expressed herein are those of the authors and do not necessarily reflect those of the Board of Governors, or anyone else in the Federal Reserve System.
Holston: Board of Governors of the Federal Reserve System, Kathryn.A.Holston@frb.gov.
Laubach: Board of Governors of the Federal Reserve System, Thomas.Laubach@frb.gov.
Williams: Federal Reserve Bank of San Francisco, John.C.Williams@sf.frb.org.