

## Secular Stagnation, Low Interest Rates and Low Inflation: Causes and Implications for Policy

Kollmann, Robert and Lubik, Thomas and Roeger, Werner

30 July 2021

Online at https://mpra.ub.uni-muenchen.de/108979/ MPRA Paper No. 108979, posted 03 Aug 2021 00:45 UTC

## Secular Stagnation, Low Interest Rates and Low Inflation: Causes and Implications for Policy

Robert Kollmann \* Solvay Brussels School of Economics and Management, Université Libre de Bruxelles, Brussels, Belgium Centre for Economic Policy Research (CEPR), London, United Kingdom ERUDITE, Université Paris-Est Créteil (UPEC), Créteil, France E-mail address: robert\_kollmann@yahoo.com

Thomas A. Lubik Federal Reserve Bank of Richmond, Richmond, USA E-mail address: thomas.lubik@rich.frb.org

Werner Roeger Deutsches Institut für Wirtschaftsforschung (DIW), Berlin, Germany Europäisches Institut für Internationale Wirtschaftsbeziehungen (EIIW), Wuppertal, Germany KUL-VIVES, Leuven, Belgium E-mail address: w.roeger@web.de

July 30, 2021

Slow growth, low interest rates and low inflation have characterized the macroeconomic environment in the Euro Area and other advanced economies since the global financial crisis of 2008-09. In this economic landscape there are growing concerns that advanced economies will face continued stagnation. This has not abated in the wake of the COVID-19 pandemic as the underlying trends and driving factors are still in force. This special issue of the *Journal of Economic Dynamics and Control* consists of 8 papers that offer novel empirical and theoretical perspectives on slow growth, low interest rates and inflation rates, and discuss resulting challenges for macroeconomic policy. All papers were presented at a virtual conference organized by the *Journal of Economic Dynamics and Control*, the European Commission and the Centre for Economic Policy Research (CEPR) on 5-6 November 2020.

<sup>\*</sup> Corresponding author at: SBS-EM, CP114, ULB, 50 Av. Franklin Roosevelt, 1050 Brussels, Belgium

The first three papers analyze the role of low trend growth and low natural real interest rates for the monetary strategy of the European Central Bank (ECB), with special emphasis on the effects of the Zero Lower Bound (ZLB) constraint on the policy interest rate. Using an estimated New Keynesian dynamic stochastic general equilibrium (DSGE) model of the Euro Area, Andrade, Galí, Le Bihan and Matheron show that a fall in the steady-state natural real interest rate raises the probability that the ECB policy interest rate hits the lower bound constraint. This calls for adjustments to the monetary policy strategy, namely an increase in the inflation target and/or the use of alternative monetary policy instruments or policy rules. *Erceg*, Jakab and Lindé study ECB monetary policy options using an estimated DSGE model, in which agents have "behavioral" expectations, that is deviations from rational expectations. The authors find that, while a range of proposed adjustments to ECB strategy can provide efficient stabilization in a low rates environment, the rebound from a deep recession remains slow and painful. Using the ECB's New Area-Wide DSGE Model, Coenen, Montes-Galdon and Schmidt show that the ZLB can cause substantial economic costs under standard inflation targeting. The authors find that price-level targeting and average-inflation targeting can, if well understood by the private sector, significantly reduce the costs induced by the effective lower bound of the policy interest rate.

The ZLB constraint is also at the heart of the next two papers. *Kumhof and Wang* focus on the implications of a ZLB constraint for *deposit* rates charged by banks. Using a New Keynesian DSGE model with financial intermediaries, the authors show that, when the ZLB constraint for deposit binds, an increase in the monetary policy interest rate can raise banks' net interest rate margins, and induce an *expansion* in credit and output. The authors argue that central bank rate setting should take credit conditions into account. *Kollmann* analyzes open economy implications of low interest rates in a two-country floating exchange-rate model. In this environment, the ZLB constraint generates multiple equilibria: each country can experience recurrent liquidity traps induced by the self-fulfilling expectation that future inflation will be low. Such liquidity traps can be synchronized or unsynchronized across countries.

The next two papers study fiscal policy in a low interest rates environment. *Pfeiffer, Roeger and Vogel* analyze optimal fiscal policy when the real interest rate is persistently below the growth rate. They find that the efficient policy response depends on the shock that causes the low real rate. In case of a shift in investor preferences in favor of government bonds, it is optimal to reduce fiscal distortions; whereas a "flight-to-quality" shock makes it optimal to increase public capital as long as the shock persists. The global financial crisis and the COVID-19 epidemic have triggered a large rise in public debt, in the Euro Area, and globally. In order to shed light on the effects of that debt build-up, *Albonico, Ascari and Gobbi* develop the notion of a "public debt multiplier" that captures the output effect of *temporary* changes in government debt induced by the deferral of tax revenues. Using an OLG model, the authors show that the debt multiplier is small in normal times, but that it can be sizable in crisis times. The authors conclude that fiscal consolidation during a recession is inappropriate.

The final paper of the special issue is devoted to the role of demographic trends for the current low rates environment. *Papetti* shows that a large-scale overlapping generation model can explain the fall of the real interest rate in the EU as a consequence of demographic and technology trends; the model predicts a further real interest rate decline until 2030. Among the demographic factors, rising longevity dominates falling fertility. The paper also explores how a range of policy measures have affected the decline of the real interest rate.

## References

Albonico, Alice, Guido Ascari and Alessandro Gobbi. 2021. The Public Debt Multiplier. Forthcoming in: Journal of Economic Dynamics and Control.

Andrade, Philippe, Jordi Galí, Hervé Le Bihan and Julien Matheron, 2021. Should the ECB Adjust its Strategy in the Face of a Lower Natural Rate of Interest? Forthcoming in: Journal of Economic Dynamics and Control.

Coenen, Günter, Carlos Montes-Galdon and Sebastian Schmidt, 2021. Macroeconomic Stabilisation and Monetary Policy Effectiveness in a Low-Interest-Rate Environment. Forthcoming in: Journal of Economic Dynamics and Control.

Erceg, Christopher, Zoltan Jakab and Jesper Lindé, 2021. Monetary Policy Strategies for the European Central Bank. Forthcoming in: Journal of Economic Dynamics and Control.

Kollmann, Robert, 2021. Global Liquidity Traps. Forthcoming in: Journal of Economic Dynamics and Control.

Kumhof, Michael and Xuan Wang, 2021. Banks, Money, and the Zero Lower Bound on Deposit Rates. Forthcoming in: Journal of Economic Dynamics and Control.

Papetti, Andrea, 2021. Demographics and the Natural Interest Rates. Forthcoming in: Journal of Economic Dynamics and Control.

Pfeiffer, Philipp, Werner Roeger and Lukas Vogel, 2021. Fiscal Policy with Low Government Bond Rates. Forthcoming in: Journal of Economic Dynamics and Control.