

## **An Empirical Evaluation of Some Long-Horizon Macroeconomic Forecasts**

KURT G. LUNSFORD & KENNETH D. WEST

### **Key Findings and Policy Implications**

This paper forecasts long-run macroeconomic outcomes that affect Social Security finances, specifically, real per capita GDP growth, CPI inflation, labor productivity growth, and long- and short-term nominal interest rates. Our approach differs from the approach used by SSA in their projections of long-run economic outcomes, and we compare our forecasts with SSA projections of these same variables. The forecasts reported in the paper are for horizons up to 50 years and are constructed based on annual macroeconomic data from 23 mostly developed countries. The paper finds that:

- For GDP and productivity growth, the forecasts using our models align well with SSA projections.
- For CPI inflation, our point forecasts tend to be slightly higher than SSA projections and our forecast intervals are notably wider than the interval between SSA's low- and high-cost projections. The SSA intermediate projection of 2.4 percent is at the low end of our point forecasts, most of which range from 2.4 percent to 3.8 percent.
- For long-term interest rates, our point forecasts are distinctly below the SSA projection and, as in the case of CPI inflation, the forecast intervals are wider than the interval implied by SSA's low- and high-cost projections. For example, even the upper bound of the forecast interval for our random walk model, at a long-term interest rate of 3.7 percent, is below SSA's intermediate projection of 4.1 percent.

The future path of the U.S. economy is central to the long-run fiscal balances of the Social Security system. This study complements the approach used by SSA to project long-term economic outcomes, documents the results from our alternative forecasting models, and points to specific macroeconomic components where our forecasts differ from SSA projections.

KURT G. LUNSFORD is a Research Economist at the Federal Reserve Bank of Cleveland.

KENNETH D. WEST is the John D. MacArthur and Ragnar Frisch Professor of Economics at the University of Wisconsin-Madison and a Research Associate at NBER.

The research reported herein was performed pursuant to grant RDR1800003 from the US Social Security Administration (SSA) funded as part of the Retirement and Disability Research Consortium. The opinions and conclusions expressed are solely those of the author(s) and do not represent the opinions or policy of SSA, any agency of the Federal Government, or NBER. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of the contents of this report. Reference herein to any specific commercial product, process or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply endorsement, recommendation or favoring by the United States Government or any agency thereof.