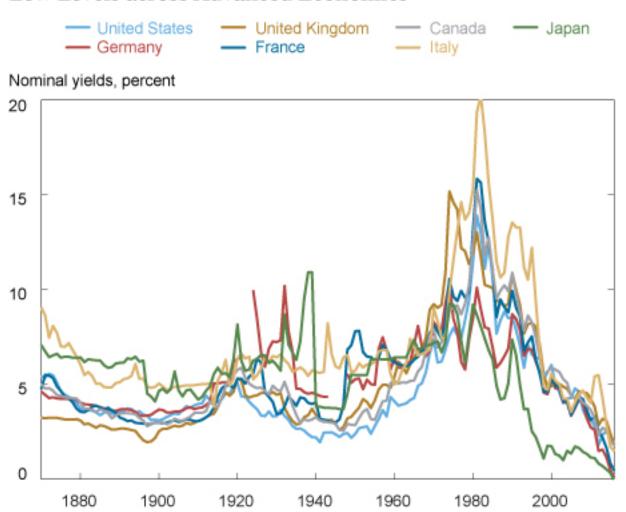
Global Trends in Interest Rates

Marco Del Negro, Domenico Giannone, Marc P. Giannoni, Andrea Tambalotti, Brandyn Bok, and Eric Qian https://libertystreeteconomics.newvorkfed.org/2019/02/global-trends-in-interest-rates.html

Long-term government bond yields are at their lowest levels of the past 150 years in advanced economies. In this blog post, we argue that this low-interest-rate environment reflects secular global forces that have lowered real interest rates by about two percentage points over the past forty years. The magnitude of this decline has been nearly the same in all advanced economies, since their real interest rates have converged over this period. The key factors behind this development are an increase in demand for safety and liquidity among investors and a slowdown in global economic growth.

Yields on Long-Term Government Bonds Are at Historically Low Levels across Advanced Economies



Source: Jordà, Schularick, and Taylor, Macrohistory Database (www.macrohistory.net/data).

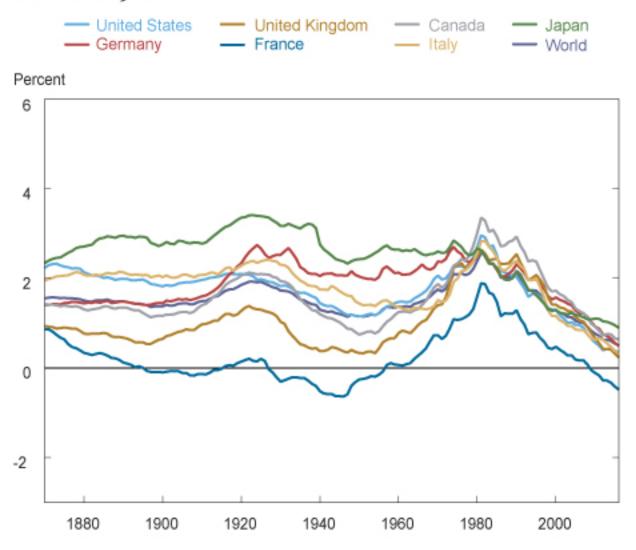
These conclusions are based on the results of our recent <u>New York Fed staff report</u>, in which we jointly estimate trends in real rates for seven advanced economies using data on short- and long-term interest rates, inflation, and consumption starting in 1870. We do so through a flexible time-series model—a vector autoregression (VAR) with common trends. Employing this econometric tool, which we used in <u>previous work</u>, we can extract trends from a large number of variables without having to take a stance on the dynamic interdependencies among their cyclical components. Therefore, we can use economic theory to model and interpret these trends, while remaining agnostic on whether theory holds at other

5 week

frequencies. For example, the absence of arbitrage opportunities in the long run implies that we can interpret the estimated common trend in real interest rates across countries as the trend in the world real interest rate. The same theoretical framework also allows for a decomposition of this trend into some of its potential drivers, such as global consumption growth.

The next chart shows that the trend decline in the world real interest over the past forty years has been closely synchronized across advanced economies. The chart reports estimated trends in the real interest rates in the seven economies in our sample. Over this period, country-specific trends have essentially disappeared, so that the trend in the world real interest rate is now extremely close to the trends for all countries (with the possible exception of France). This convergence of real interest rate trends is consistent with the growing integration of global capital markets over this period. As a result, the secular decline in real interest rates is an eminently global phenomenon, with the trends in real rates falling by very similar amounts in all advanced economies. The finding that a "global trend" in real interest rates has increasingly overshadowed country-specific trends presents interesting similarities with the results of recent work that emphasizes the emergence of a "global cycle"—or global factor—as a growing source of co-movement in the returns of risky assets around the world (for example, see Gerko and Rey).

Real Interest Rate Trends Have Converged across Countries since the 1980s



Source: Authors' calculations.

5 week

The lower panel of the chart above shows the contribution associated with the trend in global economic growth. The latter is estimated as a common component of trends in the growth rate of per capita consumption across the seven economies in our sample, as suggested by the consumption asset pricing model and further detailed in our paper. A global decline in the growth rate of per-capita consumption, possibly linked to demographic shifts, is a further notable factor pushing global real interest rates lower. Its contribution is comparable in magnitude to that of the convenience yield since 1980, but is only about half as important over the past twenty years (and less precisely estimated).

Taken together, our results suggest that low interest rates in advanced economies are a secular phenomenon driven by global forces that emerged well before the Great Recession and that are unlikely to be connected to country-specific factors, such as national policies or other domestic developments. Therefore, whatever forces might lift real interest rates in the future must be global, such as a sustained pickup in world economic growth, or a better alignment of global supply and demand with respect to safe and liquid assets.

This post has been reprinted, with minor changes, from the VoxEU.org blog. The original <u>post</u> appeared on November 12, 2018.