

Comments on

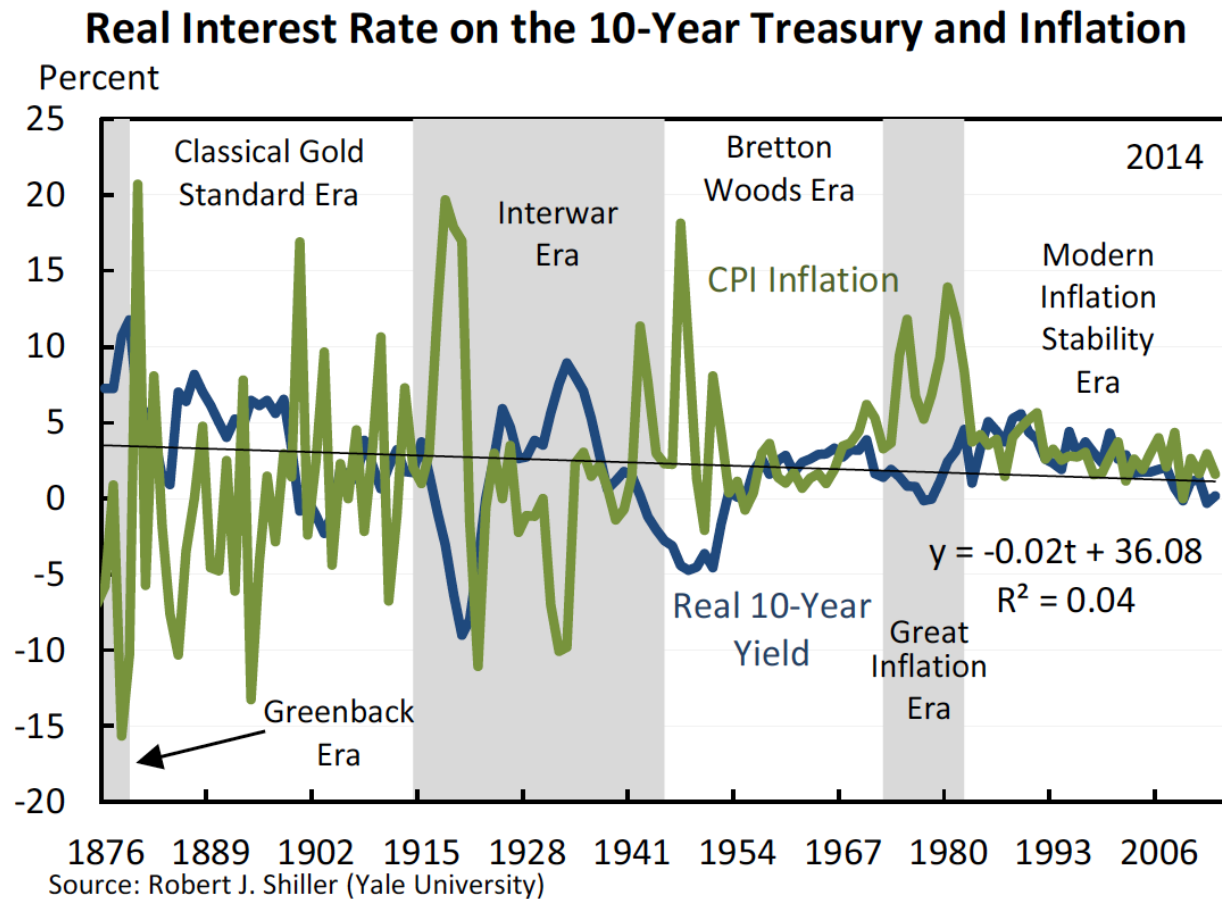
“Global Real Rates:
A secular approach”

Pierre-Olivier Gourinchas and Helene Rey

Linda Tesar
University of Michigan

“Do Changes in the Economic Landscape Require a New Policy Framework?”
Federal Reserve Bank of San Francisco
April 21, 2017

The decline in the real interest rate is a long-run phenomenon



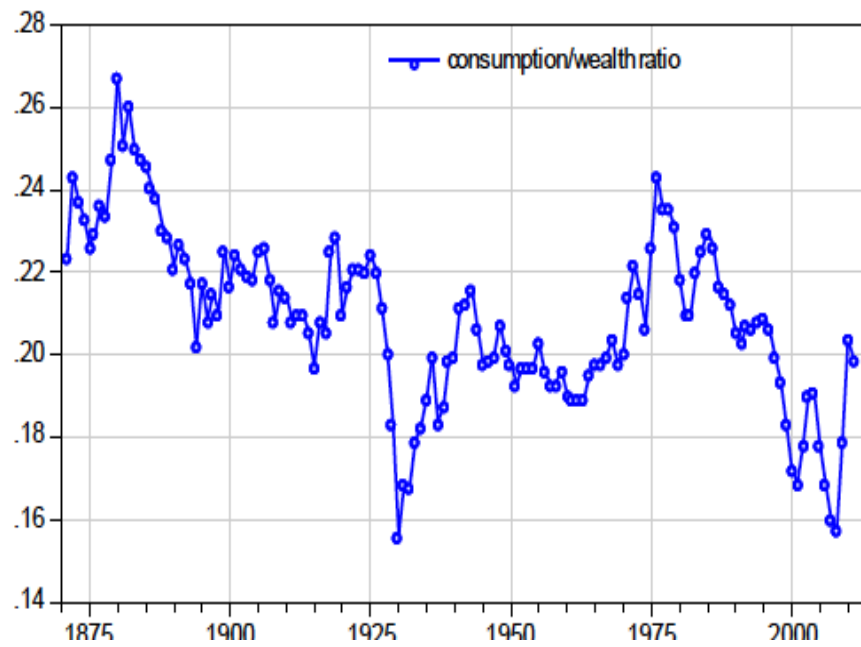
This paper seeks to find the determinants of the global riskfree interest rate

- Start with the global intertemporal budget constraint implies, assuming a constant MPC out of wealth and imposing the transversality condition
- The ratio of aggregate consumption to private wealth can be decomposed into:
 - 1) Future safe rates (r_{t+s}^f)
 - 2) Future excess returns (rp_{t+s}), or
 - 3) Future aggregate consumption growth ($\ln C_{t+s}$)

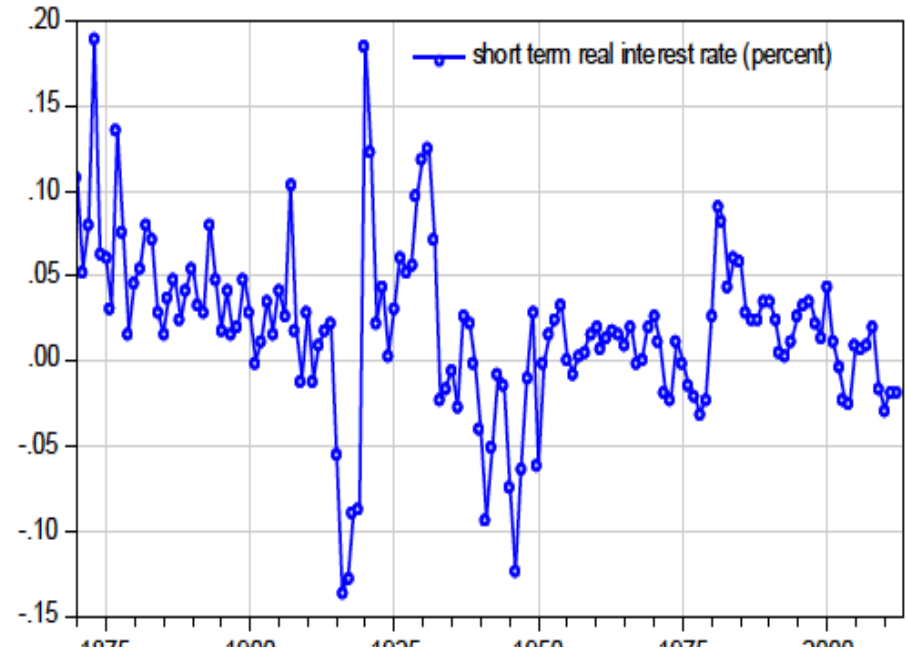
$$\begin{aligned}\ln C_t - \ln W_t &\simeq \mathbb{E}_t \sum_{s=1}^{\infty} \rho_w^s r_{t+s}^f + \nu \mathbb{E}_t \sum_{s=1}^{\infty} \rho_w^s rp_{t+s} - \mathbb{E}_t \sum_{s=1}^{\infty} \rho_w^s \Delta \ln C_{t+s} + \varepsilon_t. \\ &\equiv cw_t^f + cw_t^{rp} + cw_t^c + \varepsilon_t.\end{aligned}$$

US C/W ratio and short-term real interest rate

C/W ratio

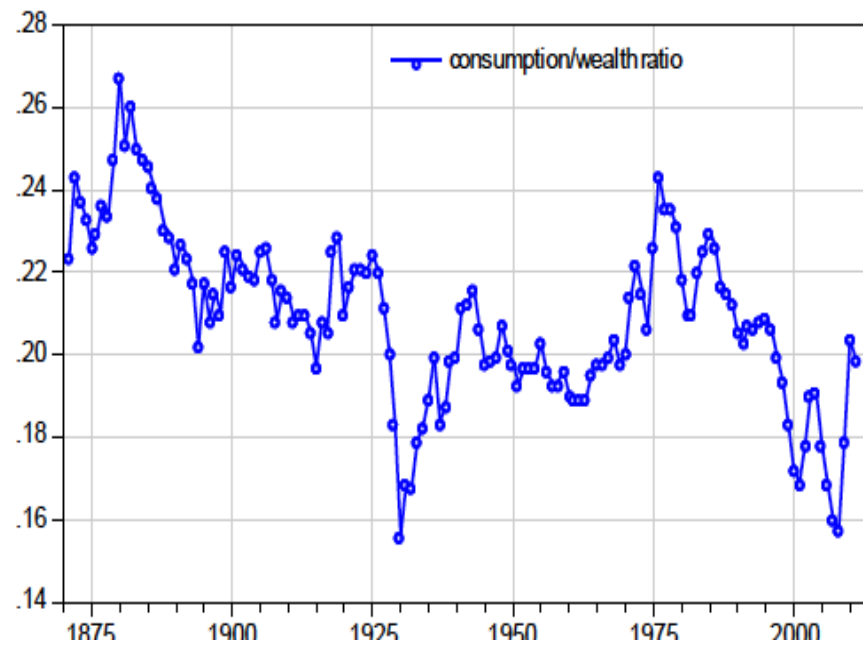


Real return on 3 mo Treasury

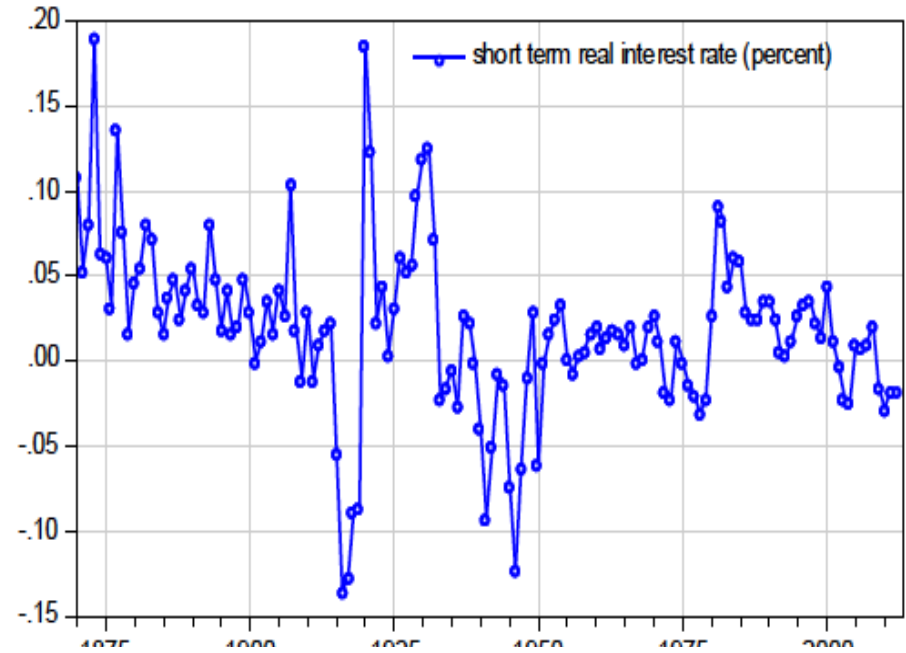


G-4 C/W ratio and short-term real interest rate

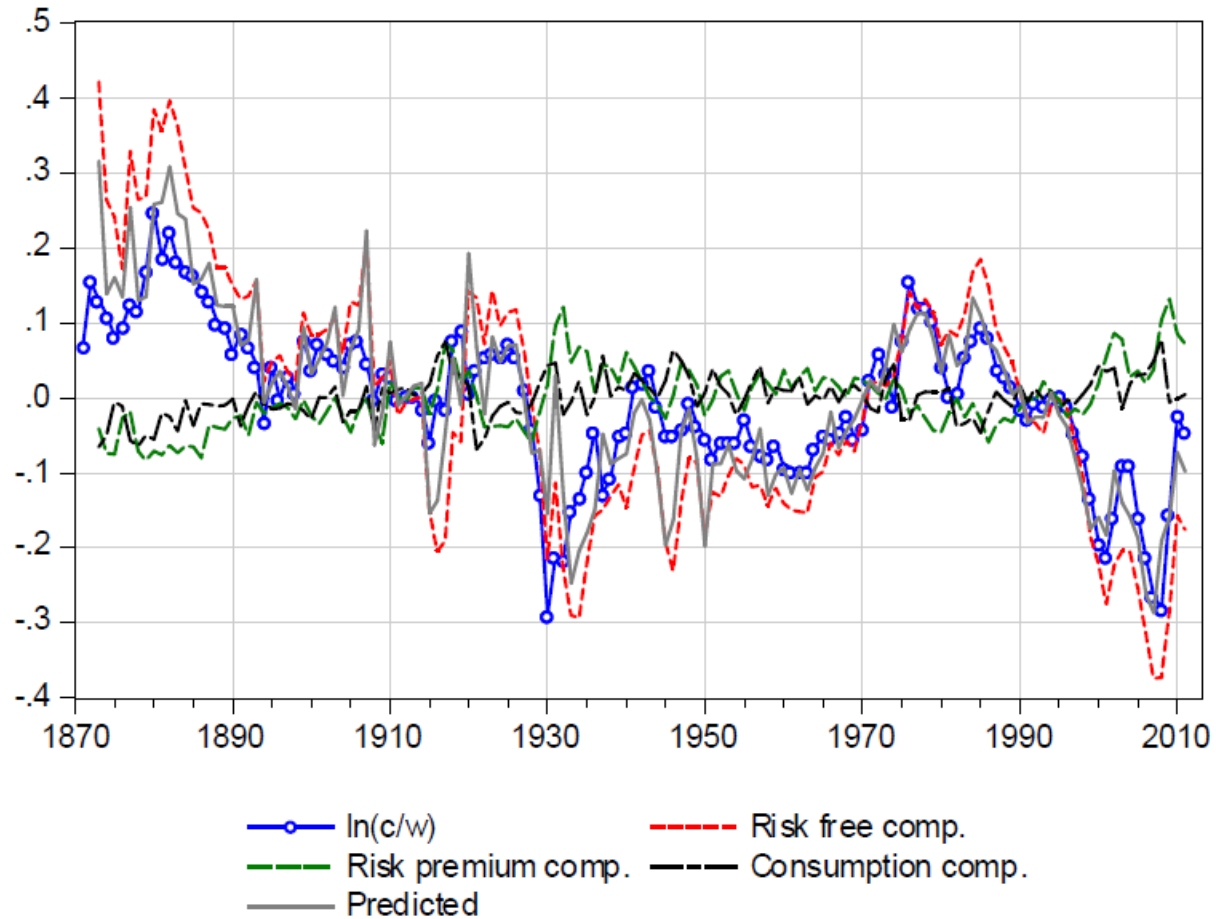
C/W ratio



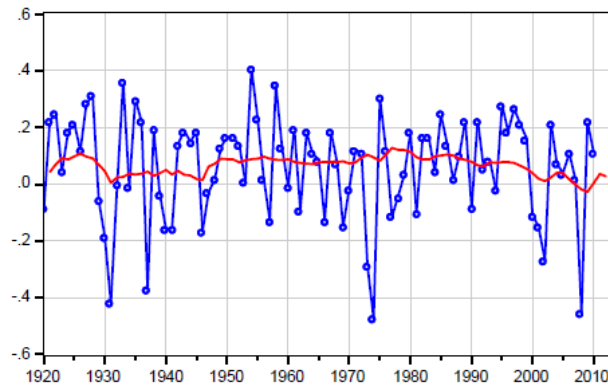
Real return on 3 mo Treasury



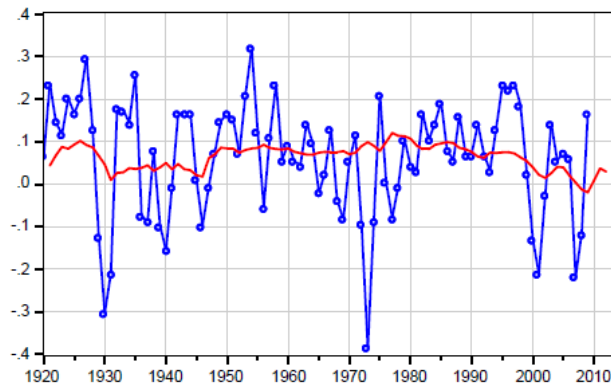
The authors highlight the relationship between the C/W ratio and the risk-free rate



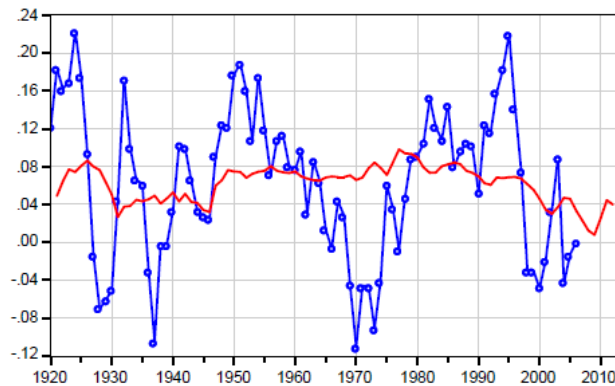
Can lagged C/W forecast stock returns? No, not at any frequency.



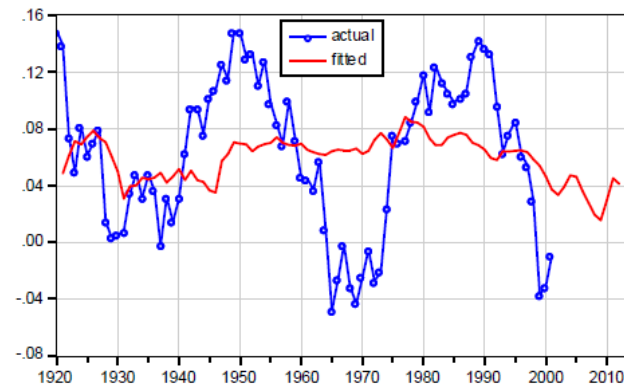
1-year ahead



2-years ahead

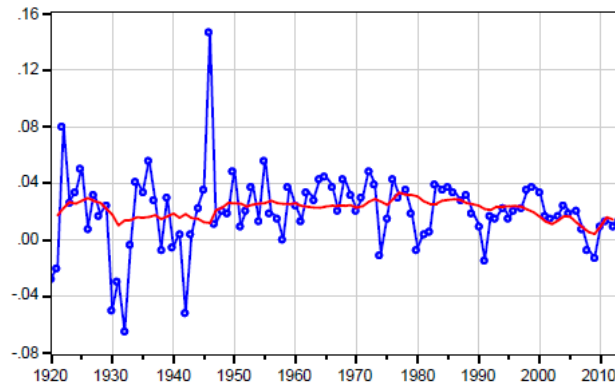


5-years ahead

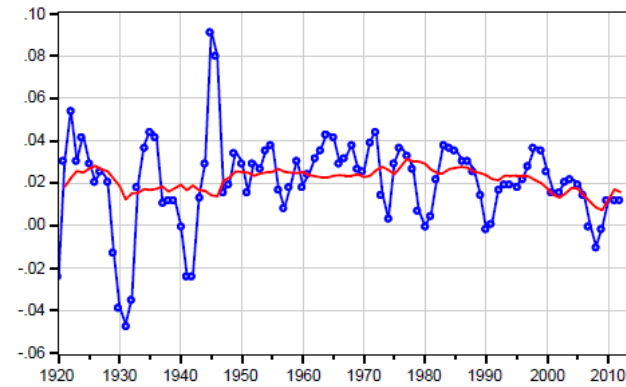


10-years ahead

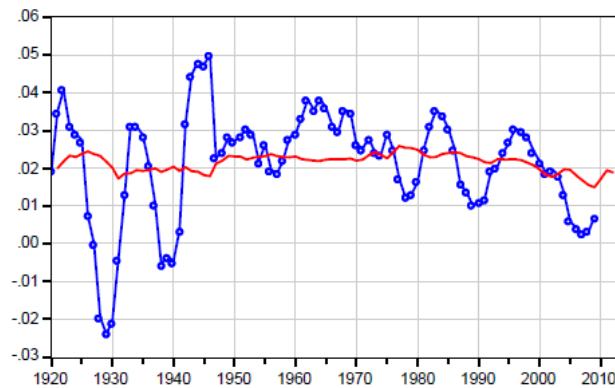
Can lagged C/W forecast consumption growth per capita? No, not at any frequency.



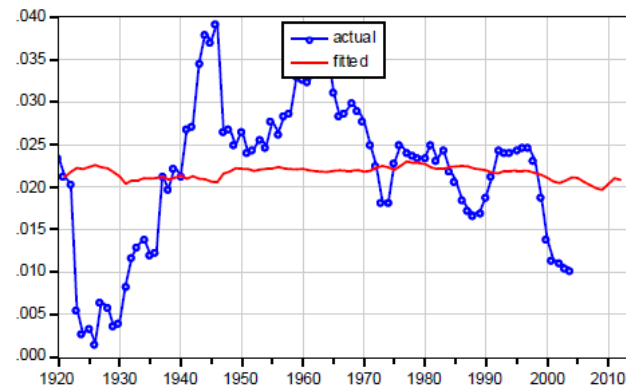
1-year ahead



2-years ahead

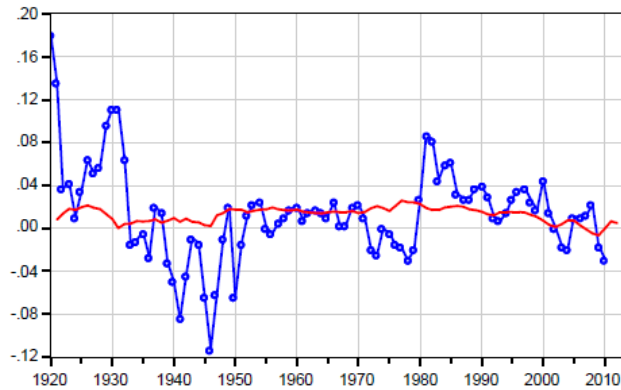


5-years ahead

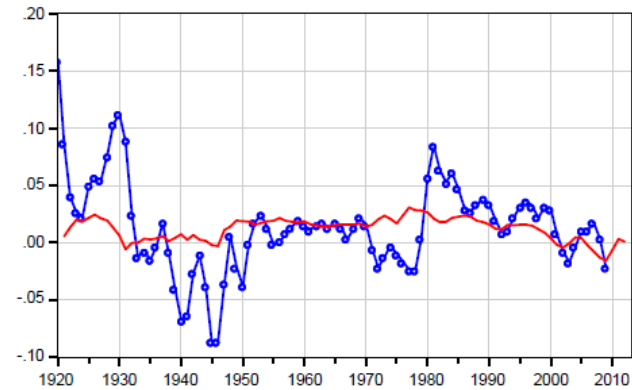


10-years ahead

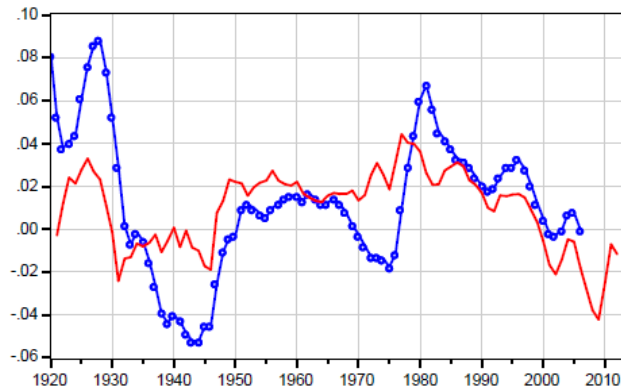
Can lagged C/W forecast the risk free rate? It seems so, at long horizons.



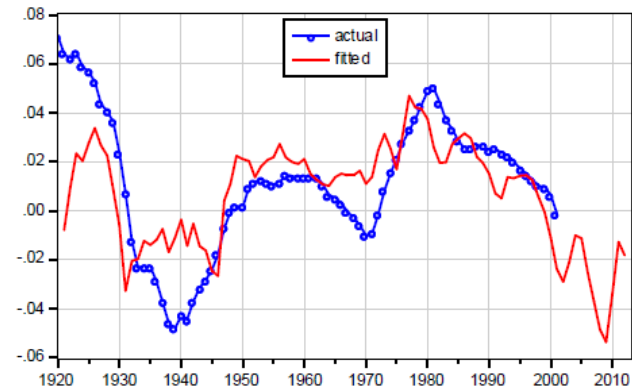
1-year ahead



2-years ahead



5-years ahead



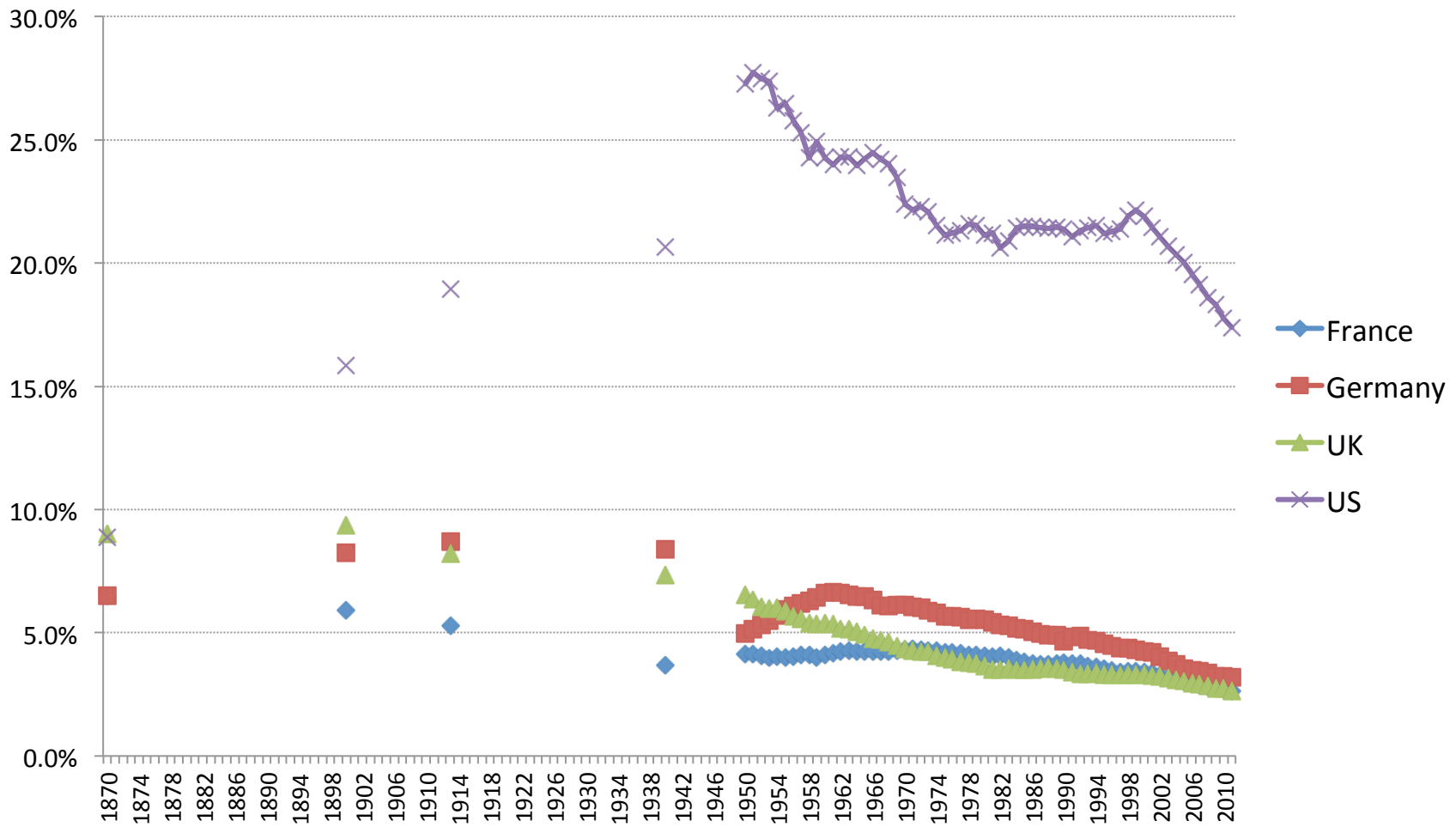
10-years ahead

Some unresolved issues

- The paper is about the factors that drive the global interest rate. The data are suggestive but do not really match their story.
- Will this hold up for the *world* economy – G4 is a smaller fraction of world economy than in the 1920s.
- In addition, they are not on the same side of the “imbalances” equation – Germany is a large net saver, which partially offsets net borrowing of US

GDP shares 1870-2011

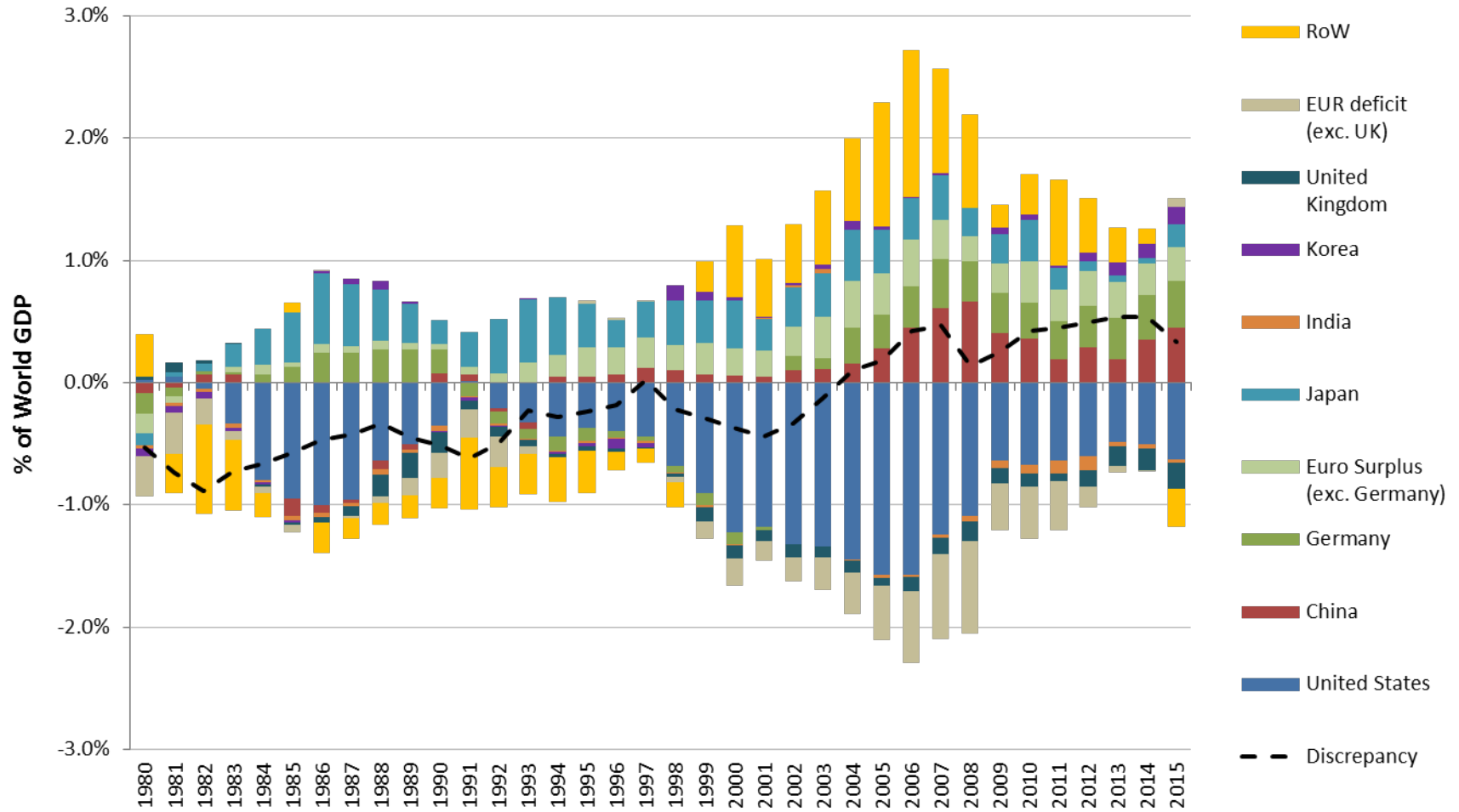
% of World Total



Source: Data from Maddison and PWT

Global Imbalances by selected countries and regions

1980-2015



Source: WEO

EUR surplus: Austria, Belgium, Denmark, Finland, Luxembourg, Netherlands, Sweden, Switzerland.

EUR deficit: Greece, Ireland, Italy, Portugal, Spain, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Turkey, Ukraine

We still do not know *why* C/W ratio changes

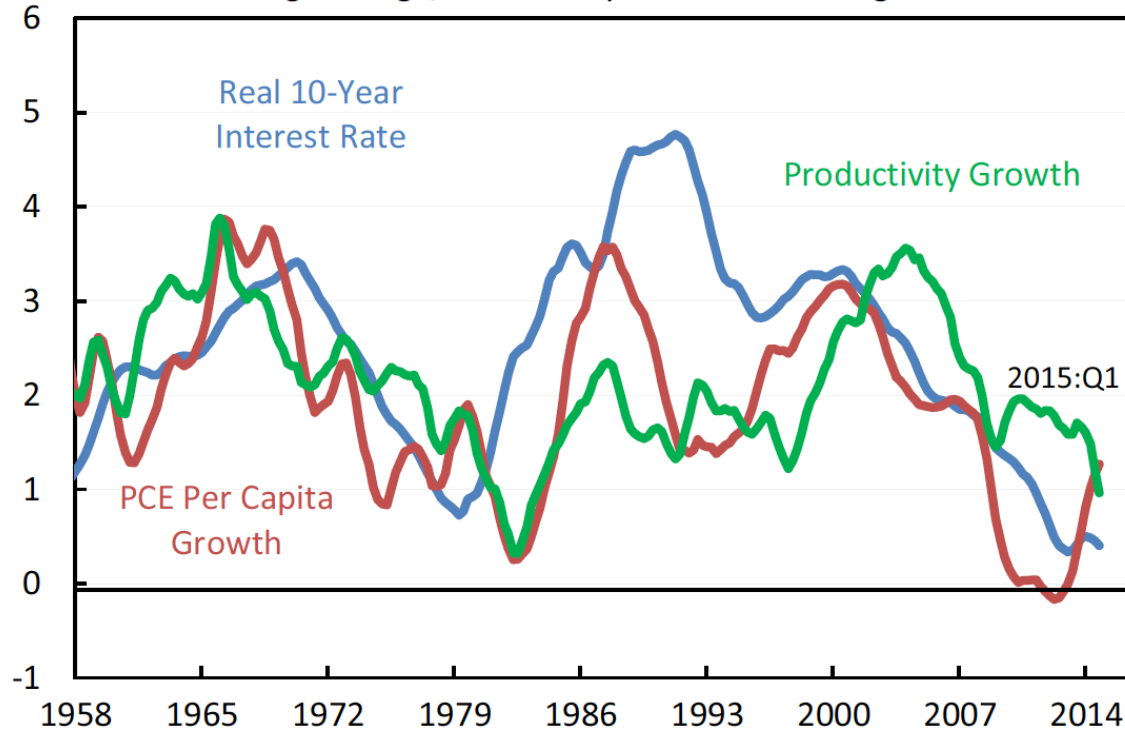
- Empirics link C/W to risk-free rate, but the direction of causality is unclear. What is causing the C/W ratio to change?
- More convincing racehorse between the alternative explanations for low rates.
 - Population growth – paper uses population growth rates for the G4; is that the relevant growth rate? Connection between savings rate and population growth is complex.
 - productivity

Long-run productivity growth does seem to be related to the long term real interest rate

Figure 6

10-Year Real Interest Rate, Real Consumption, & Productivity

20-Quarter Moving Average, Year-over-year Percent Change



Source: Federal Reserve Board; Bureau of Labor Statistics; Bureau of Economic Analysis.