

Real Interest Rates, Imbalances and The Curse of Regional Safe Asset Providers

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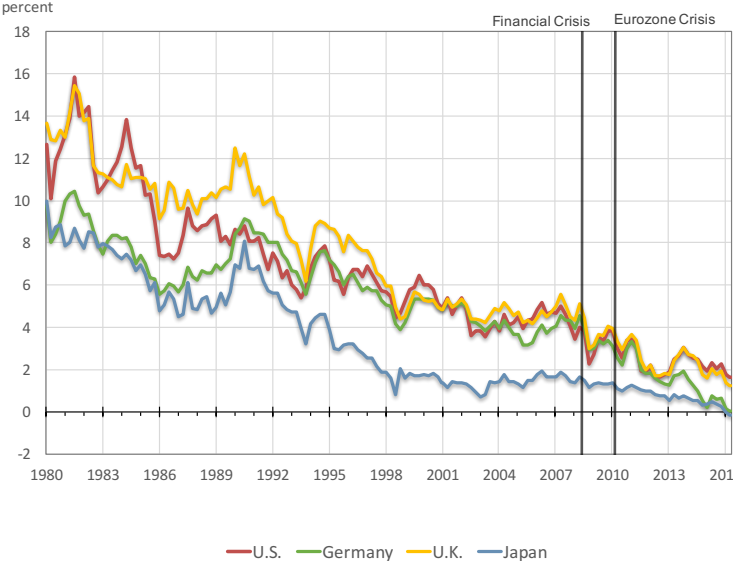
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European Central Bank Forum on Central Banking

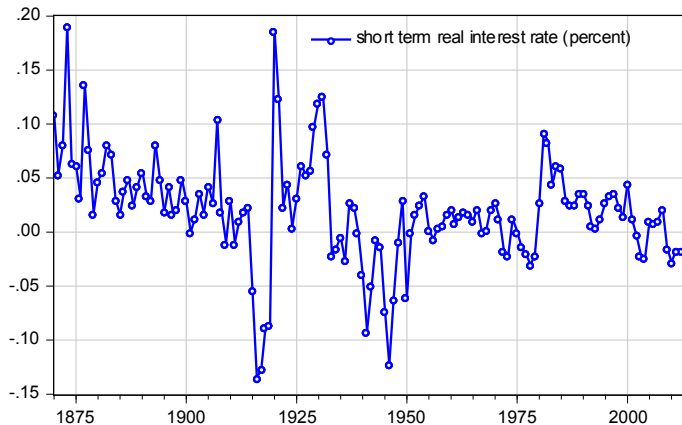
The Questions We Address:

- ▶ Why are global real interest rates so low and for how long?
(Secular Stagnation [Hansen (1939), Summers (2013)], Savings Glut [Bernanke (2005)])
- ▶ In this low growth, low real rates environment, what can we say about global imbalances?
- ▶ What specific issues are facing 'regional safe asset providers' such as Switzerland or core EMU?

Global Interest Rates (10-year)



'Historical' U.S. Real Rates, 1870-2011



The figure reports the annualized realized real 3-month interest rate for the U.S. since 1870.

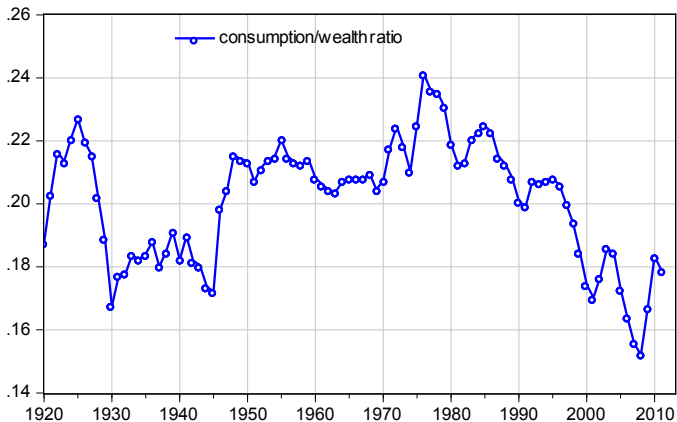
Source: Jordà et al (2016).

An Empirical Framework

- ▶ Look at the ratio of consumption (C) to wealth (W) over a long period of time.
- ▶ **Accounting identity** (budget constraint) implies that ratio C/W is **below average** when:
 - ▶ **Consumption** is expected to **grow faster** in the future, or
 - ▶ **Wealth** is expected to **grow more slowly** in the future: **low future return on wealth**
- ▶ The return on wealth is the **risk-free rate** r^f plus an **excess return** rp .
- ▶ Formally:

$$\begin{aligned}\ln(C_t/W_t) &= \sum_s \rho^s r_{t+s}^f + \sum_s \rho^s rp_{t+s}^w - \sum_s \rho^s g_{t+s}^C \\ &= \quad \quad \quad \color{red} cw_t^{rf} \quad \quad \quad + \quad \color{green} cw_t^{rp} \quad \quad \quad + \quad \color{grey} cw_t^C\end{aligned}$$

'Global' Consumption/Wealth Ratio, 1920-2011



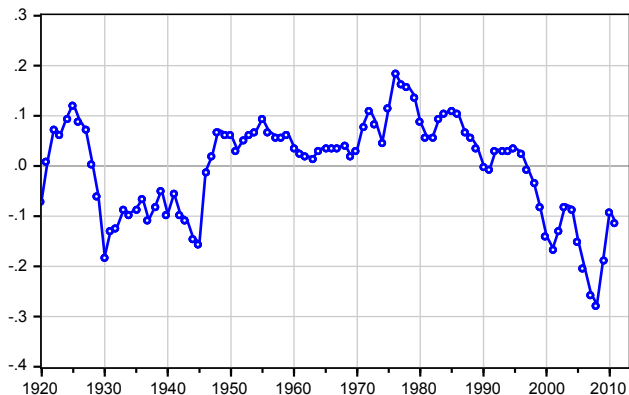
The figure reports the ratio of aggregate annual private consumption expenditures to total private wealth (land, housing, financial assets) for the U.S., U.K., Germany and France.

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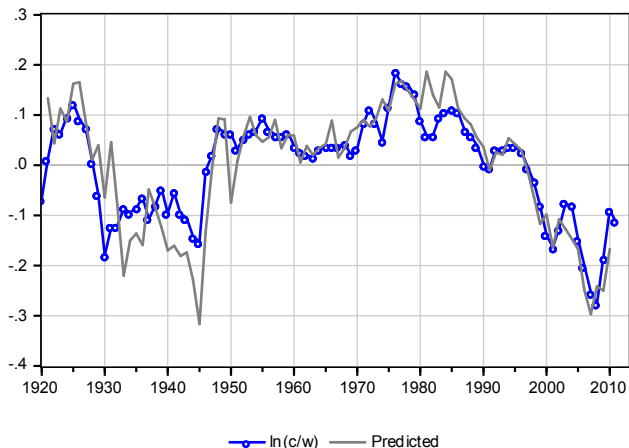
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Decomposing the Global Consumption/Wealth Ratio



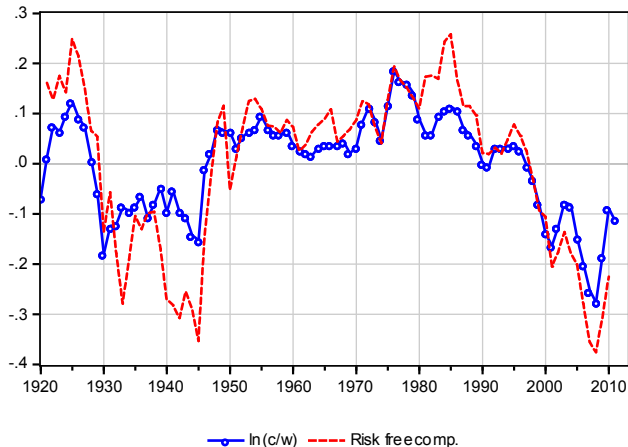
The figure decomposes the fluctuations in $\ln(C/W)$ around its mean into a risk-free component (cw^{rf}), an excess return component (cw^{rp}) and a consumption growth component (cw^c).

Decomposing the Global Consumption/Wealth Ratio



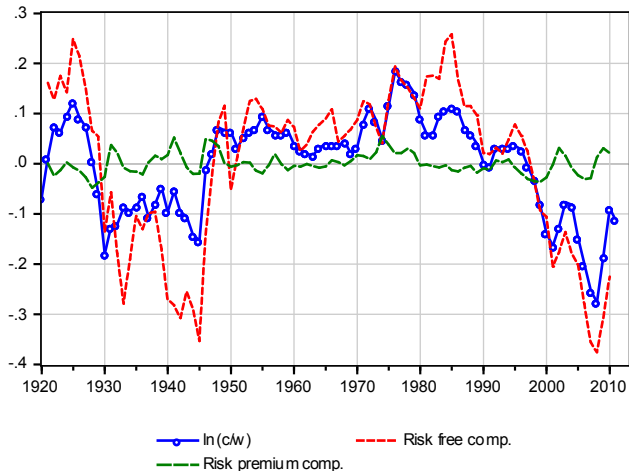
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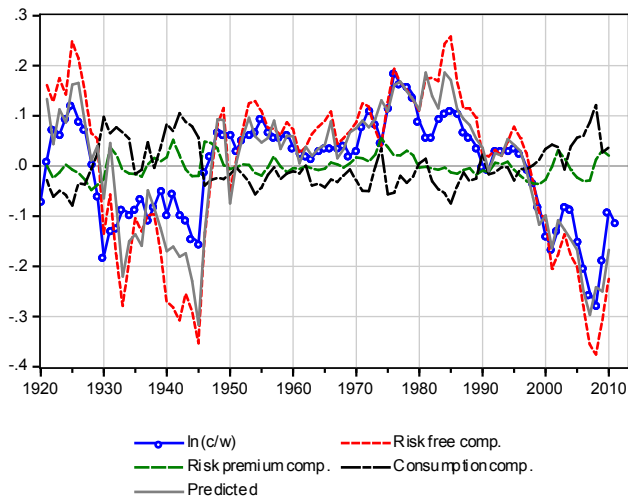
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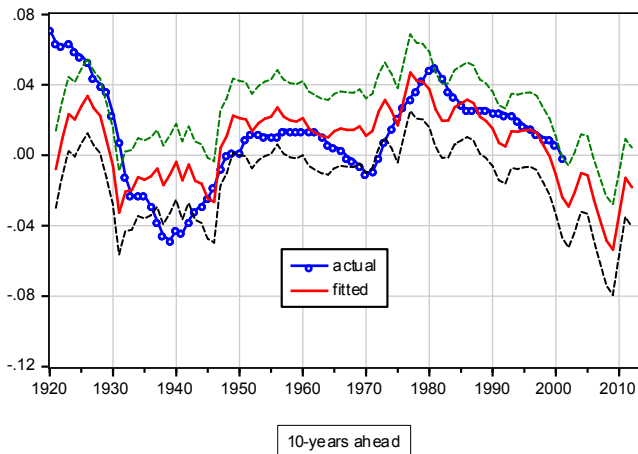
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Predicting Global Real Risk-free Rates



The figure forecasts the 10-year average future short risk-free rate using $\ln(C/W)$. Graph includes 2 standard deviation bands.

2015-2025 forecast: -2%

Low Real Rates: Why and How long?

- ▶ Empirical evidence favors **global financial boom/bust cycle** (**Miranda-Agrippino & Rey (2015)**)
- ▶ Deleveraging post crisis: **increased demand for 'safe' assets**
- ▶ Little evidence for technological slowdown or demography factors (?)
- ▶ How long? **Well into next decade!**

Global Imbalances

- ▶ Receded but did not disappear
- ▶ Salient feature: **all** eurozone members are in surplus.
- ▶ Become '**malign**' at the Zero Lower Bound: excess saving push the world into a global recession
(**Caballero, Farhi & Gourinchas (2016)**)
- ▶ Potential for **currency wars**: rotating depressed world demand, but not stimulating world economy

Global Imbalances

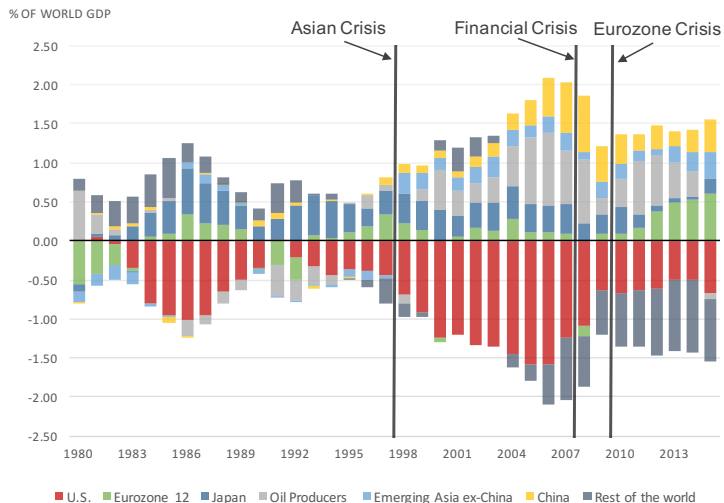


Figure: Current Account, percent of World GDP

Source: WEO April 2016.

Eurozone Imbalances

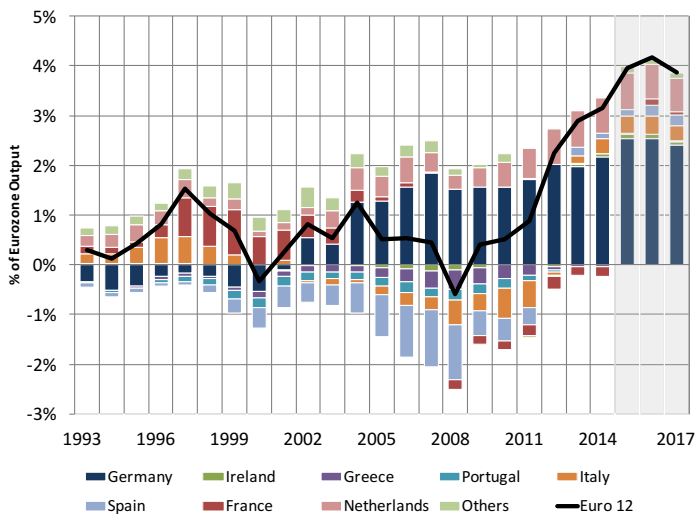


Figure: Current Account Balances, percent of Eurozone GDP

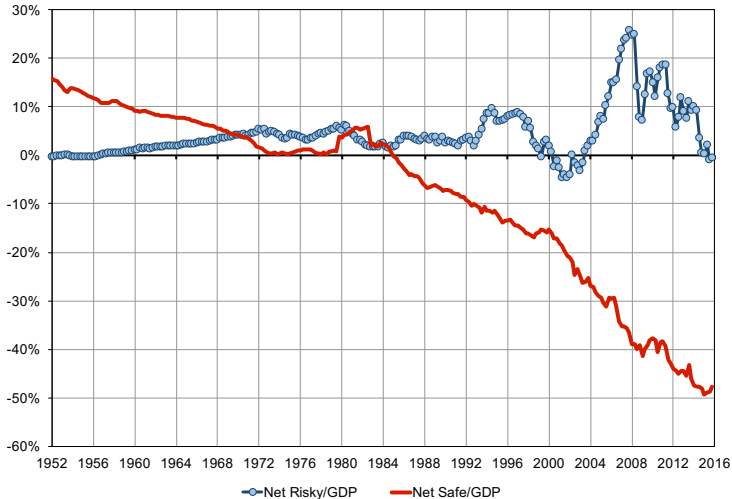
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The Curse of (Regional) Safe Asset Providers

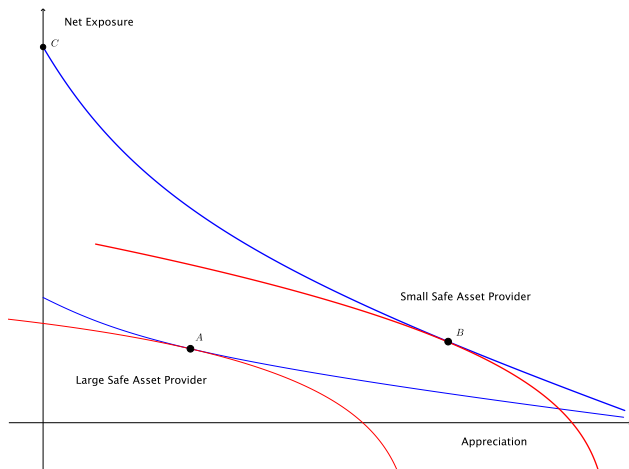
- ▶ If safe assets are scarce, their price must be high (low risk-free rates)
- ▶ Suppliers of safe assets:
 - ▶ have lower funding costs ('**exorbitant privilege**')
 - ▶ **must** face increased external exposure ('**exorbitant duty**')
- ▶ *How risky?* **U.S. losses of 23% of GDP** between 2008 and 2015. Potentially **larger losses** for Switzerland.
- ▶ **Trade-off**: tomorrow's exposure vs. today's currency appreciation. (Triffin (1960))
- ▶ But: worse trade-off the smaller is the safe asset provider:
Curse of the Regional Safe Asset Provider

'Net Risky' and 'Net Safe', United States, 1952-2015



Net Risky = Net Portfolio Equity and Direct Investment; Net Safe = Net Portfolio Debt and Other Assets. Percent of U.S. GDP

The Curse of Regional Safe Asset Providers



The figure illustrates how the trade-off between net external exposure and real appreciation varies with size. A large safe asset provider chooses point A. A small safe asset provider chooses point B. If the currency is fixed, the country is at point C. Results based on Gourinchas, Rey & Govillot (2010).

Case Studies: Switzerland & core EMU

- ▶ **Switzerland:** illustrates the trade-off: point *C*, then point *B*
- ▶ **Core EMU:**
 - ▶ core EMU banks intermediated capital flows from EMU savers and rest of the world to EMU periphery
 - ▶ because of the common currency, could not limit their exposure by appreciating the currency (point *C*)
 - ▶ cross border loans, not portfolio: protracted resolution process & only mild losses. Multiple rounds of deleveraging losses pushed onto periphery EMU
 - ▶ forces EZ into external surpluses, contributing to excess savings, safe asset scarcity and global ZLB.
 - ▶ With an exposure structure similar to the U.S., would have expected valuation losses for core EMU close to 40% of its GDP!
 - ▶ curse of core EMU may be a curse for rest of EZ and rest of the world too!

Conclusion

- ▶ Global real interest rates will remain low for long
- ▶ Why? Evidence points to deleveraging forces post financial crisis. Demand for safe liquid stores of value.
- ▶ Global Imbalances mutates at the ZLB ('malign'): greater scope for spillovers and currency wars
- ▶ Regional Safe Asset Providers face unpleasant trade-off: [Curse of the Regional Safe Asset Provider](#)
- ▶ Excessive Eurozone surpluses contribute to global ZLB.
- ▶ **Solutions:** (a) delinking safe asset supply within EZ from single country; (b) orderly and speedy loss-taking mechanism;(c) Capital Markets union.