

Discussion of:
Sovereign default and the decline in interest rates
by Max Miller, James Paron, and Jessica Wachter

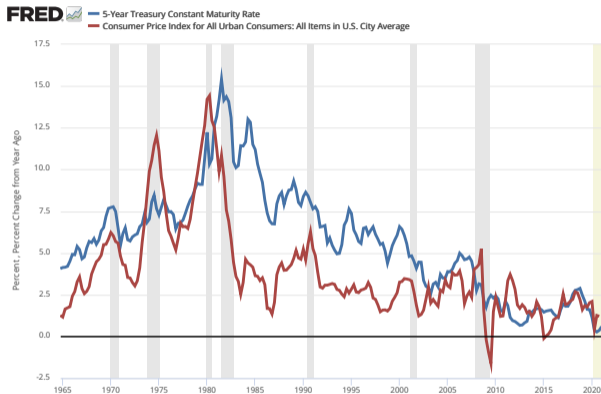
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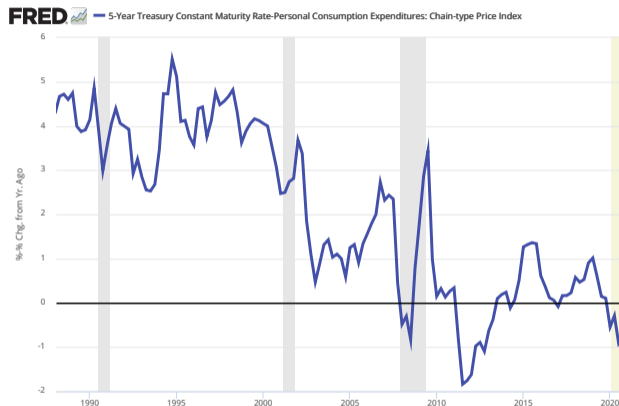
What drives decline in interest rates? Inflation!



- ▶ Nominal rates were high due the high inflation expectations of the 1970

What drives decline in real interest rates after 1990?

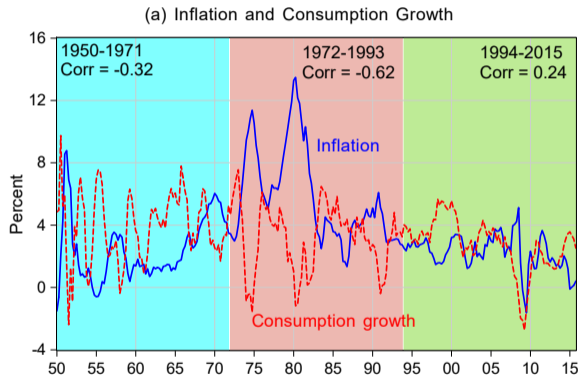
Real rates continues secular decline



- ▶ Many papers: aging population, global central banks savings, low growth, inequality
- ▶ This paper: still inflation dynamics!

Inflation cyclicality

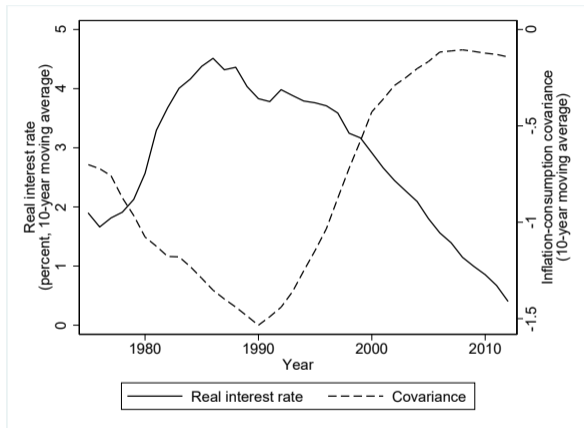
From Hur, Kondo, Perri (2018)



- Recessions used to be inflationary, now deflationary

Real rates and inflation cyclicality

From Hur, Kondo, Perri (2018)



- ▶ Hedging properties of inflation has changed
- ▶ Also in: Campbell-Pflueger-Viceira 2020, Jiang-Lustig-VanNieuwerburgh-Xiaolan 2019,2020

Real rates and inflation cyclicalty

Mechanism

- ▶ Procyclical ($y \downarrow \pi \downarrow$) inflation makes nominal debt less risky for lender
 - ▶ Real payouts \uparrow when $y \downarrow$
 - ▶ Nominal debt a good hedge
 - ▶ Low rates compensate for these good hedging properties

Paper Part I: Proof of concept and additional implications

- ▶ Pricing kernel with consumption process that depends on disaster shock
- ▶ Reduce covariance of disaster shock with inflation \rightarrow rates fall
- ▶ Consistent with stable price-dividend ratio

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Comment I: Use empirical measures of covariances changes

Real rates and inventory

Paper Part II: Production economy with inventory (money)

- ▶ Inventory provides economy extra safe asset in addition to capital
- ▶ Inventory crowds out capital and gives equilibrium with low risk free
- ▶ Government debt with inflation risk priced externally with new kernel from this economy

Real rates and inventory

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Comment II

- ▶ Inventory plays role similar to government debt
 - ▶ U.S. debt is a safe asset with interest rates that contain convenience yields
 - ▶ Khrishamurthy-Vissing Jorgenson 2012, Reis 2020
- ▶ Integrate inflation risk into production economy with government debt
- ▶ Emphasis on inflation dynamics would be sharper by having a nominal debt as the “inventory”
- ▶ Debt as good hedge, natural reason for low rates

Inflation as default

Comment III: Not the same objects

- ▶ Historically different objects, default more prevalent in foreign currency debt but not always (Reinhart-Rogoff 2012)
- ▶ Theoretically also treated differently (Aguiar-Amador-Farhi-Gopinath (2013, 2015), Hur-Kondo-Perri (2018), Arellano-Bai-Mihalache (2020))
- ▶ VAR analysis with 19 OECD countries from Hur-Kondo-Perri 2018
 - ▶ Covariance of inflation and consumption growth lowers real rates
 - ▶ **but only in countries with high credit ratings!**

Summary

- ▶ Important emphasis on inflation dynamics as driving low real rates — sold on this idea
- ▶ Safety properties of government debt important for low rates — sold on this idea
- ▶ Wishlist: unified framework merging these two points — work in progress

Embrace nominal government debt!