

Discussion of
*Safety, Liquidity, and the
Natural Rate of Interest*

by Del Negro, Giannone, Giannoni, Tambalotti

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Bank of England

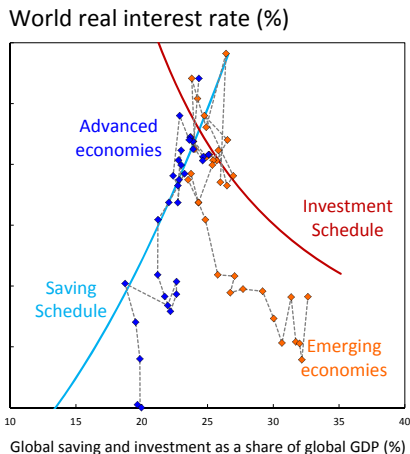
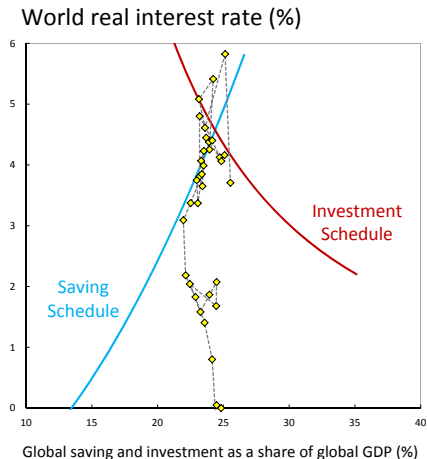
European Central Bank
29 May 2017

Views expressed are solely those of the presenter and do not necessarily
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What's growth got to do with it?

- ▶ Main results
 - ▶ Decline in low-frequency r^{**} in the US since late-1990s
 - ▶ Caused by an increase in the convenience yield on Treasuries
 - ▶ Convenience yield also drives r^* at business cycle frequencies
- ▶ Great paper
 - ▶ State-of-the-art methodologies
 - ▶ Intriguing application of convenience yield theory
 - ▶ Very helpful to think of entire 'term structure' of r^*
 - ▶ Beautifully crafted
- ▶ But also a very Bayesian paper

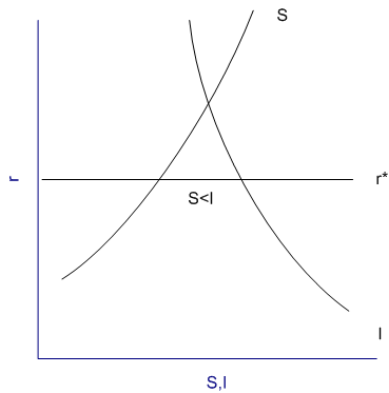
Global saving and investment



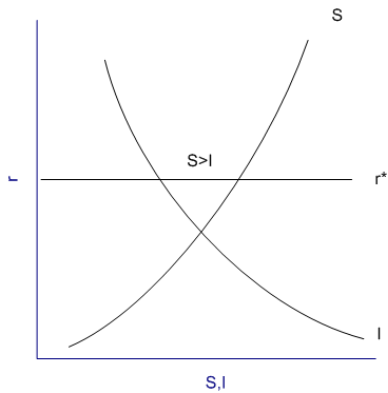
Source: Rachel and Smith BoE WP 2015

Savings glut

West

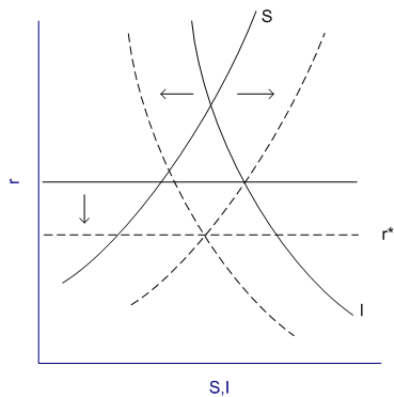


East

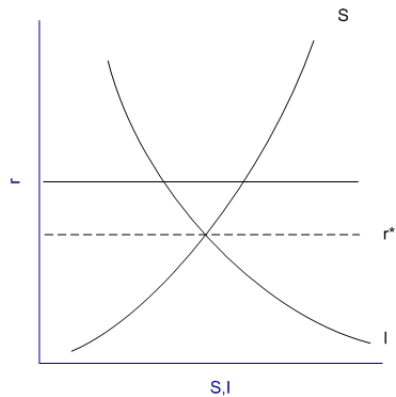


Disorderly adjustment

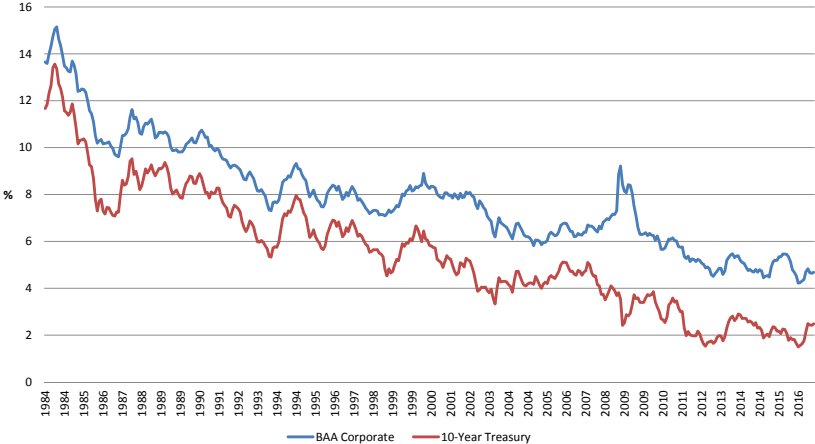
West



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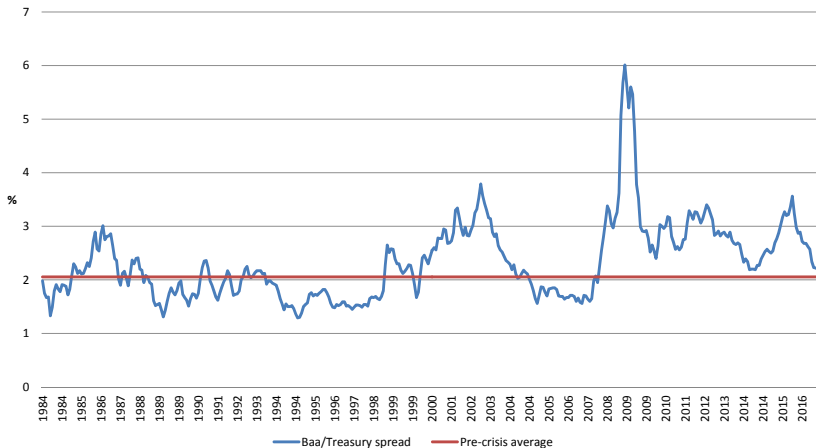


Yields



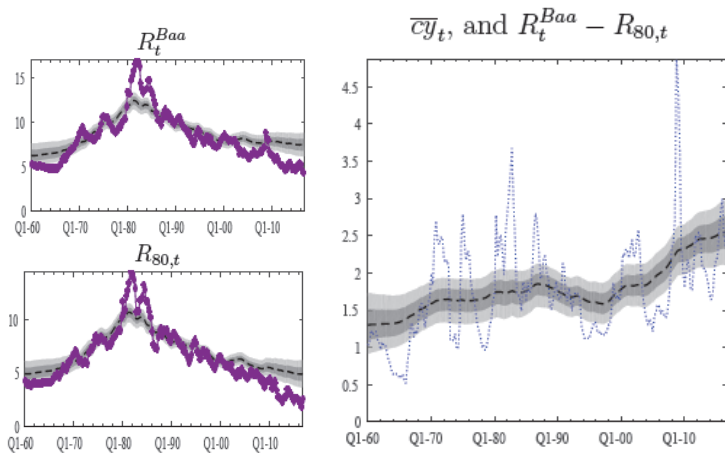
Source: FRED (St. Louis Fed)

Spread



Source: FRED (St. Louis Fed)

Trendy VAR



Source: Del Negro, Giannone, Giannoni, Tambalotti (2017)

DSGE model

- ▶ The finding that the DSGE model projects fluctuations in r^* at very long horizons as the Trendy Var is not really surprising
 - ▶ Same convenience yield trend hard-wired in both
 - ▶ Low-frequency component is not estimated (supertight prior)
- ▶ Not necessarily a problem: model not built to capture low-frequency movements
- ▶ But does raise issues of identification
 - ▶ Convenience yield essentially a preference shock
 - ▶ Trend in preference shock translates into trend in r^*
 - ▶ So would persistent secular growth (prior persistence low)

Trade-off management

- ▶ Natural rate of interest

$$\begin{aligned}\pi_t &= \beta E_t \pi_{t+1} + \kappa x_t^n \\ x_t^n &= E_t x_{t+1}^n - \sigma (i_t - E_t \pi_{t+1} - r_t^n)\end{aligned}$$

- ▶ Efficient rate of interest

$$\begin{aligned}\pi_t &= \beta E_t \pi_{t+1} + \kappa x_t^e + u_t \\ x_t^e &= E_t x_{t+1}^e - \sigma (i_t - E_t \pi_{t+1} - r_t^e)\end{aligned}$$

- ▶ Optimal policy simulations a (much) better guide than cyclical r^n
- ▶ But low-frequency component crucial for end points

Conclusion

- ▶ Beautiful paper!
 - ▶ Important question and intriguing theory
 - ▶ State-of-the-art empirical analysis
 - ▶ Clearly presented
- ▶ But Bayesian curse?
 - ▶ Convenience yield almost seems important by construction
 - ▶ Not a lot of space for alternative hypotheses
 - ▶ Not (at all) obvious that trend in spreads
- ▶ Challenge: make the case for alternatives (growth, global imbalances, price of investment, demographics, inequality,...)
- ▶ Optimal policy simulations make cyclical r^* redundant
- ▶ And by the way: what's the role of QE in all of this?