Natural and Neutral Real Interest Rates: Past and Future by Maury Obstfeld

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    - Capital flows and financial conditions affect real rates but monetary policy only focuses on short-run equilibrium in the goods market
4. Future prediction: Back to low real rates since main drivers have not changed
    - Demography favoring high savings, low investment
    - Low productivity growth
    - Corporate market power
    - Safe asset demand

A High Stake Game w/High Uncertainty

- Blanchard-Summers'84: High real rates
- Summers'15: Low real rates—Secular Stagnation
- Blanchard'23, IMF'23, Eggertson'23: Go back to secular stagnation
- Summers'23: No more secular stagnation
- Rogoff-Rossi-Schmekzing'22: $\downarrow$ since early 14th century; all of the above are blips

Obstfeld: Past data can help but future prediction is risky since shocks change; structural drivers and shocks can interact with long transitional dynamics

Drivers of the decline across time

Definitions

Measured Real Rate: r = real risk free rate + real risk premium

Natural Rate: $\bar{r}$ = long-run S-I equilibrium real rate with no rigidity

Neutral Rate: r*= real rate at potential output, Y*—no inflation/deflation

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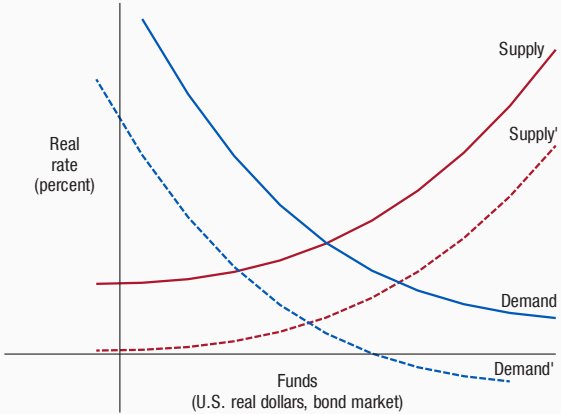
- Directly observable real rates: yields on inflation-indexed bonds (better proxy for safe rate)
- Approximate real rates: Nominal rates − inflation expectations (might also have risk premia)—short vs long rates

⇒ The paper provides an extensive array of data on measured rates

Framework: Saving and Investment—Loanable Funds Market w/Shifts in Demand and Supply for Funds



Existing Explanations for ↓ in Real Rates

1. Closed Economy
   - Investment ↓ via low price of K—Summers view
   - Too low policy rates for too long for AEs—BIS view
2. Open economy—Savings/financial crises based
   - Saving glut, China, demographics—Bernanke view
   - Deleveraging after financial crises (global debt cycles)—Reinhart-Rogoff view
   - Savings increase + financial crisis leading fluctuations in wealth— Gourinchas-Rey-Sauzet view
3. US-centric: Other Government Savings/Safe US Assets—Caballero-Farhi-Gourinchas; Gorton-Metrick; Krishnamurthy and Vissing-Jorgensen

Savings Increase: Centers on China/Asia

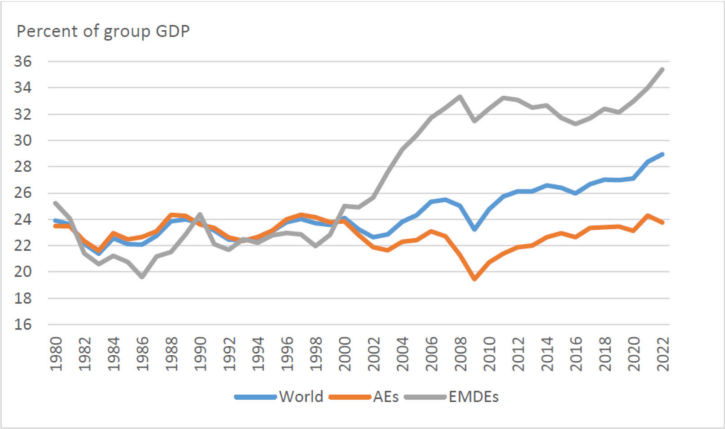
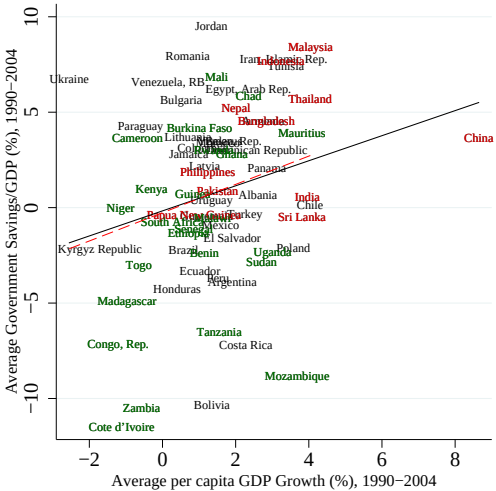


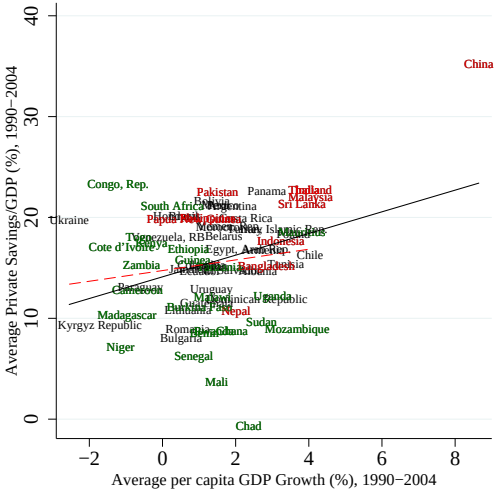
Figure 11: Gross saving according to country group

Role of Public Savings—Alfaro, Kalemli-Ozcan, Volosovych, 2014 JEEA



Legend:
Red dash line − Developing Countries excluding China
Red letters − Developing Countries in Asia
Green letters − Developing Countries in Africa

No Role for EM Private Saving



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Three Phases with Different Explanations

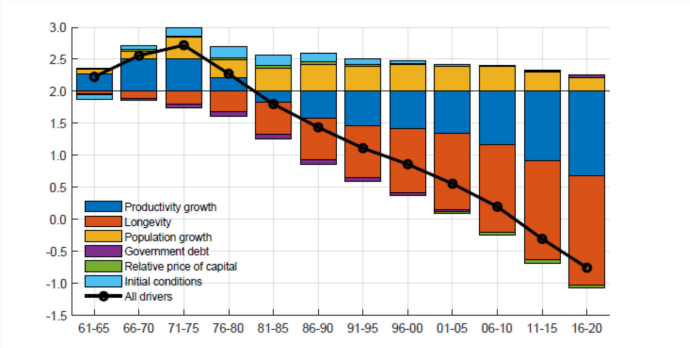
1. Mid-1990s—early-2000s: **Global S** $>$ **Global I:** China (government S), baby-boomers in AE (private S)

2. Early-2000s—late-2000s: Easy monetary policy and financial conditions
   $\Rightarrow$ not clear if **global S** $><$ **global I** since this is a period of widening global imbalances

3. GFC: 2008—2018: **Global S** $>$ **Global I:** High uncertainty, debt de-leveraging (low investment/low growth), high demand for safe assets

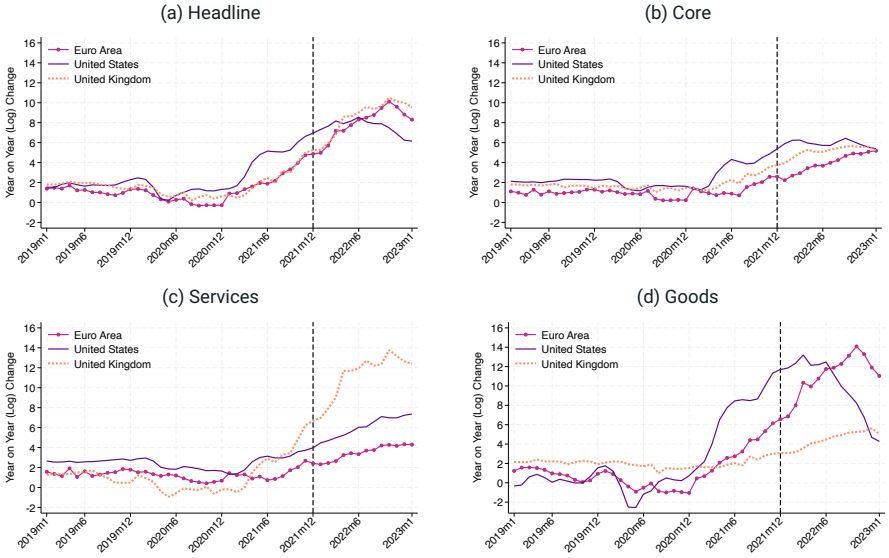
Structural: Most important drivers are demographics and productivity growth

From: Cesa-Bianchi, Harrison, Sadeji: "Drivers of Global $R*$"



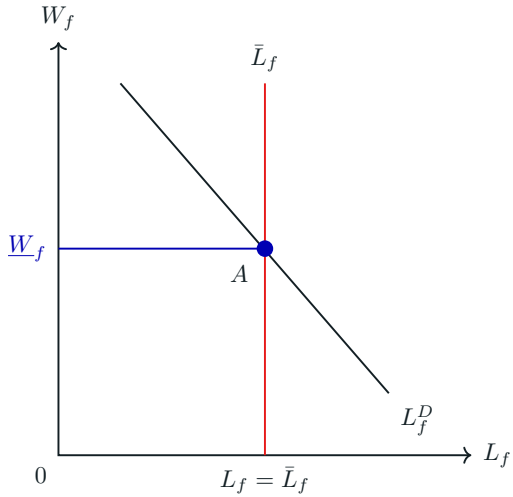
Current Inflation: Is this a Blip? Depends on Supply Shocks in a Fragmented World

Why disinflation is slow? Why labor market is resilient?
A sectoral demand-supply imbalance story



Segmented Labor Markets, Labor Supply Shock and Inflation

- $\bar{L}_f$: Potential labor. Decrease due to workers getting sick, shutdowns, great resignation.



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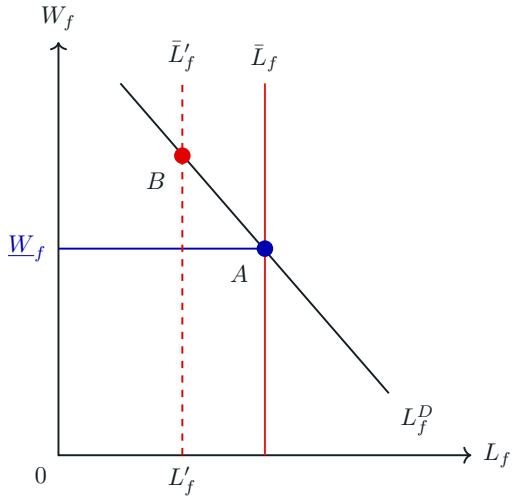

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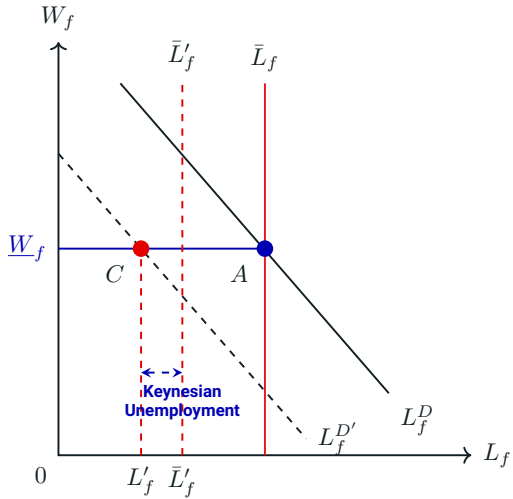
- L_f: Equilibrium employment
  - Demand effects+downward wage rigidity $\Rightarrow$ workers employed might be lower than *potential*
- During recovery – point D: heterogeneous across sectors, may not be back to 2019, still inflationary)



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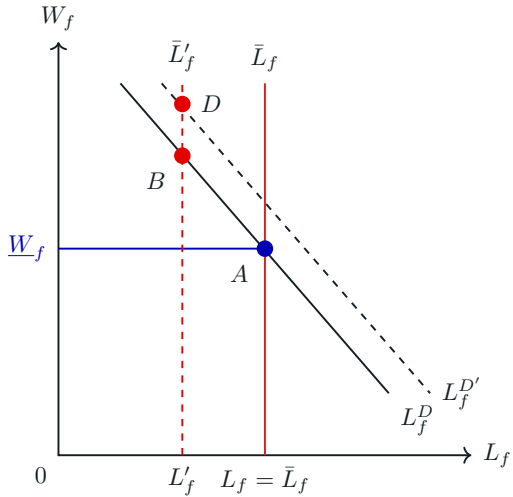
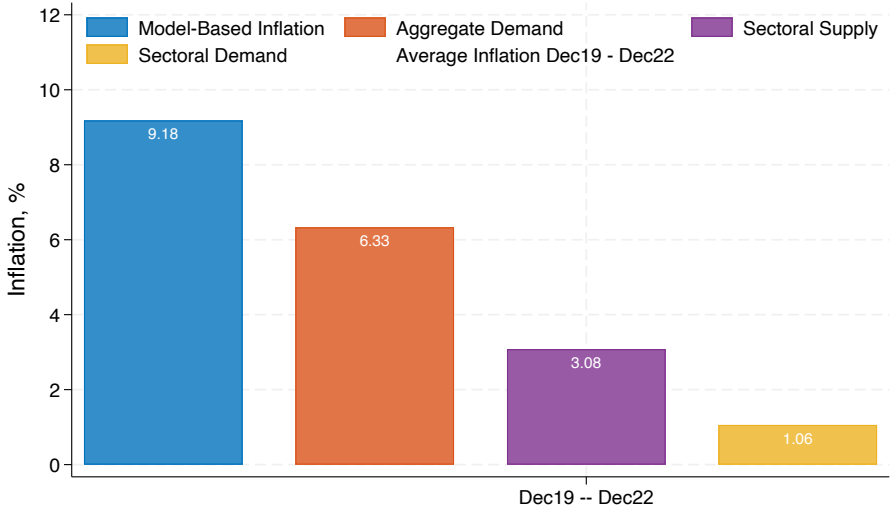


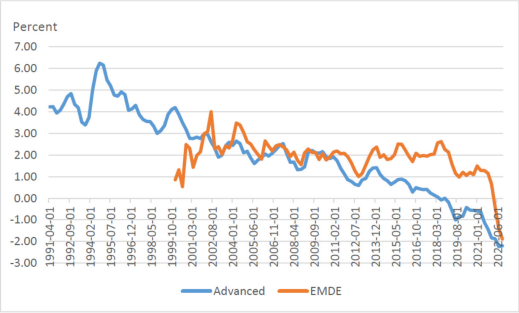
Sources of US Inflation: diGiovanni, Kalemli-Ozcan, SilvaYildirim



Implications for Monetary Policy

What else can we learn from EM-AE Difference? A striking figure

- Periods of better monetary policy making, credible inflation targeting, real rates coincide
- When nominal rates driven to ZLB with QE in AE, EM stayed constant, why?
  $\Rightarrow$ Opposing forces: capital inflows ($\downarrow$ risky rates) and tight monetary policy ($\uparrow$ safe rate)



Link between policy credibility and r^*

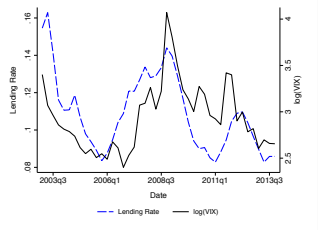
- Inflation targeting is done with nominal rates by referencing to r^*
- But credibility of inflation targeting affects r^*
- Global financial factors that are connected to policy credibility are absent from models estimating r^*
- A key issue both for AE and EM
  $\Rightarrow$ Extensive evidence for EM; capital flows are driven by risk sentiments/policy uncertainty
  $\Rightarrow$ r^* can go $\uparrow, \downarrow$ depending on what monetary policy does

$\Rightarrow$ Nominal rates relate more to global factors than r^*.

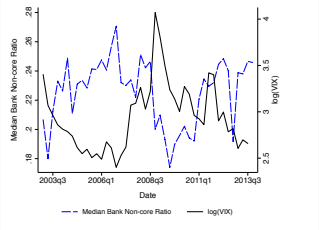
Capital Flow Facts in EM: Bank intermediated, risk-sensitive

From: diGiovanni, Kalemli-Ozcan, Ulu, Baskaya, RESTUD'21: International Spillovers and Local Credit Cycles

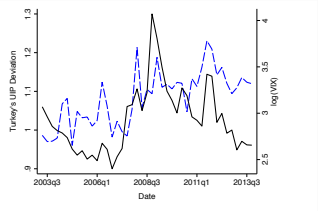
(a) GFC and Lending Rates ($\rho = 0.52$)



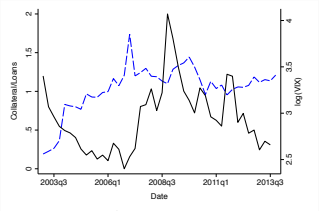
(b) GFC and Non-Core Liabilities ($\rho = -0.51$)



(c) GFC and UIP ($\rho = 0.61$)



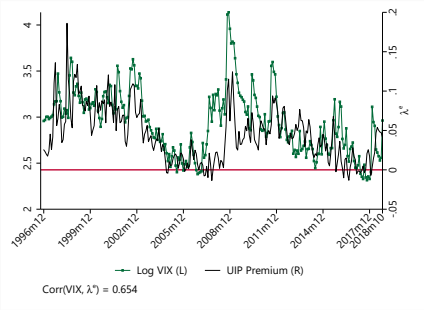
(d) GFC and Collateral ($\rho = 0.01$)



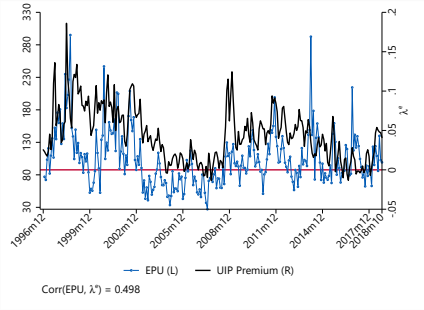
Risk premia/arbitrage deviations correlate with risk sentiment, news, uncertainty

From: Kalemli-Ozcan and Varela, 2019: 5 Facts of the UIP Premium

(a) VIX



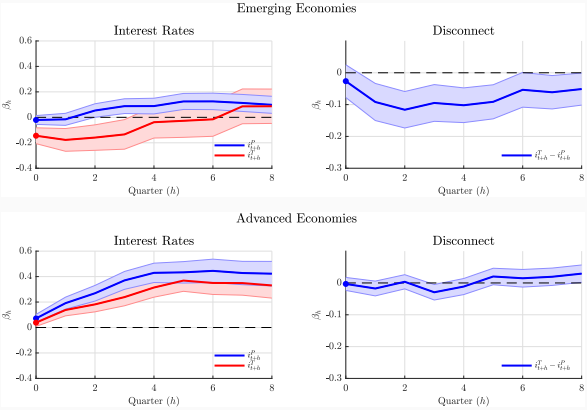
(b) News based Uncertainty



Result is ineffective MP: A disconnect between policy and market Rates

From: De Leo, Gopinath, Kalemli-Ozcan: Monetary Policy Cyclicality in EM

$$i^j_{t+h} = \alpha^j_h + \beta^j_h \Delta gdp_t + \gamma^j_h i^j_{t-1} + \epsilon^j_{t+h}$$



Takeaways

Conclusion

- Great paper! Most comprehensive on this topic to-date, must read!
- Importance of global factors
- Without a change in demographics (fertility increase to counter aging) and low productivity growth combined with higher uncertainty and a possible fragmentation, low real rates are here to stay

  $\Rightarrow$ Difficult days ahead for monetary policy making