

Discussion of

Collateral Advantage: Exchange Rates, Capital Flows, and Global Cycles

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Motivation: US external position is unique

In normal times

- ▶ $NFA = A - L < 0$
("World's Venture Capitalist")
- ▶ $r_A \gg r_L$
("Exorbitant privilege")

In bad times

- ▶ \uparrow \$ appreciation
("Safe haven")
- ▶ $NFA \downarrow$, transf. US to RoW
("Exorbitant duty")
- ▶ Capital flows reversal
("Retrenchment")

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Puzzles

- ▶ Reserve Currency Paradox (Maggiore '17): $\downarrow NFA \Rightarrow \downarrow \$$, but we observe $\uparrow \$$
- ▶ Retrenchment Puzzle: \uparrow demand US assets $\Rightarrow \uparrow$ inflows $\Rightarrow \downarrow TB$, but observe $\uparrow TB$

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This Paper: NK model w/ Financial Frictions (Gertler-Kiyotaki'10, Gertler-Karadi'11)

1. **US gov. bonds as superior collateral** \Rightarrow endog. convenience yield
2. **Sticky LCP pricing** \Rightarrow disconnect RER from ToT

Mechanism

- ▶ Banks invest in H/F bonds/capital (local deposits only). **Leverage constraint:**

$$V_{i,t} > \kappa_h D_{h,t} + \kappa_f S_t D_{f,t} + \kappa_{Kh} Q_t K_{h,t+1} + \kappa_{Kf} S_t Q_t^* K_{f,t+1}$$

where $\kappa_h < \kappa_f, \kappa_{Kh}, \kappa_{Kf}$ **Home bond is superior collateral**

$$E_t \Lambda_{i,t+1} \left(R_{h,t+1} - R_{f,t+1} \frac{S_{t+1}}{S_t} \right) = \lambda_{i,t} (\kappa_h - \kappa_f) < 0$$

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- ▶ **In bad times:** $\uparrow \lambda_{i,t} \Rightarrow$ UIP premium $\uparrow \Rightarrow S_t \downarrow$ (\$ appreciation)
 - * $\downarrow S_t \Rightarrow \downarrow NFA$ (transf. US to RoW)
 - * leveraged US banks + higher equity portfolio $\Rightarrow \downarrow Y/Y^*, C/C^*$

Comments

1. **Pricing assumption**
2. **What about dollar funding?**
3. **Regime transition**

Comment # 1: Pricing assumption

Reserve Currency Paradox

- ▶ **Financial channel:** $\downarrow S_t \Rightarrow NFA \downarrow$ (Foreign wealth \uparrow)
- ▶ **Real channel:** $\downarrow NFA + \text{home bias} \Rightarrow ToT_t \uparrow \Rightarrow \uparrow RER_t, S_t$

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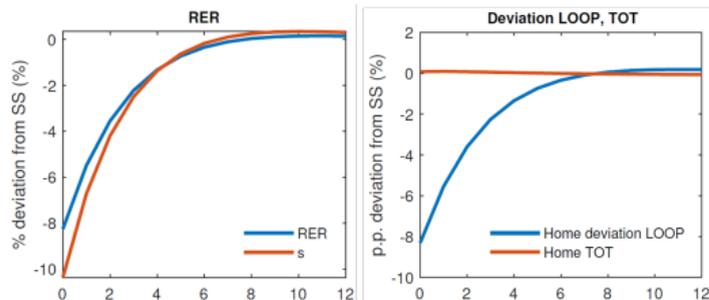
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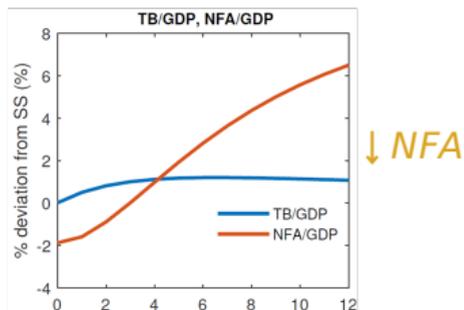
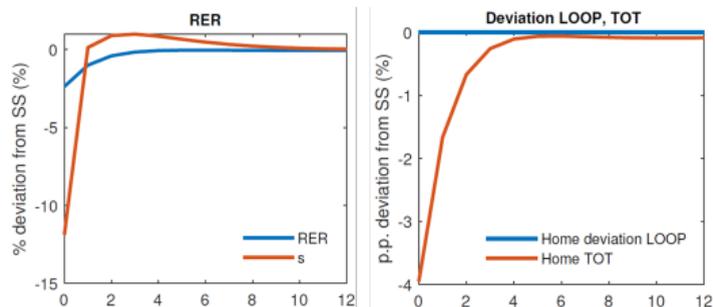
$$ToT_t = P_{f,t}/P_{h,t} \quad \mathcal{D}_t = S_t P_{h,t}^*/P_{h,t}$$
$$RER_t \propto ToT^{2\omega-1} \times \mathcal{D}_t$$

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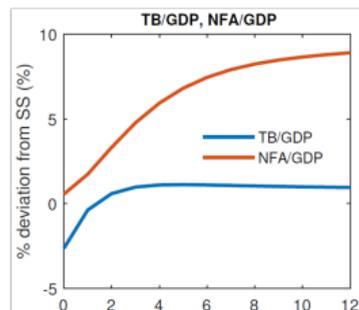
Global quality shock under LCP



Global quality shock under PCP



↑ NFA



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Solution: LCP to mute ToT → depreciation

$$ToT_t = P_{f,t}/P_{h,t} \quad \mathcal{D}_t = S_t P_{h,t}^*/P_{h,t}$$
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- ▶ What about **Dominant Currency Pricing (DCP)**?
 - * Trade mostly invoiced and sticky in US dollars
(Gopinath et al.'10, Gopinath et al.'18, Gopinath et al.'20, Gopinath-Itskhoki'22)
 - * Specific for the US: X \sim 96% and M \sim 95% are priced in US dollars.
- ▶ With DCP: P_h, P_f and P_f^* set, thus $\Delta ToT \approx 0, \downarrow S_t \Rightarrow RER_t \downarrow$

Comment # 2: What about dollar funding?

- ▶ **Dollar funding** is key for the int'l financial system and dollar dominance (Bruno-Shin'15, Avdjiev et al.'19, Bahaj-Reis'22, Bianchi-Bigio-Engel'25 WP, etc.)

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1. Would dollar funding amplify or mitigate the main results? (**Sanity check**)

2. Could $K_h < K_f$ also replicate

$$\underbrace{\frac{S_t B_{f,t}}{B_{h,t}}}_{\text{Foreign funding in Home banks}} < \underbrace{\frac{B_{h,t}^*/S_t}{B_{f,t}^*}}_{\text{Home funding in Foreign banks}} ?$$

Intuition during good times:

- * $K_h < K_f \rightarrow$ high demand for US assets \rightarrow RoW min FX exposure $\rightarrow B_{h,t}^* \uparrow$
- * NFA changes, but calibrate K_f, K_{Kh}, K_{Kf} to get $NFA < 0$
- * What could happen in **bad times?**

regulation?

Comment # 3: Regime transition

What if the US loses its collateral advantage?

- ▶ **Current steady state:** ($K_h < K_f$) US bonds as superior collateral
- ▶ **SS with no hegemon:** ($K_h \approx K_f$) due to geop. shocks, erosion of trust, debt issues...
- ▶ Can the model shed light on the potential transition paths between SS?
 - * Perhaps as a shock to K_h w/ high persistence
 - * Timely analysis

In sum

- ▶ Rich and ambitious paper!
- ▶ Scope to understand how broader dollar dominance aligns w/ the quant. results
(*e.g., dominant currency pricing, global dollar funding*)
- ▶ Very useful for policy discussions in int'l macro