

The International Monetary Transmission Mechanism

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 - ▶ Most work studies dynamic effects of ε_t^m on US economy.
- More recently, ask 'How Does the US and World Economy Respond to a US Monetary Policy Shock?'

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- Can ask questions like:
 - ▶ What are the forces driving the dynamics of US trade deficit ('demand for goods/services' versus financial factors like 'demand for safe assets')?
 - ▶ What are the short and longer-run effects of tariffs?

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- Our conclusion:
 - ▶ Yes, financial frictions play a major role.
 - ▶ But, the primary effect of a US monetary tightening seems to make ROW contract, *primarily by triggering a reduction in US import demand.*

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 - ▶ doing counterfactual simulations on estimated small open economy models.

Estimated Impulse Response Functions

- Monthly data, 2006-2019
 - ▶ Data availability & 2000s different regime for EMEs
 - ▶ US Monetary policy shocks: Bauer & Swanson (2023) [▶ Details](#)
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- Quantity and Price Variables are in Log-Levels.

Figure 1: Response to Contractionary US Monetary Policy Shock, United States

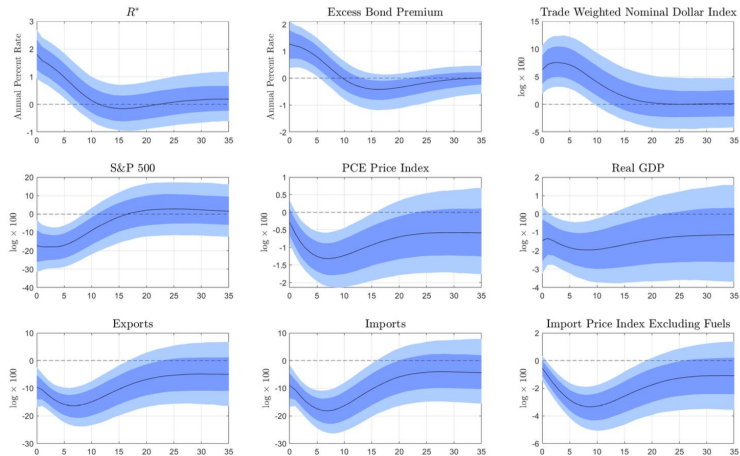


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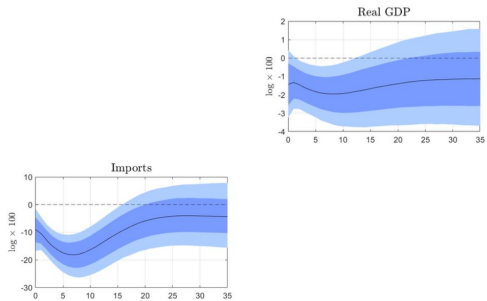
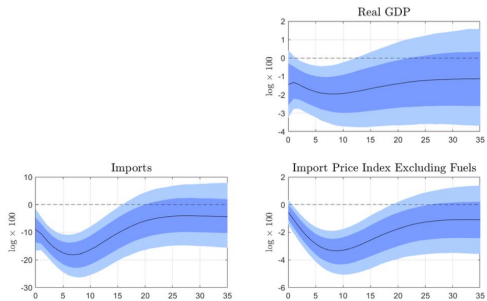


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 - ★ US investment falls substantially after a US monetary contraction.
 - ★ Relatedly, imports of cars & petroleum & materials falls a lot.

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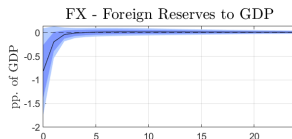
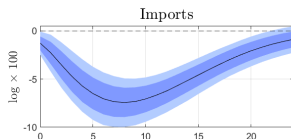
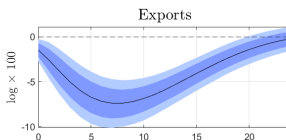
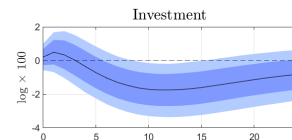
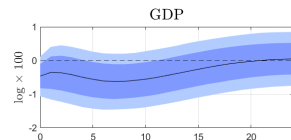
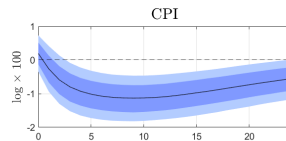
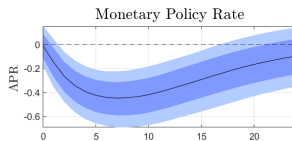
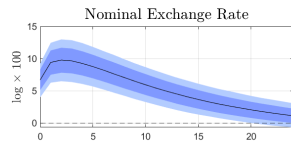
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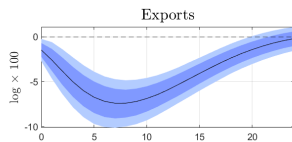
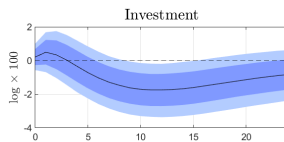
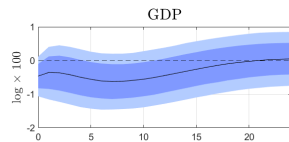
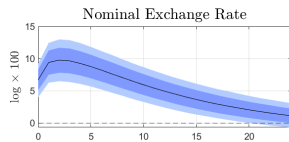
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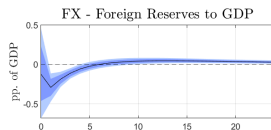
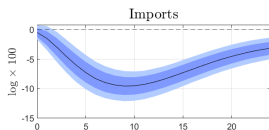
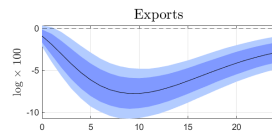
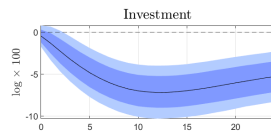
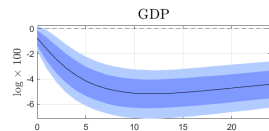
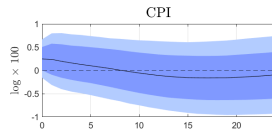
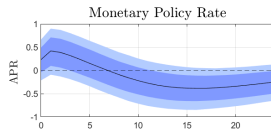
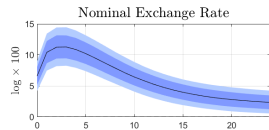
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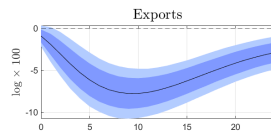
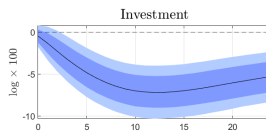
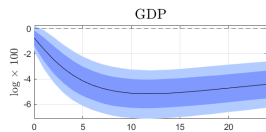
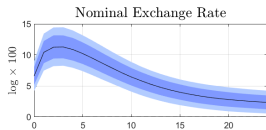
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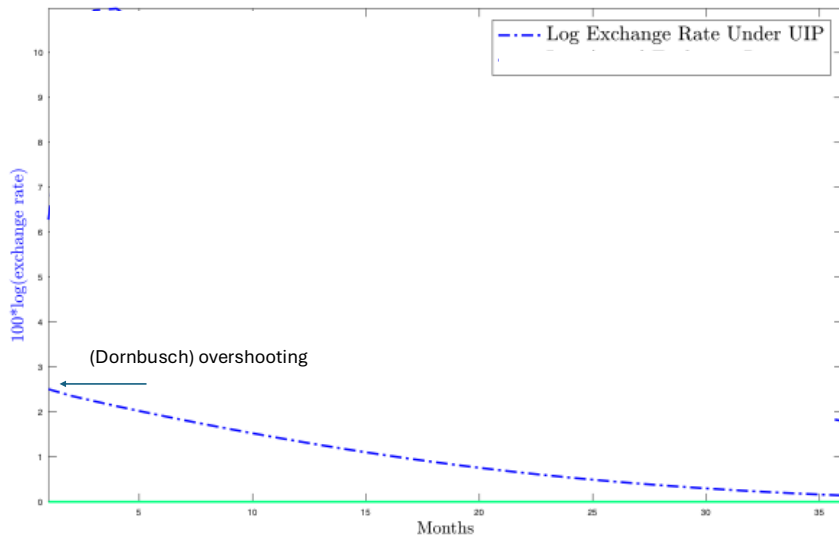
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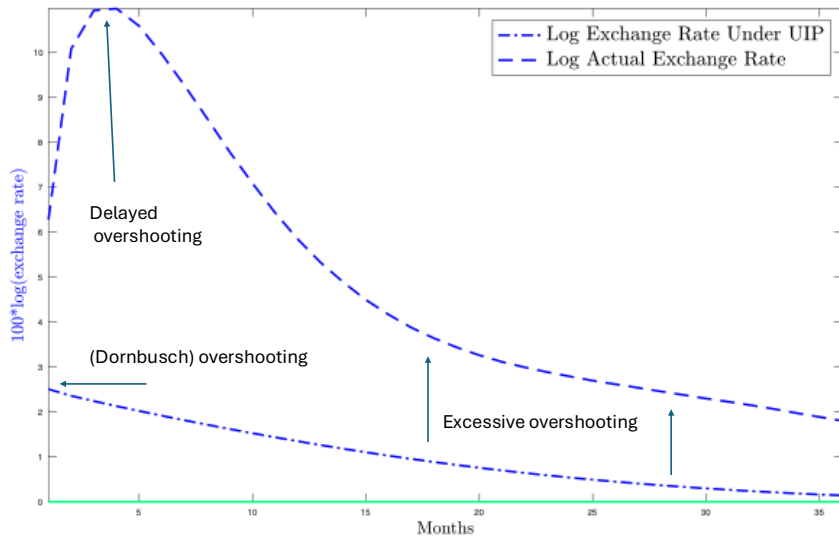
- Our EME VARs are consistent with $\lim_{\ell \rightarrow \infty} \Delta_\ell = \lim_{\ell \rightarrow \infty} \log S_\ell = 0$ and, after recursive substitution:

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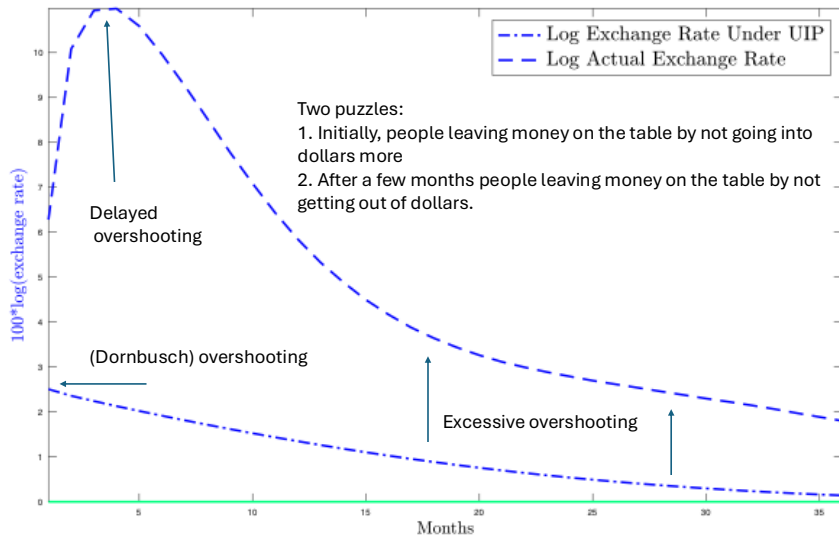
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 - ▶ Expect much bigger capital outflows from AEs and EMEs in the three months after positive R^* shock
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 - ▶ 'Resolve' the two puzzles with (a) adjustment cost on changing dollar share in portfolios, and (b) non-pecuniary preference for dollars ('reduced risk appetite') when R^* is high.

IRF Facts

- When US raises rates:
 - ▶ US import demand declines
 - ▶ Rest of world contracts
- Contractions in Foreign Economies
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 - ▶ 'Resolve' the two puzzles with (a) adjustment cost on changing dollar share in portfolios, and (b) non-pecuniary preference for dollars ('reduced risk appetite') when R^* is high.
 - ★ We take the reduced form approach in Schmitt-Grohe and Uribe (2003), Christiano, et al. (2011), Eichenbaum, et al. (2021).

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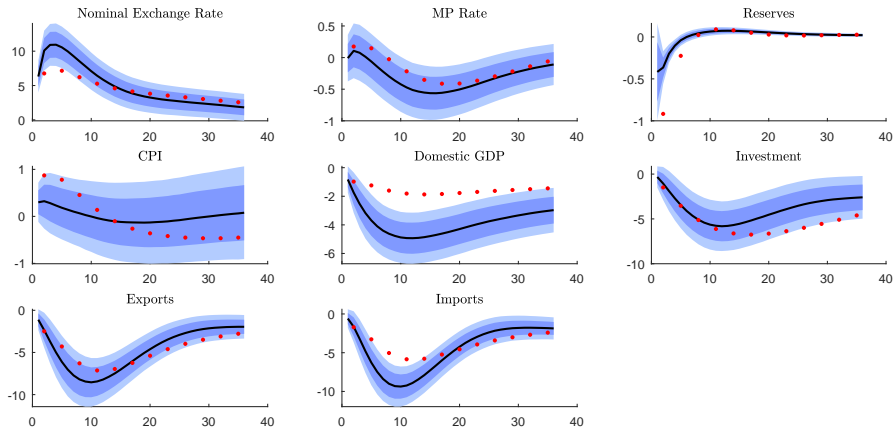
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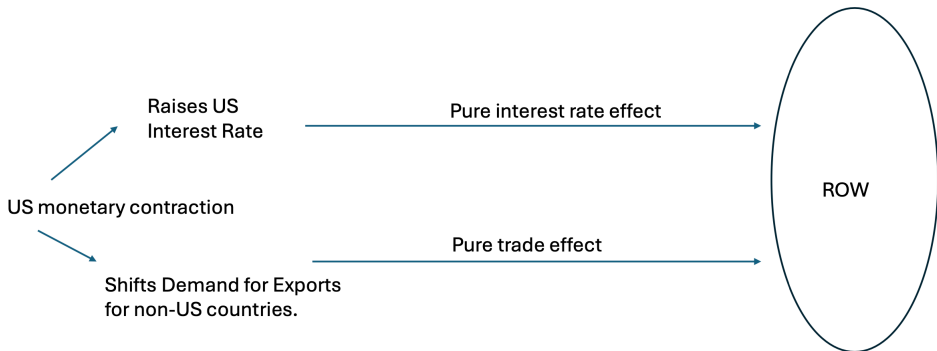
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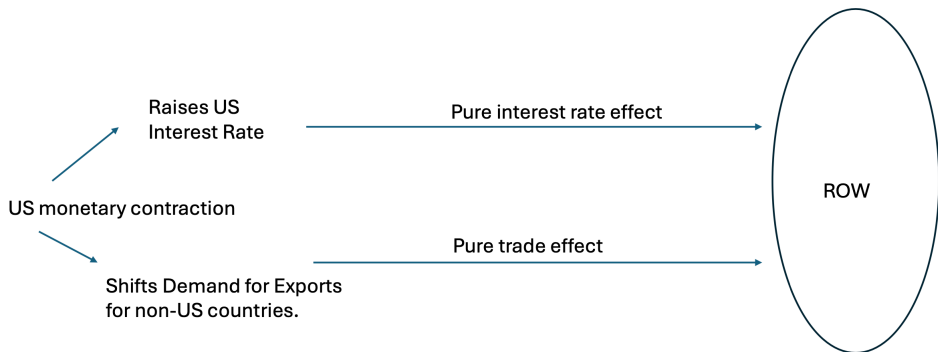
EME Model versus Empirical IRF



Two Effects on Rest of World of US Interest Rate Tightening

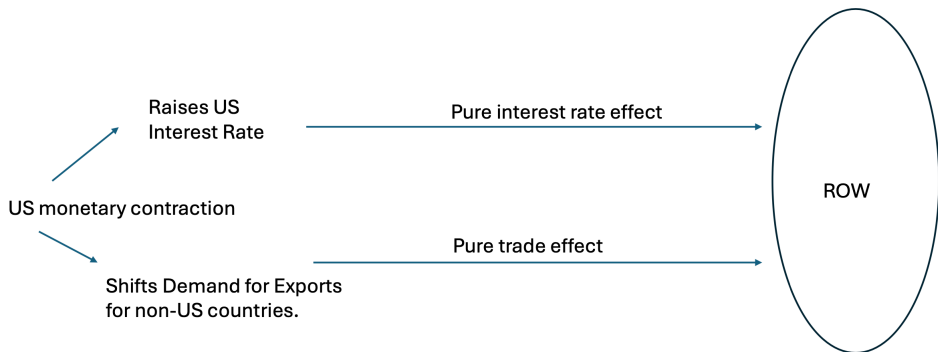


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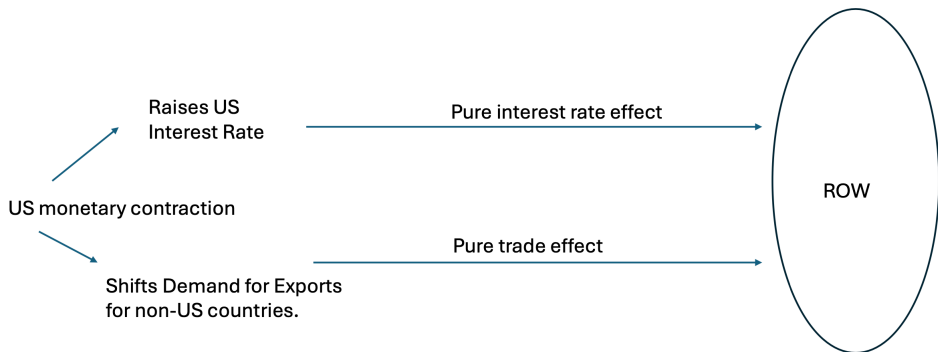
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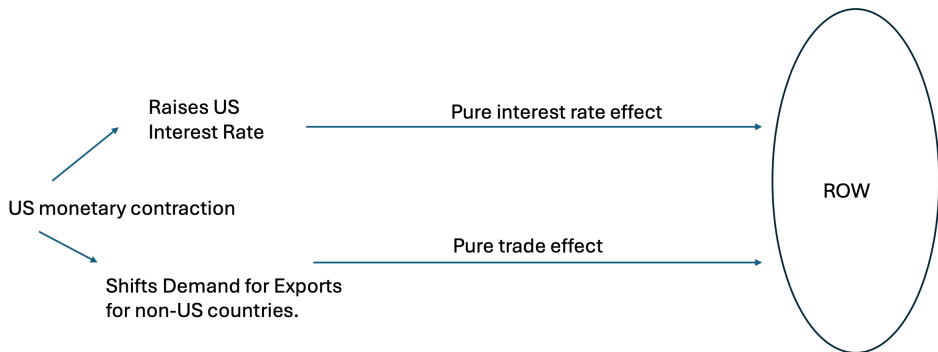
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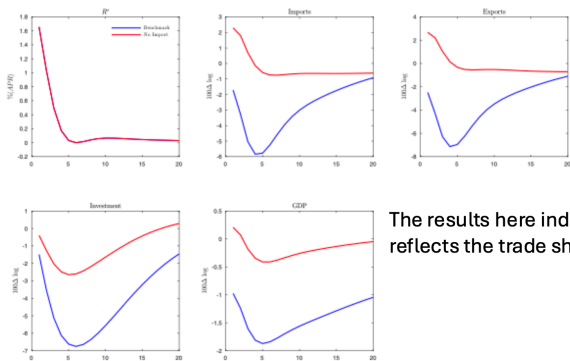
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 - ▶ The rise in the interest rate, R^* .
 - ▶ The impact on foreign countries' demand for exports.
- In our (linear) analysis, the total impact of a US monetary policy contraction is the sum of the two.

Blue Line: impulse response of model fit to the VAR
impulse responses.
Red line: pure interest rate (trade turned off).



The results here indicate that the blue line mostly reflects the trade shock.

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 - ▶ They want to remove the latter, so ε_t^m is a 'pure' monetary policy shock. [▶ back](#)