Dominant-Currency Pricing and the Global Output Spillovers from US Dollar Appreciation

Discussion of Georgiadis and Schumann (2019)

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The views expressed here do not necessarily reflect the position of the Bank of England.
This Paper

What We Know?

- Pricing paradigm (PCP, LCP, DCP) matters for exchange rate pass-through, sign/size of macroeconomic spillovers, optimal monetary policy, case for coordination (...)
  - Predictions usually derived from 2-country models
- Prevailing pricing paradigm is rarely polar and/or symmetric

What This Paper Teaches Us?

⋆ Identify spillover channel via trade (third-country expenditure-switching), arising in an $N \geq 3$-country model with partial and asymmetric DCP

Output spillover from USD appreciation negatively correlated with a country's export-import USD-invoicing share differential ($s \equiv x - m$) where negatively correlated $\iff$ less positive or more negative

⋆ Provide empirical evidence for the prediction using data on 45 economies
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Main Mechanism

**FX:** $1 = E1 = R1

**DCP,** $x$: $1 \rightarrow P^{DCP}_X = R1$

**PCP,** $1 - x$: $E1 \rightarrow P^{PCP}_X = R1$

**EM**

**RoW**

\[ E1 = P^{DCP}_M \leftarrow \$1 : m ,DCP \]
\[ E1 = P^{PCP}_M \leftarrow R1 : 1 - m ,PCP \]

where:

- **E** is the EM currency unit and **R** is the RoW currency unit
- **x** is the share of EM exports to RoW priced in $\$
- **m** is the share of EM imports from RoW priced in $\$
- \( s \equiv x - m \) is EM’s export-import $-$ invoicing share differential
Main Mechanism: Multilateral $ Appreciation

DCP, $1 $x$ \rightarrow P^\text{DCP}_X = R2
PCP, $1 - x$ $E1 \rightarrow P^\text{PCP}_X = R1

FX: $0.5 = E1 = R1

E2 = P^\text{DCP}_M \leftarrow $1 : m, DCP
E1 = P^\text{PCP}_M \leftarrow R1 : 1 - m, PCP

For the EM, with some price stickiness: ($\Delta$ denotes $\%$-change vs. pre-$\$ change)

\[
\Delta P_X \approx x\Delta P^\text{DCP}_X + (1 - x)\Delta P^\text{PCP}_X = x\Delta P^\text{DCP}
\]
\[
\Delta P_M \approx m\Delta P^\text{DCP}_M + (1 - m)\Delta P^\text{PCP}_M = m\Delta P^\text{DCP}
\]

Assuming sufficiently symmetric and constant trade elasticity then

\[
\Delta NX \propto -(x - m)\Delta P^\text{DCP} = -s\Delta P^\text{DCP}
\]
This Is Really Robust

Extensive battery of robustness tests, including controls for:

- **Financial spillovers**: controls for $-exposure
  
  ? Given that the only countries facing negative spillovers from US AD shock are EMs (⇒ dominant financial channel), perhaps this should be in the baseline?

- **Commodity exporting**: main model mechanism relies on price stickiness

- **Range of shocks**: UIP, monetary policy, (...)

There is even a placebo test if you still don’t believe them!

Careful language around hypothesis tested given that:

  Invoicing currency ≠ Pricing currency
Main Comment: Framing

Underselling?

- "We test for / Provide new evidence for the empirical relevance of DCP"
  - Is this a question macro data is best-suited to answer?
  - We have direct evidence on currency of trade invoicing [Gopinath 2015] and growing sources of customs data too

Alternatives:

+ "Provide new evidence on the importance of DCP in global trade"
+ *Identify novel channel of macroeconomic spillovers, via third-country expenditure-switching, arising under empirically relevant partial DCP*
+ "Address some important shortcomings of existing work"
  - We miss things writing 2-country models with polar assumptions

To really back these points up, the paper could go further in discussing the **economic significance** of the main mechanism
s \equiv x - m > 0 \text{ for some major EMs:}

- Argentina and Brazil: \( s \approx 10\% \) and \( \Delta \hat{y}_i \approx -0.4\% \)
- Given \( \Delta \hat{y}_t = -0.004s \rightarrow \) spillover around 0.04 pp more negative due to third-country partial-DCP trade—i.e. 10% of the spillover!
Speculation

Some of the biggest ‘beneficiaries’ (with $s \equiv x - m < 0$) are major AEs (Euro area, UK, Japan)

- Under polar DCP: case for coordination for non-US, but US has no incentive to coordinate [Egorov and Mukhin 2019]
- Does partial DCP disincentivise coordination of non-US AEs too?
- More generally, what does third-country expenditure switching mean for welfare?
Things get more complicated when we account for third-country effects and non-polar pricing paradigms.

In these instances, third-country expenditure-switching is likely to matter, over and above standard third-country demand spillovers. I’d like to know by how much?

- There are likely other third-country trade/pricing mechanisms we’ve yet to understand too [Lisack, Lloyd and Sajedi 2020(?)]

These provide additional trade-offs to account for when, *inter alia*, considering optimal policy and the case for coordination.
Appendix
EMs and the Financial Channel

The only countries facing negative spillovers from a positive US AD shock are EMs, indicating a dominant financial channel (vs. a trade channel) governing their spillovers.

Figure 5: Estimated GDP responses to a positive US demand shock

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