Dominant Currencies in Global Trade

Insights from UK Export Prices around the Brexit Referendum

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Disclaimer

Evidence in this talk comes from:

- "Invoicing and the Dynamics of Pricing to Market," by G. Corsetti, M. Crowley, and L. Han, Cambridge-INET WP No. 1815 and
- "Dominant Currency Dynamics," by M. Crowley, L. Han, and M. Son, Cambridge-INET WP No. 2051.

Background

- The vast majority of international trade is conducted in only a small handful of currencies, with the US dollar being far and away the dominant currency globally.
- Gopinath (2015) emphasizes that the dominant role of the US dollar in global trade is a key factor behind asymmetric transmission of economic shocks across countries.
- There are a variety of benefits associated with having a dominant currency – such as insulation against the international transmission of shocks.

Our research: Analyse export transactions of British firms around the Brexit referendum in June 2016 to understand the functioning and evolution of the International Price System

Why study Britain?

1. Currency is an active margin of choice for British firms:
   - ⇒ 99% of UK export value originates from firms that use 2 or more currencies for invoicing exports
   - ⇒ UK firms switch their invoicing currency over time

2. The US dollar's importance in UK exports has been rising.
   - ⇒ Over 2010 - 2019:
     - ⋆ UK extra-EU export value invoiced in US dollars rose 52.9%
     - ⋆ UK extra-EU import value invoiced in US dollars rose only 5.7%
   - ⇒ The rise of the dollar preceded Brexit:
     - ⋆ 2010 - 2015: UK extra-EU export *transactions* invoiced in US dollars rose 18.7%.

Research questions

1. Should the currency of invoicing matter?

2. What factors are behind the increasing use of the US dollar by British exporters?

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   $\Rightarrow$ **Are invoicing currencies correlated with ERPT at the level of individual transactions? If yes, over which time frame? See: Brexit event study**

2. What factors are behind the increasing use of the US dollar by British exporters?

   $\Rightarrow$ **Examine the factors behind a firm's choice of currency, especially when entering new foreign markets.**

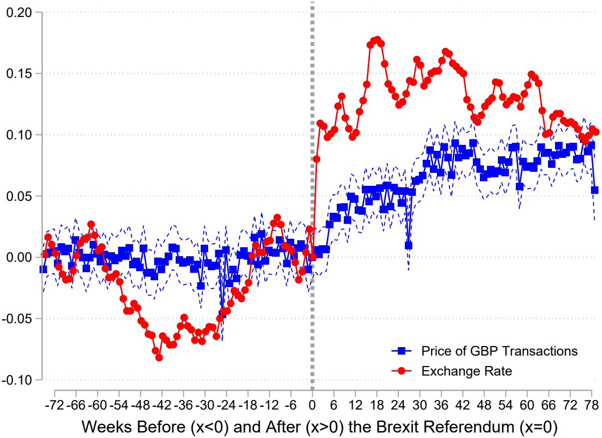
ERPT Dynamics after a Large Devaluation

The Brexit Event Study

We classify all extra-EU export transactions according to whether they are invoiced in sterling (£), US dollars ($), or the local currency used in the foreign destination (LCI – e.g., Canadian dollars, Japanese Yen)

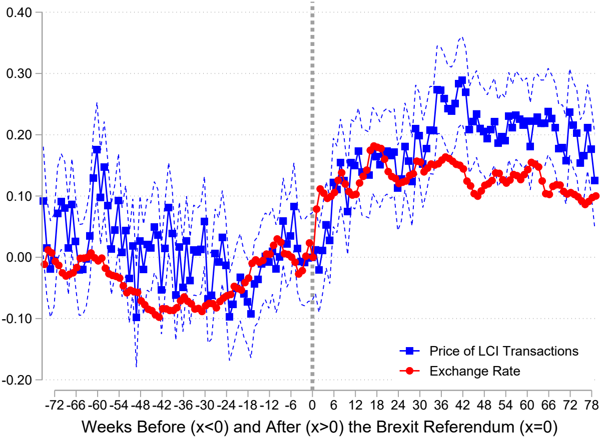
We estimate changes to the average weekly price of exports over 3 years (2015-2017) for each currency scheme (£, $, and LCI).

Weekly Price Changes of **Sterling** Invoiced Transactions **2015-2017**



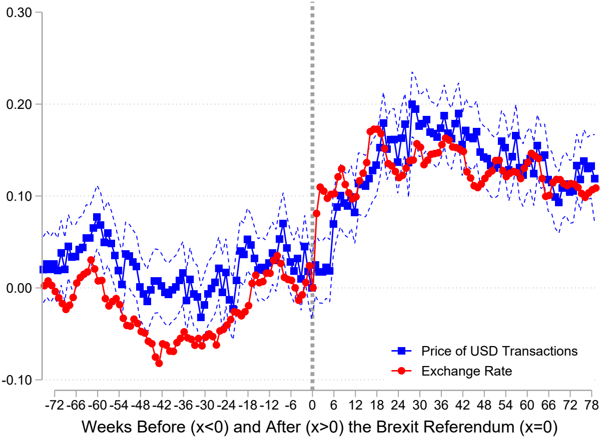
In the short run, sterling prices remained stable for £-invoiced transactions, but they gradually came to align with the weaker pound.

Weekly Price Changes of **Local Currency** Invoiced Transactions **2015-2017**



In the SR, sterling prices rose quickly for LCI transactions. Over 18 months, the £price increase exceeded the appreciation of the foreign currencies.

Weekly Price Changes of Dollar Invoiced Transactions **2015-2017**



Sterling prices rose quickly for \$-invoiced transactions, continuing to closely track the movement in the dollar over 18 months.

Main findings from the Brexit Event Study

- Large differences in ERPT between £-transactions v. $ or LCI transactions.

- Over 18 months, differences across currency schemes narrowed as prices tended toward alignment with the weaker pound.

  ⇒ The alignment to higher sterling export prices likely reflects increases in the cost of imported inputs

  ⇒ (Sterling prices of imports fully adjusted to the weaker pound by week 36 after the referendum.)

  ⇒ However, the increase in the sterling export price of *local currency* transactions somewhat exceeded the appreciation of the foreign currencies—arguably pointing to "pricing to market".

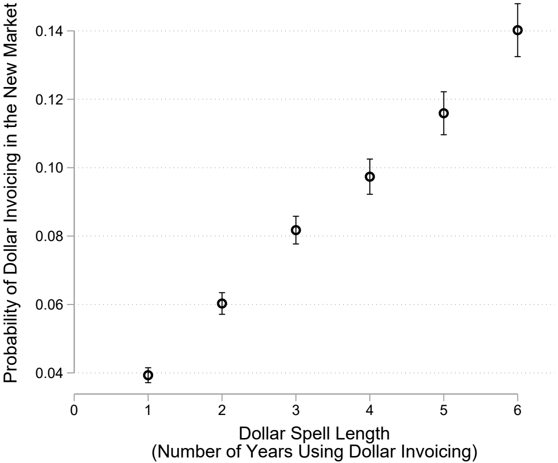
Dominant currency dynamics

What factors induce a firm to invoice exports in US dollars?

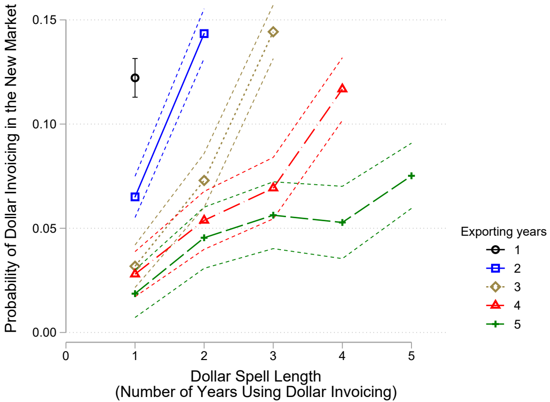
1. Strategic complementarity: An exporter will invoice in the same currency used by the majority of its competitors in a destination so that it can maintain the stability of its price relative to its competitors in case of exchange rate fluctuations.
2. Currency of imported inputs: An exporter with a larger share of imported inputs invoiced in dollars is more likely to invoice its exports in dollars.
3. Fixed cost of managing currencies: Experience with using dollars in one market lowers the cost of using dollars in *new* foreign markets.

These three forces reinforce one another to contribute to the rise of a dominant currency.

Impact of dollar-invoicing experience on likelihood of dollar-invoicing in new markets



Impact of dollar-invoicing experience on likelihood of dollar-invoicing in new markets by export-year cohorts



Conclusions

Our studies of export pricing by British firms around the Brexit referendum have taught us:

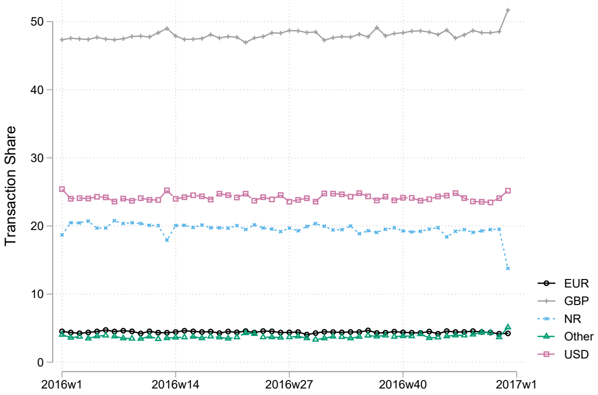
- Firms use different invoicing currencies to implement specific pricing strategies:
  - $\Rightarrow$ Firms price discriminate across foreign markets by invoicing their sales in local currencies.

- Multiple factors make invoicing in US dollars a desirable strategy for British exporters.
  - $\Rightarrow$ Novel evidence that the likelihood of using US dollars in a new foreign market is increasing in past experience with dollar invoicing points to a feedback mechanism that drives and sustains the dollar's dominance in world trade.

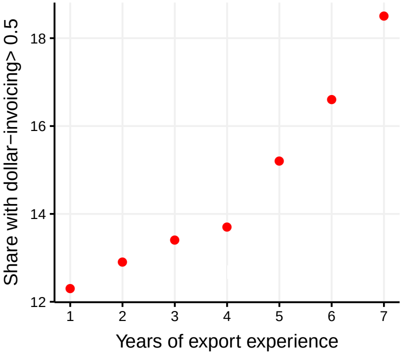
Invoicing currencies around Brexit

Aggregate level invoicing currency decomposition remains unchanged

Transaction share of invoicing currencies (Extra-EU exports)



Share of UK firms invoicing over 50% of extra-EU exports in dollars given t years of exporting



Share of firms using 2 or more currencies given t years of exporting experience