

# Exchange Rates and Asset Prices in a Global Demand System

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- Findings
- My comments:
  1. Exchange Rate Disconnect
  2. European Debt Crisis Redux
- Conclusion

- What drives variation in international asset prices?
- Seminal papers find that two factors (dollar and carry) explain almost all of the variation in exchange rates, see Lustig et al. (2011) and Verdelhan (2018).
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⇒ Common factors for exchange rates, bonds, and equity.

International asset prices move because of

- Demand of global investors which depends on macro fundamentals
- The supply of debt and equity of firms
- Policy (fiscal and monetary policy and foreign exchange reserves)

**Market clearing:** For each country  $n$  and asset  $l$

$$\underbrace{P_t(n, l)E_t(n)Q_t(n, l)}_{\text{supply}} = \underbrace{\sum_{i=1}^I A_{i,t}w_{i,t}(n, l; P_t, E_t)}_{\text{demand}}$$

	FX	LT debt	Equity
Macro variables	26%	16%	57%
Short-term rates	8%	9%	6%
Debt quantities	2%	20%	3%
Reserves	19%	11%	3%
Latent demand	45%	43%	31%

My discussion will mostly focus on these two numbers...

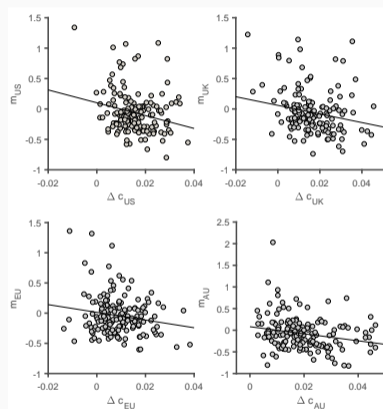


## **Comment 1: Exchange Rate Disconnect**

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# Exchange Rate Disconnect

- Significant fraction of variation in exchange rates is driven by macro variables (26%).
- This is **surprising** given large literature in international finance on the **exchange rate disconnect**.
- *General view in international finance:*  
Exchange rate follows a random-walk-like process, which is **not** robustly correlated, even contemporaneously, with **macroeconomic fundamentals** such as output, inflation, imports, and exports, see Obstfeld and Rogoff (2001).



## The Role of Intermediaries: FX Market Share 2020

- The literature has therefore moved to explain exchange rate changes with **financial** variables: **convenience yields** (Engel and Wu (2020), Jiang et al. (2021)) or **global risk proxies** such as GZ spread, intermediary capital, option implied volatility (Lilley et al. (2019)).
- $\approx 60\%$  of FX trade intermediated by 10 institutions.

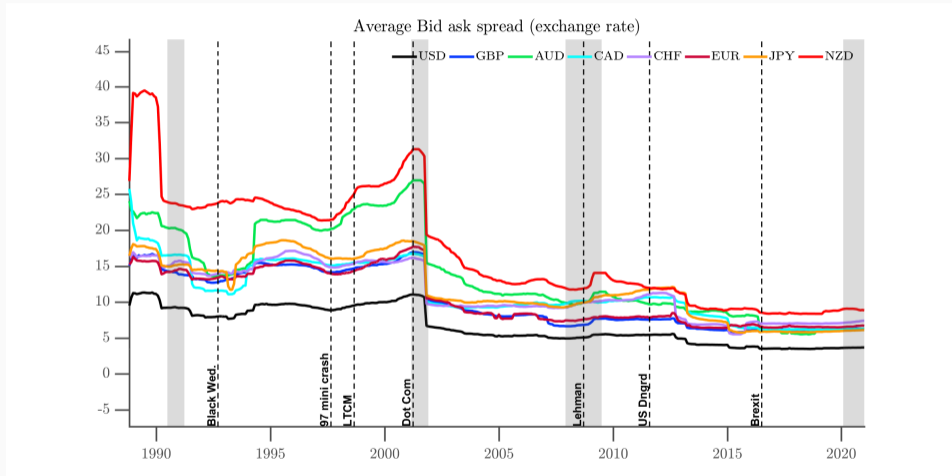
Share	Counterparty
10.78%	JPMorgan
8.13%	UBS
7.58%	XTX Markets
7.38%	Deutsche Bank
5.50%	Citi
5.33%	HSBC
5.23%	Jump Trading
4.62%	Goldman Sachs
4.61%	State Street
4.50%	BofA Securities

$\Sigma = 63.66\%$

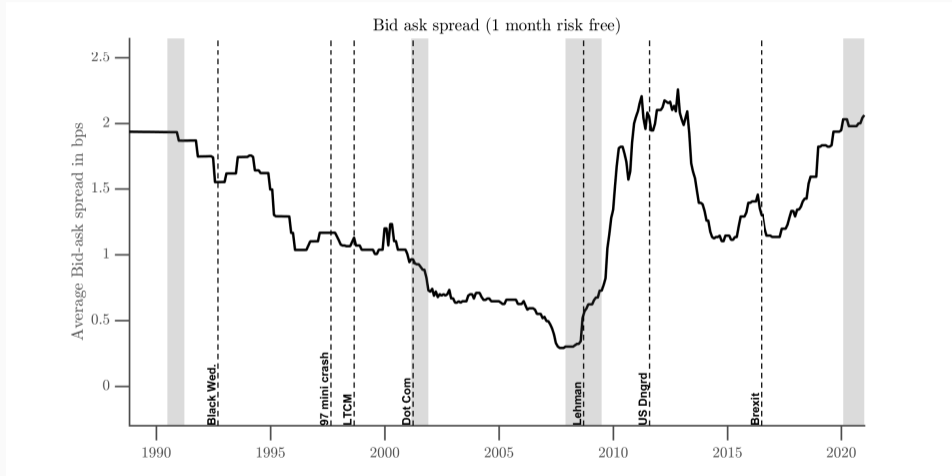
## The Role of Intermediaries in Segmented Markets

- Evidence of significant **segmentation** across international asset markets. ⇒ Authors document that **distance** matters...
- Financial institutions intermediate demand for FX in over-the-counter markets.
- Intuitively, this helps address the disconnect puzzle because intermediaries are disconnected from macroeconomy (see Gabaix and Maggiori (2015)).
- Intermediaries face many different **frictions**: Value-at-Risk, trading costs, etc.
- Size of frictions is potentially **large** even in the **most liquid** assets.

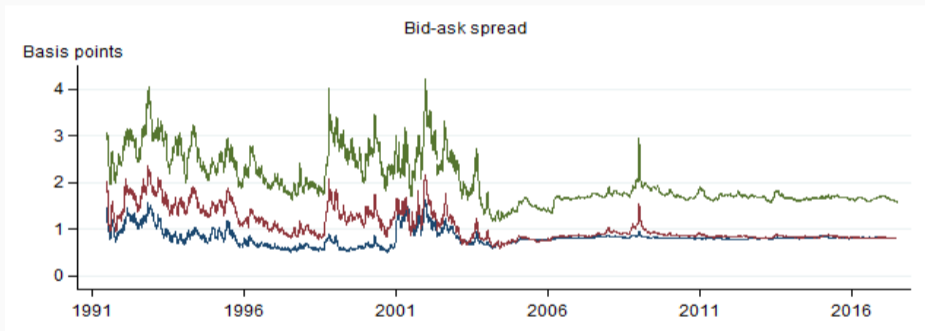
# How Big Are These Frictions? Trading Frictions in FX Markets



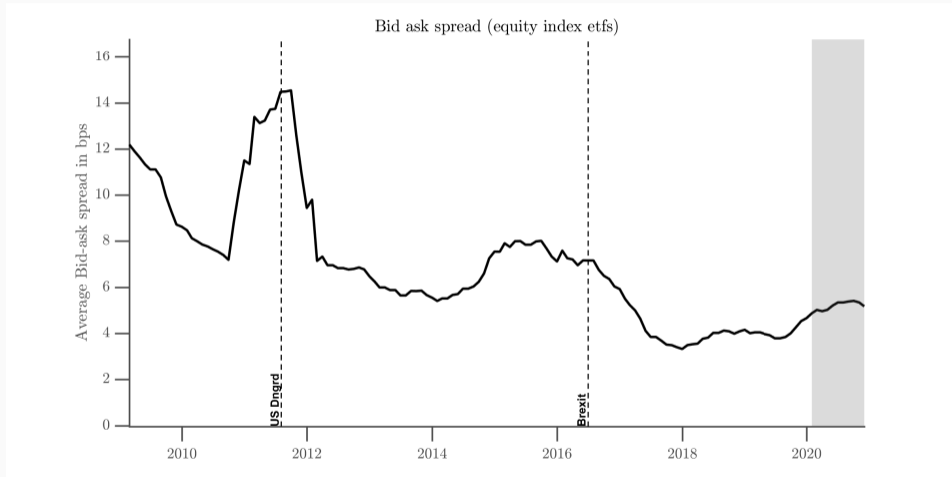
# Trading Frictions in ST Bond Markets



# Trading Frictions in LT Bond Markets



# Trading Frictions in Equity Markets





## What Currencies Get Intermediated?

USD	EUR	JPY	GBP	AUD	CAD	CHF	CNY	HKD	NZD
88%	32%	17%	13%	7%	5%	5%	4%	4%	2%

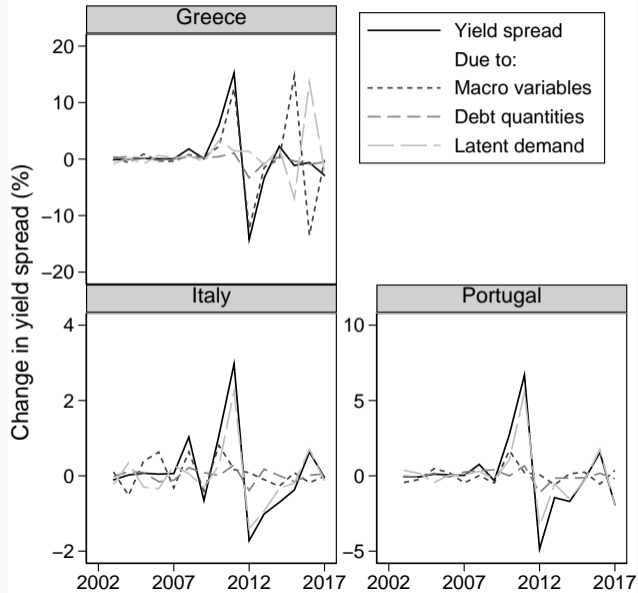
- Almost all turnover ( $\approx 180\%$ ) is in 10 currencies.
- However, paper studies 35 exchange rates (Colombia, Thailand, Philippines, etc).

- Contrary to most of the literature, this paper documents strong link between exchange rates and macroeconomic fundamentals. It would be great to understand why this is the case. What are “traditional” models missing?
- Paper is agnostic about impact of frictions. But they are likely to play a large role in an international context where all of the trade is over-the-counter.
- Traditional “factor models” in asset pricing impose that the no-arbitrage condition holds. Given large frictions or hence potential segmentation (across countries as well as across markets) may imply violations of no arbitrage.
- For example, if UIP holds, short-rates should explain all the variation in changes in exchange rates... but they only explain 8%.
- Perhaps this is all captured in the “latent demand”.

## **Comment 2: European Debt Crisis Redux**

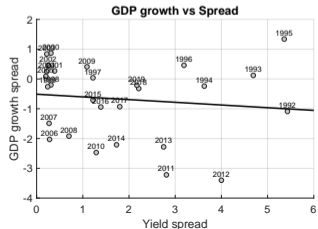
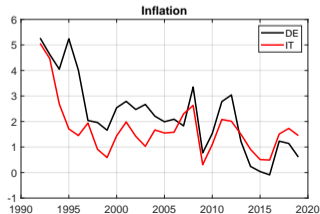
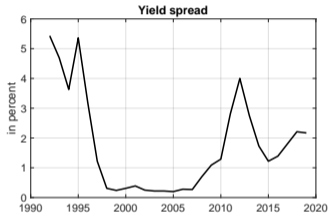
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# Yield Spread Decomposition

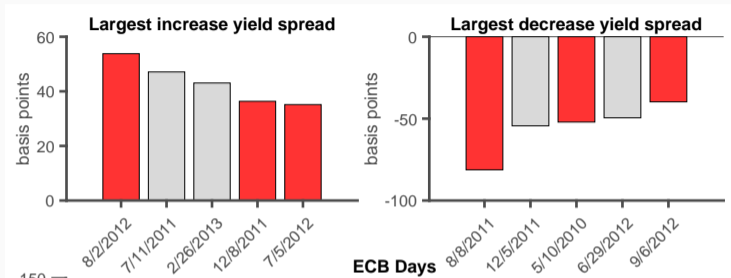


# Yield Spread and Macro Fundamentals

*“This has little to do with fundamentals. There are plenty of money managers who fear that part of Europe’s core are almost as rotten as the periphery.” (FT, Jan 2, 2013)*



# Largest Decreases in Yield Spreads Around Monetary Announcements



- Largest decreases in yield spreads usually around monetary policy announcements.
- Monetary announcements are about **expectations** about future fundamentals and not fundamentals per se.

## Conclusion

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- The paper makes a big step towards our understanding of drivers of international asset prices.
- The findings are “surprising” at first. Would be great to understand in more detail where results are coming from.
- What are the implications for international macro finance models?

Very much enjoyed reading the  
paper!