

GLOBAL SALES, INTERNATIONAL CURRENCIES, AND THE CURRENCY DENOMINATION OF DEBT

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WHAT THIS PAPER DOES

Gather data from large, publicly traded multinationals based in Advanced Economies (US, Europe, Australia, NZ, etc.) [FACTSET]

- ▶ Currency of debt liabilities
- ▶ Geography (currency) of sales revenue
- ▶ Supplement with Latin American data for robustness

Facts about firms' choice of liabilities:

- ▶ Prefer borrowing in: home currency, USD, EUR
- ▶ Share of sales in currency k predicts share of k -denominated liabilities
- ▶ Invoicing exports in home/USD/EUR \Rightarrow weaker debt-sales link

THE MAIN RESULT

Table 3: Currency denomination of debt and geography of sales

	All	All	All	2+ curr	3+ curr	ex-US	ex-US&Eurozone
Sales share (β)	0.59*** (0.03)	0.60*** (0.03)	0.45*** (0.03)	0.48*** (0.03)	0.49*** (0.04)	0.44*** (0.03)	0.47*** (0.03)
θ_{USD}	—	—	15.23*** (1.1)	16.59*** (1.16)	15.71*** (1.46)	—	—
θ_{EUR}	—	—	6.43*** (0.6)	9.56*** (0.74)	13.03*** (1.18)	6.89*** (0.63)	—
θ_{Home}	47.19*** (2.05)	47.19*** (2.05)	48.77*** (1.91)	40.52*** (1.78)	36.47*** (2.12)	48.36*** (1.97)	42.61*** (2.32)
Constant (α)	0.33*** (0.09)	0.39*** (0.09)	—	—	—	—	—
Currency FE	N	N	Y	Y	Y	Y	Y
Year FE	N	Y	Y	Y	Y	Y	Y
# of firms	778	778	778	764	380	778	778
# of obs	94138	94138	94138	62656	26796	85580	77022
R^2	0.74	0.74	0.77	0.76	0.76	0.77	0.74

HOW I APPROACH THIS PAPER

As someone who has built and described new datasets

Goal: provide a narrative behind the facts

- ▶ *Who, what, when, where, how?*

What does the structure of multinational liabilities look like?

Who works from home post-COVID, how much? (Barrero et al. 2021)

- ▶ *Why?*

What frictions lead multinationals to fund their operations like this?

Why did work from home persist after the pandemic? (Barrero et al. 2021)

MAIN COMMENT: UNDERLYING MODEL AND MOTIVATION

The facts are interesting (complementary to Maggiori et al. 2020)

But little motivation for why the facts matter

Or clear link to underlying economic model

- ▶ Currency hedging motives? Generated by what?
- ▶ Appendix proposes a model with dividend smoothing motives
⇒ smooth cash flow risk across countries

MAIN COMMENT:

UNDERLYING MODEL AND MOTIVATION

Why not model frictions related to the specific setting?

Sketch of a Potential Framework:

- ▶ Multinationals have an internal capital market
(cf. Giroud & Mueller, 2015 and 2019; Hanlon et al. 2015; De Simone et al. 2019)
- ▶ Transactions cost to moving capital across countries
- ▶ Lower cost of moving between Home and {EUR,USD}

MAIN COMMENT:

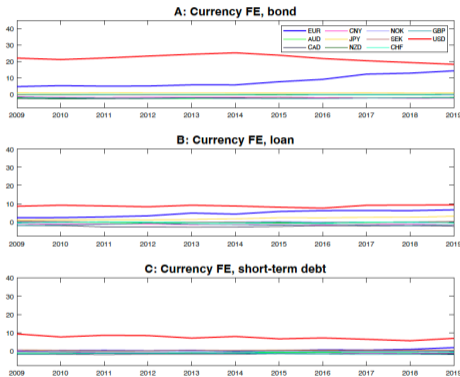
UNDERLYING MODEL AND MOTIVATION

Explicit modeling could make for a more ambitious paper:

- ▶ Point to tangible frictions
- ▶ Quantify the frictions by calibrating/estimating the model
- ▶ Use information from auxiliary facts, e.g.:
 - ▶ Invoicing exports in Home/EUR/USD reduces sales-debt link
 - ▶ Biggest sales-debt link for bonds, then loans, then short-term liabilities
- ▶ Counterfactuals: benefit of capital market union as in the EU

COMMENT: VISUALIZING THE FACTS

Most of the visualizations in the paper look like this:



But time series patterns are not central to the story
Too many different lines, colors to get a clear story

COMMENT: VISUALIZING THE FACTS

Can you represent the main results non-parametrically?

- ▶ Bin-scatter for debt share vs. sales share?
- ▶ Plot fixed effects for Home, USD, EUR?
- ▶ Estimate and plot FEs θ_{jk} for country j 's propensity to borrow in currency k ?

CONCLUSION

A paper with very nice data and facts.

Much potential to teach us more about the economics of multinationals internal capital markets.

Main Comment: Why does the geography of sales predict the geography of debt?

- ▶ Transactions costs and internal capital markets?
- ▶ Use auxiliary facts to discriminate across motives?
- ▶ Quantitative implications vs. currency or capital-markets unions?

Non-parametric analysis & visualization can make your facts stand out

SMALLER COMMENTS

Can you justify your choice of countries more. For example, are they the AEs with major currencies designated by the Fed?

Some of your results rely on clustering by firm with few firms (esp. Table 4). Hard to argue that you have enough clusters in Norway, New Zealand, Sweden for the asymptotic approximation to work.

Can you motivate the cross-sectional exercise in Table 8 more? What model would suggest these characteristics matter?

Another possible mechanism: monitoring intensity for short-term loans, vs. long-term loans vs. bonds?