

# Discussion on "Signaling with Debt Currency Choice" by Egen, Malamud, and Zhou

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# Currency of debt is important

Currency in which firms borrow has important implications for:

- Response to exchange rates shock;
- Passthrough of monetary policy;
- Stability of financial system...

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## Why do firms in emerging markets borrow in foreign currency?

1. UIP deviations. Salomao & Varela (2022), Bruno & Shin (2017)
2. Currency matching. Alfaro, Calani & Varela (2023)
3. Access to financial markets. Eichengreen & Hausmann (1999), Caballero & Krishnamurthy (2001)

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3. Access to financial markets. Eichengreen & Hausmann (1999), Caballero & Krishnamurthy (2001)
4. Signaling quality.

# The Paper

Using data on emerging countries, document three empirical facts:

1. Costlier to issue debt in foreign currency.
2.  $\text{Cov}(\text{Debt in FC, Firm quality}) > 0$
3. Covariance is still positive for firms in nontradable sector.

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What is the cost of debt?:

- Currency of debt matters for hedging against downturns.
- FC debt is a worse hedge against economic downturns.
- Therefore, FC debt is costlier in this dimension.

## Model: borrowing in FC as signaling

- Firm quality is private information.
- Share of debt in FC is a good signal - costly and has no other effects on productivity.
- High-quality firms choose to borrow more in FC.



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# Empirics

$$\frac{\text{EBIT}_{i,t+1}}{\text{Assets}_{i,t+1}} = \delta \text{FC share}_{i,t} + \beta X_{i,t} + \alpha_i + \lambda_{c,s,t} + \varepsilon_{i,t+1}$$

- Include country-industry-time FE.
- Firm controls: Ebit-to-assets ratio, market value, stock return, firm FE, ...
- Model prediction:  $\delta > 0$ .

# Empirical results are consistent with signaling hypothesis

**Table 3: Signaling channel of foreign-currency debt (levels): Full panel**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
VARIABLES	$\frac{EBIT_{f,t+1}}{Asset_{f,t+1}}$ (%)	$\frac{EBIT_{f,t+1}}{Asset_{f,t+1}}$ (%)	$\frac{EBIT_{f,t+1}}{Asset_{f,t+1}}$ (%)	nontradable $\frac{EBIT_{f,t+1}}{Asset_{f,t+1}}$ (%)	domestic $\frac{EBIT_{f,t+1}}{Asset_{f,t+1}}$ (%)	domestic and pos. fc $\frac{EBIT_{f,t+1}}{Asset_{f,t+1}}$ (%)	$\log(\text{capex})_{f,t+1}$
foreign currency share <sub>f,t</sub> (%)	0.006*** (0.002)			0.010*** (0.003)	0.006*** (0.002)	0.004* (0.002)	0.0004 (0.0002)
hard currency share <sub>f,t</sub> (%)		0.007*** (0.002)					
fc share <sub>f,t</sub> (bank loan, %)			0.004** (0.002)				
EBIT <sub>f,t</sub> / Asset <sub>f,t</sub> (%)	0.373*** (0.014)	0.373*** (0.014)	0.374*** (0.015)	0.350*** (0.028)	0.379*** (0.014)	0.314*** (0.017)	0.0203*** (0.0018)

- Coefficient is between 0.004 and 0.01.

## Alternative model: heterogeneous access to foreign lenders

- Firms differ in their ability to borrow from foreign lenders.
- Firms borrow from multiple lenders.
- Probability of finding a foreign lender increases with size and quality.
  - Fixed costs, interest to the lender, ...

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- There are UIP deviations that make borrowing in FC cheaper.
  - For most of the countries in the sample, cheaper to borrow in USD on average.
- Only top managers are aware of these differences or know how to use hedging strategies.
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## Alternative model: supply side

- Households want to make deposits in FC for hedging reasons.  
Christiano, Dalgic, and Nurbekyan (2022)
- Banks want to create assets in FC to solve currency mismatch.
- Firms want to borrow in HC for hedging reasons.
- This implies that borrowing in HC is too expensive due to shortage of HC funds.
- High-quality firms take advantage and borrow more in FC from foreign lenders.

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# Main challenge

## No direct test of the hypothesis.

- Covariances are consistent with the signaling model.
- But they are also consistent with a number of other models.

## How to address this?

- Need a shock to information availability.
  - Adoption of IFRS standards;
  - Financial liberalization and entry of foreign lenders...
- Analysis conducted within lender type: foreign vs. local.

## Concluding thoughts

- Interesting and thought-provoking paper on an important issue.
- Proposes a new explanation for an old fact.
- Can still refine the empirical test of the hypothesis.