The Network Drivers of Trade Currency Invoicing

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Question & Approach

Why is international trade overwhelmingly invoiced in a small # of currencies?

Literature points to complementarities & common drivers of currency invoicing choice.

This paper:

- Builds & estimates a network model of currency invoicing choice.
- Uses it to quantatitively study the implications of network spillovers in currency invoicing.

Results

1. Strong evidence of complementarities in currency invoicing.
2. Central countries in *trading* network key in determinining dominant currency.
3. Substitutability between EUR and USD as dominant currencies.
4. Complementarities $\rightarrow$ dominant currency status is fragile!

Contribution

Big question which requires combination of data & model.
$\rightarrow$ Data & theory both consistent with complementarities, but how important?

Model is insightful and elegant.

Rich set of results on how network matters.

Novel: applying micro methods to big macro questions.

My Comments

1. How does this paper change our mind about existing theories?
2. Identification.
3. Counterfactual.
4. Minor comments.

Model

Estimating equation:

$$y_{it} = \bar{\mu}_i + x_{it}\delta + x_{\rho t}\rho + \phi \sum_j g_{ijt} y_{jt} + \theta \sum_j g_{ijt} x_{ijt} + \epsilon_{it}$$

Motivated by theoretical & empirical literature:

1. Features of a currency that mean everyone invoices in it.
   - Safe assets.
   - Large economy.
2. Complementarities.
   - Match export and import invoicing currency.
   - Be competitive in output pricing.
   - Match export invoicing currency with financing currency.

Can results discriminate between these different forces?

Models & Network Spillovers

What does spillover term ϕ represent?

ϕ is reduced form for various model features, but mapping unclear.

- Model: map from more primitive model into SDM?
- Do results shed light on model/mechanism?

Overall currency balance or bilateral currency balance?

- Theory motivations suggest relationship between y_{ijt}^{EX} and y_{ilt}^{IM}, for j & l where i has trade links.
- Similar – but not the same – as model in paper.
- Might map into your model – can you show?

Models & Network Spillovers

Two network terms:

- ϕ – dependence on other countries' invoicing decisions.
- θ – dependence on other countries' economic variables.

Results indicate that θ is important, but this is hardly discussed.

- Which economic variables matter?
- Which theories does this support?

Can your results reject one explanation of DCP in favour of another?

Identification

Quantification key contribution & potentially key strength.

Could do more to convince the reader:

1. What intuitive threats to identification? e.g. geographically correlated switch to RMB?
2. Exogenous network G – bilateral trade?
3. Exogenous economic variables X – exchange rates?
4. Choice of X – impacts exogeneity of G.
5. Assumptions on ϵ.

Counterfactual

Counterfactual shows equilibrium outcome of countries shifting their invoicing currency choice.

Hard to evaluate counterfactual without particular theoretical model in mind.

How do we know ϕ remains constant in the CF?
$\rightarrow$ e.g. EU shift in policy makes US spillovers more important.

G and X held constant in CF.
$\rightarrow$ This is fine – just disciplines how we think about CF – but deserves some discussion.

Minor Comments

Where is the US?

- Appendix results including US more intuitive.

Where is China?

- Data issue, but seems important for a network model.
- Remove countries from your sample and show ranking of key players unchanged?

Can you talk about what replaces the USD in counterfactuals?

Conclusion

Novel and important paper, interesting in the question it asks and its execution.

Paper's strength is it formalises and quantifies spillovers in currency invoicing choice.
$\rightarrow$ Could do more to defend its quantification, and tell us how it changes our understanding vs existing literature.

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Thanks!