

# Trade Credit and Relationships

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Trade credit use in international firm-to-firm relationships

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## Empirical Part

### Data:

1. Detailed Colombian transaction-level import data (DIAN)
2. Chilean exports merge with manufacturing survey.

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### Results

- Longer relationships strongly increase trade credit adoption
- Learning is more important in countries with weaker rule of law and for more complex products.
- TC allows saving on financing cost  $\rightarrow$  efficiency

- Very interesting paper!
- Novel idea of trade credit being the efficient payment term due to advantage financing cost
- Rich dataset:
  - ▶ Trade credit at the transaction level
  - ▶ Identifying buyers and sellers
- Very clear and nicely aligning empirical analysis with theoretical predictions

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- Evidence of buyer's market power in international markets
  - ▶ Bargaining (Morlacco, 2019; Alvarez et al., 2023)
  - ▶ Oligopsony (Zavala, 2022; Juarez, 2022))

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- Compare markups and markdowns:
  - Markups ( $P \geq C$ ): TC has advance financing cost advantage over CIA  
 $\rightarrow$  In TC only need to finance  $C$  vs  $P^{CIA}$ .
  - Markdowns ( $P \leq MargRevProd$ ): CIA has financing cost advantage over TC?  
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- Potential checks to empirical part:
  1. Show most cases correspond to the markups case
  2. Show no heterogeneity by market concentration (HHI)
  3. Market shares of buyers vs sellers

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  - Domestic markets (Amberg, Jacobson and von Schedvin, 2021)
  - International markets (Hardy, Saffie and Simonovska, 2022; Cui, 2024).

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- **Potential checks:**
  1. Show unit prices are similar with different levels of trade credit:
    - conditional on firm characteristics
    - commodities vs non commodities
  2. Estimated markups as a proxy financing advantage. Could pricing-to-market behavior distort markup estimation?  
(e.g. Destination  $\times$  HS  $\times$  time FE for Chile and Origin  $\times$  HS  $\times$  time for Colombia.)

Welfare: if TC is efficient, can we calculate some welfare gains?

## Comment III: Mechanisms and dealing with alternative stories

Mechanism: Learning in long-term relationships enables trade credit, especially where enforcement is weak or goods are complex

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1. Is learning about foreign demand/supply risk or product appeal happening? (Eaton et al., 2021)
2. Learning vs. selection: Is learning truly observed, or do firms screen partners early and selectively retain good ones?
3. Section 5.2, the “balanced” panel keeps the first 40 transactions per firm to mitigate bias from exiting firms → risks selecting mainly trustworthy firms.

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Checks:

- Check by years of relationship or years of relationship in the same product?
- Explore re-entering firms: they should not start with CIA.
- Nth transaction in same year t: not enough time for learning so should find no effect.
- For 3. Reporting the proportion of relationships that survive 40 transactions and their characteristics would reveal any selection bias.

- Test Prop Section 4.3, split the sample and estimate separately the effect of relationship length to assess whether learning diminishes after repeated transactions.

→ Why nine transactions was chosen as the cut-off?

Suggestion: interact relationship length with the number of transactions (or with a transaction-count percentile) in a single regression.

- To address endogeneity in section 4.3: variable mark-ups when constructing their instrument vs the core model, constant mark-ups.  
→ A more complete model of mark-ups—and their role in this context—would resolve the inconsistency.
- The share of trade credit transactions for zero-length relationships varies across countries and is correlated with the rule of law index (is it also correlated with the product differentiation index?). With the share nearing natural truncation at 100%, the coefficient's magnitude may be mechanically linked to its distance from this truncation. If so, these heterogeneous effects should not be viewed as evidence supporting the theoretical prediction.

Suggestion: restrict the sample to firms with at least one prior transaction

- When analysing within-relationship trade-credit dynamics, the authors use the Bayesian-learning model as a counterfactual. Incorporating this version of the model into the main text would strengthen the theoretical framework, especially by deriving explicit, testable predictions about belief formation—the model's central element.

## Other Comments

**Referee:** "Financing costs are symmetric—or at least not systematically different—between exporters and importers." → Shows both expected-profit expressions differ only in the interest rate and the payment probability.

**Answer:** The authors are right. Referee's demonstration overlooks the role of the first-period surplus in the cash-in-advance (CIA) case.

- Error: discounting with the loan rate instead of the deposit rate.
- Funds are carried forward by holding them in a deposit, the present value should be computed with  $r_d$  rather than  $r_b$ .

*Proof:*

$$CIA : \quad \mathbb{E} \left[ \pi_1^{CIA,E} \right] = (1 + r_d) \left( \frac{\tilde{\eta}^E}{1 + r_b^l} R - C \right) \quad \Rightarrow \quad \mathbb{E} \left[ \pi_0^{CIA,E} \right] = \frac{\tilde{\eta}^E}{1 + r_b^l} R - C$$

$$TC : \quad \mathbb{E} \left[ \pi_1^{TC,E} \right] = \tilde{\eta}^l R - (1 + r_b^l) C \quad \Rightarrow \quad \mathbb{E} \left[ \pi_0^{TC,E} \right] = \frac{1}{1 + r_d} \left( \tilde{\eta}^l R - (1 + r_b^l) C \right)$$

Great Paper!

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