

«Quality, Trade, and Exchange Rate- Pass Through» by Natalie Chen and Luciana Juvenal

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Overview

- Chen and Juvenal:
 - Develop a multi-quality extension of Corsetti and Dedola (2005) and Berman et al. (2012), relating within-firm quality heterogeneity to distribution intensity and thus PT (*and external adjustment*).
 - Examine this within-firm relation between quality and PT in an extremely detailed dataset of Argentine wine exports.

Mechanism (I)

- Corsetti and Dedola (2005): producer sets export price while distribution sector is competitive (all prices in importer currency):

$$P_{FINAL} = P_{EXPORT} + D$$

$$\max_{P_{EXPORT}} (P_{EXPORT} - Exr * MC)(P_{FINAL})^{-\sigma}$$

- Implies:

$$P_{EXPORT} = \frac{\sigma}{1 - \sigma} Exr * MC + \frac{1}{1 - \sigma} D$$

- PT into export prices is < 1 and decreasing in distribution cost-intensity D/MC .

Mechanism (II)

- Berman et al. (2012): D/MC increases in firm productivity; quality interpretation as in Auer and Chaney (2009), along lines of Baldwin and Harrigan (2011), Crozet et al. (2012), Johnson (2012).
- Chen and Juvenal combine these insights with Chatterjee et al. (2013) to **derive a within-firm relation between quality and ERPT.**
- Further, Chen and Juvenal combine this with a non-homothetic preference setup to examine how the **within-firm prediction varies across markets of different income.**

High Quality Data Set

1. Unit values = prices? Here: firm-destination-HS12-Grape-Vintage.
 2. What is “quality”? Here: reviews as in Crozet et al. (2012) but with within-firm variation.
 3. How endogenous is quality? Vintages cant be changed/ plus geographic instrumentation (important since geography doesn't change).
 4. Imported inputs & ERPT (Amiti et al. (2013)). Here: most variable costs for wine are in local currency (maybe fertilizer).
- Drawbacks are imperfect matching (43% of export value) and special circumstances in Argentina (post-crisis, import-export regime for wine).

Estimation and Results

- RE panel regressions relating FOB price level to the exchange rate level.
- Focus on within-firm variation by controlling for firm-time effects.
- Find that PT is decreasing in quality:
 - In the baseline specification, PT at mean quality +/- 2 SD is 84.6% and 87%. Binned regressions show stronger effect for very top quality wines.
 - Economically smaller importance than in Auer et al. (2012) or Antoniadou and Zaniboni (2013);
 - Is the empirical strategy that absorbs a lot of variation the reason for this?

Comments I: Aggregate Implications?

- What are the aggregate implications of understanding this novel margin of price setting?
- Is the within-firm relation between quality and ERPT different from the across-firm relation?
- Are there important biases when examining less detailed data (at firm-HS level) with underlying quality heterogeneity and exit/entry (Nakamura and Steinson (2012) vs. Gagnon et al. (2014))?

Comments II. – Modeling of Non-Homothetic Preferences

- Relation between PT and quality found only on high-income markets.
 - Chen and Juvenal rationalize this by adding non-homothetic preferences to the model.
 - However, in their model, results seems to be due to the assumption on the distribution technology: remove $s(\varphi, y)$ from preferences (10); results unchanged.
- Alternative modeling of non-homothetic preferences?

Comments III. – Mechanism

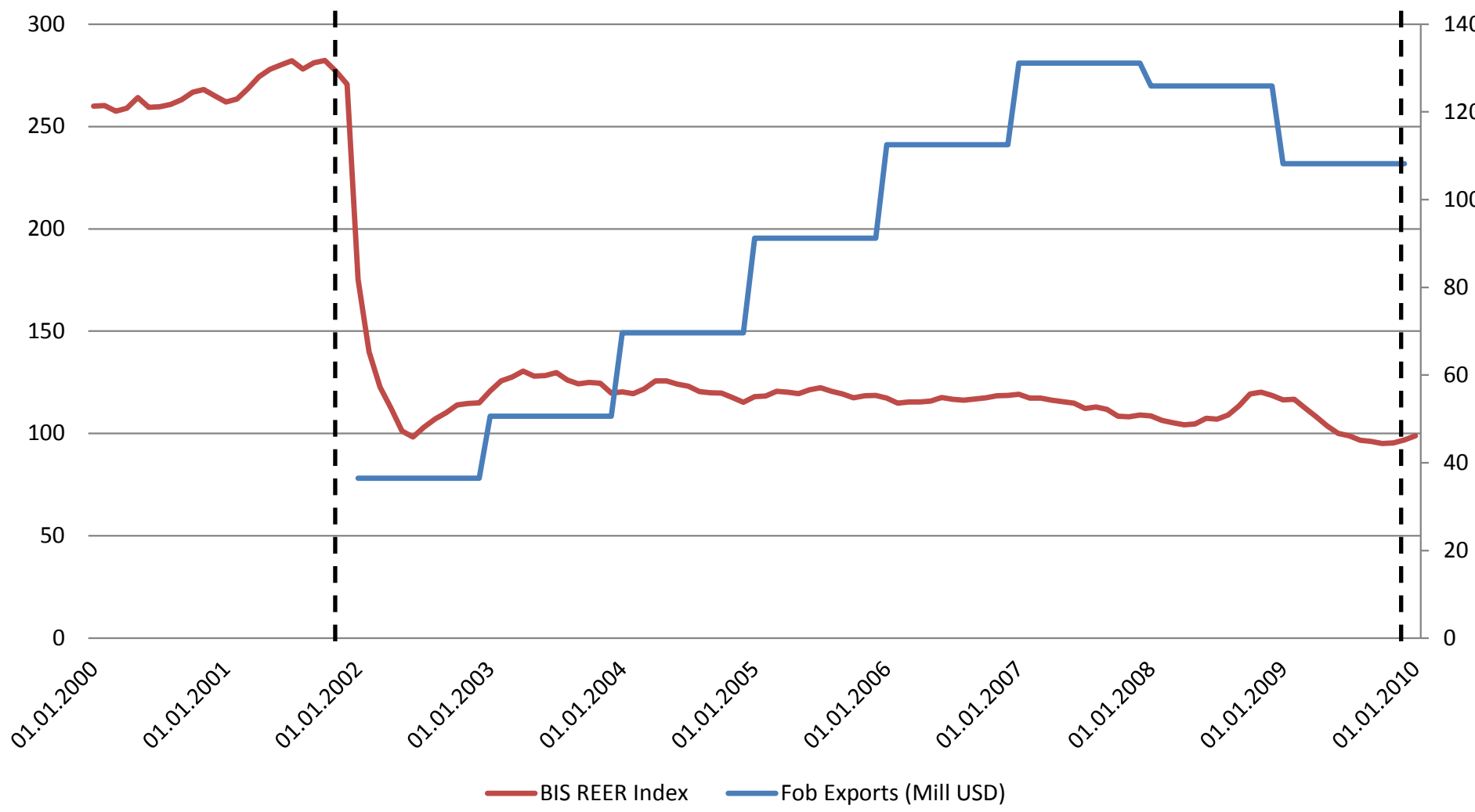
- Chen and Juvenal show that results hold also when controlling for interaction of exchange rate and sectoral distribution cost intensity.
- Is this evidence for the proposed mechanism that says quality is correlated with distribution costs and thus PT?
 - Why not follow Berman et al. and split the sample into high and low distribution cost-intensity sectors?
 - Or match export prices with retail price data.

Comments IV. – Start Date/Specification

With data that starts just after a large devaluation that might have a long-lasting impact, is a RE level on level regression the best baseline approach?

- Gopinath and Rigobon (2008) document that ERPT has a slow time profile; especially true after a large devaluation (Burstein et al. (2005)).
- Indeed, structural trends are important in this industry: 59 exporters in 2002, 150 in 2006.

Argentine Exchange Rate and Exports



Conclusion

- Great paper!
- Key contribution is careful assembly and analysis of extremely disaggregated dataset with properties that make it well-suited to examine the relation between within-firm quality heterogeneity and PT.
- Maybe further empirical work on underlying mechanisms is of interest.