



Discussion of:

Product Introductions, Currency Unions and the Real Exchange Rate

by
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Vanderbilt University and NBER

Conference on:

The Effect of Globalization on Market Structure, Industry Evolution and Pricing
Dallas Federal Reserve Bank of Dallas
May 31 – June 1, 2013

Summary

- Paper studies LOP for online sales of Apple, IKEA, H&M and Zara.
 - LOP holds almost exactly across common currency members of Europe
 - LOP holds to a closer approximation within Europe relative to Europe-US
 - Outside of the common currency area, at the time of product introduction, the nominal exchange rate vis a vis the Euro plays a dominant role in LOP deviations.



Whenever I see the term

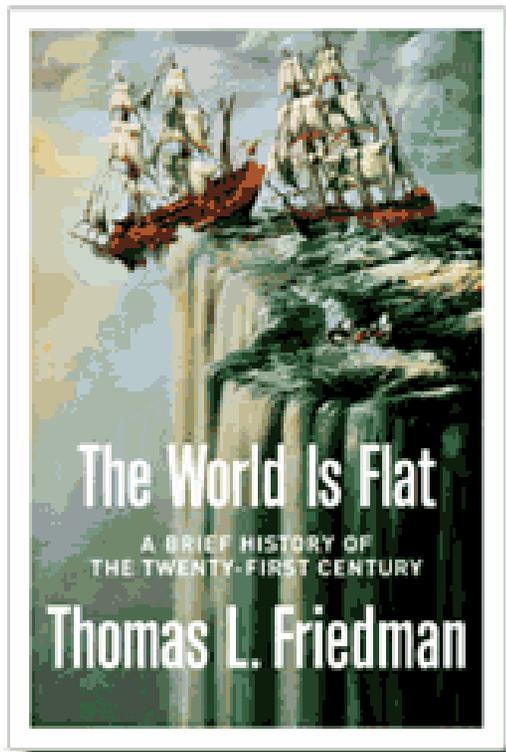
“Globalization”

I invoke my public lecture title:

“Flat World Fiction, Real World Friction”

Flat World Fiction

The NYT Best-seller

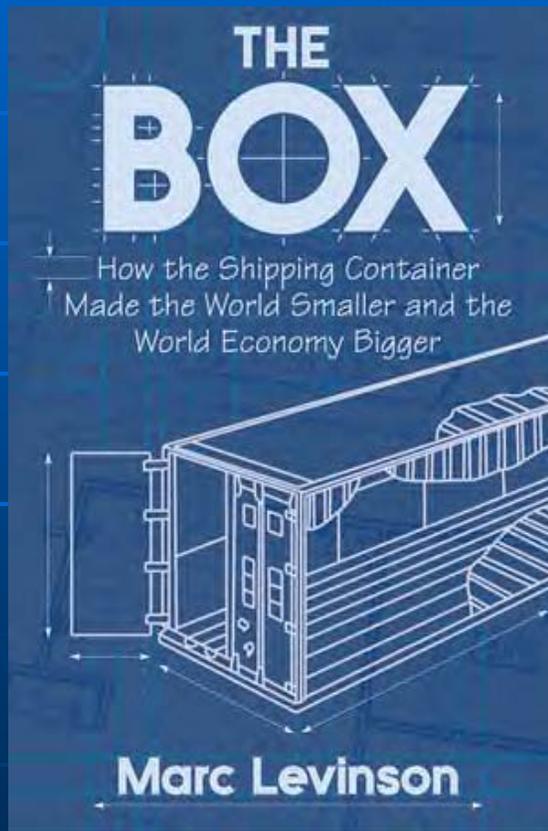


Thomas L. Friedman: The World is Flat: A Brief History of the Twenty-First Century.

"The Bible tells us that God created the world in six days and on the seventh day he rested. Flattening the world took a little longer. The world has flattened by the convergence of ten major political events, innovations, and companies. None of us has rested since, or maybe ever will again."

Real World Friction

I Know Levinson Sold at Least One Copy

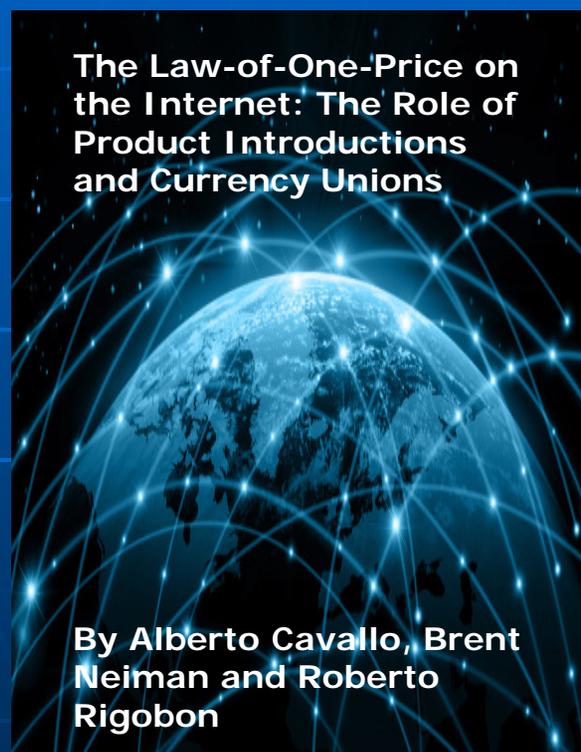


Marc Levinson: The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger.

"A crane lifted 58 aluminum truck containers aboard a tanker ship in Newark harbor and five days later it arrived in Houston harbor and the same 58 boxes were unloaded onto waiting transport trucks."

Nominal World Friction

Coming Soon to [Amazon.com](https://www.amazon.com)



Alberto Cavallo, Brent Neiman and Roberto Rigobon
Product Introductions, Currency Unions and the Real Exchange Rate.

*"... it is the common currency per se rather than the lack of nominal [exchange rate] volatility, that results in the lack of cross-country differences in the prices of **these goods.**"*

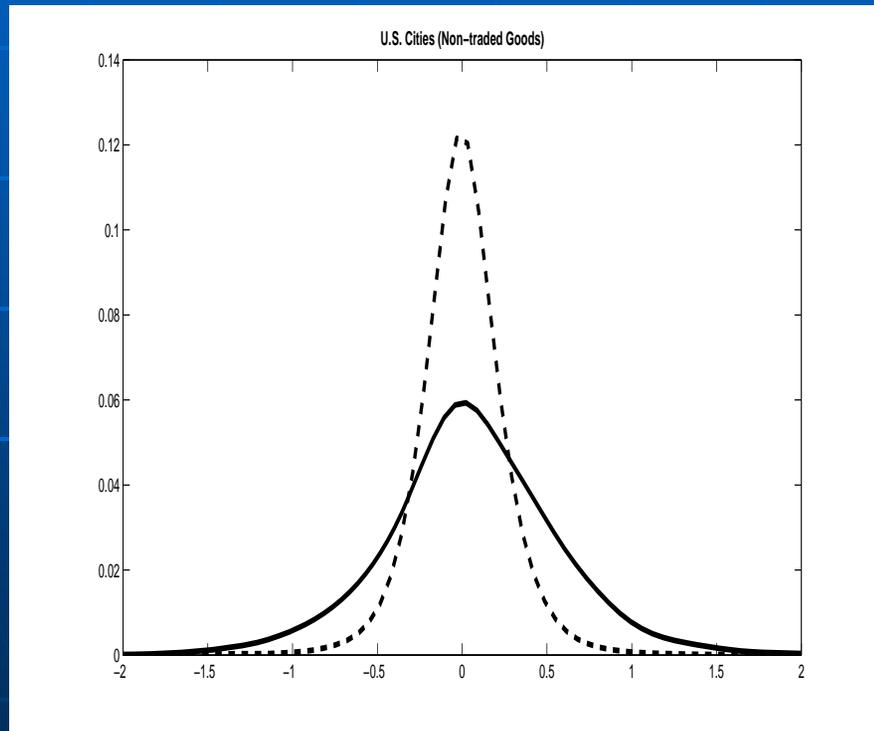


Does the LOP Hold?

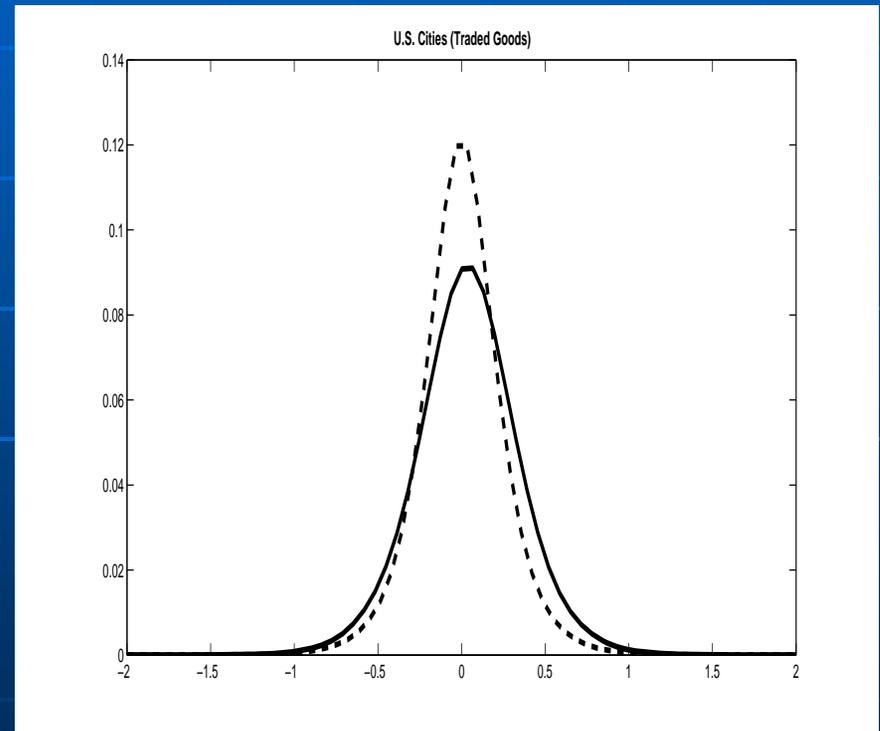
Crucini and Yilmazkuday (2008)

Economist Intelligence Unit micro-data: 1990-2005
Within the United States

Non-traded goods



Traded goods





Does the LOP Hold?

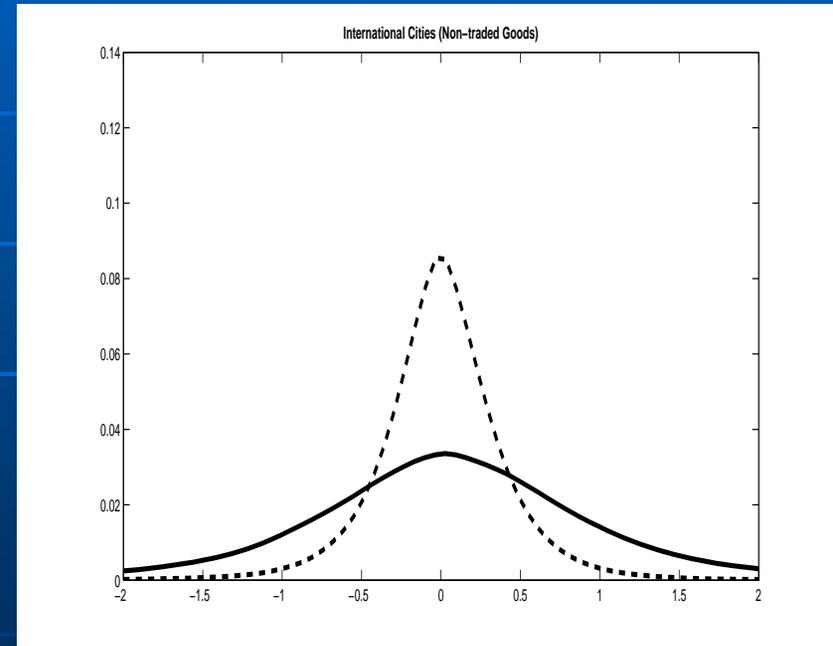
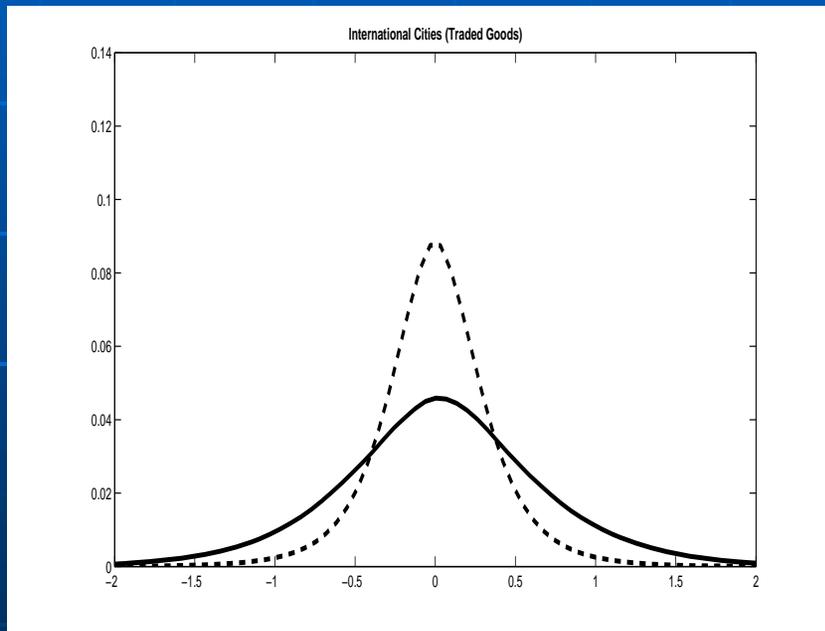
Crucini and Yilmazkuday (2008)

Economist Intelligence Unit micro-data: 1990-2005

Global comparisons (all nations)

Non-traded goods

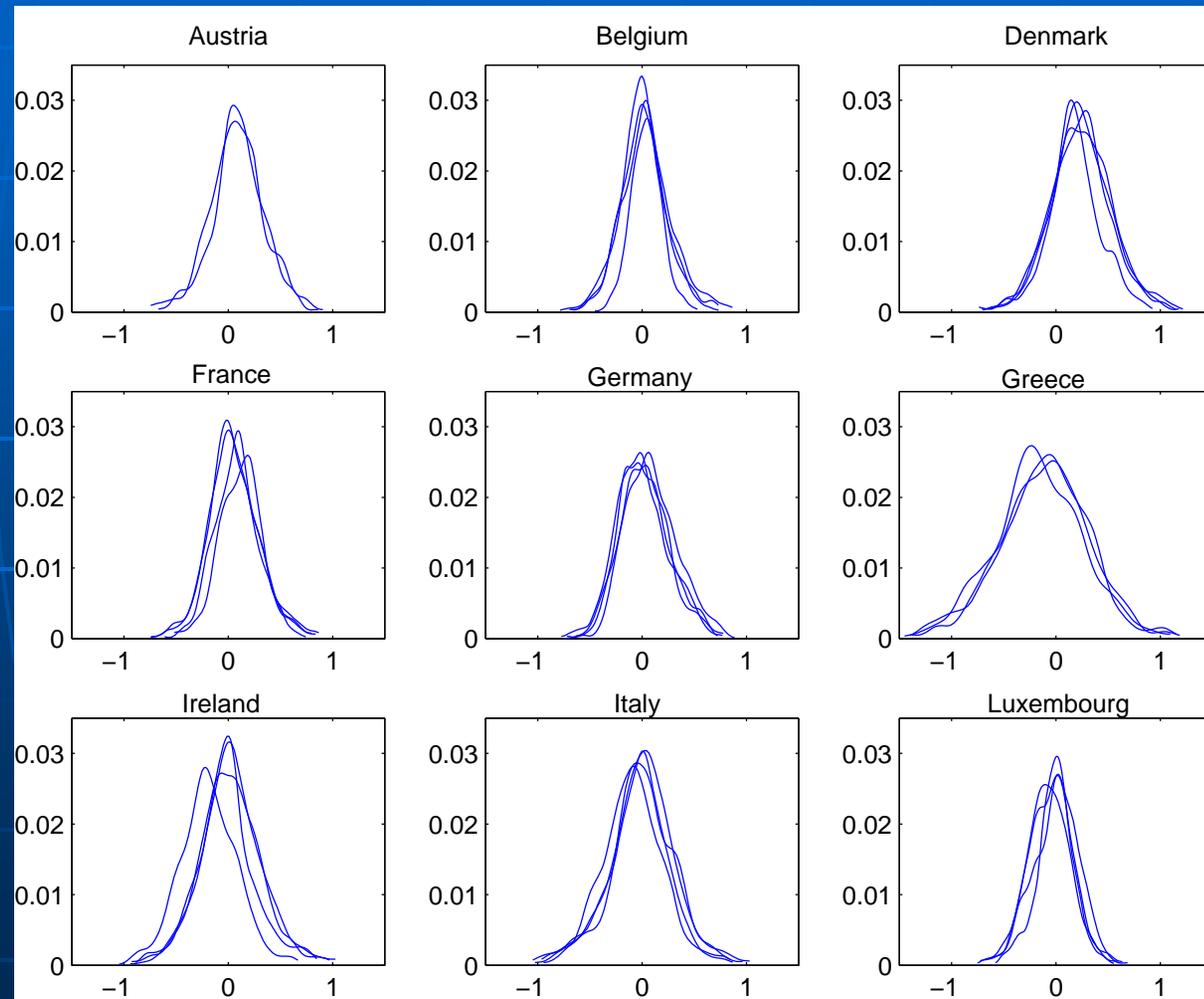
Traded goods





Does the LOP Hold?

Crucini, Telmer and Zacharidis (AER, 2005)
Eurostat micro-data: 1975, 1980, 1985, 1990

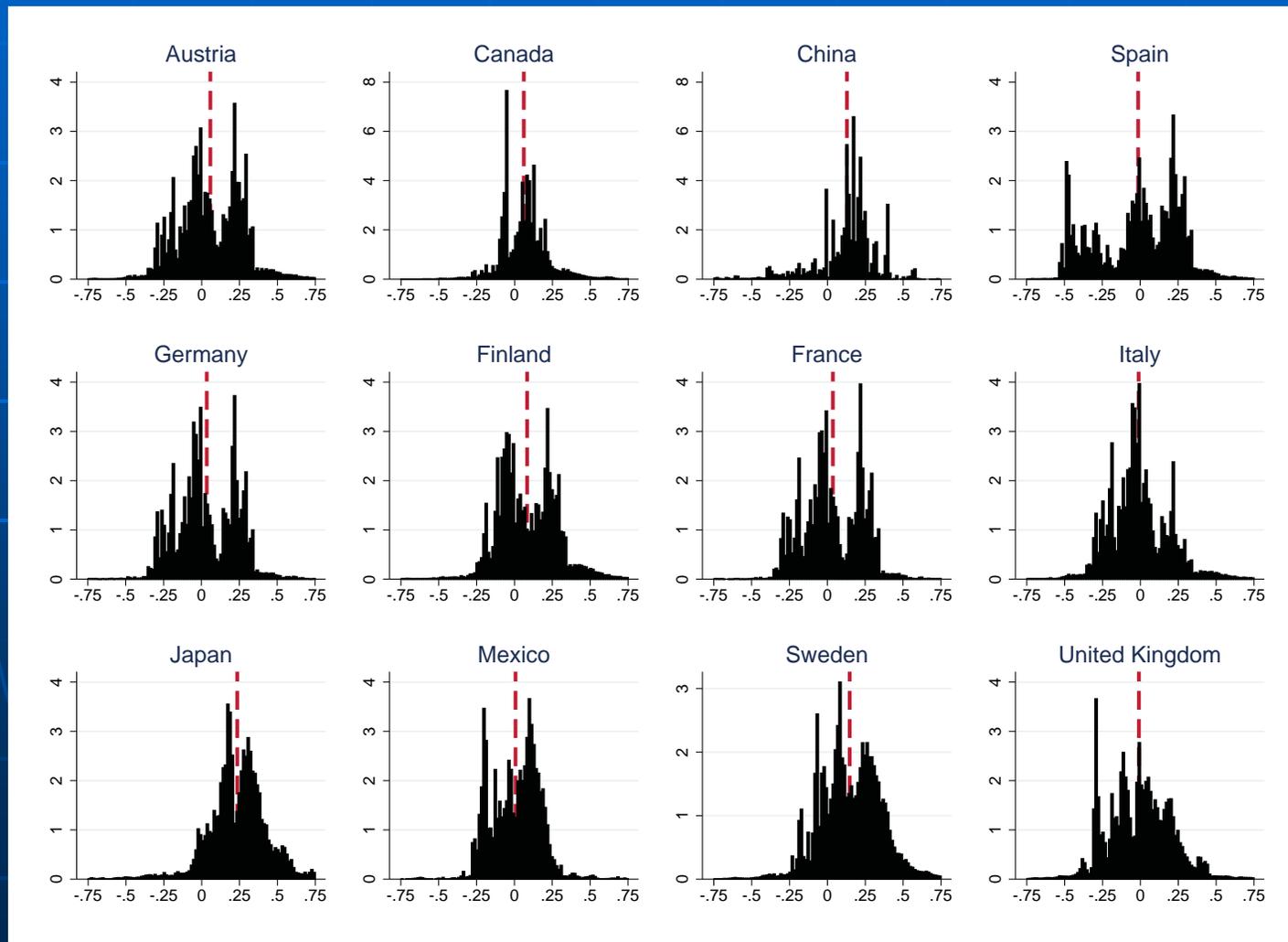


Note: Portugal and Sweden not shown.



Does the LOP Hold?

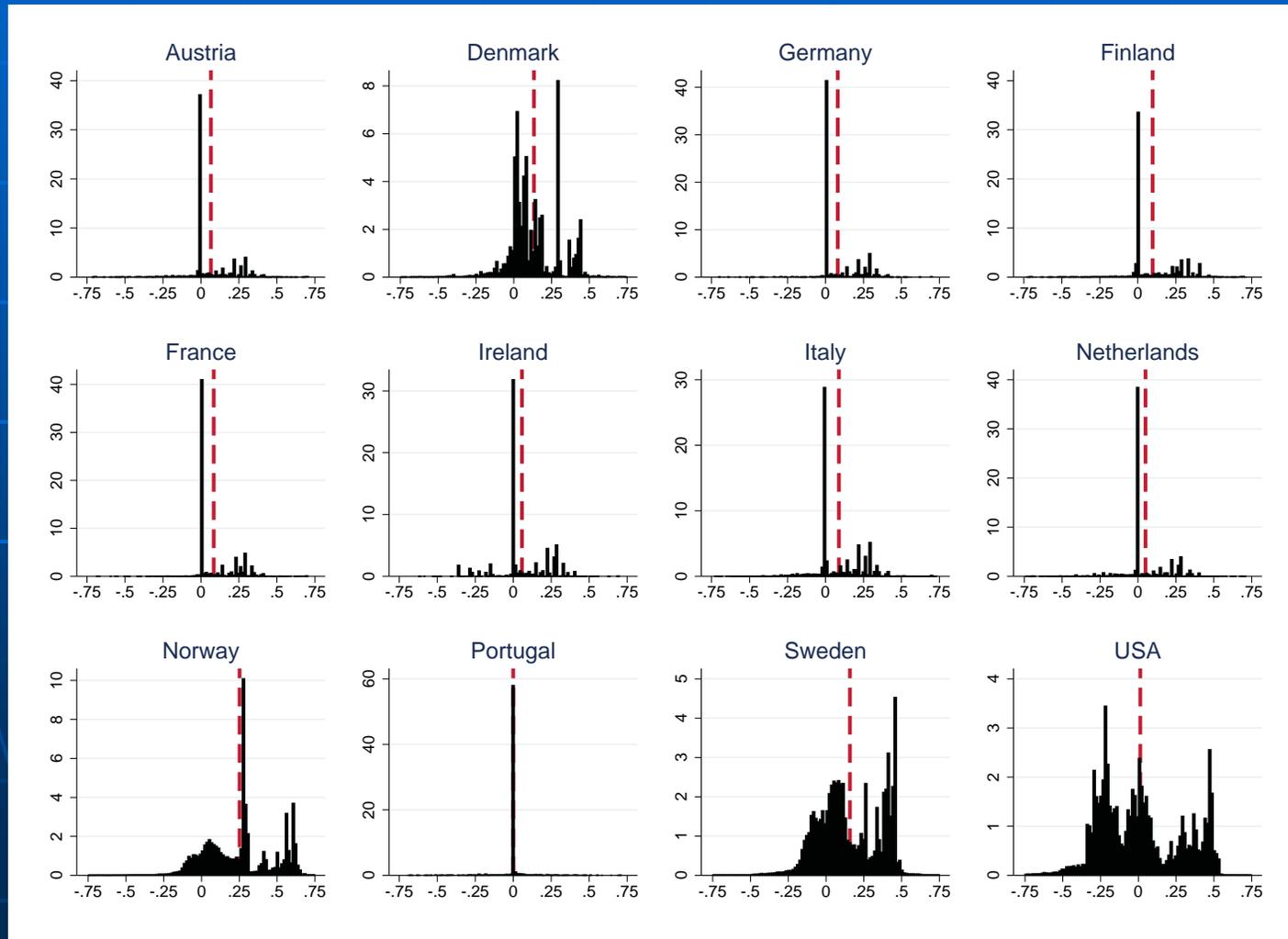
Alberto Cavallo, Brent Neiman and Roberto Rigobon
USA as numeraire





Does the LOP Hold?

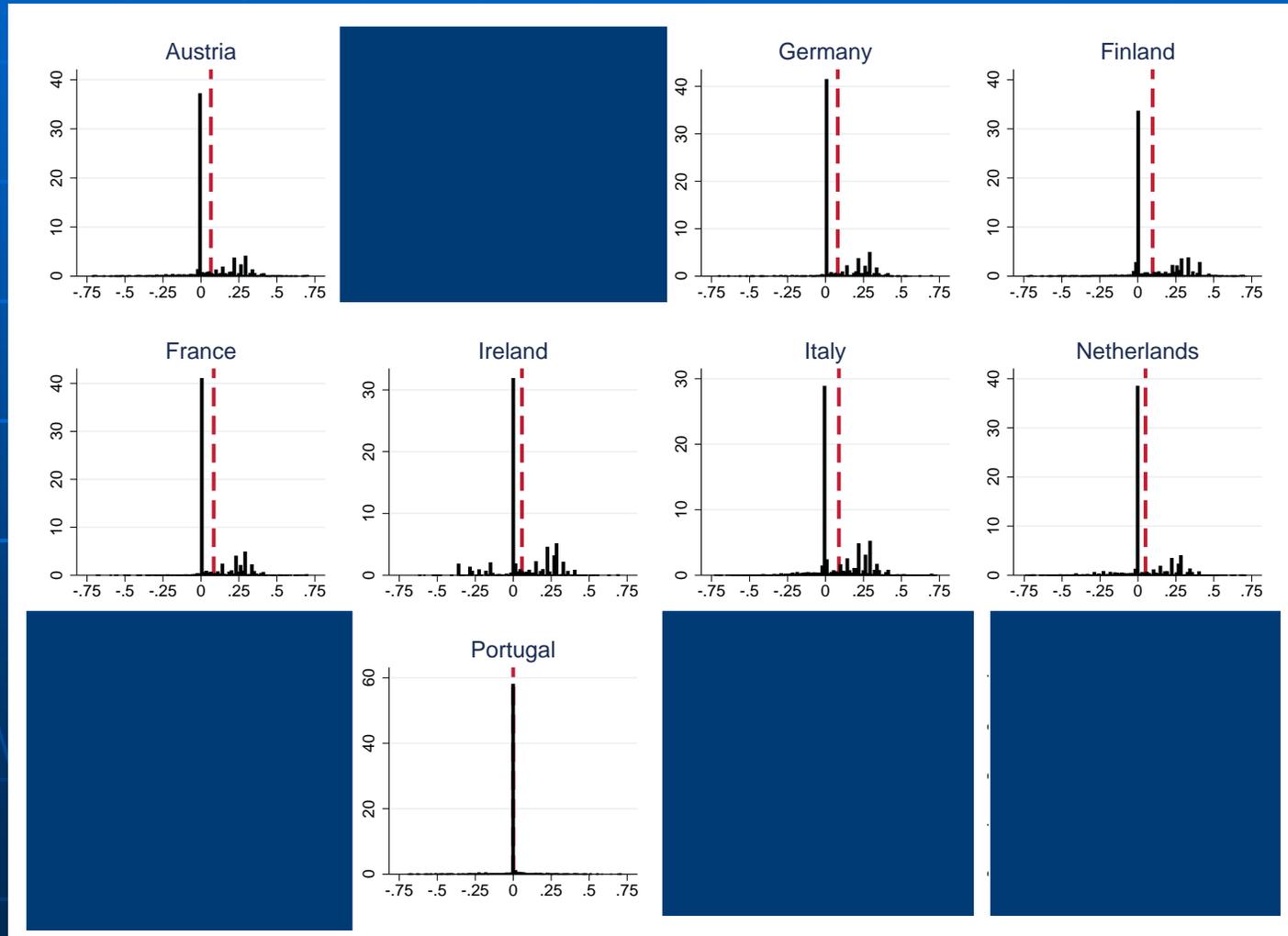
Alberto Cavallo, Brent Neiman and Roberto Rigobon
Spain as numeraire





Does the LOP Hold?

Alberto Cavallo, Brent Neiman and Roberto Rigobon
Spain as numeraire EMU





Does the LOP Hold? Recap!

Locations	Data	Abs(q_{ijkt})
The World	CT Table 5 EIU	0.548 Non-traded 0.526 Retail n.a. Online
The EU	CTZ Table 5 Eurostat	0.402 Non-traded 0.259 Retail n.a. Online
The US	CT Table 5 EIU	0.401 Non-traded 0.356 Retail n.a. Online
European Floats	Online sales (Apple, IKEA, H&M and Zara)	n.a. Non-traded n.a. Retail 0.182 Online
Currency unions	Online sales (Apple, IKEA, H&M and Zara)	n.a. Non-traded n.a. Retail 0.062 Online



Does the LOP Hold? No!

Taken at face value, a **clear**
and **puzzling** ranking emerges:

World
Europe
US cities
EU
EMU



Why We Get Different Answers to the Same Question? My Answer: Wrong Question.

Non-traded "goods" as arm-length, bilateral trades, involving bargaining over heterogeneous items by heterogeneous agents (think of homes, automobiles, contractors).

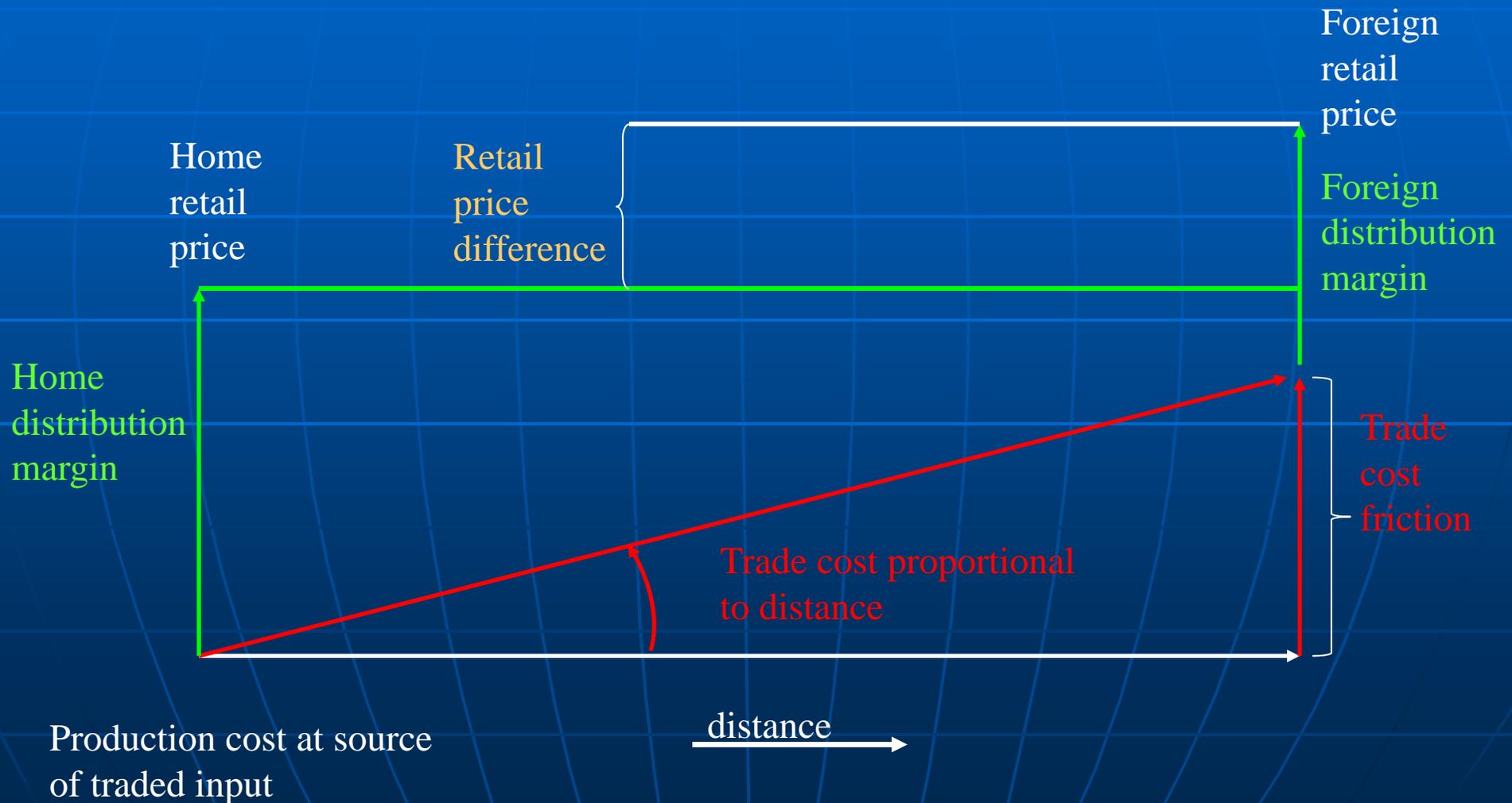
Off-line retailing involves brick-and-mortar stores in the location of sale, a sizable distribution margin.

Online retailing involve public posting of prices and trade up to a shipping cost. Different from both of the above.



Real World Frictions

Off-line is Green, On-line is Red





LOP Dispersion

Heterogeneity Across Goods

Lines divide product space online, retail, non-traded

734

THE AMERICAN ECONOMIC REVIEW

JUNE 2005

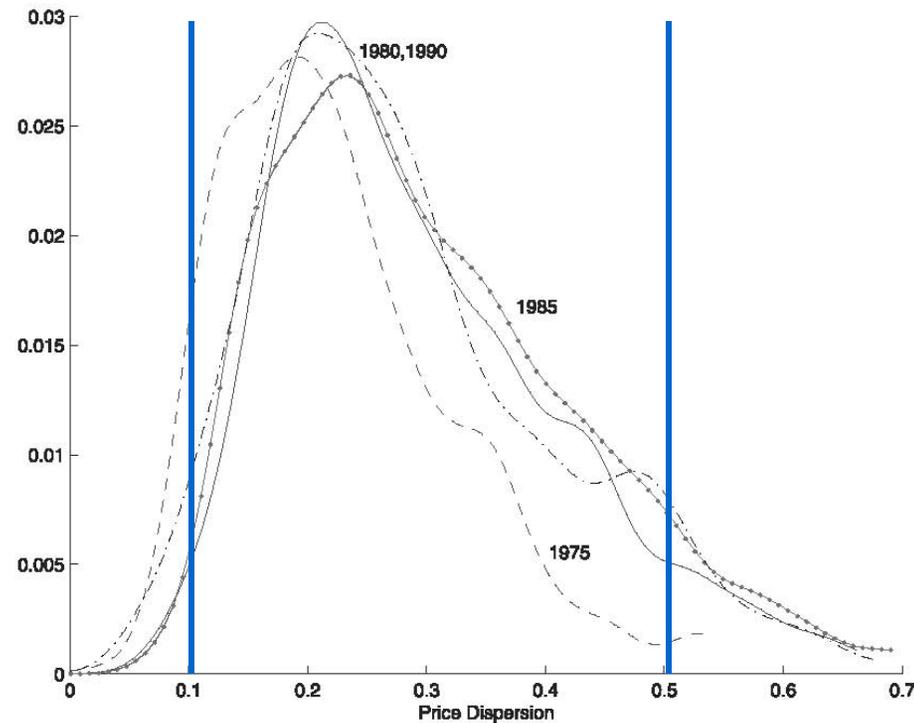


FIGURE 3. EMPIRICAL DISTRIBUTIONS OF $\text{Var}(q_{ij}|i)^{1/2}$

Note: Each line represents an estimate (for each year) of the density of $\text{Var}(q_{ij}|i)^{1/2}$, the standard deviation of the LOP deviation for good i across countries j .

Real World Frictions

LOP here excludes trade costs and online retailing avoids distribution margins
Crucini-Yilmazkuday (2009, 2013)

TABLE 4 – ACCOUNTING FOR LONG-RUN DEVIATIONS FROM LOP

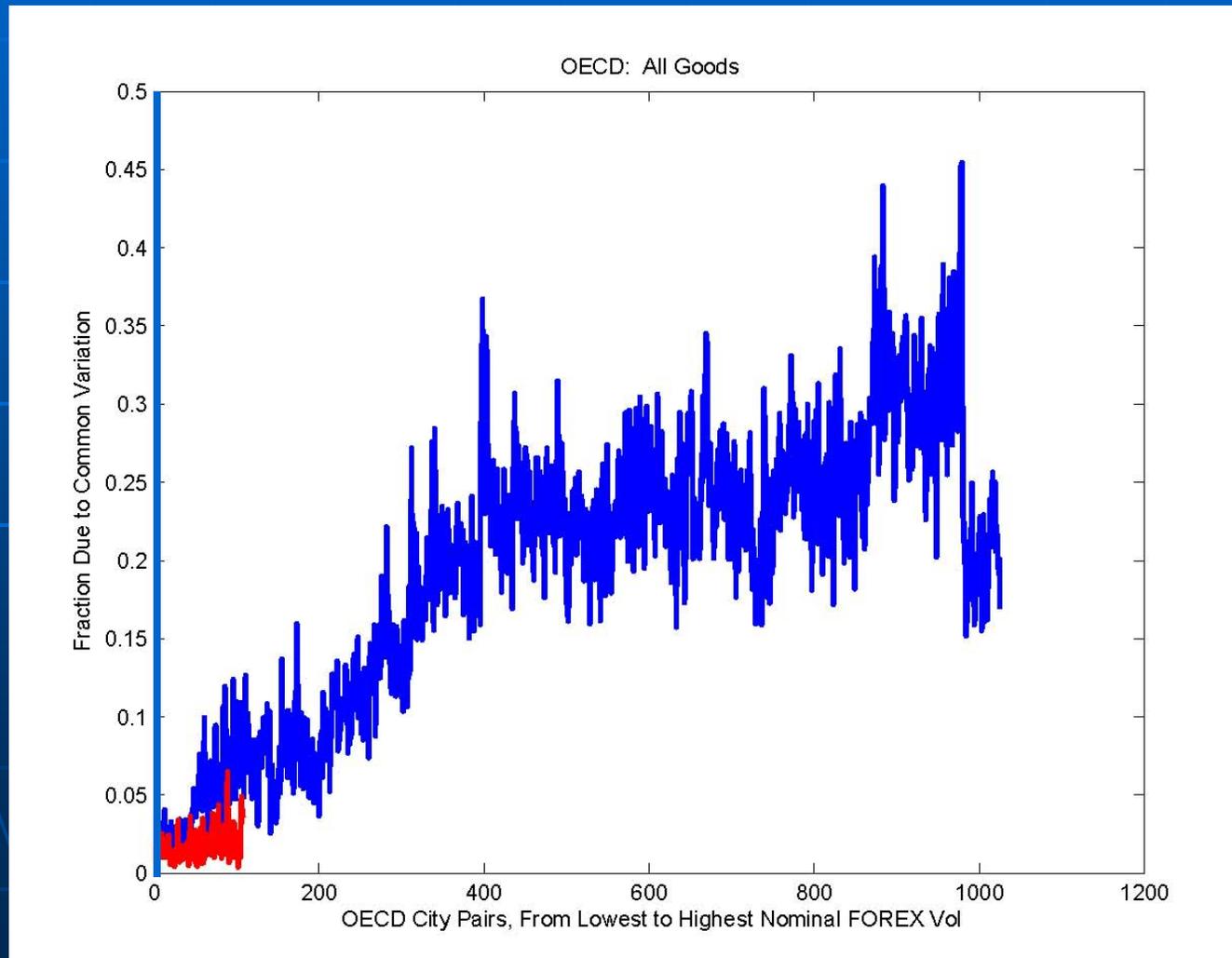
	WORLD		LDC		OECD		CAN-US	
	NB	B	NB	B	NB	B	NB	B
Price dispersion	15.02	58.62	24.82	64.84	13.32	31.58	14.20	18.53
Absolute contribution of:								
Border effect	–	10.39	–	11.13	–	7.98	–	7.55
Distance	6.44	13.70	7.57	14.70	6.55	10.42	7.04	8.18
Service wages	0.42	18.70	1.10	10.71	0.19	2.22	0.15	2.77
Retail productivity	2.14	0.04	4.10	7.37	1.76	6.31	2.10	0.63
Residual	6.02	15.79	12.05	20.93	4.82	4.65	4.91	–0.60
Percentage contribution of:								
Border	–	17.7	–	17.2	–	25.3	–	40.7
Distance	42.9	23.4	30.5	22.7	49.2	33.0	49.6	44.1
Service wages	2.8	31.9	4.4	16.5	1.4	7.0	1.1	14.9
Retail productivity	14.2	0.1	16.5	11.4	13.2	20.0	14.8	3.4
Residual	40.1	26.9	48.5	32.3	36.2	14.7	34.6	–3.2
Average miles separating cities	856	4,054	564	3,944	896	3,216	1,083	1,134



Nominal World Frictions

The Currency Union Boundary

Crucini and Telmer (2012), Parsley and Wei (2001)



7th Inning Stretch

- Combine online retailing (reduced real frictions) with currency union (no ERPT facet) and you are left with very low price dispersion.
- Sample is gold-standard for what it entails, MNC who **choose** online retailing.
- Do not be defensive about non-representative sample – this detract from the exposition.
- We can learn from cross-sectional variance in LOP dispersion. Online sample, a strength!



LOP Variance Decomposition

Component	Explanation	Contribution to variance
Product introduction	Product vintages enter and exits markets, this is LOP deviation at introduction date	Majority
Cost/demand and PT	"Rigobon Residual"	Non-trivial
Nominal exchange rate	Null of no local currency price adjustment, so the actual nominal exchange rate	Non-existent

LOP Variance Decomposition

- Not sure what theories would lend themselves to such a decomposition
- Suggest more structure
- Possible value of Crucini-Telmer time series versus cross-sectional variance decomposition.

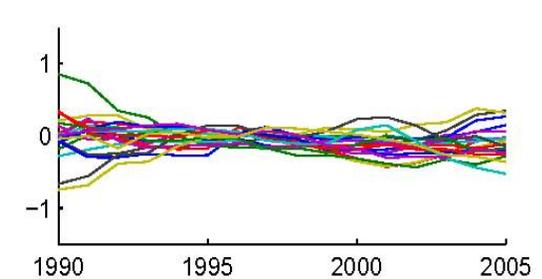
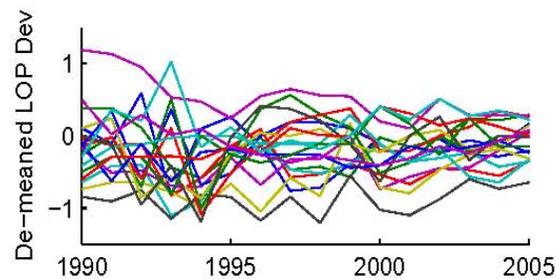
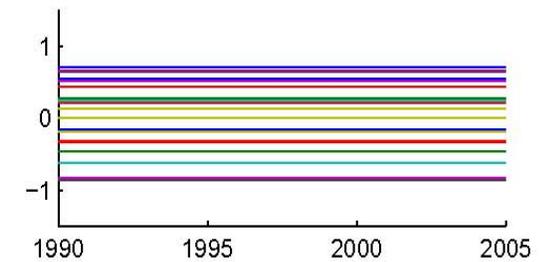
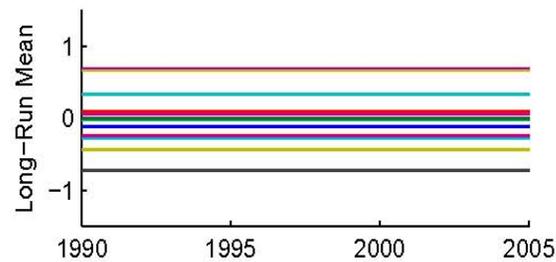
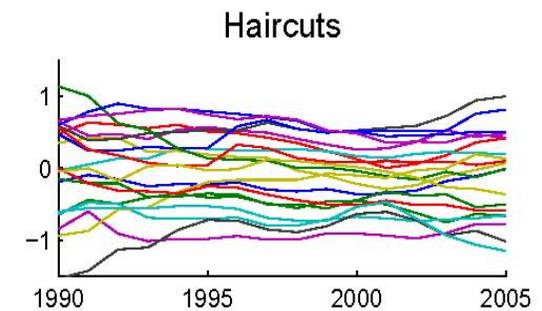
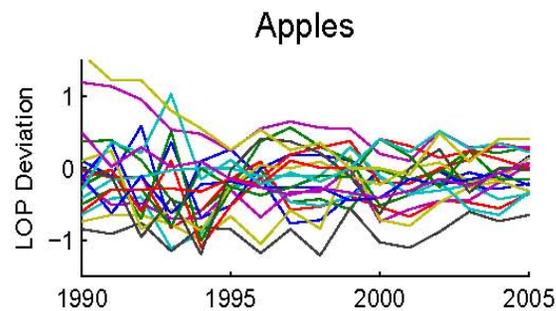
The Other Apples and Also Haircuts

LOP deviations for US-Canada city pairs
(Crucini and Telmer (2013) EIU data)

Total is long-run,
across locations +
time series, next two
boxes.

What role does
expected mean price
over expected
duration of products
existence play?

No nominal
exchange rate
component for
apples (or Apples),
opposite is the case
for haircuts.



Bottom of the Ninth

- Nowadays, I am rarely surprised by facts about LOP or PPP.
 - **This paper surprised me!**
- Gold standard data, but may tell us more about where we are headed than overall picture
 - **Emphasize the special nature of online retailing** for relative prices (across goods) and how things may change over time. There was not internet before Al Gore invented it.
- Intrigued by the variance decomposition
 - Bolster with a **conceptual model**
 - Consider linking to Crucini-Telmer long-run (trade theory) versus short-run (business cycles) concept.