

Comments on
"The Mode of Competition between
Foreign and Domestic Goods,
Pass-Through, and External Adjustment"

Georg Strasser

Boston College

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on Market Structure, Industry Evolution and Pricing
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Determinants of Pricing-to-Market and External Adjustment

- Local Costs: Distribution costs (Burstein & Neves & Rebelo 2003; Corsetti & Dedola 2005), ...
- Market Power: Border costs (Engel & Rogers 1996), costly export entry and exit (Dixit 1989), ...
- Macro Conditions: Bank credit (Strasser 2013), ...
- Long-term Considerations: Customers as capital (Drozd & Nosal 2012), ...
- Menu costs: Not very important (Nakamura & Zerom 2010), ...

Elasticity Estimates

Elasticity of substitution for a given sector k

	USA	ROW
USA	$\rho_k^{US} = 9$	$\mu_k = 4$
ROW	.	$\rho_k^{US} = 9$

Key Result

Sets of imported and domestic goods are considerably different from each other (for USA)

Implications for

- 1 Exchange Rate Pass-Through
- 2 External Adjustment
- 3 ... Imbalances, ...

Elasticity Estimates

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What is “the” Elasticity?

Given a sector k

- 1 Between Imported and Domestic Goods (“macro elasticity” in Feenstra et al. 2012)
- 2 Within Imported Goods (**origins and/or firms**, “micro elasticity” in Feenstra et al. 2012)
- 3 Within Domestic Goods (firms)

What is ROW?

- 1 Is ROW group as homogenous as USA? ROW contains (probably) Germany and China, Switzerland and South Africa.
- 2 How to interpret high average μ_k ? Maybe quality (category) differences between USA and ROW, i.e. a specialization of USA vs. ROW. But within ROW group there is even more specialization!
- 3 How big is the estimated elasticity between sectors, η ? Link to “one-tier” estimates?

Armington (IMF 1969)

Production function: $Y_k =$

$$\left\{ w_k \left[\sum_{n \in N_k^{US}} (q_{n,k}^{US})^{\frac{\rho_k - 1}{\rho_k}} \right]^{\frac{(\mu_k - 1)\rho_k}{\mu_k(\rho_k - 1)}} + (1 - w_k) \left[\sum_{n \in N_k^{ROW}} (q_{n,k}^{ROW})^{\frac{\rho_k - 1}{\rho_k}} \right]^{\frac{(\mu_k - 1)\rho_k}{\mu_k(\rho_k - 1)}} \right\}^{\frac{\mu_k}{\mu_k - 1}}$$

“The assumption of independence states, roughly, that buyers’ preferences for different products of any given kind (e.g. French chemicals, Japanese chemicals) are independent of their purchases of products of any other kind.”

Effect:

- Independent groups of competing products (“markets”)
- Demand for a particular product depends only on size of its market (e.g. French demand for chemicals in general), and the relative competitors’ prices in that same market

Further simplifying assumptions:

- Elasticity of substitution between products in a given market is constant (i.e. independent of time, covariates)
- and same for all products in that market.

Assumptions vs. Reality

- ROW Homogeneity: Regional specialization
⇒ ROW is not homogenous.
- Sector Independence: Competence clusters span sectors.
⇒ Narrowly defined sectors are not independent.
- Constant Elasticities: Industry landscape evolves, regional specialization trend strengthened during past decade.
⇒ Results specific to time period

Example: Car Industry

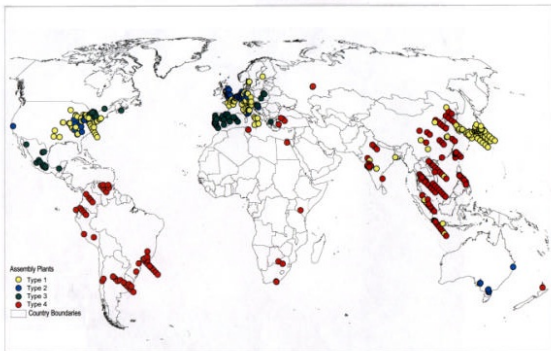
- 1 Regional Clustering
- 2 Clusters differ by role in manufacturing (R&D Lead Plants, Cost-Cutting Plants, Local Market Access Plants)
- 3 Likely also difference in produced varieties between regions

Very heterogeneous countries; substitutability with US product differs by region

At a higher level: regions specialize on industry

Regional Specialization

Automotive Assembly Plants by Type (2000)

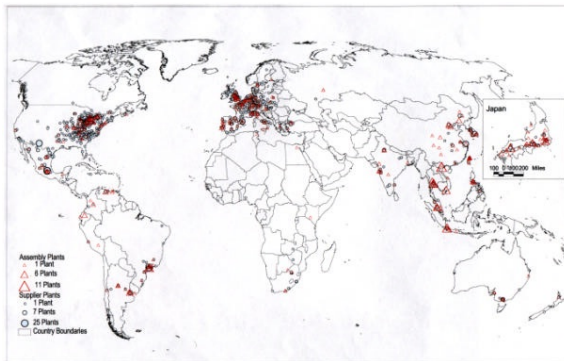


Source: Globalization and Jobs Project Database

Source: T. Sturgeon and R. Florida (2000), Globalization and Jobs in the Automotive Industry, MIT-IPC-00-012 / Globalization and Jobs Project Database (Industrial Performance Center at MIT)

Multi-Sector Clusters

Assembly Plant And Supplier Locations (2000)



Source: Globalization and Jobs Project Database

Source: T. Sturgeon and R. Florida (2000), Globalization and Jobs in the Automotive Industry, MIT-IPC-00-012 / Globalization and Jobs Project Database (Industrial Performance Center at MIT)

Pass-Through Reversal?

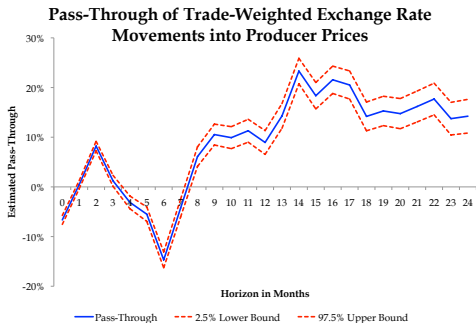


Figure 3: Pass-Through of Trade-Weighted Exchange Rate into US Producer Prices with 95% Bands

What Separates “Macro” from “Micro” Elasticities?

- Macro shocks largely ignored at micro (firm) level
- Bergin, Glick and Wu (ReStat forthcoming): condition on macro shocks
- Time-period specific estimates, condition on macro shocks?

Summary

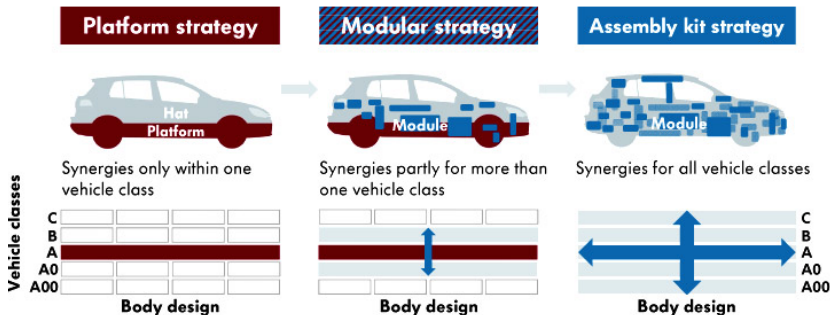
- 1 New elasticity estimates
- 2 Emphasizes the importance of carefully modeling heterogeneity of the supply side in international markets.
- 3 Suggestions:
 - Differences between sector categories and across time
 - Richer economic geography (e.g. country types)

BACKUP: Related Literature

- Micro-Macro Disconnect: Bergin, Glick and Wu (ReStat forthcoming)
- Differences between temporary versus permanent price changes: Ruhl (2008), Kehoe and Ruhl (2009)
- Recent Elasticity Estimates: Feenstra et al. (2009), Imbs and Merejan (2009)

BACKUP: Industry Evolution

The modular assembly kit evolution



Source: Volkswagen AG

BACKUP: Open Ends

- Exchange rate nowhere formally introduced in model. Multiplicative to foreign cost?
- Undefined time period and frequency of dataset
- Figure 6 missing (link between μ_k and external adjustment rate)
- Very interesting might be a scatter plot showing differences in μ_k along sector properties