Discussion of Morlacco’s Market Power in Input Markets: Theory and Evidence from French Manufacturing

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Main questions and contributions

- **Do importers have market power in their foreign purchases?**
  - Develops theory on mark-ups and buyer power
  - Estimates output elasticities of foreign and domestic inputs
  - Calculates implied “buyer power” of French importers

- **What are the welfare implications of this buyer power?**
  - Adapts Hsieh and Klenow (2009) to include buyer power
  - Finds lower gains from trade due to new distortions
2 key assumptions in the paper

1. Domestic input market is perfectly competitive so feasible to:
   - Estimate the firm’s output market mark-up as
     \[ \mu_{it} = \frac{\theta_{it}^m}{\alpha_{it}^m} \]

2. Infer input market power in country \( x \) by comparing domestic versus foreign output elasticities to their shares
   \[ \psi_{it}^x = \frac{\theta_{it}^x}{\theta_{it}^m} \cdot \frac{\alpha_{it}^m}{\alpha_{it}^x} \]

3. Holds firms’ extensive margin sourcing decision fixed
   - No fixed costs of sourcing
Comment 1: Why do firms import?

- To lower their marginal costs
  - Amiti and Konings (2007); Gopinath and Neiman (2014); Halpern, Koren, and Szeidl (2015); Blaum, Lelarge, and Peters (2018); etc.

- To access higher quality inputs
  - Verhoogen (2008); Eslava, Fielier, and Xu (2018)

- To access new inputs
  - Goldberg, Khandelwal, Pavcnik, and Topalova (2010)

- In this paper...by assumption
  - Focuses only on firms that import from 3+ countries and export
  - Some substitutability between domestic and foreign inputs
If firms import to lower MCs $\rightarrow$ lower foreign shares

- Houseman et al. (2010) show US productivity measures are biased up due to offshoring

Source: Houseman, Kurz, Lengermann, and Mandel (2010)

- If low MC countries have higher fixed costs, implies higher pricing power for larger, more productive firms
Comment 2: Domestic shares decrease in firm size

- French importers’ domestic input expenditure shares seem to be flat/decreasing in firm size

![Figure 2. Domestic Shares and Firm Size](image)


- How do firm shares differ conditional on sourcing strategies?
Comment 3: What is the source of market power?

- Firms have market power *only* in foreign markets
- My prior: Big firms have more market power in domestic markets
  - Exporters are big and sell to many domestic and foreign customers
  - Domestic suppliers are smaller on average, with fewer customers

Bernard, Moxnes, and Ultveit-Moe (2018) find that:
- The top 10% of Norwegian exporters to an OECD country account for 90% of exports to that country
- Over 90% of export value is by exporters with multiple foreign customers in a country
- Within a market, exporters that sell more have more customers
- Median exports by customer *not* increasing in no. of customers

Kikkawa, Magerman, and Dhyne (2019) find that suppliers’ mark-ups are increasing in their average customer-specific shares

Source crucial for understanding sources of misallocation
Some intuition on the source

What does the model predict for output mark-ups?
Comment 4: Reduced-form evidence on buyer power?

- Exploit differences in market power across foreign sources?
  - Use Comtrade data to assess French market share
  - Calculate average unit values by import country
  - Are unit values negatively correlated with shares?
- Exploit differences in market power across HS products?
  - More buyer power in industries w/out persistent relationships?

Table 4: Stay Shares, Selected HS2 Industries

<table>
<thead>
<tr>
<th>HS2</th>
<th>Description</th>
<th>Stay Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>Cotton</td>
<td>0.05</td>
</tr>
<tr>
<td>54</td>
<td>Man-Made Filaments (Textile)</td>
<td>0.08</td>
</tr>
<tr>
<td>51</td>
<td>Wool/Animal Hair/Yarn/Fabric</td>
<td>0.09</td>
</tr>
<tr>
<td>22</td>
<td>Beverages, Spirits and Vinegar</td>
<td>0.85</td>
</tr>
<tr>
<td>40</td>
<td>Rubber and Articles Thereof</td>
<td>0.87</td>
</tr>
<tr>
<td>86</td>
<td>Railway Locomotives/Rolling-Stock/Fixtures etc.</td>
<td>0.99</td>
</tr>
</tbody>
</table>

Source: Monarch (2018)

- Does buyer power affect relationship type (as in Heise et al. 2017)?
- Use RF evidence to identify comparison group operating under PC
Measuring misallocation: What is productivity?

- Revenue productivity (TFPR) is really profitability
  - Industry-level output price deflators
  - Industry-level input price deflators

- Physical productivity (TFPQ) closer to production efficiency
  - Usually just have output unit values
  - Still cannot observe quality

- Sometimes the distinction is irrelevant
  - TFPR and TFPQ are correlated in the data
  - Foster, Haltiwanger, Syverson (2008) show young firms have high TFPQ but low TFPR
  - Pierce (2011) finds firms that win anti-dumping cases see TFPR ↑, but TFPQ ↓

- Here, clever use of trade data to “correct” for firm-specific prices
Comment 5: Internal consistency across sections

- Adapts Hsieh and Klenow (2009) to include buyer power
  - TFPR should be equalized across firms
  - High TFPR firms should be bigger

- Uses first section estimates to quantify costs of misallocation

- But Haltiwanger, Kulick, and Syverson (2018) show that HK 2009
  - Only works under CES
  - Only works under constant returns to scale

- TFPR will differ in a world with fixed costs
  - Dispersion no longer equates misallocation
  - Seems important for modeling import behavior
Is there reduced-form evidence of mechanism?

- Model predicts firms too small when sourcing with buyer power
  - Firms substitute foreign inputs with domestic inputs
  - Generally, substitute towards no buyer power inputs

- Use panel data on extensive margin importing changes
  - Shocks to industries or countries that change firm sourcing
  - Expect a scale effect
  - Is the scale effect mitigated when firm has market power?

- Differential response of size versus productivity?
  - Model predicts TFPR increases relatively more than size
  - Evidence of this?
  - Super cool to show TFPR vs. TFPQ responses!
More thoughts for the author...
Comment X: Selection

- All the estimates are based on firms that import from 3+ countries
  - Sales premia and minimum number of source countries

![Graph showing the relationship between premium and minimum number of countries from which firm sources.

The graph displays a trend where the premium increases as the minimum number of countries from which firm sources increases. There is a shaded area indicating the 95% confidence interval, suggesting variability in the observed data.]
Comment X: Use of $\theta$

- I agree $\theta$ is a great letter!
- Section 2: $\theta_{it} \equiv \frac{\partial X_{it} V_{it}}{\partial V_{it} Q_{it}}$
- Section 3: $\theta_{it}^j$ are firm-time fixed effects
- Section 4: $Q = \prod_{s=1}^{S} Q_s^{\theta_s}$
Comment X: Fred’s last name

- Warzynski not Warzynsky (Table 5 notes)