Discussion on “How Did China’s WTO Entry Affect U.S. Prices?”
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Summary

Research Question:
How does China’s WTO entry affect U.S. price index?
- Estimate the magnitude
- Identify the channels and the magnitude of each channel

Contribution
- First to propose the importance of the "China’s own input tariff reduction upon WTO entry" channel
- Show that the newly proposed channel is significantly more important than the well-documented tariff uncertainty channel
Approach

Research Strategy

- Multi-hierarchies of intruments to extract the WTO effect
- Reduced form estimation derived by structural form model

The mechanism

- Two possible sources (i.e. Sato-Vartia price index component & Feenstra variey component):
  1. Lower Chinese export prices
  2. More varieties from China (increased entry of Chinese firms into U.S. market)
\[
\ln \frac{P_{gt}}{P_{g0}} = China P_g + China V_g + Other P_g + Other V_g
\]

- **China \(P_g\) (-0.049)**
  - Price instrument
  - Lower export price
  - TFP
  - Import variety instrument
  - Input tariff reduction

- **China \(V_g\) (-0.026)**
  - Export participation instrument
  - Higher export participation
  - Tariff uncertainty instrument
  - Export tariff uncertainty relief
Comment 1

- Policy Implications for the U.S.?
- Pass-through channel?
  - Markup / market share effect?
  - Is China mainly exporting final goods or intermediate goods?

<table>
<thead>
<tr>
<th></th>
<th>U.S. Price</th>
<th>China P_g</th>
<th>Other P_g</th>
<th>China V_g</th>
<th>Other V_g</th>
</tr>
</thead>
<tbody>
<tr>
<td>China P_g</td>
<td>-0.049</td>
<td>-0.018</td>
<td>-0.045</td>
<td>0.001</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>65.2%</td>
<td>23.3%</td>
<td>59.2%</td>
<td>-1.0%</td>
<td>-16.3%</td>
</tr>
<tr>
<td>China V_g</td>
<td>-0.026</td>
<td>0.001</td>
<td>0.000</td>
<td>-0.029</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>34.8%</td>
<td>-1.9%</td>
<td>-0.1%</td>
<td>37.8%</td>
<td>-1.1%</td>
</tr>
<tr>
<td>WTO effect</td>
<td>-0.076</td>
<td>-0.016</td>
<td>-0.045</td>
<td>-0.028</td>
<td>0.013</td>
</tr>
</tbody>
</table>
Comment 1
Pass-through channel?

- More informative to further decompose Other $P_g$ and Other $V_g$

\[ \ln \frac{P_{gt}}{P_{g0}} = \text{China } P_g + \text{China } V_g \]

\[ + \text{US } P_g + \text{US } V_g + \text{Other}' P_g + \text{Other}' V_g \]

- China $P_g$ has big effect on $(\text{US } P_g + \text{Other}' P_g)$
- Effect on US $P_g$?
- If so, effects might be similar to output tariff reduction (decreasing price of imported output)
  - In literature, mixed findings on effects of output tariff reduction
- Effect on markups
- Effect on firm TFP
Comment 1
Pass-through channel?

- Does China mainly export final goods or intermediate goods?
- If China is also exporting intermediate goods to the U.S., same mechanism of this paper applies too
  - Decreasing price of imported input is similar to input tariff reduction
Comment 2

- $\hat{M}_{\text{max},ft}$: instrument for the expenditure on imported inputs in the common set
- “...many firms did not have common imported inputs over the entire sample period, ...”
- Input imports may be associated with replacing local inputs with higher quality imported inputs, rather than variety expansion?
- Has the model already incorporated/considered this possibility? If not, can the model be extended to allow for this possibility?
Mapping from structural model to estimation model

\[ \int_{\varphi} \nu \ (\text{before WTO}) \, dG - \int_{\varphi} \nu \ (\text{WTO}) \, dG \]

\[ = (T_h - 1) \left[ F_g + (1 - \delta) F^E_g \right] \]

\[ (T_h - 1) \rightarrow \left( \ln \bar{\tau}_h - \ln \tau^M_{h} \right) - \left( \ln \bar{X}_g - \ln X^M_{g} \right) \]

- **Firm FE \times \ln (Gap_g) \times WTO_t?**
- **Heterogeneity in the propensity to participate export market because of the product characteristics?**