Comments on:

Do Falling Iceberg Costs Account for Recent US Export Growth?

By G. Alessandria and H. Choi

Kim J. Ruhl
NYU Stern School of Business

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No.
Accounting for Growth in Exports

- Data:

\[
\Delta \frac{x}{y} = \Delta \frac{\bar{x}}{\overline{y}} + \Delta \frac{\bar{y}_x}{\overline{y}} + \Delta \frac{N_x}{N}
\]

\[
\begin{array}{cccc}
0.46 & 0.42 & -0.20 & 0.24 \\
\end{array}
\]
Accounting for Growth in Exports

- Can Melitz-style models account for this?
- In Dixit-Stiglitz world
  \[
  \frac{x}{y} = \frac{\epsilon^{-\theta} Y^*}{Y + \epsilon^{-\theta} Y^*}
  \]
- Back out change in \(\epsilon\) to nail \(\Delta \overline{x}/\overline{y}_x\)

\[
\Delta \frac{x}{y} = \Delta \frac{\overline{x}}{\overline{y}} + \Delta \frac{y_x}{y} + \Delta \frac{N_x}{N}
\]

\[
\begin{array}{c|c|c|c}
\Delta & \Delta & \Delta & \Delta \\
\hline
0.46 & 0.42 & -0.20 & 0.24 \\
0.80 & 0.42 & -0.22 & 0.59 \\
\end{array}
\]
Questions, Questions

• Why is average firm size falling?
  • data: largest firms losing employment share
  • data: smallest firms gaining employment share

• Why is there too much export entry in the model?
(a) Establishment Share
(b) Employment Share

Change in employment

Employment of an establishment

Data
Model
Model (Scale labor)
A New Title?

Do Falling Iceberg Costs Account for Recent Changes in Firm Size Distributions?
Do Falling Iceberg Costs Account for Recent Changes in Firm Size Distributions?

No.
Another Hierarchy

- Firms and aggregates:

\[
\frac{x(z)}{y(z)}, \phi_x(z), \phi_d(z) \Rightarrow \frac{x}{y}
\]
Another Hierarchy

• Firms and aggregates:

\[
\frac{x(z)}{y(z)}, \phi_x(z), \phi_d(z) \Rightarrow \frac{x}{y}
\]

• Another layer:

\[
\frac{x_i(z)}{y_i(z)}, \phi_{x,i}(z), \phi_{d,i}(z) \Rightarrow \frac{x_i}{y_i}, \phi(i) \Rightarrow \frac{x}{y}
\]
Why Industries?

• Firm in an industries may be more homogeneous
  
  o Face the same set of competitors
  o Face similar demand curves \((\theta_i)\)
  o Produce similar goods \((\eta_i)\)
  o Policies set at “industry” level

• Traditional quantitative theory: representative industry

• New quantitative theory: connect firms to industries?
What is Happening to Industries?

- Simple decomposition

\[
\frac{\sum_{i=1}^{I} x_i}{\sum_{i=1}^{I} y_i} = \frac{x_1}{y_1} + \frac{x_2}{y_2} + \cdots + \frac{x_I}{y_I}
\]

- Export intensity of industry \( i \): \( x_i / y_i \)

- “Size” of industry \( i \), \( y_i / y \)
Compostition Effects?

Data on total exports / total sales from 1997 to 2007 shows a general trend of increase.
Compostition Effects?

Data

$\frac{x_i}{y_i}$ fixed

Total exports / total sales
More Questions!

• Heterogeneity at the industry level
  o Industry size
  o Industry export intensity

• How do we map underlying industry characteristics to firm and industry export outcomes? Aggregate outcomes?

• This paper is moving the literature in the right direction.