Reshoring by US Firms: What do the Data Say?

Lindsay Oldenski
PIIE and Georgetown University

October 7, 2015
Examples of Reshoring

• 2009: General Electric moved production of water heaters from China to Louisville, Kentucky

• 2010: Master Lock returned 100 previously offshored jobs to Milwaukee, Wisconsin.

• 2012: Caterpillar opened a new plant in Victoria, Texas to produce excavators.

• 2013: Whirlpool moved washing machine production to Clyde, Ohio from Monterrey, Mexico.

• 2015: Ford announced plans to produce its EcoBoost engines in Cleveland.
Overview

• These anecdotes have attracted much attention

• But the data show no evidence of a widespread reshoring trend by US firms

• What does this mean for US workers and the future of US manufacturing?
Manufacturing Imports by US-Based MNCs as a Share of Total MNC Sales

Source: US Bureau of Economic Analysis
Manufacturing Imports Between Related Parties

Source: US Census Bureau
Reshoring firms also expand abroad

• In 2011 General Electric set up new plants in the US but also built new factories in China and India.

• Ford has made highly publicized reshoring announcements, yet it also announced plans in April 2015 for $2.5 billion of new manufacturing investments in Mexico.

• Firms that do the most importing are also the ones that do the most exporting, as global engagement rarely moves in only one direction.
What happens when offshoring costs rise?

- Chinese wages more than tripled from 2000 to 2010 and grew by 10% in 2014.

- But reshoring is not the only alternative
  - Coach shifted production of wallets and handbags from China to Vietnam, Indonesia, Thailand, and the Philippines.
  - Casabella moved production back to Mexico after a decade in China.
  - St. Louis-based Viasystems Group Inc. also shifted production to Mexico from China.
Imports by US-Based MNCs from their Foreign Affiliates in Select Countries ($millions)

Source: US Bureau of Economic Analysis
Imports by US-Based MNCs from their Foreign Affiliates in Mexico ($millions)

Source: US Bureau of Economic Analysis
Offshoring Facts

• Offshoring strengthens US manufacturing, benefiting US workers and consumers

• Some US workers lose their jobs, but this is offset by gains to other workers

• Manufacturing employment has been falling for decades, but not primarily due to offshoring

• Policy question: how to position US workers to take advantage of growing areas of the economy
Implications for the US

• 2014 AT Kearney survey of production location decisions
  1) delivery time improvement
  2) total cost of ownership
  3) quality improvement
  4) freight cost improvement
  5) wages, tied with customer responsiveness improvement

• Offshoring decisions are not solely based on wages, which is good for the US

• 84% of R&D spending by US MNCs takes place within the US (virtually unchanged over the past decade)
Manufacturing Exports by US MNCs Originating in the US ($billions)

Source: US Bureau of Economic Analysis
US Exports and Imports of Services ($billions)

Source: US Bureau of Economic Analysis
US Manufacturing in Context

- Only 4.6% of US employment is in manufacturing production occupations

- The manufacturing sector accounts for 8.8% of US employment. Only about half of those jobs are in traditional production occupations

- A narrow focus on reshoring physical production distracts from other important sources of growth

- Adapting to the changing nature of global business is crucial for US manufacturing
## Changes in Occupational Employment Shares within US Manufacturing Sector

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Change in Employment Share, 2005-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture and Engineering Occupations</td>
<td>0.82%</td>
</tr>
<tr>
<td>Business and Financial Operations</td>
<td>0.77%</td>
</tr>
<tr>
<td>Management Occupations</td>
<td>0.70%</td>
</tr>
<tr>
<td>Computer and Mathematical Occupations</td>
<td>0.40%</td>
</tr>
<tr>
<td>Sales and Related Occupations</td>
<td>0.11%</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
<td>-0.04%</td>
</tr>
<tr>
<td>Construction and Extraction Occupations</td>
<td>-0.31%</td>
</tr>
<tr>
<td>Office and Administrative Support</td>
<td>-0.83%</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>-1.23%</td>
</tr>
<tr>
<td>Production Occupations</td>
<td>-1.90%</td>
</tr>
</tbody>
</table>

Source: Author's calculations using data from the US Bureau of Labor Statistics
Factoryless Goods Producers

• Many firms associated with manufacturing do not show up in official US manufacturing statistics (Bernard and Fort 2015)

• Example: Apple does none of the production for most products including iPhones, iPads and Macbooks. Apple closely controls all aspects of a product, but almost none of Apple's US establishments are in the manufacturing sector.

• The actual fall in manufacturing employment is much smaller than official statistics suggest once these firms are included.
Conclusions

• In an increasingly globalized world, US manufacturing need not become obsolete, even with continued offshoring growth.

• The nature of US manufacturing has been changing for years, but this does not represent a net setback for US workers.

• The key is to look forward, rather than backward, for opportunities.