Lecture 6b:
Offshoring – part 2

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4- Evidence on Offshoring

- Offshoring is controversial and is often the topic of intense political debate.

- Most economists tend to be in favor of offshoring

- Evidence on the effect of Offshoring?

+ Discussion on other effects of offshoring, e.g. transmission of shocks
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Offshoring and multinational activity

- “Offshoring” often associated with multinational activity but not necessarily
  - Multinational firms involve suppliers that are affiliated
  - One can also have outsourcing offshoring (offshoring with an unaffiliated supplier)

- Note: “Outsourcing” is not a synonym of “Offshoring”!
  “Outsourcing”: involve an independent supplier.
  “Offshoring”: involves a supplier abroad. One can have outsource within the US, and offshoring without outsourcing.
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Evidence on the US

The fear that offshoring and multinational activity threatens jobs in the United States is overstated:

• Expansion abroad by U.S. multinationals tends to support jobs based in the U.S.

• More investment and employment abroad are strongly associated with more investment and employment in American parent companies.

• Expanding abroad also allows firms to refine their scope of activities.
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Evidence on the US

Amiti and Wei (2014):

• Service offshoring increases labor productivity of US firms by 10%

• Offshoring of manufacturing inputs increases labor productivity of US firms by 5%

If you want to learn more: check articles and videos from Matt Slaughter

• FDI and offshoring
• China and patent protection
• Skill gap
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Evidence on **Denmark**: Workers

- Why Denmark? Allow us to track workers more precisely
- Recent study (Hummels et al 2013):
  - **Coverage:**
    - Entire population of firms
    - Entire population of workers
    - Links & tracks workers and firms: 99% match
  - **Info:**
    - Trade, wages, education, occupation, sex, etc.
    - Work status of entire population once a year
    - Detailed data on export and imports by firm
## 4- Evidence on Offshoring

### Characteristics of Trading Firms

<table>
<thead>
<tr>
<th>Variable</th>
<th>Effect of an increase in offshoring opportunities</th>
<th>Effect of an increase in Exports opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log(employment)</td>
<td>-0.196</td>
<td>0.346</td>
</tr>
<tr>
<td>Log(gross output)</td>
<td>0.151</td>
<td>0.486</td>
</tr>
<tr>
<td>Log(capital per worker)</td>
<td>0.099</td>
<td>0.282</td>
</tr>
<tr>
<td>Log(annual results)</td>
<td>0.012</td>
<td>0.831</td>
</tr>
<tr>
<td>Log(wage bill per worker)</td>
<td>0.127</td>
<td>0.119</td>
</tr>
<tr>
<td>Share of high-skilled workers</td>
<td>0.048</td>
<td>0.066</td>
</tr>
<tr>
<td>Share of low-skilled workers</td>
<td>-0.048</td>
<td>-0.066</td>
</tr>
</tbody>
</table>
Summary of study on Denmark

Offshoring induces:
• Decreases in employment
• Increases in output
• Increases in profitability
• Increases in relative employment of skilled workers

Effect on wages:
• Doubling offshoring leads to an 3-8% rise in skilled labor wage,
• 2-5% fall in unskilled labor wage
Other remarks and discussion topics:

- US as an offshoring destination
- Transmission of shocks
Conversely: The US is a provider of offshoring activities

- In manufacturing but especially in service industries
- Traditionally: offshoring is about trade in components
- Today: offshoring of services increasingly important.
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Trade Surplus in Business Services

![Graph showing trade surplus in business services for the United Kingdom, United States, and India from 1980 to 2008. The graph indicates an increasing trend for all three countries, with the United Kingdom and United States showing a trade surplus, while India shows a positive trend but starts with a deficit.](image-url)
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Global transmission of shocks through production chains

Examples:

• 2011 Earthquake/Tsunami in Japan
  o Affected car component supplies
  o Ipad2 components

• 2012 Floods in Thailand
  o Hard drive producers

• And other events such as: Supplier bankruptcy, etc.
Low VA/Export: shocks transmit through production chains
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“Mars One” Project:
Key challenge: supplying damaged parts and components!! (extreme trade costs bw Mars and Earth)

Same applies to SpaceX
Conclusion

This chapter on Offshoring:

• Definitions and examples

• Offshored tasks likely to be the least skill-intensive

• Offshoring can explain increase in wage inequality in both source and destination countries

• Benefits skilled workers, ambiguous for unskilled workers
  • Debate on the effect of offshoring but generally not as bad as people think

• Other implications: volatility of supply, processing zones, etc.