DOES THE NEO-MERCANTILIST PREOCCUPATION WITH PROTECTING MANUFACTURING MAKE SENSE?

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Presented at the ARTNeT Symposium “Towards a Return of Industrial Policy?”
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To be covered

- Protectionist argument
- Can we rationalize it with data?
  - Manufacturing share of GDP
  - Manufacturing share of the labor force
- Conclusions
The protectionist argument

- Manufacturing central to economy; other sectors serve manufacturing
- Services not tradable
- Capital goods and knowledge accumulation in manufacturing is tried and true recipe for growth
- Structural unemployment
- National security concerns
How do we define manufacturing?

• Defined by UN’s ISIC D
• Comprehensive data
  • From 1970’s
  • ~200 countries
• Caveat: overlap with services – many manufacturing companies either contract out to services or have “evolved” into services:
  • Neely: overlap in ~30% of firms studied – only 2% pure
  • Example: IBM
Does the size manufacturing base explain growth rate?

**Growth Rate explained by Manufacturing Share of GDP in 1970 (UN)**

\[ R^2 = 0.061 \]
Explanatory models tested

<table>
<thead>
<tr>
<th>Year</th>
<th>Model</th>
<th>Beta</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>$growth = \beta_1 \ln(gdp) + \beta_2 \text{government} + \beta_3 \text{manshare}$</td>
<td>0.011004</td>
<td>0.784263</td>
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<tr>
<td>1996</td>
<td>$growth = \beta_1 \ln(gdp) + \beta_2 \text{government} + \beta_3 \text{manshare} + \beta_4 \text{educ} + \beta_5 \text{popgrowth}$</td>
<td>-0.08362</td>
<td>0.215455</td>
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<tr>
<td>1998</td>
<td>$growth = \beta_1 \ln(gdp) + \beta_2 \text{government} + \beta_3 \text{manshare}$</td>
<td>0.157915</td>
<td>0.041066</td>
</tr>
<tr>
<td>1998</td>
<td>$growth = \beta_1 \ln(gdp) + \beta_2 \text{government} + \beta_3 \text{manshare} + \beta_4 \text{educ} + \beta_5 \text{popgrowth}$</td>
<td>0.134058</td>
<td>0.041156</td>
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<tr>
<td>Average</td>
<td>$growth = \beta_1 \ln(gdp) + \beta_2 \text{government} + \beta_3 \text{manshare}$</td>
<td>-0.1494</td>
<td>0.006218</td>
</tr>
<tr>
<td>Average</td>
<td>$growth = \beta_1 \ln(gdp) + \beta_2 \text{government} + \beta_3 \text{manshare} + \beta_4 \text{popgrowth}$</td>
<td>-0.1159</td>
<td>0.036251</td>
</tr>
</tbody>
</table>
For 10 developed countries, we have a positive relationship in the 1970s and a negative relationship now.
Governance

MVA explained by governance (1996)

\[ y = 0.018x + 0.150 \]

\[ R^2 = 0.057 \]
Conclusions

- Impact of a large manufacturing sector on an economy is uncertain, so policy intervention is unwarranted.
- A large portion of the labor force in manufacturing helped developed countries in the 1970’s, but we don’t see those same benefits to growth today.
- Crucial question: Do the lost jobs signal an ailing industry, or is a leaner manufacturing sector a sign of recent productivity gains? If the latter is indeed occurring, then politicians need not intervene.
- Improving governance may do more for the manufacturing industry than industrial policy.
Sources

• UN Statistical Division National Accounts Aggregates
• World Bank WDI and GDF
• US Bureau of Labor Statistics ILC
Revisiting the Jagdish Bhagwati-Ha-Joon Chang Debate hosted by the *Economist*: True or false? An economy cannot succeed without a big manufacturing base.
Commentary on the debate

1. Should we protect or subsidize manufacturing? No one says that explicitly.
2. Did Bhagwati lose the debate by much of a margin? Not by that much
3. Deindustrialization will lead to balance of trade deficits in the short run and lower standard of living in the long run. I am not convinced of the validity or importance of the former. The latter is true if deindustrialization is the result of bad policy.
4. Manufacturing is already subsidized, so we should not subsidize it further. (Bhagwati). If subsidies have no economic basis, then further subsidies encourage a sector already suffering from resource misallocation.
5. Services are hard to export so if we don’t have manufacturing we won’t be able to export anything to pay for our manufacturing imports. Lots of us are engaged in service exports. Teachers abroad, teachers at home, and book writers.
Commentary on the debate Cont’d

6. Slow growth in manufacturing at home relative to manufacturing abroad will cause manufacturing at home to be uncompetitive and lead to balance of payments problems. Won’t a flexible exchange rate restore competitiveness?

7. Dr. Krugman on What Every Undergraduate Needs to Know about International Trade seems to be responding directly to the argument above. Yes, comparative advantage still reigns. That is, we need to teach them that trade deficits are self-correcting and that the benefits of trade do not depend on a country having an absolute advantage over its rivals. If we can teach undergrads to wince when they hear someone talk about "competitiveness," we will have done our nation a great service.

8. A strong producer services industry requires a healthy manufacturing sector to practice on. The way to strengthen the manufacturing sector is to be sure that it is using state-of –the-art technology. That requires free trade and non-distorted markets. Thus again a hands off approach is required.

9. Could labor mobility and effective communication substitute for having a manufacturing sector at home? Yes. The need to have manufacturing at home in order to develop services would be more convincing in a world without skype, without email and without cheap international travel and without working friendships that span nations.
More commentary on the debate

10. Manufacturing is a leading sector so we should subsidize it. **Hard to define manufacturing.**
11. Manufacturing is heterogeneous. **We need to develop technology at home in order for our economy to be successful. Doesn’t make sense to me.**
12. Manufacturing is not created equally, it may have both high and low tech aspects. **Chang makes this point. Paul Krugman in a talk at the world bank sometime ago, made the same point. Silicon chips have their low tech aspects, so protecting industry is not as smart as targeting externality in a predictable way.**
13. There are plenty of things the government can do to improve the supply side of the economy, but trying to alter the balance between manufacturing and services is not one of them. (Geoffrey Owen). **Bravo**
14. Conclusion: Linkages make the cost of mucking up markets more substantial than we previously thought. **The development of a new way of doing things depends on a raft of availabilities of talents and materials and expertise. The gain from arbitraging an idea from one sphere to another may be substantial and larger than most of us think, and larger than the surpluses that we calculate from standard models. Think of Paul Romer’s argument that small import restrictitons may prevent whole industries from setting up**