Firms and Trade

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Firms and Trade

- Share of US firms exporting relatively small at 18 percent, with exporting firms being larger and more productive (Bernard et al., 2007)

- Key hypothesis proposed to explain higher productivity of exporters:
  - exporting requires extra resources in terms of transportation, distribution and marketing costs, workers with foreign managerial skills, and modification of products for export
  - only more productive firms can bear such costs
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- Firms draw labor productivity coefficient $a$

- Firm has to make choice about entering domestic market ($D$), exporting ($X$), or setting up foreign production ($I$), given fixed costs $f$ and profits $\pi$

- Given $a$, and $f_D < f_X < f_I$, firms have four choices:

  (i) Exit domestic market: $\pi_D < f_D$

  (ii) Serve domestic market only: $f_D < \pi_D < (f_D + f_X)$

  (iii) Export: $(f_D + f_X) < \pi_X < (f_D + f_I)$

  (iv) Set up foreign production: $(f_D + f_I) < \pi_I$
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- Assume domestic ($i$) and foreign market ($j$), are similar in terms of demand and labor endowment.
- In Figure 1, for $i$ productivity $a$ measured along horizontal axis, profits $\pi$ measured on vertical axis.
- Domestic tariff results in profit function $\pi^D_i$ being steeper, i.e., firms producing only for domestic market get border protection.
- Also, foreign tariff results in slope of export profit function $\pi^{ij}_X$ being shallower.
- Sorting pattern of firms consistent with evidence.
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Figure 1
Firms and Trade Liberalization

- In Figure 2, with cuts in domestic and foreign tariffs:
  - Reduces profits of non-exporting firms, and productivity cutoff rises to $a_D'$
  - Raises profits of exporting firms, and lowers productivity cutoff to $a_X'$
- Some firms supplying only home market become exporters, and existing exporters increase exports
- Induces low productivity firms to exit market, resulting in higher average industry productivity due to turnover of firms from domestic to export markets
Firms and Trade Liberalization

Figure 2