

# Trade and the Skill Premium

## Comments on Harrigan and Reshef

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- Very nice paper
- Part of a literature seeking to understand when liberalization may raise the skill premium in both/all countries
- Rooted in Data
- Thought-provoking model
- Go read it now!

# The Proposition 1 World and Conditional Responses to Liberalization

A key element of the HR world is that competitiveness may be indexed by:

$$\phi \equiv \frac{\varphi}{s^\alpha w^{1-\alpha}}$$

In autarky,  $\phi$  indexes firm level variables, including revenue.

Consider two firms with the same initial  $\phi$ , one with high  $(\varphi, \alpha)$  and the other with low  $(\varphi, \alpha)$ .

Now consider liberalization, as per Proposition 1.

Firms with the same initial  $\phi$  will not have the same terminal  $\phi$ , since the change in the skill premium does not affect them equally (due to differences in  $\alpha$ ).

- Conditional on initial sales (or any other firm-level variable apart from skill intensity), if liberalization raises the skill premium, then the skill intensive firm will be less likely to export and will have lower domestic and foreign sales under trade.

# Conjecture 2?

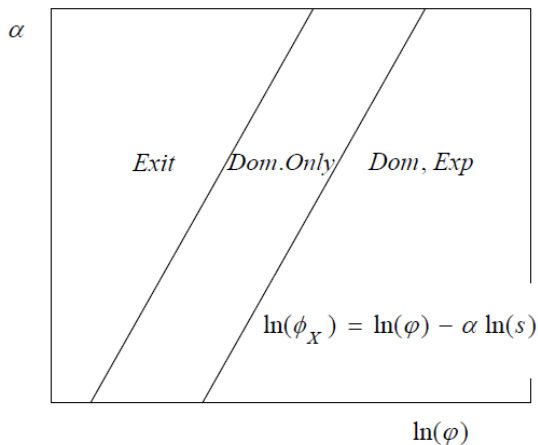
The setting for Conjecture 2 is the case with factor endowment differences. It reads:

**Conjecture 2:** If productivity  $\varphi$  and  $\alpha$  are strongly positively correlated, then opening to costly trade leads to a rise in the skill premium in both countries.

I may misunderstand, but even if  $\varphi$  and  $\alpha$  are perfectly positively correlated, the conjecture could fail if the dispersion of  $\varphi$  is modest. Cost is then driven primarily by firms' factor intensities, not their TFP. In that case (and in spite of the perfect positive correlation of  $\varphi$  and  $\alpha$ ), high skill firms are also high cost firms and should shrink relative to low skill firms under trade

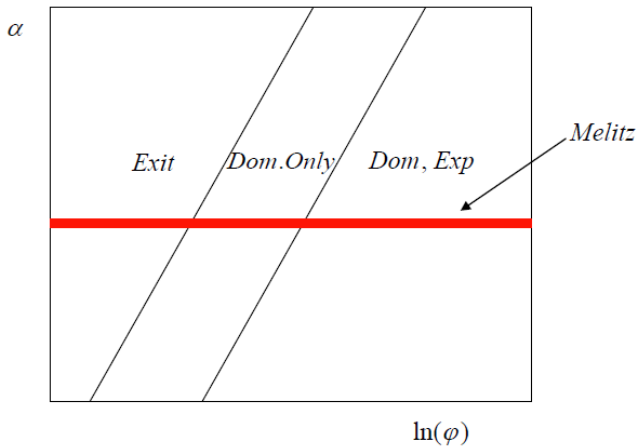
I suspect that tends to lower skill premia in spite of a perfect positive correlation

# Figure 1 From HR



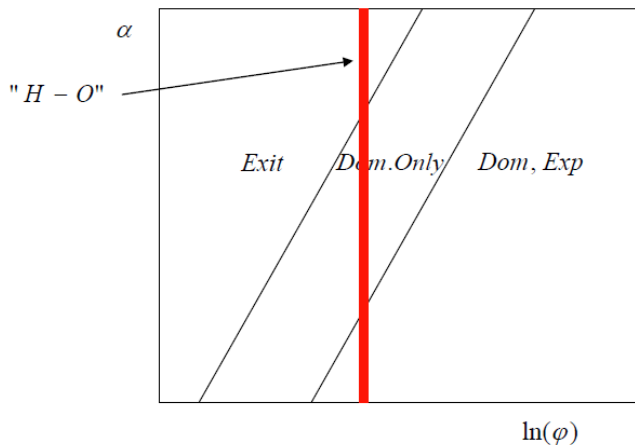
# A Melitz Version

Variation in  $\varphi$  only



# An "H-O" Version

Variation in  $\alpha$  only



# Role of Consumption

- Traditional H-O models leave within-industry "varieties" as perfect substitutes
- Newer variants just have higher substitution within industry (analytically, goods of same factor intensity) than between
- Harrigan-Reshef allow common elasticity of substitution among all varieties irrespective of input ratio
- Analytically very useful as it sweeps out any bias in protection that adds to supply side influences on factor prices
- But has consequence that no goods compete head-to-head, selective border measures can influence relative factor prices only through aggregates
- Seems pretty strong



# Question List

- Are two factors enough (cf. Acemoglu, Autor survey)
  - Hollowing out of the middle class
  - Do we believe in such an integrated labor market?
- Firms, but no firm heterogeneity in wages
  - Cf. Helpman, Itskhoki, Redding; Egger, Kreickemeier; Davis and Harrigan; Amiti and Davis, etc.
- Are two types of countries enough?
  - $US \neq Chile \neq Indonesia$
  - Cf. Amiti and Cameron
- Should we pay attention to fixed costs as more than a nuisance?
  - In core model, fixed costs are low skill activities for productive firms, high skill activities for unproductive firms