Trade, Labor Markets and the Role of Human Capital

Pravin Krishna, Johns Hopkins University
Mine Senses, Johns Hopkins University
Guru Sethupathy, Johns Hopkins University

Discussion by: Teresa Fort, University of Maryland

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Overview: Specific human capital and trade

- Specific human capital is related to wages
  - Industry, occupation, and task tenure measures
  - Task tenure portable across occupations and industries

- New welfare implications of trade
  - Workers lose specific human capital from displacements
  - Trade-related displacements may be more costly

- New focus on task trade
  - Important to understand task portability
  - Factor in within group reallocations
Comment 1: Worker selection and sorting

- Complicates causal interpretation of tenure on wages
  - Assortative matching of workers into more similar tasks
  - Tenure may reflect time-varying unobservables
- Trade could provide exogenous shock
  - Potential to use for causal interpretation
  - Need to ensure task type not related to tenure (eg, manual)
  - Requires convincing measure of trade-related displacement
Comment 2: Identifying trade-related displacements

- Paper uses industry lagged import penetration with industry FEIs
  - Cannot compare high vs. low import penetration industries
  - Penetration in year prior to displacement relative to industry mean
  - Different de-meaning for industry switchers
  - Does not necessarily capture changes in import penetration

- Consider alternative specifications
  - Without industry FEIs
  - Changes in import penetration

- Consider export intensity
  - Expansion of exports can also lead to shuffling/displacement
  - Do workers that switch into export-intensive industries face similar costs?
Comment 3: How do we think about unemployment?

- Additional impact of trade on workers?
- How does unemployment affect task tenure measure?
  - Is unemployment better than very distant tasks?
  - Does experience decay with unemployment?
  - Do workers internalize task distance implications in employment choices?
Additional comments 1: German labor market?

- Context in order to assess applicability to other countries
- What is the outside option for workers?
- Do firms face firing constraints?
  - That vary across industries?
  - That depend on trade status?
- Does Germany have job re-training programs?
- Search mobility
Economic interpretation of coefficients
- Nice to evaluate interactions for different industries
- Only meaningful without industry fixed effects

Displacements that occur when import penetration above mean
- Positive if no industry or occupation switch
- Positive or zero if no occupation switch
- Not totally consistent with your story
Additional comments 3: Why limit to “involuntary” displacements?

- Define as separation followed by 90+ days of unemployment
  - Measurement issues possible
  - Smaller sample
  - How to account for unemployed period?
- Consider short separations
  - Look at role of industry import and export intensity
  - Change in relative prices of tasks induces sorting
  - Use trade liberalization, etc as instrument for switching
Additional comments 4

- Time frame of sample in regressions?
- High wage censoring
- Analysis without females
  - Time trends in increased participation
  - Maternity leave
- Separate analysis for low and high skill workers
  - Gathmann and Schonberg suggest important differences (in slopes)
  - Trade effects may be stronger for the low skill workers
Estimate:

- Relationship between wages and tenure measures
  \[ w_{it} = \alpha_1 X_{it} + \alpha_2 IndTen_{it} + \alpha_3 FirmTen_{it} + \alpha_4 OccTen_{it} + \alpha_5 TaskTen_{it} + FE + \varepsilon_{it} \]

- Change in real wages following involuntary separation
  \[ \Delta w_{it} = \alpha_1 X_{it-1} + \alpha_2 IndTen_{it-1} + \alpha_3 FirmTen_{it-1} + \alpha_4 OccTen_{it-1} + \alpha_5 TaskTen_{it-1} + \alpha_6 ImpPen_{it-1} + FE + \varepsilon_{it} \]
  - Add interaction between import penetration and:
    - industry switch
    - occupation switch

- Change in tenure following an involuntary separation
  \[ \Delta Ten_{it} = \alpha_1 X_{it} + \alpha_2 IndTen_{it-1} + \alpha_3 FirmTen_{it-1} + \alpha_4 OccTen_{it-1} + \alpha_5 TaskTen_{it-1} + \alpha_6 ImpPen_{it-1} + FE + \varepsilon_{it} \]
  - Run for Industry, Occupation, and Task tenure