Trade, Labor Markets and the Role of Human Capital

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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 FEs
  - 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 FEs
  - 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

Additional comments 2

- 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

$$w_{it} = \alpha_1 X_{it} + \alpha_2 IndTen_{it} + \alpha_3 FirmTen_{it} + \alpha_4 OccupTen_{it} + \alpha_5 TaskTen_{it} + FE + \varepsilon_{it}$$

- 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