Global value chains and structural change

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Our micro data project proposals

1) The global value chains and labor market effects

2) Costs of globalization at individual level

3) Geographical mobility strategies following job displacement
Decomposing global value chains within Swedish multinationals

• Sweden is especially well-suited for analyzing issues that this subproject intends to study

• MNEs play a prominent role in the Swedish business sector

• The data on employment in MNEs on occupations and level of education is very good in Sweden
### Value added and employment in Swedish MNEs and foreign-owned firms 2008

<table>
<thead>
<tr>
<th>Sector</th>
<th>Swedish MNEs</th>
<th>Foreign-owned</th>
<th>All MNEs</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Value added</td>
<td>Value added</td>
<td>Value added</td>
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<tr>
<td></td>
<td>Employment</td>
<td>Employment</td>
<td>Employment</td>
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<tr>
<td>Manufacturing</td>
<td>146 (29.2)</td>
<td>193 (38.7)</td>
<td>499 (67.9)</td>
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<tr>
<td></td>
<td>177 (27.5)</td>
<td>222 (34.4)</td>
<td>399 (61.9)</td>
</tr>
<tr>
<td>Service</td>
<td>169 (14.6)</td>
<td>269 (23.2)</td>
<td>438 (37.8)</td>
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<td></td>
<td>197 (12.4)</td>
<td>333 (20.9)</td>
<td>530 (33.3)</td>
</tr>
<tr>
<td>Business sector</td>
<td>341 (18.4)</td>
<td>476 (25.7)</td>
<td>818 (44.1)</td>
</tr>
<tr>
<td></td>
<td>390 (15.5)</td>
<td>581 (23.1)</td>
<td>971 (38.6)</td>
</tr>
</tbody>
</table>

Notes: Value added in billion SEK and employment in thousands. Share of the sector in percent within parentheses.
Decomposing global value chains within Swedish multinationals

- Study the relationship between changes in employment in affiliates abroad and level of education and composition of occupations/tasks in the parents in Sweden

- Previous studies: Head and Ries (2002), Hansson (2005), and Becker, Ekholm and Muendler (2009)

- Estimate a relative demand function with wage bill share of skilled labor (non-routine tasks) as dependent variable and adding shares of employment in affiliates in high- and low income countries as regressors
Share of employees in manufacturing Swedish MNEs working in parents in Sweden and in affiliates abroad 1979-2008
The nature of performed tasks may be more relevant for a job’s propensity to be offshored than the skill level of the worker.

Hypothesize that non-routine tasks are less offshoreable.

We are able to calculate the share of non-routine tasks in MNE parents by combining occupational information for the employees in the MNE parents with measures of importance of tasks in different occupations.
Some extensions

- Impact of import of intermediate goods and service to parents in Sweden

- Examine the effects on productivity in MNE parents instead of on relative labor demand
The Individual- and Firm-level Data Base (IFDB)

- A linked employer-employee data base that contains all individuals, establishments, and firms in the Swedish economy
- Covers the period 1986 to 2009
- IFDB contains information from two specific registers on multinational enterprises for which Growth Analysis is the official responsible statistical authority