Need for Speed?
Exploring the Relative Importance of Patents and Utility Models among German Firms

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Product life cycle

Literature Review and Research Question
- Several patent systems are in fact “two-tiered”
  - Offer patent AND utility model protection (see Janis 1999, Suthersanen 2006)
  - UM systems are not internationally regulated i.e. countries may design them as they see fit
- Germany introduced UM system in 1891 to fill the gap between patents and design rights
- The justification of the German utility model institution has evolved
  - Currently: “Fast IP right” (DPMA, Radauer et al. 2015)
- UM systems offer faster but shorter protection than patents at same inventive step requirements
- What determines a firm’s decision to opt for patents/UMs (or both)?

Results and Limitations
We find significant correlations for:
- Larger firms are active users of UMs and patents
- UMs are used by firms with short life cycles of products and services

Descriptive Statistics

<table>
<thead>
<tr>
<th>Model</th>
<th>Bivariate probit</th>
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<tbody>
<tr>
<td>Dependent variable</td>
<td>Patent</td>
</tr>
<tr>
<td>D(Short life cycle)</td>
<td>-0.019</td>
</tr>
<tr>
<td></td>
<td>(0.081)</td>
</tr>
<tr>
<td>log(Employees)</td>
<td>0.223***</td>
</tr>
<tr>
<td></td>
<td>(0.026)</td>
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<tr>
<td>log(R&amp;D per employee)</td>
<td>0.111***</td>
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<tr>
<td></td>
<td>(0.012)</td>
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<tr>
<td>log(Export intensity)</td>
<td>1.545***</td>
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<tr>
<td></td>
<td>(0.207)</td>
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</tbody>
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Data
- Community Innovation Survey (CIS)
  → Wave 2005 (Germany)
- 4,552 firms
- Dependent variables
  - Use of patents and/or UMs
  - Stated importance for patents and UMs
- Independent variables
  - Firm size, short life cycle proxy
- Controls
  - R&D per employee, export intensity, member of group, technology class

If products with short life cycles are patent-protected for 20 years, knowledge spillovers and technological progress might be hindered.