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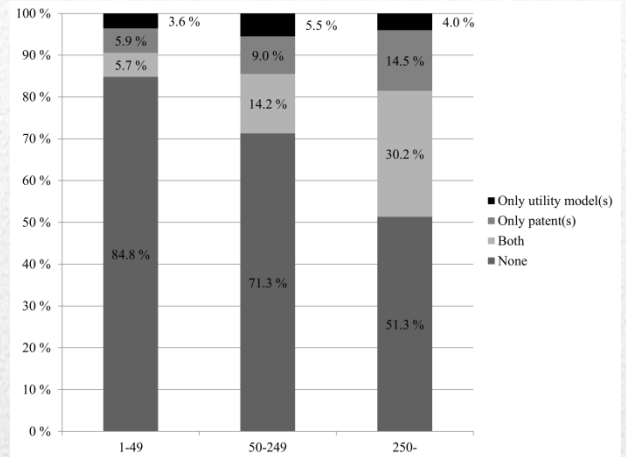
Product life cycle



or



Descriptive Statistics



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
 - Patent Act 1990: "A protection method for SMEs" (Königer 2009)
 - Currently: "**Fast IP right**" (DPMA, Radauer et al. 2015)
- UMs 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)?

Model	Bivariate probit	
	Patent	UM
D(Short life cycle)	-0.019 (0.081)	0.186** (0.078)
log(Employees)	0.223*** (0.026)	0.188*** (0.024)
log(R&D per employee)	0.111*** (0.012)	0.053*** (0.010)
log(Export intensity)	1.545*** (0.207)	0.748*** (0.211)

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 ✓

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.