

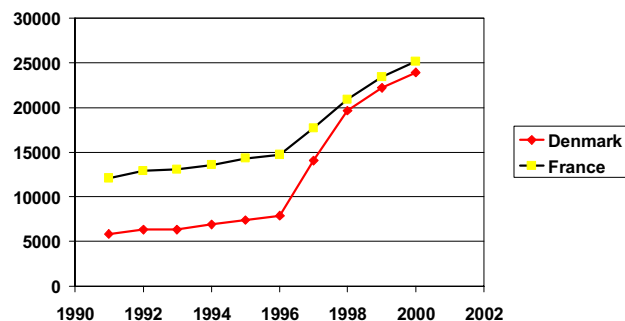
International Patenting and the European Patent Office: A Quantitative Assessment

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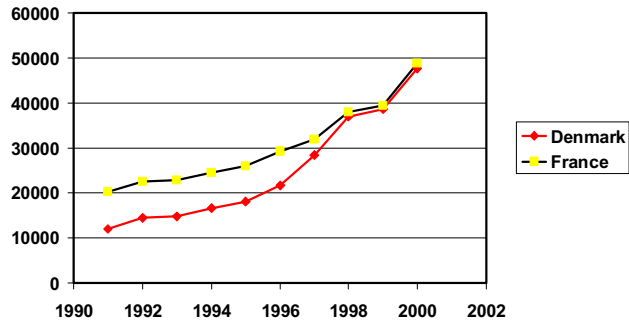
Internationalization of Patenting

- World Intellectual Property Organization (WIPO)
 - Patent Cooperation Treaty (PCT)
- European Patent Office (EPO)
- Surge in cross-border patenting

Patenting by German Applicants



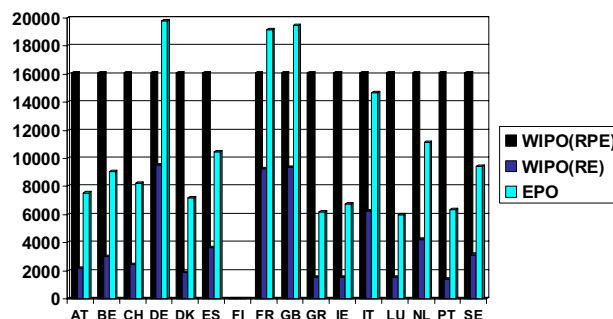
Patenting by US Applicants



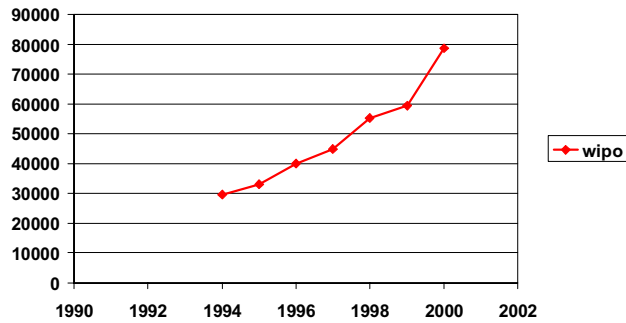
“A Statistical Mirage”?!

- Two Data Founts
 - National Patent Offices → WIPO (patent application statistics)
 - Distinguishes applications via:
 - National direct (N)
 - PCT (P)
 - EPO (RE)
 - PCT to EPO (RPE)
 - OECD used N+RE+RPE
 - EPO (publications) by date of application

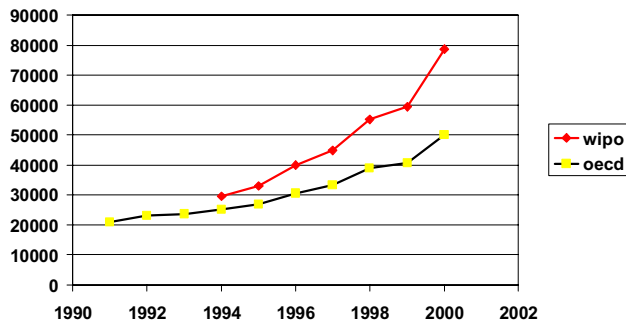
US Patenting in Europe, 1995



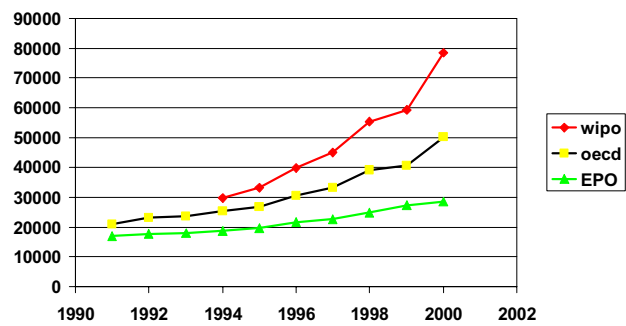
US Patent Applications in Germany



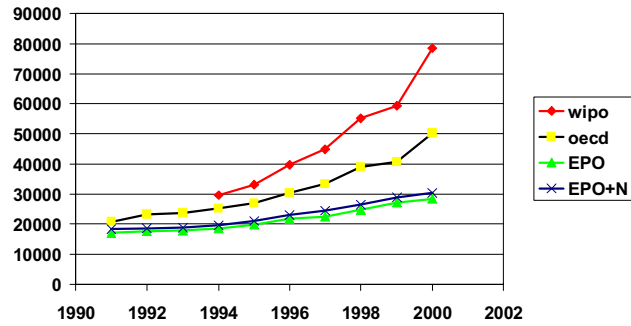
US Patent Applications in Germany



US Patent Applications in Germany

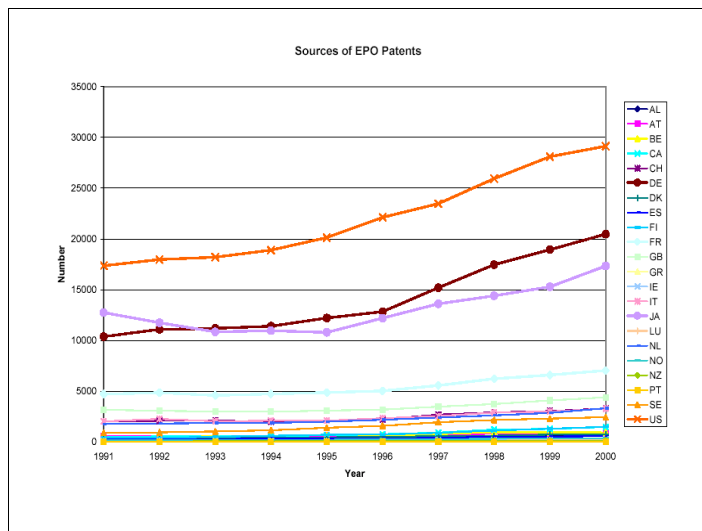


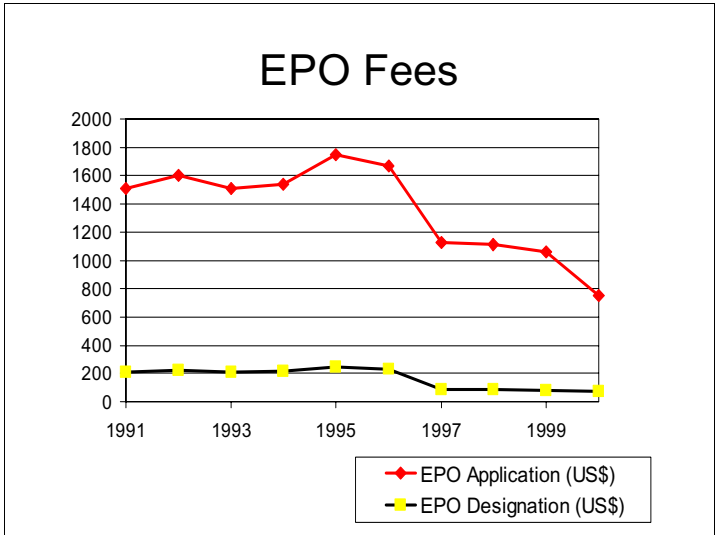
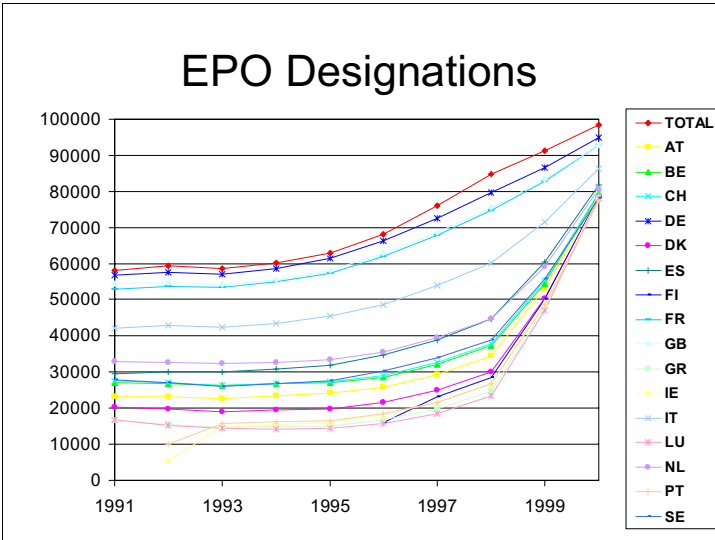
US Patent Applications in Germany



Seeing Past the Mirage

- Our preferred measure is EPO+N
 - (But N is small)
- We now look at the EPO data
- Still signs of growth and globalization
- Has there been an explosion of innovation?

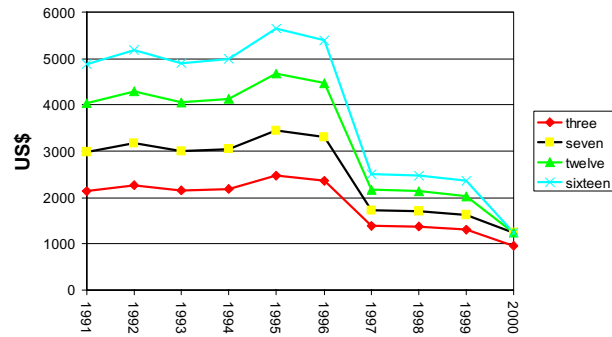




Moreover, after June 30, 1999:

All Designations after the first 7 are Free!!!

Cost: 3, 7, 12, and 15 Designations



Modeling the Patenting Decision

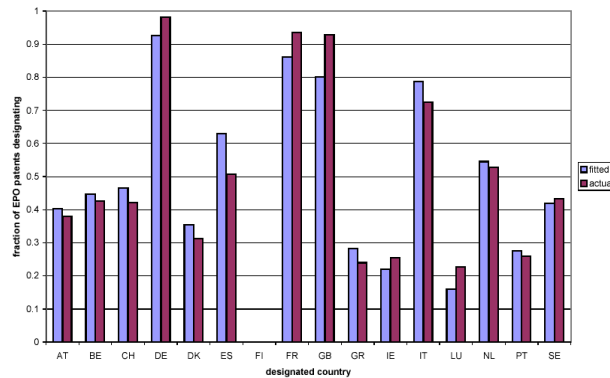
Routes to protect an invention:

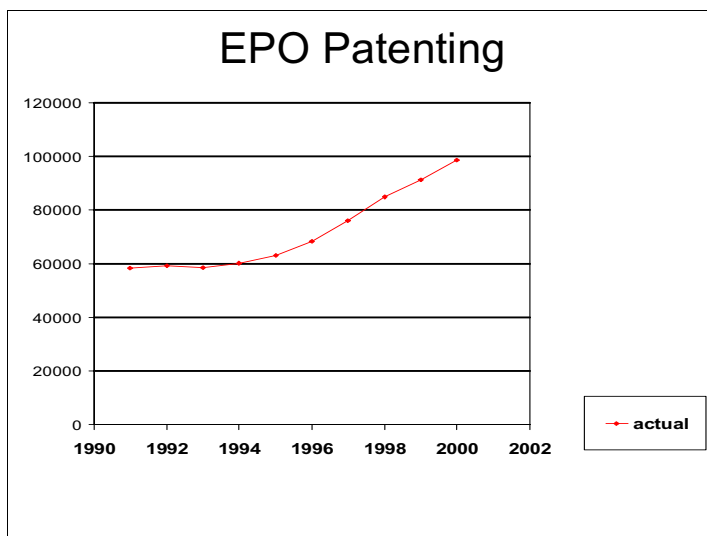
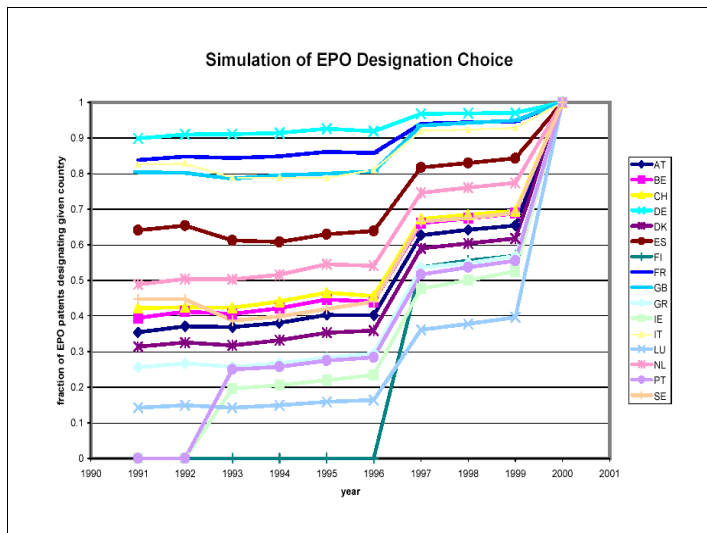
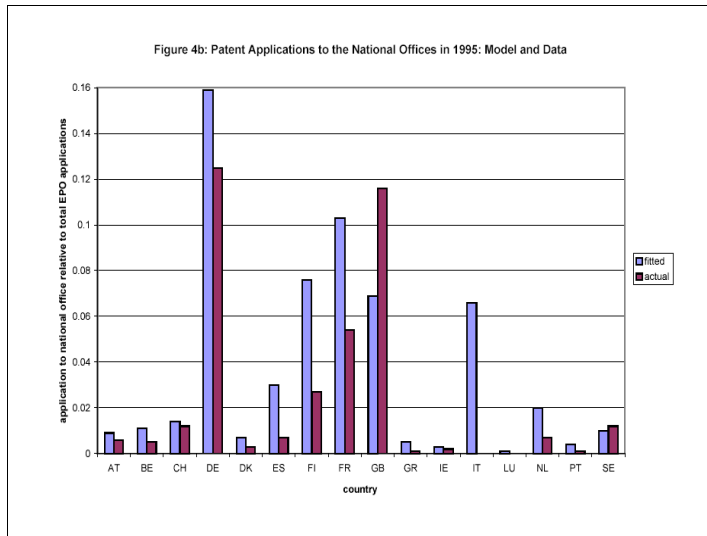
1. Direct to national patent offices (pay national fees)
2. EPO and designate a set of countries (Fixed fee + designation fees)

Cost: Fee data

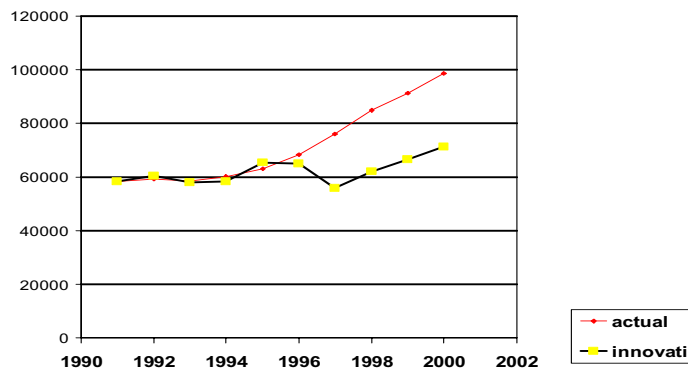
Benefit: Values of patent protection in EPO members, inferred from GDP's and patent data for 1995.

Figure 4a: EPO Designations in 1995: Model and Data





EPO and Implied Innovation



Conclusion: The Three Mirages

- Double counting of PCT applications
- Over counting of PCT/EPO applications
- EPO patenting growth due to plummeting fees

- Does EPO patenting suggest a surge of innovation?
 - No, more like 2% growth per year