

## *The impact of joining the regional European Patent Convention System*

### **Bronwyn Hall**

Professor of the Graduate School, University of California at Berkeley  
Professor of Technology and the Economy at the University of Maastricht  
bhhall@econ.berkeley.edu

### **Christian Helmers**

Assistant Professor, Department of Management  
Universidad Carlos III Madrid and SERC LSE  
christian.helmerts@uc3m.es

We analyze a natural experiment in patent cost and coverage: the impact of accession to the regional patent system established by the European Patent Convention (EPC) on the 14 countries that acceded between 2000 and 2008. The accession of these countries was largely driven by the enlargement of Europe and can be viewed as exogenous to the patent system itself, and can be expected to have lowered the cost of obtaining coverage in multiple countries. We look at the evolution in patenting behavior by domestic and foreign applicants in these countries, most of which are mid-level developing countries, at the national patent offices, the European Patent Office (EPO) and the World Intellectual Property Organization (WIPO).

Our findings suggest a strong and immediate change in patent filing behavior among foreigners seeking patent protection in the accession states, substituting domestic patents with EPO patents, mostly in chemicals and pharmaceuticals. At the same time, there is no discernible reaction among domestic entities in terms of domestic filings. We also find some indicative evidence at the firm-level that manufacturing companies located in accession states increased their propensity to file patents with the EPO post-accession. We are currently exploring the ownership structure of these companies in more detail, to ascertain whether they are largely branches of multinationals or indigenous firms. The results will add to our understanding of the impact of patenting systems on firms in developing countries.