The Market Value of Patents and R&D: Evidence From European Firms

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This paper provides novel empirical evidence on the private value of patents and R&D. We analyze an unbalanced sample of firms from five EU countries - France, Germany, Switzerland, Sweden and the UK in the period 1985-2005. We explore the relationship between firm's stock market value and patents, accounting for the 'quality' of EPO patents. We find that Tobin's q is positively and significantly associated with R&D and patent stocks. In contrast to results for the U.S., forward citations do not add information beyond that in patents. However, the composite quality indicator based on backward citations, forward citations and the number of technical fields covered by the patent is informative for value. Software patents account for a rising share of total patents in the EPO. Moreover, some scholars of innovation and intellectual property rights argue that software and business methods patents on average are of poor quality and that these patents are applied for merely to build portfolios rather than for protection of real inventions. We therefore tested for the impact of software patents on the market value of the firm and did not find any significant effect, in contrast to results for the United States. However, in Europe, such patents are highly concentrated, with 90 per cent of the software patents in our sample held by just 15 of the firms.

Keywords: market valuation, intangible assets, patents, software

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