

The Sources of Knowledge and the Value of Academic Patents
Elefthérios SAPSALIS and Bruno van POTTELSBERGHE DE LA POTTERIE

Patents have been used to measure innovation performances for many years. They have been used as indicator of R&D output, as vector of knowledge spillovers, as a tool to assess the direction or strategy of research and as macroeconomic indicators of technological performances.¹ However the simple count of patents provides a highly biased view of the innovation reality, because their value distribution is highly skewed, as illustrated by Griliches (1990) and Scherer and Harhoff (2000) for instance. On average it is said that only one to three patents out of one hundred yield significant financial returns. This skewed distribution of patent value is at the origin of a small but burgeoning stream of economic research.

The main objective of this field of research is to identify the determinants of patent value. In this respect, forward patent citations (the number of citations a patent receives from more recent patents) has been identified as a major determinant of patent value. The other most important determinants are the family size (geographical scope for protection) and backward patent citations (the number of citations to previous patents). Several other potential determinants have been put forward recently.

The objective of this paper is to contribute to this literature on patent value. The contribution is twofold. It first aims at suggesting new determinants of patent value. These new indicators consist in improving the existing indicators (non patent citations, backward patent citations, co-assignees and family size) by formally identifying the related institutional sources of knowledge. Second, it aims at testing the validity of the traditional and new determinants of patent value with academic patents.