

Added Value

Do patents add value to a company? In September 2007, Bronwyn Hall, Gird Thoma, and Salvatore Torrisi published an article titled [*The Market Value of Patents and R&D: Evidence from European Firms*](#), which measures the impact of patents on market valuation.

The study looked at 1,060 firms from 1991 through 2002. The sample consisted of publically traded companies that reported consolidated R&D spending through the period and had not had major changes in equity structure. The companies selected were middle to large size companies from 15 different countries. The companies do business in 35 different patent classifications with median annual sales of 306 million Euros. Approximately half the companies held at least one patent issued by either the European Patent Office (EPO) or the US Patent and Trademark Office (USPTO).

Using the information from these firms the authors built a statistical model that estimated the ratio of market value to replacement value (net book value less intangibles) for each company. Controlling for size, country and industry variations the study estimated the impact of cumulative R&D spending and patent ownership on the market value ratio.

From this model, the authors were able to conclude that compared to companies without patents:

There was no significant difference in the expected market value ratio for companies that held patents that were only issued by the EPO.

There was a 10% increase in the expected market value ratio for companies that held patents that were only issued by the USPTO.

There was a 20% to 30% increase in the expected market value ratio for companies that held patents where the same invention was protected by patents issued by both the EPO and the USPTO.

For companies with the double patent protection, an additional Euro of R&D spending would yield an extra 0.035 Euros of market value compared to companies with no patent protection. This works out to be about a 17% premium.

While the study measured the ratio of market value to replacement value, the results apply directly to market value since replacement value can be considered fixed. The study was also reasonably robust with cumulative R&D spending and patent ownership being able to explain about 27% of the total market value variations. That is not bad for a valuation model that doesn't take profitability into account.

As with all studies of this type, the results have to be taken with caution. First, no conclusion can be reached about causality. One cannot conclude that owning patents will improve the value of R&D efforts. It is just as likely, and common sense might say more likely, that companies with more valuable R&D organizations are more likely to apply for patents. Second, while the companies in the study represent a broad spectrum of organizations, they were not randomly

selected because one of the primary selection criteria was reporting R&D expenditures in the financial statements.

But this does study shed some light on where the value of patents might lie.

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