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Entry and innovation: an analysis of the fabless semiconductor business

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Notes

1. See the reviews contained in Santarelli and Vivarelli ([2007](#)) and Helfat and Lieberman ([2002](#)).
2. The majority of firms (92.4%) in our sample are located in the USA or Canada,

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electrical and electronic engineering, chemical engineering, and electrical engineering and computer science. Hard science includes: physics, mathematics and chemistry. Business includes: economics, administration and management.

7. Many theories of spin-off formation exist. See Klepper and Thompson ([2006](#)) for a review and a model.
8. The distinction between technology and application was made on the basis of the Standard International Classification (SIC) code of the parent company. In particular, we consider 'semiconductor companies' those belonging to the electronic components and accessories group (SIC 367). 'Application companies' are those belonging to industry group 366 (communications

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irrelevant for innovating. Indeed, around 50% of the firms whose founder had a business degree had at least a co-founder with a technical degree to contribute to the pool of required relevant knowledge.

13. Similar results were obtained by using the stock of patents granted to the founder up to the year in which the spin-off was founded.
14. Similar results were obtained by using the number of firms founded up to the year in which the spin-off was founded.
15. Further checks on model 4 were carried out by adding a dummy for foreign firms. Our sample includes 21 firms (or 15.78%) that are not US based. It may be that the presence of foreign firms introduces a bias in the

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patents were collected. Between 1984 and 2005 a total of 18,628 patents have been granted to the firms. Results from a series of pooled negative binomial estimations, controlling for exposure time, suggest that, with some limitations, the same determinants seem to account also for the firm total patent output. We do not report these results here. They are available from the authors upon request.

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Appendix

See Table [9](#).

Table 9 Correlation matrix

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