

Large firms

There has long been a debate around the extent to which scale influences the innovative behavior of firms. One of the first and most influential contributions came from Schumpeter, who hypothesized that large firms innovate more because they have the resources and financial freedom needed to invest in innovation, and because their larger market power provides them with a higher capacity to reap the returns from innovation. In contrast, the propensity of small firms to innovate is also lower, since they lack financial resources and face larger obstacles for accessing external financial resources. Differently from small firms, large businesses can also take advantage of economies of scale and scope in R&D, and spread risks over a portfolio of projects. Moreover, the conventional wisdom that small is better for innovation has been challenged by authors like Mandel (2011), who argues that scale is becoming increasingly important to innovate in a globalized world. Also, large firms can more easily attract highly skilled specialists, and support the establishment of large R&D laboratories. In addition, large firms are able to defend their patents more efficiently and can employ specialists to access government funding schemes.

But there are also reasons why large firms might be less innovative. As firms grow larger, they may lose the entrepreneurial dynamism, internal flexibility and responsiveness to changing circumstances that stand at the core of innovation. An increase in bureaucracy, a larger degree of risk aversion, and lack of appropriate incentives prevalent in large firms can make them less innovative than smaller, more agile companies. When firms become larger they may develop more layers of corporate hierarchy; their decision-making processes become longer, leading to slower reaction times; decisions are often controlled by risk-averse accountants; and managers become bureaucrats that lack the necessary dynamism to innovate. In such contexts, it will be difficult to generate radically new ideas and turn them into business opportunities.

To address the pitfalls of size, management scholars have advocated models whereby large firms would imitate the action-oriented model of entrepreneurial start-ups, encouraging individual initiative through greater autonomy and incentives, reducing cumbersome bureaucracy, breaking up the firm into small autonomous pieces, allowing interactive learning through customer-interface teams, etc. (Sharma, 1999).

The evidence suggests that large firms can be innovators. In fact several of the global innovation champions are huge firms like Apple, Google or Facebook. This is in part due to adopting innovative management structures but also because of the following: These large firms have learned to interact with SMEs and start-ups, and to nurture innovative ecosystems around their own interests. Moreover, many of the most pressing global challenges for innovators involve vast systems, such as healthcare, or giant problems, such as global warming, and it is easy to argue that scale turns critical to be able to address such major challenges.

Overall, the empirical evidence around the impact of firm size on innovation shows mixed results (see Kuemmerle, 2006 for a review). Some studies have found that controlling for other factors size does not influence the intensity of firms' innovation. Other studies suggest large firms devote a higher share of their total R&D budget to basic R&D than smaller firms, but that large firms rarely carry out risky innovation projects. Yet other studies have found a U-shaped relationship, such that the propensity to innovate increases as size increases, but only up to a point after which innovation slows as firms become larger.

References:

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