

Policy Briefing

Doing innovation. Creating value from innovation: How does IP protection help? A UK analysis with a focus on smaller firms

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Innovation – the market introduction of new products, services or processes – lies at the centre of most firms’ value creation strategies. Using matched data on IP protection holding for the population of UK firms and innovation survey evidence from the UK Innovation Survey, we examine how formal IP protection mechanisms – patents, registered designs and trade marks – contribute to innovation individually and in combination. We focus particularly on small firms and consider how IP protection contributes both to the propensity to innovate and to firms’ ability to capture value from their innovation. Our analysis suggests that registered designs combined with patents promote the propensity for product or service innovation. To some extent, trade marks combined with registered designs also boost the returns to innovation by protecting a firm’s market-oriented capabilities. Both effects prove rather similar for small firms as they are to the general population of businesses. The results suggest that registered designs play a critical role in ‘unlocking’ the potential for firms’ IP to contribute to innovation and subsequent value creation.

Key findings

Using population data on registered IP provided by the Intellectual Property Office matched with survey data on firms’ innovation activity taken from the UK Innovation Survey, we explore the impact of formal IP protection instruments on firstly, a firm’s propensity to innovate, and secondly, a firm’s ability to create value from its innovation. In terms of firms’ propensity to innovate, our analysis suggests that:

- Across all firms and in small firms, a firm’s stock of registered designs is positively related to the propensity for new-to-the-market product/service innovation.
- Patents and trade marks have no statistically robust direct effect on the propensity for new-to-the-market product/service innovation in small firms.
- Patents enhance the impact of registered designs on the propensity to undertake new-to-the-market product/service innovation in small firms. There is no similar indirect effect from trade marks.

Authors



Joanne Turner

Enterprise Research Centre
and Warwick Business School
Joanne.E.Turner@wbs.ac.uk



Stephen Roper

Enterprise Research Centre
and Warwick Business School
Stephen.roper@wbs.ac.uk

In terms of firms' ability to create value from innovation, we find:

- Across all firms and in small firms, a firm's stock of trade marks is negatively related to the proportion of its turnover coming from innovation. This is perhaps due to established products benefitting more than innovative products from firms' trade marks.
- Patents have no significant, positive direct or indirect effect on the proportion of sales from new-to-the-market innovation.
- Registered designs have no significant direct effect on the proportion of sales from innovation. However, across all firms, registered designs have significant indirect positive benefits on trade marks in the case of new-to-the-market innovation.

Understanding how IP protection enables innovation

Through time, individual firms build up stocks of knowledge and understanding relating to their markets and the technologies and know-how related to their products and services. This knowledge can be protected by formal IP methods (trade marks, patents, registered designs) or more strategic approaches (trade secrets, NDAs). Here, we construct IP histories of all UK firms which have formal IP holdings – around 110k firms – and, controlling for the effects of strategic approaches to IP protection, consider the implications for innovation outcomes.

We explore two mechanisms through which IP may influence innovation outcomes. First, having knowledge protected by formal IP methods may increase firms' ability to introduce new products or services – a propensity to innovate effect. Second, after firms have innovated, formal IP protection may enable firms to maximise the value they derive from their innovation, e.g., by protecting them from imitation. Both mechanisms may increase the value firms derive from investments in knowledge creation through R&D, design etc.

Implications for policy

Our analysis suggests the complex interplay between firms' knowledge stocks, IP and innovation. Aspects of IP play a role in both increasing the propensity to innovate as well as firms' ability to create value from their innovation. Registered designs play an unexpectedly strong role in the story, both in terms of increasing the propensity to innovate and in unlocking value creation post-innovation. The suggestion is that design has an important direct and supporting role to play in the UK's vision to become a global hub for innovation by 2035. However, UK public support for design activities remains 'meager' relative to that devoted to R&D, both in terms of the eligibility of design activities in current innovation support measures as well as measures to promote design excellence.

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