

The effectiveness of regional, national and EU support for innovation in the UK and Spain

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Innovation policy typically aims to stimulate innovation and hence firm-level productivity and growth. In this paper we use panel data on innovation panel for the UK and Spain over the 2004 to 2012 period to explore the effectiveness of regional, national and EU innovation support in promoting the extent of innovation activity, its novelty, and market success.

Key findings

In Spain public intervention in innovation is more intensive than in the UK, support is more regional and firms face more intensive regulation. These differences make the comparison interesting. Our analysis is based on the experience of over 35,000 firms in the UK and over 52,000 in Spain.

Controlling for which types of firms get public support for innovation our analysis suggests:

- Regional support is most influential in both the UK and Spain in terms of the probability of process and organisational innovations.
- In both countries, national innovation support is associated with a higher probability of product or service innovation *and* the novelty of that innovation.
- In the UK *only* regional support is associated with increased innovative sales. In Spain, innovative sales are influenced by both regional, national and EU support measures.

We discuss the potential implications of the centralisation of innovation policy which has taken place in England since 2010.

The effectiveness of innovation policy

Any assessment of the effectiveness of innovation policy needs to take into account the way in which such support is allocated and the characteristics of the recipient firms. Workforce quality, size, and exporting all prove important in increasing the likelihood that a firm will receive innovation support. Firms experiencing financial constraints for innovation or uncertain demand – making the risks of innovation greater – are also more likely to receive regional and national support.

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The importance (statistical significance) of the effect of each type of public support on different aspects of innovation – probability of occurring, novelty, sales – are summarised in the table below. ‘+’ and ‘-’ indicate statistically robust positive and negative effects; (+) and (-) are weaker effects.

Effect sizes are generally larger in Spain than in the UK perhaps reflecting the stronger engagement of Spanish public sector institutions in the innovation system. For example, regional support in Spain is associated with a 33 per cent increase in the probability of undertaking organisational innovation compared to 11 per cent in the UK

	UK			Spain		
	Regional	National	EU	Regional	National	EU
Probability of innovation						
Product/service	(+)	+	(-)	+	+	(+)
Process	+	(+)	-	(+)	(+)	(-)
Organisational	+	(-)	(-)	+	(+)	(+)
Strategic	+	(-)	(+)	(+)	+	+
Managerial	+	(-)	(-)	+	(+)	+
Marketing	+	(-)	(-)	+	(-)	(+)
Novelty of innovation						
New-to-the-market innovation	(+)	+	(-)	-	+	+
Innovation Sales						
New only	+	(+)	(-)	(-)	+	+
New and improved	+	(+)	(-)	+	+	(+)

National support is associated with a 26 per cent increase in the probability of undertaking new-to-the-market innovation in Spain compared to 8 per cent in the UK. Regional support in the UK was associated with a 5.3-7.1 per cent increase in sales from innovative products. EU support has no significant positive effect on innovation in the UK although it does have significant effects on innovation in Spain.

Policy implications

Since 2012, and the end of our analysis period, the delivery of innovation policy in England has been centralised (although it has remained largely unchanged in the Devolved Areas). This seems likely to have strengthened the UK’s focus on leading-edge, novel product and service innovation. Recent years have seen less emphasis placed on regional innovation support, which in the pre-2012 period was important for more broadly based process and organisational innovation.

In the context of the on-going debate about the nature of the Brexit settlement it is also worth noting that, in the pre-2012 period at least, EU support had little significant impact on innovation in the UK (although this effect was stronger in Spain).

Full paper link:

<http://www.enterpriseresearch.ac.uk/our-work/publications/?type=whitepaper-research>