Identifying innovation in the UK

Innovation not limited to traditionally high-performing business sectors or geographic areas of economic activity

Key findings
• Six business industries are found to be persistently high performing:
  - medicinal and pharmaceutical manufacturers
  - electronics manufacturers
  - research and development on natural sciences and engineering
  - labour recruitment and provision
  - software consultancy and supply
  - other computer-related activities
• Two locations are identified as innovation hotspots: Cambridge and London NW
• Up to ten per cent of firms in sectors traditionally thought not to be innovative are found to be high performers
• More than half of UK Post Code areas achieved high performance status at least once over the three survey periods, but long term high performance is evasive and difficult to sustain
• High performers can be differentiated from other firms by the activities they engage in and the use of information sources for innovation
• Approximately one quarter of highly innovative firms do not engage in internal research and development

Background
In the wake of the credit crunch and as a response to re-building the national economy following the recession, great emphasis is placed on the importance of innovation. Policy statements illustrate their message by drawing on examples of industry practice and achievement and highlighting locations characterised by innovation.

Previous studies looking at where innovation occurs in the UK have tended to adopt a regional perspective or focus on innovation clusters. The limitation of the former is self-evident in that it fails to deliver a national picture, whilst the latter may exclude innovative areas characterised by a diversity of industry types. Few studies have taken a micro-geographic perspective particularly with reference to a wider range of innovation indicators beyond the traditional patent counts and measures of research and development activity.

This research addressed these gaps and identified and mapped the distribution of innovation across the country. For a recovery strategy based on the premise that innovation leads to growth and that innovative businesses are growing businesses, it is important to understand where innovation occurs and which firms are doing it. Particular emphasis has been placed on uncovering innovation hotspots, geographical and/or industrial concentrations of highly innovative activity, and to examine the possibility of highly innovative firms in unexpected places – notably in sectors commonly thought not to be innovative and amongst firms that do not engage in research and development.
A range of innovation measures underpin this study, including inputs to innovation, outputs of innovation, innovation activities that firms engage in, and the degree of novelty generated by innovators. By using both the UK Standard Industrial Classification of Economic Activities (SIC) down to the level of three digit SIC codes at the industry level, and Post Code areas in terms of spatial distribution, the report provides a finer-grained analysis of the distribution of innovation, across a number of innovation indicators, than has previously been achieved.

**Policy relevance and implications**

The analysis of this study shows a wide distribution of innovation across the country. It confirms some preconceptions about the distribution of innovative activity and performance in the UK, and challenges others.

Recent and current policy has been strongly oriented toward new technologies, but innovation is not just a technological phenomenon, restricted to a limited number of high-tech and bio-pharmaceutical industries situated in innovation clusters such as the M4 Corridor or Thames Valley, or knowledge generation connected to leading universities such as Oxford and Cambridge.

We do not necessarily have to look to established clusters (however important) to find innovation, nor establish clusters to promote innovation. Innovation may be found in locales not characterised by clusters of homogeneous economic activity, while firm performance is not always improved as a result of cluster membership.

A range of sectors less traditionally connected with innovation retain a low profile in policy debates, despite innovation activity across all sectors. Up to ten percent of high performing firms were found in sectors traditionally thought not to be innovative – delivering organisational, service, business model and practice innovations for businesses such as budget airlines and internet banking. Other innovations include supply chain improvements and process efficiencies across every business sector.

**Brief description of the research**

The research project ‘The distribution of innovation activity across UK industry’ is an ESRC Knowledge Exchange Fellowship mapping the industrial and geographic distribution of innovation in the UK, with particular respect to high performance hotspots and geographical and industrial concentrations of highly innovative activity. It also examines the possibility of highly innovative firms in unexpected places, notably in sectors commonly thought not to be innovative and amongst firms that do not engage in research and development.

**Further information**

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