

UNITED KINGDOM

The United Kingdom performs well on several innovation performance indicators. It has a strong reputation for world-class research and ranks second only to the United States in production of highly cited articles. It produces a considerable number of science and engineering graduates at the doctoral level, and hosts the largest number of international doctoral students after the United States. It has good international linkages, ranks first in business enterprise expenditure on R&D funded from abroad, and has well-developed venture capital thanks to a deep financial system.

At the same time, R&D intensity is lower than the OECD average (1.78% against 2.26% in 2006), and business R&D intensity has declined from around 1.5% of GDP during the 1980s to 1.10% in 2006, also below the OECD average. The UK innovation system also has a small percentage of firms co-operating with public research organisations; this is surprising considering the strong scientific performance of these organisations and the growing number of new high-technology start-ups around some universities.

The structural characteristics of the British economy, with 75% of GDP produced in the services sector, and few large R&D-intensive activities in key sectors such as motor vehicles, information technology or electronics, may partially account for the low overall measured level of business R&D and its decline in the last decades. There is evidence that the United Kingdom's wider innovation performance, which includes areas such as design and business models, may be more robust than the R&D statistics suggest. Academic studies also suggest strong and rapidly rising investment in other intangible assets. Nevertheless, there

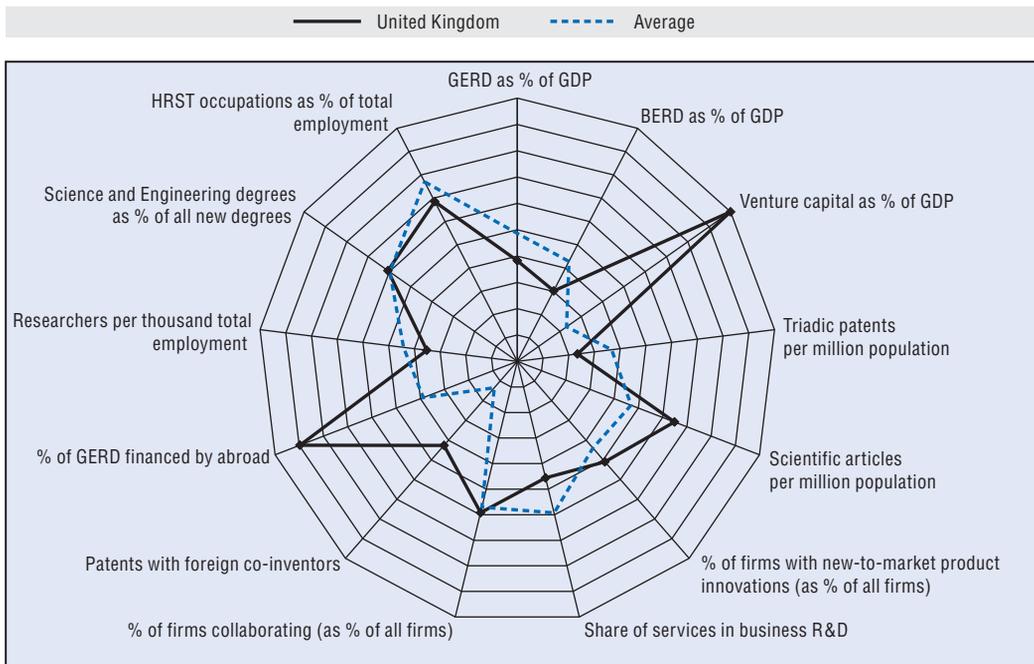
is a wide consensus that private investment in R&D should increase.

More broadly, economic growth has been steadier and stronger than in most other OECD countries, with activity operating at close to full capacity and with above-average labour productivity growth since 1995. Looking ahead, the question is how to strengthen innovation to encourage future economic growth and competitiveness.

The government's Science and Innovation Investment Framework 2004-14 has set as a long-term objective to raise overall R&D investment to 2.5% of GDP and has identified strategic actions to address the system's main weaknesses. The business-led Technology Strategy Board supports business R&D and innovation in all sectors and will identify priorities in emerging areas of technology. The government has also recently increased R&D tax credits for SMEs and large companies to encourage further business investment in R&D. The rate for large companies will rise to 130% of qualifying R&D expenditure, and the rate for SMEs will be 175%.

The newly created Department for Innovation, Universities and Skills will be responsible for delivering an integrated approach to the innovation challenges facing the country and for driving the government's long-term vision. In March 2008, it published a White Paper, *Innovation Nation*, which sets out the government's proposals for boosting innovation: using procurement and regulation to promote innovation, making the public sector and public services more innovative, providing innovation vouchers to improve collaboration between SMEs and the knowledge base, and raising skill levels.

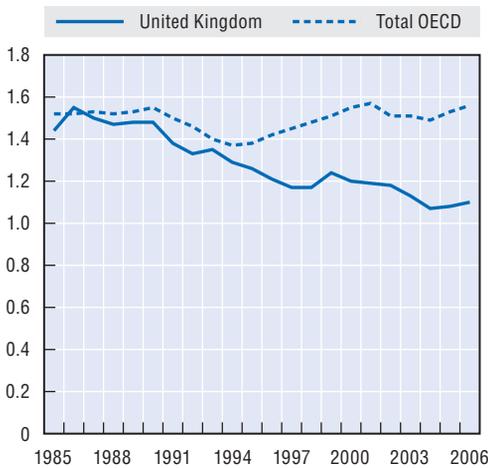
Science and innovation profile of the United Kingdom



StatLink <http://dx.doi.org/10.1787/454111640067>

Business enterprise expenditure on R&D, 1985-2006

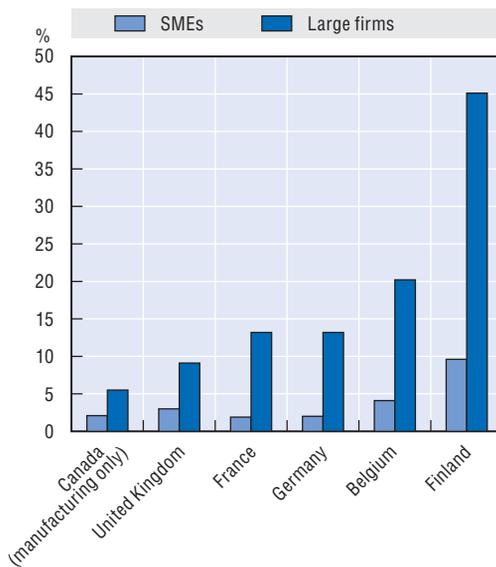
As a percentage of GDP



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Firms collaborating in innovation activities with public research organisations (higher education and government institutions), by size, 2002-04 (or nearest available years)

As a percentage of innovating firms



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