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Iceland

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On many innovation indicators, Iceland ranks among the top OECD countries, and it enjoys high per capita income and robust economic growth. While labour productivity levels still lag those of the United States, growth in labour productivity rose to 3.2% a year over 2001 to 2006.

Resource-based industries and services form the basis of the Icelandic economy. As a result, measures of technological and knowledge intensity are often below the OECD average. However, the country has a complex and well-developed innovation system with a variety of actors from government, industry and the science community. Its innovation performance is robust, with a large share of firms introducing new-to-market product innovations. The small internal market (a population of just over 300 000) has stimulated many companies to internationalise, and international linkages are a notable element of the innovation system.

Iceland has one of the OECD's highest R&D intensities, with gross domestic expenditure on R&D (GERD) at 2.78% of GDP in 2005, although it is low in absolute terms. Almost 50% is financed by the business sector, and more than 10% is financed from abroad. Iceland has quite a large public research system: government expenditure on R&D (GOVERD) was 0.66% of GDP in 2005, compared to an OECD average of 0.27%.

The number of R&D personnel grew strongly from 1995 to 2005 at an average annual rate of 6.7%. Iceland has 13 researchers per 1 000 in the labour force, compared to the OECD average of seven. However, it has a small percentage of science and engineering graduates, and the proportion of the working-age population with only lower-secondary education is still significant, even among young people.

In terms of scientific publications, Iceland outperforms the OECD average, and patenting activity has increased. Iceland acceded to the European Patent Convention in 2004, and this is expected to encourage innovation through the patent system.

The innovation policy environment is guided by the Science and Technology Policy Council, established in 2003. Iceland has recently introduced more competitive funding instruments and attempted to streamline the innovation system (for example, by merging universities). Government R&D support has shifted towards basic research, industrial technologies, and, especially, biomedical and health- and biotechnology-related R&D.

Looking ahead, Iceland's policy challenges include making more efficient use of R&D funds and encouraging innovation, both technological and non-technological, among a broader set of firms. Building critical mass in some areas must be balanced against the need to maintain flexibility, so as to enable quick reallocation of resources to areas of emerging opportunity.

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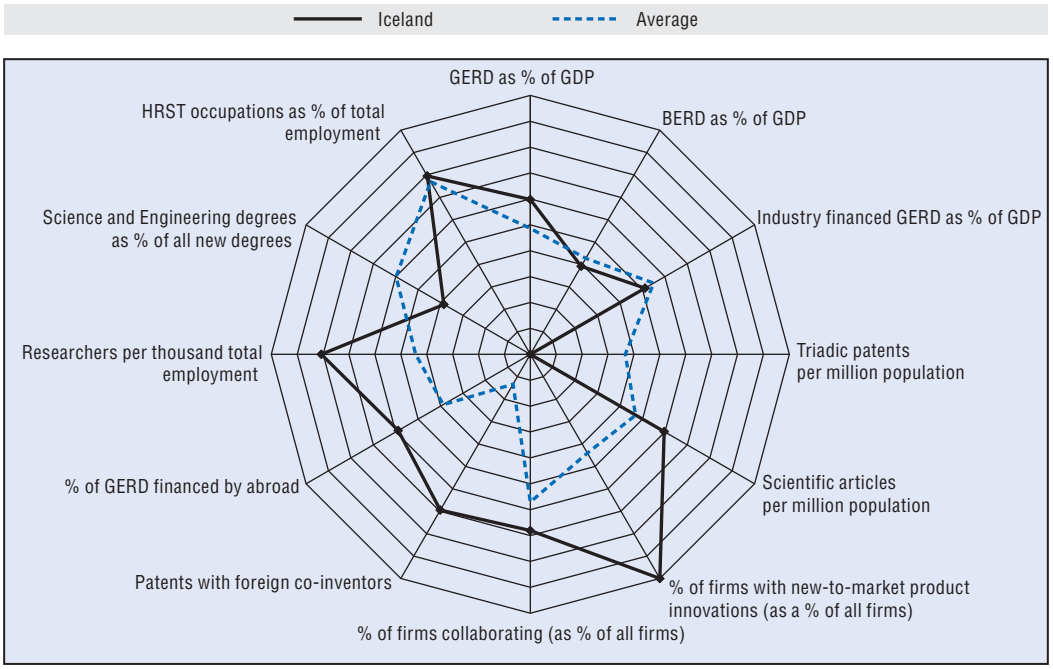
Science and innovation profile of Iceland



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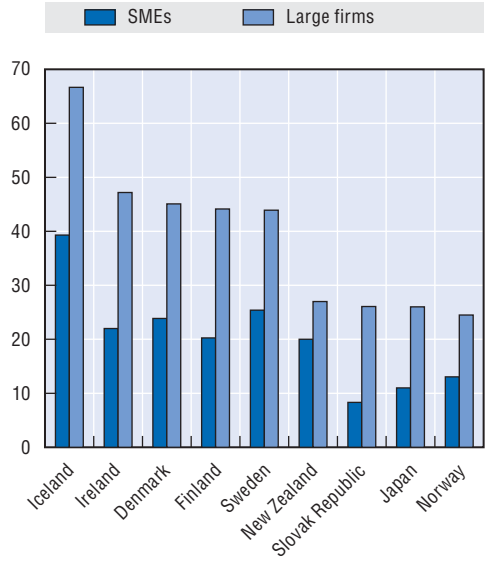
Firms with new-to-market product innovations, by size, 2002-04 (or nearest available years)

As a percentage of all firms



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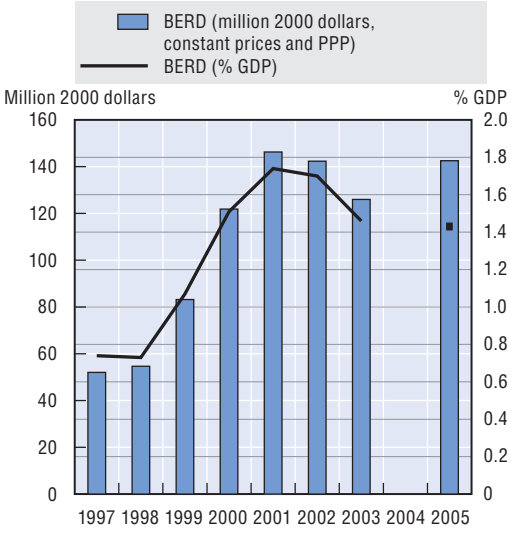
Note: SMEs: 10-249 employees for European countries; 10-99 for New Zealand.

Business R&D expenditure, 1997-2005



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Chapter 3

Science and Innovation: Country Notes

This chapter complements Chapters 1 and 2 by providing an individual profile of the science and innovation performance of each OECD country, as well as observers to the OECD Committee on Science and Technology Policy (Brazil, Chile, China, Israel, Russia and South Africa), in relation to their national context and current policy issues. The graphs enable countries to see some of their relative strengths and weaknesses as compared to other countries' performance.

The common indicators in the first (radar) graphs were selected on the basis of current policy issues. They focus on research and innovation inputs, scientific and innovation outputs, linkages and networks, including international linkages, and human resources. A standard set of indicators is used; however, when data are not available, alternative indicators may be applied. The annex provides a full list and description of the indicators, methodological notes and data sources.

For each indicator in the radar graph, the country with the maximum value is set at 100, taking into account all OECD and non-OECD countries with available data. The average is calculated by taking into account all OECD countries with available data (non-OECD countries are excluded from the average). The annex provides further details.

The radar graphs are accompanied by country-specific figures that further illustrate national characteristics and underpin policy-specific comments. The selection of comparator countries in these graphs aims to highlight the general position of the focal country and, in some instances, data on other countries may also be shown.

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