

CZECH REPUBLIC

The Czech Republic continues to catch up with other OECD countries and performs above other eastern European OECD countries on a number of indicators. Between 2002 and 2006, annual growth in real GDP per capita increased from around 2 to 6%, and labour productivity grew strongly at 4.1% a year. Past reforms and accession to the European Union are leading to further expansion of export-driven manufacturing backed by foreign direct investment.

Expenditure on R&D has grown in the past decade. Gross domestic expenditure on R&D (GERD) reached 1.54% of GDP in 2006, still well below the OECD average (2.26%) but markedly higher than ten years earlier (0.97%). Industry financed around 57% of GERD in 2006. Business expenditure on R&D (BERD) has also increased rapidly, but at 1.02% of GDP remains below the OECD average of 1.56%. Venture capital financing is extremely low and has fallen as a share of GDP in recent years.

Around one-third of BERD is performed by small and medium-sized enterprises (SMEs). The services sector accounted for 38% of total business R&D. Only 3% of R&D is financed from abroad. International co-operation on innovation by firms is relatively strong within Europe (9%) but lower outside Europe (2%). From 2002 to 2004, the share of turnover from new-to-market product innovations was 16% for SMEs and 26% for large firms. Over the same period, non-technological innovation was undertaken by some 27% of firms, particularly large firms.

There is little patenting and scientific publishing. In 2005, 309 scientific articles

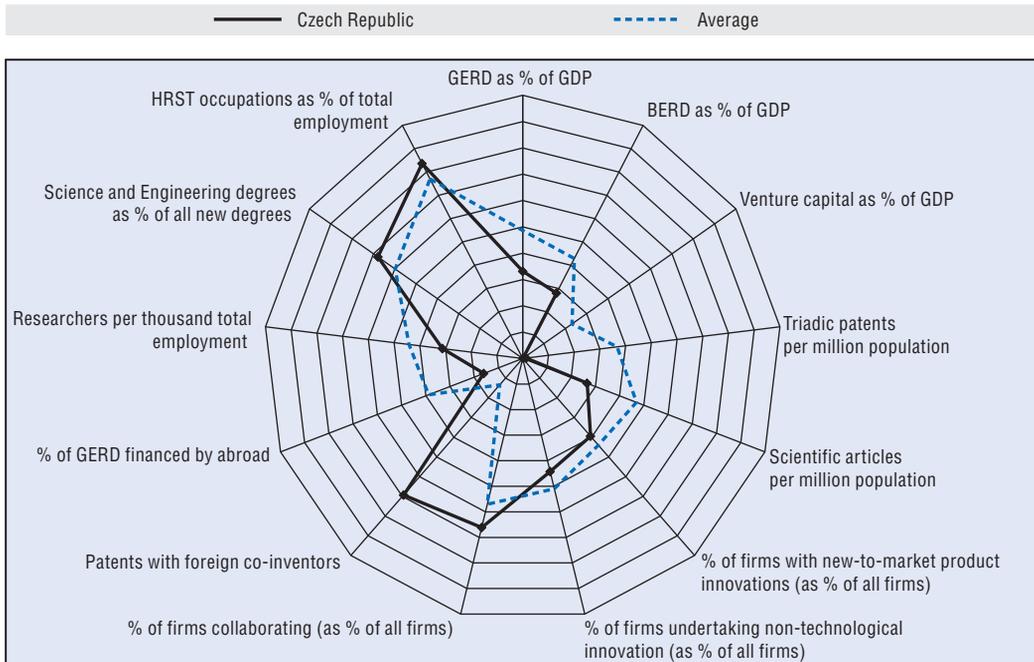
per million population were produced, compared to an average of 477 for the EU27 and 493 for the OECD area. However, patenting grew at an annual rate of 17% between 1997 and 2004, with medium-low- and low-technology patents growing by 27% and high-technology patents by 17%. Some 40% of patents are with foreign co-inventors, with around one-third of the partners in the European Union.

The ratio of R&D personnel to total employment more than doubled from 1996 to 2006 and is now close to the EU27 average. Occupations involving human resources for science and technology (HRST) represented 33% of total employment, a share similar to that of the United States. However, HRST occupations grew by only 1.6% a year over the past decade, one of the lowest figures across the OECD area and lower than other countries with similar employment profiles.

A number of initiatives aim to enhance the performance of the innovation system. The goals of the National Research and Development Policy include better evaluation, international and regional co-operation, human resources, and transfer of R&D results to industry. Government priorities include strengthening R&D by increasing public R&D expenditures to 1% of GDP by 2010, and supporting intellectual property rights through a short-term programme to co-finance applicants from academia and SMEs.

The key policy challenges for the immediate future include building skill-based industries and improving the public sector's scientific output, especially in view of the plan to boost R&D expenditure in this sector.

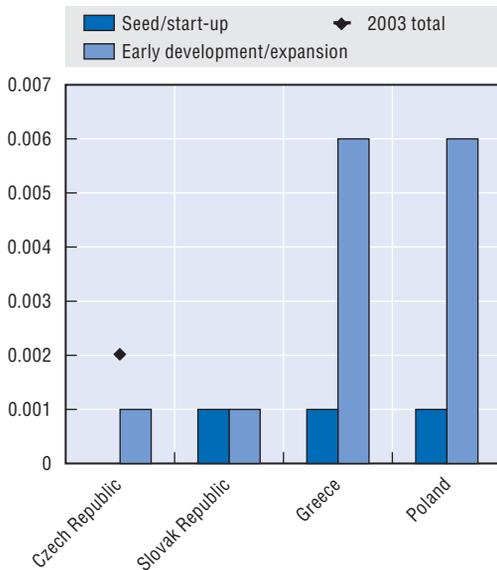
Science and innovation profile of the Czech Republic



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Venture capital investment, 2006

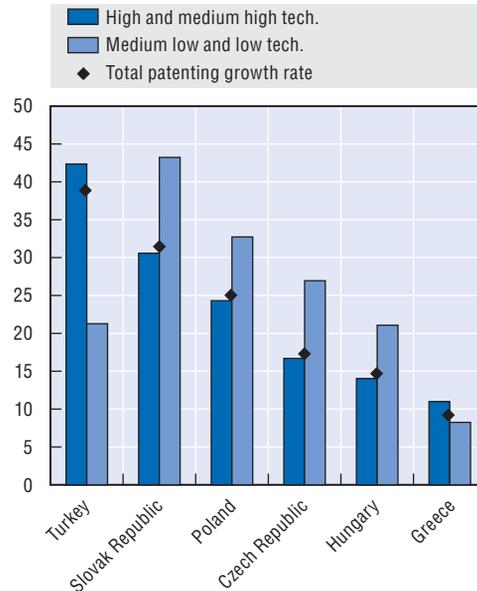
As a percentage of GDP



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Annual growth of patenting

PCT filings 1997-2004



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