GREECE

Greece's science and innovation profile shows some improvement over the two years to 2008. Indicators for human resources in science and technology (HRST) are mixed. Science and engineering degrees represent 23.4% of all new degrees, slightly above the OECD average (20.9%). Although Greece had a relatively low 4.4 researchers per thousand employment in 2007, researcher numbers had increased at an average annual 3.7% between 2001 and 2007. HRST occupations represented a relatively weak 23% of total employment, and unemployment among graduates was a relatively high 5.7% in 2008 compared to the OECD average of 3.2%.

Greece has made significant progress on some innovation outcomes over the past two years. While triadic patents stood at only 1.2 per million population in 2008, scientific articles published per million population improved to an above-average 902, and accounted for 0.6% of world output. Compared to the 2008 *STI Outlook*, a larger share of firms introduced new-to-market product innovations (20%) during 2004-06, and an above-average 52% introduced non-technological innovations.

The level of innovation inputs is relatively low. Gross expenditure on R&D (GERD), at 0.6% of GDP in 2007, lags the OECD average significantly, although in real terms, expenditure has grown by a robust average annual 4% since 2001. Government funded 47% of GERD, and industry 31%. More than a third of business R&D (BERD) went to SMEs with fewer than 50 employees. Venture capital investment was a low 0.01% of GDP.

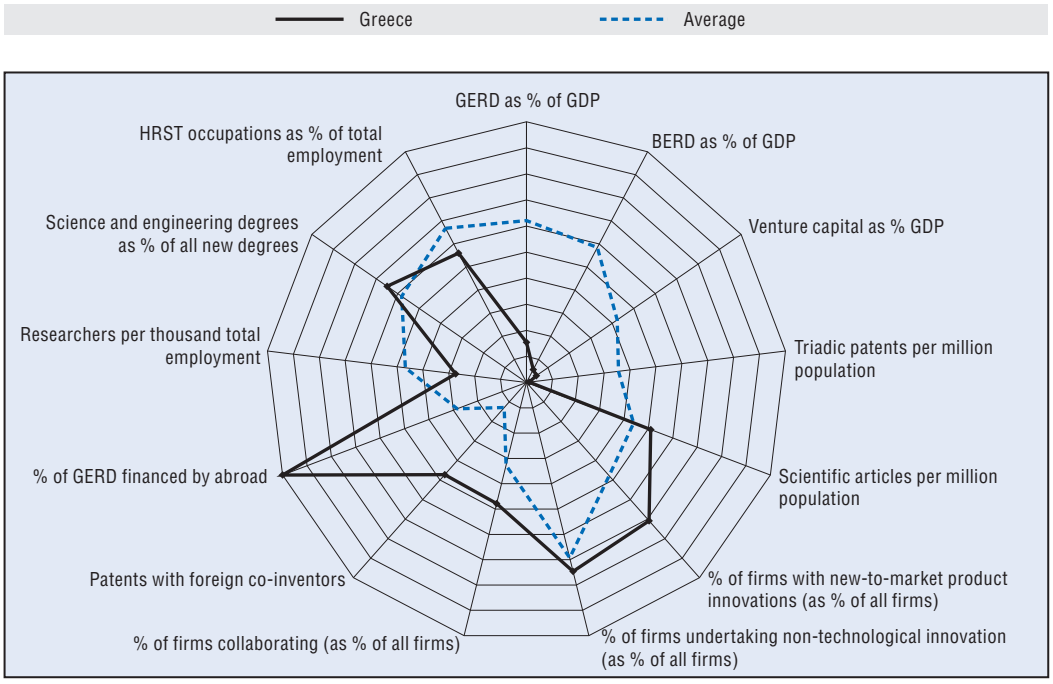
However, Greece's innovation linkages and international integration are strong. Some 14% of firms collaborated on innovation, and the 28.5% share of patent applications with foreign co-inventors is above average. In 2005, 19% of GERD was financed from abroad, the largest share in the OECD area.

Greece experienced strong average annual GDP growth of 3.8% during 2001-08, when per capita GDP grew by an average annual 2.8%. In 2009, however, real GDP contracted by 2%, and unemployment increased to 9.5%. Labour productivity grew strongly until 2004, but then slowed significantly to 2008. Relative to the United States, GDP per capita was 61% in 2008.

Greece faces significant challenges. The continuous rise of bond yield spreads in international markets led to extremely high borrowing costs. The Greek government requested the activation of the support mechanism of the euro zone governments and the International Monetary Fund, which pledged financing support of EUR 110 billion for the next three years.

The National Strategic Reference Framework 2007-13 forms the basis of innovation policy. It aims to make the economy more competitive, with a stronger international presence. The government implemented a series of Operational Programmes in 2009 to support restructuring up to 2013. Despite the global recession, and Greece's financial difficulties, innovation remains a priority for the Greek government, which has adopted measures to promote innovative investments for further development.

Science and innovation profile of Greece



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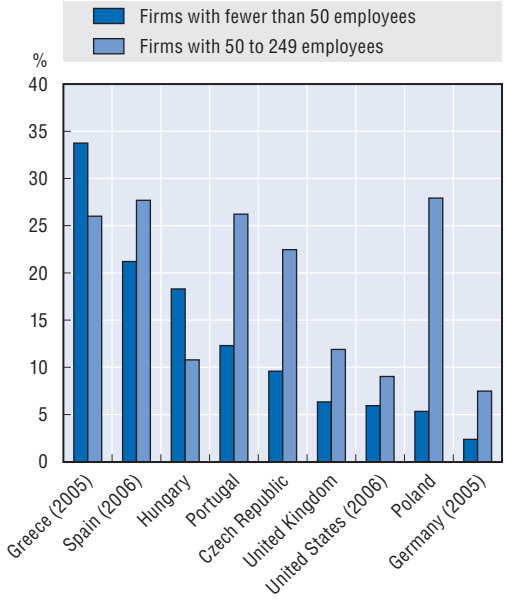
Share of business R&D, by firm size

As a percentage of total business R&D, 2007



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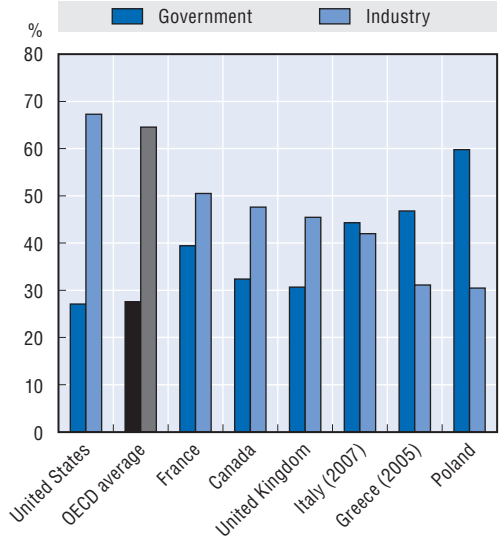
Gross expenditure on R&D by source of financing

Percentage share of total GERD, 2008



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