

UNITED STATES

The United States has the world's largest economy, with GDP exceeding USD 14 trillion and GDP per capita of USD 46 400 in 2009. US firms are at or near the forefront of technological advances in a number of areas and the country has quite a strong science and innovation profile.

In 2008, gross expenditure on R&D (GERD) increased to 2.8% and GERD per capita was USD 1 307 in current PPP, the fourth highest in the OECD area after Sweden, Luxembourg and Finland. In 2008, two-thirds of GERD was financed by industry and 27% by government. In the same year, business enterprises performed 73% of GERD, the higher education sector 13% and the government sector 11%. Business expenditure on R&D (BERD) increased to 2% of GDP in 2008, the highest level since 2000. BERD is skewed in favour of larger firms and high-technology manufacturing, the latter accounting for 67% of total manufacturing R&D; a low 15% is performed by small and medium-sized firms. Business R&D performed in the services sector declined from 41% in 2002 to 30% in 2006. In 2008, venture capital intensity was 0.12% of GDP, above the average.

Although its triadic patents grew at a modest 0.2% average annual rate in the decade to 2008, the United States recorded 49 patents per million population. It accounts for a significant 43% of all pharmaceutical patents, half of all medical patents and almost 20% of all environmental patents. It published 277 446 scientific articles, the highest in the world, and accounted for 16% of world scientific publishing, although this share has been falling in recent years. In 2008, its 911 scientific articles per million population was above average.

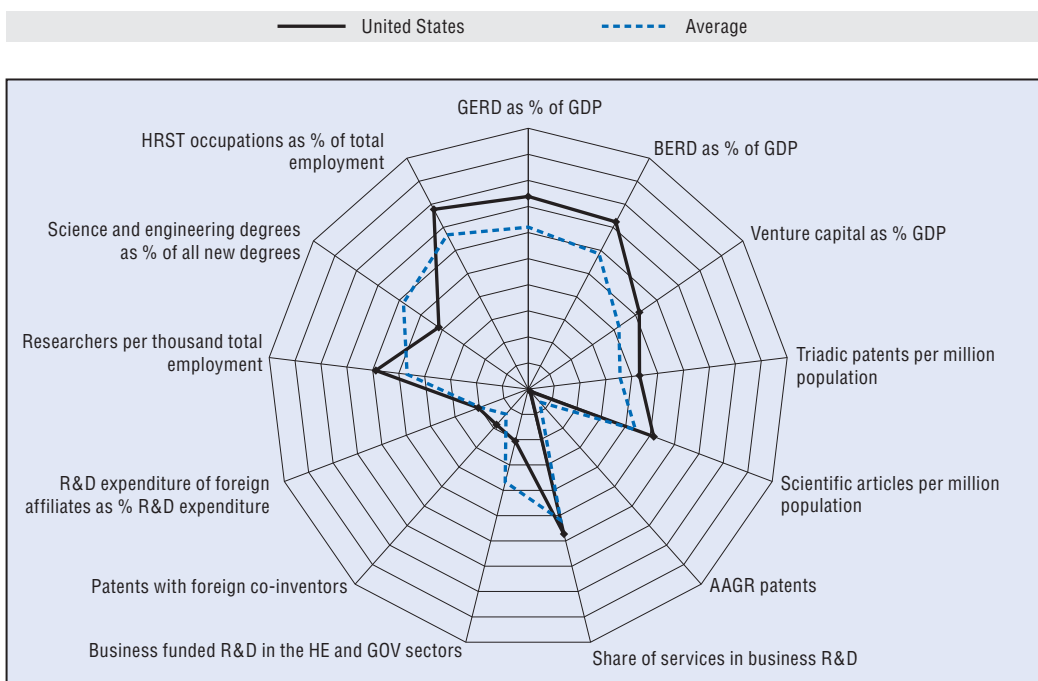
Indicators for international linkages vary. R&D expenditures of foreign affiliates are a comparatively low 15%. However, during 2005-07 the 11% of patents with a foreign co-inventor was above average. In 2008 the higher education and government sectors performed a modest 3.1% of business-funded R&D.

Human resources in science and technology (HRST) indicators are mostly strong. In 2006 the United States had 1.4 million researchers, or ten per thousand employed. More than one-third of all new university students graduated successfully, and the United States awards 28% of all doctorates in the OECD area. Science and engineering degrees are 15% of all new degrees, however, below the OECD average. HRST occupations comprise around one-third of total employment.

GDP expanded by 2.6% a year between 2001 and 2007, followed by a recession in mid-2008. GDP contracted by 4% in 2009 and unemployment rose to 9.3%. In January 2009, the government enacted a stimulus package, the American Recovery and Reinvestment Act 2009, which includes nearly USD 100 billion in science, technology and innovation investments.

In September 2009, a White Paper, *Strategy for American Innovation: Driving towards Sustainable Growth and Quality Jobs*, outlined the key science, technology and innovation policies of the Office of Science and Technology Policy. The most recent budget announced the doubling of the funding for three key science agencies: the National Science Foundation (NSF), the Department of Energy's Office of Science (DOE SC) and the National Institute of Standards and Technology (NIST) laboratories.

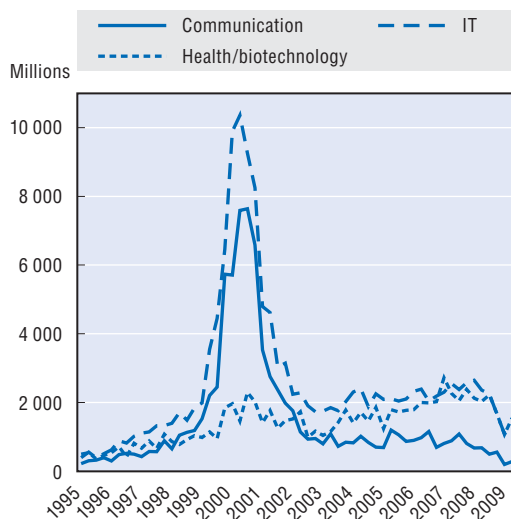
Science and innovation profile of the United States



StatLink <http://dx.doi.org/10.1787/888932335305>

US venture capital investment by industry

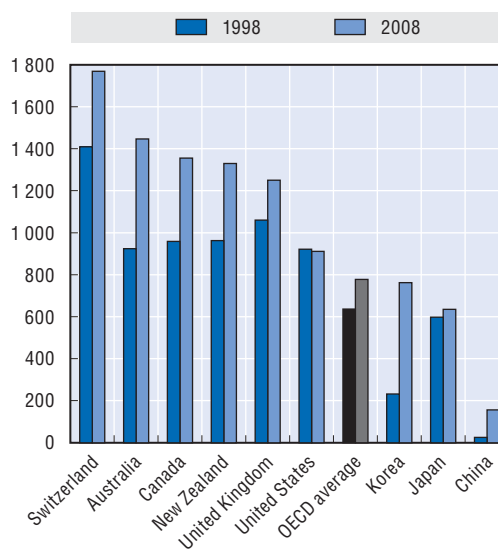
USD million, 1995-2009



StatLink <http://dx.doi.org/10.1787/888932335324>

Scientific articles published

Per million population, 1998 and 2008



StatLink <http://dx.doi.org/10.1787/888932335343>



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