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## Israel

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## ISRAEL\*

Israel has a technologically advanced and open market economy, with highly developed agricultural and industrial sectors. Exports account for about 45% of its GDP. Its science and innovation profile shows strong performance. It had the highest gross expenditure on R&D (GERD) in 2008 at 4.9% of GDP. In 2006, 77% of GERD was funded by industry, and government funded 16%.

The business enterprise sector performed 81% of GERD in 2008, the second highest share among the countries analysed here. Business expenditure on R&D (BERD) was 3.9% of GDP in 2008, more than in all other countries. Other indicators are also strong. In 2008, Israel published 1 380 scientific articles per million population and produced 66 triadic patents, in both cases these were the fifth highest number. In 2006 industry-financed GERD reached 3.4% of GDP.

Although a comparatively small 3% of GERD was financed from abroad in 2006, a high 15% of Patent Cooperation Treaty (PCT) patent applications during 2005-07 were developed with foreign co-inventors, especially in the United States. Israel performs strongly in medical technology patents: in 2004-06, Israel accounted for 2.7% of patents in medical technologies, twice its 1.3% share in total patents.

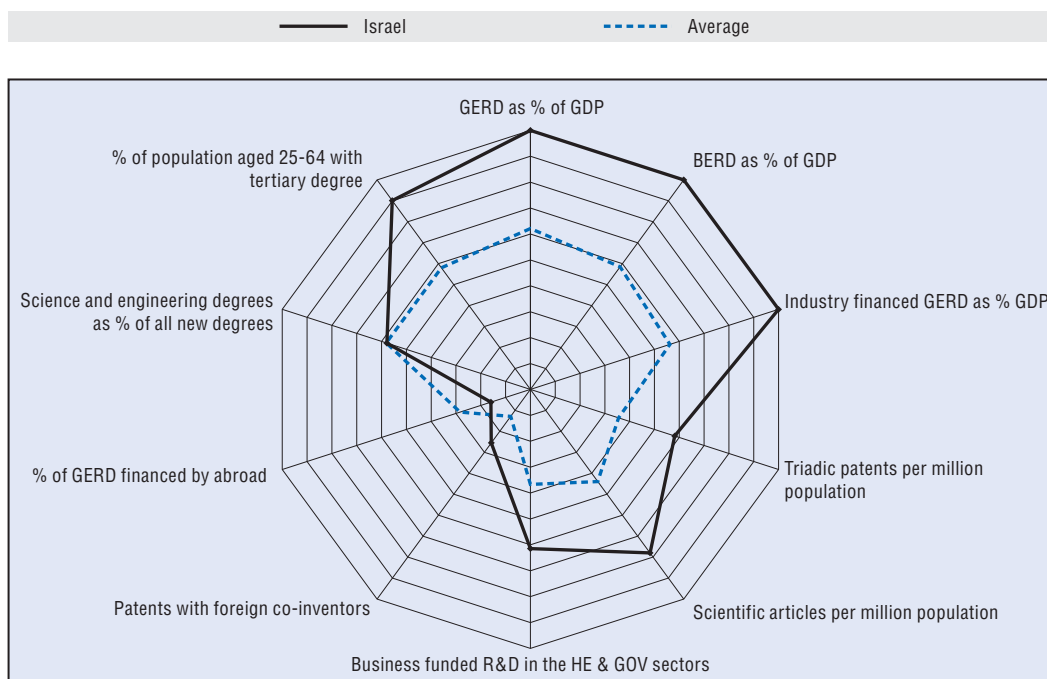
In 2007 Israel had a strong comparative advantage in trade in high-technology manufactures: high-technology industries contributed a positive 1.6% to the manufacturing trade balance.

Israel performs well on human resources in science and technology (HRST). Science and engineering degrees represent 21% of all new degrees, very close to the OECD average. It has a high level of educational attainment: in 2008 44% of the population aged 25-64 had a tertiary qualification. In an attempt to keep Israel's leading scientists from leaving the country, the government recently approved the creation and funding of 30 centres of academic excellence.

Between 2001 and 2007, Israel experienced strong average annual GDP growth of 3.5%. Growth slowed in 2008 and expanded by only 0.7% in 2009. Unemployment increased from 6.1% in 2008 to 7.4% in 2009. Average labour productivity growth between 2001 and 2008 was 1.4% but was flat during 2007 and 2008. Relative to the United States, GDP per capita was 59% in 2008.

To improve efficiency, the Ministry of Finance recently co-ordinated the budgeting process for all science, technology and innovation budgets, including higher education, basic research and industrial R&D. After years of a neutral policy, the Office of the Scientist has recently adopted a preferential policy to distinguish between high potential and high risk. The sectors currently considered for preferential treatment are biotechnology, nanotechnology and low-technology industries; support for clean-technology sectors, such as renewable energies, water and oil substitutes are being re-evaluated.

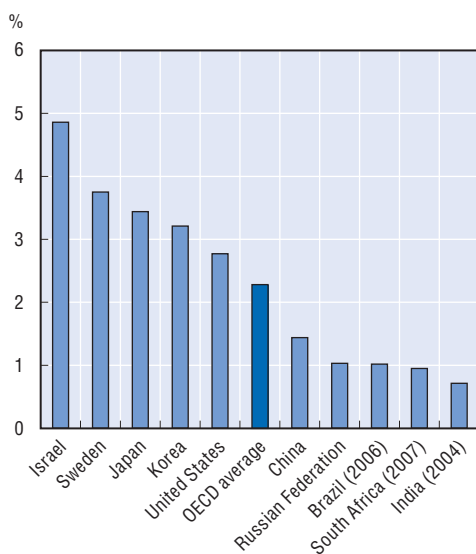
### Science and innovation profile of Israel\*



StatLink <http://dx.doi.org/10.1787/888932334165>

#### Gross expenditure on R&D

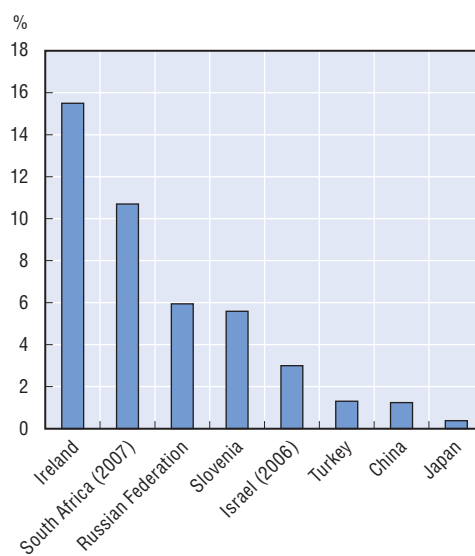
As a percentage of GDP, 2008



StatLink <http://dx.doi.org/10.1787/888932334184>

#### Gross expenditure on R&D financed from abroad

As a percentage of total GERD, 2008



StatLink <http://dx.doi.org/10.1787/888932334203>

\* The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.