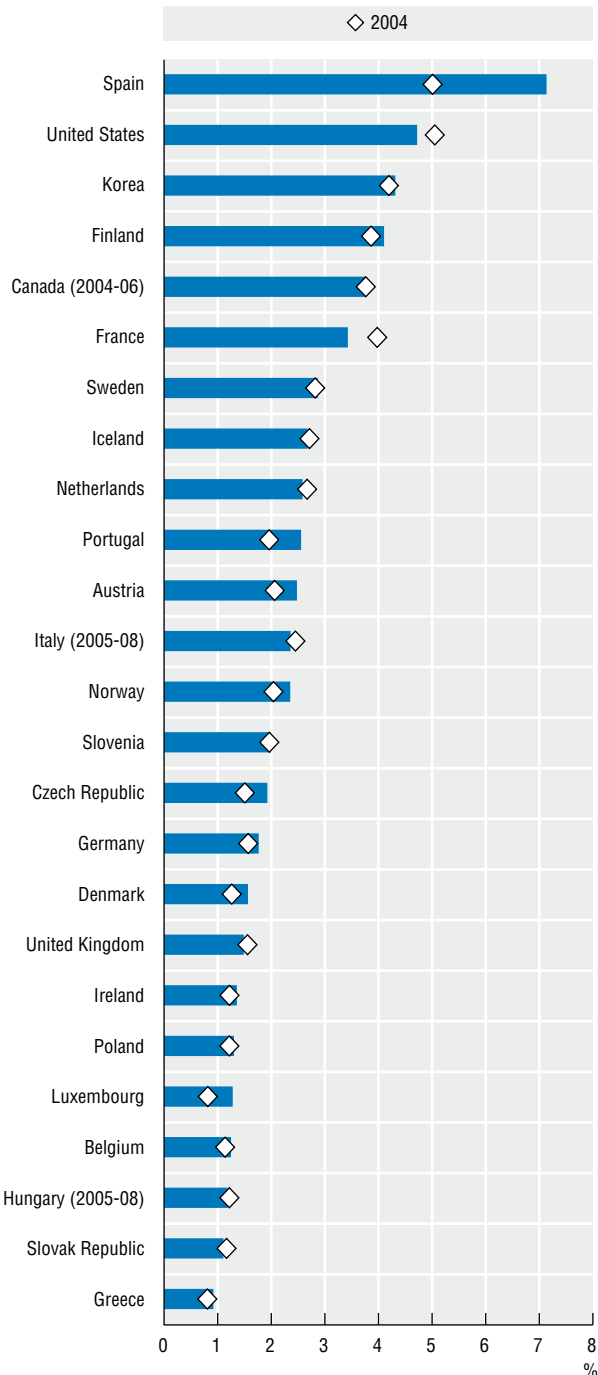


Governments perform in-house R&D and also finance R&D in various sectors of the economy. They play many roles in the innovation system, such as providing education, training and skills development, fostering knowledge creation and diffusion, and supporting the R&D efforts of firms.

Government budget appropriations or outlays for R&D, 2007

As a percentage of total government outlays



Source: OECD, Research & Development Database, December 2009; OECD Annual National Accounts Database, March 2010. See chapter notes.

StatLink <http://dx.doi.org/10.1787/835870280132>

DID YOU KNOW?

OECD countries' stimulus packages for science, R&D and innovation ranged from 0.1% to 0.3% of GDP.

(OECD, *Policy Response to the Economic Crisis: Investing in Innovation and Long-Term Growth*, 2009.)

Governments invest in R&D for different purposes (national defence, environment, health, etc.). These are usually projects with high social impact but low short-term economic impact or large scientific projects that are too expensive and risky for private-sector investment alone (e.g. space research).

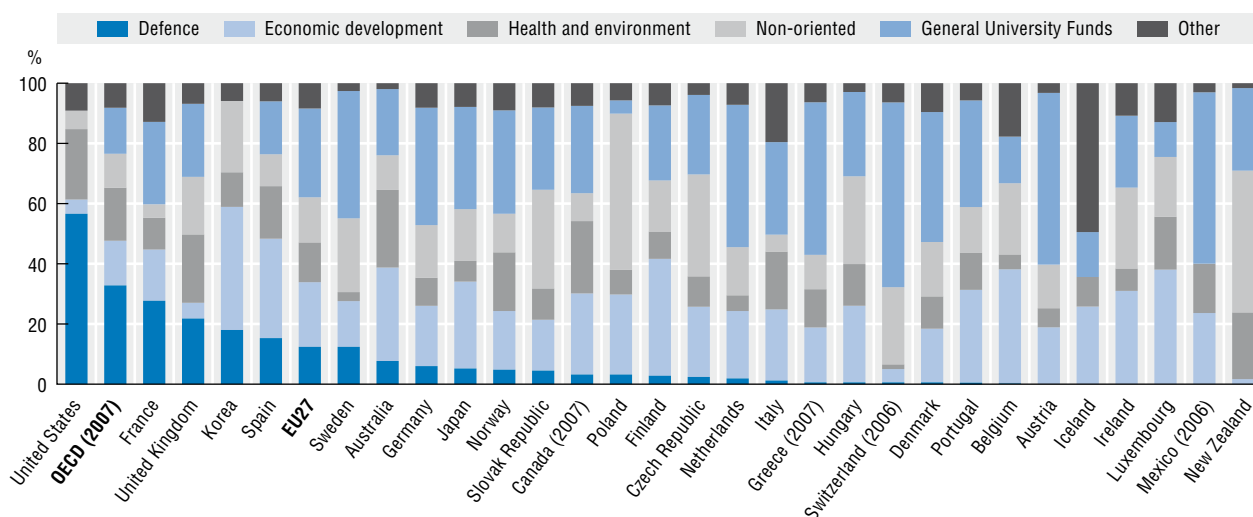
In 2007, OECD central governments invested 1% to 7% of their total budget in R&D activities. Spain had the largest increase in the last few years, with more than 7% of total central government outlays for R&D funding.

Countries vary widely in terms of the importance of funding by socioeconomic objective and by performance sectors. These differences reflect national priorities and differences in countries' national innovation systems. For instance, Poland's high share of public funding to public research organisations and Israel's high share of public funding to the business sector reflect the particularities of each national innovation system.

Definitions

Government budget appropriations or outlays for R&D (GBAORD) are the funds committed by the federal/central government for R&D. It can be broken down by sectors of performance (business enterprise, government, higher education and private non-profit) and by socioeconomic objectives (the main ones are shown on the facing page). Total government outlays are current outlays (e.g. current consumption, transfer payments, subsidies) and capital outlays. Data refer to the central/federal government only to be consistent with the definition of GBAORD. For countries which include regional and local R&D expenditures in their GBAORD estimates (Belgium, Denmark, Germany, Ireland and United Kingdom), total government outlays include the sub-national aggregates. General university funds (GUF) is the estimated R&D content of government block grants to universities (Frascati Manual, 2002).

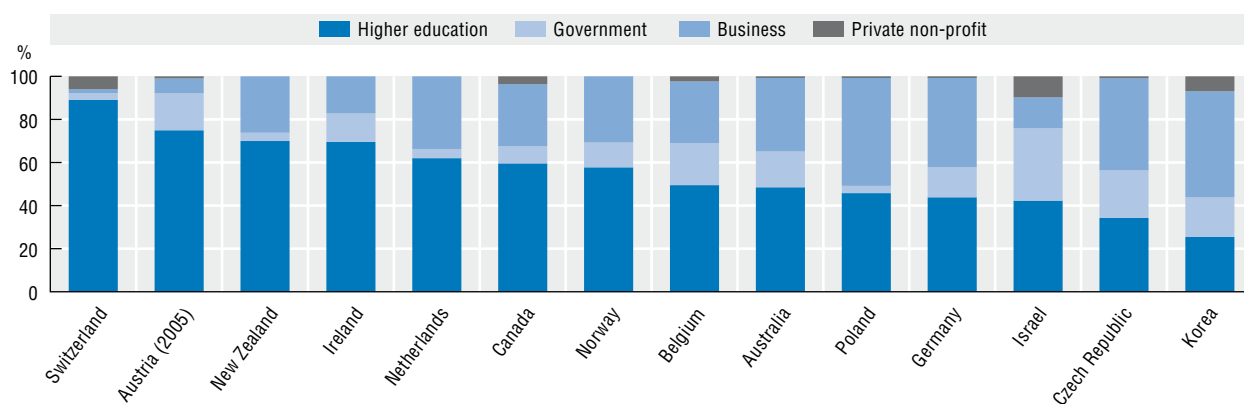
Government budget appropriations or outlays for R&D, by selected socio-economic objectives, 2008



Source: OECD, Research & Development Database, December 2009. See chapter notes.

StatLink <http://dx.doi.org/10.1787/835870280132>

Government budget appropriations or outlays for R&D, by national sector of performance, 2008



Note: This is an experimental indicator. International comparability is currently limited.

Source: OECD, based on preliminary data from the Microdata project on public R&D funding, 2009. See chapter notes.

StatLink <http://dx.doi.org/10.1787/835870280132>

Measurability

GBAORD (government budget appropriations or outlays for R&D) represents the funds committed for R&D by the federal/central government to be carried out by business enterprise, government, higher education and private non-profit organisations at home or abroad (including international organisations). The data are usually based on budgetary sources and reflect the views of the funding agencies. They are generally considered less internationally comparable than performer-reported data, but they are more timely and reflect current government priorities, as expressed in the breakdown by socioeconomic objectives.

The OECD project on modes of public R&D funding is currently developing new indicators based on the type of instrument (academic, innovation and policy, or thematic instruments) or funding agencies (line ministry, independent agency, etc.). The indicators are still experimental, but NESTI (OECD Working Party of National Experts in Science and Technology Indicators) is working to develop methodological guidelines for refining and institutionalising their collection.