

Science and Technology Data - 2011

Canada & the World

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Science and Technology Data is published yearly by Industry Canada's Science and Innovation Sector. This publication presents a snapshot of the state of science and technology in Canada in an accessible and convenient format.

This year, the format has been changed to five two-page documents. "National" provides a summary of Canada's R&D. "Government," "Industry" and "Higher Education" each cover a specific component in the national S&T system. "Canada & the World" describes links between Canada's S&T activities and those in other countries around the world.

Due to the varied approaches to national collection and multilateral compilation of data, the figures used for international comparisons will often be for earlier periods than those used for domestic trends. All figures are based on the most recent, reliable data.

In 2011, the share of BERD funded from foreign sources stood at 11.6 percent, below the recent peak of 15.9 percent witnessed in 2007. In 2010, Canada ranked third among G7 countries (11th in the OECD) for its share of BERD funded from foreign sources.

In 2009, foreign affiliates accounted for 32 percent of Canada's BERD. On this metric, Canada ranked second among G7 countries behind the United Kingdom.

Canada remains a relatively small country. In 2011, its total business R&D expenditures (\$15.4 billion) were of the same magnitude as the R&D budgets of the world's 10 largest multinational groups, ranging from Toyota Motors (\$10.2 billion) to Merck US (\$8 billion).

Acronyms and Abbreviations

BERD	Business enterprise expenditure on research and development
GERD	Gross domestic expenditure on research and development
OECD	Organisation for Economic Co-operation and Development

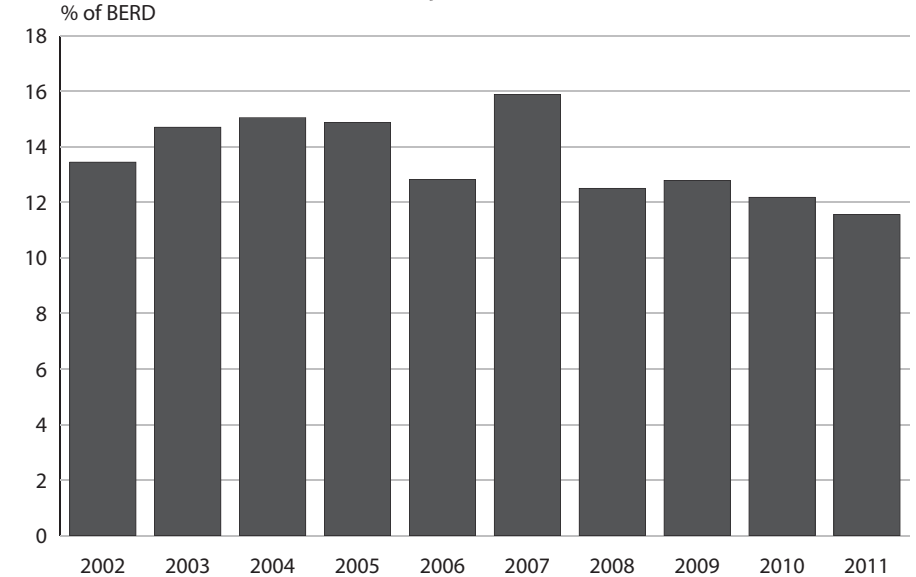
Definitions

R&D "Research and development" is creative work undertaken on a systematic basis to increase the stock of knowledge, including knowledge of humankind, culture and society, and the use of this stock of knowledge to devise new applications.

RSAs "Related scientific activities" complement and extend R&D by contributing to the generation, dissemination and application of scientific and technological knowledge.

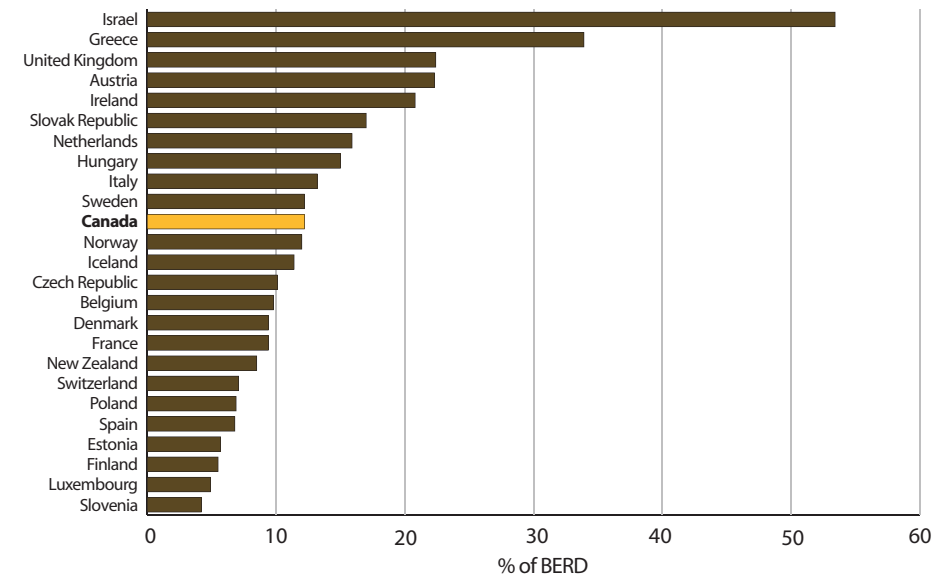
S&T "Science and technology" includes both R&D and RSAs.

Percentage of BERD Funded by Foreign Sources, Canada, 2002 to 2011



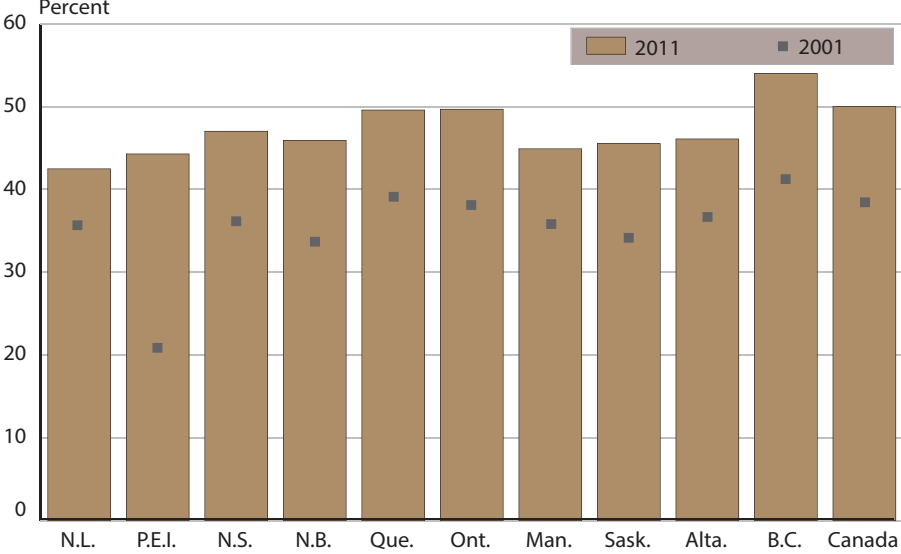
Source: Statistics Canada, *Gross Domestic Expenditures on Research and Development in Canada (GERD)*, and the Provinces, Catalogue no. 88-221-X, December 2012.

Percentage of BERD Funded by Foreign Sources, Top OECD Countries, 2010 or latest available year



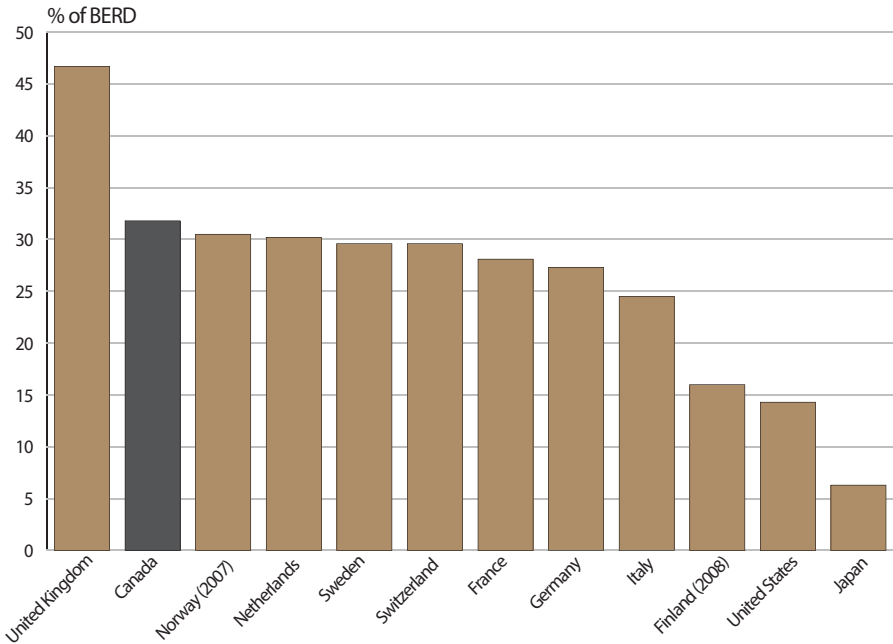
Source: OECD, *Main Science and Technology Indicators: 2012/2*, January 2013.

Canadian International Collaboration Rates by Province, Scientific Publications, 2001 and 2011



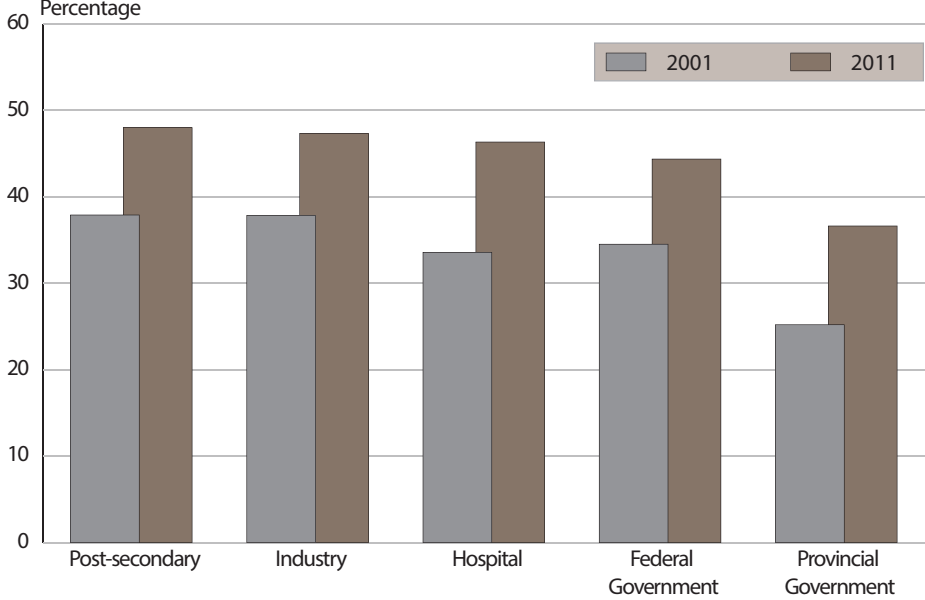
Source: Observatoire des sciences et des technologies (Thomson Reuters—Web of Science).

R&D Expenditures Generated by Foreign-Controlled Affiliates, 2009



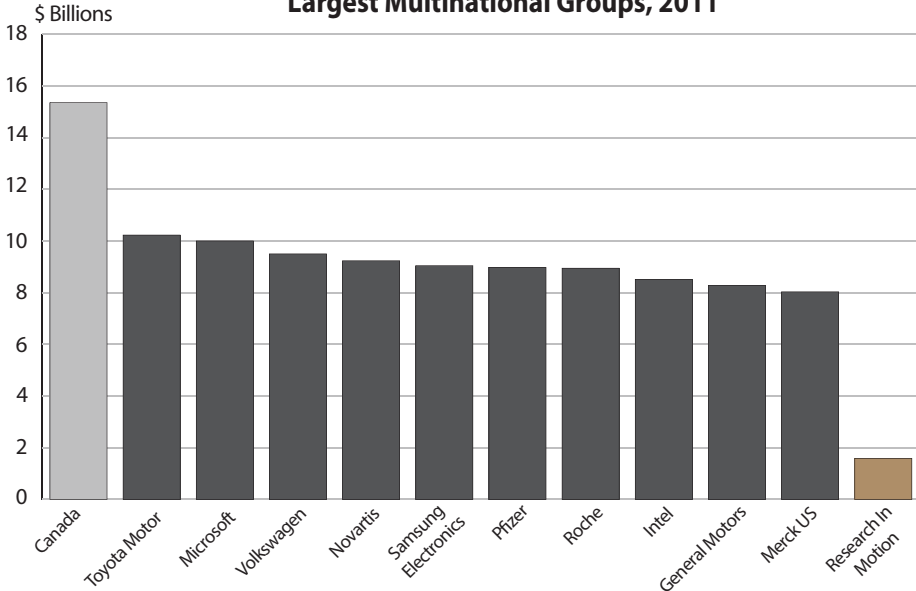
Source: OECD, *Main Science and Technology Indicators: 2012/2*, January 2013.

Canadian International Collaboration Rates by Sector, Scientific Publications, 2001 and 2011



Source: Observatoire des sciences et des technologies (Thomson Reuters—Web of Science).

Industrial R&D Expenditures, Canada and the Largest Multinational Groups, 2011



Note: The R&D expenditures of multinational groups are consolidated at the global level and may include a share of R&D performed in Canada.

Sources: Statistics Canada, *Gross Domestic Expenditures on Research and Development in Canada (GERD)*, and *the Provinces*, Catalogue no. 88-221-X. European Commission, EU Industrial R&D Scoreboard, 2012.