Highlights from the OECD Science, Technology and Industry Scoreboard 2017 - The Digital Transformation: New Zealand

Science, innovation and the digital revolution

- **New Zealand** now has over 100% penetration of mobile broadband, with 101.9 subscriptions per 100 inhabitants in 2016 [Scoreboard fig. 1.2 – see below].
- In 2015, gross domestic expenditures on R&D were 1.3% of GDP in **New Zealand**, comparable with Italy, Luxembourg, and Portugal [fig. 1.10].
- R&D is a highly concentrated activity across the OECD, especially in small countries; in **New Zealand** the 50 largest R&D performers were estimated to account for around 70% of domestic business R&D expenditure in 2014, similar to Denmark and Belgium [fig. 1.17 – see below].

Growth, jobs and the digital transformation

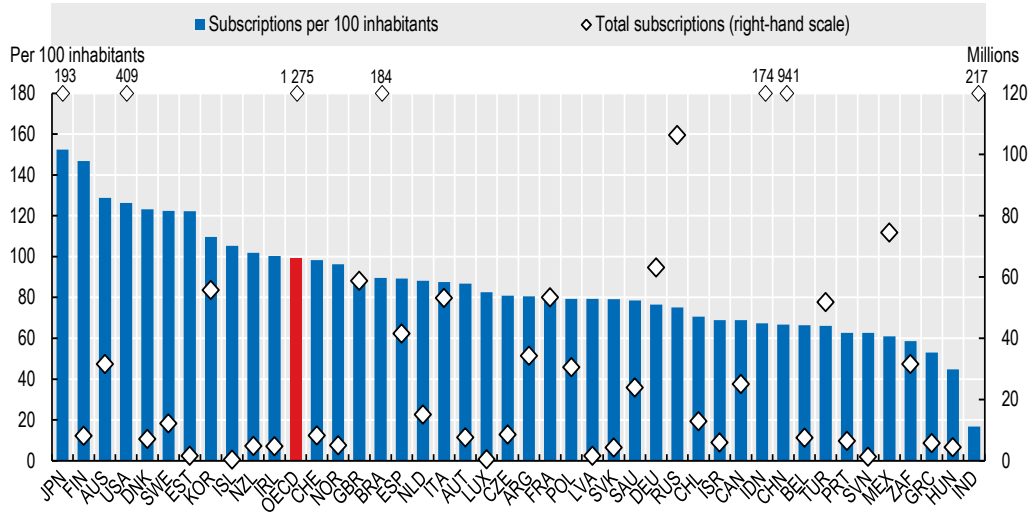
- From 2010 to 2015, **New Zealand** experienced net employment gains of almost 200 000 jobs. Large net gains were recorded in construction and in public administration, and small net losses in agriculture, forestry and fishing [fig. 1.34].
- From 2009 to 2014, **New Zealand** recorded modest gains in labour productivity, with wholesale, retail, hospitality and transport, and professional and business services the best performing sectors [fig. 1.44].
- Three-quarters of workers in **New Zealand** receive some training from their employers. High-skilled workers account for over half of those receiving training, while low-skilled workers account for only 15% [fig 1.40].
- Women in **New Zealand** earn about 15% less than men, even after individual and job-related characteristics are taken into consideration, and about 11% less when skills differences are also taken into account [fig. 1.41].

Innovation today - Taking action

- Women accounted for 7.2% of tertiary graduates in the ICT field in **New Zealand** in 2015, the highest rate amongst OECD countries and more than double the OECD average of 3% [fig. 1.59 – see below].
- **New Zealand** is among the OECD countries where government budgets for R&D have increased since 2008, growing 28% from 2008 to 2016 and especially strongly from 2013 on [fig. 1.62].
- By socioeconomic objective, around one-third of **New Zealand** government budgetary allocations for R&D flowed to agriculture, environment and earth exploration in 2016, with another third focused on general advancement of knowledge [fig. 1.63].
- Inventions often stem from collaboration within and across economies. In the period 2012-15, around 18% of patents listing inventors resident in **New Zealand** were international co-inventions. For ICT patents, this share was 31.1% [fig. 3.6.1].
- A higher share of the foreign-born working age population is educated at tertiary level (41%) than the population born in **New Zealand** (24%) [fig. 3.3.3 – see below].

Figure 1.2 Mobile broadband penetration, OECD, G20 and BRIICS, 2016

Total subscriptions and per 100 inhabitants

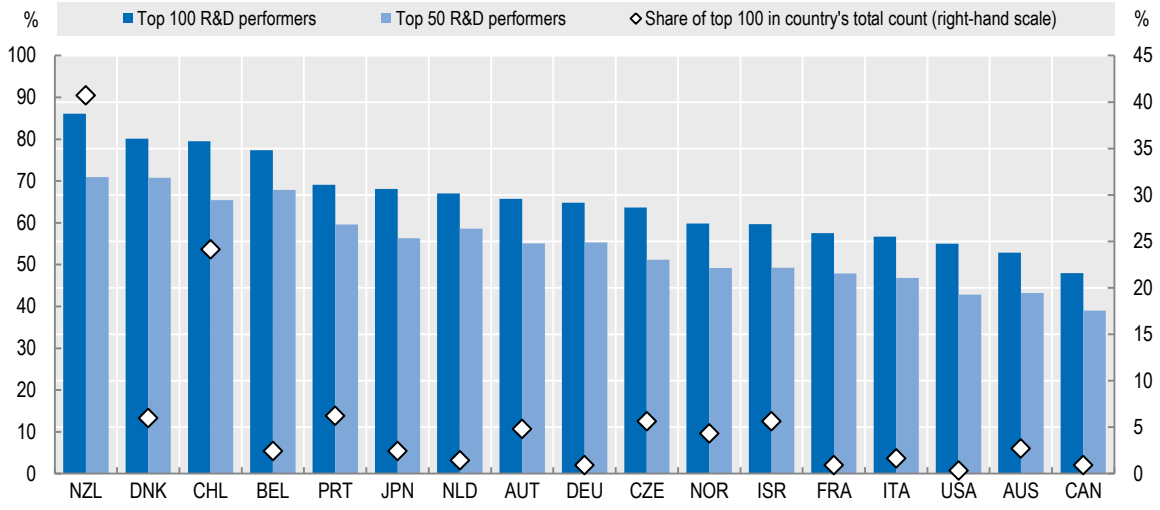


StatLink http://dx.doi.org/10.1787/888933616883

Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, http://dx.doi.org/10.1787/sti_scoreboard-2017-en.

Figure 1.17 Concentration of business R&D: top 50 and top 100 performers, 2014

As a percentage of domestic business R&D expenditure and of total count of performers

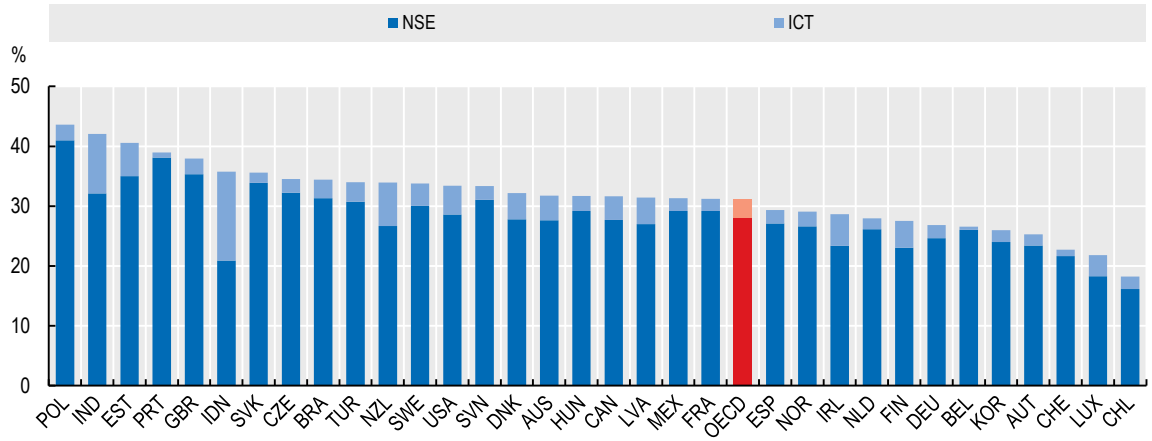


StatLink http://dx.doi.org/10.1787/888933617168

Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, http://dx.doi.org/10.1787/sti_scoreboard-2017-en.

Figure 1.59 Women tertiary graduates in natural sciences, engineering and ICTs (NSE & ICT), 2015

As a percentage of all tertiary graduates in NSE & ICT

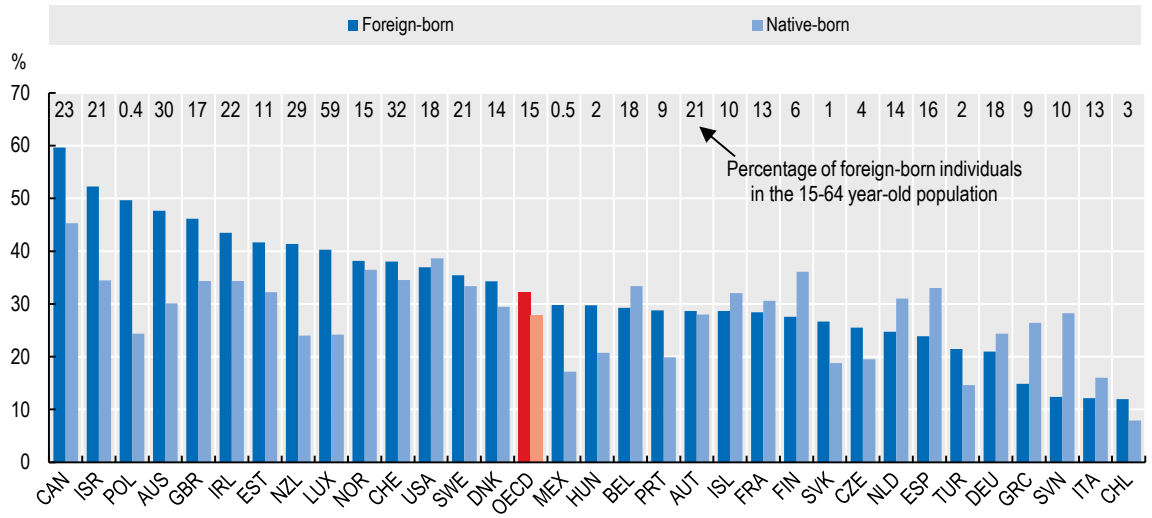


StatLink http://dx.doi.org/10.1787/888933617966

Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, http://dx.doi.org/10.1787/sti_scoreboard-2017-en.

Figure 3.3.3 Highly-educated individuals in the working-age population, by place of birth, 2015

As a percentage of relevant group, 15-64 year-old population



StatLink http://dx.doi.org/10.1787/888933618878

Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, http://dx.doi.org/10.1787/sti_scoreboard-2017-en.

The OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation

The 2017 edition of the Scoreboard contains over 200 indicators showing how the digital transformation affects science, innovation, the economy, and the way people work and live.

The aim of the STI Scoreboard is not to "rank" countries or develop composite indicators. Instead, its objective is to provide policy makers and analysts with the means to compare economies with others of a similar size or with a similar structure, and monitor progress towards desired national or supranational policy goals.

It draws on OECD efforts to build data infrastructure to link actors, outcomes and impacts, and highlights the potential and limits of certain metrics, as well as indicating directions for further work.

The charts and underlying data in the STI Scoreboard 2017 are available for download and selected indicators contain additional data expanding the time and country coverage of the print edition. For more resources, including online tools to visualise indicators, see the OECD STI Scoreboard webpage (http://www.oecd.org/sti/scoreboard.htm).

The OECD Directorate for Science, Technology and Innovation

It is part of the DNA of the Directorate for Science, Technology and Innovation (DSTI) to constantly look for ways of better understanding where our economies and societies are today, and where they are going tomorrow. We pride ourselves on tackling topics at the boundaries of our scientific and technological understanding, such as using biotechnology and nanotechnology to alter modes of production, and how digital shifts like "big data," earth observation and digital platforms are changing our world.

Discover DSTI at www.oecd.org/sti and the OECD's Going Digital project at www.oecd.org/going-digital.

Further reading

OECD (2017), *OECD Digital Economy Outlook 2017*, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264276284-en

OECD (2016), *OECD Science, Technology and Innovation Outlook 2016*, OECD Publishing, Paris. http://dx.doi.org/10.1787/sti_in_outlook-2016-en