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

Science, innovation and the digital revolution

- **Mexico** was amongst the OECD countries with the most rapid increase in mobile broadband subscriptions between 2010 and 2016 [Scoreboard fig. 6.1.1 - see below]. These grew 14 times over the period, from 4.2 subscriptions per 100 inhabitants in 2010, to 60.9 in December 2016.
- However, the mobile broadband penetration gap between medium-sized and small firms remains substantial in **Mexico**; at 17 percentage points, it is higher than all other OECD countries for which data are available [fig. 6.1.3].
- Most basic research is typically performed by higher education institutions; in **Mexico** government is responsible for 52% of basic research [fig 2.2.2].

Growth, jobs and the digital transformation

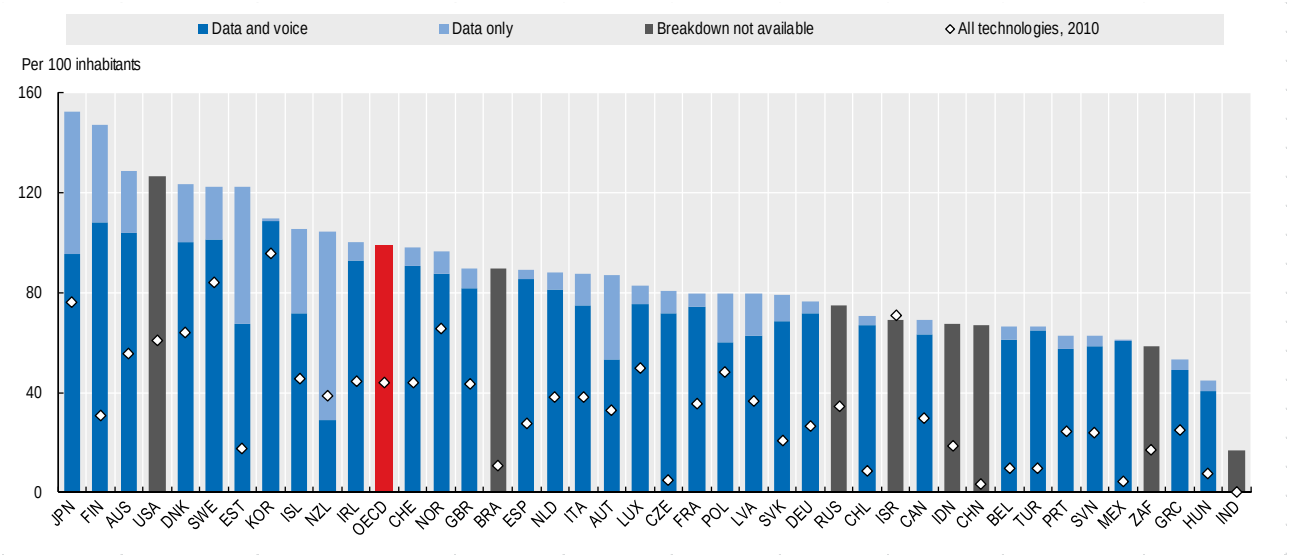
- From 2010 to 2016, **Mexico** experienced net employment gains of over 2.2 million jobs [fig. 1.34]. Large net gains were recorded in agriculture, manufacturing, wholesale and retail trade, business services and public services, with small net losses in construction.
- In relative terms, **Mexico** had the third-highest level of labour productivity in the information industries compared to productivity in the total non-agricultural business sector, only behind Ireland and Israel [fig. 1.45].
- In **Mexico**, women represented just over 31% of all tertiary graduates in natural sciences, engineering and ICT fields in 2015. This share was mainly driven by graduates in science and engineering (29.2%) rather than ICT (2.1%) [fig. 1.59].
- **Mexico** was among the OECD countries with the highest growth in spending on tertiary education between 2005 and 2014 [fig. 2.1.1]. It grew by over 23% over the period, from 1.16% of GDP in 2005, to 1.44% in 2014.
- 60% of individuals in **Mexico** used the Internet in 2016, up from 20.6% in 2006 [fig. 1.57]. Almost 86% of 16-24 year olds used the Internet in 2016, and 24.2% of 55-74 year olds [fig. 1.58].
- **Mexico** had the fifth-highest share of individuals aged 16-24 who attended an online course in 2014, at over 29%, up from just under 20% in 2009 [fig. 6.4.3 - see below].

Innovation today - Taking action

- **Mexico** is among the OECD countries where government budgets for R&D have increased since 2008, growing by 42% from 2008 to 2016 [fig. 1.62 - see below]).
- In 2012-15, in **Mexico**, 12.2% of patents were invented by women, the fourth-highest in the OECD after Portugal, Spain and Poland, compared to 10% in the United States and 7% in the EU [fig. 1.61].

- Data on the international mobility of scientific authors from 2002 to 2016 shows that **Mexico** attracted slightly more authors over this period than it lost [fig. 1.69 - see below]. However, the net inflows over the period reflect strong gains from 2002 to 2006, and losses from 2012 to 2016.
- **Mexico** has a low intensity of business R&D to GDP, of 0.16% in 2015, amongst the lowest levels in the OECD [fig. 1.71]. In 2015, **Mexico** was among the OECD countries that did not have a tax incentive scheme to support business R&D; it abolished its previous tax relief scheme in 2009, but reintroduced the instrument in 2017. In 2015, it provided direct support to business R&D, though, accounting for 0.06% of GDP [fig. 4.6.1].
- Between 2005 and 2013, the share of researchers working in the business sector fell in **Mexico**, from 45.3% in 2005 to 24.5% in 2013 [fig. 2.4.2]. From 2005 to 2015, the share of business R&D in total R&D fell from 46.9% to 30% [fig. 4.1.1].

Figure 6.1.1 Mobile broadband penetration, by technology, December 2016

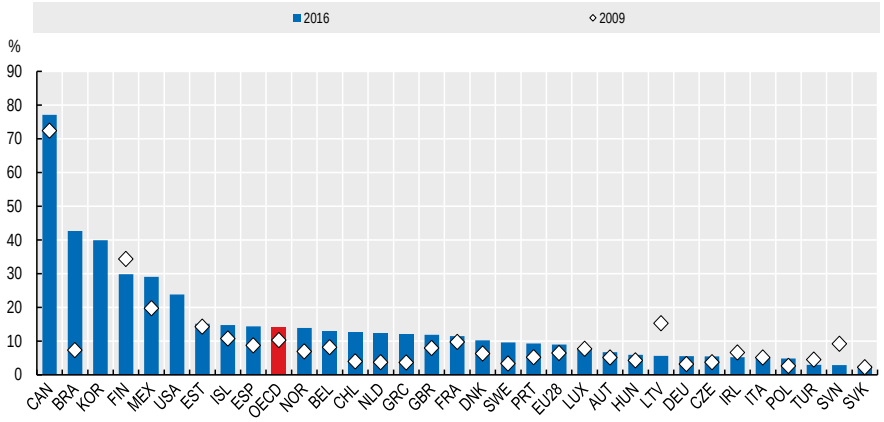


StatLink : http://dx.doi.org/10.1787/888933619923

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 6.4.3 Individuals aged 16-24 who attended an online course, 2009 and 2016

As a percentage of individuals aged 16-24



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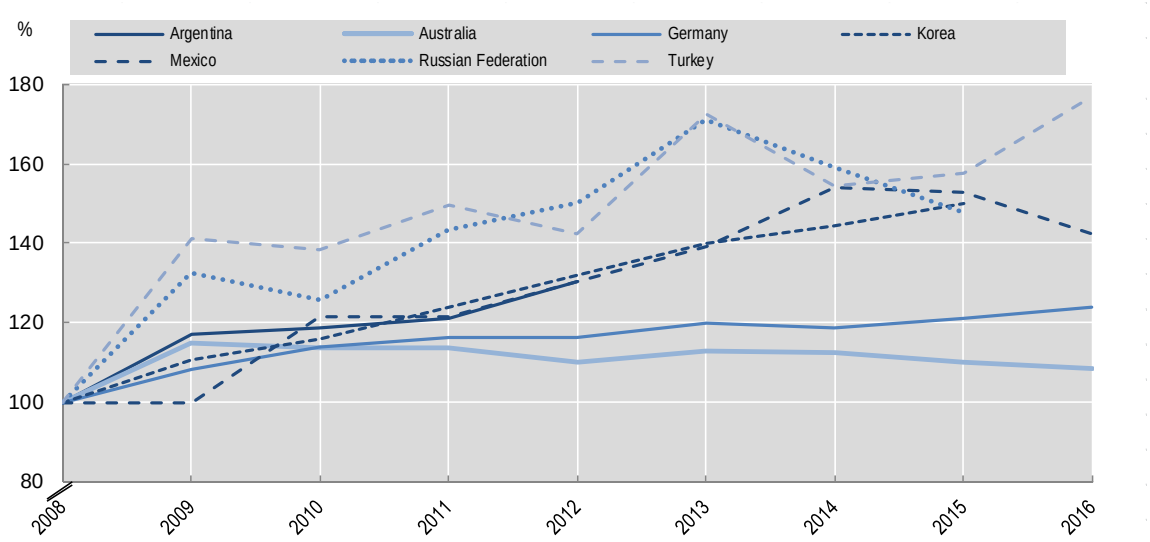
Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, http://dx.doi.org/10.1787/sti_scoreboard-2017-en.

Figure 1.62 Government R&D budgets, selected economies, 2008-16

Constant price index (USD PPP 2008 = 100)

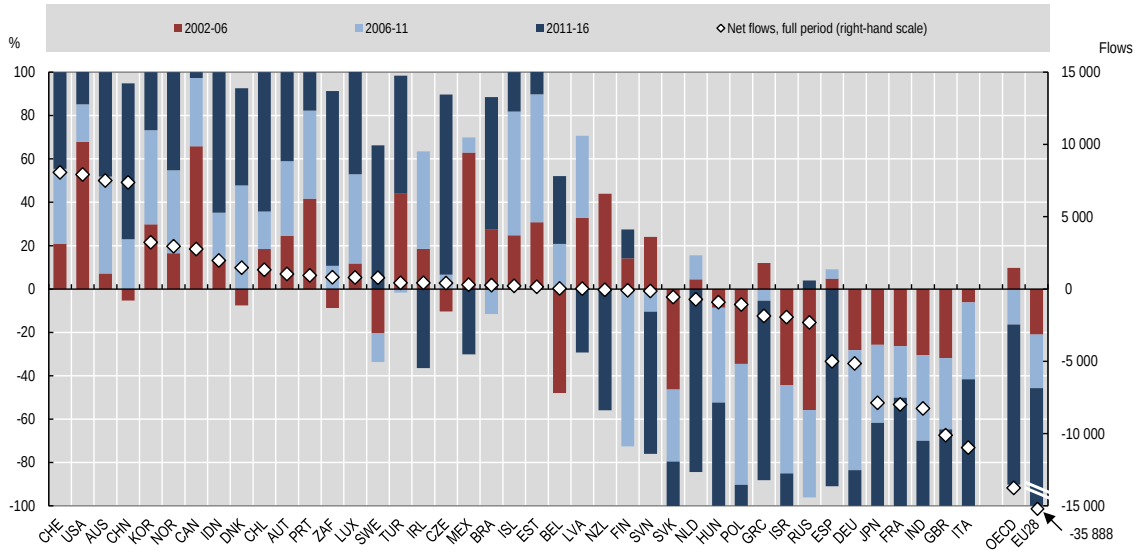


StatLink : http://dx.doi.org/10.1787/888933618023

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 1.69. International net flows of scientific authors, selected economies, 2002-16

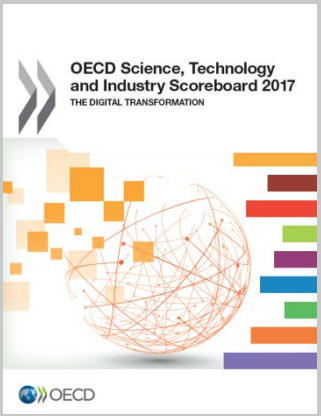
Difference between annual fractional inflows and outflows, as a percentage of total flows



StatLink : http://dx.doi.org/10.1787/888933618156

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