



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

#### Science, innovation and the digital revolution

- Around 18% of business R&D in **Greece** is performed in the ICT equipment and information service industries a similar proportion to the United Kingdom and Denmark; this is mostly driven by the information industries [Scoreboard fig. 4.4.1 see below].
- The 2015 results of the PISA test revealed that 27% of students of age 15 in **Greece** achieved low test scores for science and mathematics abilities; the OECD average is 17% [fig. 2.5.1].
- Experimental indicators on the international mobility of scientific authors, based on bibliometric data, show that in 2016, **Greece** experienced a marked net outflow of scientific authors 2% of authors left the country, the highest outflow among OECD countries [fig. 3.4.2]; as in most other countries, departing authors tend to publish in more highly ranked journals than their staying or returning peers [fig. 3.4.3].

#### Growth, jobs and the digital transformation

- From 2010 to 2016, **Greece** experienced the greatest decrease in employment of any OECD country (-13.5% of total employment); all sections of the economy were impacted especially the public sector, construction, and wholesale, retail, food and transportation services [fig. 1.34].
- All industry groups in Greece experienced positive average annual growth in labour productivity before
  the crisis; while manufacturing and construction kept on growing in the 2009-2015 period, all other
  sectors experienced annual decreases in labour productivity, driving an overall decline of -2.4% per year
  [fig. 1.44].
- Capital services for selected Knowledge Based Capital assets and ICT equipment provided a key contribution to labour productivity growth in the 2000-14 period, as a percentage of labour productivity growth itself [fig. 1.50]; this was mostly driven by accumulation of software and ICT tangible capital, nevertheless the ICT investment intensity in Greece did not change significantly from 2005 to 2015 [fig. 2.1.3].
- In **Greece**, the information industries have almost twice the labour productivity (87% higher) of all other non-agriculture business sectors, the OECD average difference is 60% [fig. 1.45 see below].
- Jobs in **Greece** have relatively low ICT task intensity, about half that of Norway (the highest); jobs in Italy and Lithuania have similar ICT intensities [fig. 2.6.1].
- Performing more ICT tasks does not strongly increase wages in **Greece**, where men gain the least of any country from higher rates of ICT tasks and the benefits for women, while much higher, are still in the lowest quartile across OECD countries [fig. 1.42 see below].
- The proportion of people aged 16-74 in **Greece** who are Internet users more than doubled between 2006 and 2016 to 70% (OECD average of 84%) [fig. 1.57]; while almost all individuals (97%) of age 16-24 use the internet, only 31% of 55-74 year olds do so (OECD average of 63%) [fig. 1.58 see below].

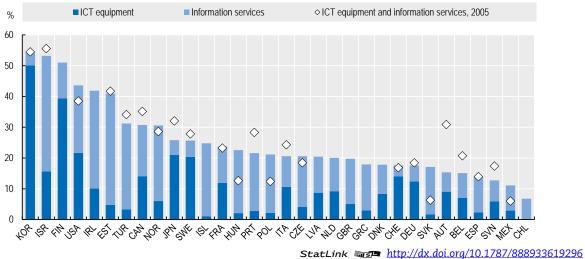
• About 30% of workers in **Greece** received firm-level training in 2015, similar to the rate in Italy and the Russian Federation, in Finland, Denmark, and the Netherlands over 75% received firm-based training [fig. 1.40].

#### **Innovation today - Taking action**

- **Greece** is among the OECD countries where government support for business R&D has increased since 2006, rising from 0.02% of GDP in 2006 to 0.08% of GDP in 2014 and reaching similar levels to Finland, Germany, Italy, and New Zealand [fig. 4.6.1].
- In **Greece** in 2014, most of the support to business R&D in 2014 was indirect, through tax incentives 63%, up from 57% in 2006 [fig. 4.6.2].

Figure 4.4.1 R&D expenditure by ICT equipment and information services industries, 2015

As a percentage of business enterprise expenditure on R&D

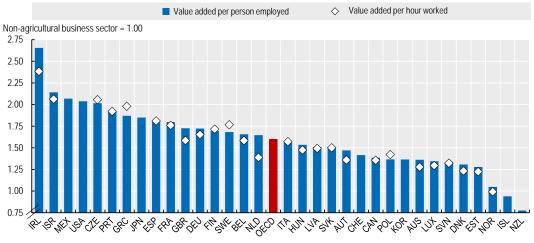


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Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/sti\_scoreboard-2017-en">http://dx.doi.org/10.1787/sti\_scoreboard-2017-en</a>.

Figure 1.45 Labour productivity levels in the information industries, 2015

Relative to aggregate labour productivity of other industries in the non-agriculture business sector

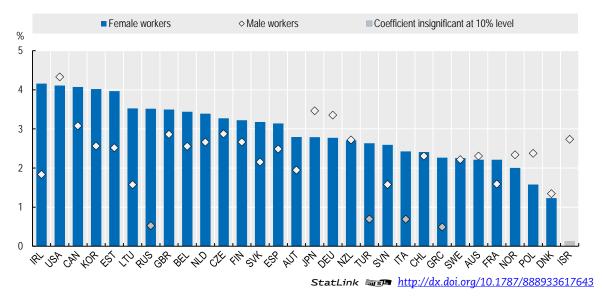


StatLink http://dx.doi.org/10.1787/888933617700

Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/sti\_scoreboard-2017-en">http://dx.doi.org/10.1787/sti\_scoreboard-2017-en</a>.

Figure 1.42 Labour market returns to ICT tasks by gender, 2012 or 2015

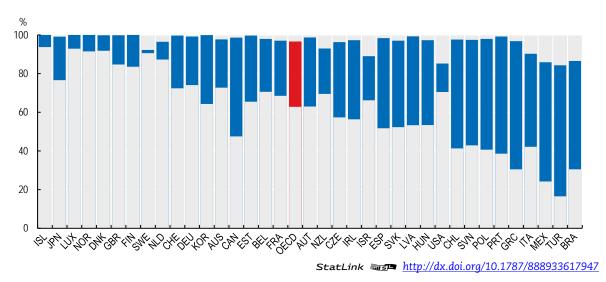
Percentage change in hourly wages for 10% increase in ICT task intensity (at the country mean, by gender)



Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/sti\_scoreboard-2017-en">http://dx.doi.org/10.1787/sti\_scoreboard-2017-en</a>.

Figure 1.58 Internet usage trends, by age, 2005-16

Percentage gap between 16-24-year-old and 55-74-year-old Internet users, 2016



Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/sti\_scoreboard-2017-en.">http://dx.doi.org/10.1787/sti\_scoreboard-2017-en.</a>



## 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 (<a href="http://www.oecd.org/sti/scoreboard.htm">http://www.oecd.org/sti/scoreboard.htm</a>).

#### 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.





### **Further reading**

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

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