

Published on Innovation Policy Platform (https://www.innovationpolicyplatform.org)

# Metrics and evaluation for universities and PRIs

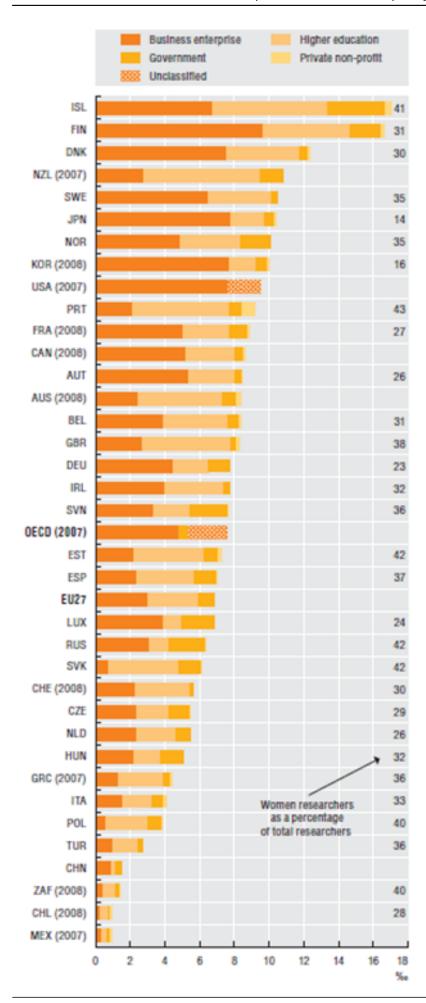
Multiple measures can be used to proxy the contributions of universities and PRIs to innovation, including measures dealing with innovation inputs, innovation processes, and innovation outputs. Measures may:

- Focus on input to universities and PRIs' innovation, such R&D expenditure by performing sectors (figure 1, 2, 3, 4), and the numbers of researchers by R&D performing sector (figure 5).
- Reveal dimensions of the innovation process, such as the impact of domestic scientific collaboration by institutions on research output (figure 6).
- Focus on output of universities and PRIs, such as the employment rate of doctorate holders (figure 7), and the sources of knowledge for firms innovation (figure 8).

#### Figure 5: Researchers by R&D performing sector, 2009

Per thousand employment

Published on Innovation Policy Platform (https://www.innovationpolicyplatform.org)



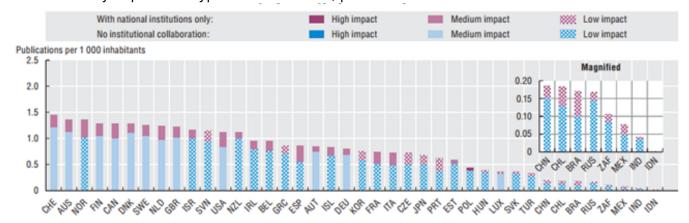


Published on Innovation Policy Platform (https://www.innovationpolicyplatform.org)

<u>Source:</u> OECD, Main Science and Technology Indicators Database, June 2011. <u>StatLink: http://dx.doi.org/10.1787/888932485899</u> [1]

Figure 6: The impact of domestic scientific collaboration by institutions on research output, 2009

Publications by impact and type of collaboration, per 1 000 inhabitants



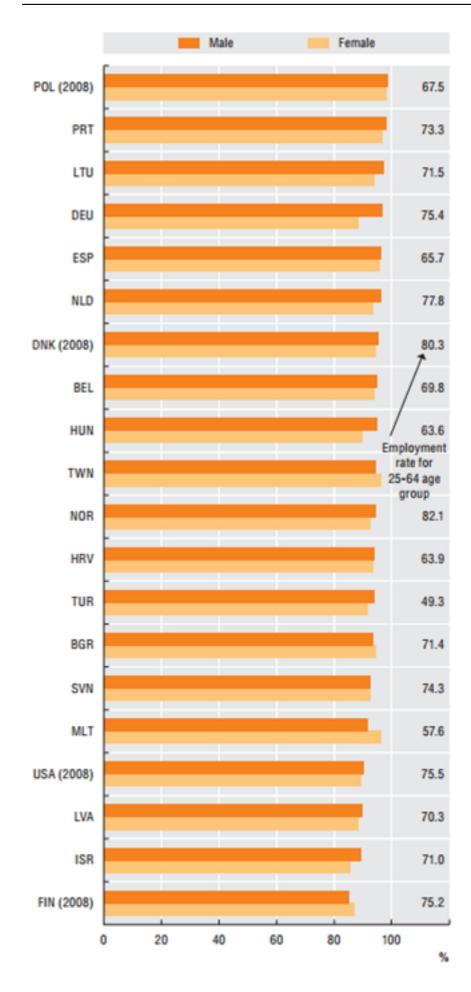
<u>Source</u>: OECD and SCImago Research Group (CSIC), Report on Scientific Production, based on Scopus Custom Data, Elsevier, June 2011. See chapter notes.

StatLinks: http://dx.doi.org/10.1787/888932486298 [2]

Figure 7: Employment rate of doctorate holders by gender, 2009

As a percentage of total doctorate holders.

Published on Innovation Policy Platform (https://www.innovationpolicyplatform.org)





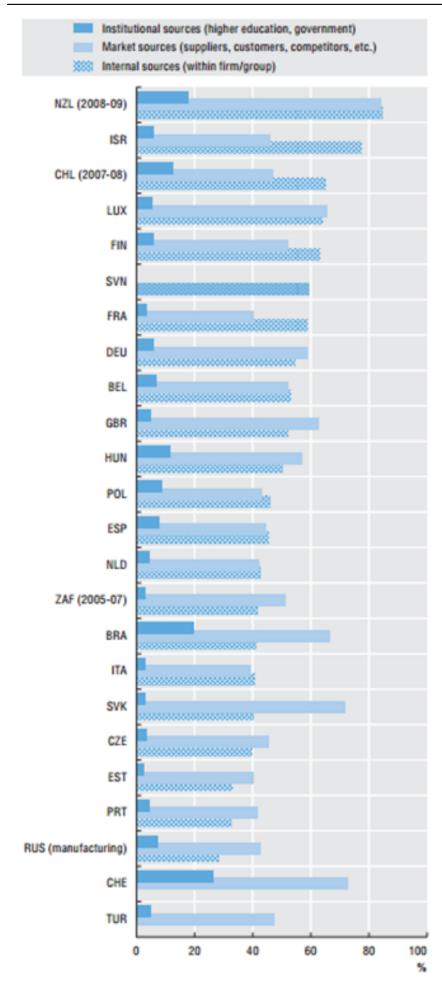
Published on Innovation Policy Platform (https://www.innovationpolicyplatform.org)

Source: OECD, based on OECD/UNESCO Institute for Statistics/Eurostat data collection on careers of doctorate holders 2010, June 2011; and OECD, Employment Database, June 2011. See chapter notes. StatLinks: http://dx.doi.org/10.1787/888932485785 [3]

### Figure 8: Sources of knowledge for innovation by type, 2006-08

Percentage of innovative firms citing source as "highly important" for innovation

Published on Innovation Policy Platform (https://www.innovationpolicyplatform.org)





Published on Innovation Policy Platform (https://www.innovationpolicyplatform.org)

Source: OECD, based on Eurostat (CIS-2008) and national data sources, June 2011. See chapter notes.

StatLinks: http://dx.doi.org/10.1787/888932486469 [4]

# Figure 1. Share of gross domestic expenditure on R&D, financed by industry

Figure 2. Share of gross domestic expenditure on R&D, financed by government

Figure 3. Share of gross domestic expenditure on R&D, financed by higher education

Figure 4. Share of gross domestic expenditure on R&D, financed by private non-profit sector

#### References

- OECD (2013), OECD Science, Technology and Industry Scoreboard 2013, OECD Publishing.
- OECD (2011), OECD Science, Technology and Industry Scoreboard 2011, OECD Publishing. doi: 10.1787/sti scoreboard-2011-en
- OECD (2010a), "Improving Governance and Measurement", in The OECD Innovation Strategy: Getting a Head Start on Tomorrow, OECD Publishing. doi: 10.1787/9789264083479-9-en
- OECD (2010b), Measuring Innovation: A New Perspective, OECD Publishing.doi: 10.1787/9789264059474-en
- OECD (2009b), OECD Patent Statistics Manual, OECD Publishing, doi: 10.1787/9789264056442-en
- OECD/Eurostat (2005), The Measurement of Scientific and Technological Activities—Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd ed., OECD Publishing. doi: 10.1787/9789264013100-en

**Related Link:** The role of measurement and evaluation in policy and governance Scientific publications
Metrics and evaluation for technology transfer and commercialisation
Peer review



Published on Innovation Policy Platform (https://www.innovationpolicyplatform.org)

**Source URL:** https://www.innovationpolicyplatform.org/content/metrics-and-evaluation-universities-and-pris?topic-filters=12199

#### Links

- [1] http://dx.doi.org/10.1787/888932485899
- [2] http://dx.doi.org/10.1787/888932486298
- [3] http://dx.doi.org/10.1787/888932485785
- [4] http://dx.doi.org/10.1787/888932486469