CO3.2: Gender differences in university graduates by fields of study

Definitions and methodology

This indicator provides information on the subjects that male and female students tend to study at university by looking at the gender distribution of graduates in certain subjects. This gives an insight into the skills and expertise that men and women then bring to the labour market, and into how differences in subjects studied at university affect future career and family income patterns.

Data on graduates by field of study are collected through the joint UNESCO-OECD-Eurostat (UOE) annual data collection on education systems. Graduates are classified as having successfully followed and completed a university programme and graduated in the specified year; this is then further disaggregated by gender and subject.

Key findings

Chart CO3.2.A shows that across all OECD countries, a majority of graduates in humanities and arts subjects are women. Included within this category are courses in fine arts, performing arts, audio-visual arts and media production (e.g. film and video production and photography), foreign languages, philosophy, linguistics and literature, history and archaeology. Some prospective careers stemming from these degrees include schoolteachers, interpreters and translators, and archaeologists.

Chart CO3.2.A. Men's and women's shares of degrees awarded in arts and humanities subjects

Distribution (%) of tertiary degrees awarded in arts and humanities qualifications by sex, 2018

Note: Qualifications classified under ISCED 11 levels 5-8, only.

Graduates in business, administration and law are, in most countries, more evenly distributed across gender, although still predominately female (Chart CO3.2.B). In all OECD countries except Denmark, Japan, Korea, the Netherlands, Switzerland and Turkey, more than 50% of graduates in these subjects are women, and on average across OECD countries with data available about 57% of tertiary degrees in business, administration and law are awarded to women. Courses in this area include accounting and taxation, finance, banking and insurance, management and administration, marketing and advertising, secretarial and office work, wholesale and retail sales, and law. Prospective careers are most likely to be found in private businesses and law firms.

Other relevant indicators: Employment profiles over the life course (LMF1.4); Gender neutrality in tax/benefit systems (PF1.4); Educational attainment by gender (CO3.1); and, Literacy scores by gender at age 15 (CO3.4).
One field of study dominated by male students is engineering, manufacturing and construction (Chart CO3.2.C). This field encompasses a diverse range of subjects and thereby offers multiple job opportunities. Students study a range of courses including chemical engineering, mechanics, food and drink processing, mining and extraction, and architecture, construction and civil engineering. On average across OECD countries, women account for only 26.4% of all graduates in these subjects. The highest female share is in Poland (42.5%), and the lowest is in Japan (14.5%).
Comparability and data issues

There should be few major issues with the cross-national comparability of data in this area. The UOE data collection manual gives detailed instructions to national correspondents on the mapping of subjects and fields of study. For more details and notes for specific countries, see the notes for Indicator A.3 provided in OECD Education at a Glance 2020 Annex 3 (https://doi.org/10.1787/69096873-en).

Sources and further reading: