



The Position of Women in Czech Science

2020 Monitoring Report



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The Position of Women in Czech Science 2020 Monitoring Report

Centre for Gender & Science

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MAIN FINDINGS

Employees in Research and Development

- The number of research and development employees is increasing overall, including in the individual professions of researcher, technician, and other R&D personnel.
 - In 2020, a total of 118,004 employees (i.e., 80,959 full-time equivalents – FTE) worked in research and development, of which 36,191 were women.
- **Men are more numerous in all research and development professions and their share is increasing.**
- Overall, women accounted for 30.7% (28.6% in FTEs) of research and development employees in 2020:
- Women made up 30.4% (28.6% in FTEs) of all positions in research and development in 2020:
 - 27.6% of researchers (24.1% in FTEs).
 - 29.2% of technicians (27.6% in FTEs).
 - 45.8% of other R&D personnel (48.5% in FTEs).

Researchers

- Researchers represented 55.2% of all research and development employees, with 61,966 persons (41,198 FTEs) in 2020.
- **The representation of women among researchers was 27.6% (24.1% in FTEs).** The representation of women among researchers is slightly increasing after stagnating in recent years; in 2020, women made up 27.6% of researchers. However, despite this positive development, this is one of the lowest shares in the last 15 years, even though the total number of female researchers increased by 27,651 from 2005 to 2020.
- **At the European level, the Czech Republic has the lowest proportion of women researchers out of all EU countries; in 2019 the figure was 27.2%** – data for 2020 were not available at the time the Monitoring Report was written.
 - In all the other countries that were at the very bottom of the ranking in 2009 alongside the Czech Republic, the representation of women researchers has increased over the last 10 years, while in the Czech Republic it has decreased by 1.7 percentage points. Therefore, the Czech Republic has not been performing well at the EU level in the long term.

The Ideal and Typical Career Path in Research

- In 2020, a total of 98,096 people were studying at the master's level and 21,048 at the doctoral level.
 - 59,417 women (60.6%) and 38,679 men (39.4%) were enrolled in a master's degree programme.
 - 9,369 women (44.5%) and 11,679 men (55.5%) were in a doctoral degree programme.
- The majority of all graduates from a master's programme were in the social sciences (46.7%) and the minority were in the agricultural sciences (4.9%). The distribution is the same among doctoral graduates, with the social sciences leading at 21.1% and the agricultural sciences coming last at 3.5%.
- **The share of women among master's students has remained at 60% over the last 10 years. Women have also long predominated among master's graduates, as 59.6% of master's graduates in 2020 were women.** In the transition between graduating from a master's programme and starting a doctorate, women's interest in continuing their studies has been declining. **Only 44.5% of women who graduate with a master's degree decide to go on to pursue a doctoral degree – i.e., a drop of 13.9 percentage points.**
- **While the proportion of female students in doctoral programmes has stagnated, the percentage of women who successfully complete their doctoral degree has been increasing. Over the last 15 years, this figure rose by 10.3 percentage points. If the positive trend of recent years continues at the same rate in the future, then the number of female graduates and male graduates of doctoral programmes could be equal by 2027.**
- **The biggest drop in the proportion of women in the study-professional pathway in 2020 occurred in the transition between doctoral graduates (45.3% of whom are women) and researchers (27.6% of whom are women) which is a drop of 17.7 percentage points.**
- In the technical sciences, men outnumber women at all stages of the study-professional pathway. However, over the course of their careers, as women progress from being master's students to pursuing a career as a researcher, it is in this field that the share of women decreases the least among all the disciplines investigated, as in 2020 it declined by 'only' 14.7 percentage points. The biggest drop was in the natural sciences, where the proportion of women fell by 36.9 percentage points over the course of their study-professional career. The problem of the small share of women in the natural and technical sciences is that these fields are becoming increasingly important in terms of the total number of people in these professions.
- In the agricultural, medical, and social sciences and the humanities, the majority of students and graduates of both master's and doctoral degrees are women. In the case of the research profession, however, the gender balance reverses in favour of men.

Researchers by Field

- A total of 65,193 people were working in research in 2020. The largest share of researchers in the Czech Republic is in the technical sciences (37.4%) and the natural sciences (31.0%), and together they employ more than two-thirds of all researchers. At the same time, these two fields also have the smallest shares of women researchers. Women make up only 14.7% of researchers in the technical sciences, while in the natural sciences they account for close to a quarter at 24.8%.
 - On a full-time equivalent (FTE) basis, the proportion of women among researchers in both disciplines is slightly lower (13.0% in the technical sciences; 24.4% in the natural sciences).
- The medical sciences are closest to parity, as 48.2% of researchers in this field are women (50.3% in FTEs), followed by the agricultural sciences, where 45.8% of researchers are women (44.4% in FTEs).

Researchers by Sector

- The sector with the largest proportion of researchers is the higher education sector. In 2020 it employed 41.9% of all researchers. It was closely followed by the business sector, with 40.7% of all researchers. The government sector employed 17.0% of all researchers in 2020, while only 0.4% worked in the private non-profit sector.
 - The proportion of women among researchers in the higher education sector is slightly above one-third (35.7%; 38.7% in FTE), while in the business sector they make up less than one-seventh (13.7%; 13.4% in FTE). In the government and private non-profit sectors, 40% of researchers are women.
- In the business sector, internationally controlled private businesses offer the most research positions (53.9%) but employ the fewest women of all business establishments (11.5%).
- In the government sector, the Czech Academy of Sciences offers the largest number of research positions (62.6%), 36.4% of which are held by women – the second lowest measured ratio in the government sector.
- The higher education sector is dominated by public and state universities (89.7%) where 34.7% of researchers are women, the lowest figure in the sector.
- **In international comparison, the share of women researchers in the Czech higher education and business sectors is the lowest in the European Union, and in the government sector the Czech Republic has the fourth-worst score in the EU.**

Academic Employees

- In 2020, the overall employment of academics was 18,507 full-time equivalent (FTEs) academics, of which women made up 36.0%.
- Women were most commonly in the position of lecturers (56.4%). However, the proportion of women decreases as the academic position rises, with women accounting for only 15.3% of full professors.
 - The share of women among assistants was 48.8%, while 40.9% of assistant professors and 26.8% of associate professors were women.
 - **If the rate of increase in the proportion of female professors, i.e., 1.8 percentage points every 10 years, continues at the same rate, we will reach parity in this role in 193 years.**
- The highest proportions of women academics are found in the social sciences (45.5%), the medical sciences (44.0%), and the humanities (41.9%), while the lowest shares are in the technical sciences (22.4%) and the natural sciences (26.0%).
- Overall, the biggest losses during the transitions between academic roles occur between the positions of assistant professor and associate professor, where the share of women drops by 14.1 percentage points.
 - In the agricultural sciences, the proportion of women declines by 50.8 percentage points during the transition from lecturer to professor. The social sciences also suffer from strong vertical segregation, as the share of women drops by 47.2% between the lowest and highest academic career roles.
 - The technical sciences are horizontally segregated and the share of women with the ambition of entering academia is the smallest in this field out of all the fields in question. However, the attrition rate in this field is relatively low as women rise through the academic ranks, and the probability of a woman reaching the academic position of full professor is higher in the technical sciences than in the other sciences.
- At every level of an academic career, the gender pay gap between academics is to the disadvantage of women.
 - The largest wage gap is between associate professors, with men earning on average 12.3% more than women. The smallest wage gap is between male and female full professors (8.6%).
 - **Since 2010, the pay gap has increased at all levels of qualification, except for lecturers.**

Decision-Makers

- Decision-making in science remains the domain of men, who in 2020 held 90.7% of management positions in research institutions, universities, and other research and development institutions. There are no women in leadership positions in the Czech Rectors' Confederation, the Council of Universities, the Technology

Agency of the Czech Republic, the Czech Science Foundation, and the Learned Society of the Czech Republic.

- The share of women in the decision-making and strategic and supervisory bodies of these institutions was 21.8%.
- The share of women in advisory and expert bodies was 27.1%.

Science and engineering professionals

- In 2019, women made up 27.5% of science and engineering professionals, the highest figure since 2011. This category includes specialists in science, mathematics, and statistics, as well as specialists in engineering, manufacturing, construction, and architecture.
- For professionals in this field, there are differences in average gross monthly salaries not only by gender but also by age.
 - Women are generally at a disadvantage compared to men, with the largest pay gaps occurring in the 25–29 (15.9%) and 35–44 (16.0%) age categories.
- In an EU comparison, we find 29.5% of professionals in science and engineering in the Czech Republic are women, which is slightly above the EU-27 average.

Patent applications

- The number of patents granted to women increased from 2005 to 2011 and has ranged between 9% and 11% since then. In 2020, 10.2% of patents were granted to women.
 - The highest number of patents, 14.6%, were granted to women working in scientific institutes of the Czech Academy of Sciences.
 - The lowest number of patents (7.8%) were granted to women working in the commercial sector.

A NOTE ON DATA SELECTION, DATA AVAILABILITY AND ACCESS TO DATA PROCESSING

The source data on which this monitoring report is based are published by the Ministry of Education, Youth and Sports (MEYS) and the Czech Statistical Office (CZSO). We also use data from Eurostat and the *She Figures* report, a publication issued by the European Commission that monitors the state of gender equality in research and innovation across Europe and beyond. We also draw on the annual reports of public research institutions and universities.

In relation to the indicators used in this publication, we additionally note the following:

- Due to a change in the data collection methodology (CZSO), time series primarily from 2005 onwards are available for a comparison of selected indicators over time.
- A time series on students published by the Ministry of Education, Youth and Sports in the framework of the Statistics on Performance Indicators of Public and Private Higher Education Institutions of the Czech Republic is re-generated every year in its entirety dating back to 2001. Universities have the possibility to change the data on the number of students and graduates retrospectively, which they do. Therefore, the data generated in this year may differ from data published in previous years (and therefore in previous monitoring reports).
- In the introductory, textual, and graphical parts, the data on R&D personnel are presented in the form of a Head Count (HC), which is preferred to full-time equivalents (FTE). The former of these two types of data represents the physical counts of employees as of 31 December of a given year and indicates the number of persons involved in research and development (R&D), irrespective of the time spent on these activities. FTE, by contrast, represents the number of employees converted to full-time equivalents and thus captures the actual time spent on R&D. It tends to be mainly women who work part time, so the representation of women in FTEs is in most cases lower than the physical number of women. The reason for the preference for head counts stems from the desire for compatibility with the data on students (see the Ideal and Typical Career Path in Research), where naturally physical counts are included.

For the sake of better clarity and maintaining comparability with the source, this publication adopts the terminology used in the field of statistics (CZSO and MEYS data).

Definitions of staff categories used in the Monitoring Report

Research and development (R&D) personnel	Research and development (R&D) personnel. A group consisting of researchers, technicians, and other R&D personnel.	Data: CZSO – Research and Development Indicators
Researchers	R&D personnel who create new or extend existing knowledge, usually by managing and/or carrying out activities that involve the conception or creation of new knowledge, products, processes, methods, and systems, applying scientific concepts and theories. Their job description usually includes conducting R&D, including directing or supervising these activities (e.g., supervising graduate student research); disseminating and applying scientific knowledge gained from the study of particular disciplines; and collecting, processing, analysing, and interpreting scientific papers and reports.	Data: CZSO – Research and Development Indicators Data: Eurostat – Share of women researchers, by sectors of performance Data: European Commission – She Figures
Technicians	R&D staff who perform technical, professional, practical, and support tasks related to R&D and the application of scientific concepts and operational methods, usually under the supervision of researchers. Technicians also includes research assistants such as research assistants or laboratory technicians who, while performing assigned research tasks, do not themselves create or extend existing knowledge. Their usual activities include installing, monitoring, operating, and servicing special instruments and equipment; carrying out and monitoring tests, experiments, laboratory analyses, and field investigations; collecting and testing samples; recording, observing, and analysing data without attempting to interpret the findings in a professional manner; drawing up, examining, and interpreting technical drawings and graphs; planning and carrying out mathematical, statistical, and related calculations; storing data in databases and editing computer records; retrieving and verifying bibliographic data, etc.	Data: CZSO – Research and Development Indicators
Other R&D personnel	R&D staff involved in or integrated into R&D activities (e.g., tradespeople, secretaries, and clerks). Managers and administrative staff whose activities are in direct service of R&D are also included.	Data: CZSO – Research and Development Indicators
Academic staff	Professors, associate professors, assistant professors, assistant, lecturers, and scientific and R&D workers who are employees of the university. They carry out direct teaching activities, work related to direct teaching activities, scientific, research, development and innovation, artistic or other creative activities.	Data: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources) Data: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic
Science and engineering professionals	People in jobs with the highest skill levels. These include, for example: astronomers, meteorologists, chemists, geologists, statisticians, biologists, botanists, zoologists, specialists in manufacturing, construction, and related fields, architects, cartographers, surveyors, electrical engineers, or graphic and multimedia artists. The group is defined by the internationally used ISCO-08 classification, or its national version CZ-ISCO.	Data: CZSO – Labour Force Survey (LFS)
Persons in R&D decision-making positions	Persons in institutional management (directors, rectors), persons in decision-making, strategic and control bodies, and persons in R&D advisory bodies.	Data: Annual reports and the websites of relevant institutions
Persons in charge of institutions	The person in charge is the person who represents the institution. In selected institutions, this is the director, chairperson, rector, or dean.	Data: Annual reports and websites of relevant institutions
Persons in decision-making, policy-making, and control bodies	Persons in decision-making, policy-making, and control bodies are classified by institution: <ul style="list-style-type: none"> • Public Research Institutions: Institute Council and Supervisory Board • Higher education institutions (HEIs): Academic Senate, Vice-Dean, Scientific/Artistic/Academic Council, Board of Directors • Czech Science Foundation: Board, Scientific Council, Supervisory Council • Technology Agency of the Czech Republic: Board, Research Council, Supervisory Council • Czech Academy of Sciences: Academic Assembly, Supervisory Board, Academic Council, Scientific Council • R&D Council: members of the RVVI • Council of HEIs: Board, Assembly • Czech Rectors' Conference: Board, Chambers of the Rectors' Conference (logically, this is quite similar to the management of HEIs), plenary • The Learned Society: Board, Council 	Data: Annual reports and websites of relevant institutions

Persons in advisory and expert bodies	They are included here by institution: <ul style="list-style-type: none"> • Czech Science Foundation: evaluation panels, sectoral committees • Technology Agency of the Czech Republic: programme councils and commissions • Czech Academy of Sciences: commissions and councils • R&D Council: commissions • Council of HEIs: working committees and working groups • Czech Rectors' Conference: working groups and commissions 	Data: Annual reports and website of relevant institutions
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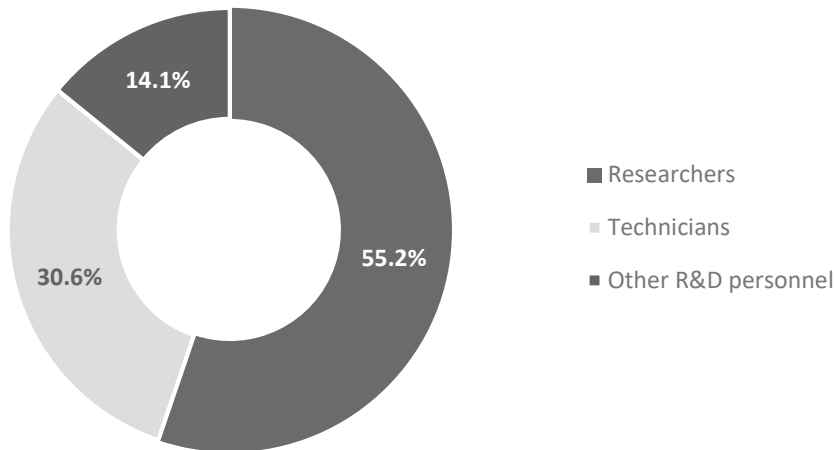
Overview of abbreviations used

HC	Head Count, physical counts: The head count as of 31 December of a given year indicates the number of persons involved in research and development (R&D), irrespective of the time spent on these activities.
FTE	Full-Time Equivalent: A unit to measure employed persons in a way that makes them comparable even if they work or study a different number of hours per week. The unit is obtained by comparing an employee's average number of hours worked to the average number of hours of a full-time worker. A full-time person is therefore counted as one FTE, while a part-time worker gets a score in proportion to the hours he or she works or studies. For example, a part-time worker employed for 20 hours a week where full-time work consists of 40 hours is counted as 0.5 FTE.
GPG	Gender pay gap: The difference in average gross hourly earnings between women and men. It is based on salaries paid directly to employees before income tax and social security contributions are deducted.

EMPLOYEES IN RESEARCH AND DEVELOPMENT

According to the Czech Statistical Office (CZSO), a total of 118,004 employees worked in research and development (R&D) in 2020. The majority (55.2%) were researchers, almost a third (30.6%) were employed as technicians, and 14.1% represented other R&D personnel.

Figure 1: Proportion (%) of employees in R&D in 2020, by discipline (HC)

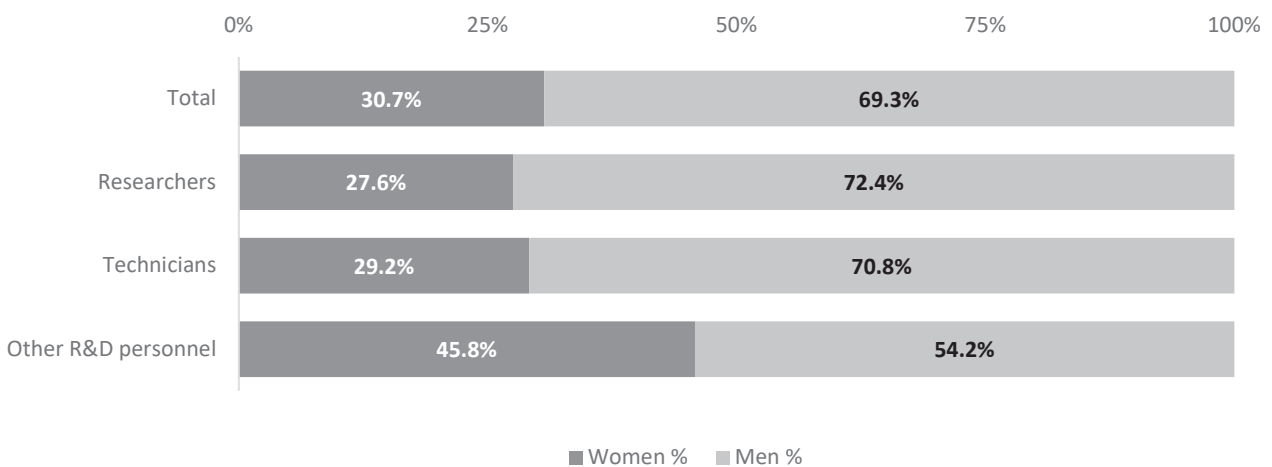


Source: CZSO – Research and Development Indicators.

Overall, women accounted for 30.7% of R&D employees. Although the proportion of women among researchers, technicians, and other R&D personnel has been increasing over the years, the trend has fluctuated, with positive and negative changes within tenths of a percent. Since 2005, when the total proportion of women working in R&D was at its highest at 35%, the share of women declined until 2017, when it reached an all-time low of 30.2%.¹ Proportional representation remained uneven in 2020, both in aggregate and across fields, as can be seen in Figure 2.

In the category of other R&D personnel, the structure of representation is closest to equality (45.8% women) but employees in this category make up only 14.1% of R&D employees (16,700 persons) – see Figure 1. However, the numerically largest area, which is researchers, has the smallest proportion of women and accounts for only 27.6% of the 65,193 persons who are women. Women technicians make up 29.2% of the total 36,151 technical staff.

Figure 2: Proportion (%) of employees in R&D in 2020, by sex and discipline (HC)



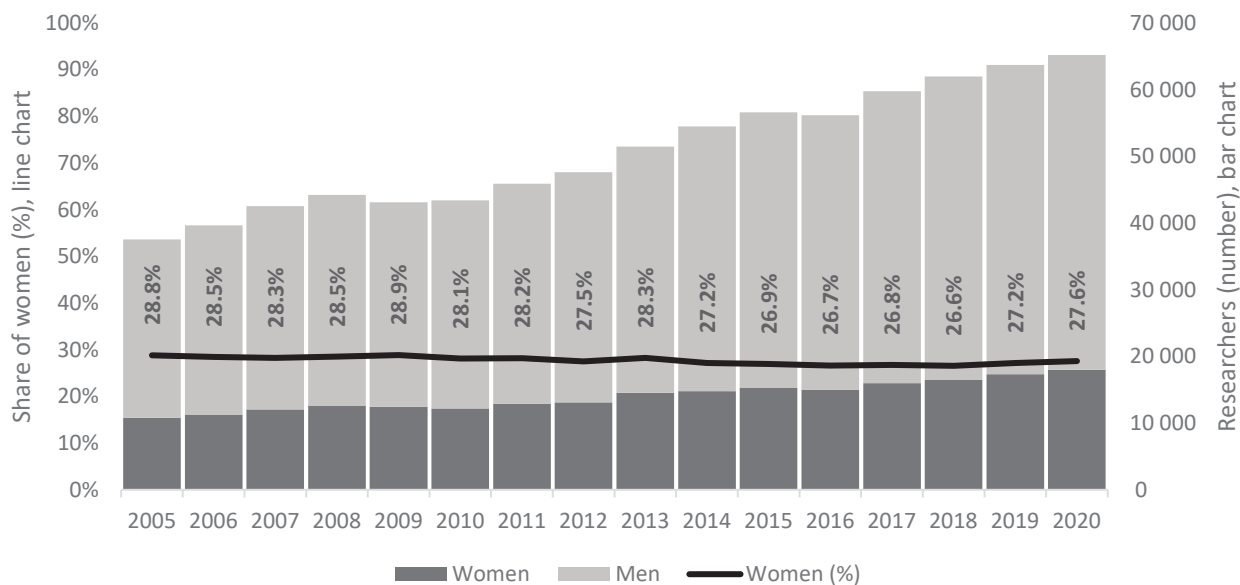
Source: CZSO – Research and Development Indicators.

¹ See Table 1.

Researchers

A closer look at the researcher category shows that a slight fluctuation in the proportion of women also characterises this category. The timeline shows a slight increase over the last two years, reaching 27.6% in 2020. Despite this positive development, however, this is one of the lowest shares of women researchers recorded in the last 15 years, even though the total number of researchers increased by 27,651 from 2005 to 2020. Over this period, the number of men researchers increased from 26,715 in 2005 to 47,201 in 2020, while the number of women researchers rose from 10,827 in 2005 to 17,922 in 2020.

Figure 3: Compound annual growth rate (%) in the number of researchers, by sex, 2005–2020 (HC)²



Source: CZSO – Research and Development Indicators.

² See Table 1.

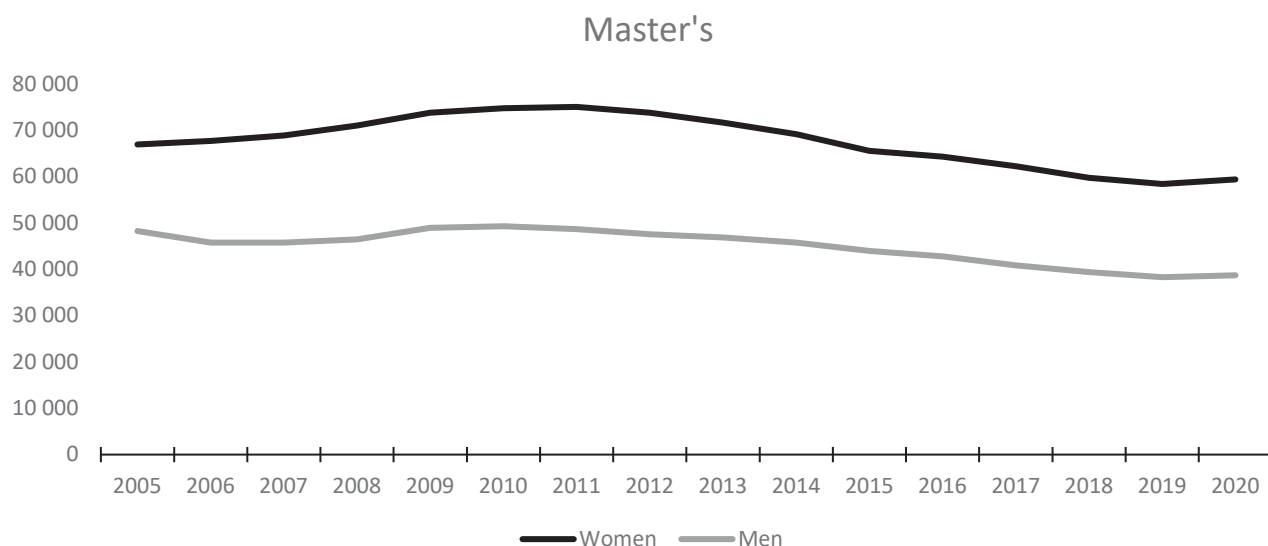
THE IDEAL AND THE TYPICAL CAREER PATH IN RESEARCH

University studies

The aim of this chapter is to examine the gender aspects of education at the master's and doctoral levels in the Czech Republic, the current situation, and long-term development. We work primarily with data from the Ministry of Education, Youth and Sports (MEYS), which publishes statistics on the performance indicators of public and private universities annually based on the ISCED-F classification of disciplines.³ For the purpose of the analysis, students and graduates of all nationalities, irrespective of type of the university (public vs private) and the type of study (full-time, remote, combined) were considered.

MEYS data indicate that in 2020 a total of 98,096 students were enrolled in a **master's degree programme**, 59,417 of whom were women (60.6%) and 38,679 were men (39.4%). A similarly large share of women master's students was last recorded in 2011–2012, when the figures ranged from 60.7% to 60.8%.⁴ Women have long predominated among both undergraduate and graduate students. In 2020, 27,371 students graduated from a master's programme, 16,320 (59.6%) of whom were women and 11,051 (40.4%) were men. Over the last 10 years, the share of women among master's graduates has ranged from 59.6% to 60.5%. The lowest figure was recorded in 2005 at 54.8%, while in 2013 the figure was 60.5%. Since then, it has been possible to observe a slight decline, with a drop of 2.1 percentage points between 2013 and 2020.

Figure 4: Compound annual growth rate in the number of master's students in the Czech Republic, by sex, 2005–2020 (HC)⁵



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

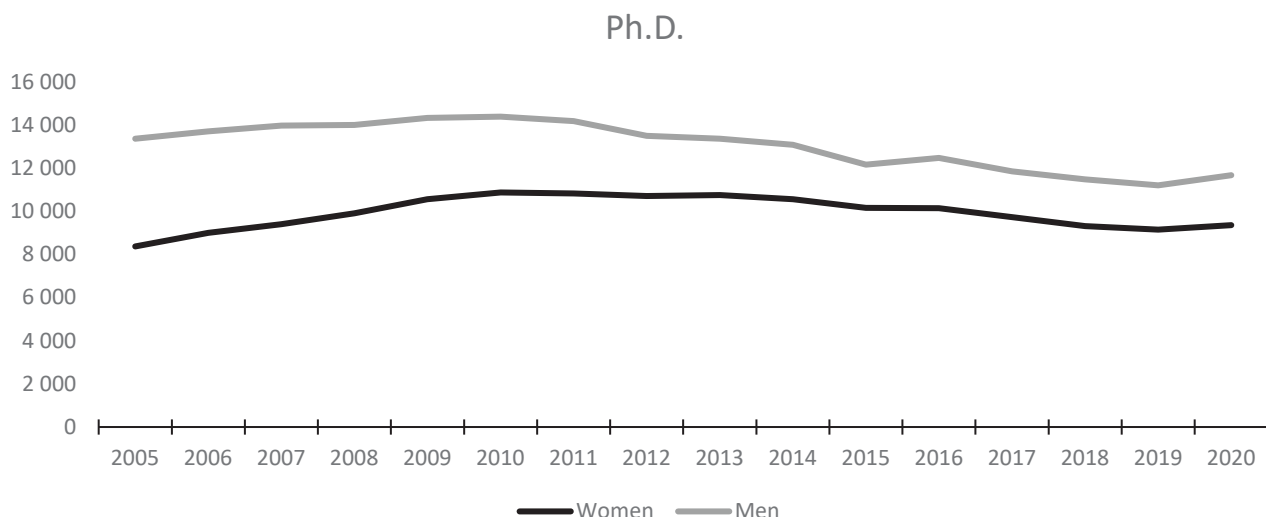
In 2020, there were 21,048 people studying in a doctoral programme, and 9,369 of them were women (44.5%) and 11,679 were men (55.5%). These figures, with small variations of a few tenths of a percent, have been almost constant since 2012, when the percentage of women doctoral students first reached a level above 44% – 44.2% to be precise. Since 2015, when women accounted for a record 46.8% of PhD students, there has been a 2.3 percentage point drop in the last 5 years. Men also predominate among doctoral graduates, 981 (54.7%) of whom were men in 2020, compared to 841 (45.3%) women. However, the proportion of women among graduates has been increasing over the long term; in 2005, women accounted for 35.0% of graduates. There has therefore been an increase of 10.3 percentage points over 15 years. If the positive trend observed in recent years continues at the same pace in the future, the number of women and men among graduates could be equal by 2027.

³ MEYS: Classification of fields of education (CZ-ISCED-F 2013).

⁴ See Table 3.

⁵ See Table 3.

Figure 5: Compound annual growth rate in the number of doctoral students in the Czech Republic, by sex, 2005–2020 (HC)⁶

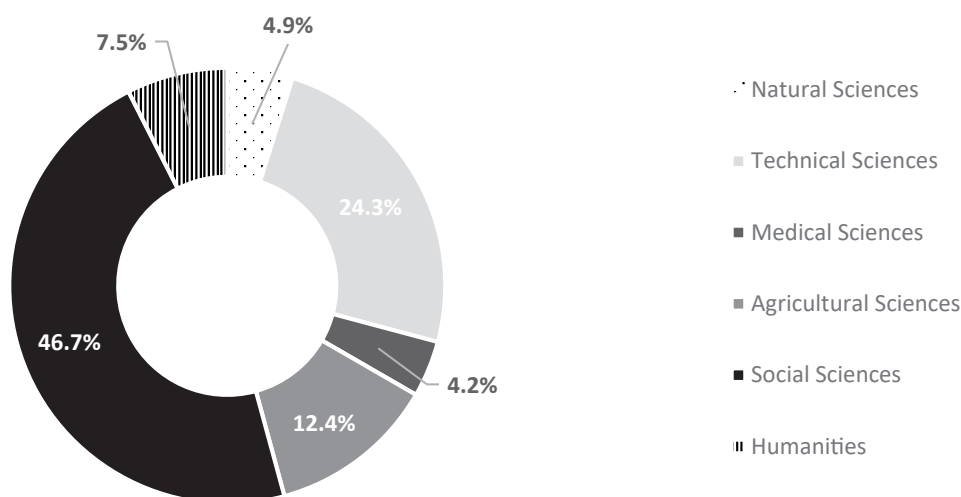


Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

Considering that the number of persons studying a given university degree does not take into account the success rate at this education level, in the following analyses we focus on data on graduates who obtain the given degree. We also record the numbers of students enrolled in master’s and doctoral level studies by discipline.⁷

In 2020, 27,371 people graduated from a master’s programme.⁸ The largest number of graduates were in the social sciences, with 12,793 (46.7%)⁹, followed by graduates in the technical sciences, with a total of 6,650 (24.3%)¹⁰ successfully completing their master’s studies. Graduates in the medical sciences also accounted for a double-digit share of the total number of graduates in the Czech Republic, with 3,405 (12.4%).¹¹ The humanities (7.5%), natural sciences (4.9%), and agricultural sciences (4.2%) were less represented.

Figure 6: Proportion (%) of master’s graduates, by discipline, 2020

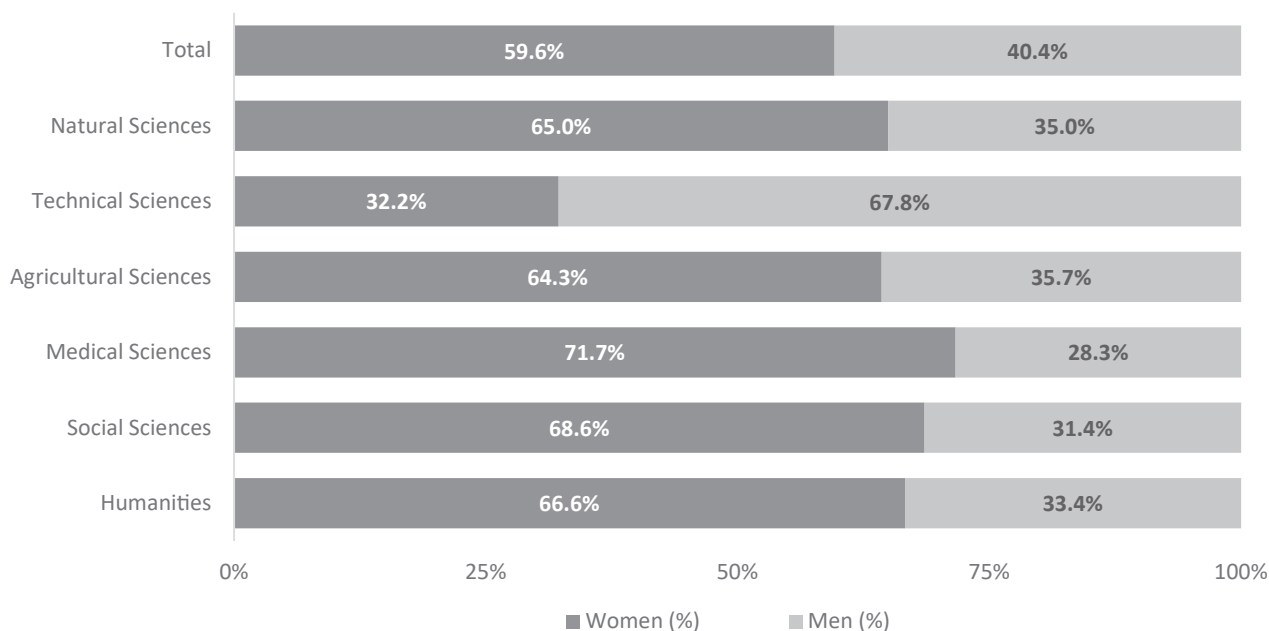


Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

⁶ See Table 3.
⁷ See Tables 3 to 9.
⁸ See Table 3.
⁹ See Table 8.
¹⁰ See Table 5.
¹¹ See Table 7.

The proportion of women graduates of master's programmes is significantly higher than their male counterparts except in the technical sciences, where 32.2% of graduates were women. However, in the technical sciences, the number of women graduates has been increasing year on year and has grown by 8.8 percentage points since 2005.¹² The timelines for all fields in the sciences overall and separately can be found in Figures 9 to 14.

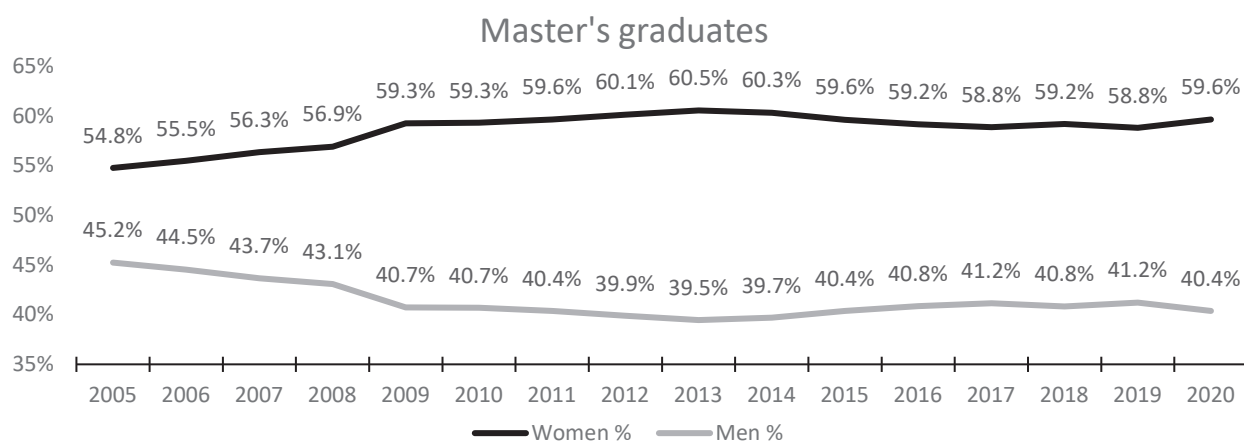
Figure 7: Proportion (%) of master's graduates, by sex and discipline, 2020¹³



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

Since the beginning of measurement in 2005, women have always formed the majority among people completing a master's degree. The smallest share of women master's graduates was in 2005, at 54.8% (12,957 women graduates), and the peak was in 2013, at 60.5% (22,359 women graduates). As with other degrees, the proportion of women has been changing, but since 2009 the total share of women graduates has not fallen below 58%, despite changes in the size of the population.

Figure 8: The compound annual growth rate (%) of master's graduates in the Czech Republic, by sex, 2005–2020 (HC)¹⁴



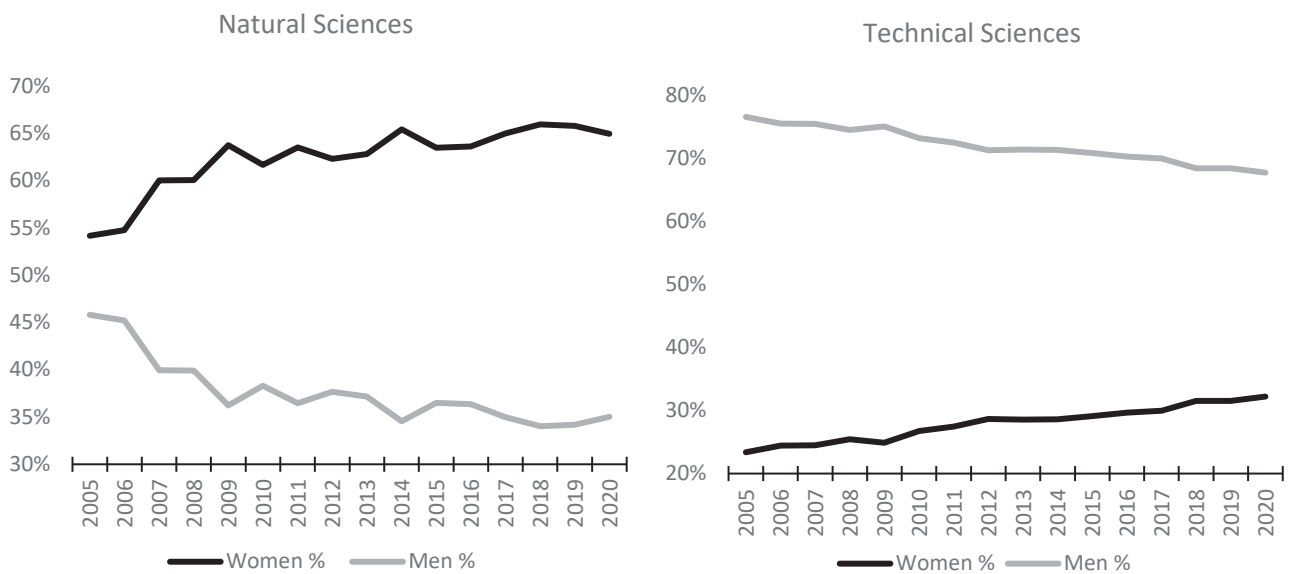
Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

¹² See Table 5.

¹³ See Tables 3 to 9.

¹⁴ See Table 3.

Figure 9 and 10: The natural sciences and technical sciences – the compound annual growth rate in the percentages of master's graduates, by sex, 2005–2020 (HC)15



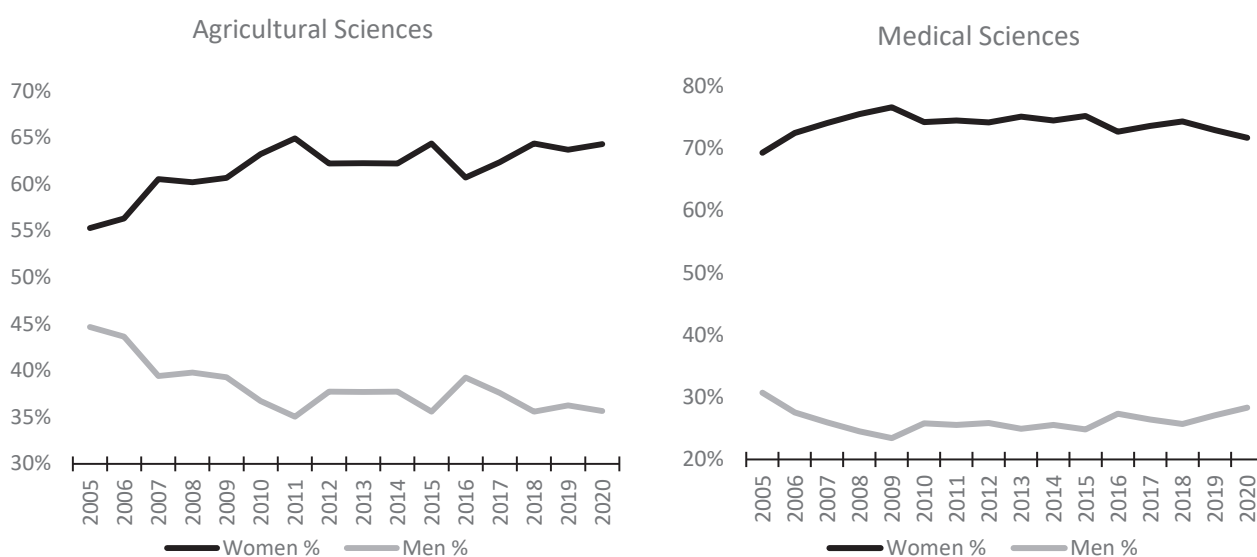
Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

Below, we look at the situation in each sector. In the natural sciences, there has been a steady increase in the number of women graduates. While in 2005, 602 women (54.2%) and 509 men (45.8%) graduated with a master's degree in the natural sciences, by 2020 there were 863 women (65.0%) compared to 465 men (35.0%).

Looking at Figure 10, it is evident that the number of graduates in the technical sciences varies significantly by gender. From a ratio of 23.4% women to 76.6% men in 2005, the proportion of women grew to 26.8% in 2010, 29.1% in 2015, and to 32.2% in 2020. Every five years the ratio has increased by an average of three percentage points. If this growth continues at the same rate, it can be assumed that gender parity among master's graduates in the technical sciences will be reached in 2050.

15 See Tables 4 and 5.

Figures 11 and 12: The agricultural sciences and medical sciences – the compound annual growth rate in the percentage of master’s graduates, by sex, 2005–2020 (HC)¹⁶



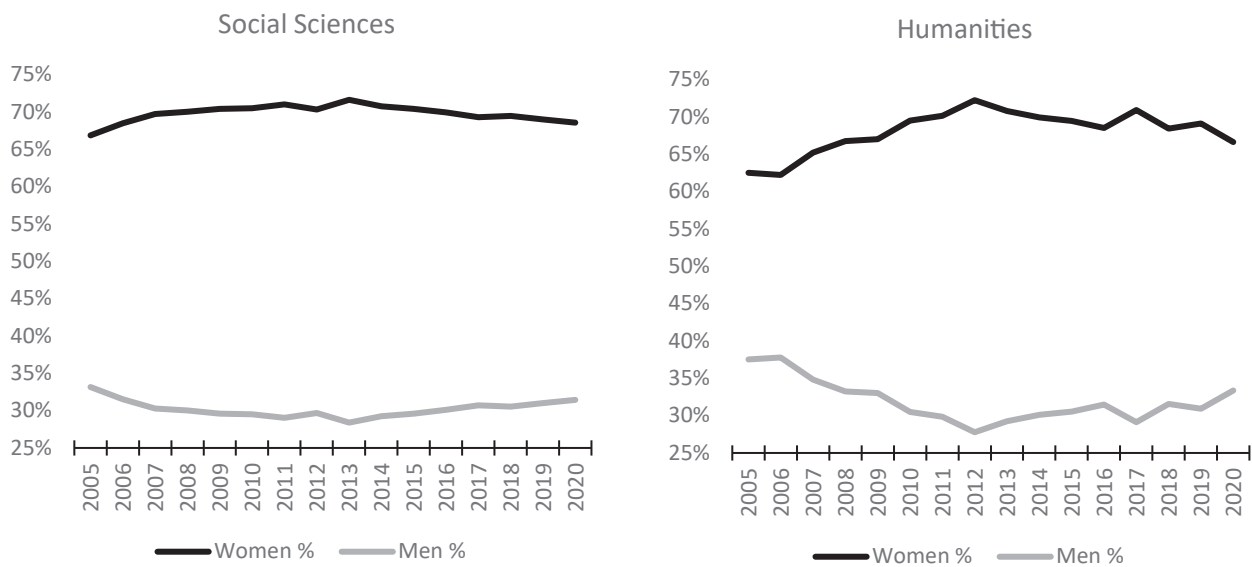
Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

The agricultural sciences, like the other disciplines surveyed, have an upward trend in terms of women’s representation. From an initial 857 graduates in 2005, 474 of whom (55.3%) were women and 383 (44.7%) were men, the number of graduates in 2020 has increased to 737 women (64.3%) and 409 men (35.3%). However, the increase in the number of men has been marginal – by just 26 graduates, while the number of women rose by 263, more than ten times the increase among men. Thus, the share of men has fallen by 9% over the last 15 years to 35.7% today.

The medical sciences, unlike the aforesaid disciplines, have long had the highest representation of women among graduates. In 2005, when the percentage of women graduates was at its lowest, women still made up 69.3% - and the share has never fallen below 70% since then. The highest number of women master’s graduates in this field was in 2009, when their share was as high as 76.6%. As the number of men increased, the share of women decreased slightly, to 71.7% in 2020.

¹⁶ See Tables 6 and 7.

Figures 13 and 14: The social sciences and the humanities
 – the compound annual growth rate in the percentage of master's graduates, by sex, 2005–2020 (HC)¹⁷



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

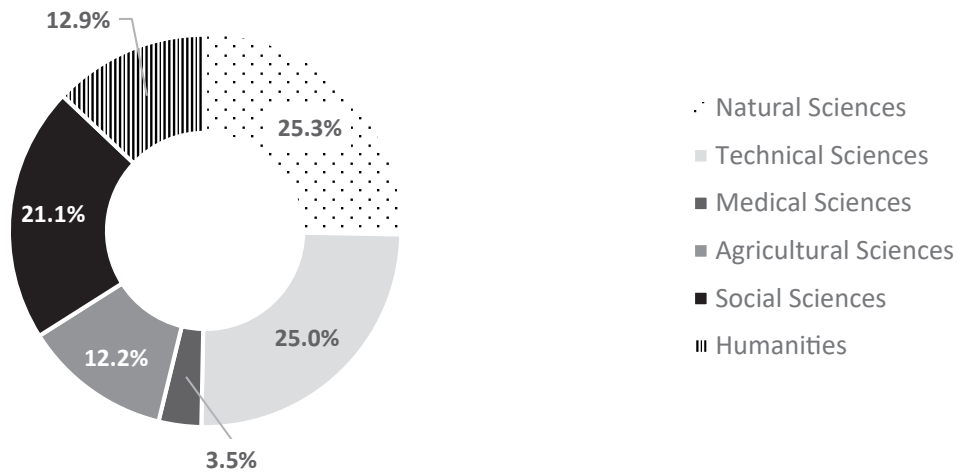
The number of master's graduates in the social sciences increased regularly from 2005 to 2012. Starting from 2013, the figures have been decreasing. This has not, however, had a large impact on the percentage of women and men. In 2012, when a total of 20,655 people graduated in this field, 14,521 (70.3%) of them were women and 6,134 (29.7%) were men. This compares with the 7,932 (66.8%) women graduates and 3,934 (33.2%) men graduates that there were in 2005, the year that saw the lowest number of students complete their studies. In 2020, 8,772 (68.6%) graduates were women and 4,021 (31.4%) were men – and that was the second lowest proportion of women among master's graduates in the social sciences in the last 15 years.

While the number of women among humanities graduates increased by 840 from 2006 to 2012, the number of men graduates increased by only 42 over the same time period. Thus, the percentage of women graduates in this field increased from 62.2% in 2006 (vs 37.8% of men) to 72.2% (vs 27.8% of men) in 2012, an increase of 10 percentage points. However, since 2013, the proportion and number of women have been declining, with women making up 66.6% and men 33.4% of graduates in 2020. In contrast, the percentage of men graduating with a master's degree in the humanities has been increasing and rose by 5.6 percentage points from 2012 (27.8%) to 2020 (33.4%).

In 2020, 1,795 people graduated with a **doctoral degree**. The majority of graduates were in the natural sciences (25.3%), closely followed by recent PhD graduates in the technical sciences (25.0%) and the social sciences (21.1%), while 12.9% of PhD graduates were in the humanities and 12.2% were in the medical sciences. The fewest doctoral graduates were in the agricultural sciences (3.5 %).

¹⁷ See Tables 8 and 9.

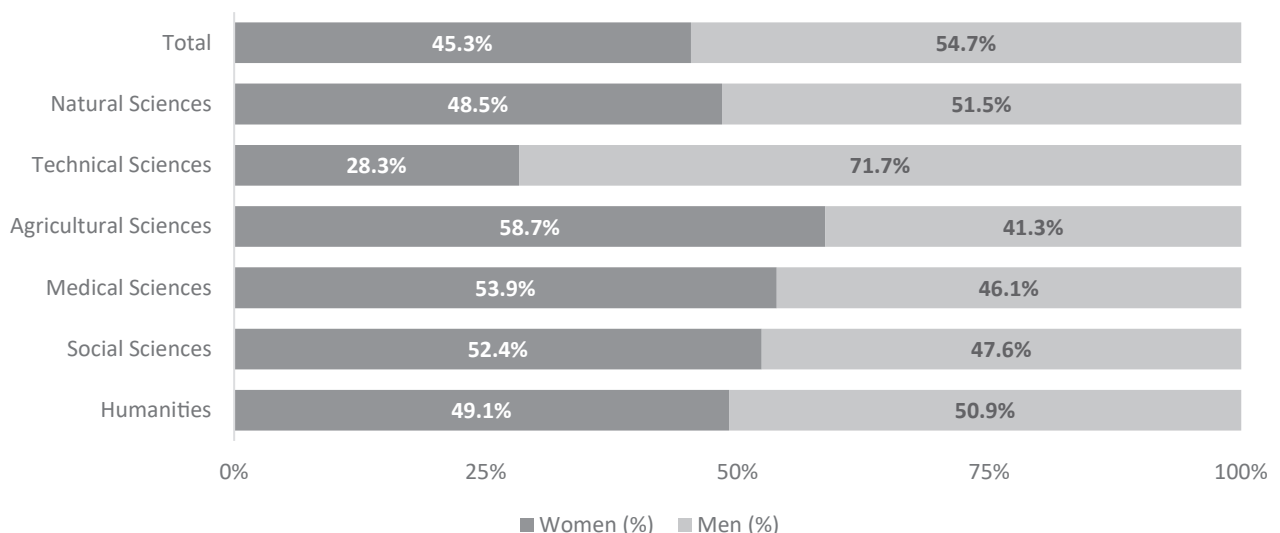
Figure 15: Proportion (%) of doctoral graduates by discipline, 2020



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

There is a fairly even distribution of women and men among doctoral graduates, except in the technical sciences. Despite the overall small share of women in the technical sciences, the proportion of women has been rising every year, except in 2012 and 2017.¹⁸ Specifically, the figures increased from 17.7% in 2005 to 28.3% in 2020.¹⁹ The most noticeable shift was in the agricultural sciences, where the share of women doctoral graduates increased by 15 percentage points between 2005 (43.7%) and 2020 (58.7%). In the medical sciences, the share grew by 14 percentage points over the same period (from 39.9% in 2005 and 53.9% in 2020). The social sciences have been close to parity since the beginning of the observation period, i.e., in 2005, when women accounted for 43.3% of doctoral graduates, while by 2020 the figure was 52.4%. The situation was similar in the humanities, where women made up 45.9% of graduates in 2005 compared to 49.1% in 2020. The timelines for all the disciplines in aggregate and separately can be found in Figures 18 to 23.

Figure 16: Proportion (%) of doctoral graduates by sex and discipline, 2020²⁰

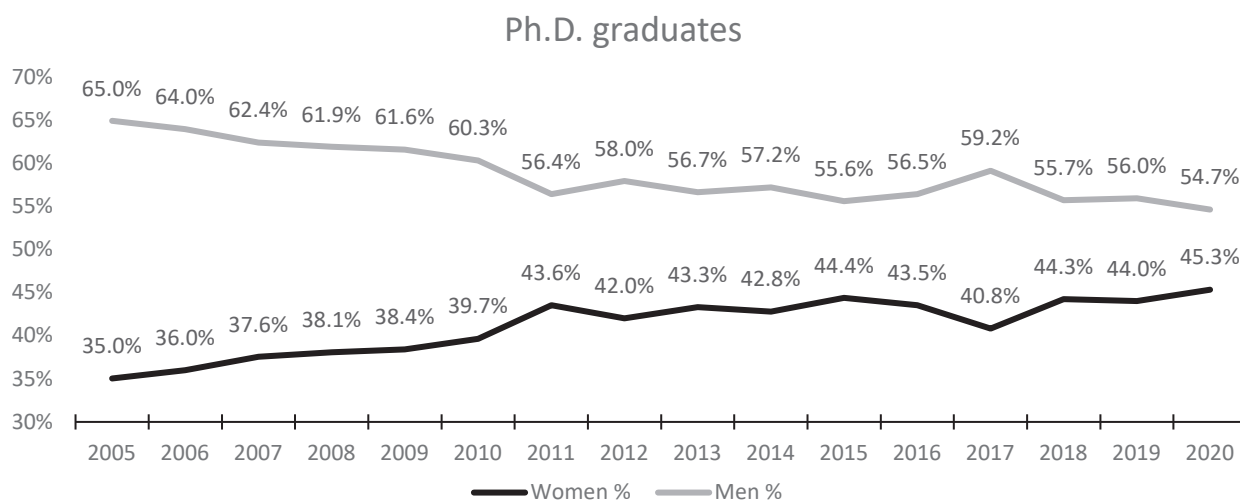


Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

¹⁸ See Table 5.
¹⁹ See Table 5.
²⁰ See Tables 3 to 9.

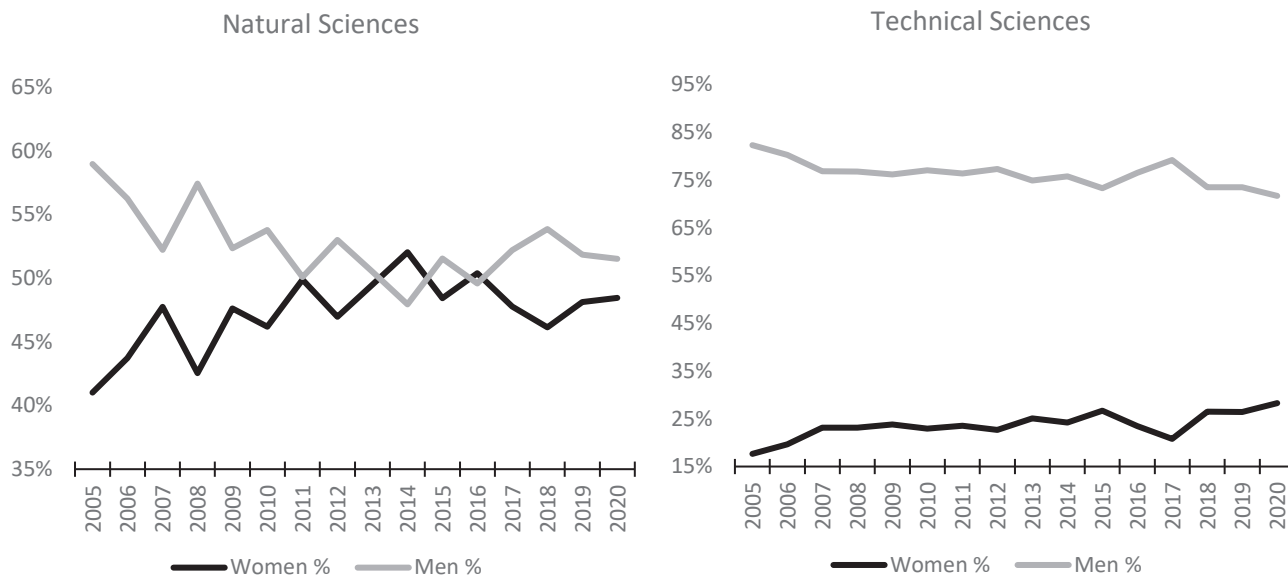
In the timeline shown in Figure 17, we can see that the gap between the proportion of women and men who are completing their doctoral studies is narrowing each year. In 2005, women accounted for only 35% of all PhD graduates, while five years later they already made up 39.7%. This trend continued until 2015, when the share of women was at 44.4%. From 2015 to 2020, the growth slowed and since 2020 there has been only a marginal increase of 0.9 percentage points to reach the current 45.3%.

Figure 17: The compound annual growth rate in the percentage of doctoral graduates in the Czech Republic, by sex, 2005–2020 (HC)²¹



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

Figures 18 and 19: The natural sciences and the technical sciences – compound annual growth the percentage of doctoral graduates, by sex, 2005–2020 (HC)²²



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

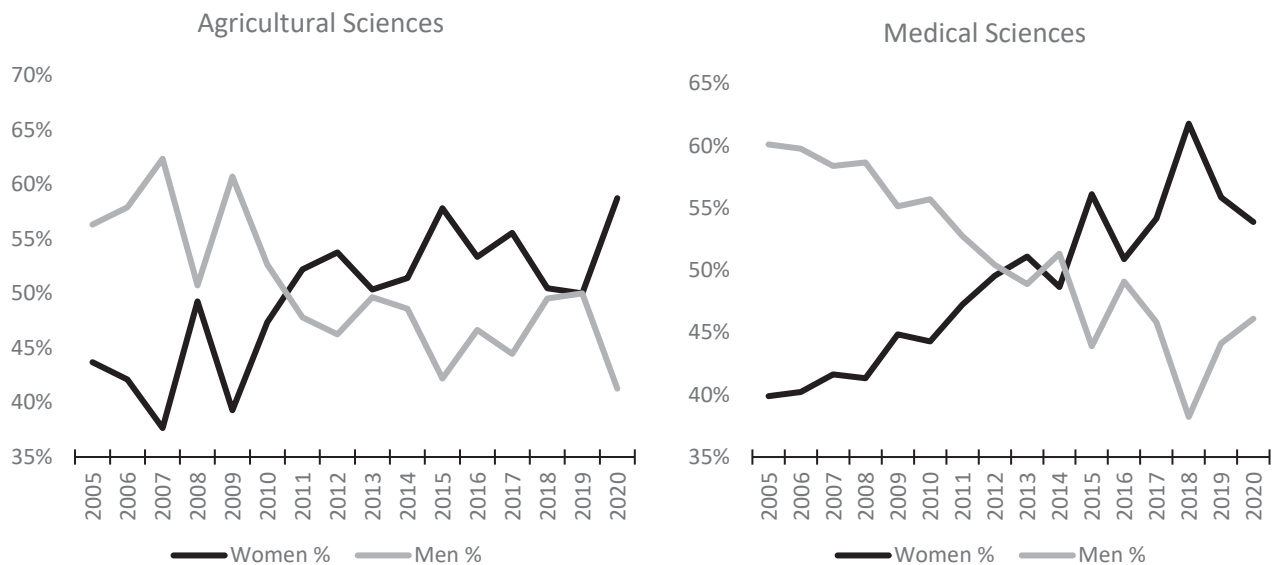
A very slight increasing trend can also be observed in the proportion of women in the natural sciences, where women made up the majority share in 2014 (52.0%) and 2016 (50.4%), and the field has become relatively gender-balanced over time. Despite the fluctuating trend in the proportion of women, since 2010 the figure has not dropped below 46.0%, and in fact in 2020 it was 48.5%. To draw a comparison, women made up 65.0% of graduates at the master's level in 2020 – see Figure 9.

²¹ See Table 3.

²² See Tables 4 and 5.

The technical sciences are the furthest behind in gender parity of all the disciplines. Despite the upward trend, the proportion of women in the field is very low. In 2020, women accounted for 28.3% of PhD graduates in the technical sciences. Over the last 10 years, this figure has increased by just 5.4 percentage points from 22.9% in 2010. The situation is also unfavourable for women graduates of master's programmes in the technical sciences (see Figure 10), though at the master's level there is a larger share of women than at the doctoral level; in 2020, the share of women master's graduates was 32.2%. The complex issue of the small share of women in the technical sciences must therefore begin to be addressed at the primary level of education. It will take some time before positive developments at the primary and secondary level will become noticeable in tertiary education and especially at the doctoral level. Activities to boost interest in these fields therefore need to be initiated as soon as possible.²³

Figures 20 and 21: The agricultural sciences and the medical sciences
– compound annual growth rate in the percentage of doctoral graduates, by sex, 2005–2020 (HC)²⁴



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

The agricultural sciences are one of the fields in which the situation has improved the most. From an initial 43.7% in 2005, the proportion of women increased to 47.4% in 2010 and 57.8% in 2015. Between 2018 and 2019 the figure dropped to 50%, but in 2020 returned to 58.7%. However, it should be noted that the number of doctoral graduates has been in the tens of persons per year. In 2020, there were a total of 63 graduates – 37 women and 26 men. Any increase or decrease in the number of graduates can consequently have quite a substantial impact on the percentage share of each gender. The fact that wages in the agricultural sciences are relatively low may also be a factor in why women make up the majority of graduates in this field and why men are less interested in pursuing a doctorate in this field. Professionally, graduates of the agricultural sciences earn wages that are about a quarter lower than graduates of the technical sciences and they also make less money than humanities graduates.²⁵ Moreover, men are more likely than women to seek higher-paying jobs in lucrative industries.²⁶

Until 2012 men predominated among graduates of doctoral programmes in the medical sciences. In 2013 the share of women exceeded 50.0% for the first time, but one year later it fell back to 48.7%. Since 2015, however, the proportion of women doctoral graduates has remained above 50% and was at a record 61.8% in 2018. The distribution in 2020 was 53.9% women and 44.1% men. Women have long dominated among master's and doctoral students and graduates in this discipline. Based on data from previous years, the feminisation of the medical sciences can be expected to continue in the coming years. Stakeholders should therefore make greater efforts to achieve a gender balance among medical students, similarly to what has been going on in the field of education studies.

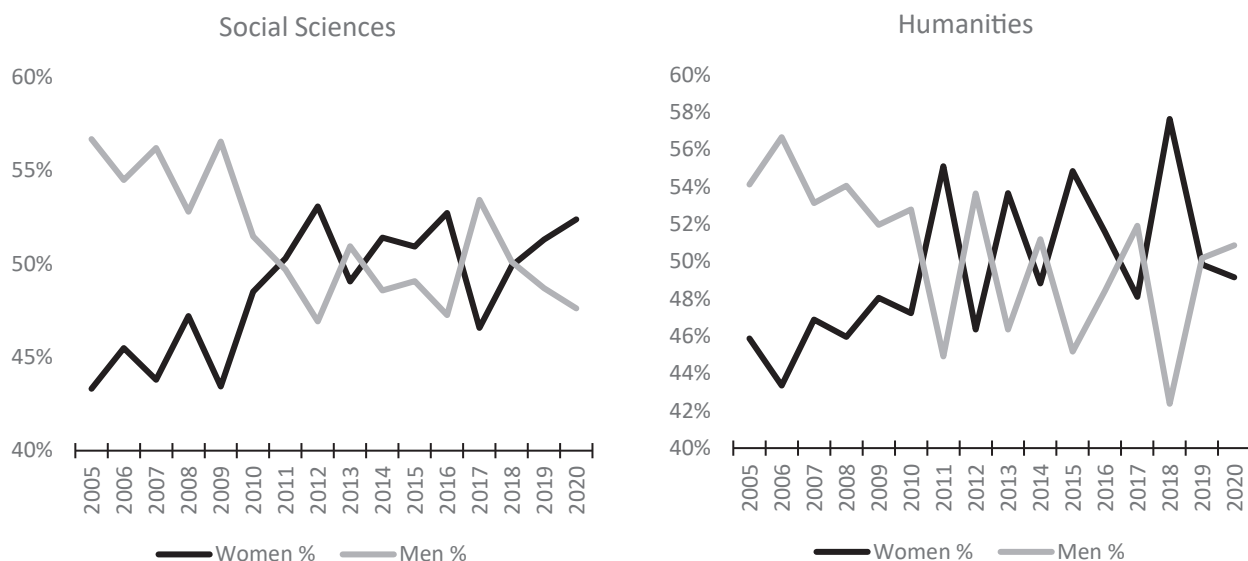
23 Czesaná, V. et al.: Příprava odborníků pro uplatnění ve VaVal. Studie v rámci projektu sdílených činností STRATIN+(MS2104). Národní vzdělávací fond, 2022.p. 6.

24 See Tables 6 and 7.

25 Czesaná, V. et al.: Příprava odborníků pro uplatnění ve VaVal. Studie v rámci projektu sdílených činností STRATIN+(MS2104). Národní vzdělávací fond, 2022 p. 69.

26 European Parliament: Gender pay gap: definitions and causes.

Figures 22 and 23: The social sciences and the humanities
 – compound annual growth rate in the percentage of doctoral graduates, by sex, 2005–2020 (HC)²⁷



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic.

The social sciences are characterised by greater fluctuations in the share of both genders among doctoral graduates. From 2010 to 2020, except for 2017, the proportion of women ranged between 48.5% and 52.7%. The share in 2020 was the second highest measured, with women making up 52.4% of doctoral graduates in the social sciences. However, the situation is different in the case of graduates of the master’s programme, where on average make up 69.8% of graduates²⁸ – see Figure 13. It is worth noting that although the highest number of master’s graduates out of all the disciplines examined is in the social sciences, the number of doctoral graduates in the social sciences (378) is lower than the number in the natural sciences (454) and the technical sciences (449).²⁹

In some ways, the humanities mimic the social sciences described above. However, in 2015 and 2018, there were very pronounced fluctuations in the proportion of women and men graduates in the humanities. In 2015, 54.8% of graduates in the humanities were women (compared to 48.8% in 2014 and 51.6% in 2016), and in 2018 the figure was 57.6% (compared to 48.1% in 2017 and 49.8% in 2018). In this discipline the trend in the share of women has varied and was quite volatile between 2010 and 2020, ranging widely between 45.2% to 57.6%. In 2020, 49.1% of humanities doctoral graduates were women. Like in the social sciences, the number of women graduates of master’s programmes in the humanities was higher than the number who completed a doctoral programme (see Figure 14), with women making up an average of 68.0% of the doctoral graduates in this field.³⁰

27 See Tables 8 and 9.

28 Mean of the percentage of women graduates from 2005 to 2020, see Table 8.

29 In 2020 a total of 12,793 students graduated with a master’s degree in the social sciences, 1,328 in the natural sciences, and 6,650 in technical sciences.

30 Mean of the percentage of women graduates from 2005 to 2020, see Table 9.

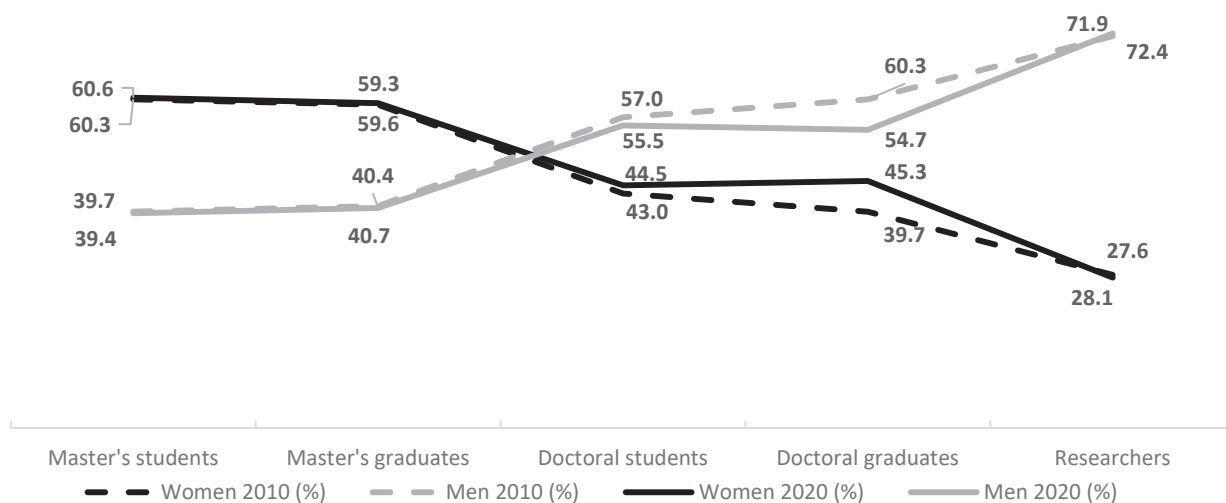
From study to research

This section looks at the proportion of women and men in different scientific disciplines using data from the MEYS and the CZSO and maps the share of women and men in each field starting at the level of master's studies up to working in a research position. To illustrate this trajectory, we compared the years 2010 and 2020, which we present in aggregate and separately for individual scientific disciplines.

Across the observed period we found a stable predominance of women among students and graduates of master's programmes and a slight increase in the percentage of women at the doctoral level. The situation of women doctoral students has slightly improved over the last 10 years, but the rate of growth has been very low to marginal – between 2010 and 2020 the share of women studying at this level rose by only 1.5 percentage points. There has been a positive increasing trend in the share of women doctoral graduates, growing by 5.6 percentage points over the examined period from 39.7% in 2010 to 45.3% in 2020. Interestingly, more women who graduate with a doctoral degree choose not to pursue a career as researchers – in 2020 the difference between the share of women doctoral graduates and the share of women researchers was 17.2 percentage points compared to a difference of 12.1% in 2010. This trend is the opposite of the above-average majority of women we see among master's students and graduates and the slightly below-average share among doctoral students. In fact, women make up less than a third of researchers. The share was 28.1% in 2010 and 27.6% in 2020, a decrease of 0.5 percentage points in 10 years. If the share of women continues to increase by a half a percentage point every decade, we will not reach parity by the end of the 21st century.

In general, women are under-represented in research. Overall, the number of people working in research is increasing every year, but it is mainly men who are driving the numbers upwards, as can be seen in Figure 24. In 2010 there were 31,220 (71.9%) men working as researchers; in 2020, the figure was 4,201 (72.4%) – an increase of 15,981. In contrast, there were 12,198 (28.1%) women working as researchers in 2010 and there were 17,992 (27.6%) in 2020 – an increase of 5,794 women.³¹

Figure 24: Proportion (%) of men and women in a typical academic career, students and academic staff, 2010 vs 2020, irrespective of discipline³²



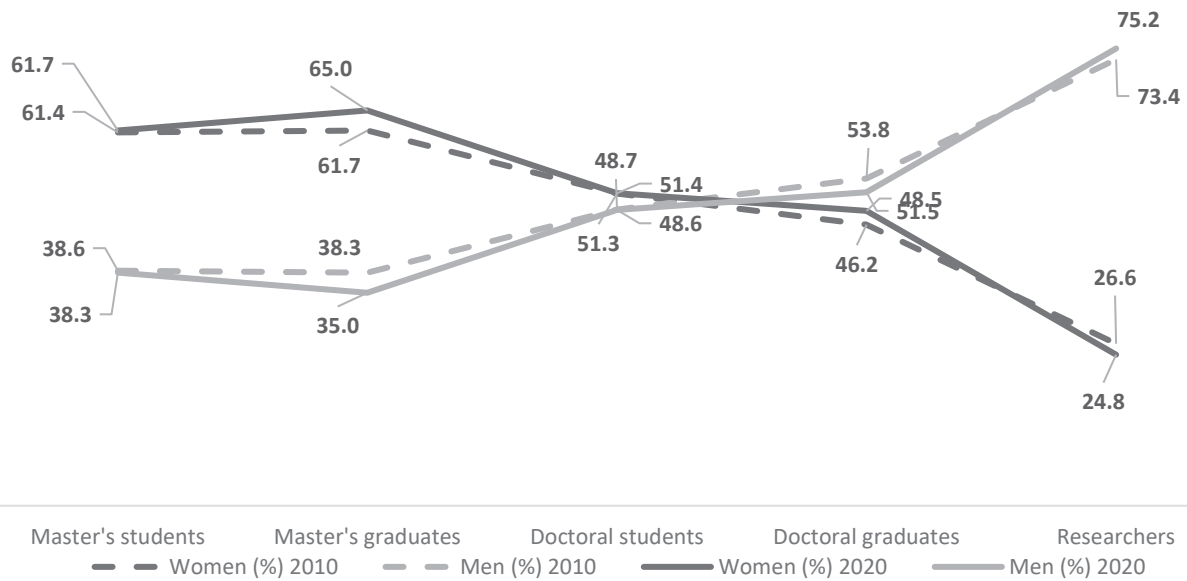
Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

As we can see in Figure 25, there has been an increase in the share of women graduates of master's and doctoral programmes in the natural sciences. Between 2010 and 2020 the share of women at the master's level increased by 3.3 percentage points to reach 65.0% and at the doctoral level there was an increase of 2.3 percentage points over 10 years. These figures indicate that there has not been much growth over the observed period. A relatively large proportion of women, however, decide not to continue their scientific career after completing their master's degree (see the difference of 13.6 percentage points between women master's graduates and women doctoral students). The only category that shows a decline in women is research, where the share of women decreased by 1.8 percentage points. In the natural sciences it is typical that a relatively large proportion of the women who successfully complete a PhD in this field choose not to pursue a research career – the gap between the share of women PhD graduates and the share of women in research was 23.7 percentage points in 2020.

³¹ See Table 3.

³² See Table 3.

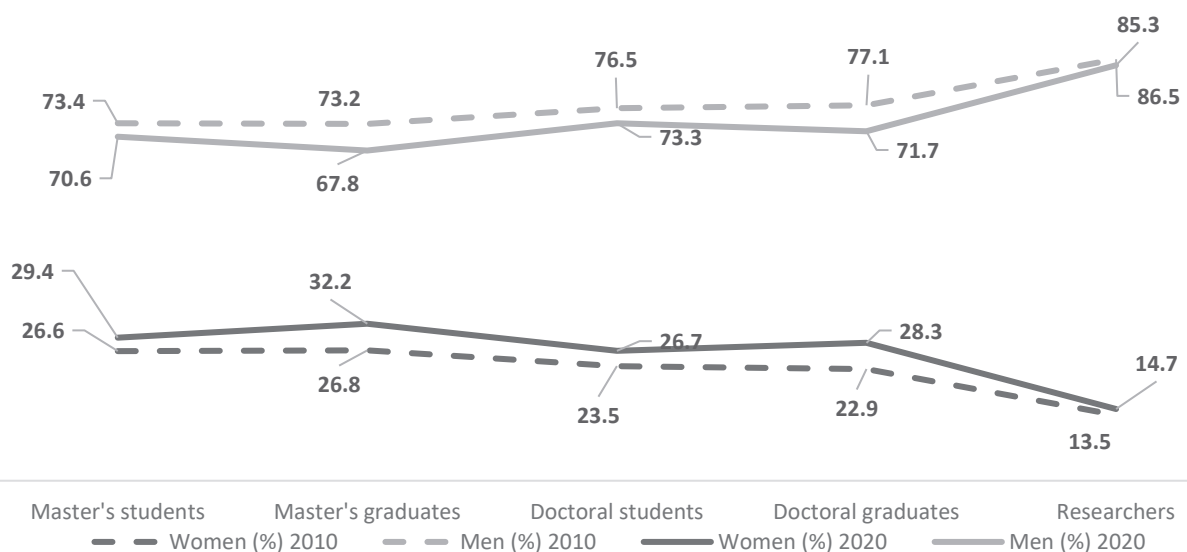
Figure 25: The natural sciences – the proportion (%) of men and women in a typical academic career, students and academic staff, 2010 vs 2020³³



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

The technical sciences have long been troubled by an imbalance in the representation of women, and the number of women is found to decrease at each successive stage over the course of progression from being a student to being a career researcher. The good news may be that at all levels of study, the share of women increased between 2010 and 2020, but the changes were only in units of percentages. The number of women studying at the master's level increased by 2.8%, while the number of women master's graduates increased by 5.4 percentage points between 2010 and 2020. At the doctoral level, the situation was similar, with the share of women students growing by 3.2 percentage points to 26.7% and the share of women graduates increasing by 5.4 percentage points to 28.3% in 2020. Like in the natural sciences, there has been a sharp drop in the share of women pursuing a research career. In 2020, the decline was of 13.6 percentage points. Overall, women do not even make up a sixth of the total number of researchers. In 2020, there were 3,587 women researchers in this field (14.7 %) compared to 20,781 men (85.3%).

Figure 26: The technical sciences – proportion (%) of men and women in a typical academic career, students and academic staff, 2010 vs 2020³⁴



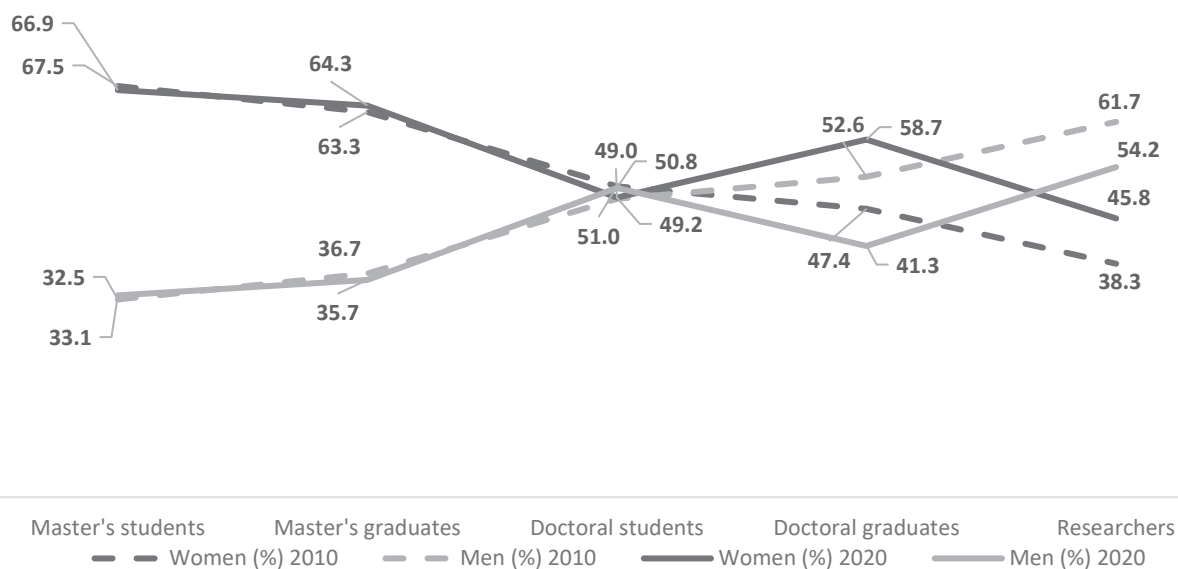
Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

33 See Table 4.

34 See Table 5.

A comparison of the data from 2010 and 2020 shows no significant change in the predominance of women among agricultural master's graduates during that period. However, a large share of them decided not to continue with doctoral studies and the drop between the two levels of study was 15.1 percentage points in 2020. The representation of women among doctoral students felt below the 50% threshold to 49.2% in 2020 – compared to 51.0% in 2010. Women doctoral graduates made up 58.7% of all graduates in 2020, an increase of 11.3 percentage points since 2010. It is important to note that despite the growth, the total number of graduates from the PhD programme in the agricultural sciences has remained very low over the long term, with 63 women (47.4%) and 70 men (52.6%) completing the programme in 2010, compared to 37 women (58.7%) and 26 men (41.3%) in 2020. A large percentage of women also leave this field in the period between completing their PhD and entering a scientific profession, with 12.9% of women exiting the field in 2020. In that same year, 45.8% of researchers were women, an increase of 7.5 percentage points since 2010. Given the major advances that have been made in digitisation, and particularly with the introduction of precision farming methods, autonomous robots, and crop and animal health monitoring, the demand for highly qualified professionals and researchers can be expected to increase sharply in the coming years. Because of the greater flexibility in working hours, the reduced physical demands that have been achieved through modern technology, and the immediacy of fieldwork, there will be more working opportunities for women in the agricultural field in the future.³⁵

Figure 27: The agricultural sciences – proportion (%) of men and women in a typical academic career, students and academic staff, 2010 vs 2020³⁶



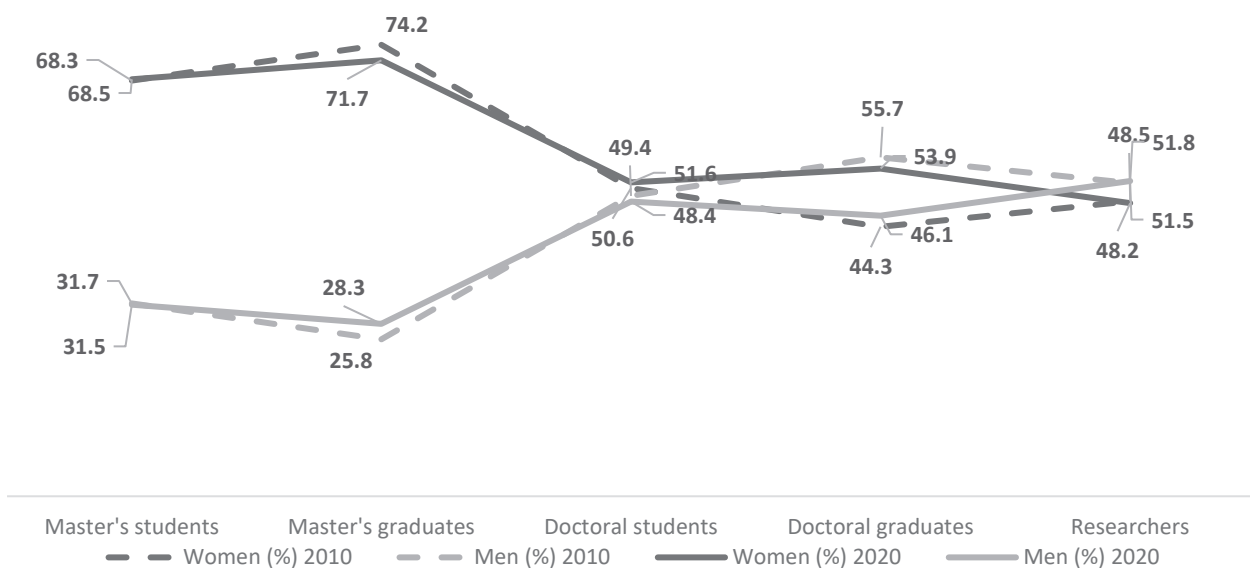
Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

In the medical sciences, women are over-represented among both master's students and graduates, accounting for 68.5% and 71.7% of students and graduates, respectively, and among doctoral students (51.6%). After a period of growth in the 2000s, the representation of women in the medical sciences stagnated slightly, but it is the highest out of all the disciplines surveyed. Over the last 10 years, the proportion of women among doctoral graduates has risen proportionally from 44.3% in 2010 to 53.9% in 2020. Among researchers, 45.8% were women, and the medical sciences had one of the smallest outflows of women in the transition from obtaining a doctorate to entering a research profession – with a loss of women of just 5.1 percentage points. However, out of all the sciences surveyed the biggest decline in the transition from the master's to the doctoral level of study was observed in the medical sciences, which saw a loss of 20.1 percentage points in 2020.

³⁵ Czesaná, V. et al.: Příprava odborníků pro uplatnění ve VaVal. Studie v rámci projektu sdílených činností STRATIN+(MS2104). Národní vzdělávací fond, 2022, p. 69.

³⁶ See Table 6.

Figure 28: The medical sciences – proportion (%) of men and women in a typical academic career, students and academic staff, 2010 vs 2020 ³⁷

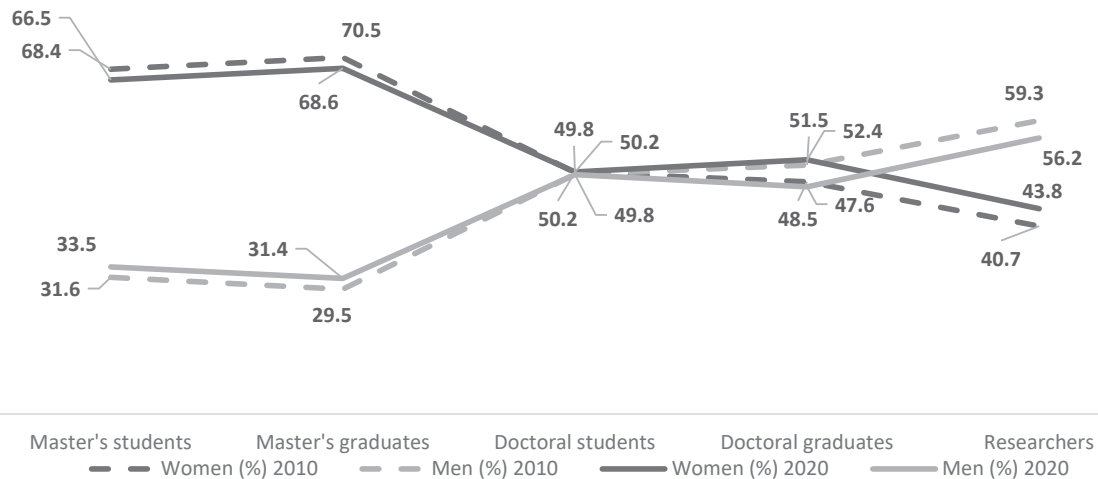


Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

In the social sciences the number of women at the master’s level decreased slightly from 2010 (by 1.9 percentage points) among both students and graduates, so that in 2020 66.5% of students and 68.6% of graduates were women. Despite this negligible decrease, women account for more than three-fifths of students enrolled in a master’s degree programme in the social sciences. The gender gap is closing at the doctoral level, where the gender ratio is fairly even from this stage onwards. This may be due to the fact that a large number of women decide to leave their studies after completing their master’s degree. The drop in the proportion of women doctoral students in 2020 was 18.4 percentage points. In terms of the number of women among doctoral students, the figure remained unchanged at 50.2% in 2010 and 2020. However, there was a 3.9 percentage point increase in the share of women who earned a doctorate in the social sciences, with women accounting for 53.9% of graduates in this field in 2020. It is clear from the figures described above that, like in the agricultural and medical sciences, women dominate both the master’s and doctoral levels of tertiary education. However, men still make up the majority in the research sector, though their predominance has been slowly declining over the years. In 2010, there were 1,958 (59.3%) men and 1,342 (40.7%) women working as researchers in the social sciences; in 2020, there were 3,223 (54.2%) men and 2,507 (43.8%) women. Although the total number of researchers in the social sciences is increasing every year, as is the representation of women, which has increased by 3.1 percentage points in 10 years, at the current growth rate parity cannot be expected until 2040.

³⁷ See Table 7.

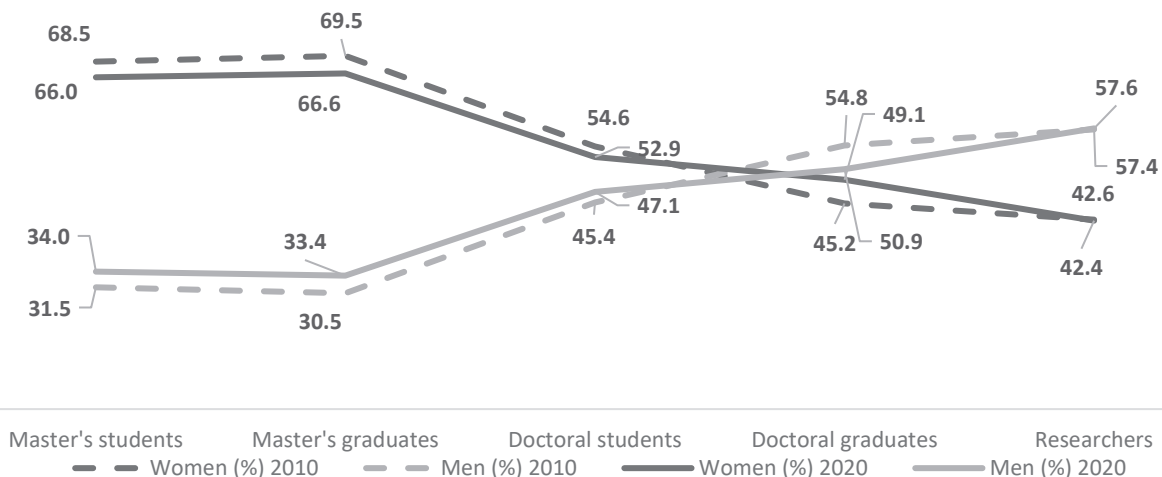
Figure 29: The social sciences – proportion (%) of men and women in a typical academic career, students and academic staff, 2010 vs 2020³⁸



Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

The humanities followed a trend similar to that in the social sciences, where, despite the declining representation of women at the master's level, women made up the majority in 2020 – 66.0% of master's students were women (vs 68.5% in 2010) and 66.6% of graduates were women (vs 69.0% in 2020). In 2020, the largest outflow of women from the ideal and the typical career path in research occurred after completing a master's degree and before starting a PhD, when the share of women in the field decreased by 14.9 percentage points. At the doctoral level the situation was similar, with a slight decrease of 1.7 percentage points in the percentage of women doctoral students between 2010 and 2020 to 52.9%. However, the number of women who successfully completed their PhD grew: in 2020 almost half of all PhD graduates, i.e., 49.1%, were women. The proportion of women among researchers in the social sciences remained virtually unchanged between 2010 and 2020, decreasing by just 0.2 percentage points to 42.4%.

Figure 30: The humanities – proportion (%) of men and women in a typical academic career, students and academic staff, 2010 vs 2020³⁹



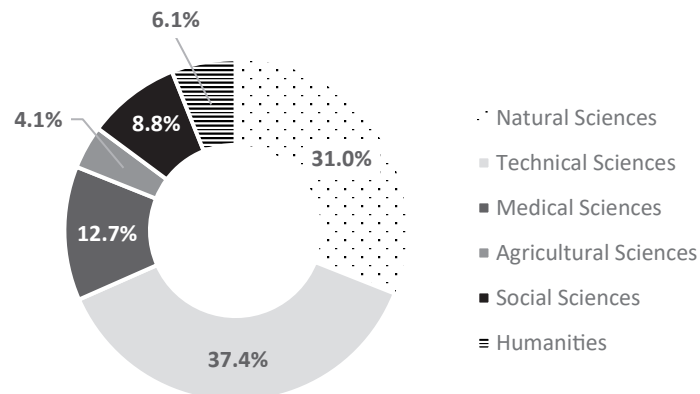
Source: Ministry of Education, Youth and Sports – Statistics on the performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

38 See Table 8.

39 See Table 9.

RESEARCHERS BY DISCIPLINE

Figure 31: Researchers by discipline, 2020 (HC, %)

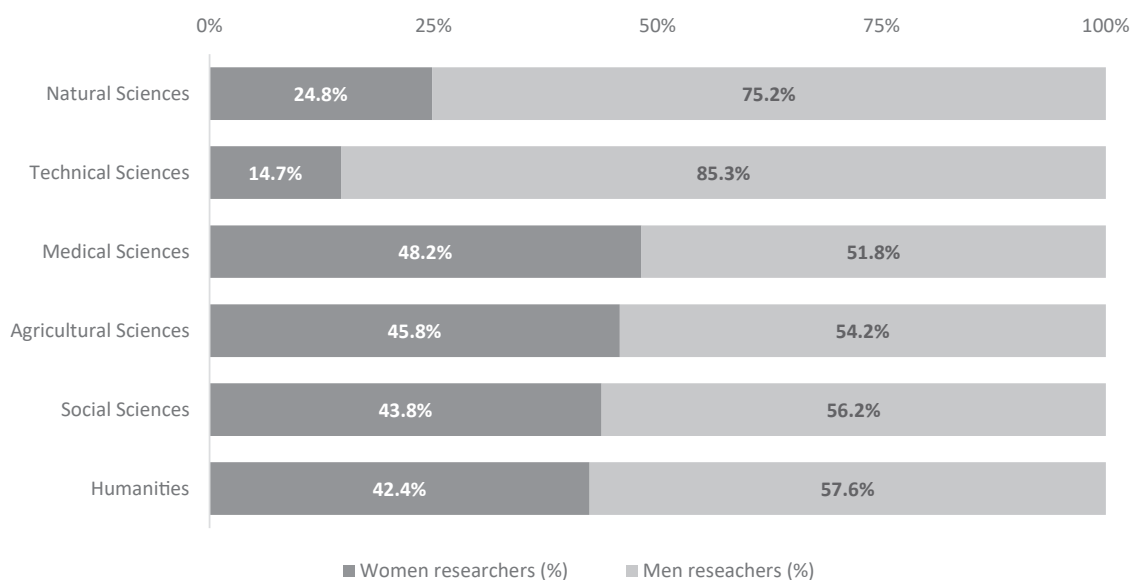


Source: CZSO – Research and Development Indicators.

According to CZSO data, a total of 65,193 people were working in the research sector in 2020. The technical (37.4%) and natural sciences (31.0%) were the biggest fields, where 68.4% of all researchers were working. This was followed by the medical sciences (12.7%) and, by a wide margin, by the social sciences (8.8%), the humanities (6.1%), and the agricultural sciences (4.1%). In terms of year-on-year comparisons, increases were registered in shares of researchers in the natural sciences, the medical sciences, the agricultural sciences, and the humanities. Decreases were recorded in the technical and social sciences. However, changes were within tenths of a percent. In the previous section, which looked at the share of women and men in different fields from the point of studying in a master's programme through to earning a PhD and starting a career in research (Figures 4–30), gender representation was examined in reference to the ideal and the typical career path in research. Figure 32 below shows the distribution of researchers by gender and research area.

The lowest representation of women among researchers was found in the technical sciences, where there were 3,587 women researchers (14.7%) and 20,781 (85.3%) men researchers. This was followed by the natural sciences, where there were 5,020 (24.8%) women and 15,195 (75.2%) men. Other fields, however, are well on the way to gender equality, with women accounting for 42.4% of researchers in the humanities, 43.8% in the social sciences, 45.8% in the agricultural sciences, and 48.2% in the medical sciences – a sector where women have been over-represented for a long time.

Figure 32: Researchers by sex and field, 2020 (HC, %)⁴⁰

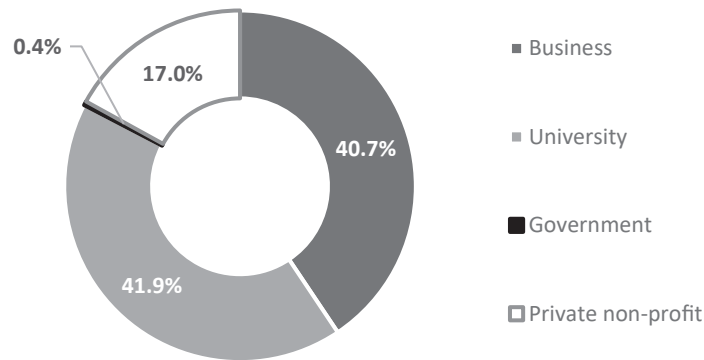


Source: CZSO – Research and Development Indicators.

⁴⁰ See Table 10.

RESEARCHERS BY SECTOR

Figure 33: Proportion of researchers in 2020, by sector (HC, %)⁴¹

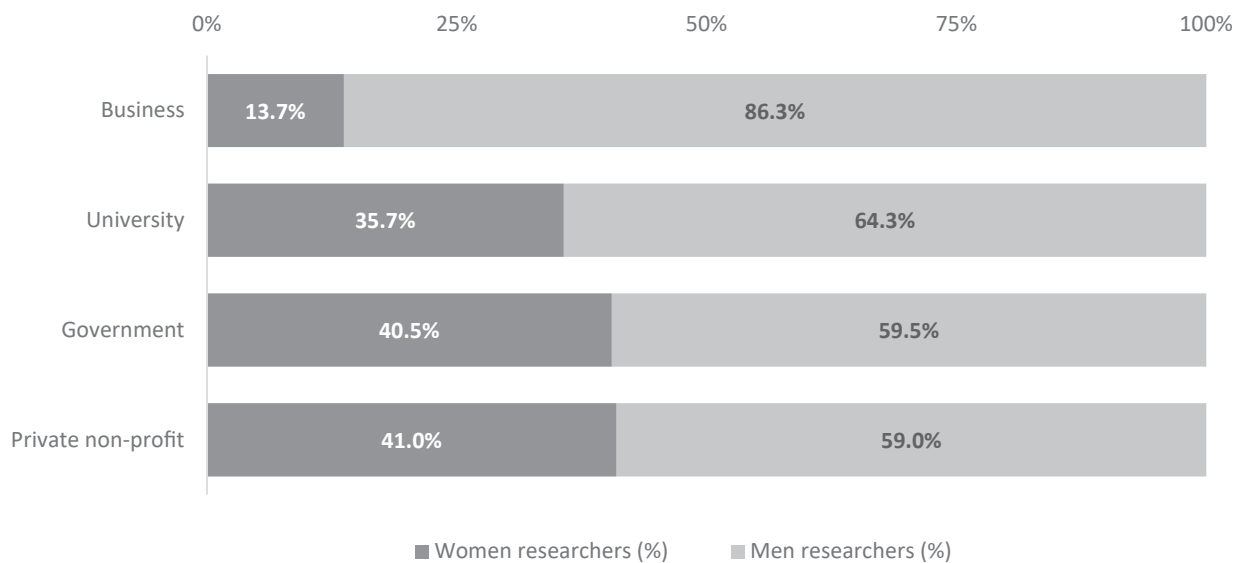


Source: CZSO – Research and Development Indicators.

The sector with the highest proportion of researchers is the higher education, where in 2020 there were a total of 27,325 researchers (41.9%). The business sector was close behind with 26,522 researchers (40.7%). The government sector employed 11,080 people as researchers (17.0%), and the private non-profit sector employed only 266 researchers (0.4%). Compared to 2019, the share of researchers in the higher education sector decreased by 0.1 percentage points, while the share of researchers in the business sector increased by 0.1 percentage points. In the private not-profit and government sectors, the figures remained unchanged.

In the higher education sector, the largest employer of researchers, slightly more than one-third of the researchers it employed in 2020 were women (35.7%), as we can see in Figure 34. The business sector, which employed a total of 26,522 people in 2020, employed only 3,639 women as researchers (13.7%) compared to 22,882 men (86.3%) and performed the worst of all the sectors surveyed. In the other sectors, the number of women was above 40% – specifically 40.5% in the government sector and 41.0% in the private non-profit sector.

Figure 34: Proportion of researchers in 2020, by sex (HC, %)⁴²



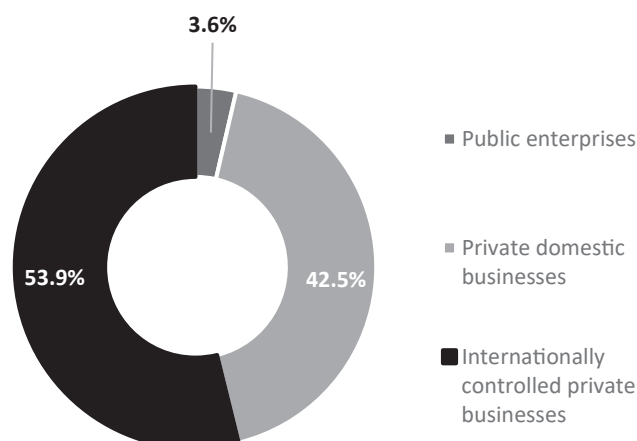
Source: CZSO – Research and Development Indicators.

⁴¹ See Table 24.

⁴² See Table 24.

Business sector

Figure 35: Proportion of researchers in the business sector in 2020, by type of employer (HC, %)⁴³



Source: CZSO – Research and Development Indicators.

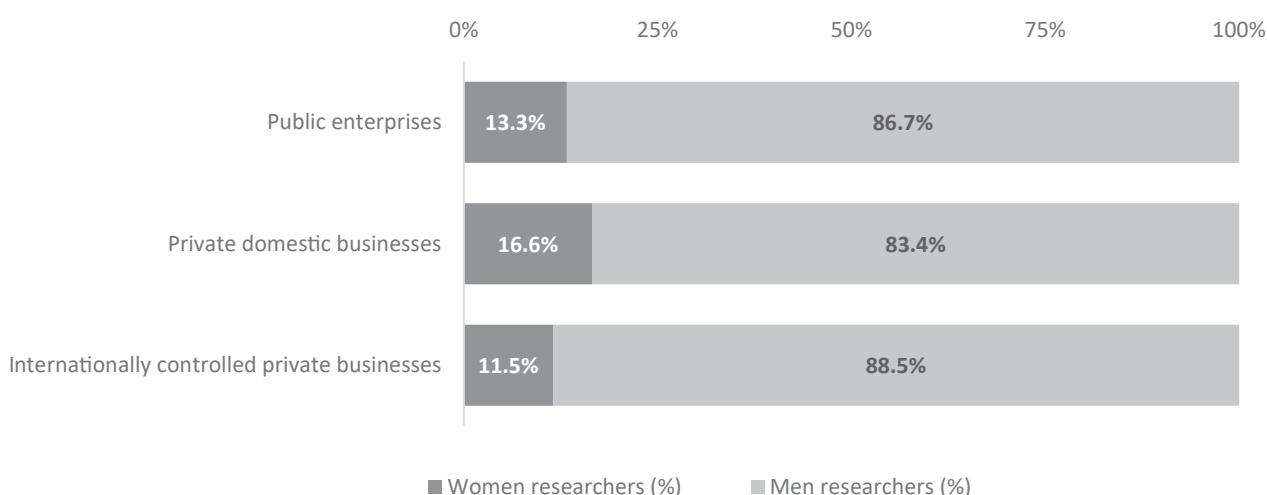
Research work in the business sector is mainly concentrated in businesses, which employ 96.4% of the researchers working in this sector. The most researchers are employed in businesses controlled by foreign partners – in 2020, these businesses employed 53.9% of the researcher workforce, compared to 42.5% in Czech businesses. Public enterprises employ only a tiny share of researchers, with only 3.6% of researchers in the sector.

As for the gender distribution in the business sector, a closer look at the different types of workplaces shows that the low representation of women is a pervasive issue, and the share of women researchers does not exceed one-sixth in any of the workplaces studied. Although internationally controlled private businesses are among the largest employers of researchers in the business sector (see Figure 35), in 2020 they employed the fewest women researchers

– just 1,642 (11.5%) compared to 12,641 (88.5%) men. In public enterprises, which employed the fewest researchers in numbers, women made up 13.3% of their research employees. Private domestic businesses were the largest employers of women, with 1,869 (16.6%) women researchers and 9,407 (83.4%) men researchers.

The predominance of internationally controlled private businesses among employers of researchers may be due to the fact that international companies often offer higher salaries than domestic companies in order to attract the best candidates.⁴⁴ At the same time, it can be assumed that international businesses take advantage of the local less gender-sensitive culture, which, often unlike in their home countries, allows them to ignore gender equality issues. The Czech Republic has the smallest share of women among researchers working in the business sector in the European Union at 13.2% in 2019 – see Figure 66. International companies are also not actively motivated to address the gender equality of their research staff, as the Czech government offers no incentives and imposes no conditions for them to do so.

Figure 36: Proportion of researchers in the business sector in 2020, by sex (HC, %)⁴⁵



Source: CZSO – Research and Development Indicators.

⁴³ See Table 25.

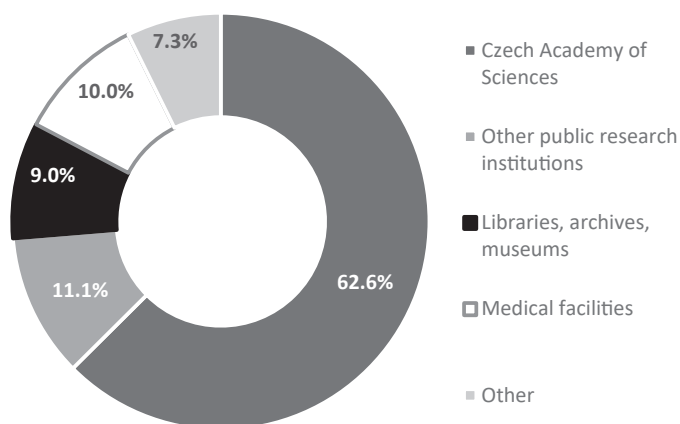
⁴⁴ Institute for the Study of Labor: Do Foreign Firms Really Pay Higher Wages? Evidence from Different Estimators.

⁴⁵ See Table 25.

Government sector

In the government sector, the majority of researchers work at the Czech Academy of Sciences, which in 2020 employed 62.6% of researchers in this sector. This is followed by researchers who work for other public research institutions (11.1%) and healthcare institutions (10%). A single-digit share of researchers work at libraries, archives, and museums (9.0%) and other research institutions (7.3%).

Figure 37: Proportion of researchers in the government sector in 2020, by place of work (HC, %)⁴⁶

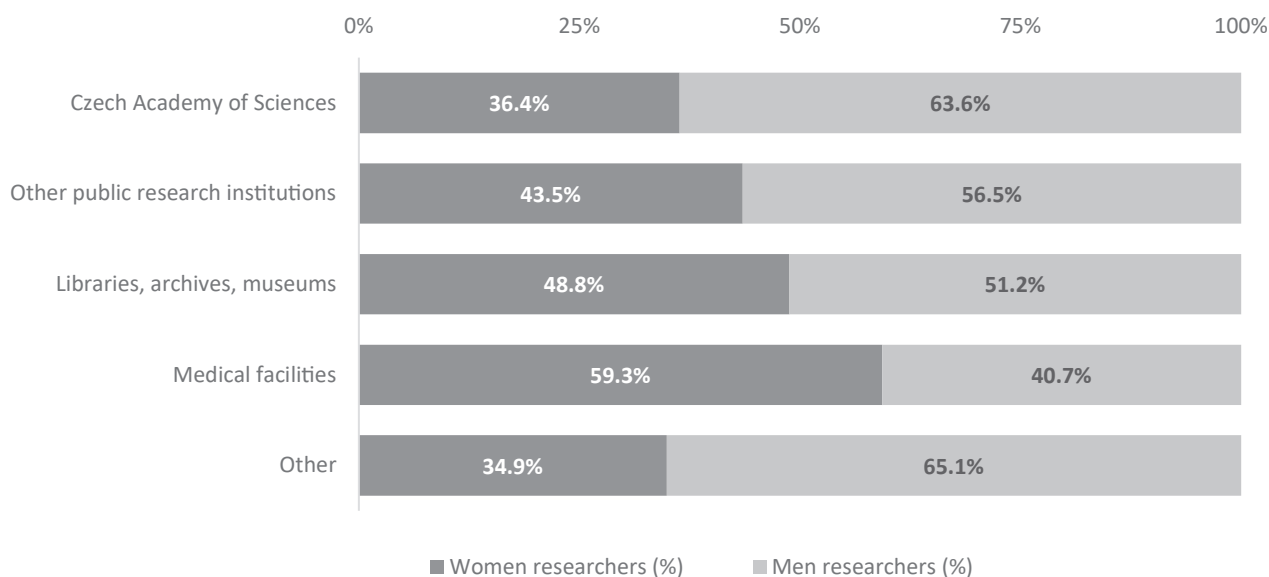


Source: CZSO – Research and Development Indicators.

The predominance of women among medical science students and graduates is reflected in the proportion of women employed as researchers in medical facilities, where women accounted for 59.3% of researchers, specifically 656 women compared to 450 men. Despite having the second smallest number of researchers, libraries, archives, and museums have just under a one-half share of women in their ranks, as 48.8% of their researchers are women. More than three-fifths of researchers in the government sector work for the institutes of the Czech Academy of Sciences (CAS), but only 36.4% of the CAS's research employees are women – 2,521 women vs 4,410 men (64.6%), the second-lowest figure in the government sector.

From 2005 to 2020, the share of women researchers working for the Czech Academy of Sciences increased by just 3.9 percentage points.⁴⁷ The smallest number of women researchers (34.9%) worked for other public research institutions, which as a group form the smallest employer of researchers.⁴⁸

Figure 38: Proportion of researchers in the government sector in 2020, by sex (HC, %)⁴⁹



Source: CZSO – Research and Development Indicators.

⁴⁶ See Table 26.

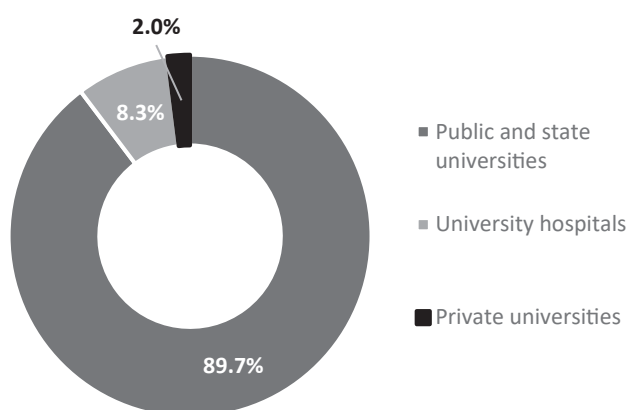
⁴⁷ See Table 26.

⁴⁸ These are all public research institutions except for the departments of the Czech Academy of Sciences.

⁴⁹ See Table 26.

Higher education sector

Figure 39: Proportion of researchers in the higher education sector in 2020, by place of work (HC, %) ⁵⁰



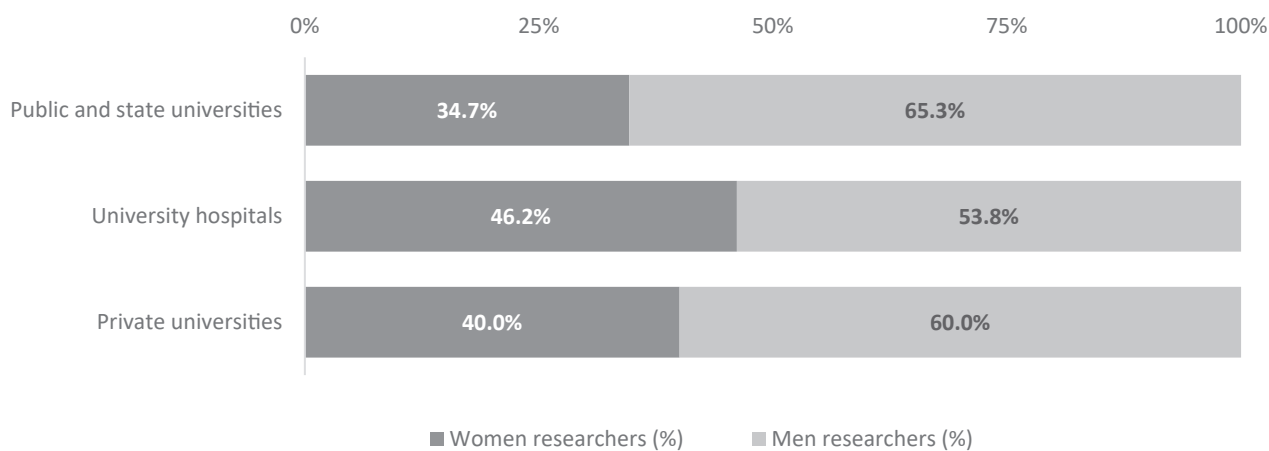
Source: CZSO – Research and Development Indicators.

In the higher education sector, public and state universities are by far the largest employers of researchers. In 2020, 24,510 (89.7%) of the total of 27,325 researchers worked at these universities. Following at a distant second are university hospitals, employing 8.3% of researchers. Private universities employed only 2.0% of researchers in this sector.

As far as gender parity is concerned, university hospitals come closest to attaining parity, with 1,047 women researchers (46.2%) and 1,221 (53.8%) men researchers. The long-standing predominance of women in the medical sciences is most likely fuelled by this distribution. In private universities, 40.0% of women and 60.0% of men are engaged in research activities. The most substantial differences are in the largest group of providers of research work, i.e., public and state universities, where only 8,493

women (34.7%) and 16,017 men (65.3%) are employed. In the following section, the representation of women and men in academia will be discussed in greater detail.

Figure 40: Proportion of researchers in the higher education sector in 2020, by sex (HC, %) ⁵¹



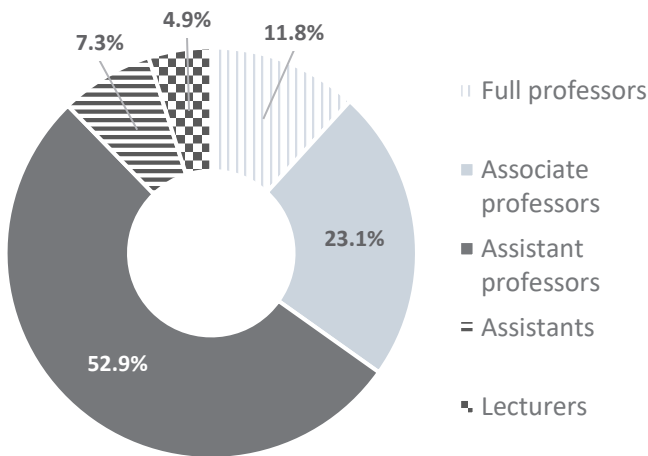
Source: CZSO – Research and Development Indicators.

⁵⁰ See Table 27.

⁵¹ See Table 27.

ACADEMIC STAFF AT UNIVERSITIES

Figure 41: Structure of academic staff (FTE) by academic position, 2020⁵²



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

According to data from the MEYS that publishes information on the full-time equivalent (FTE) of academic staff each year, in 2020 the total academic staff was equal to 18,507 FTEs, of which women made up 36.0%. More than half of academics (52.9%) were working as assistant professors. Associate professors accounted for 23.1% of staff, while full professors made up just 11.8%. Assistants (7.3 %) and lecturers (4.9%) made up single-digit shares of academic staff.

In Figure 42 we can clearly see that the share of women in academic positions declines sharply the higher up the position is in the academic hierarchy. The largest number of women academics is found among lecturers, who accounted for 56.4% of all women academics in 2020. This is followed by women working as assistants, who have close to equal representation, with 48.8% women compared to 51.2% men. Only 40.9% of assistant professors were women, and just

over one-quarter (26.8%) of associate professors were women. Out of the 2,178 full professors in 2020, only 334 were women (15.3%).

Figure 42: Structure of academic staff (FTE), 2020, by sex and academic position (%)⁵³



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

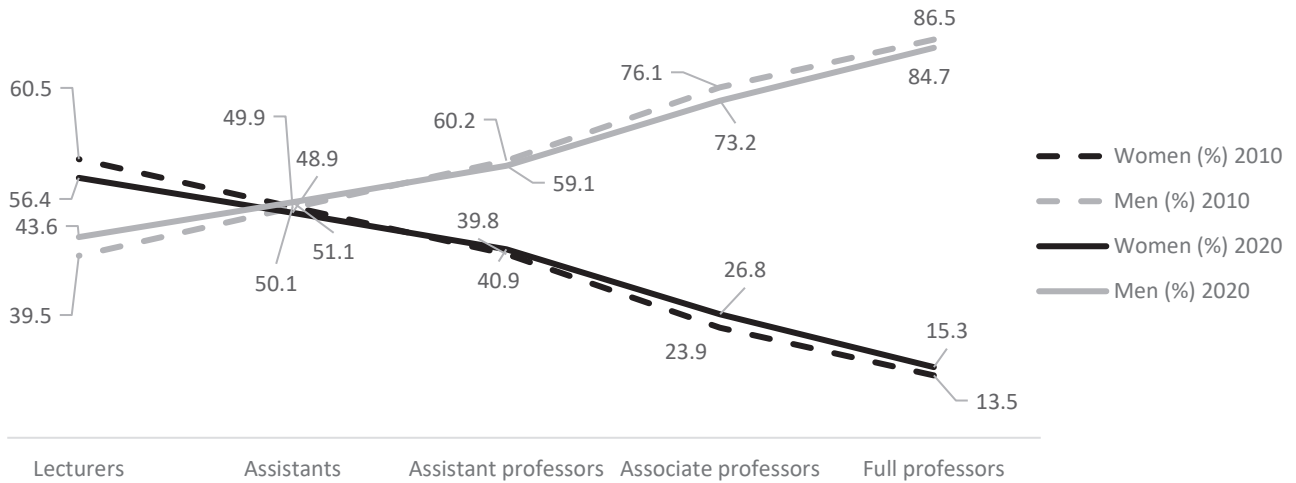
A comparison over time shows that at the lowest levels of an academic career, i.e., lecturers and assistants, men have accounted for most of the increase in staff numbers of the last 10 years. This was an increase of 4.1 percentage points in the share of lecturers among academic staff from 39.5% to 43.6%, while the ranks of assistants grew by 1.2 percentage points. This resulted in men predominating among assistants, accounting for 51.1% of all assistants in 2020 compared to 49.9% in 2010. The opposite trend was observed for other academic

⁵² See Table 29.

⁵³ See Table 29.

professions, but changes are happening at a slow pace. The proportion of women assistant professors was 40.9% in 2020, compared to 39.8% in 2010, while the share of women associate professors increased by 2.9 percentage points from 23.9% in 2010 to 26.8% in 2020. The most significant difference was in the share of women full professors, who account for only one-sixth of the total number of professors. If the share of full professors who are women continues to grow at the current pace, i.e., 1.8 percentage points every 10 years, we will reach parity in 193 years in 2213. The changes, irrespective of the academic position, were at most within 3 percentage points and therefore cannot be considered significant. On the positive side, however, we can observe a slight tendency towards a closing of the gender gap, with an increase in the proportion of men among lecturers and assistants and concurrently an increase in the share of women in the positions of assistant professors, associate professors, and full professors.

Figure 43: The proportion of men and women (FTE) over the course of a typical academic career, 2010 and 2020 (%) ⁵⁴



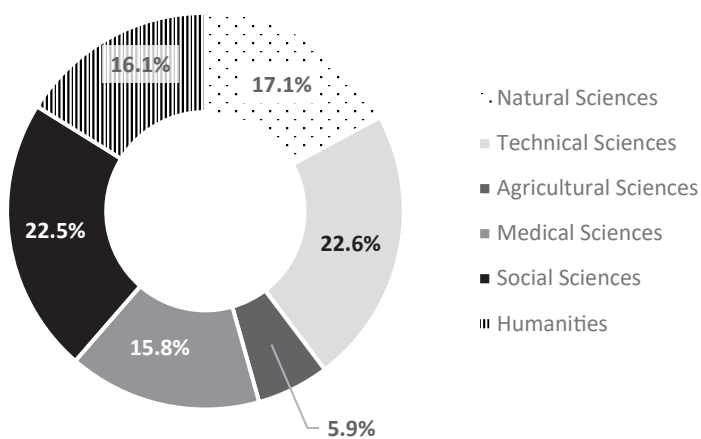
Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

⁵⁴ See Table 29.

Academic staff by discipline

The Ministry of Education, Youth and Sports does not collect data on academic staff by discipline but provides data by faculty for all accredited universities. The faculties in this chapter were hand-coded according to the Frascati Manual,⁵⁵ an internationally recognised methodology for collecting and using R&D statistics that provides detailed information on the classification of disciplines into disciplinary areas. The following text can therefore be seen as a general overview of the position of women and men among academics (FTE) by discipline, bearing in mind, however, that the assignment of academics to disciplines based on the name of the faculty where they work may be somewhat inaccurate. For example, Language Centres or Departments of Physical Education, which almost every faculty has, often have academics with a different area of expertise from that of the given faculty, and this may slightly distort the figures.

Figure 44: Structure of academic staff (FTE) by discipline, 2020 (%)



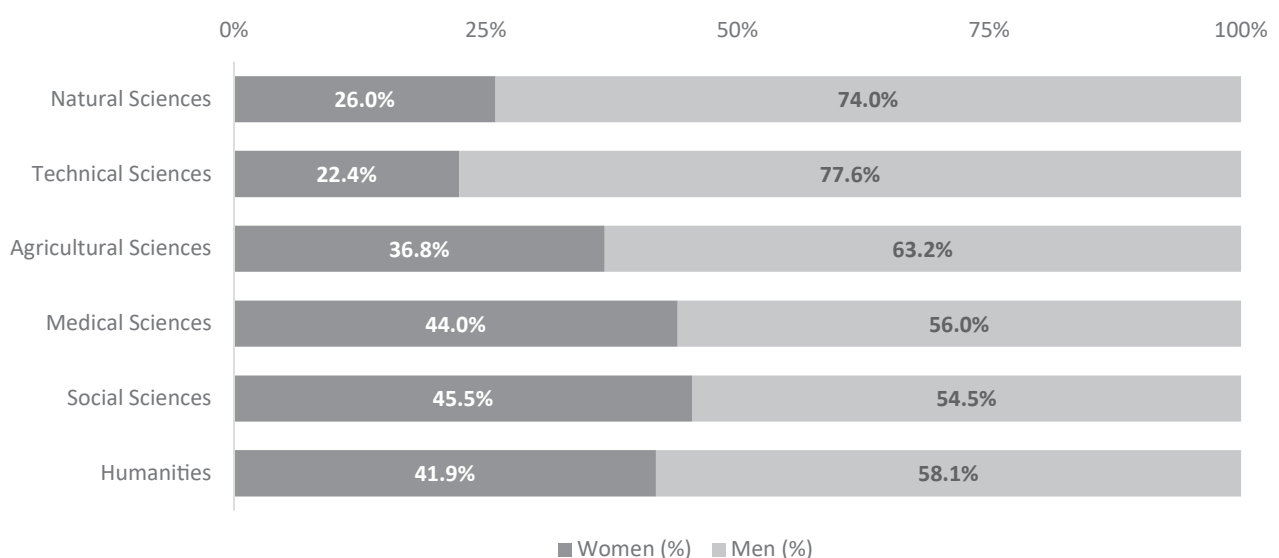
Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

The technical sciences have the highest share of academic staff (22.6%), followed closely by the social sciences, with a difference of one-tenth of one percent (22.5%). The natural sciences (17.1%), humanities (16.1%), and medical sciences (15.8%) all fall within a range of 15% to 20%. The agricultural sciences offer the fewest full-time positions to academics, accounting for just 5.9% of academic staff.

Figure 45 presents the shares of women and men in academic posts by discipline. Closest to parity are the social sciences, where 45.5% of full-time positions were held by women academics in 2020. The medical sciences (44.0%) and humanities (41.9%) were similarly placed. At the opposite end were the technical sciences, which suffer from a lack of women on all levels, and where just 22.4% of full-time academics in 2020 were women. The situation was slightly better in the natural sciences, where 26.0% of academics were women.

In the agricultural sciences, just over one-third or 36.8% of full-time academics were women.

Figure 45: Structure of academic staff (FTE) by sex and discipline, 2020 (%)⁵⁶



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

⁵⁵ OECD. Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development.

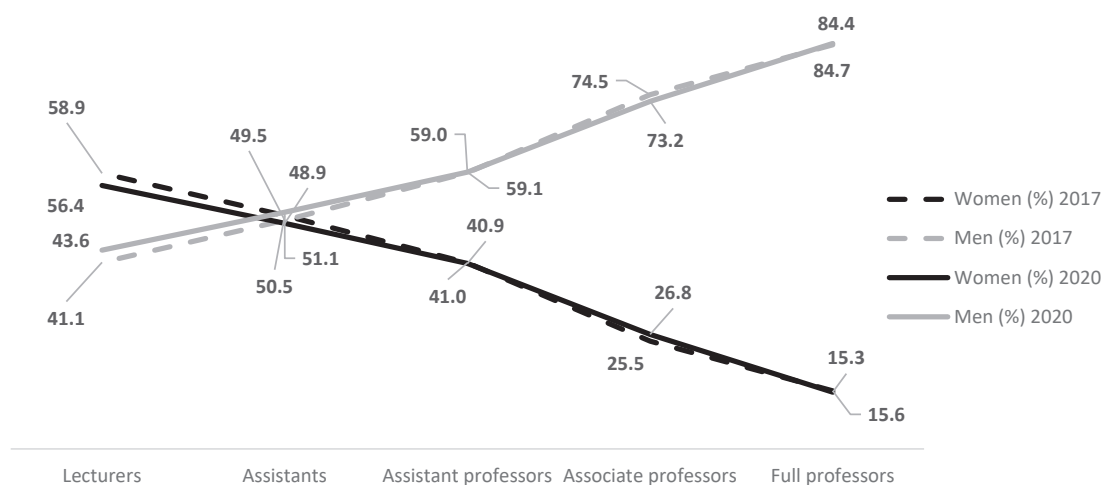
⁵⁶ See Table 30.

Academic staff by position

In this section, as in the section on academic staff by discipline, we draw on data from the MEYS, which were manually coded according to the Frascati Manual⁵⁷ and are expressed in the form of academic full-time equivalents (FTE). However, information on the structure of academics by position and discipline has only been collected by the Ministry of Education, Youth and Sports since 2017. For this reason, the years 2017 and 2020 are used for comparison.

As Figure 46 indicates, the higher the position in the academic hierarchy the smaller the proportion of women we find in such positions, with a decrease of around 10 percentage points at each level further up the hierarchy of positions. Overall, there were changes in gender representation in each academic position between 2017 and 2020, but in most cases these changes were only marginal increases or decreases of a few tenths of a percentage point. Women accounted for 56.4% of lecturers in 2020, a decrease of 2.5 percentage points from 2017 (58.9%). Similarly, women assistants saw their representation fall from above 50.5% in 2017 to 48.9% in 2020. The proportion of full-time women assistant professors fell by a marginal 0.1 percentage points from 2017 (41%) to 2020 (40.9%). The only position category that saw growth in the number of women was that of associate professor. In 2020, 26.8% of the people in this position were women, which was 1.3 percentage points more than in 2017 (25.5%). The greatest gender inequality was observed in the position of full professor, only 15.3% of whom were women in 2020, a drop of 0.3 percentage points from 2017 (15.6%). The biggest losses during transitions between the different stages in an academic career are found in the transition from assistant to associate professor (14.1 percentage points) and from associate to full professor (11.5 percentage points).

Figure 46: The trend in the proportion of men and women (FTE), 2017 and 2020, by academic position (%), irrespective of discipline⁵⁸



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

Despite the increasing trend in the representation of women among academics, which is occurring in all disciplines, the rate of growth is very slow. It is mainly women associate professors and full professors who are underrepresented in all fields. It can be assumed that, unless efforts are made to increase their representation, parity will not be achieved for associate professors in at least one of the six disciplines surveyed for another 10 years; associate professors in the social sciences would be the first to achieve gender equality in 2030, and full professors would achieve parity in 54 years – also in the social sciences – but not until 2074.⁵⁹ We will discuss the situation in each discipline in more detail in the next section.

In the natural sciences, the higher the academic rank, the wider the differences in representation and the smaller the proportion of women at that level. The highest percentage of women at the rank of lecturer, 44.3% of whom were women in 2020. However, there has been virtually no increase since 2017, with an increase of just 4 tenths of a percentage point from 43.9%. Women accounted for 33.8% of assistants in 2020, a decrease of 4.2 percentage points (38.0%) from 2017. The representation of women among academic staff at the assistant, associate, and full professor level increased between 2017 and 2020, but these were minimal changes. The percentage of women among assistant professors in 2020 was 30.8% (30.4% in 2017), among associate professors it was 19.4% (16.9% in 2017), and among full professors

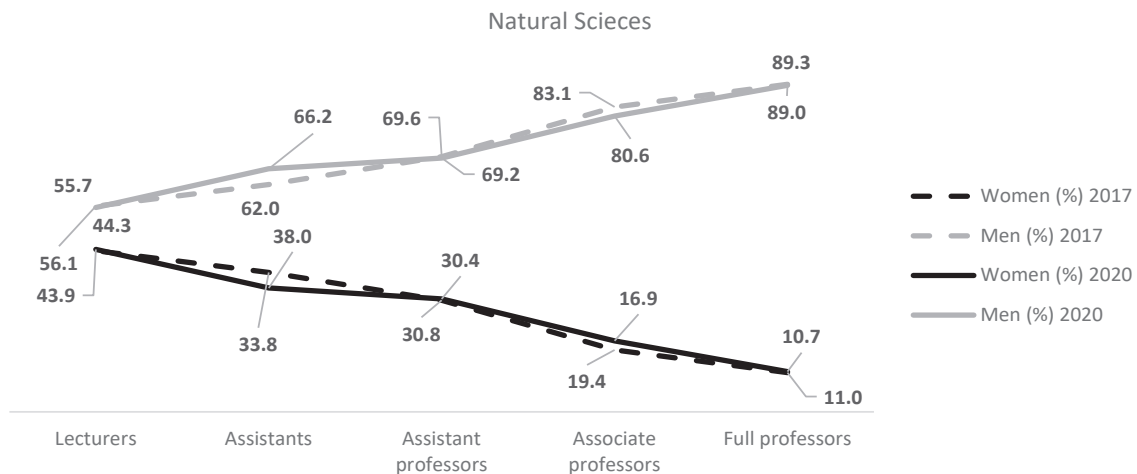
⁵⁷ OECD. Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development.

⁵⁸ See Table 29.

⁵⁹ Assuming that growth rates in all disciplines remain the same as between 2017 and 2020.

it was 11% (10.7%). Although the share of women among full professors increased over the period under review, in practice their number decreased. In 2017, there were 46 women full professors, compared to 383 men full professors; in 2020, there were 45 women full professors and 366 men full professors. The percentage increase of 0.3 points for women was due to the fact that 17 male professors quit between 2017 and 2020.⁶⁰ The largest decline of women in the ideal and the typical career path is found right at the beginning, during the transition from lecturer to assistant professor (a drop of 10.5 percentage points) and during the transition from assistant to associate professor (11.4 percentage points).

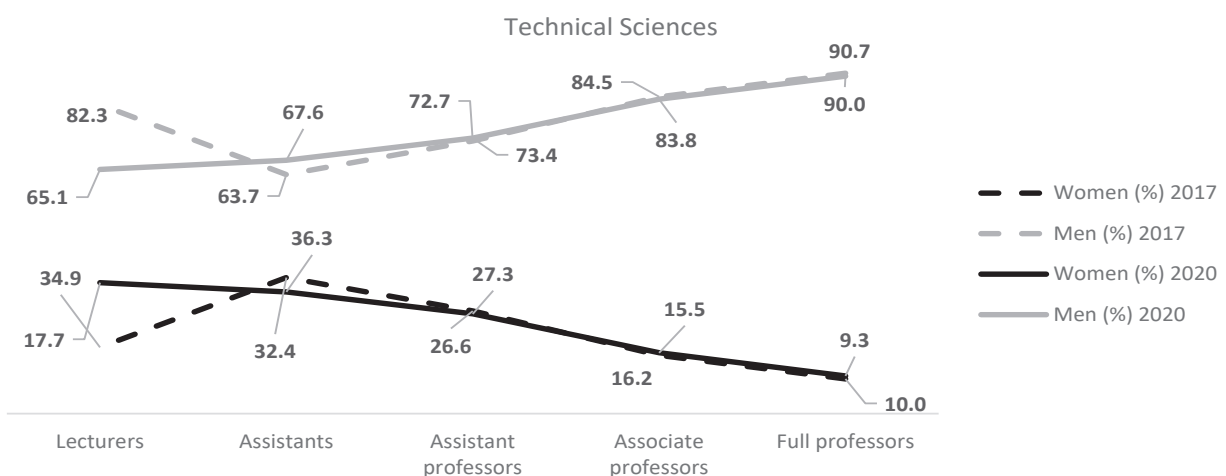
Figure 47: The trend in the proportion of men and women (FTE) in the natural sciences, 2017 and 2020, by academic position (%)⁶¹



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

The technical sciences are characterised by unequal gender representation in all the areas examined here, and, as Figure 48 indicates, the situation of academics is unfortunately no exception. There is horizontal segregation at the level of working contracts, and the concentration of women with the ambition to start an academic career in this field is low. The decline in the representation of women in the transition between career stages is relatively consistent throughout the career lengths studied – except for the transition from assistant professor to associate professor, where the decline is higher. On the bright side, the percentage of women lecturers has almost doubled since 2017, from 17.7% to 34.9% in 2020. The share of women assistant professors dropped 3.9 percentage points from 36.6% in 2017 to 32.4% in 2020 – which means that more than two-thirds of assistant professors were men (67.6%). The percentage of women working as associate professors in 2020 was 26.6% (27.3% in 2017) compared to 73.4% men. In the academic position of associate professor, the representation of women increased by 0.7 percentage points (15.5% in 2017 vs 16.2% in 2020), and the same percentage increase was recorded for women full professors (9.3% in 2017 vs 10.0% in 2020).

Figure 48: The trend in the proportion of men and women (FTE) in the technical Sciences, 2017 and 2020, by academic position (%)⁶²



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

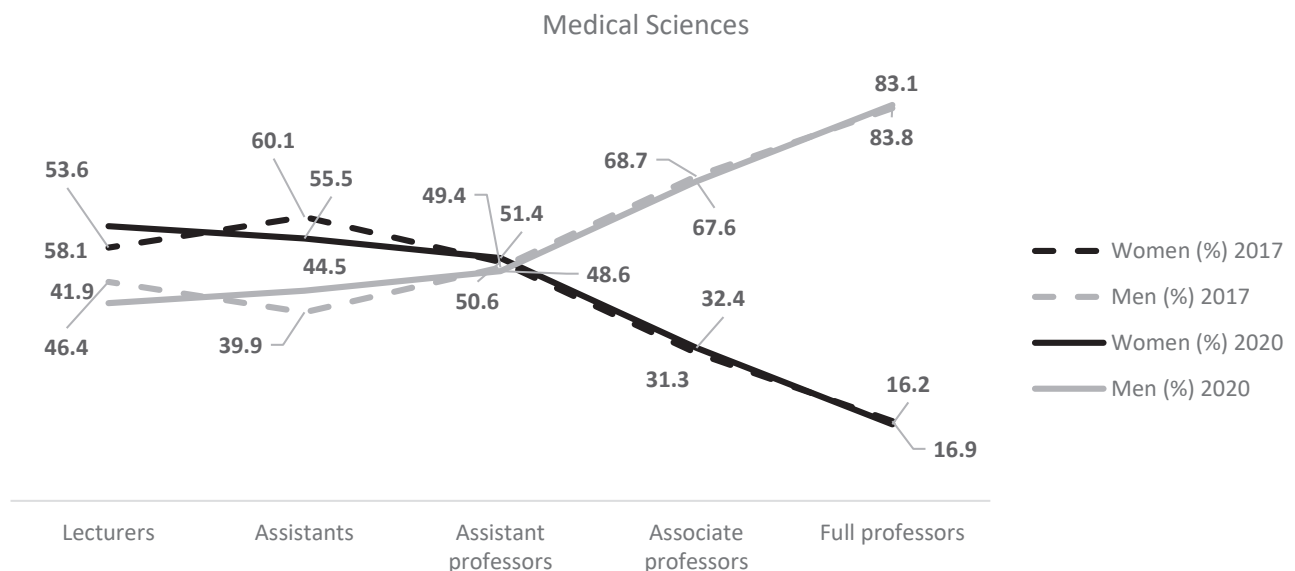
60 See Table 31.

61 See Table 31.

62 See Table 32.

In the medical sciences gender equality was recorded in three academic positions – lecturers, assistants, and assistant professors. Specifically, in the medical sciences 58.1% of lecturers were women in 2020 (53.6% in 2017), 55.5% of assistants were women in 2020 (60.1% in 2017), and 51.4% of assistant professors were women in 2020 (50.6%). Although parity in these positions is a good indicator, attention should be paid to avoiding the over-feminisation of the field and to maintain a balance of gender representation. Furthermore, there may be a glass ceiling effect at the associate professor and full professor levels. Despite the fact that more than half of the students and graduates of master’s and doctoral programmes in the medical sciences are women, and women also predominate among medical researchers,⁶³ there are very few women in the positions of associate and full professors, and their representation in these positions does not reflect their presence in the field. Specifically, 32.4% of associate professors were women in 2020 (31.3% in 2017), which is less than one-third of the 466 total (151 women vs 315 men). The situation is similar for women full professors, who accounted for only 62 (16.2%) of the total of 385 persons in 2020 – less than one-sixth – compared to 16.9% in 2017. A slump in the ideal-typical trajectory of women academics in the medical sciences is observed during the transition from assistant professor to associate professor, where the share of women falls by 19.0 percentage points once the academic position of associate professor is reached. The decline in the proportion of women observed between the position of lecturer to full professor is 41.9 percentage points.

Figure 49: The trend in the proportion of men and women (FTE) in the medical sciences, 2017 and 2020, by academic position (%)⁶⁴

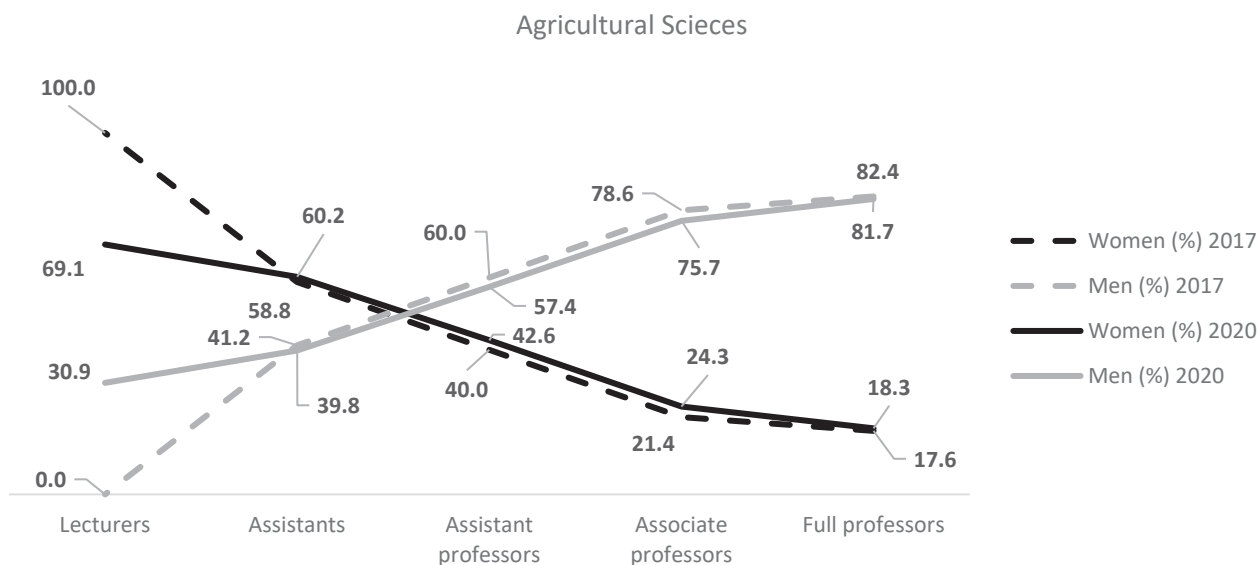


Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

In Figure 50, describing the agricultural sciences, it is worth mentioning that the outlier situation in this field, where 100% of lecturers are women, exists because in 2017 there were only 2 women (100%) and no men (0%) working as lecturers in the agricultural sciences, which is a very small number compared to other disciplines.⁶⁵ Therefore, while this figure may seem surprising, the situation became more equal in 2020, with 2 men (30.9%) and 4 women (69.1%) working as lecturers. In other academic positions, women’s representation increased between 0.7 and 2.9 percentage points between 2017 and 2020. More than three-fifths of assistant professors in the agricultural sciences were women in 2020 (60.2%), compared to 58.8% in 2017, while women accounted for 42.6% of assistant professors in 2020 (40.0% in 2017), 24.3% of associate professors (21.4% in 2017), and 18.3% of full professors (17.6% in 2017). Despite the growth trend, the rate of increase is very slow. Associate professors come closest to gender equality and could reach parity in 2029 if the rise were to continue at the same rate, i.e., 2.6 percentage points every 3 years. The agricultural sciences see the biggest decline out of all disciplines in women’s representation across the career stages that make up the ideal pathway to a professorship. During the transition from lecturer to full professor, the proportion of women declines by 50.8 percentage points. The biggest losses are in the transitions between assistant and associate professor (17.6 percentage points) and between assistant professor and associate professor (19 percentage points).

63 See Table 7.
 64 See Table 33.
 65 See Table 34.

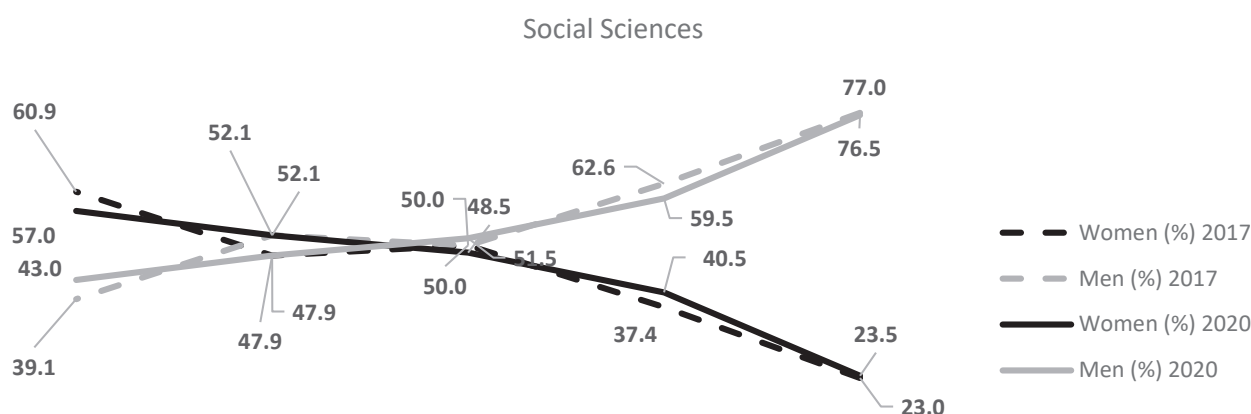
Figure 50: The trend in the proportion of men and women (FTE) in the agricultural sciences, 2017 and 2020, by academic position (%)⁶⁶



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

A good example for other disciplines is the social sciences, which registered the smallest gender differences at every position in the academic hierarchy. However, at higher levels of the academic hierarchy, the differences are also larger than would be desirable. Women made up 57.0% of lecturers in 2020 (60.9% in 2017), so the overrepresentation of women is decreasing over time. Women accounted for 52.1% of assistants defined as FTEs (47.9% in 2017), and 48.5% of assistant professors (50.0% in 2017). The proportion of women among associate professors increased by 3.1 percentage points between 2017 and 2020, from 37.4% to 40.5%. The biggest decline in the share of women in academia occurs in the transition from associate to full professor. The gap between these two academic grades was 17 percentage points in 2020, resulting in a slowly growing share of women among full professors. In 2017, there were 65 women full professors (23.0%) and 219 men (77.0%); in 2020, there were 67 women (23.5%) and 218 men full professors (76.5%). Despite the marginal growth, the largest share of women full professors out of all the fields studied is in the social sciences, yet they still make up less than one-quarter of the total number of full professors.⁶⁷

Figure 51: The trend in the proportion of men and women (FTE) in the social sciences, 2017 and 2020, by academic position (%)⁶⁸



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources)

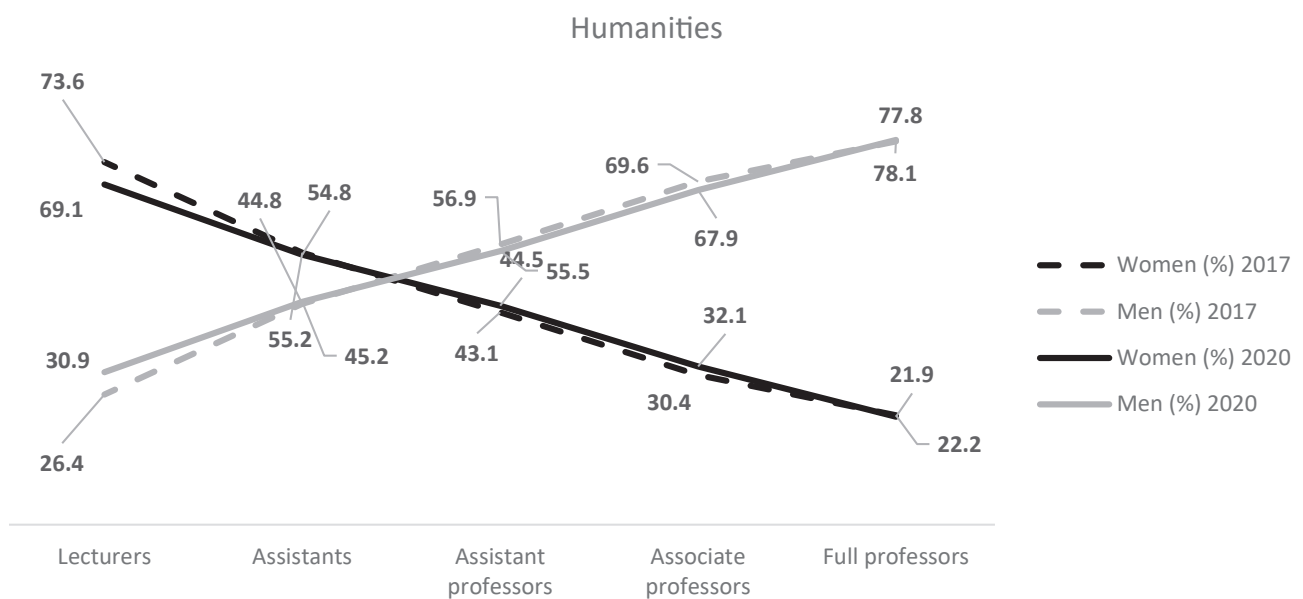
66 See Table 34.

67 The lowest proportion of women professors is in the technical sciences, where women made up just 10% in 2020.

68 See Table 35.

Last but not least, we look at the humanities. Figure 52 shows that this field – like the agricultural sciences – suffers from strong vertical segregation, as the higher the academic position, the smaller the share of women. The total decline in the proportion of women between the lowest and the highest career levels is 47.2 percentage points. The decline in the share of women here is relatively even; the difference between the lowest and highest academic positions ranges between disciplines from 14.3 percentage points to 10.2 percentage points. The humanities have the highest number of women working as lecturers, with 158 (69.1%) in 2020 compared to 165 (73.6%) in 2017.⁶⁹ Women made up the majority of assistants in 2020 (54.8%), a slight decrease from 55.2% in 2017. On a positive note, the numbers of assistant professors are slowly approaching parity, with 44.5% women and 55.5% men in 2020, compared to 43.3% women in 2017. Associate professors follow a similar trend but are now only approaching a one-third share of women in this position (32.1% in 2020 versus 30.4%) rather than parity. In conclusion, the humanities also have a long way to go to achieve greater equality in academic positions. In 2020, only 21.9% of women were full professors (22.2% in 2017) compared to 78.1% of men – four-fifths of full professors were men.

Figure 52: The trend in the proportion of men and women (FTE) in the humanities, 2017 and 2020, by academic position (%)⁷⁰



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

⁶⁹ See Table 36.

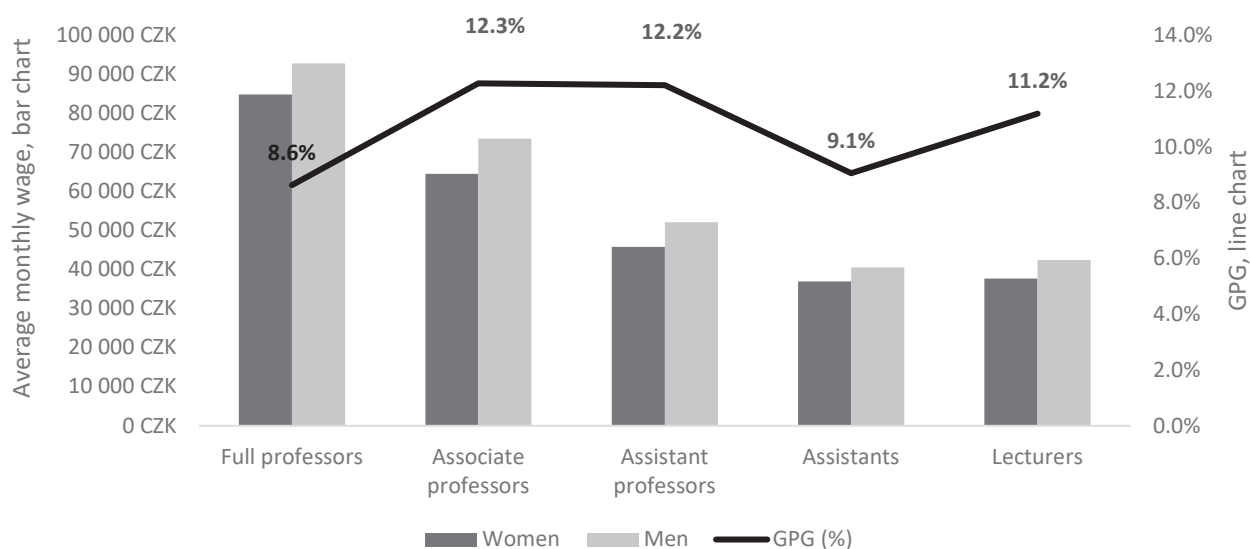
⁷⁰ See Table 36.

Wages

The gender pay gap shows the percentage by which the average monthly salary of women and men academics differs. In 2020, men on average earned a higher salary than women in all academic positions and this difference ranged from 8.6% to 12.3%. The most pronounced gap was between men and women in the position of associate professor, with men earning an average of CZK 73,508, while women earned CZK 64,484, which is CZK 9,024 less. The smallest difference was at the full professor level, where salaries are generally the highest. The average monthly wage of women full professors was CZK 84,815, while their male colleagues earned CZK 8,009 more with an average salary of CZK 92,824. Women assistant professors earned on average CZK 6,371 less than men assistants, women assistants made CZK 3,679 less than their male counterparts, and women lecturers made CZK 4,749 less than men lecturers.

Given that it was not possible to include data on all salary components, such as personal bonuses, because this data is not collected by MEYS, it can be assumed that the actual differences in the salaries of academic staff are more substantial. Moreover, since 2010, when information on the pay gap for academics was first published, the gender pay gap has grown wider at every level except for lecturers.⁷¹

Figure 53: The gender pay gap (GPG, %) in gross average monthly wages for academic staff in 2020, by academic position⁷²



Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

71 See Table 37.

72 See Table 37.

DECISION-MAKING POSITIONS

The distribution of women and men in decision-making positions in science and research was far from equal in 2020, with the vast majority of roles held by men. In 2020, the share of women in positions of leadership in research, higher education, and other R&D institutions was just 9.3%, down 5.6 percentage points from 2018 (14.9%). Only 21.8% of women were in decision-making, strategic, and supervisory bodies, a decrease of 1.2 percentage points from 2018 (23%). The situation is similar in advisory and expert bodies, where the share of women is slightly above one-quarter – 27.1% in 2020 compared to 28.1% in 2018. Despite efforts to increase the share of women in decision-making positions, the reverse has paradoxically happened, and their share is decreasing.

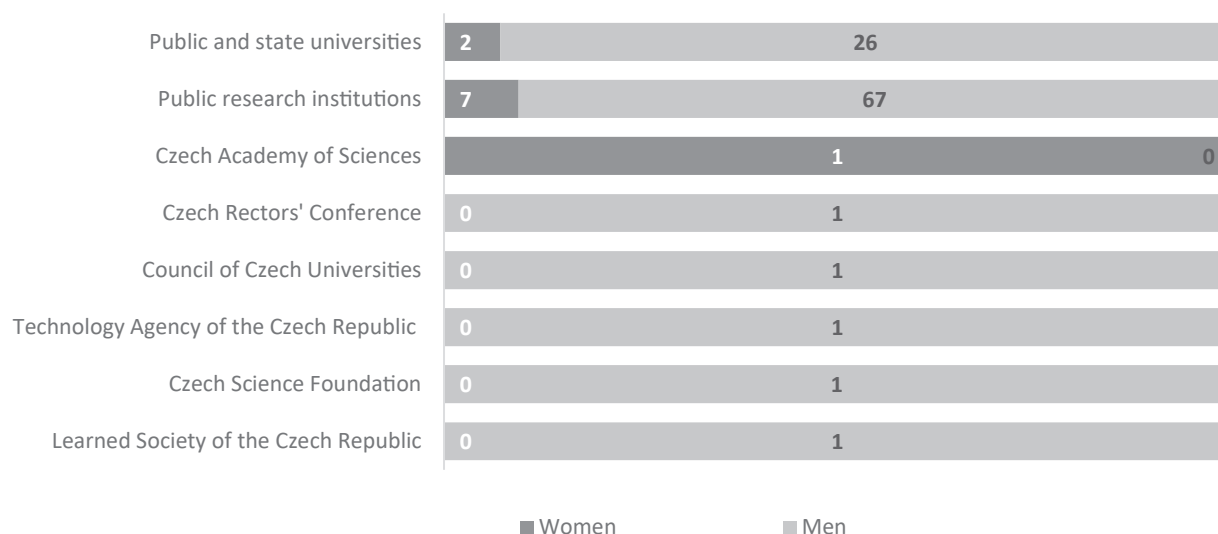
Table A: Proportion of women and men in management and decision-making bodies at public research institutions, 2020⁷³

	Management			Decision-making, strategic and supervisory bodies			Advisory and expert bodies		
	Women	Men	% Women	Women	Men	% Women	Women	Men	% Women
Public and state universities	2	26	7.1	513	1817	22.0	-	-	-
Public research institutions	7	67	9.5	245	945	20.6	-	-	-
Czech Academy of Sciences	1	0	100	61	250	19.6	84	294	22.2
Czech Rectors' Conference	0	1	0	11 *	32 *	25.6	20 *	74 *	21.3
Council of Czech Universities	0	1	0	102	175	36.8	136	237	36.5
Technology Agency of the Czech Republic	0	1	0	5	24	17.2	58	158	26.9
Czech Science Foundation	0	1	0	5	22	18.5	14	78	15.2
The Learned Society	0	1	0	13	154	7.8	-	-	-
Total	10	98	9.3	955	3419	21.8	312	841	27.1

* Data from 2021, as 2020 figures were not available.
Source: Annual reports and websites of the given institutions.

Figure 54 illustrates the number of women in R&D institutions. Four of them – the Czech Rectors' Conference, the Council of Universities, the Technology Agency of the Czech Republic, and the Learned Society of the Czech Republic – are headed exclusively by men, while only the Czech Academy of Sciences and the Czech Science Foundation are headed by women. In public and state universities and public research institutions, 7.1% and 9.5% of the leadership is women. Overall, in 2020, 90.7% of leadership positions in research were occupied by men and only 9.3% by women.

Figure 54: Number of women and men in the management of public R&D institutions, 2020⁷⁴



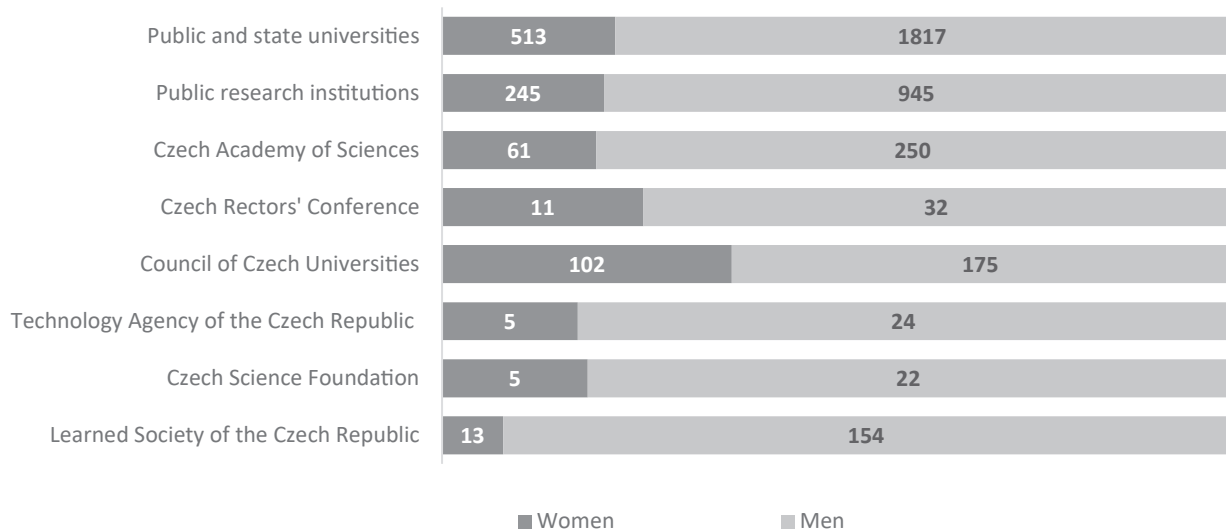
Source: Annual reports and websites of the given institutions.

⁷³ See Tables 38 to 44: We should point out that there was a change in the methodology, where in 2018 the Ministry of Education, Youth and Sports began taking into account not only university rectors but also deans and, for example, heads of departments. Therefore, the reported values after 2018 are not comparable with values before 2018.

⁷⁴ See Table 38 to 44.

In decision-making, strategic, and control bodies there is a greater share of women than in management positions. The two extreme ends in this area are the Council of Universities, where the share of women is the highest, exceeding one-third – 102 (36.8%), and the Learned Society of the Czech Republic, which is at the other end with only 13 women (7.8%). Overall, there are 955 women (21.8%) and 3,419 (78.2%) men in decision-making positions.

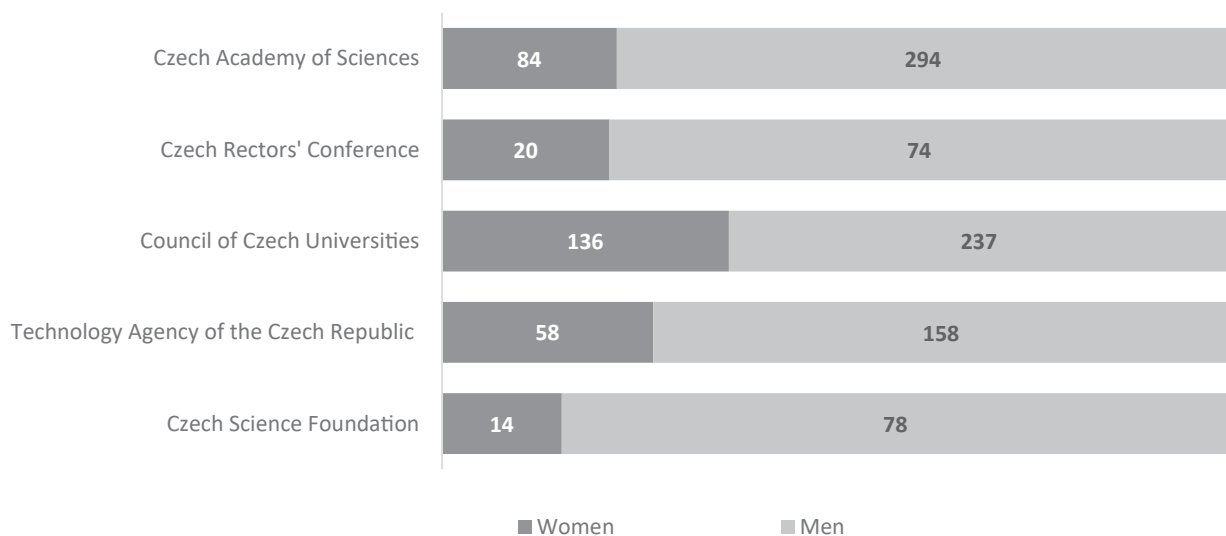
Figure 55: Number of women and men in decision-making, strategic, and supervisory bodies of public R&D institutions, 2020⁷⁵



Source: Annual reports and websites of the given institutions.

Last but not least, we will focus on gender representation in advisory and expert bodies. The largest share of women is in the Council of Universities, of women are in the Council of Universities, with 136 women (36.5%) and 237 men (64.5%), and the smallest share is in the Czech Science Foundation, with 14 women (15.2%) and 78 men (84.8%) representatives. The Czech Academy of Sciences has 84 women (22.2%) in its advisory body, the Technology Agency of the Czech Republic has 58 (26.9%) in its advisory body, and the Czech Rectors' Conference has 20 (21.3%). Despite the fact that parity in advisory and expert bodies is far from a reality, out of all the research and development institutions it is these bodies that come closest to parity.

Figure 56: Number of women and men in the advisory and expert bodies of public R&D institutions, 2020⁷⁶



Source: Annual reports and websites of the given institutions.

75 See Table 38 to 44.

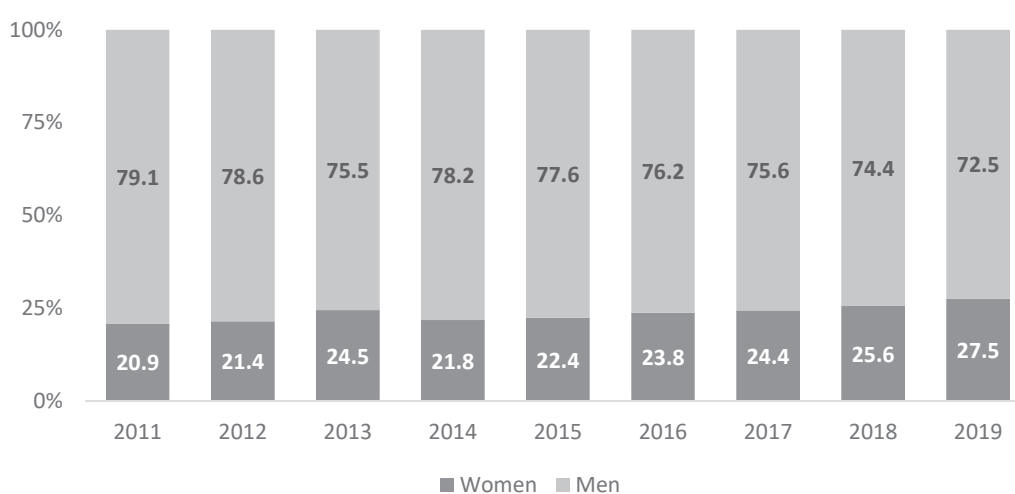
76 See Tables 38 to 44.

SCIENCE AND ENGINEERING PROFESSIONALS

Science and engineering are another area in which gender inequality is a major problem. This has already been described in the previous chapters on students, graduates, and academics in the natural and technical sciences. In this section, we take a closer look at the shares of women and men in science and engineering occupations, as well as the gender pay gap, using data collected by the Czech Statistical Office as part of the Labour Force Survey (LFS).

In 2019 – data for 2020 were not available on the CZSO website at the time the 2020 Monitoring Report was published – a total of 143,700 professionals worked in science and engineering. Of these, 39,500 were women (27.5%) compared to 104,200 men (72.5%). Although in absolute terms we can observe a slight gradual increase in women in this field over time,⁷⁷ the differences are not very significant in relative terms. In 2011, 20.9% of the science and engineering workforce was represented by women; in 2019, their share was 27.5%. This is an increase of 6.6 percentage points. If the increase in women’s representation continues at the same rate as in the last 8 years, then gender equality in science and engineering could be expected in 2048.

Figure 57: Proportion of men and women (%) among science and engineering professionals, 2011–2019⁷⁸



Source: CZSO – Labour Force Survey (LFS).

In addition, among science and engineering professionals there are differences in average gross monthly salaries not only by gender but also by age. Women are generally at a disadvantage compared to men, and in 2020 the largest pay gaps were in the 25-29 age group (difference of CZK 7,017) and the 35-44 age group (CZK 10,072), where the GPG of women compared to men was 16.0%.

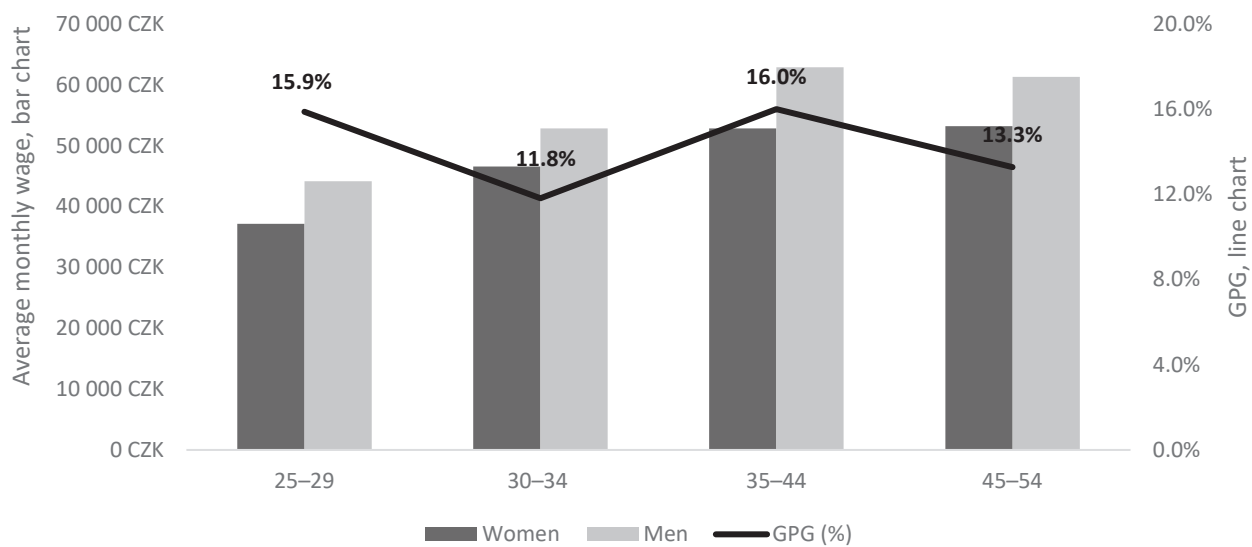
The biggest GPG has long been in the 35-44 and 45-54 age categories, but it has narrowed slightly since 2015. In the 35-44 age group it was 16.0% in 2020 (compared to 19.2% in 2015), while in the 45-54 age category women earned 13.3% less than men in 2020 (compared to 20.4% in 2015). There were only slight fluctuations for women aged 30-34, with the figures for 2015 (11.7%) and 2020 (11.8%) being almost identical. The situation is getting worse for women professionals aged 25-29, whose average monthly salary was 15.9% lower than of their male counterparts in 2020; in 2015, the income gap was less than half as large (7.8%).⁷⁹

⁷⁷ See Table 45.

⁷⁸ Data for 2020 were not published on the CZSO website at the time the 2020 Monitoring Report was issued.

⁷⁹ See Table 45.

Figure 58: Gender pay gap (GPG, %) in gross average monthly wages among science and engineering professionals in 2020, by age group

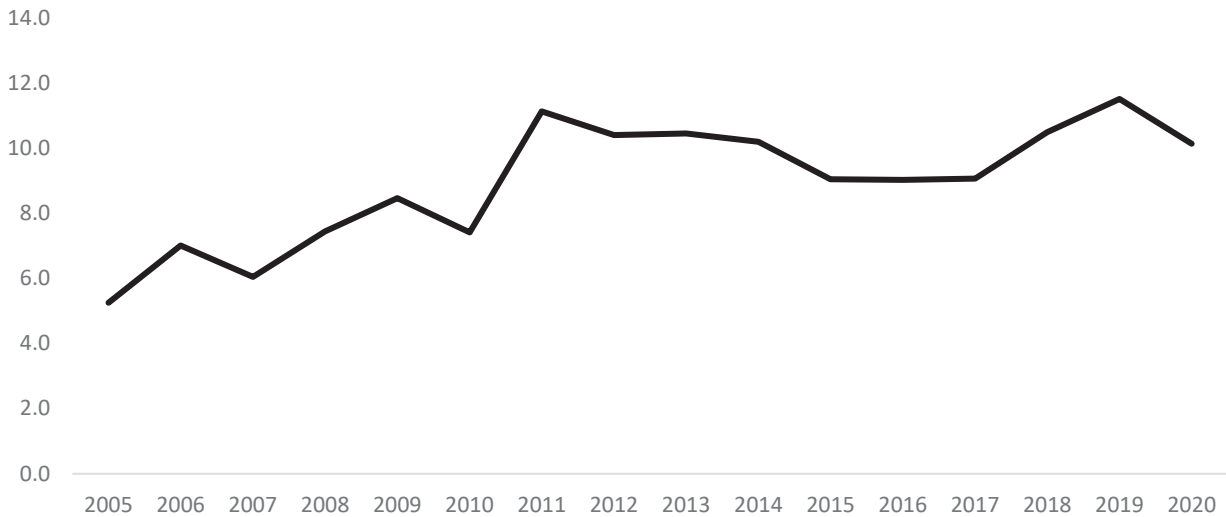


Source: CZSO – Labour Force Survey (LFS).

THE GENDER GAP IN PATENTS

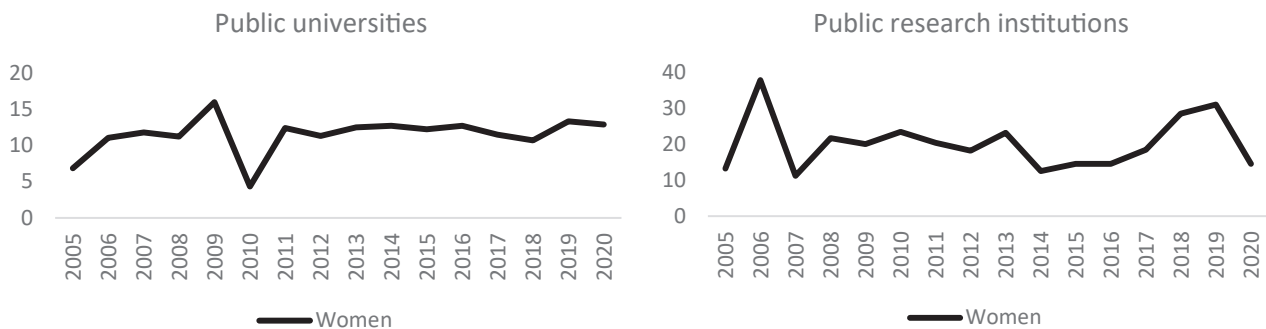
Data from the Industrial Property Office and the Czech Statistical Office, which rank patents in effect in the Czech Republic by the gender of the applicant, indicate that 53 patents (10.2%) out of the total of 525 patents granted in 2020 were granted to women. Since 2011, when the share of patents granted to women first crossed the 10% line, the figure has not changed much, fluctuating between 9% and 11%. The figures from recent years therefore do not suggest that there will be more growth in the coming years the way there was between 2005 and 2010.

Figure 59: The trend in the proportion (%) of patents granted to women from 2005 to 2020⁸⁰



Source: Industrial Property Office and CZSO, 2021.

Figures 60 and 61: The trend in the proportion (%) of patents granted to women working at public universities and public research institutions from 2005 to 2020⁸¹



Source: Industrial Property Office and CZSO, 2021.

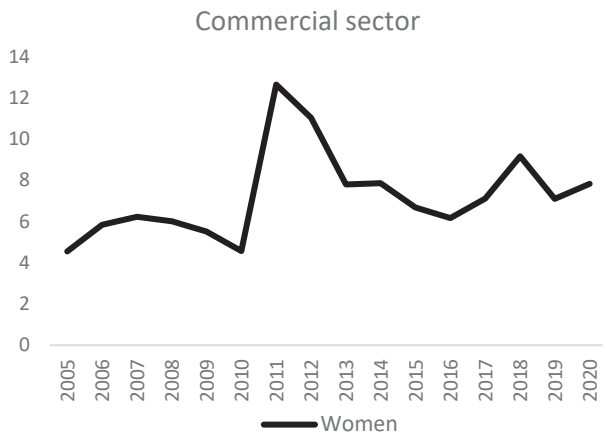
Source: Industrial Property Office and CZSO, 2021.

Looking at different sectors, we find that the situation is similar for both public universities and businesses. Except for 2005 (6.9%) and 2010 (4.3%), when women obtained less than 10% of all patents granted in the field, in other years the percentage of patents granted to women ranged between 11% and 13%. The most patents obtained by women in the public universities was in 2009 (16.0%). In contrast, public research institutions, which include many of the scientific institutes of the Czech Academy of Sciences, have the highest number of patents obtained by women of all the sectors surveyed. In 2020 the share of patents earned by women at the Czech Academy of Sciences was 14.6%, which is just half the figure in the previous two years – 28.5% of patents were granted to women in 2018 and 31.3% in 2019.

⁸⁰ See Table 46.

⁸¹ See Table 46.

Figures 62 and 63: The trend in the proportion (%) of patents granted to women working in the commercial sector and to women as private individuals from 2005 to 2020 (%)⁸²



Source: Industrial Property Office and CZSO, 2021.



Source: Industrial Property Office and CZSO, 2021.

The situation is worse in the private than in the public sector. In the commercial sector, women were granted only 7.8% of patents in 2020. Nevertheless, the number of patents granted to women exceeded the 10% threshold in 2011 (12.7%) and 2012 (11.0%). In the case of patents granted to private individuals, this figure was exceeded only once – in 2014 (10.8%). In 2020, women as private individuals were granted only 8.8% of all patents.

⁸² See Table 46.

THE CZECH REPUBLIC IN A EUROPEAN COMPARISON

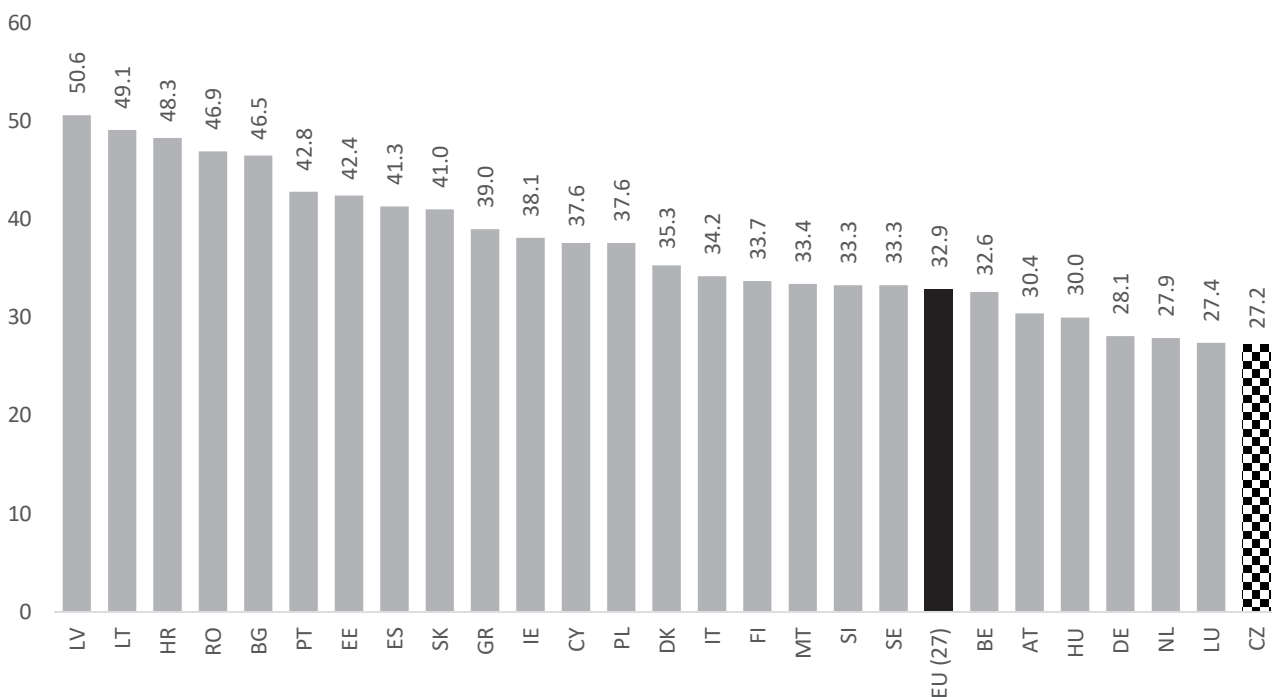
Researchers

The European Statistical Office (Eurostat) publishes data on the number and structure of R&D workers in the member states of the European Union and in countries in the European Free Trade Area (EFTA). The data are regularly collected from the national statistical offices of each country. As the data are issued retrospectively and some member states release them with a significant delay, data for 2020 are not available for all the analyses in this chapter.

On a European scale, the Czech Republic had the lowest share of women researchers among all EU member states in 2019, at 27.2%. The highest proportion of women among researchers was in Lithuania, where women accounted for more than half (50.6%) of researchers. Only 6 countries were below the EU average of 32.9% – Belgium, Austria, Hungary, Germany, the Netherlands, Luxembourg, and the Czech Republic.

One explanation for the disparity in the representation of women researchers in Europe is that low overall spending in this area translates into low salaries, resulting in an outflow of men who prefer higher paid jobs in other sectors of the labour market.⁸³ Another reason may be the different orientation of research, where a greater orientation towards STEM fields (68.4% of researchers in the Czech Republic work in STEM fields) may significantly affect the overall situation of women in research. However, this theory could be further explored.

Figure 64: Proportion (%) of women among researchers in the European Union, 2019 (%)

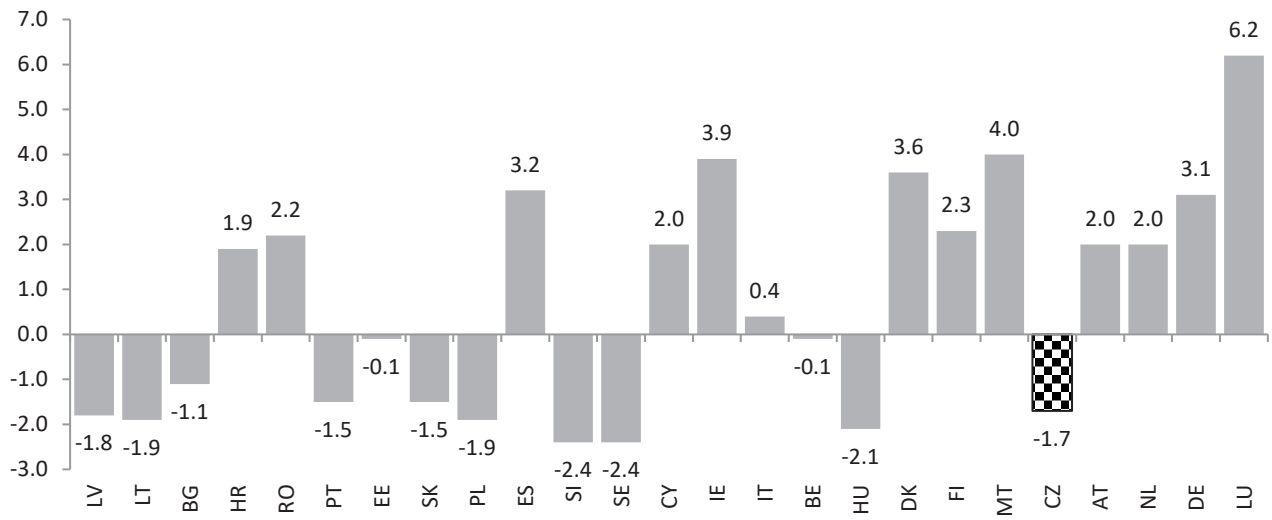


Source: Eurostat – Share of women researchers by sector of performance.

Compared to 2009, the share of women among researchers increased in most European countries, but the Czech Republic was not one of these countries, as its share dropped by 1.7 percentage points. However, countries such as Austria (+2.0%), the Netherlands (+2.0%), Germany (+3.1%), and Luxembourg (+6.2%), which together with the Czech Republic ranked last in the table in 2009, saw relatively large increases. Despite these efforts, all of these countries were still below the EU-27 average in 2019 – see Figure 64. On the other hand, Lithuania, Latvia, and Bulgaria, which were in the top three positions of countries with the most women researchers in 2009, saw a slight decline between 2009 and 2019, but even with this decline they were still the top three countries.

⁸³ European Commission. Waste of talents: turning private struggles into a public issue. Women and Science in the Enwise countries.

Figure 65: Change in the proportion of women researchers between 2009 and 2019 in EU countries, irrespective of research sector (%)

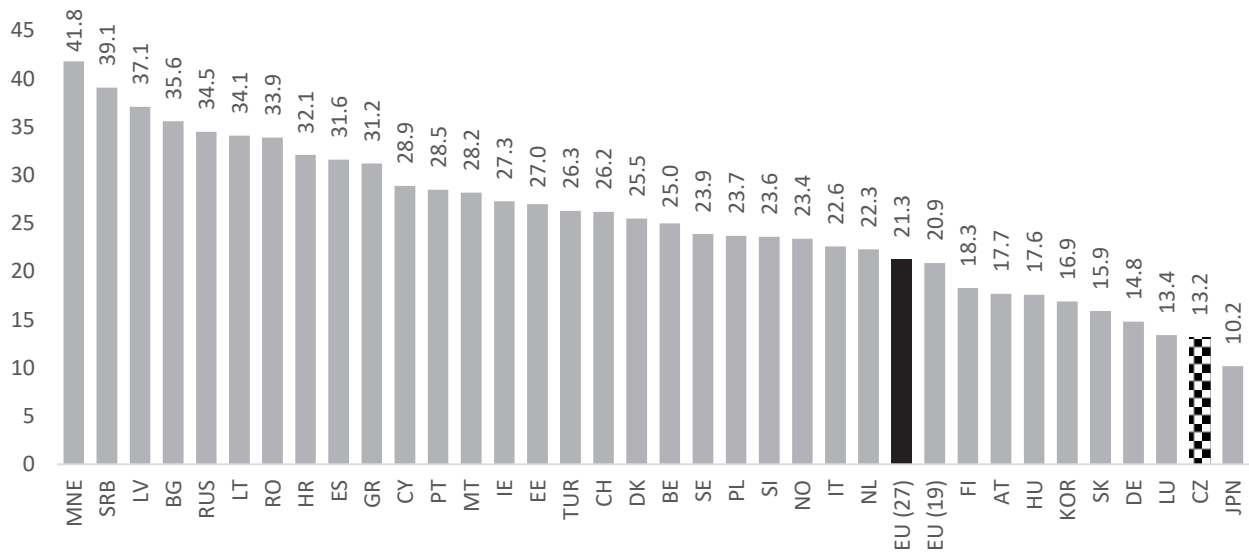


Source: Eurostat – Share of women researchers by sector of performance.

Researchers by sector

In the Czech Republic, the share of women researchers working in the **business sector** in 2019 was among the lowest in the EU (13.2%). However, neighbouring countries are not doing too well in European terms either – only 14.8% of researchers in the business sector are women in Germany, 17.7% in Austria, 15.9% in Slovakia, and 17.6% in Hungary, all of which are below the EU–27 average of 21.3%. Looking at the EFTA countries, Japan is at the bottom with 10.2%. At the other end of the ranking is Montenegro, where 41.8% of researchers in the business sector were women, followed by Serbia with 39.1%. In the EU context, the best performers are Latvia (37.1%), Bulgaria (35.6%), and Lithuania (34.1%).

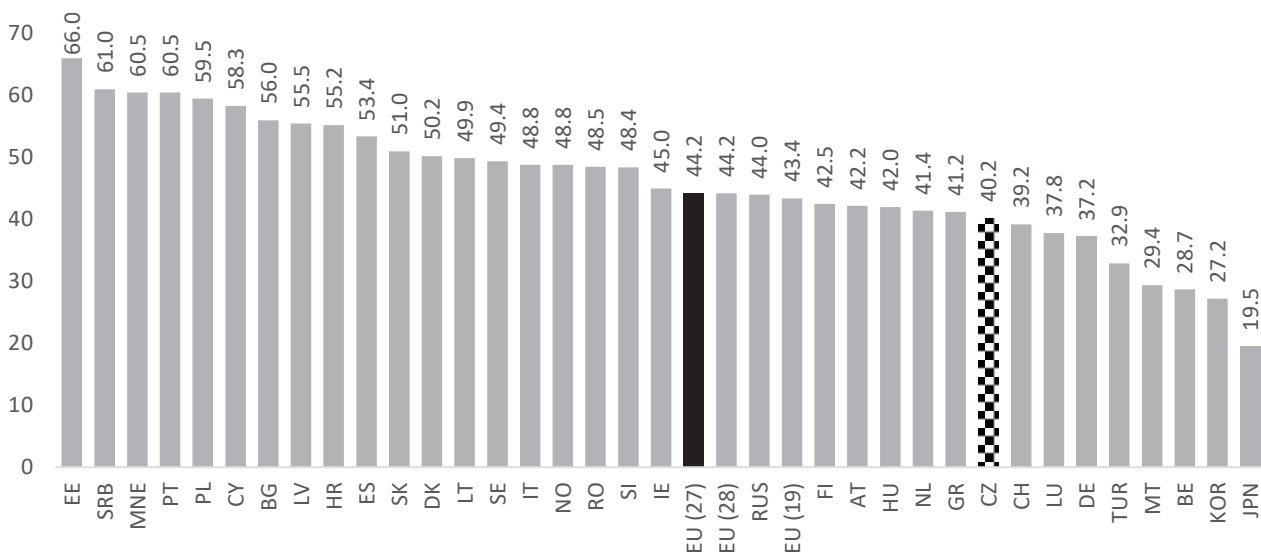
Figure 66: Proportion (%) of women researchers in the business sector, EU countries and EFTA, 2019



Source: Eurostat – Share of women researchers by sector of performance.

The differences in the representation of women among researchers working in the **government sector** are large, ranging from 19.5% to 66%. Estonia was the leader with 66% of women, followed by Serbia (61%) and Montenegro and Portugal, both with 60.5%. At 40.2%, the Czech Republic ranked below the EU–27 average of 44.2% in 2019. Among the EU member states, Luxembourg (37.8%), Germany (37.2%), Malta (29.4%), and Belgium (28.7%) were doing worse than the Czech Republic, while from EFTA countries, it was Switzerland (39.2%), Turkey (32.9%), and South Korea (27.2%). Overall, Japan had the lowest share of women researchers in the government sector with 19.5%.

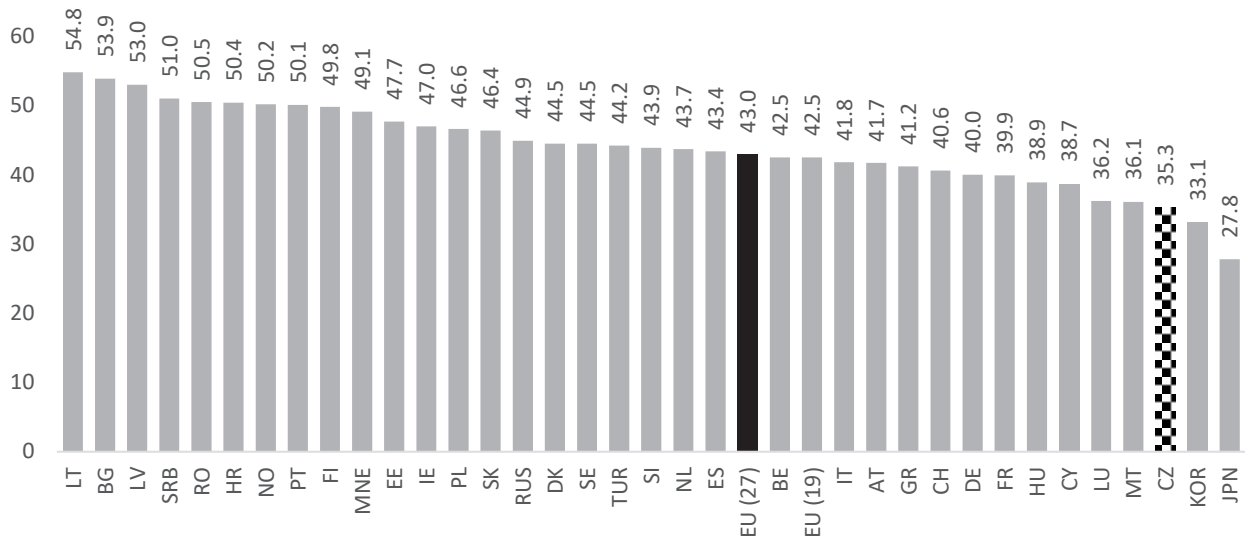
Figure 67: Proportion (%) of women among researchers in the government sector, EU countries and EFTA, 2019



Source: Eurostat – Share of women researchers by sector of performance.

As Figure 68 shows, the situation was similar for women researchers working in the **higher education sector**. The 35.3% of women researchers in this sector in the Czech Republic was below the EU–27 average of 43% in 2019. Lithuania (54.8%), Bulgaria (53.9%), and Latvia (53%) had the highest proportion of women researchers, and South Korea (33.1%) and Japan (27.8%) had the lowest.

Figure 68: Proportion (%) of women among researchers in the higher education sector, EU countries and EFTA, 2019

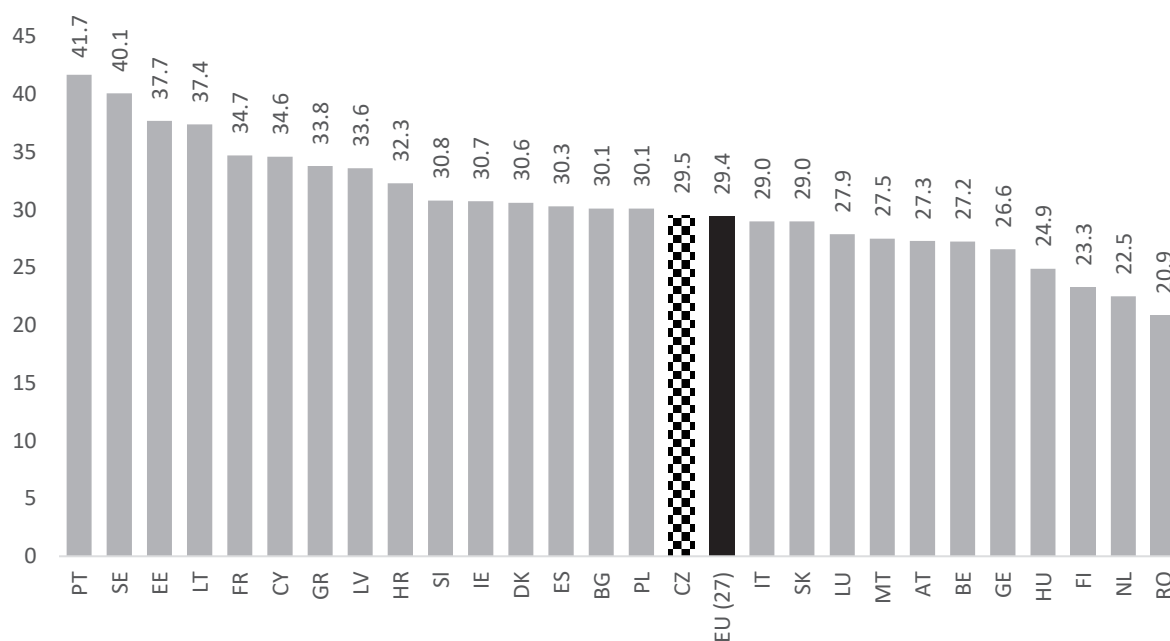


Source: Eurostat – Share of women researchers by sector of performance.

Science and engineering professionals

In European terms, the Czech Republic has a solid position in the representation of women among science and engineering professionals.⁸⁴ In 2020, 29.5% of women were employed in these roles in the Czech Republic, which was slightly above the EU-27 average of 29.4%. The closest to parity are Portugal (41.7%) and Sweden (40.1%), where the share of women exceeded the 40% line in 2020. In Estonia (37.7%), Lithuania (37.4%), France (34.7%), Cyprus (34.6%), Greece (33.8%), and Latvia (33.6%), the proportion of women was higher than one-third. At the very bottom of the ranking are Hungary (24.9%), Finland (23.3%), the Netherlands (22.5%), and Romania (20.9%), where women make up less than a quarter of the workforce among science and engineering professionals.

Figure 69: Proportion (%) of women among science and engineering professionals (HC) in the EU member states, 2020



Source: Science and engineering professionals – international comparison.

⁸⁴ This category includes professionals such as astronomers, meteorologists, chemists, geologists, statisticians, biologists, botanists, zoologists, specialists in manufacturing, construction and related fields, architects, cartographers, surveyors, electrical engineers, and graphic and fine artists.

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EMPLOYEES IN RESEARCH AND DEVELOPMENT

Tab. 1: Employees in research and development (HC)

	Research employees		Technical employees		Other employees		Total								
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)							
2020	17 922	27.6	72.4	10 548	25 603	29.2	70.8	7 651	9 049	45.8	54.2	36 191	81 854	30.7	69.3
2019	17 313	27.2	72.8	10 533	26 275	28.6	71.4	7 536	9 041	45.5	54.5	35 382	81 693	30.3	69.7
2018	16 461	26.6	73.4	10 524	24 093	30.1	69.9	7 457	9 406	44.3	55.7	34 442	79 005	30.4	69.6
2017	16 005	26.8	73.2	9 543	22 649	29.6	70.4	7 027	8 724	44.6	55.4	32 576	75 158	30.2	69.8
2016	14 971	26.6	73.4	9 225	20 690	30.8	69.2	6 072	7 710	44.1	55.9	30 268	69 606	30.3	69.7
2015	15 252	26.9	73.1	9 538	20 053	32.2	67.8	6 332	7 601	45.4	54.6	31 122	69 006	31.1	68.9
2014	14 815	27.2	72.8	9 146	20 330	31.0	69.0	6 159	7 225	46.0	54.0	30 120	67 234	30.9	69.1
2013	14 537	28.3	71.7	8 906	18 710	32.2	67.8	6 454	7 189	47.3	52.7	29 897	62 816	32.2	67.8
2012	13 102	27.5	72.5	8 700	18 176	32.4	67.6	5 944	7 058	45.7	54.3	27 746	59 813	31.7	68.3
2011	12 936	28.2	71.8	8 604	16 423	34.4	65.6	5 192	6 161	45.7	54.3	26 732	55 550	32.5	67.5
2010	12 198	28.1	71.9	8 194	15 473	34.6	65.4	5 030	5 789	46.5	53.5	25 422	52 482	32.6	67.4
2009	12 437	28.9	71.1	8 503	14 781	36.5	63.5	4 333	5 078	46.0	54.0	25 273	50 515	33.3	66.7
2008	12 613	28.5	71.5	7 865	13 652	36.6	63.4	4 243	4 501	48.5	51.5	24 721	49 780	33.2	66.8
2007	12 034	28.3	71.7	8 413	13 231	38.9	61.1	4 395	4 503	49.4	50.6	24 842	48 238	34.0	66.0
2006	11 295	28.5	71.5	8 099	13 239	38.0	62.0	4 000	4 147	49.1	50.9	23 394	45 767	33.8	66.2
2005	10 827	28.8	71.2	7 817	11 835	39.8	60.2	4 220	3 965	51.6	48.4	22 864	42 515	35.0	65.0

Source: CZSO – Research and Development Indicators.

Tab. 2: Employees in research and development (FTE)

	Research employees		Technical employees		Other employees		Total								
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)							
2020	10 665	24.1	75.9	7 255	18 691	27.6	72.4	5 240	5 566	48.5	51.5	23 160	57 799	28.6	71.4
2019	10 154	23.9	76.1	7 406	18 340	28.8	71.2	5 259	5 740	47.8	52.2	22 819	56 426	28.8	71.2
2018	9 543	23.2	76.8	6 911	16 408	29.6	70.4	4 978	5 474	47.6	52.4	21 432	53 538	28.6	71.4
2017	9 060	23.1	76.9	5 918	14 909	28.4	71.6	4 612	5 116	47.4	52.6	19 590	50 146	28.1	71.9
2016	8 610	23.1	76.9	5 813	13 609	29.9	70.1	4 237	4 786	47.0	53.0	18 660	47 123	28.4	71.6
2015	8 923	23.4	76.6	6 102	13 248	31.5	68.5	4 391	4 611	48.8	51.2	19 416	47 017	29.2	70.8
2014	8 701	24.1	75.9	6 065	13 781	30.6	69.4	4 154	4 404	48.5	51.5	18 920	45 523	29.4	70.6
2013	8 401	24.5	75.5	5 921	13 012	31.3	68.7	4 191	4 581	47.8	52.2	18 513	43 463	29.9	70.1
2012	8 212	24.7	75.3	5 832	12 576	31.7	68.3	4 090	4 615	47.0	53.0	18 134	42 197	30.1	69.9
2011	7 696	25.1	74.9	5 485	11 624	32.1	67.9	3 591	4 315	45.4	54.6	16 772	38 924	30.1	69.9
2010	7 490	25.6	74.4	5 141	10 830	32.2	67.8	3 369	3 723	47.5	52.5	16 000	36 352	30.6	69.4
2009	7 490	26.0	74.0	5 395	10 610	33.7	66.3	2 938	3 259	47.4	52.6	15 823	35 138	31.0	69.0
2008	7 559	25.4	74.6	5 259	9 874	34.8	65.2	2 888	3 002	49.0	51.0	15 706	35 102	30.9	69.1
2007	7 093	25.4	74.6	5 641	9 789	36.6	63.4	2 916	2 967	49.6	50.4	15 650	33 541	31.8	68.2
2006	6 652	25.3	74.7	5 672	10 168	35.8	64.2	2 731	2 891	48.6	51.4	15 055	32 674	31.5	68.5
2005	6 349	26.3	73.7	5 672	8 620	39.7	60.3	2 633	2 795	48.5	51.5	14 654	29 235	33.4	66.6

Source: CZSO – Research and Development Indicators.

IDEAL AND TYPICAL CAREER PATH IN RESEARCH

Tab. 3: Students and graduates of master's and doctoral programmes and researchers (HC)

	Master's students		Master's graduates		Doctoral students		Doctoral graduates		Researchers		
	Women	Men	Women (%)	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)
2020	59 417	38 679	60.6	11 051	59.6	9 369	11 679	814	981	47 201	27.6
2019	58 430	38 305	60.4	11 567	58.8	9 153	11 211	992	1 261	46 377	27.2
2018	59 748	39 412	60.3	12 224	59.2	9 326	11 488	1 027	1 293	45 505	26.6
2017	62 270	40 873	60.4	18 308	58.8	9 742	11 853	955	1 384	43 784	26.8
2016	64 365	42 763	60.1	19 303	59.2	10 150	12 486	994	1 289	41 206	26.6
2015	65 572	43 981	59.9	20 629	59.6	10 161	12 166	1 048	1 313	41 352	26.9
2014	69 199	45 809	60.2	21 343	60.3	10 560	13 093	920	1 230	39 679	27.2
2013	71 700	46 856	60.5	22 359	60.5	10 755	13 375	1 018	1 332	36 917	28.3
2012	73 848	47 581	60.8	22 656	60.1	10 710	13 502	1 093	1 507	34 579	27.5
2011	75 076	48 705	60.7	22 434	59.6	10 840	14 193	1 032	1 337	32 966	28.2
2010	74 801	49 304	60.3	21 146	59.3	10 881	14 398	855	1 301	31 220	28.1
2009	73 820	48 977	60.1	19 692	59.3	10 566	14 340	886	1 421	30 656	28.9
2008	71 077	46 458	60.5	17 561	56.9	9 921	14 006	876	1 425	31 627	28.5
2007	68 932	45 788	60.1	15 656	56.3	9 416	13 978	836	1 390	30 504	28.3
2006	67 707	45 757	59.7	14 306	55.5	9 015	13 716	724	1 286	28 381	28.5
2005	66 954	48 294	58.1	12 957	54.8	8 377	13 378	669	1 240	26 715	28.8

Source: MEYS – Performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

Tab. 4: Students and graduates of master's and doctoral programmes and researchers (HC) in the natural sciences

	Master's students		Master's graduates		Doctoral students		Doctoral graduates		Researchers		
	Women	Men	Women (%)	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)
2020	2 577	1 601	61.7	465	65.0	2 313	2 190	220	234	15 195	24.8
2019	2 370	1 368	63.4	435	65.8	2 092	2 010	271	292	14 432	25.5
2018	2 369	1 286	64.8	490	66.0	2 201	2 053	245	286	14 572	24.2
2017	2 407	1 299	64.9	908	65.0	2 196	2 124	269	294	13 647	25.1
2016	2 470	1 410	63.7	919	63.6	2 258	2 158	249	245	12 433	25.3
2015	2 468	1 469	62.7	905	63.5	2 277	2 172	233	248	12 154	25.8
2014	2 473	1 525	61.9	482	65.4	2 335	2 187	254	234	11 971	25.7
2013	2 485	1 455	63.1	550	62.8	2 423	2 146	239	244	10 628	27.1
2012	2 434	1 446	62.7	928	62.3	2 312	2 118	234	264	9 582	27.8
2011	2 487	1 537	61.8	920	63.5	2 246	2 108	255	256	8 956	27.7
2010	2 418	1 523	61.4	887	61.7	2 196	2 084	219	255	7 524	26.6
2009	2 415	1 499	61.7	866	63.8	2 186	2 068	221	243	6 837	27.7
2008	2 352	1 429	62.2	697	60.1	2 083	2 063	203	274	7 406	27.7
2007	2 090	1 322	61.3	720	60.1	1 993	2 108	213	233	7 069	26.3
2006	1 910	1 341	58.8	640	54.8	1 975	2 183	206	265	7 216	25.9
2005	1 882	1 537	55.0	602	54.2	1 850	2 125	185	266	6 656	26.8

Source: MEYS – Performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

Tab. 5: Students and graduates of master's and doctoral programmes and researchers (HC) in the technical sciences

	Master's students		Master's graduates		Doctoral students		Doctoral graduates		Researchers		
	Women	Men	Women (%)	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)
2020	4 757	11 445	29.4	4 507	32.2	1 541	4 240	26.7	127	322	28.3
2019	5 314	12 048	30.6	4 687	31.5	1 574	4 140	27.5	160	445	26.4
2018	5 760	12 902	30.9	4 927	31.5	1 596	4 243	27.3	182	505	26.5
2017	6 017	13 580	30.7	2 279	30.0	1 612	4 488	26.4	140	533	20.8
2016	6 095	14 447	29.7	2 293	29.7	1 642	4 880	25.2	153	499	23.5
2015	6 021	15 026	28.6	2 359	29.1	1 599	4 406	26.7	192	528	26.7
2014	6 049	15 693	27.8	2 347	28.6	1 795	5 291	25.3	175	548	24.2
2013	6 213	16 210	27.7	2 397	28.6	1 817	5 433	25.1	164	490	25.1
2012	6 336	16 447	27.8	2 408	28.7	1 812	5 459	24.9	169	577	22.7
2011	6 345	16 725	27.5	2 401	27.5	1 796	5 705	23.9	148	480	23.6
2010	6 223	17 153	26.6	2 162	26.8	1 796	5 836	23.5	144	484	22.9
2009	6 044	16 949	26.3	1 834	24.9	1 775	5 725	23.7	177	567	23.8
2008	5 032	15 572	24.4	2 088	25.4	1 725	5 564	23.7	168	557	23.2
2007	4 912	15 836	23.7	1 768	24.5	1 734	5 615	23.6	166	552	23.1
2006	5 006	16 226	23.6	1 612	24.4	1 640	5 545	22.8	125	510	19.7
2005	5 769	18 464	23.8	1 345	23.4	1 554	5 548	21.9	101	471	17.7

Source: MEYS – Performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

Tab. 6: Students and graduates of master's and doctoral programmes and researchers (HC) in the agricultural sciences

	Master's students		Master's graduates		Doctoral students		Doctoral graduates		Researchers			
	Women	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)
2020	2 511	1 245	66.9	737	409	64.3	424	438	49.2	37	26	58.7
2019	2 451	1 193	67.3	750	427	63.7	420	387	52.0	55	55	50.0
2018	2 576	1 253	67.3	826	457	64.4	402	382	51.3	53	52	50.5
2017	2 706	1 357	66.6	763	460	62.4	402	359	52.8	60	48	55.6
2016	2 762	1 392	66.5	727	470	60.7	431	381	53.1	56	49	53.3
2015	2 663	1 376	65.9	785	434	64.4	448	387	57.8	63	46	57.8
2014	2 732	1 354	66.9	755	458	62.2	464	360	56.3	73	69	51.4
2013	2 814	1 346	67.6	786	476	62.3	441	389	53.1	69	68	50.4
2012	2 834	1 345	67.8	765	464	62.2	450	409	52.4	100	86	53.8
2011	2 738	1 349	67.0	800	432	64.9	543	514	51.4	83	76	52.2
2010	2 723	1 310	67.5	780	453	63.3	548	526	51.0	63	70	47.4
2009	2 777	1 341	67.4	738	478	60.7	516	533	49.2	44	68	39.3
2008	2 767	1 355	67.1	684	452	60.2	448	500	47.3	67	69	49.3
2007	2 749	1 475	65.1	708	461	60.6	419	502	45.5	61	101	37.7
2006	2 785	1 573	63.9	609	472	56.3	440	499	46.9	56	77	42.1
2005	2 688	1 722	61.0	474	383	55.3	431	507	45.9	59	76	43.7

Source: MEYS – Performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

Tab. 7: Students and graduates of master's and doctoral programmes and researchers (HC) in the medical sciences

	Master's students		Master's graduates		Doctoral students		Doctoral graduates		Researchers					
	Women	Men	Women (%)	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)			
2020	14 091	6 476	68.5	965	71.7	1 522	1 429	51.6	118	101	53.9	3 981	4 281	48.2
2019	13 397	6 276	68.1	860	72.9	1 492	1 375	52.0	124	98	55.9	3 721	4 116	47.5
2018	12 798	6 134	67.6	859	74.3	1 379	1 285	51.8	139	86	61.8	3 436	3 725	48.0
2017	13 116	6 094	68.3	906	73.6	1 476	1 291	53.3	130	110	54.2	3 471	3 736	48.2
2016	13 181	6 162	68.1	904	72.7	1 519	1 319	53.5	114	110	50.9	3 116	3 410	47.7
2015	13 028	6 067	68.2	795	75.2	1 518	1 352	56.1	124	97	56.1	3 265	3 340	49.4
2014	12 963	5 931	68.6	844	74.4	1 499	1 310	53.4	127	134	48.7	3 179	3 358	48.6
2013	13 072	5 875	69.0	772	75.1	1 484	1 345	52.5	139	133	51.1	3 250	3 335	49.4
2012	12 707	5 751	68.8	834	74.2	1 520	1 366	52.7	112	114	49.6	2 866	2 794	50.6
2011	12 542	5 794	68.4	793	74.5	1 460	1 392	51.2	120	134	47.2	3 179	3 356	48.6
2010	12 054	5 590	68.3	790	74.2	1 465	1 428	50.6	97	122	44.3	3 201	3 399	48.5
2009	11 788	5 424	68.5	718	76.6	1 454	1 478	49.6	109	134	44.9	3 352	3 646	47.9
2008	11 742	5 222	69.2	629	75.5	1 349	1 531	46.8	93	132	41.3	3 058	3 289	48.2
2007	11 432	5 106	69.1	620	74.1	1 243	1 490	45.5	97	136	41.6	2 868	3 263	46.8
2006	11 164	5 016	69.0	636	72.5	1 154	1 455	44.2	72	107	40.2	2 752	3 030	47.6
2005	10 594	4 742	69.1	675	69.3	1 032	1 353	43.3	73	110	39.9	2 521	2 942	46.1

Source: MEYS – Performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

Tab. 8: Students and graduates of master's and doctoral programmes and researchers (HC) in the social sciences

	Master's students		Master's graduates		Doctoral students		Doctoral graduates		Researchers						
	Women	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)			
2020	31 031	15 616	66.5	8 772	4 021	68.6	2 016	1 997	50.2	198	180	52.4	2 507	3 223	43.8
2019	30 346	15 073	66.8	9 242	4 153	69.0	2 053	1 926	51.6	237	225	51.3	2 576	3 441	42.8
2018	31 378	15 377	67.1	9 989	4 393	69.5	2 141	2 069	50.9	238	239	49.9	2 649	3 534	42.8
2017	32 893	16 028	67.2	10 464	4 641	69.3	2 335	2 099	52.7	217	249	46.6	2 503	3 484	41.8
2016	34 368	16 816	67.1	11 528	4 961	69.9	2 424	2 222	52.2	241	216	52.7	2 507	3 435	42.2
2015	35 730	17 375	67.3	12 824	5 392	70.4	2 404	2 268	50.9	249	240	50.9	2 390	3 225	42.6
2014	39 308	18 544	67.9	13 728	5 677	70.7	2 497	2 333	51.7	254	240	51.4	2 376	3 196	42.6
2013	41 227	19 199	68.2	14 302	5 671	71.6	2 587	2 368	52.2	260	270	49.1	2 364	3 117	43.1
2012	43 418	19 723	68.8	14 521	6 134	70.3	2 620	2 471	51.5	319	282	53.1	1 862	2 596	41.8
2011	44 680	20 476	68.6	14 563	5 955	71.0	2 834	2 789	50.4	253	250	50.3	1 991	2 720	42.3
2010	45 174	20 878	68.4	13 686	5 731	70.5	2 895	2 877	50.2	213	226	48.5	1 342	1 958	40.7
2009	44 675	20 838	68.2	12 722	5 349	70.4	2 765	2 905	48.8	212	276	43.4	1 437	2 068	41.0
2008	43 309	19 960	68.5	11 092	4 754	70.0	2 583	2 762	48.3	220	246	47.2	1 711	2 247	43.2
2007	41 907	19 129	68.7	9 685	4 210	69.7	2 398	2 694	47.1	194	249	43.8	1 783	2 489	41.7
2006	41 046	18 610	68.8	8 798	4 052	68.5	2 274	2 550	47.1	177	212	45.5	1 879	2 516	42.8
2005	40 343	18 718	68.3	7 932	3 934	66.8	2 096	2 431	46.3	162	212	43.3	1 741	2 565	40.4

Source: MEYS – Performance indicators of public and private universities in the Czech Republic; CZSO – Research and Development Indicators.

RESEARCHERS BY DISCIPLINE

Tab. 10: Researchers by discipline (HC)

	Natural Sciences		Technical Sciences		Agricultural Sciences		Medical Sciences		Social Sciences		Humanities	
	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)
2020	5 020	15 195	3 587	20 781	1 222	1 447	3 981	4 281	2 507	3 223	1 675	2 274
2019	4 950	14 432	3 288	20 895	1 135	1 197	3 721	4 116	2 576	3 441	1 642	2 296
2018	4 665	14 572	3 144	20 191	1 014	1 305	3 436	3 725	2 649	3 534	1 553	2 179
2017	4 564	13 647	2 931	19 252	1 076	1 529	3 471	3 736	2 503	3 484	1 461	2 135
2016	4 213	12 433	2 695	18 410	968	1 440	3 116	3 410	2 507	3 435	1 473	2 079
2015	4 222	12 154	2 999	19 093	907	1 405	3 265	3 340	2 390	5 616	1 469	2 135
2014	4 143	11 971	2 882	17 780	937	1 431	3 179	3 358	2 376	5 572	1 299	1 941
2013	3 943	10 628	2 779	16 475	894	1 478	3 250	3 335	2 364	5 481	1 307	1 885
2012	3 694	9 582	2 349	16 114	783	1 385	2 866	2 794	1 862	4 458	1 548	2 078
2011	3 432	8 956	2 178	14 746	914	1 352	3 179	3 356	1 991	4 711	1 243	1 835
2010	2 731	7 524	2 258	14 487	995	1 600	3 201	3 399	1 342	3 300	1 671	2 253
2009	2 623	6 837	2 499	14 425	1 076	1 651	3 352	3 646	1 437	3 505	1 450	2 028
2008	2 835	7 406	2 629	15 124	1 160	1 751	3 058	3 289	1 711	3 958	1 220	1 810
2007	2 523	7 069	2 530	14 121	1 124	1 844	2 868	3 263	1 783	4 272	1 206	1 718
2006	2 519	7 216	1 953	12 316	1 041	1 631	2 752	3 030	1 879	4 395	1 150	1 672
2005	2 432	6 656	1 998	11 315	1 061	1 649	2 521	2 942	1 741	4 306	1 074	1 589

Source: CZSO – Research and Development Indicators.

Tab. 11: Researchers by discipline (FTE)

	Natural Sciences		Technical Sciences		Agricultural Sciences		Medical Sciences		Social Sciences		Humanities	
	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)
2020	3 792	11 741	2 437	16 336	801	1 003	1 630	1 608	1 017	1 393	989	1 461
2019	3 626	10 988	2 264	16 092	705	805	1 533	1 588	1 100	1 428	926	1 447
2018	3 362	11 218	2 082	15 162	620	777	1 391	1 494	1 204	1 629	884	1 375
2017	3 210	10 668	1 983	14 665	660	809	1 332	1 248	1 083	1 493	792	1 239
2016	3 009	9 887	1 747	14 105	625	806	1 320	1 174	1 128	1 570	780	1 186
2015	3 075	9 605	1 985	14 708	578	821	1 352	1 265	1 117	1 430	816	1 328
2014	2 998	9 220	2 122	13 544	492	782	1 190	1 183	1 124	1 465	777	1 143
2013	2 837	8 090	1 967	13 349	471	794	1 303	1 189	1 060	1 390	763	1 059
2012	2 689	7 400	1 850	12 958	407	789	1 292	1 177	980	1 415	992	1 267
2011	2 425	6 458	1 713	11 982	553	754	1 358	1 345	971	1 379	678	1 068
2010	1 966	5 618	1 656	11 553	590	884	1 446	1 388	737	1 031	1 034	1 325
2009	2 006	5 182	1 821	11 528	615	833	1 370	1 383	807	1 140	870	1 204
2008	2 162	5 716	1 888	11 982	636	895	1 291	1 349	855	1 160	727	1 124
2007	1 952	5 460	1 767	10 918	624	961	1 263	1 365	796	1 104	691	978
2006	1 960	5 671	1 336	9 547	592	882	1 210	1 289	862	1 199	693	1 027
2005	1 785	5 132	1 356	8 384	583	879	1 160	1 327	803	1 125	662	972

Source: CZSO – Research and Development Indicators.

RESEARCHERS BY SCIENTIFIC DISCIPLINE AND SECTOR

Tab. 12: Researchers in the natural sciences by sector (HC)

	Business sector		Government sector		University sector		Private non-profit sector					
	Women	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)				
2020	1 163	15.1	2 263	34.9	65.1	4 397	26.4	73.6	18	39	31.4	68.6
2019	1 143	15.2	2 113	34.5	65.5	4 012	29.5	70.5	18	24	43.6	56.5
2018	1 034	13.5	2 053	33.5	66.5	3 819	29.0	71.0	15	25	37.5	62.5
2017	984	13.6	2 173	35.8	64.2	3 477	28.5	71.5	22	34	39.0	61.0
2016	978	14.7	1 927	34.2	65.8	3 028	30.0	70.0	11	30	26.5	73.5
2015	934	15.1	1 830	32.7	67.1	3 139	31.3	68.7	25	35	41.7	58.3
2014	922	15.7	1 823	33.3	66.7	3 332	29.2	70.8	25	33	43.1	56.9
2013	862	18.4	1 717	32.8	67.2	3 249	29.4	70.6	12	29	29.3	70.7
2012	879	21.9	1 571	32.3	67.9	3 087	28.5	71.5	12	39	23.5	76.5
2011	616	25.7	1 503	32.1	68.8	3 006	30.2	69.8	12	52	18.8	81.3
2010	525	20.2	1 409	29.6	70.4	1 923	28.9	71.1	15	48	23.8	76.2
2009	536	19.5	1 480	32.0	68.0	1 702	25.8	74.2	15	38	28.3	71.7
2008	461	19.6	1 804	32.9	67.1	1 789	23.9	76.1	7	14	33.3	66.7
2007	356	20.2	1 678	31.9	68.1	1 449	25.0	75.0	5	13	27.8	72.2
2006	324	19.3	1 526	30.5	69.5	1 793	27.0	73.0	5	13	27.8	72.2
2005	359	19.8	1 440	30.3	69.7	1 341	31.8	68.2	8	14	36.4	63.6

Source: CZSO – Research and Development Indicators.

Tab. 13: Researchers in the natural sciences by sector (FTE)

	Business sector		Government sector		University sector		Private non-profit sector					
	Women	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)				
2020	989	15.2	1 766	34.8	65.2	2 889	26.1	73.9	17	18	49.0	51.0
2019	978	15.4	1 600	33.7	66.3	2 439	29.7	70.3	17	14	56.3	43.7
2018	879	13.4	1 548	32.8	67.2	2 339	28.3	71.7	12	16	42.3	57.8
2017	817	13.2	1 631	33.8	66.2	2 082	26.3	73.7	19	26	42.7	57.3
2016	806	14.3	1 454	33.0	67.0	2 073	26.3	73.7	9	24	27.2	72.8
2015	736	14.0	1 406	32.5	67.5	2 142	29.9	70.1	20	34	37.0	63.0
2014	747	15.1	1 405	32.9	67.1	2 121	28.1	71.9	17	27	38.6	61.4
2013	686	17.7	1 282	32.2	67.8	2 174	28.3	71.7	9	28	24.3	75.7
2012	715	21.8	1 154	30.1	69.9	2 131	27.4	72.6	14	32	30.4	69.6
2011	492	19.8	1 140	30.9	69.1	1 883	29.5	70.5	7	31	18.4	81.6
2010	419	19.8	1 079	28.9	71.1	1 238	27.0	73.0	10	35	22.2	77.8
2009	445	22.6	1 178	31.7	68.3	1 096	25.4	74.6	11	24	31.4	68.6
2008	383	19.3	1 386	32.2	67.8	1 191	24.6	75.4	4	10	28.6	71.4
2007	318	17.8	1 331	32.2	67.8	869	25.7	74.3	3	6	33.3	66.7
2006	295	17.3	1 159	30.0	70.0	1 223	29.1	70.9	4	8	33.3	66.7
2005	326	17.9	1 093	29.8	70.2	748	32.5	67.5	6	15	28.6	71.4

Source: CZSO – Research and Development Indicators.

Tab. 14: Researchers in the technical sciences by sector (HC)

	Business sector			Government sector			University sector			Private non-profit sector						
	Women	Men	Women (%)	Men (%)	Women	Men	Women (%)	Men (%)	Women	Men	Women (%)	Men (%)				
2020	1 759	15 464	10.2	89.6	108	270	28.6	71.4	1 696	5 014	25.3	74.7	24	33	42.2	57.8
2019	1 623	15 271	9.6	90.4	106	272	28.0	72.0	1 547	5 334	22.5	77.5	13	18	41.7	58.3
2018	1 496	14 555	9.3	90.7	116	265	30.4	69.6	1 529	5 357	22.2	77.8	3	14	17.6	82.4
2017	1 382	13 852	9.1	90.9	128	309	29.3	70.7	1 410	5 060	21.8	78.2	11	31	26.2	73.8
2016	1 177	13 014	8.3	91.7	123	278	30.7	69.3	1 384	5 098	21.4	78.6	11	20	35.5	64.5
2015	1 413	13 670	9.4	90.6	118	328	26.5	73.5	1 459	5 084	22.3	77.7	9	11	45.0	55.0
2014	1 539	12 732	10.8	89.2	90	256	26.0	74.0	1 237	4 766	20.6	79.4	15	26	36.6	63.4
2013	1 402	11 996	10.5	89.5	101	247	29.0	71.0	1 271	4 202	23.2	76.8	5	31	13.9	86.1
2012	1 057	11 299	8.6	91.4	90	247	26.7	73.3	1 199	4 538	20.9	79.1	3	30	9.1	90.9
2011	1 065	10 585	9.1	90.9	98	225	30.3	69.7	1 011	3 907	20.6	79.4	4	29	12.1	87.9
2010	880	9 747	8.3	91.7	80	211	27.5	72.5	1 296	4 507	22.3	77.7	1	22	4.3	95.7
2009	984	9 678	9.2	90.8	77	252	23.4	76.6	1 435	4 488	24.2	75.8	3	7	30.0	70.0
2008	1 086	10 195	9.6	90.4	102	283	26.5	73.5	1 435	4 591	23.8	76.2	6	55	9.8	90.2
2007	999	9 319	9.7	90.3	83	233	26.3	73.7	1 444	4 534	24.2	75.8	4	36	10.0	90.0
2006	824	8 207	9.1	90.9	95	241	28.3	71.7	1 031	3 853	21.1	78.9	3	15	16.7	83.3
2005	819	6 834	10.7	89.3	96	239	28.7	71.3	1 080	4 224	20.4	79.6	3	18	14.3	85.7

Source: CZSO – Research and Development Indicators.

Tab. 15: Researchers in the technical sciences by sector (FTE)

	Business sector			Government sector			University sector			Private non-profit sector						
	Women	Men	Women (%)	Men (%)	Women	Men	Women (%)	Men (%)	Women	Men	Women (%)	Men (%)				
2020	1 474	13 329	10.0	90.0	88	227	27.9	72.1	865	2 764	23.8	76.2	10	15	39.1	60.9
2019	1 317	12 917	9.3	90.7	96	228	29.7	70.3	844	2 936	22.3	77.7	7	11	37.9	62.1
2018	1 242	12 188	9.3	90.7	87	225	27.8	72.2	751	2 733	21.5	78.5	3	15	14.5	85.5
2017	1 154	11 740	9.0	91.0	77	238	24.5	75.5	745	2 664	21.9	78.1	6	23	22.0	78.0
2016	984	11 176	8.1	91.9	94	266	26.0	74.0	666	2 655	20.0	80.0	3	7	31.5	68.5
2015	1 212	11 774	9.3	90.7	87	260	25.1	74.9	683	2 662	20.4	79.6	4	12	25.0	75.0
2014	1 335	10 610	11.2	88.8	82	210	28.1	71.9	696	2 697	20.5	79.5	9	27	25.0	75.0
2013	1 228	10 513	10.5	89.5	75	217	25.7	74.3	661	2 596	20.3	79.7	3	22	12.0	88.0
2012	945	9 890	8.7	91.3	53	240	18.1	81.9	848	2 804	23.2	76.8	4	24	14.3	85.7
2011	951	9 290	9.3	90.7	66	199	24.9	75.1	693	2 475	21.9	78.1	3	17	15.0	85.0
2010	793	8 553	8.5	91.5	52	212	19.7	80.3	810	2 769	22.6	77.4	2	19	9.5	90.5
2009	899	8 587	9.5	90.5	55	234	19.0	81.0	865	2 697	24.3	75.7	2	11	15.4	84.6
2008	955	9 096	9.5	90.5	91	243	27.2	72.8	840	2 623	24.3	75.7	3	20	13.0	87.0
2007	888	8 096	9.9	90.1	72	200	26.5	73.5	805	2 613	23.6	76.4	1	9	10.0	90.0
2006	705	7 127	9.0	91.0	78	207	27.4	72.6	552	2 209	20.0	80.0	1	5	16.7	83.3
2005	727	6 086	10.7	89.3	70	185	27.5	72.5	559	2 104	21.0	79.0	1	8	11.1	88.9

Source: CZSO – Research and Development Indicators.

Tab. 16: Researchers in the agricultural sciences by sector (HC)

	Business sector		Government sector		University sector		Private non-profit sector	
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)
2020	198	47.2	366	50.7	865	43.1	2	28.6
2019	187	46.9	363	50.7	629	48.1	2	50.0
2018	160	42.0	344	48.2	738	41.9	2	50.0
2017	134	39.0	356	50.0	584	37.8	2	66.7
2016	127	36.3	347	48.9	507	36.8	2	66.7
2015	132	37.6	332	47.8	822	34.9	2	66.7
2014	128	39.3	224	44.4	946	38.1	2	66.7
2013	101	36.6	189	43.2	583	36.5	6	25.0
2012	170	35.9	249	38.0	604	61.9	-	-
2011	204	44.8	232	38.0	846	35.7	1	20.0
2010	190	41.3	308	48.3	766	34.3	5	16.7
2009	224	44.0	289	48.2	400	33.7	5	16.7
2008	226	43.5	266	50.0	515	34.9	-	-
2007	201	40.4	292	49.4	638	35.8	4	23.5
2006	239	44.3	304	46.7	1145	34.0	8	33.3
2005	228	42.0	334	47.4	1192	33.6	4	66.7
			280	44.6	984	33.6	13	13.3
			348	55.4	987	35.9	-	-

Source: CZSO – Research and Development Indicators.

Tab. 17: Researchers in the agricultural sciences by sector (FTE)

	Business sector		Government sector		University sector		Private non-profit sector	
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)
2020	140	49.4	261	43.5	399	43.6	1	21.4
2019	123	46.5	284	48.5	299	45.3	1	16.0
2018	109	44.7	262	47.3	248	42.1	0	0.0
2017	101	44.9	299	49.6	259	40.6	1	50.0
2016	92	40.8	283	46.8	250	41.7	2	21.1
2015	91	40.8	321	45.9	349	36.4	1	33.3
2014	95	41.9	335	40.1	202	36.7	2	25.0
2013	69	38.3	228	41.5	235	34.7	6	0.0
2012	127	37.5	207	38.0	240	29.3	4	20.0
2011	134	43.2	276	49.2	152	32.8	4	33.3
2010	133	40.8	265	49.0	141	31.6	2	20.0
2009	167	42.9	198	56.5	190	32.0	4	0.0
2008	179	44.4	240	48.5	191	35.0	7	14.3
2007	145	39.4	277	46.3	425	34.5	1	12.5
2006	177	44.8	231	45.4	239	32.9	7	0.0
2005	153	41.0	278	42.9	185	36.5	8	0.0
			218	57.1	211	63.5	2	0.0
			290	42.9	367	36.5	0	100.0

Source: CZSO – Research and Development Indicators.

Tab. 18: Researchers in the medical sciences by sector (HC)

	Business sector			Government sector			University sector			Private non-profit sector		
	Women	Men	Women (%) Men (%)	Women	Men	Women (%) Men (%)	Women	Men	Women (%) Men (%)	Women	Men	Women (%) Men (%)
2020	370	319	53.7 46.3	745	505	59.6 40.4	2 858	3 450	45.3 54.7	8	7	53.3 46.7
2019	316	270	53.9 46.1	782	582	57.3 42.7	2 617	3 258	44.5 55.5	6	6	50.0 50.0
2018	315	306	50.7 49.3	775	543	58.8 41.2	2 344	2 874	44.9 55.1	2	2	50.0 50.0
2017	340	281	54.8 45.2	715	534	57.2 42.8	2 413	2 919	45.3 54.7	3	2	60.0 40.0
2016	316	275	53.5 46.5	697	464	60.0 40.0	2 103	2 671	44.1 55.9	-	-	- -
2015	313	242	56.4 43.6	769	594	56.4 43.6	2 183	2 504	46.6 53.4	-	-	- -
2014	249	237	51.2 48.8	674	634	51.5 48.5	2 556	2 487	47.6 52.4	0	1	0.0 100.0
2013	246	240	50.7 49.3	802	554	59.1 40.9	2 200	2 541	46.4 53.6	1	0	100.0 0.0
2012	235	272	46.3 53.7	768	518	59.7 40.3	1 861	2 001	48.2 51.8	2	3	40.0 60.0
2011	272	234	43.8 46.2	740	605	55.0 45.0	2 152	2 514	46.1 53.9	15	3	83.3 16.7
2010	330	239	58.0 42.0	729	596	55.0 45.0	2 141	2 561	45.5 54.5	1	3	25.0 75.0
2009	131	198	41.5 58.5	819	671	55.0 45.0	2 392	2 772	46.3 53.7	-	-	- -
2008	157	197	44.3 55.7	783	633	55.3 44.7	2 118	2 458	46.3 53.7	-	-	- -
2007	155	187	45.3 54.7	709	673	51.3 48.7	2 003	2 401	45.5 54.5	1	1	50.5 50.0
2006	150	238	38.7 61.3	729	652	52.8 47.2	1 871	2 139	46.7 53.3	2	2	50.0 50.0
2005	144	180	44.4 55.6	709	601	54.1 45.9	1 666	2 160	43.5 56.5	2	0	100.0 0.0

Source: CZSO – Research and Development Indicators.

Tab. 19: Researchers in the medical sciences by sector (FTE)

	Business sector			Government sector			University sector			Private non-profit sector		
	Women	Men	Women (%) Men (%)	Women	Men	Women (%) Men (%)	Women	Men	Women (%) Men (%)	Women	Men	Women (%) Men (%)
2020	310	262	54.2 45.8	355	211	72.7 27.3	961	1 133	45.9 54.1	4	2	67.7 33.3
2019	272	243	52.8 47.2	407	281	59.1 40.9	851	1 062	44.5 55.5	3	2	60.0 40.0
2018	243	276	46.9 53.1	400	261	60.6 39.4	745	956	43.8 56.2	2	2	50.0 50.0
2017	272	246	52.5 47.5	379	233	61.9 38.1	677	767	46.9 53.1	3	2	60.0 40.0
2016	255	230	52.6 47.4	411	249	62.3 37.7	654	695	48.5 51.5	-	-	- -
2015	254	204	55.5 44.5	439	271	61.8 38.2	659	790	45.5 54.5	-	-	- -
2014	186	213	46.6 53.4	340	247	57.9 42.1	658	723	47.6 52.4	6	0	100.0 0.0
2013	203	199	50.5 49.5	463	276	62.7 37.3	622	714	46.6 53.4	15	0	100.0 0.0
2012	215	245	46.7 53.3	449	266	62.8 37.2	601	665	47.5 52.5	28	1	96.6 3.4
2011	228	201	53.1 46.9	430	311	58.0 42.0	672	832	44.7 55.3	27	2	93.1 6.9
2010	256	201	56.0 44.0	397	297	57.2 42.8	768	888	46.4 53.6	23	2	92.0 8.0
2009	125	172	42.1 57.9	434	309	58.4 41.6	810	901	47.3 52.7	1	1	50.0 50.0
2008	142	181	44.0 56.0	420	328	56.1 43.9	728	839	46.5 53.5	2	1	66.7 33.3
2007	136	159	46.1 53.9	392	327	54.5 45.5	733	877	45.5 54.5	2	2	50.0 50.0
2006	136	190	41.7 58.3	382	362	51.3 48.7	690	736	48.4 51.6	1	1	50.0 50.0
2005	132	144	47.8 52.2	351	335	51.2 48.8	676	849	44.3 55.7	1	0	100.0 0.0

Source: CZSO – Research and Development Indicators

Tab. 20: Researchers in the social sciences (HC)

	Business sector		Government sector		University sector		Private non-profit sector	
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)
2020	147	338	211	257	2 094	2 560	55	69
2019	138	324	328	309	2 039	2 738	70	70
2018	147	390	421	363	2 030	2 710	51	71
2017	147	406	366	338	1 940	2 669	50	71
2016	260	636	307	280	1 887	2 462	53	57
2015	95	266	253	287	1 988	2 612	55	60
2014	138	379	268	270	1 914	2 481	56	66
2013	51	219	256	240	2 002	2 596	55	62
2012	65	197	257	275	1 492	2 075	48	49
2011	39	134	256	252	1 656	2 270	40	64
2010	39	70	218	241	1 038	1 592	47	55
2009	87	159	216	253	1 083	1 589	51	67
2008	74	102	257	276	1 366	1 855	14	14
2007	66	110	298	312	1 405	2 043	14	24
2006	54	83	377	375	1 431	2 021	17	37
2005	54	113	337	311	1 330	2 121	20	20

Source: CZSO – Research and Development Indicators.

Tab. 21: Researchers in the social sciences by sector (FTE)

	Business sector		Government sector		University sector		Private non-profit sector	
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)
2020	107	247	172	195	692	894	45	57
2019	101	225	263	229	687	926	49	48
2018	107	264	274	256	776	1 050	46	59
2017	100	277	249	229	688	927	47	60
2016	188	479	213	200	682	844	45	48
2015	69	173	229	214	772	992	47	51
2014	104	265	213	219	757	921	50	60
2013	32	141	205	205	775	992	49	51
2012	38	108	215	225	680	1 037	46	45
2011	25	81	231	283	682	961	32	54
2010	29	45	249	267	415	668	44	50
2009	49	91	208	221	504	774	46	54
2008	41	51	257	241	543	855	14	12
2007	37	58	295	267	447	759	17	20
2006	24	55	311	325	516	798	11	21
2005	25	82	271	250	495	779	13	14

Source: CZSO – Research and Development Indicators.

Tab. 22: Researchers in the humanities (HC)

	Business sector		Government sector		University sector		Private non-profit sector	
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)
2020	2	40.0	791	44.5	879	40.7	3	35.0
2019	-	-	662	41.5	976	41.8	4	30.0
2018	3	60.0	635	41.6	912	51.6	3	27.6
2017	3	75.0	570	40.9	886	40.4	2	33.3
2016	3	60.0	580	41.3	886	41.5	4	66.7
2015	0	0.0	545	41.8	923	40.2	1	100.0
2014	0	0.0	546	40.9	752	39.5	1	100.0
2013	0	-	568	43.8	737	39.0	2	50.0
2012	0	-	565	44.2	972	41.7	11	73.3
2011	3	33.3	570	44.0	664	38.0	7	28.0
2010	2	18.2	576	45.6	1 077	41.3	16	39.0
2009	1	9.1	593	44.4	851	40.2	5	29.4
2008	1	5.6	624	44.6	591	37.1	4	20.0
2007	1	8.3	607	46.0	598	37.6	0	0.0
2006	2	9.5	593	44.2	554	38.1	1	25.0
2005	18	42.9	591	43.8	459	36.5	6	37.5

Source: CZSO – Research and Development Indicators.

Tab. 23: Researchers in the humanities (FTE)

	Business sector		Government sector		University sector		Private non-profit sector	
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)
2020	1	50.0	520	41.8	466	38.9	1	27.6
2019	-	-	462	40.7	461	37.5	3	37.0
2018	2	33.3	439	39.6	439	38.6	4	35.7
2017	2	66.7	440	40.7	349	37.0	1	33.3
2016	2	49.2	420	39.8	357	39.4	2	66.7
2015	0	0.0	368	38.6	447	37.6	1	100.0
2014	1	50.0	389	39.1	536	41.9	1	100.0
2013	1	100.0	386	42.5	534	41.3	1	33.3
2012	0	-	352	41.7	636	45.2	4	57.1
2011	2	33.3	342	40.5	328	37.5	6	28.6
2010	2	22.2	361	43.4	547	37.5	6	71.4
2009	1	9.1	373	43.2	665	44.4	6	31.6
2008	1	6.3	391	41.7	491	41.3	5	41.7
2007	0	0.0	433	45.2	331	37.6	4	23.5
2006	1	8.3	424	44.4	258	36.8	0	0.0
2005	7	30.4	387	41.6	267	35.6	0	0.0
			544	58.4	214	34.9	54	80.6

Source: CZSO – Research and Development Indicators.

RESEARCHERS BY SECTOR

Tab. 24: Researchers by sector (HC)

	Business sector		Government sector		University sector		Private non-profit sector	
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)
2020	3 639	22 882	4 484	6 596	9 759	17 566	109	157
2019	3 407	22 457	4 354	6 465	9 438	17 328	114	127
2018	3 155	22 120	4 320	6 487	8 910	16 777	76	121
2017	2 990	20 988	4 308	6 261	8 618	16 392	89	143
2016	2 861	19 820	3 966	5 899	8 064	15 378	81	110
2015	2 887	19 651	3 847	6 058	8 427	15 536	92	107
2014	2 975	18 497	3 625	5 885	8 115	15 164	100	132
2013	2 662	16 462	3 633	5 537	8 166	14 791	75	127
2012	2 405	15 204	3 393	5 308	7 226	13 908	77	129
2011	2 198	13 786	3 475	5 459	7 184	13 548	79	172
2010	1 967	12 536	3 301	5 396	6 848	13 129	82	159
2009	1 973	12 285	3 451	5 326	6 939	12 906	73	138
2008	2 005	12 721	3 862	5 954	6 711	12 839	35	113
2007	1 777	11 945	3 679	5 862	6 549	12 610	29	87
2006	1 594	10 781	3 621	5 828	6 050	11 691	29	82
2005	1 622	9 447	3 454	5 576	5 713	11 630	38	62

Source: CZSO – Research and Development Indicators.

Tab. 25: Researchers in the business sector (HC)

	Business sector		Public enterprises		Private domestic businesses		Internationally controlled private businesses	
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)
2020	3 639	22 882	128	834	1 869	9 407	1 642	12 641
2019	3 407	22 457	134	859	1 726	9 299	1 548	12 299
2018	3 155	22 120	133	760	1 578	8 859	1 444	12 501
2017	2 990	20 988	133	775	1 447	8 266	1 410	11 947
2016	2 861	19 820	110	694	1 338	7 766	1 413	7 766
2015	2 887	19 651	120	782	1 365	7 869	1 401	11 000
2014	2 975	18 497	107	808	1 416	8 305	1 452	9 385
2013	2 662	16 462	92	756	1 359	7 707	1 212	7 998
2012	2 405	15 204	129	761	1 215	7 100	1 061	7 343
2011	2 198	13 786	127	819	1 170	6 479	902	6 488
2010	1 967	12 536	132	869	1 097	6 055	738	5 613
2009	1 973	12 285	134	898	1 005	5 464	835	5 923
2008	2 005	12 721	158	942	945	5 325	902	6 454
2007	1 777	11 945	131	1 065	963	5 684	684	5 196
2006	1 594	10 781	159	1 180	920	5 404	515	4 196
2005	1 622	9 447	232	1 181	868	4 874	522	3 392

Source: CZSO – Research and Development Indicators.

Tab. 26: Researchers in the government sector (HC)

	Government sector		Czech Academy of Sciences		Other public research institutions		Libraries, archives, and museums		Medical facilities		Other							
	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)						
2020	4 484	6 596	40.5	2 521	4 410	36.4	537	697	43.5	487	511	48.8	656	450	59.3	283	528	34.9
2019	4 354	6 465	40.2	2 342	4 261	35.5	539	683	44.1	442	483	47.8	653	484	57.4	378	554	40.6
2018	4 320	6 487	40.0	2 263	4 319	34.4	530	673	44.1	424	463	47.8	654	458	58.8	449	574	43.9
2017	4 308	6 261	40.8	2 487	4 255	36.9	510	633	44.6	359	396	47.5	579	440	56.8	373	537	41.0
2016	3 966	5 899	40.2	2 216	4 024	35.5	494	614	44.6	378	381	49.8	547	374	59.4	331	506	39.5
2015	3 847	6 058	38.8	2 092	4 070	34.0	470	630	42.7	351	383	47.8	637	496	56.2	297	479	38.3
2014	3 625	5 885	38.1	2 054	3 875	34.6	376	585	39.1	315	355	47.0	530	527	50.1	350	543	39.2
2013	3 633	5 537	39.6	1 913	3 691	34.1	470	639	42.4	343	350	49.5	591	377	61.0	316	480	39.7
2012	3 393	5 308	39.0	1 744	3 501	33.3	431	600	41.8	314	380	45.2	564	358	61.2	340	469	42.0
2011	3 475	5 459	38.9	1 692	3 559	32.2	529	656	44.6	360	397	47.5	537	375	58.9	357	472	43.1
2010	3 301	5 396	38.0	1 557	3 461	31.0	486	621	43.9	386	400	49.1	528	385	57.8	344	529	39.4
2009	3 451	5 326	39.3	1 601	3 269	32.9	522	630	45.3	374	425	46.8	608	449	57.5	346	553	38.5
2008	3 862	5 954	39.3	2 043	3 910	34.3	529	658	44.6	404	444	47.6	602	416	59.1	284	526	35.1
2007	3 679	5 862	38.6	1 931	3 815	33.6	509	652	43.8	407	408	49.9	534	467	53.3	298	520	36.4
2006	3 621	5 828	38.3	1 828	3 776	32.6	510	646	44.1	396	402	49.6	558	436	56.2	329	568	36.7
2005	3 454	5 576	38.3	1 733	3 602	32.5	493	645	43.3	359	399	47.3	572	445	56.2	297	485	38.0

Source: CZSO – Research and Development Indicators.

Tab. 27: Researchers in the university sector (HC)

	University sector		Public and state universities		University hospitals		Private universities									
	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)	Women	Men Women (%)								
2020	9 759	17 566	35.7	64.3	8 493	16 017	34.7	65.3	1 047	1 221	46.2	53.8	219	328	40.0	60.0
2019	9 438	17 328	35.3	64.7	8 269	15 793	34.4	65.6	948	1 177	44.6	55.4	221	358	38.2	61.8
2018	8 910	16 777	34.7	65.3	7 717	15 261	33.6	66.4	961	1 183	44.8	55.2	232	333	41.1	58.9
2017	8 618	16 392	34.5	65.5	7 424	14 952	33.2	66.8	958	1 099	46.6	53.4	236	341	40.9	59.1
2016	8 064	15 378	34.4	65.6	7 071	14 064	33.5	66.5	783	1 055	42.6	57.4	210	259	44.8	55.2
2015	8 427	15 536	35.2	64.8	7 151	14 036	33.8	66.2	1 032	1 181	46.6	53.4	244	319	43.3	56.7
2014	8 115	15 164	34.9	65.1	6 890	13 777	33.3	66.7	981	1 014	49.2	50.8	244	373	39.5	60.5
2013	8 166	14 791	35.6	64.4	6 960	13 217	34.5	65.5	952	1 123	45.9	54.1	254	451	36.0	64.0
2012	7 226	13 908	34.2	65.8	6 253	12 661	33.1	66.9	737	884	45.5	54.5	236	363	39.4	60.6
2011	7 184	13 548	34.7	65.3	6 102	12 205	33.3	66.7	892	1 020	46.7	53.3	190	323	37.0	63.0
2010	6 848	13 129	34.3	65.7	5 825	11 806	33.0	67.0	847	1 059	44.4	55.6	176	264	40.0	60.0
2009	6 939	12 906	35.0	65.0	5 721	11 459	33.3	66.7	1 022	1 178	46.5	53.5	196	269	42.2	57.8
2008	6 711	12 839	34.3	65.7	5 755	11 697	33.0	67.0	816	895	47.7	52.3	140	247	36.2	63.8
2007	6 549	12 610	34.2	65.8	5 513	11 383	32.6	67.4	892	983	47.6	52.4	144	244	37.1	62.9
2006	6 050	11 691	34.1	65.9	5 268	10 710	33.0	67.0	710	826	46.2	53.8	72	155	31.7	68.3
2005	5 713	11 630	32.9	67.1	5 008	10 713	31.9	68.1	633	791	44.4	55.6	72	126	36.4	63.6

Source: CZSO – Research and Development Indicators.

ACADEMICS

Tab. 29: Academics by position (FTE)

	Lecturers		Assistants		Assistant professors		Associate professors		Full professors											
	Women	Men (%)	Women (%)	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)										
2020	515	398	56.4	43.6	664	695	48.9	51.1	4 007	5 782	40.9	59.1	1 143	3 125	26.8	73.2	334	1 844	15.3	84.7
2019	508	365	58.2	41.8	629	638	49.7	50.3	3 940	5 685	40.9	59.1	1 103	3 096	26.2	73.8	335	1 815	15.6	84.4
2018	471	329	58.9	41.1	611	601	50.4	49.5	3 963	5 713	41.0	59.0	1 072	3 056	26.0	74.0	330	1 814	15.4	84.6
2017	455	318	58.9	41.1	632	621	50.5	49.5	3 943	5 663	41.0	59.0	1 049	3 066	25.5	74.5	333	1 802	15.6	84.4
2016	450	321	58.3	41.7	655	686	48.8	51.2	3 943	5 667	41.0	59.0	1 036	3 054	25.3	74.7	332	1 825	15.4	84.6
2015	457	299	60.4	39.6	634	685	48.1	51.9	3 759	5 470	40.7	59.3	954	2 828	25.2	74.8	313	1 739	15.3	84.7
2014	367	251	59.4	40.6	576	619	48.2	51.8	3 396	4 577	42.6	57.4	849	2 376	26.3	73.7	274	1 501	15.4	84.6
2013	319	218	59.4	40.6	598	627	48.8	51.2	3 399	4 653	42.2	57.8	822	2 332	26.1	73.9	273	1 503	15.4	84.6
2012	329	219	60.0	40.0	633	670	48.6	51.4	3 443	4 837	41.6	58.4	824	2 386	25.7	74.3	268	1 528	14.9	85.1
2011	431	292	59.6	40.4	989	1 029	49.0	51.0	4 667	6 980	40.1	59.9	1 040	3 265	24.2	75.8	352	2 135	14.2	85.8
2010	499	326	60.5	39.5	1 101	1 098	50.1	49.9	4 669	7 048	39.8	60.2	1 034	3 289	23.9	76.1	342	2 184	13.5	86.5
2009	463	310	59.9	40.1	1 158	1 237	48.4	51.6	4 652	7 150	39.4	60.6	959	3 191	23.1	76.9	298	2 126	12.3	87.7
2008	463	310	59.9	40.1	1 158	1 237	48.4	51.6	4 652	7 150	39.4	60.6	959	3 191	23.1	76.9	298	2 126	12.3	87.7
2007	459	298	60.6	39.4	1 059	1 170	47.5	52.5	4 495	6 897	39.5	60.5	940	3 100	23.3	76.7	263	2 070	11.3	88.7
2006	352	295	54.4	45.6	968	1 112	46.5	53.5	4 270	6 551	39.5	60.5	917	3 083	22.9	77.1	258	1 980	11.5	88.5
2005	274	223	55.1	44.9	851	978	46.5	53.5	4 249	6 416	39.8	60.2	881	3 052	22.4	77.6	240	1 944	11.0	89.0

Source: Ministry of Education, Youth and Sports - Statistical Yearbook (Employees and wage resources).

Tab. 30: Academics by discipline (FTE)*

	Natural Sciences		Technical Sciences		Agricultural Sciences		Medical Sciences		Social Sciences		Humanities		Not specified, Total						
	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)	Women	Men (%)							
2020	762	2 173	26.0	865	3 000	22.4	373	639	36.8	1 188	1 509	44.0	1 751	2 097	45.5	1 158	1 604	41.9	-
2019	701	2 094	25.1	848	2 870	22.5	332	616	35.0	1 155	1 605	41.9	1 670	1 993	45.6	1 158	1 605	41.9	-
2018	445	1 415	23.9	1 059	2 815	27.3	205	624	39.6	1 123	1 569	41.7	1 746	2 555	40.6	1 198	1 715	41.1	-
2017	484	1 466	24.8	1 102	3 679	23.1	286	520	35.5	1 120	1 459	43.4	2 060	2 598	44.2	1 191	1 687	41.6	883.4
2016	414	1 326	23.8	1 096	3 694	22.9	276	506	35.3	1 088	1 424	43.3	2 046	2 579	44.2	1 144	1 647	41.0	730.1
2015	565	1 775	24.1	1 254	4 491	21.8	315	531	37.2	2 265	3 178	41.6	2 030	2 482	45.0	1 339	2 011	40.0	-

* Data collection started in 2015.
Source: Ministry of Education, Youth and Sports - Statistical Yearbook (Employees and wage resources). Calculations made according to the Frascati Manual (OECD).

Tab. 31: Academics by position in the natural sciences (FTE) *

	Lecturers		Assistants		Assistant professors		Associate professors		Full professors					
	Women	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)			
2020	69	87	44.3	54	33.8	386	870	30.8	144	601	19.4	45	366	11.0
2019	70	93	43.1	41	35.7	386	863	30.9	138	646	17.7	45	396	10.2
2018	70	90	43.8	28	41.1	364	828	30.6	134	629	17.5	44	395	10.0
2017	69	88	43.9	30	38.0	365	835	30.4	125	616	16.9	46	383	10.7

* Data collection started in 2017.
Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

Tab. 32: Academics by position in the technical sciences (FTE)*

	Lecturers		Assistants		Assistant professors		Associate professors		Full professors					
	Women	Men	Women (%)	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)			
2020	22	40	34.9	187	32.4	544	1505	26.6	153	789	16.2	49	441	10.0
2019	19	39	32.7	173	33.8	543	1464	27.1	152	788	16.2	47	436	9.7
2018	6	19	25.2	160	35.7	577	1533	27.4	148	784	15.9	46	430	9.6
2017	4	18	17.7	161	36.3	567	1507	27.3	143	781	15.5	44	430	9.3

* Data collection started in 2017.
Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

Tab. 33: Academics by position in the medical sciences (FTE) *

	Lecturers		Assistants		Assistant professors		Associate professors		Full professors					
	Women	Men	Women (%)	Men	Women (%)	Women	Men	Women (%)	Women	Men	Women (%)			
2020	88	63	58.1	133	55.5	693	656	51.4	151	315	32.4	62	323	16.2
2019	82	59	58.3	111	59.2	670	658	50.5	149	316	32.0	62	320	16.3
2018	76	59	56.3	92	62.3	655	649	50.2	146	314	31.7	63	315	16.7
2017	78	68	53.6	92	60.1	655	640	50.6	145	319	31.3	64	313	16.9

* Data collected started in 2017.
Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

Tab. 34: Academics by position in the agricultural sciences (FTE) *

	Lecturers		Assistants		Assistant professors		Associate professors		Full professors					
	Women	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)			
2020	4	2	69.1	38	60.2	193	260	42.6	51	158	24.3	22	96	18.3
2019	3	0	90.8	32	57.8	178	247	41.9	47	156	23.0	20	97	16.8
2018	2	0	100.0	30	59.1	177	249	41.5	43	152	22.1	22	101	17.8
2017	2	0	100.0	30	58.8	172	258	40.0	43	159	21.4	22	102	17.6

* Data collection started in 2017.
Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

Tab. 35: Academics by position in the social sciences (FTE) *

	Lecturers		Assistants		Assistant professors		Associate professors		Full professors					
	Women	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)			
2020	101	76	57.0	111	52.1	1107	1174	48.5	332	488	40.5	67	218	23.5
2019	101	68	59.7	103	52.5	1102	1149	48.9	322	486	39.8	69	224	23.4
2018	90	58	61.0	102	48.5	1126	1147	49.5	308	485	38.8	65	218	23.0
2017	77	50	60.9	119	47.9	1171	1171	50.0	296	494	37.4	65	219	23.0

* Data collection started in 2017.
Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

Tab. 36: Academics by position in the humanities (FTE) *

	Lecturers		Assistants		Assistant professors		Associate professors		Full professors					
	Women	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)			
2020	158	71	69.1	105	54.8	663	828	44.5	214	453	32.1	62	223	21.9
2019	162	68	70.5	106	53.6	657	830	44.2	202	444	31.3	64	219	22.6
2018	163	65	71.6	108	53.4	630	834	43.0	195	429	31.2	64	227	21.8
2017	165	59	73.6	105	55.2	622	821	43.1	188	432	30.4	65	229	22.2

* Data collection started in 2017.
Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources).

Tab. 37: Average gross monthly wage (CZK)* of academics

	Lecturers		Assistants		Assistant professors		Associate professors		Full professors	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
2020	37 695	42 443	36 932	40 611	45 892	52 163	64 484	73 508	84 815	92 824
2019	37 553	43 417	36 287	40 270	45 155	50 876	63 991	72 218	83 540	91 486
2018	34 783	38 640	33 265	36 530	41 586	47 233	59 694	67 541	78 091	84 350
2017	31 643	35 405	29 446	32 588	37 552	42 482	53 300	60 746	72 983	77 629
2016	30 128	34 236	27 976	30 424	35 212	39 858	50 794	56 966	68 791	72 750
2015	30 575	33 919	27 877	29 662	34 876	39 310	50 648	56 942	69 435	73 049
2014	28 354	33 068	26 198	27 688	32 959	36 403	48 674	54 146	66 978	70 016
2013	27 487	30 814	25 361	27 336	31 603	35 468	47 279	52 071	64 414	67 344
2012	26 139	29 033	24 642	25 929	31 215	34 078	45 569	49 414	61 778	65 062
2011	24 684	27 540	23 232	25 867	29 464	32 967	43 677	47 427	58 156	62 057
2010	24 319	27 409	23 415	24 603	29 877	31 793	43 451	46 230	58 661	60 329
2009	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-

* Nominal wage.
Source: Ministry of Education, Youth and Sports – Statistical Yearbook (Employees and wage resources)

DECISION-MAKERS

Tab. 38: Proportion of women in public research institutions in 2020 (HC)

	Women	Men	Women (%)
Director	7	67	9.5
Deputy director	-	-	-
Council	155	627	19.8
Supervisory board	90	318	22.3
Total	245	1 012	19.5

Source: 2020 annual reports.

Tab. 39: Proportion of women on the management and advisory boards of the Czech Academy of Sciences in 2020 (HC)

	Women	Men	Women (%)
Chair	1	0	100.0
Academic council	6	11	35.3
Academic assembly	50	207	19.5
Supervisory board	1	7	12.5
Research board	4	25	13.8
Management of the CAS in total	62	250	19.9
Other advisory boards (commission, councils)	84	294	22.2
Total CAS	146	544	21.2

Source: www.avcr.cz

Tab. 40: Proportion of women in the Czech Rectors' Conference in 2020 (HC)

	Women	Men	Women (%)
Chair	0	1	0.0
Board	1	5	16.6
Rectors' Conference of public and state universities*	4	24	13.3
Rectors' Conference of private universities *	6	13	31.6
Total	11	43	20.3

Source: crc.muni.cz.

* Data from 2021, as 2020 figures were not available.

* Data from 2021, as 2020 figures were not available.

Tab. 41: Proportion of women in the Council of Czech Universities in 2020 (HC)

	Women	Men	Women (%)
Chair	0	1	0.0
Board	18	32	36.0
Student chamber	13	22	34.3
Assembly	115	198	36.7
Total	146	253	36.6

Source: www.radavs.cz.

Tab. 42: Proportion of women in the Technological Agency of the Czech Republic in 2020 (HC)

	Women	Men	Women (%)
Chair	0	1	0.0
Board	1	4	20.0
Research board	1	12	7.7
Controlling body	3	7	30.0
Management of TACR in total	5	25	16.7
Programme's council, expert commissions	58	158	26.9
Total	63	160	28.3

Source: 2020 Technological Agency Annual Report, www.tacr.cz.

Tab. 43: Proportion of women in the Czech Science Foundation in 2020 (HC)

	Women	Men	Women (%)
Chair	1	0	100.0
Board	2	3	40.0
Research board	1	11	8.3
Controlling body	1	8	11.1
Management of CSF in total	5	22	18.5
Evaluation panels	82	328	20.0
Commission	0	5	0.0
Total	87	355	19.7

Source: 2020 Czech Science Foundation Annual Report.

Tab. 44: Proportion of women in the Learned Society of the Czech Republic in 2020 (HC)

	Women	Men	Women (%)
Chair	0	1	0.0
Council	2	5	28.6
Regular members	7	84	7.7
Foreign members	3	47	6.0
Emeritus members	1	17	5.5
Total	13	154	7.8

Source: [www.learned.cz/](http://www.learned.cz/cz/).

SCIENCE AND ENGINEERING PROFESSIONALS

Tab. 45: Science and engineering professionals* and their average gross monthly wage (CZK)

	Total		Age: 25 – 29		Age: 30 – 34		Age: 35 – 44		Age: 45 – 44		
	Women	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)
2020	-	-	-	37 145	15.9	46 589	11.8	52 854	16.0	53 196	13.3
2019	39 500	104 200	27.5	35 749	16.7	44 883	13.4	49 933	17.4	49 276	18.2
2018	36 800	106 300	25.6	34 272	12.0	41 510	13.4	45 656	16.7	45 489	17.3
2017	34 400	105 300	24.4	31 693	13.0	38 432	15.0	42 613	18.9	42 209	17.5
2016	30 900	100 000	23.8	-	-	-	-	-	-	-	-
2015	26 900	91 600	22.4	29 768	7.8	36 885	11.7	38 453	19.2	36 689	20.4
2014	25 400	85 500	21.8	-	-	-	-	-	-	-	-
2013	23 300	79 700	24.5	-	-	-	-	-	-	-	-
2012	21 600	74 700	21.4	-	-	-	-	-	-	-	-

*Rounded to the nearest hundred.
Source: CZSO – Labour Force Survey (LFS).

PATENTS

Tab. 46: Patents granted by gender

	Total		Public universities		Public research institutions		Commercial sector		Private individuals			
	Women	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)	Men	Women (%)	
2020	53	486	10.2	19	130	12.9	7	40	14.6	5	47	8.8
2019	60	459	11.5	17	114	13.3	20	43	31.1	17	216	7.1
2018	55	463	10.5	15	123	10.7	11	29	28.5	22	217	9.2
2017	55	549	9.1	20	150	11.5	10	42	18.5	19	254	7.1
2016	60	606	9.0	27	187	12.7	8	48	14.5	18	277	6.2
2015	54	546	9.1	25	179	12.2	10	59	14.6	16	228	6.7
2014	50	436	10.2	20	140	12.7	7	48	12.5	16	185	7.9
2013	44	377	10.5	20	138	12.5	10	31	23.2	12	144	7.8
2012	44	378	10.4	16	123	11.3	8	38	18.2	18	147	11.0
2011	38	306	11.1	13	90	12.4	7	28	20.4	15	104	12.7
2010	22	278	7.4	3	62	4.3	9	29	23.5	5	112	4.6
2009	32	348	8.5	9	48	16.0	8	33	20.1	11	189	5.5
2008	19	232	7.5	2	17	11.2	6	20	21.8	9	139	6.0
2007	15	226	6.1	3	20	11.8	1	10	11.2	8	120	6.2
2006	19	247	7.0	2	14	11.0	5	8	37.8	9	141	5.9
2005	18	327	5.3	1	17	6.9	2	15	13.3	9	180	4.6

Source: Industrial Property Office and CZSO, 2021.

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