

CHANGES IN THE PREFERENCES OF THE FIELD OF STUDY AT UNIVERSITIES IN THE CZECH REPUBLIC

Lukáš Krabec – Jana Vrabcová

Abstract

In the last decades in the Czech Republic, the share of the population with a university degree of education has been increasing. Studies at Czech universities are attractive not only for Czechs but also foreigners, thanks to the wide range of fields that are provided and a high-quality combination of study and practice. The most represented are foreign students from Slovakia, Russia, Ukraine, Vietnam, Kazakhstan and Belarus. Data on the number of students in 2001–2021 are based on data sources from the Ministry of Education, Youth and Sports. Data for university students (for public and private universities) include a bachelor, follow-up master's, master's and doctoral education program and always apply on 31 December of the year. Due to demographic changes in the Czech Republic in 2010–2017, there was a loss of students at universities. However, the number of foreign students is growing during the period. Economic disciplines are a long-term attractive field regardless of gender. Women prefer education, medicine and fields with social issues. In men, the most popular are technical fields with an IT focus. The question is whether experience with the pandemic Covid-19, the current economic crisis and changes at the geopolitical level will not affect students' preferences in the coming years.

Key words: students, tertiary education, ISCED-F, Czech Republic

JEL Code: I21, I23

Introduction

University studies have been gaining popularity in the Czech Republic for a long time. It is associated with a better position in the labour market, higher incomes, in some professions with some social status. And it is not only an influence on individuals, higher education is reflected in the whole society, such as Lim & Kim (2013), in their work, have quantified the effect of GDP growth in selected European countries in employing persons with tertiary education. It is easily investment in the future. According to the Population censuses, only 0.9 % of the Czech population had a higher education in 1950, in 1991 it was 7.2 % and in 2021 it was

17.6 %. But these statistics are interesting from the point of view of gender. In 2001, the ratio of graduates of men and women was approximately balanced, currently, women are among the graduates from three fifths. But the Czechs are not only studying at Czech universities. According to available surveys among students from abroad, the Czech Republic is repeatedly ranked in the top ranks of interest in study stay locations due to its attractiveness (*2022 World University Rankings - Compare Universities & Colleges | U-Multirank*, n.d.; *QS World University Rankings, Events & Careers Advice | Top Universities*, n.d.). The main criteria of attractiveness include a high-quality education system at the universities, a wide choice of provided fields, and a good connection to the private sector, where companies allow students many challenges and thus a quality combination of study and practice. Students also mention the attractiveness of the Czech Republic due to its geographical location and the lower economic living costs compared to other countries within the EU. And last but not least, the importance of Czech universities in the field of science and challenge is also increasing (Fiala, 2013). The main, “disadvantage“ of the Czech Republic is the Czech language, but since the largest part of incoming students is from countries such as Slovakia, Ukraine and Russia, this disadvantage is quickly put aside. It is understandable for students from Slovakia that they use geographical distance and linguistic closeness (Šerý et al., 2013). Thus, the biggest problem for students that can be considered is the bureaucratic obstacle in obtaining the necessary documents for entering the country and obtaining a study permit. However, these obstacles can be understood recently, the society has been going through major events that affect the whole world due to Covid-19 infection and the state of war.

1 Data

Data on the number of students and their other characteristics are based on data sources of the Ministry of Education, Youth and Sports, specifically on the SIMS Database (Sdružené informace matrik studentů). Since the study field with the same code may have different content at different universities and the inclusion of individual students in the relevant groups according to ISCED-F 2013 is therefore problematic, in the case of breakdowns according to the fields stated by qualified estimates carried out by the Ministry of Education, Youth and Sports. Classification of Education fields CZ-ISCED-F 2013 is valid from 1 January 2016. Detailed knowledge of the content of the study program has primarily a university that realizes it. For this reason, the proposal of a specific code of the ISCED-F 2013 classification is in its competence, although the ministry reserves the right to change the proposed code. As Hrabata (*Oborová*

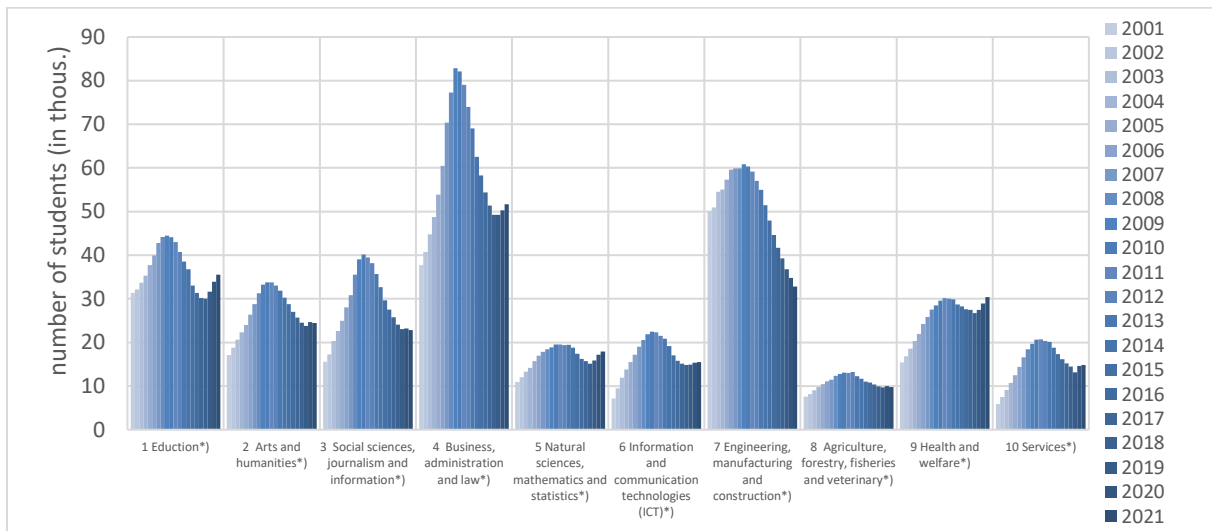
klasifikace, b.r.) states: "Although the study programs accredited or registered after 2016, the specific field of ISCED is already listed, but due to the creation of study programs, which is primarily based on education areas, this inclusion may not be appropriate. In addition, this inclusion is only performed during the initial accreditation of the study program. However, any subsequent expansion of this accreditation may move the study program to a completely different ISCED. And even if the resulting studies operated, the resulting studies may not correspond to the assigned ISCED, if the university operates most of the studies in the specialization that is due to others possible specializations included in a different field classification ISCED." It is therefore clear that the division according to this classification will not be entirely accurate, but we believe that it is the best we can work with if we are interested in the student's preferences and their development over time.

Data for university students (for public and private universities) include a bachelor, follow-up master's, master's and doctoral education program and always apply on 31 December of the year.

2 Development of the number of students based on ISCED-F classification

Students with the nationality of the Czech Republic were almost 252 thousand at the end of 2021. Among the disciplines that are most abundantly represented are 4 (Business, Administration and Law), 1 (Education), 2 (Arts and humanities), 3 (Social sciences, journalism and information), 7 (Engineering, Manufacturing and Construction) and 9 (Health and welfare). Since 2010, it has been evident in all fields a decline in the number of students. This is mainly due to demographic development when fewer cohorts born in the 1990s began to study. Since 2018, a growing trend will occur based on the demographic structure of the Czech Republic. However, for categories 3 and 7, a steady decline from 2010 to the present is clear.

Obr. 1: Numbers of Czech university students according to the classification of ISCED-F in the Czech Republic, 2001–2021



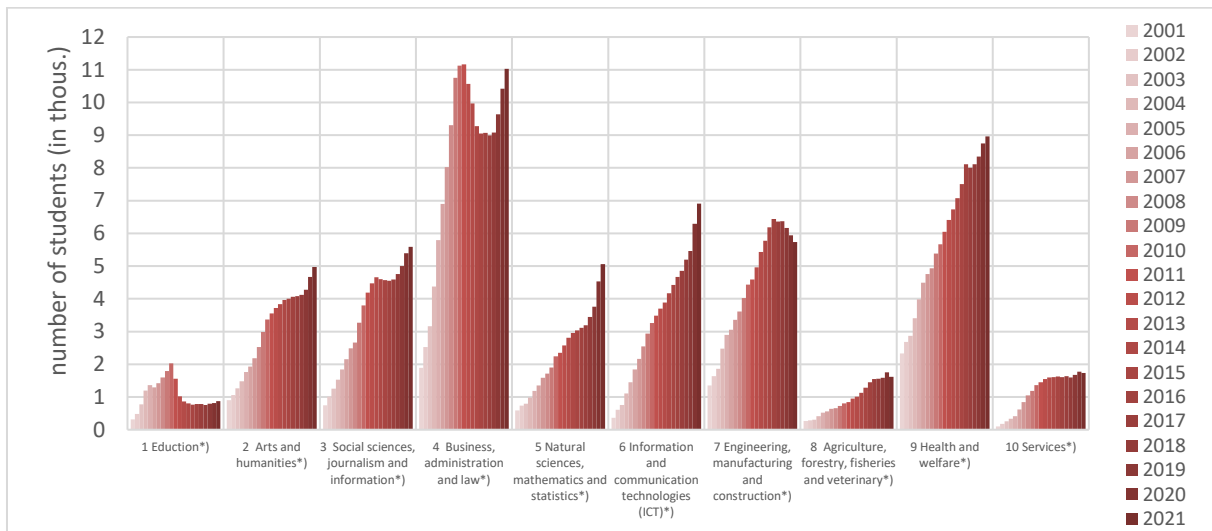
Note: *) It is not the sum for individual fields as one student can study more different fields at the same time

Source: SIMS database (according to status as of 20.1.2022), MŠMT, CZSO

The number of foreigners living in the Czech Republic increases smoothly, currently reaching 659 thousand, so foreigners make up more than 6 % of the population (as of 31 December 2021). Foreigners come to the Czech Republic most often for economic reasons, followed by family reasons and the third reason is studies. The Czech Republic is currently attractive in terms of the possibility of studying at universities, especially for citizens of Slovakia, Russia, and Ukraine. Students from Vietnam, Kazakhstan, Belarus, and other countries are also represented at Czech universities. Studying without paying a fee is provided in study programs carried out in the Czech language. Students must therefore demonstrate knowledge of the Czech language.

As is clear from the data of the Ministry of Education, Youth and Sports between 2001 and 2019 they constantly increased (from the value of 8,764 foreign students as of 31 December 2001 to 52,109 on the last day of 2021) (*Statistika výkonových ukazatelů veřejných a soukromých vysokých škol ČR, 2022*). In more detail, the increase in the number of foreign students at Czech universities and their representation in full-time or distance forms of study deals with in the article by Krabec & Vrabcová (2021).

Fig. 2: Numbers of university students of foreign nationality according to the classification of ISCED-F in the Czech Republic, 2001–2021



Note: *) It is not the sum for individual fields as one student can study more different fields at the same time

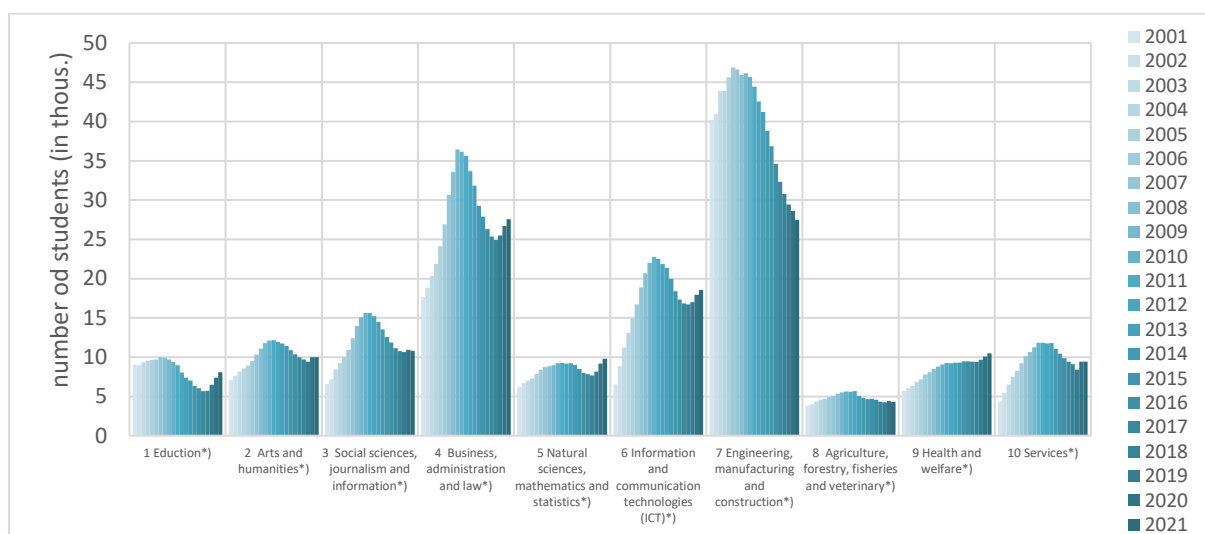
Source: SIMS database (according to status as of 20.1.2022), MŠMT, CZSO

If we look at foreign university students in the Czech Republic from the point of view of the classification of the fields (ISCED-F 2013), it is clear that most of them are represented in the field of Business, administration and law, then Health and welfare (see Fig. 2). The relatively small amount of foreigners is quite logically in the field of Education. In areas 2, 3, 5, 6, and 8, there is an increase in the entire monitored period. In area 1 (Education), under 2011, there is a decline and currently slight growth. There was also a decline in area 4 after 2011, but there is a rapid growth in interest. In the field of 7 (Engineering, manufacturing and construction), there has been a decrease in interest from foreign students since 2018. And in the area of 10 (Services), there is a certain stagnation between 2014–2019 and in recent years again slight growth.

1.1 Differences in study fields by gender

In the following graphs, we will look at the preferences of foreign students in the Czech Republic by gender in the period of 2001–2021. During this period, the Czech Republic saw great progress in the approach of universities and their openness to foreign students and subsequent applicability to the labour market. Over the past 20 years, the Czech Republic has become a very searched country for studying certain fields such as medicine, economics and technical fields.

Fig. 3: Numbers of university students - men according to the classification of ISCED-F in the Czech Republic, 2001–2021

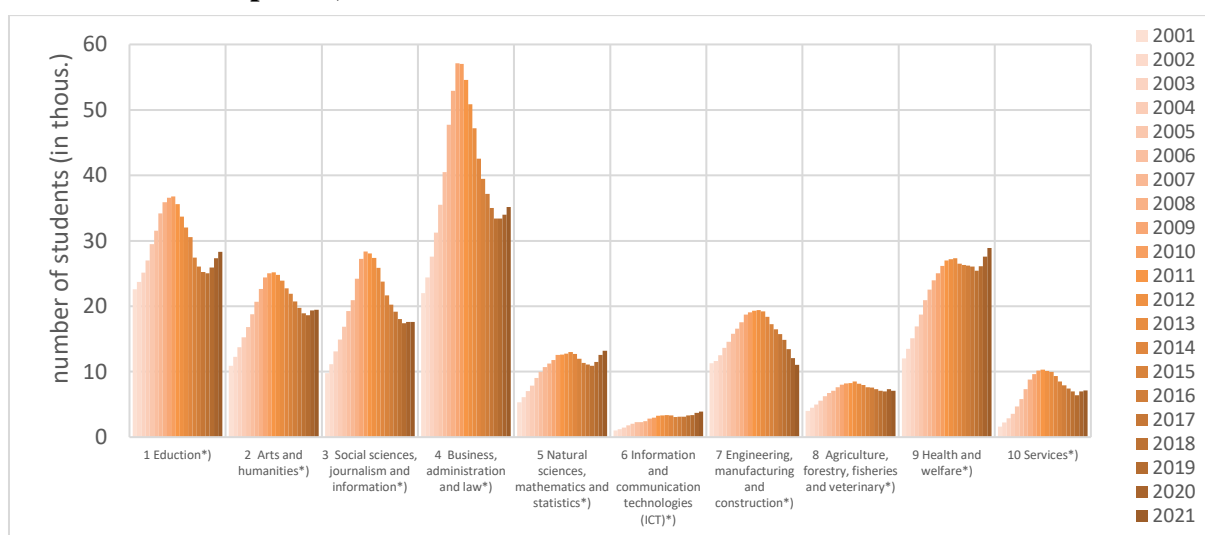


Note: *) It is not the sum for individual fields as one student can study more different fields at the same time

Source: SIMS database (according to status as of 20.1.2022), MŠMT, CZSO

Figure 3 shows men's long-term preference in technical fields, which are increasingly specialized in connection with IT-focused fields. A common field without gender differences in the economic field. Apart from the common interest in economic fields, women mainly specialize in healthcare and social human studies (see figure 4).

Fig. 4: Numbers of university students - women according to the classification of ISCED-F in the Czech Republic, 2001–2021



Note: *) It is not the sum for individual fields as one student can study more different fields at the same time

Source: SIMS database (according to status as of 20.1.2022), MŠMT, CZSO

Conclusions

As there is more and more pressure on global networking and gaining experience outside of the homeland, various institutions and grant projects are being created and allowed to travel abroad for study or work-study stay. Czech students are most interested in the long-time field of Business, Administration and Law and Engineering, Manufacturing and Construction. During the period under review, there is an increase in the decline in the number of students at universities, but this is mainly due to demographic development depending on the age structure of the Czech Republic. As mentioned, the Czech Republic is increasingly interesting for foreign students and it is clear from the data that the number of foreign students is getting higher year by year. Foreign university students in the Czech Republic are in the most popular fields of Business, administration and law, then Health and welfare.

If we look at the individual output of studies in the Czech Republic by gender, we can find common important points among students. The main attractive direction, regardless of gender, is the economic fields, which are already appearing in various modifications in schools nowadays and link to other interesting subfields, e.g. communication, digitalization, etc. If we look at the preferences of individual genders, women search dominantly for education, social studies and healthcare. These fields are very popular with women, as there is a high level of employability for them and they also very often appear in leading positions in these fields. For men, technical fields with a focus on IT are the most preferred.

It is a big assumption due to the development and transition to industry 4.0 that trends in education will move in the same direction. A fundamental priority of the labour market towards education is a high degree of digitization and a focus on presentation skills. Thanks to the use of various applications and media communication used by society as a whole, the labour and education market cease to be divided by gender.

References

2022 World University Rankings—Compare Universities & Colleges | U-Multirank. (b.r.).

Multirank. Available online from <https://www.umultirank.org>

Fiala, D. (2013). Science Evaluation in the Czech Republic: The Case of Universities.

Societies, 3(3), Art. 3. <https://doi.org/10.3390/soc3030266>

Krabec, L. (n.d.). *Filozofický pohled na vzdělávání*. Medias res. Available online from

<http://www.mediasres.cz/filosofie-a-psychologie/2973-lukas-krabec-filozoficky-pohled-na-vzdelavani.htm>

- Krabec, L., & Vrabcová, J. (2021). *CIZINCI STUDUJÍCÍ NA ČESKÝCH VYSOKÝCH ŠKOLÁCH*. 384–391. Available online from <https://relik.vse.cz/2021/download/pdf/460-Vrabcova-Jana-paper.pdf>
- Lim, G., & Kim, C.-U. (2013). Who Has to Pay for Their Education? Evidence From European Tertiary Education. *Educational Researcher*, 42(4), 250–252. <https://doi.org/10.3102/0013189X13477686>
- Oborová klasifikace*. (n.d.). Základy statistiky vysokých škol 2001 až 2021. Available online from <https://statis.msmt.cz/statistikyvs/klasifikace.aspx>
- QS World University Rankings, Events & Careers Advice | Top Universities*. (n.d.). Available online from <https://www.topuniversities.com/>
- Statistika výkonových ukazatelů veřejných a soukromých vysokých škol ČR*. (2022). MŠMT Odbor informatiky a statistiky. Available online from <https://statis.msmt.cz/statistikyvs/vykonyVS1.aspx>
- Šerý, O., Mintálová, T., Szczyrba, Z., & Toušek, V. (2013). Slováci v České republice: S důrazem na dojížděku za prací a do vysokých škol. *16. mezinárodní kolokvium o regionálních vědách. Sborník příspěvků. (16th International Colloquium on Regional Sciences. Conference Proceedings.)*, 109–119. <https://doi.org/10.5817/CZ.MUNI.P210-6257-2013-13>

Contact

Lukáš Krabec

Vysoká škola kreativní komunikace

Na Pankráci 420/54

140 00 Praha 4 – Nusle

krabec1@vskk.cz

Jana Vrabcová

Prague University of Economics and Business

nám. W. Churchilla 4

13067 Praha 3

jana.vrabcova@vse.cz