

# SOCIAL DIMENSION OF STUDYING IN SERBIA

## EUROSTUDENT V

Report for the Republic of Serbia



SOCIAL DIMENSION OF STUDYING IN SERBIA  
EUROSTUDENT V REPORT FOR THE REPUBLIC OF SERBIA

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Social Dimension of Studying in Serbia  
EUROSTUDENT V  
Report for the Republic of Serbia

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## Abbreviations

EHEA	European Higher Education Area
EU	European Union
ECTS	European Credit Transfer System
SORS	Statistical Office of the Republic of Serbia
HEI	Higher Education Institutions
HE	Higher Education

### NOTE

The expressions in this text are used in their grammatical masculine form and include both the natural male and female gender of the persons referred to.

The word parent is used to mean biological parent(s), caregiver(s) and anyone who was or is taking primary care of the students.

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## Foreword

The correlation between education, particularly higher education, economic growth and social development has been verified through a considerable volume of research, while the need to develop human capital and prepare citizens for the occupations requiring higher qualifications is undisputed. Therefore, it is not surprising that an increasing number of countries are approaching education systematically and strategically. For years, higher education reforms in European countries have been primarily based on issues directly or indirectly related to the economic growth and development (e.g. the creation of the European Higher Education Area, students' and workforce mobility, etc.) which prevailed over the issues regarding a social dimension of higher education.

Serbia is not an exception in the process of adjusting and harmonizing education with the context of modern, twenty-first century society. Following signing of the Bologna Declaration in 2003 and the adoption of the new Law on Higher Education in 2005, the Republic of Serbia has implemented higher education reforms resulting in an increase in the number of those enrolling higher education and in a less pronounced elitist character of higher education, gradually providing space for deliberation of equality and the social dimension issues of higher education in Serbia. Furthermore, the Strategy for the Development of Education in Serbia 2020 (2012) states that a mission of higher education is continuous transfer and creation of scientific knowledge and professional competences enabling social, cultural, economic and other forms of progress (p. 80). The Strategy also defines the directions for development until 2020, the method of harmonization with the European Higher Education Area and the European Research Space, the structure and status of higher education in life-long learning, quality assurance and control, the modernization of study programmes and international mobility. Moreover, as one of its strategic objectives, Serbia has adopted the goal of the Europe 2020 strategy that by 2020 the share of 30–34 year olds with tertiary educational attainment should increase by at least 40%, thus making equity and access to education one of its key strategic goals. Likewise, the Strategy emphasizes the importance of evidence-based decision making.

Having in mind the above strategic orientation, it is clear that the research producing valid and comparable data is of utmost importance. One such research is the EUROSTUDENT survey implemented across the wider European area with the goal of analysing the socio-economic status of students, providing comparable, detailed and reliable data on the social dimension of higher education in Europe. The data collected through this survey refers primarily to the social and economic indicators of the students' status and their living conditions, as well as temporary international mobility. The EUROSTUDENT survey is underpinned by the belief that knowing the characteristics of students and their lives is a key for assessing the equity and efficiency of a higher education system. The importance of this survey is also reflected in the fact that, so far, the four cycles of the EUROSTUDENT survey have been implemented, with the number of participating countries increasing with each subsequent cycle.

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In 2012, Serbia has joined the fifth cycle of the EUROSTUDENT survey for the first time through the TEMPUS project *“Towards Sustainable and Equitable Financing of Higher Education in Bosnia and Herzegovina, Montenegro and Serbia – FINHED”*, thus becoming one of the 30 European countries implementing this survey. This cycle of the survey lasted from 2012 to 2015, with the field research implemented during the summer semester of 2013/14.

This report contains an analysis of the data collected for Serbia through the EUROSTUDENT survey. Its value is reflected at the three levels: firstly, it provides insight into data regarding access to, and equality of higher education in Serbia, and also provides the opportunity for the comparative reviews (regarding the assessment of advantages and disadvantages of the national higher education system); secondly, Serbia is in a period of higher education reforms where adequate data represents a basis for adjusting higher education policies to the needs of students; and thirdly, analyses regarding the social dimension of higher education in Serbia are still rare and are mostly based on the data collected for other purposes and not to measure the social dimension of higher education; the authors have mostly relied on data collected from the forms necessary to fill in at the enrolment to a higher education institution (the ŠV-20 form), annual workforce surveys or surveys implemented with other goals, etc. (Živadinović and Čekić Marković, 2015). Therefore, this survey represents the first comprehensive and targeted survey of the student population in the country. The EUROSTUDENT questionnaire served as an instrument to collect and make data available for the development of policies that would stimulate the equity of both European and Serbian higher education.

Regarding the structure of the report, it consists of eight chapters. The first (introductory) chapter provides an overview of the context, the second chapter contains methodological explanations for the survey and the remaining six chapters contain systematized data and its analysis regarding the social and economic status and origin of students; access to higher education; the correlation of previous education with the major subjects currently studied at the higher education institution, the characteristics and different aspects of the transition towards higher education, the progress of work toward the academic degree, satisfaction with the university studies, plans after the completion of studies, students' living conditions, employment and international mobility.

Having in mind the state of the labour market in Serbia and the overall economic situation, as well as the results of studies on the employability of graduate students, it is important to note that data regarding employment, the assessment of the prospects within the domestic and international labour market, as well as plans for continuing university education have been analysed in particular detail.

Moreover, wherever possible, the data obtained for Serbia were compared with the data obtained for other countries, making sure to present both, the data from countries similar to Serbia (at the level of economy, the educational system, historical heritage, etc.), and the Western European countries that differ from Serbia in many ways but in certain ways represent good practices that could provide guidance for Serbia in elaborating the adjustment of the

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higher education system to the needs of students. In this sense, the comparative overview presented throughout the report is generally based on data from various countries participating in the fifth cycle of the EUROSTUDENT survey (particularly if it was concluded that some, primarily economic circumstances between the two cycles of the survey caused certain structural changes – e.g. in situations where the economic crisis resulted in the cuts in the budget expenditures for support to students considering the importance of public financing in European higher education); however, in certain segments it draws upon the data obtained from the fourth cycle of the EUROSTUDENT survey.

Finally, we hope that the findings presented in this report will be informative and significant for decision and policy makers at the national level, as well as for the representatives of the research community, civil society organizations working in education, representatives of higher education institutions, students and all other stakeholders interested in this topic.

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## 1. Background

As early as the 2000s Serbia has initiated changes of its legal and strategic framework in the field of education, which have also covered the higher education system. Thus, higher education in Serbia has been in a reform process during the last ten years mainly due to the wave of reform inspired by the Bologna process in most European countries.

In addition to the Constitution of the Republic of Serbia (2006), guaranteeing all citizens a right to education, the higher education system is also regulated by the Law on Higher Education (2005), providing a general foundation for this segment of the education system. The law regulates this field in general terms, emphasizing that all citizens with completed secondary education, regardless of the numerous differences between them, shall have access to higher education under the same conditions.

Since the Law on Higher Education in Serbia was adopted in 2005, after Serbia had officially become a signatory to the Bologna Process, it was supposed to provide a framework for the future reform of higher education system in Serbia and its harmonization with European trends in higher education, based on the principles of the Bologna Declaration and the Lisbon Convention. The planned reform envisaged the introduction of a three-cycle system of university education, a reform and modernization of curricula, the development of a quality assurance system, enhancing students' and faculty mobility, promotion of cooperation at the European level, recognition and validation of a higher education courses attended abroad, etc. As a result of these reform goals and corresponding activities, the higher education system in Serbia was exposed to challenges inevitably brought about by popularization, privatization and a sudden increase in the number of higher education institutions<sup>1</sup>, the expansion of new study programmes, etc. One of the key future challenges for the higher education system in Serbia is to discover the characteristics of its student body, in order to create adequate students' support systems.

However, despite all the above changes and challenges, the system of financing higher education in Serbia has remained essentially the same – still based on input parameters so that most of the funds come from the state budget and tuition fees. In other words, the basis for financing higher education institutions is not diversified enough, while there are almost no stimuli for its diversification, strengthening alternative and testing new sources of financing. Since this report focuses on researching the characteristics of the student population in a light of creating an adequate system of student support, the issue of higher education financing also needs to be reflected upon briefly.

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1 According to the law (Art. 32), *higher education institution* refers to “university, faculty or academy of arts within a university, academy of professional career studies, four-year college, four-year college of professional career studies.” The first two belong to the university sector, while the latter three are considered non-university HE and had not been regulated by the same act as universities in previous periods.

In short, the current system of higher education financing provides financing for the education at a state-owned higher education institutions from the state budget for around 45% of students of the entire student body, while the remaining students (around 55% of them) finance the costs of higher education by themselves. All students at private higher education institutions pay their own tuition fees. Tuitions at all levels of study, decided upon by the universities, are often too high for the most of students and are not based on transparent calculations of the costs of study (Social Dimension of Higher Education in Serbia: Baseline Study, 2012).

Another law, the Law on Pupils and Students' Standard (2010), directly indicates the context wherein all aspects of student life in Serbia are realized; its provisions, likewise, have direct correlations with the system of financing higher education. An analysis of this law and its by-laws leads to the conclusion that student loans are primarily merit – based, that retention of student loans is linked only to the successful enrolment to the next year of studies; that the students financing their own studies are completely excluded from the system of state loans; that the socio-economic status of students has a nearly marginal impact on the overall scores; and that the 10% of places reserved for students from vulnerable groups is insufficient (Živadinović and Čekić Marković, 2015). Likewise, it is evident that so established student's standard system relies on a rather narrow definition of socio-economic status, reducing it to an average monthly income of the student's family, i.e. economic status, thereby making invisible for student loans the under-represented groups of students, such as students coming from outside university centres (and thus having significantly higher costs of living), students from single-parent families, students-parents and others, thus neglecting their situation (Živadinović and Čekić Marković, 2015).

The Strategy for Education Development in Serbia 2020 (2012), although adopted considerably later than the Law on Higher Education, represents the most comprehensive document providing a strategic approach to the area of higher education.

The Strategy unequivocally states that investments in higher education are seen as investments into the future. It envisages the introduction of a new model of financing, to be based on publicly determined cost of study per field of studies and institutions and the mandatory nature of a state share in paying tuition fees for most students. This would be achieved by introducing the category of co-financing students, and the expected result of such a financing system would be elimination of the existing significant difference between self-financing and budget-financed students (Strategy for Education Development in Serbia 2020, 2012). The Strategy envisages the introduction of a linear scale for co-financing the tuition for each co-financing student. A unified ranking of students by achievement would be formed for a given higher education institution. This would be combined with the social status criterion only for the first year of studies (the ratio of criteria could be, for example 50:50, with strict controls of the validity of social status). The Strategy also envisages providing state-subsidized loans to students for co-financing their tuitions. Such loans could also incorporate costs of living (Strategy for Education Development in Serbia 2020, 2012).

In addition to the legal and strategic framework, several new studies regarding the student population in Serbia provide the required information on the context of Serbia and can serve as a supplement to the data obtained by the EUROSTUDENT survey, as well as a basis for the comparisons of the situation and/or progress.

Thus, the data obtained by the research *Social Dimension of Higher Education in Serbia: Baseline Study (2012)*, conducted through the Tempus EQUIED project, gives an estimate that the chances of a pupil whose father did not complete secondary school to become a student are 5 times lower than of a pupil whose father completed secondary school, and 18 times lower than a student whose father has a faculty degree. Indirect indicators used in this study show that there are less students from the families with a lower financial status than from families with average and higher financial status. It is interesting to note that, despite being completed years earlier, the study *Higher Education and Social Stratification in Serbia 1990–2005*, which illustrates how the initial socio-economic inequality in Serbia is reflected in educational inequality and thereafter once again in socio-economic inequality, at all levels of education, is showing a nearly identical situation (Vukasović, 2007). In other words, the data from this study indicates that pupils whose parents are more educated enrol in gymnasiums<sup>2</sup> more often and subsequently, students having completed gymnasiums are better represented in higher education than students who completed secondary vocational education, and that the probability of pupils having completed gymnasiums enrolment in HEI is three times higher than that of pupils having completed secondary vocational schools. Likewise, students whose parents do not have higher education are less represented in higher education compared to students whose parents do (Vukasović, 2007).

Another survey dealing with one of the aspects of student life and work is the survey of graduate students implemented as part of the CONGRAD Tempus project which indicates a similar, if not identical situation. The survey indicates that there is a statistically significant correlation between parent education and completed secondary school, that an increase in the level of parental education leads to an increase in the probability of a graduate student having completed a gymnasium, i.e. that there is a higher probability that graduates who have completed secondary vocational schools are children of parents with fewer years of education, that the educational background of graduates is also correlated with the choice of higher education institution (an increase in the level of parental education leads to an increase in the probability of students completing university HE instead of non-university HE) (Lažetić et al, 2015).

The *Social Dimension of Higher Education in Serbia: Baseline Study (2012)* also lists the following issues as obstacles in the context of student standards: (1) lack of a transparent and available information centre on scholarships, loans and other forms of support during education, despite the fact that the Law on Higher Education stipulates keeping records of the students and their achievements; (2) lack of a clear legislative framework on the application of

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2 General track of secondary education.

affirmative measures at state level for the students from vulnerable groups, in regards to their enrolment in the first year of studies and accommodation in student dormitories.

Regarding the costs of studying, the same study states that, in addition to the tuitions amounting to an annual average of € 1600 per student according to the calculations of the study, higher education institutions also charge for various services. They regulate these charges, which can be extremely costly, independently and. The authors of this study conclude that numerous students who require financial support do not apply for student loans, because they assess their prospects of obtaining a loan as very poor (a number of loans is disproportionately low compared to a number of students requiring financial assistance). In other words, system support to the student standard covers 12% of the students using scholarships and loans, 7% of the students living in student dormitories and 20% of students having meals in subsidized student canteens. Therefore, 80% of students do not use any form of system support for living standards, and over 50% of students do not qualify for its use due to the fact that they do not hold the status of a budget-financed student (Social Dimension of Higher Education in Serbia: Baseline Study, 2012).

Finally, to further clarify the context, as well as the importance of data collected through the EUROSTUDENT survey that follows in subsequent chapters, it is important to note the correlation between education, poverty and social inclusion shown through specific data on the entire population of Serbia. Namely, data analysis from the 2011 Census (SORS, 2013), provides the conclusion that the population having completed only mandatory primary education is under the highest risk of poverty, compared to the percentage of population having completed at least secondary education or having obtained a higher education diploma. Although there is a high degree of vulnerability in the entire over-18 population with primary education, the percentage of the male population aged 25-49, and/or 50-59 within this group is under the highest risk. Contrary to this, the percentage of the population with a higher education diploma is under the lowest risk of poverty, with the risk further reduced for the age group of over-55, regardless of gender. Furthermore, data regarding the risk of poverty and insufficient social inclusion speaks in favour of the fact that over 80% of the population with a higher education diploma are not a part of the population under a risk of poverty and do not live in the disadvantaged households, i.e. do not belong to the households whose members are unemployed. Nearly 50% fewer of households are in this group if the educational level of its members is at the primary education or below. Regarding the most vulnerable segment of the population, i.e. the population under a risk of poverty, only 1% of the population with a higher education diploma is living under difficult material conditions including a low level of employment among household members, unlike nearly 9% of the population having completed only mandatory primary education or less (Social Inclusion and Poverty Reduction Unit, 2014).

Having in mind all the above strategic commitments, legal solutions, data obtained by various surveys and shown in various studies, we may conclude that the students' support system in Serbia is still not entirely adequate, but that the importance of support for students is (increasingly) recognized and

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the reform of higher education (including a reform of the system of financing higher education) has become a strategically important issue in Serbia. Another fact in favour of this statement is that Serbia, through the Ministry of Education, Science and Technological Development, is supporting the project “Towards the Sustainable and Equitable Financing of Higher Education in Bosnia and Herzegovina, Montenegro and Serbia”, within which this report is produced. The goal of the project is to contribute to a more efficient, effective and equitable system of financing higher education by: (a) gathering and analysis of basic and key evidence on financing at the systemic and institutional level and equity in higher education; (b) introducing and implementing the EUROSTUDENT survey; (c) strengthening local expertise in developing policies on financing and equity in higher education; (d) developing a systemic framework for efficient, effective and equitable systems of higher education; (e) designing a model for financing universities based on a smart diversification of income sources; and (d) founding a regional resource centre focused on the sustainability of results and their dissemination across the region. Likewise, it may be concluded that the above strategic directions make a good initial basis for creating and implementing individual measures of support for students. It is important to determine the true needs of the student population, to examine to what extent the operationalization of these commitments in the form of measures is applicable to the student body, to see whether there are any significant obstacles preventing students in achieving their rights to receive quality education under equal conditions, and, based on the data obtained, what could be the pillars for decision makers in a process of creating adequate support measures for students. The following chapters address those issues.

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## 2. Research Methodology

Upon joining the fifth cycle of the EUROSTUDENT survey on the social dimension of higher education in Europe in 2012, Serbia has begun the preparations for its realization. The survey was implemented during the summer semester of the 2013/14 academic year.

The survey instrument was a paper-based questionnaire. The reason for this, traditional type of data collection lies in the fact that it was impossible to implement an electronic verification of due to the lack of a unique student ID number. Interviewers were students of master studies in Applied Statistics from the University Centre for Applied Statistics in Novi Sad who have received the adequate training prior to the field work.

The survey instrument for students in Serbia was developed based on a generic questionnaire in English – received from the EUROSTUDENT consortium and adjusted to the characteristics of the student population and the conditions of study in our country. For example, a question was added regarding whether the student is financed from the budget or is self-financing, which is not an option in other countries, yet represents a key point of division in case of the student population in Serbia. The team adapting the questionnaire made every effort to keep the changes to the generic version to a minimum, in order to preserve the possibility of comparing different national higher education systems.

A representative sample of the students was formed based on data available from the Statistical Office of the Republic of Serbia (SORS). The available data included the number of students: per HEI ownership (public/private), status (budget/self-financing), gender (male/female) and field of study. The sample created in this manner represents a combination of a stratified sample (with a proportional distribution) and a quota sample. The determined scope of the sample involving 4500 students was stratified in several steps. Firstly, within universities: 5 strata were composed of public universities, 1 stratum was allocated to all private universities and faculties, 1 stratum for all public non-university HEIs, 1 stratum for all private non-university HEIs proportional to the existing number of students within a stratum, and thereafter in accordance with the fields of study. Then, within each stratum, the number of students to be sampled from bachelor and master studies was determined. The surveyed students were selected using a quota sample (an identified number of students was invited to fill the questionnaire). This provided a representative sample regarding the type of institution (public/private and university HEI/non-university HEI), type of study programme (according to academic discipline), level of study (bachelor/master), and a year of study. This approach has also provided for the representativeness of factors such as gender, status (budget/ self-financing), age, origin, place of residence, employment status (employed/ unemployed) to be automatically present in

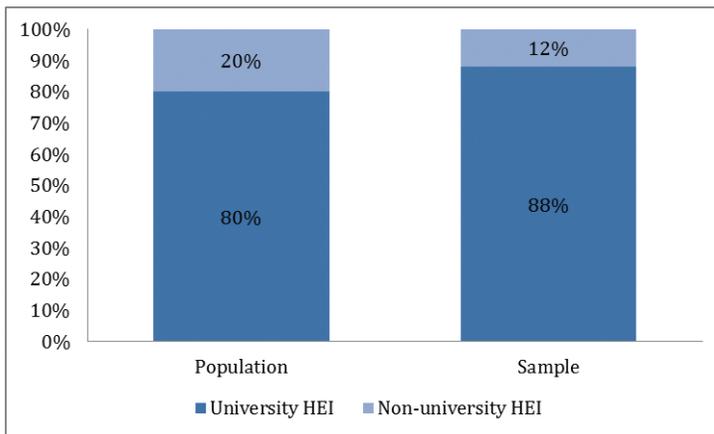
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the selected sample. Certain under-represented parts of the population, such as students with impairments, students with children, etc. were separately invited to participate in the survey.

Regarding the sample response rate, the questionnaire was completed by a total of 3991 students from 45 different higher education institutions and 16 different cities in Serbia. Following detailed control of the completed questionnaires, implemented in accordance with the rules of the EUROSTUDENT survey, a certain number of questionnaires were excluded from further data analysis due to the insufficient number of responses to the mandatory questions. Thus, the final analysis included 3780 students. In order to obtain a sample with a structure best matching the structure of students registered in the official data from the Statistical Office of the Republic of Serbia, the sample was weighted using the variables: gender, status, level of studies and field of study. According to data by the Statistical Office of the Republic of Serbia for 2013, the total number of students in Serbia was 238,945, indicating that the surveyed sample represents 1.58% of the total population.

The main characteristics of the survey sample compared to the data from SORS are given in the following overviews. Thus, Figure 1 shows the structure of the sample according to a type of higher education institution.

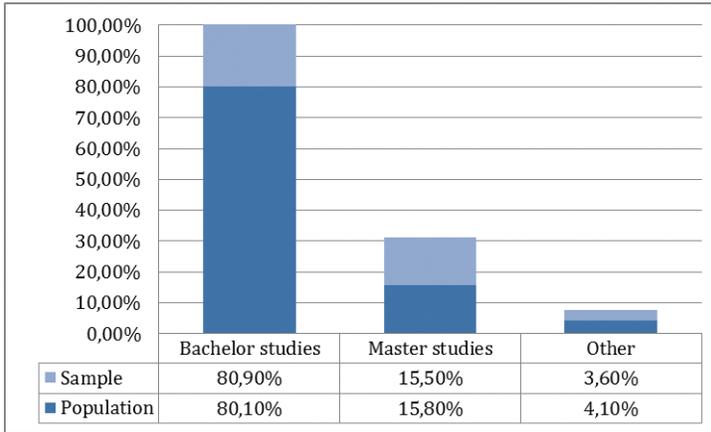
**Figure 1: Distribution of students within the student population and sample by type of higher education institution**



Based on these data, the four fifths of the students are enrolled in study programmes belonging to one of the university HEIs, while the remaining one fifth is studying in programmes of non-university HEIs. Likewise, it is evident that the used sample preserved the structure by type of higher education institution.

The next figure (Figure 2) represents the distribution of students in Serbia according to the level of enrolled studies by SORS data and within the survey sample.

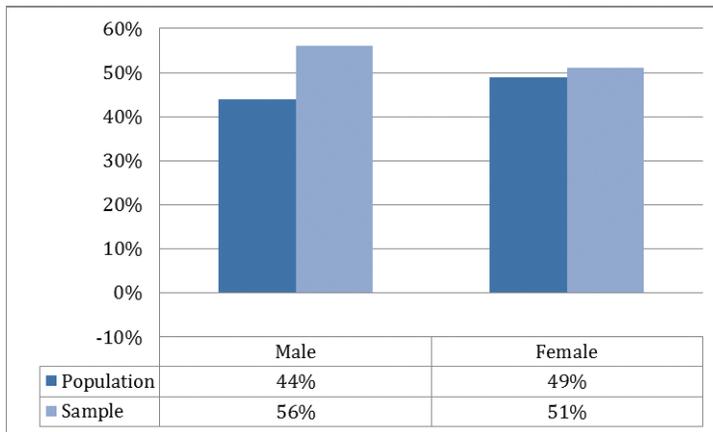
**Figure 2: Distribution of students within the student population and sample by level of studies**



It is also evident from the data that the four fifths of the students in Serbia are enrolled in one of the programmes at bachelor level, while one fifth of the student population is composed of students at the second level of studies – academic master or integrated studies master, master students at non-university HEIs, while other students represent students of doctoral academic studies, students of specialist programmes and students studying according to the “old”, pre-Bologna system of study.

The structure of the student population regarding gender, by SORS data and the survey sample, is shown in Figure 3. Within the student population of Serbia, 56% are female, while 44% are male. Within the sample the ratio of students per gender is more balanced.

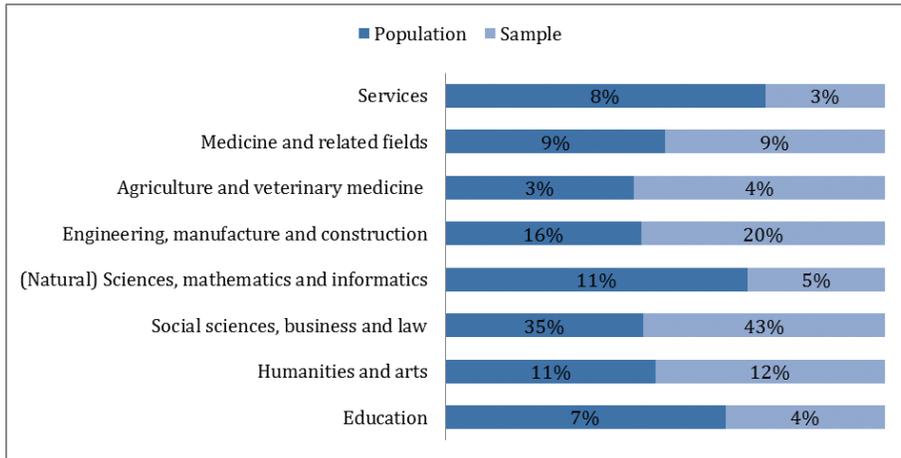
**Figure 3: Distribution of student population and sample by gender**



Regarding field of study, over one third of the students in Serbia opted for social science, business and law. Attractive fields appear to be engineering,

manufacture and construction, humanities and arts and science, while the lowest number of Serbian students is enrolled in programmes in the field of agriculture and veterinary medicine (Figure 4).

**Figure 4: Distribution of students within the population and sample by field of study**



### 3. Socio-Economic and Demographic Profile of Students

As already stated, the EUROSTUDENT survey has been implemented over the last several decades in a large number of European countries, with the intention of collecting data on the socio-economic status of students.

Likewise, data regarding the students' socio-economic status is particularly important because if we accept the perspective that socio-economic status represents a composite measure of parental education, parental occupation, the level of prestige of their occupations, the material status and cultural resources at the disposal of the family (Baucal, 2012), and/or if we define it as a status within a social hierarchy affecting the availability of financial funds, power and prestige (Sirin, 2005), it becomes clear that an individual's socio-economic status will influence both their current, as well as future life, which certainly includes education too. This means that if the link between education and the economic, political and cultural system of society is analysed through the prism of class relations in society (power in schools and influence of high-income parents), it is clear that education is linked to the economic system in two ways. First, access to, and full utilization of the possibilities offered by education largely depend on the economic resources an individual possesses. Second, schools and faculties represent the main means of selection and stratification of the workforce, because the distribution of economic goods is a key for the quality of education, and educational institutions are a key for our "life choices". Therefore, inequality in education cannot be observed independently of economic inequality (Lynch & Baker, 2005). This, at the same time, means that if the educational system is organized so that everyone has equal access, and thereafter, quality education, it ceases to be a channel for reproducing social inequality (Čekić Marković and Jokić, 2015).

Since this data should serve as the basis for creating new, and improving existing policies in the field of education and also provide the "image" of Serbia in this area compared to the other European countries participating in this survey, general data providing insight into the student population in Serbia and general data on the socio-economic status of students were analysed separately in this chapter. A significant amount of this data will also be the basis for the analysis of data in subsequent chapters.

Likewise, most of the data was analysed in a comparative perspective, to create a clearer view of the situation in Serbia compared to the selected countries, and where adequate data could be obtained, the results for Serbia were compared to the results of the selected European countries. Therefore, in addition to the countries in the region, the results of Croatia, Austria, Slovakia and the Czech Republic were mainly used. The choice of Austria was made due to the fact that it is one of the first countries in Europe to introduce and implement support measures for students at a systemic level. Croatia was chosen because it features the same historical heritage as Serbia (the heritage of former Yugoslavia), but in

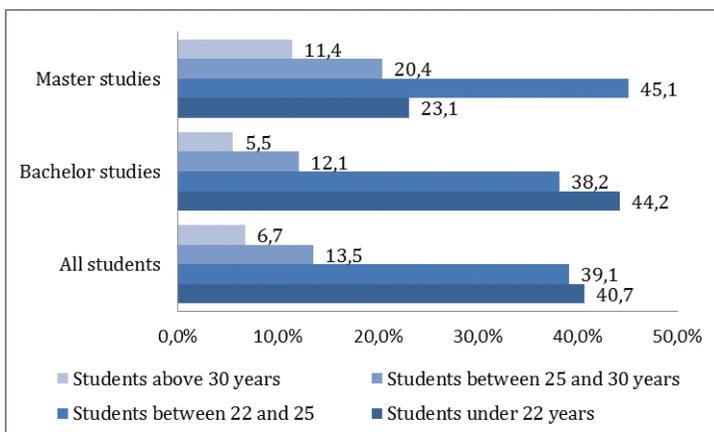
the processes of establishing systemic support measures for students, *inter alia*, it has completed the process of harmonization with the educational systems of European Union countries, having become a member state in mid-2013. The Czech Republic and Slovakia were chosen because they have been member countries of the European Union for over a decade, therefore it was significant to get insight into the current status of their educational systems, as well as the subsystem of higher education and its complementary measures of student support, and to see whether the remnants of a centralized education system (as is the case with Serbia) are still a challenge, or whether those countries today are more like the “old members” of the European Union.

### 3.1. Age Structure and Origin of Students

Age is an important characteristic of students because it bears on both the way a student enters the higher education system and organizes his/her studies, and the conditions for studies. In regards to age, a student in Serbia is on average 23.56 years old (the median is 22.58 years). Within the student population, the lowest percentage belong to the oldest students, those above 30 years of age (6.7%), indicating a relatively adequate pace of study. However, a part of the students older than thirty years is still in bachelor level studies (5.5%).

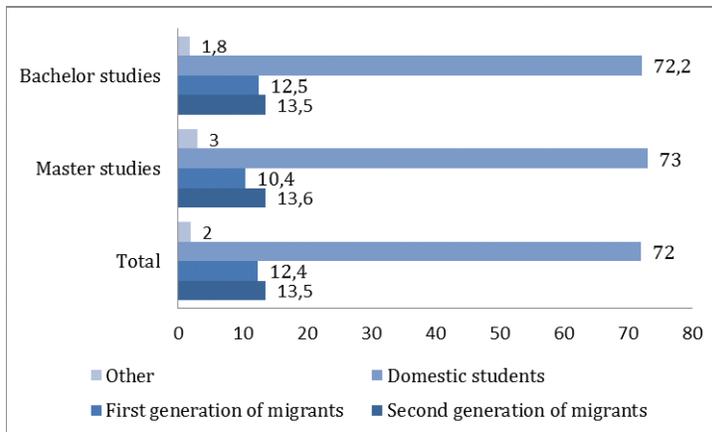
The data on the age structure of students corresponds to the data obtained through the CONGRAD survey showing that the time of study has significantly decreased after the Bologna reform, thus achieving one of the goals of the systemic changes in higher education. When comparing the age structure of students in master and bachelor studies, there is a trend of a relatively successful mobility towards master studies based on student age (Lažetić et al, 2014). This is particularly important in the situations when the higher education situation is observed through the prism of assessing the success of the Bologna reforms and in situations where student support needs to be adapted to their age, because the living circumstances of students can significantly differ depending on their age.

**Figure 5: Age of students in Serbia by level of study (in %)**



From the Figure 6 below we can see that the most of the students in higher education institutions in Serbia were born in the same country as their parents (72%). The percentage of students whose parents were not born in the student's country of study which is student's country of birth, (second generation of migrants) is slightly higher than the first generation of migrants, where the students were not born in the country of study. This could seemingly indicate a constant trend of moving towards university centre cities (Belgrade and Novi Sad), but also towards higher education institutions in Serbia in general. This data is important to enable creating additional support measures for those students. However, it is important to note that the first and even the second generation of migrant students could be students from the former Yugoslav territory, since the EUROSTUDENT survey regards migration through the birthplace of parents and students according to the currently existing state borders.

**Figure 6: Migrant students by level of study (in %)**



Regarding the origin of students, to improve directing the planned measures towards the target groups, the next cycle of the EUROSTUDENT survey needs to separate students considered as migrants (although this does not impact their social status, because they moved to Serbia in waves of labour or other migrations during the existence of former Yugoslavia) from students whose families are refugees or were internally displaced from the territory of former Yugoslavia which can significantly affect their socio-economic status, and thereby many other aspects of student life. Although the proposed way of research of students origin cannot be applied in most of the EUROSTUDENT countries, in case of the former Yugoslav states this would be necessary in order to provide a realistic insight into the situation and to increase the comparability with other countries participating in the survey.

### 3.2. Basic Socio-Economic Characteristics of Students in Serbia

The basic socio-economic characteristics of students in Serbia are presented in the following table (Table 1). They are based on the indicators such as parental education, kind of parental occupation, family situation of the student, etc. The data presented provides insight into a general overview of the student population in Serbia. It can be seen that there is a large percentage of students in Serbia whose mothers and/or fathers do not have tertiary education (this percentage is large even when the percentage of parents with tertiary education is looked at by level of student studies), whose parents are workers without tertiary education compared to the total number of manual workers and the percentage of students assessing their parents to be in the lower half of the scale regarding their social status.

**Table 1: Basic socio-economic characteristics of students in Serbia (in %)<sup>3</sup>**

Question	Result for Serbia
Students whose fathers do not have tertiary education	69.9
Students whose mothers do not have tertiary education	69.1
Students whose fathers are manual workers	30.2
Students whose mothers are manual workers	11.6
Students with children	4.2
Female students in bachelor studies	50.3
Female students in master studies	55.1
Students whose parents are workers without tertiary education compared to the total number of manual workers	88.6
Students in bachelor studies whose parents do not have tertiary education	51.6
Students in master studies whose parents do not have tertiary education <sup>4</sup>	66.3
Students assessing their parents to be in the lower half of the scale regarding their social status (mark 5 or below on a scale of 1 to 10)	32.3
Students whose parents have a low social status (1–5 on a scale of 1 to 10) and no tertiary education compared to other students	22.1
Students in bachelor studies with a lower social status	31.8
Students in master studies with a lower social status	31.5

Table 2 shows the distribution of students by level of study according to the highest level of their parents' educational attainment. The focus is on the characteristics of parents, i.e. the indicators that should point to the groups with unequal status regarding access to higher education. We can note that most of the students' parents in the sample in Serbia have completed secondary school. The situation is the same regarding the distribution of parental education by level of study of the students.

<sup>3</sup> Whenever the parents are mentioned, it refers to either of the two parents

<sup>4</sup> A percentage higher than Serbia is only in Italy, Poland and Portugal.

**Table 2: Ratio of the level of studies of the students and the highest educational attainment of students' parents (in %)**

Highest educational attainment of students' parents	What level of study are you currently at?			
	Bachelor studies	Master studies	Other <sup>5</sup>	Total
Primary school	0.5	9.2	0.0	1.9
Secondary school	51.1	57.1	86.2	53.4
Higher education	40.3	29.0	13.2	37.4
Master studies	5.9	2.2	0.7	5.1
Doctoral studies	2.0	2.5	0.0	2.0
I do not know	0.2	0.0	0.0	0.2

Comparing the employment structure of the students' parents and the employment structure of the entire population of the country, focusing on employed parents in low-qualification occupations and with low personal income, we can conclude that students with less educated and poorer parents have smaller chances to access a higher education system. Likewise, data from this survey (shown in Table 3), indicates that the employment structure of the students' parents differs from the population of Serbia according to the 2011 Census (SORS, 2013). Namely, students whose parents hold simpler jobs (i.e. in crafts, agriculture, services or trade) are less represented in the student body, meaning they have significantly lower chances to access higher education. The situation is similar in other Eastern-European countries participating in the EUROSTUDENT survey.

**Table 3: Distribution of students' parents by type of current or last occupation (in %)<sup>6</sup>**

Occupation	Current or last occupation of father	Current or last occupation of mother	Population according to 2011 Census	Percentage of population according to 2011 Census
Manager (executive), senior official or law officer	15.1	6.2	57172	2.5
Expert or artist	11.9	17.6	340703	14.8
Engineer, associate professional or technician	15.3	10.2	372300	16.2
Clerk or administration worker	9.8	23.9	168188	7.3
Service or sales worker	8.1	15.3	372058	16.1
Skilled agricultural, forestry, fishery or similar worker	7.7	3.1	271195	11.8
Craft or related trades worker	11.4	4.3	312667	13.6
Plant and machine operator, assembler or driver	9.8	0.8	190643	8.3
Simple occupations	1.3	3.4	182954	7.9

5 Integrated academic studies, vocational studies, doctoral studies, pre-Bologna study programme.

6 The data under columns 3 and 4 is from the 2011 Census (SORS, 2013)

Occupation	Current or last occupation of father	Current or last occupation of mother	Population according to 2011 Census	Percentage of population according to 2011 Census
Defence forces	4.3	0.2	19876	0.9
I do not know	3.3	2.9	16872	0.7
Was not active in the labour market	2.0	12.1	/	/
Total	100	100	2304628	100

The percentage of the surveyed students' parents who are employed in manual jobs in Serbia is 30.2% of fathers, and mothers 11.6% (3.1+4.3+0.8+3.4). Comparing these results with the countries selected from the EUROSTUDENT V survey (Croatia, Austria and Slovakia), in Croatia these percentages are 35.4% and 22.9%, in Slovakia 42.6% and 19.4%, while data for Austria is unavailable.

Table 4 shows the distribution of students' parents according to occupation and level of education for manual jobs (agricultural, forestry, fishery or similar worker, craft or related worker, plant and machine operator, assembler or driver and simpler occupations (e.g. cleaner, agricultural worker on another person's property, sanitation worker). The percentage of manual workers without tertiary education among the total number of manual workers is 88.6%. In Croatia it is 87.2%, in Slovakia 96.9%, while data for Austria is not available.

**Table 4: Ratio of parental education level and current/last occupation of parent (%)**

Parents engaged in manual occupations	Highest level of parental education					
	Primary school	Secondary school	Higher education	Master studies	Doctoral studies	I do not know
Skilled agricultural, forestry, fishery or related worker <sup>7</sup>	12.9	73.2	13.4	0.0	0.0	0.5
Craft or related trades worker	6.4	81.7	10.5	0.0	1.4	0.0
Plant and machine operator, assembler or driver	3.7	87.0	8.3	0.9	0.0	0.0
Simple occupations	22.9	72.9	4.2	0.0	0.0	0.0
Percentage of manual workers with a certain level of education among the total number of manual workers	9.5	79.1	10.5	0.2	0.5	0.2

Regarding the population of Serbia according to the 2011 Census (Table 5 and Table 6), the percentage of adult population (15 years of age and above) with the highest level of education being primary education is 34.6%, secondary school 49.1% and higher education 16.3% (SORS, 2013), while among the student population 40.3% of the students are from families in which parents

<sup>7</sup> The related occupations include, e.g. fish farmer, subsistence farmer, market-oriented farmer, hunter, etc.

have higher education (at least 1 parent has completed study programme at university or not-university HEI). The data source for both tables is SORS.

This data indicate that there is unequal representation of different social groups in a higher education in Serbia, and that parents with a low educational level are hardly able to provide for their children tertiary education. However, we should keep in mind that, in this case, the different things were compared – the percentage of the population with higher education and the number of families where at least one parent has a university degree.

**Table 5: Population distribution according to data from the 2011 Census**

Education level	Population	Percentage
No formal education	164884	2.7
Incomplete primary education	677499	11.0
Primary education	1279116	20.8
Secondary education	3015092	48.9
Post-secondary education	348335	5.7
Higher Education	652234	10.6
Unknown	24424	0.4
Total	6161584	100

**Table 6: Reduced distribution of population according to data from the 2011 Census<sup>8</sup>**

Level of education	Population	Percentage
Up to primary school	2121499	34.6
Secondary school	3015092	49.1
Post-secondary and higher education	1000569	16.3
Total	6137160	100

Due to better insight into the situation in Serbia regarding parental education in this country compared to other countries, our data can be compared with the data from Austria where, for students in bachelor studies, the percentage of parents with primary education is 5.2%, secondary education 61.6% and tertiary education 33.2%. In Croatia, these percentages are 2.4%, 50.6% and 47%. In Slovakia, the percentage of students' parents with primary education is 0.5%, with secondary 59.5% and with higher education 40%.

Figure 7 complements the above analysis regarding the level of educational attainment of students' parent by students' gender. A uniformity of indicators by gender is noted.

<sup>8</sup> The table is reduced since it excludes those respondents for whom the education level is not known and contains reduced overview of the level of education.

**Figure 7: Highest educational attainment of students' parents by students' gender (in %)**

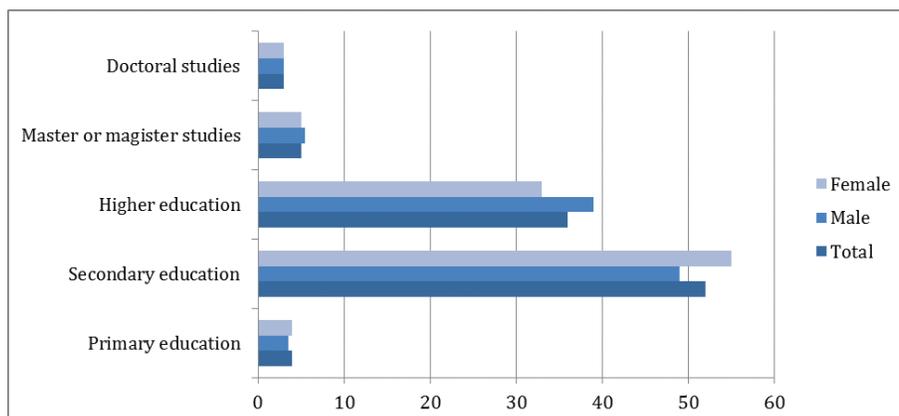


Table 7 represents an overview of the perception of students regarding the social status of their parents. This is done in an attempt to assess the socio-economic status of students in a more comprehensive way, not just through the parents' educational and occupation structure. A simple comparison of the proportion of students at the bottom parts of the scale provides information on their perception of their own social status which is a very broad conceptual framework for self-evaluation. Based on the data obtained, we may conclude that 33.7% of the students assess that their parents are at the lower half of the social status scale (mark 6 and below). Comparing the same proportion by gender, we see that female students assess their parents' social status of as lower (32.8%) compared to male students (31.5%). Based on comparisons with the results of the EUROSTUDENT V survey from other countries – Croatia, Austria and Slovakia, in Croatia this percentage is 54.2%, in Austria 20.1% and in Slovakia 33.8%.

**Table 7: Students' perceptions of their parents' social status by gender of students (in %)**

Level of social status	Women	Men
10 High social status	5.9	5.7
9	6.7	7.3
8	18	13.2
7	20.4	21.8
6	14.8	15.7
5	22.1	19.6
4	6.7	7
3	3.2	4.3
2	1.1	0.9
1 Low social status	1.1	1.4
Total	100	100

Table 8 shows the perception of social status depending on the educational attainment of students' parents. This ties the subjective assessment of the social standing to one of the relatively reliable indicators for the very same status.

**Table 8: Students' perceptions of social status by educational attainment of students' parents (in %)**

Level of social status	Total	Primary school	Secondary school	Faculty	Doctorate
10 High social status	5.8	2.9	4.4	5.8	25.7
9	7	2.9	3.3	10.7	9.5
8	17.2	8.8	15.5	19.8	17.6
7	21.1	8.8	19.8	23.4	33.7
6	15.2	23.8	15.9	14.9	6.7
5	20.9	27.9	25.5	16.1	0
4	6.8	5.9	8.4	5	5.4
3	3.7	13.2	4.7	2.5	0
2	1	2.9	1	0.8	1.4
1 Low social status	1.3	2.9	1.5	1	0
Total	100	100	100	100	100

The data shows that the students' perception of the social status is correlated with the level of their parents' education. Considerably less students whose parents have completed primary school perceive themselves as having a high social status than students whose parent holds a doctoral degree. This is most probably linked with the real family income and an objective quality of life. The following table (Table 9) presents the combination of students' perception of the social status of their parents and the three levels of studies. These are the responses to the question whether there are significant differences between different levels of studies and student structure by social status.

The results indicate that the percentage of students in bachelor studies with a higher social status (marks 6–10) is 66.6%, and with lower social status 33.4%. Within the category of master students, these percentages are 67.2% and 32.8%, while in the group of students in non-university HEIs the percentages are 56.1% and 43.9%. We may thus conclude that there is no difference in the perception of social status between students in bachelor and master studies, but there is a certain difference regarding students in other forms of study where the social status is somewhat lower.

Having in mind how much socio-economic status impacts student attainment, as measured by international studies on student attainment such as PISA, and the conditionality of enrolment of students with lower socio-economic status in secondary vocational schools (Pavlović-Babić and Baucal, 2009), these findings contribute to the conclusion that enrolment in higher education is also conditioned by the students' socio-economic status.

Regarding other countries from the EUROSTAT V survey, Croatia has 24.6% students with a self-assessed higher social status (7 and more) and 75.4% with lower (6 and less), while in master studies these percentages are 29.5% and 70.5%. In Austria, there are 15.7% students in bachelor studies with higher social status, 84.3% with lower status, while the percentages in master studies are 62.3% and 37.7%, representing a very significant change in the perception of socio-economic status between the two levels of study. In Slovakia, in bachelor studies, 35.5% of the students perceive their socio-economic status as high, while in master studies this percentage is 34.6 %.

**Table 9: Students' perceptions of social status of parents by level of students' studies (in %)**

Level of social status	Bachelor studies	Master studies	Other	All students
10 High social status	6.1	4.9	3.3	5.8
9	7.5	5.9	1.3	7
8	17.8	15.7	11.1	17.2
7	20.6	23.7	20.8	21.1
6	14.6	17	19.6	15.2
5	21.7	16.7	21.6	20.9
4	6.4	7.8	11.8	6.8
3	3.1	6.6	5.9	3.7
2	1.0	0.7	1.3	1
1 Low social status	1.2	1.0	3.3	1.3
Total	100	100	100	100

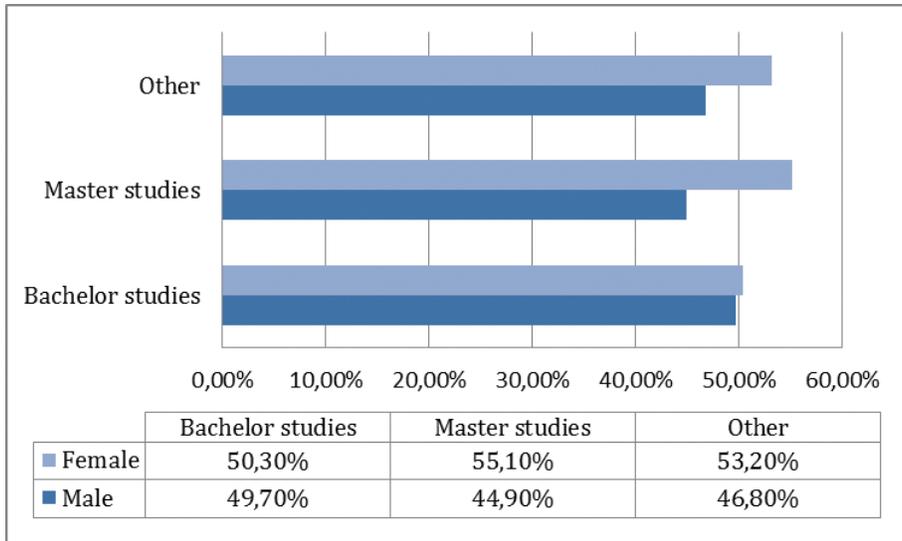
At the European level, the proportion of male and female students is not equal, neither from the aspect of study programmes, nor the aspect of other important characteristics, as shown by the fourth and fifth cycle of the EUROSTUDENT survey.<sup>9</sup> The gender profile of the student population is changing over time and the share of female students is increasing.

The percentage of students by gender in Serbia is also unequally distributed. Figure 8 shows that the percentage of female students is higher, and while this difference in primary studies is among the lowest in Europe, at the level of master studies it increases in favour of female students. According to the 2011 Census, among the overall population there are 51.31% females and 48.69% males, while among 20 to 24 age population this proportion is 48.8% females to 51.2% males (SORS,2012), i.e. the exact reverse of the student population. Looking at the results of the EUROSTUDENT V survey which other countries used for the comparative analysis, the percentage of female students is increasing with the higher levels of study, except in Austria. In Croatia, the percentage of female students in bachelor studies is 55.5%, in master studies 57.2%. In Austria, the percentage of female

<sup>9</sup> <http://www.EUROSTUDENT.eu/results/reports>

students in bachelor studies is 53% and in master studies 47.2%, while in Slovakia the percentage in bachelor studies is 58.1 % and in master studies 60%.

**Figure 8: Distribution of students by gender and level of studies**



The data below represent the highest level of education attained by the students' parents. In international comparisons, the attained educational level of students' parents is frequently viewed as an indicator of the effects of socio-cultural and economic factors on access to higher education. Although not entirely precise, it can enable relatively reliable international comparisons using the International Standard Classification of Education (ISCED)<sup>10</sup>. The focus is, actually on the students coming from families with a lower educational attainment of their parents in which these students are very often the first family members entering higher education.

We can see that the highest percentage belong to the students whose parents have completed at least secondary schools (62.2% of fathers and 58.8% of mothers) and higher education (29.4% of fathers and 29.2% of mothers). Regarding the 2011 Census of the Republic of Serbia, the percentage of the adult population (age 15 and over) with education up to the completed primary school is 34.43%, 48.93% of the population have secondary school, and only 16.24% of the population have post-secondary or higher education.

Overview of data related to the current level of the students' studies in relation to social status of parents expressed by the highest level of educational attainment of students' parents, shows us another angle of the way in which the inequalities in social status are reflected. Namely, the highest number of students of non-university HEIs comes from families where neither parent has higher education.

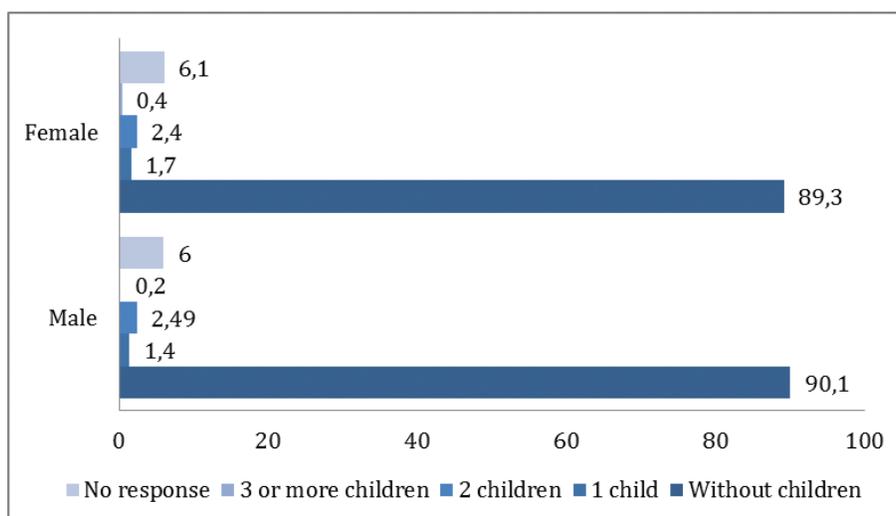
<sup>10</sup> <http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx>

**Table 10: Distribution of students by level of study and educational attainment of students' parents (in %)**

Level of parental education	Level of study			Total
	Bachelor studies	Master studies	Non-university HEIs	
Primary school	21.4	78.6	0.0	100
Secondary school	76.6	16.9	6.5	100
Higher education	86.3	12.3	1.4	100
Master studies	92.7	6.8	0.5	100
Doctoral studies	80.3	19.7	0.0	100
I do not know	80.2	15.8	4.0	100

In certain situations students have to distribute their resources, i.e. their time and money, between themselves and their children. This produces additional burden for students, leaving them in a subsidiary situation compared to students without children. The important factor is not just having the children, but also their age which significantly affects the distribution of resources.

Figure 9 shows the percentage of parents among students of different genders and the number of children they have. The total number of students with children is 4.2%. Regarding other countries, this percentage in Croatia is 3.3%, in Austria 8.9% and in Slovakia 7.1%. In Serbia, student parents are in a significantly more disadvantaged situation than student parents in most of the countries covered by the EUROSTUDENT survey because Serbia is among those countries that do not have organized childcare programmes within HEIs and student dormitories. The HEIs in Serbia also do not provide possibilities for such students to attend the lectures and fulfil other obligations in a way adjusted to their situation.

**Figure 9: Distribution of students with children by gender and number of children (in %)**

Comparing students by number of children in relation to degree of their satisfaction with their obligations during studies (Table 11), the conclusion is that student parents are less satisfied than other students.

**Table 11: Distribution of students by degree of satisfaction with obligations during studies by parental status, i.e. number of children (in %)**

Satisfaction with obligations	No children	1 child	2 children	3 or more children	Students overall
Satisfied	28.0	20.0	25.6	24.0	27.9
Moderately satisfied	41.2	40.0	53.7	40.8	41.7
Unsatisfied	30.8	40.0	20.7	35.2	30.4
Total	100	100	100	100	100

Regarding students who are parents and considering the financial difficulties they experience (Table 12), compared to other students, a significant difference is noted regarding parents with two and three children. The conclusion is that in most cases the threshold for facing serious financial difficulties is the arrival of the second child.

**Table 12: Distribution of students by the level of financial difficulties by parental status, i.e. number of children (in %)**

Level of difficulties	No children	1 child	2 children	3 or more children	Students overall
I have very serious financial difficulties	9.7	3.7	18.3	0.0	9.9
I have serious financial difficulties	21.6	5.6	17.0	16.7	21.0
I have moderate financial difficulties	40.9	35.2	43.2	66.7	41.0
I don't have financial difficulties	18.3	33.3	17.0	0.0	18.6
I don't have any financial difficulties	9.5	22.2	4.5	16.6	9.5
Total	100	100	100	100	100

The students' responses to the question with who they live during studies show that most students in Serbia live with their parents (52.5%), while a significantly smaller number of students live independently (14.8%). The smallest percentage of students is in the group of students who live with their partner (and children, if any) (7.6%). Likewise, a significant share of the

students report living with other persons (25.1%), including room-mates in student dormitories or in rented housing.

### 3.3. Students with Impairments

Regarding the number of students with impairments and aspects of their student life, the distribution of students with impairments according to the type of health problem is shown in the following table. The data shows that the percentage of students with impairments in the overall population is 6.7%. The most numerous among them are students with health problems. These are the students without chronic diseases, mental health problems or mobility difficulties. At the second place with 1.5% are the students with chronic diseases.

**Table 13: Distribution of students by type of health problem compared to the entire student population**

Type of health problem	Percentage of total number of students
Chronic disease	1.5
Mental health problems	0.5
Mobility difficulties	0.2
Other health problems	4.5
Total number of students with some type of impairment, chronic health problems or functional impairments	6.7

According to the results of the EUROSTUDENT V survey concerning students having some type of impairment, chronic health problem or functional limitation, in Croatia there are 14.1% of students with such problems, in Austria 14.5%, while in Slovakia this is the case with 22.1% of students. However, it is not possible to compare different countries regarding the number of students with certain kind of health problem, because different countries have different traditions in defining and categorizing health problems which qualify for the additional support from the state.

Table 14 shows the distribution of students according to a type of impairment, health problem or functional limitation, i.e. the percentage of students with certain impairment among the total number of students with impairments. A significant percentage of students with chronic diseases and sensory impairments is noted.

**Table 14: Distribution of students by type of impairment, chronic health problem or functional limitation compared to the overall student population (in %)**

Type of impairment, chronic health problem or functional limitation	Compared to the total number of students with impairments	Compared to the total number of students
Chronic disease	22.4	1.5
Mental health problems	7.7	0.5
Mobility difficulties	3.1	0.2
Sensory impairment (e.g. vision or hearing problems)	45.2	3.1
Learning problem (e.g. ADHD, dyslexia)	3.5	0.2
Other chronic health problems	18.1	1.2
Total	100.0	6.7

Table 15 provides insight into the perception of students' with different impairments of the severity of obstacles they face during studies due to their impairments.

Approximately one quarter of students with some impairment see their impairment as a large obstacle for studying. Such data should be interpreted carefully (bearing in mind that only a smaller number of students see their impairment as a large obstacle) because of the possibility that a large number of those with serious impairments have not even begun their studies due to the lack of adequate conditions while the students in the sample receive support for their studies in various ways and from various sides. Regarding students in other countries, for most countries the percentage of students perceiving their impairment as a large obstacle for studies is around 30% (Spain, Finland, France, etc.) In Croatia the percentage is 45.6%, in Slovakia 35%.

**Table 15: Student perception of the impairment-caused level of obstacle for studies**

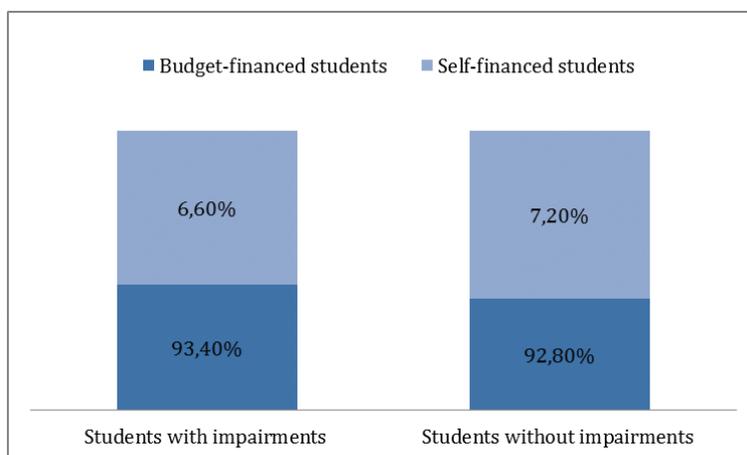
Level of obstacle	Number of students	Percentage
Small or no obstacle	132	52
Medium obstacle	64	25
Large obstacle	60	23

Table 16 shows the extent in which students perceive their impairment, chronic health problem or functional limitation as obstacles. Thus, looking at the results per type of impairment compared to the level of obstacle caused by the impairment, the situation is different, and we may conclude that the system of support for students with impairments is still underdeveloped.

**Table 16: Type of student health problem compared to the level of obstacle the problem presents to them (in %)**

Type of health problem	Large obstacle	Medium obstacle	Small or no obstacle	Total
Chronic disease	21	24	55	100
Mental health problems	50	35	15	100
Mobility difficulties	38	50	13	100
Sensory impairment (e.g. vision or hearing problems)	22	30	48	100
Learning problem (e.g. ADHD, dyslexia)	33	23	44	100
Other chronic health problems	19	29	52	100

Considering the distribution of students with some form of impairment by status (budget financing or self-financing) (Figure 10), their percentage coincides with the share of students without impairments. In other words, over 93.4% of students with impairments study under the status of budget students, while in the sample of students without impairments the percentage is 92.80%, compared to 6.6% of self-financing students with impairments and 7.2% of students without impairments.

**Figure 10: Distribution of students with impairments regarding status of studies**

According to the results of the 2011 Census, the percentage of persons with impairments among the overall population in the Republic of Serbia is 7.96%, while the percentage of students with some form of impairment among the overall student body is only about a percent lower and amounts to 6.8% (SORS, 2013). By gender, the percentage of female students among the student

population with some form of impairment is 59.8%, while for male students it is 40.2%, approximating the statistical data regarding the overall population of Serbia and the percentage of persons with impairments (women 58.2%, men 41.8%).

The data in the following table could indicate the poor status of students with impairments in Serbia, because it shows that most of the students having some form of impairment believe that institutional support during studies is low (78%). The students with chronic health problems face least obstacles during studies, while the largest obstacles have students with mental health and mobility problems.

Data also indicates a disturbing situation regarding the institutional support to all persons with impairments (regardless of the type of impairment), because the vast majority of all students conclude that the institutional support is low.

**Table 17: Type of health problem of students compared to the institutional support they receive during studies (in %)**

Type of health problem	Support not needed/ requested	Low support	Moderate support	High support	Total
Total number of students with impairments in relation to the support they receive during studies	15	78	2	5	100
Chronic disease	11	80	0	9	100
Mental health problems	5	90	5	0	100
Mobility difficulties	12	88	0	0	100
Sensory impairment (e.g. vision or hearing problems)	8	79	3	10	100
Learning problem (e.g. ADHD, dyslexia)	0	86	0	14	100
Other chronic health problems	29	71	0	0	100

It should be underlined that an additional analysis of the data gives ground to the conclusion that students with significant health problems apply for advice and support to various institutions and institutes, including higher education ones, much more than their colleagues without such problems.

Regarding decision to continue studies to obtain higher academic degree among students from this group, and comparing students with some form of impairment with students without chronic health problems or impairments, no significant difference is noted between the two groups. However, the group with health problems and impairments continues their studies later, i.e. they need more time to continue their studies.

**Table 18: Student plans to continue studies after completing the current study programme (in %)**

Response	With chronic health problems or impairments	Without chronic health problems or impairments
Yes, within one year after completing the study program I currently attend	35.7	39.0
Yes, but within a period longer than one year after completing the study program I currently attend	24.8	13.5
No, I do not plan to continue my studies	10.6	11.2
I still do not know	28.9	35.5
No response	0.0	0.8
Total	100	100

A similar conclusion may be drawn from the data in the following table, which show whether students wish to continue their studies, and at what level they wish to continue.

**Table 19: Plans to continue studies (in %)**

Plan to continue studies	With chronic health problems or impairments	Without chronic health problems or impairments
No response	0.8	2.5
I do not wish to continue	39.2	46.6
Bachelor studies	4.9	2.6
Master academic studies	32.8	33.3
Doctoral studies	8.5	7.0
Other programmes	8.1	4.9
I still do not know	5.7	2.9
Total	100	100

It is worth considering how many the students with chronic health problems or impairments are satisfied with the organization of studies and schedule of lectures compared to other students (Table 20). Based on the data shown, the percentage of those unsatisfied among the group with health problems is notably nearly double, indicating that the higher education institutions have not invested sufficient efforts to provide students having certain health impairments with a satisfying level of organization of studies and lectures. Likewise, based on the data from Table 21, we may conclude that the students with chronic health problems or impairments are more unsatisfied with the way the administration in higher education institutions treats them.

**Table 20: Satisfaction with the organization of studies and schedule of lectures (in %)**

Satisfaction level	With chronic health problems or impairments	Without chronic health problems or impairments
Satisfied	48.3	55.1
Moderately satisfied	19.6	27.7
Unsatisfied	32.1	17.2
Total	100	100

**Table 21: Satisfaction with treatment of students by administration staff (in %)**

Satisfaction level	With chronic health problems or impairments	Without chronic health problems or impairments
Satisfied	50.4	57.6
Moderately satisfied	22.3	22.8
Unsatisfied	27.3	19.6
Total	100	100

Regarding the treatment of students by teaching staff, students with chronic health problems or impairments have a more critical attitude, but it does not differ much compared to other students (Table 22). The majority of students is satisfied with their treatment by the teaching staff.

**Table 22: Satisfaction with treatment of students by teaching staff (in %)**

Satisfaction level	With chronic health problems or impairments	Without chronic health problems or impairments
Satisfied	70.8	73.3
Moderately satisfied	19.7	20.4
Unsatisfied	9.5	6.3
Total	100	100

Regarding satisfaction with the higher education institutions infrastructure and the quality of equipment, the students are mostly satisfied with them, regardless of whether they have health problems or impairments or not, although it would be expected that the higher education institutions infrastructure and equipment would affect the studies of students with impairments (Table 23).

**Table 23: Satisfaction with faculty equipment (library, computers, building, classrooms) (in %)**

Satisfaction level	With chronic health problems or impairments	Without chronic health problems or impairments
Satisfied	62.8	66.5
Moderately satisfied	20.7	20.7
Unsatisfied	16.5	12.8
Total	100	100

Regarding financial difficulties, data from the following table show that both groups of students, regardless of being impaired or not, experience financial difficulties. However, these difficulties are more experienced by the students with chronic health problems or impairments.

**Table 24: Assessment of financial difficulties (in %)**

Degree of financial difficulties	With chronic health problems or impairments	Without chronic health problems or impairments
I have very severe financial difficulties	13.7	9.5
I have severe financial difficulties	23.6	20.9
I have moderate financial difficulties	40.4	41.4
I don't have financial difficulties	12.0	19.1
I don't have any financial difficulties	10.3	9.2
Total	100	100

## 4. Education Prior to Studies and Transition to Higher Education

When researching the social dimension of higher education, it is important to analyse all relevant information on the students' prior education, to be able to derive conclusions on whether the accessibility of higher education or the intensity of studies depends on the students' prior education, and, *inter alia*, whether some fields of study are preferred by students differing by the type of the completed secondary education. Likewise, it is important to determine whether there are any systemic differences between students coming from families with different educational and socio-economic status in the context of studies and previous education.

Among the students covered by the EUROSTUDENT V survey in Serbia who have responded to this question, 57.7% (N=2117) come from vocational secondary schools, while 42.3% (N=1552) come from gymnasiums. Having in mind that 24.8% of the overall secondary school population is gymnasium students (SORS, 2014a), it may be concluded that gymnasium students enrol in faculties to a greater extent. However, this data indicating that higher education in Serbia is also very accessible to the students from vocational secondary schools.

Important information regarding an educational system are provided by the data on its equity, i.e. to what extent the educational system is able to provide equal conditions for education to all citizens. Data on a system equity, also, speaks about the vertical mobility within a society. In this survey, parental education and occupation are taken as indicators of the socio-economic status of students, and we have examined their influence on the various aspects of studies, such as delayed enrolment, the intensity of study, student employment during studies.

Data on educational attainment of students' parents and their occupation for students from Serbian sample indicates that the students with parents who do not have higher education, and students with parents employed in manual jobs mostly attended vocational secondary education programmes.

Regarding educational attainment of students' parents, we see that students from families where at least one parent has higher education degree tend more towards enrolling in gymnasiums, while students from families where neither parent has higher education degree tend more towards attending vocational secondary schools (Table 25).

**Table 25: Previous education of students and educational attainment of students' parents (in %)**

Previous education	Total	Without higher education (ISCED 0–4)	With higher education (ISCED 5–8)
Vocational secondary school	42.3	61.9	52.5
Gymnasium	57.7	38.1	47.5
Total	100	100	100

Students from families where both parents have manual occupations attended vocational secondary schools to a greater extent, and this difference is statistically significant (Table 26). In other words, the data on parental education and occupation indicates that more students with a lower socio-economic status attended vocational secondary schools.

**Table 26: Previous education of students and parental occupation (in %)**

Previous education	Non-manual occupations (ISCO <sup>11</sup> 1-5)	Manual occupations (ISCO 5-9)
Vocational secondary school	56.1	66.9
Gymnasium	43.9	33.1
Total	100	100

This data is fully in line with the data collected through the *PISA* surveys, the analysis of which confirmed the correlation between the indicators of socio-economic status and the choice of secondary school for pupils in Serbia. In other words, this data allows the conclusion that, in Serbia, the socio-economic status of students has a secondary effect and that students with the same educational attainments, but different socio-economic status, do not have the same prospect of enrolling in gymnasiums. The students with a lower socio-economic status enrol more frequently in programmes offered by vocational secondary schools (Čekić Marković and Jokić, 2015). Likewise, all of these findings are in accordance with the opinions of certain authors claiming that the educational systems are not only “immune” to social stratification and do not contribute to social mobility, but can also become a tool for social stratification and thus actively contribute to it (Bourdieu & Passeron, 1977/1990).

The data also shows that the students from vocational secondary schools enrol in non-university HEIs more than students from gymnasiums and this difference is considerable (Table 27).

**Table 27: Previous education of students and type of higher education institution they attend (in %)**

Previous education	University HEIs	Non-university HEIs
Vocational secondary school	55.2	76.5
Gymnasium	44.8	23.5
Total	100	100

11 ISCO is the abbreviation of International Standard Classification of Occupation, and non-manual occupations include managers, experts, technicians, clerks and service and trade workers, while manual occupations include qualified agricultural workers, fisheries and forestry workers, crafts and similar workers, factory workers, machine operators and assemblers, and elementary occupations; see <http://www.ilo.org/public/english/bureau/stat/isco/isco08/>

Regarding the time which students who have completed secondary vocational education and gymnasiums spend on completing study obligations per week, there are no statistically significant differences ( $p>0.05$ ) between students with completed vocational secondary schools and those with completed gymnasiums. In other words, we may conclude that students' pre-university education does not influence the intensity of their studies (Table 28).

**Table 28: Previous education of students and intensity of studies (in %)**

Previous education	Low intensity of studies <sup>12</sup>	Medium intensity of studies	High intensity of studies
Vocational secondary school	60.4	56.5	57.3
Gymnasium	39.6	43.5	42.7
Total	100	100	100

Students with completed vocational secondary schools finance their living expenses and education by earnings they make by working significantly more, and use public sources of income as the dominant source of income much more than the students who have completed gymnasiums (Table 29). The fact that students who attended vocational secondary schools make greater use of their earnings from work as the dominant source of income, along with the previously noted data that more of them have a lower socio-economic status (measured by parental education and occupation) suggests that their position is such that they have to work to finance their education. (Student employment during studies will be presented in more detail in the sixth chapter of the report).

**Table 29: Previous education of students and dominant source of income (in %)**

Previous education	Family as the dominant source of income <sup>13</sup>	Own income from work as the dominant source of income	Public source of income as the dominant source of income	Other sources of income <sup>14</sup>
Vocational secondary school	56.5	72.2	69.4	64.4
Gymnasium	43.5	27.8	30.6	35.6
Total	100	100	100	100

12 Low intensity of studies means that students dedicate under 20 hours per week for study obligations, medium intensity of studies is for students dedicating between 20 and 40 hours per week for study obligations, while high intensity of studies means dedicating over 40 hours per week to completing study obligations.

13 Dominant source of income means that the given source provides 50% or more of the total monthly income of the student.

14 Other sources of income include pensions, child support, private sources of financing, but also students without any of the dominant sources of income from the above categories.

The comparison of the ratio of students with completed vocational secondary schools and those with completed gymnasiums by their current enrolment in higher education institutions of different fields of study has shown statistically significant differences (Table 30). The fields of education, humanities and arts, (natural) sciences and engineering, manufacture and construction have a larger number of students with completed vocational secondary schools. The situation in the remaining fields is rather balanced. This situation is expected in the field of engineering, manufacture and construction, because there are numerous vocational schools in Serbia educating students in exactly these fields, but for the other fields a detailed analysis should certainly be implemented. Of course, this analysis should take into account the fact that among the overall secondary school population, 75.2% pupils attend secondary vocational schools (SORS, 2014).

**Table 30: Field of studies depending on secondary education (in %)**

Field of studies	Vocational secondary school	Gymnasium	Total
Education	64.9	35.1	100
Humanities and arts	64.2	35.8	100
Social sciences, law and business	52.5	47.5	100
(Natural) sciences, mathematics and informatics	62.2	37.8	100
Engineering, manufacture and construction	65.4	34.6	100
Agriculture and veterinary medicine	57.1	42.9	100
Medicine and related fields	50.9	49.1	100
Services	57.9	42.1	100

Having in mind that in the EUROSTUDENT V sample of students from Serbia, there are 57.7% students coming from vocational secondary schools, and 42.3% of students from gymnasiums, we can conclude from the data above that vocational secondary school students enrol more frequently in higher education institutions with study programmes in education, humanities, engineering, manufacture and construction, and less frequently in the higher education institutions with study programmes in medicine and related fields, social sciences, and law and business.

#### 4.1. International Students

In this survey, the international students are the ones who have completed their previous level of education in a country other than the Republic of Serbia. The data on international students is important in order to identify students attracted by higher education institutions in Serbia. This data could influence the formulation of recommendations for strengthening incoming mobility by increasing the attractiveness of higher education institutions in Serbia to the secondary school students from other countries.

Data obtained by this survey shows that among the total number of students, 92.9% have completed secondary schools in Serbia. Among those who have completed secondary schools outside Serbia, and stated the country in which they have completed secondary school (n=221), the majority are students who have completed secondary school in the former Yugoslavia countries – 93.6%. Of this number, 64.2% of the total number of international students have completed secondary schools in B&H, 17.2% in Montenegro, 6.3% in Croatia, 3.6% in Slovenia and 2.3% in Macedonia. This data indicates that higher education institutions in Serbia are most attractive to the students from the former Yugoslavia countries. There is a very small number of students coming from other countries (USA, Germany and Hungary 4 students each, from Canada 2 and from Holland 1 student). The data indicates that higher education institutions are attractive to students without language barrier, and, in the context of increasing mobility towards Serbia, the activities should be primarily aimed at increasing the number, quality and recognisability of study programmes offered in English and other languages.

Regarding the characteristics of international students, slightly more of them have parents with higher education, and more of them are enrolled in non-university HEIs (Table 31).

**Table 31: International students by educational attainment of their parents and type of HEI (in %)**

Type of student	Parent education		Type of higher education institution	
	Without higher education (ISCED 0–4)	With higher education (ISCED 5–8)	Non-university HEIs	University HEIs
Students from Serbia	94	92	90.2	93.3
International Students	6	8	9.8	6.7
Total	100	100	100	100

The number of international students additionally varies in regards of the field of the study programme. The most attractive study programmes for international students are programmes in the field of humanities and arts, services, medicine and related fields (Table 32).

**Table 32: International students by field of studies (in %)**

Field of studies	Students from Serbia	International Students	Total
Education	98	2	100
Humanities and arts	87.7	12.3	100
Social sciences, law and business	93.3	6.7	100
(Natural) sciences, mathematics and informatics	94.7	5.3	100
Engineering, manufacture and construction	94.2	5.8	100
Agriculture and veterinary medicine	96.3	3.7	100
Medicine and related fields	91.4	8.6	100
Services	90.7	9.3	100

It is important to note that the data obtained indicates that international students and students from Serbia do not differ by intensity of study, and that there is no significant statistical difference regarding the dominant source of income used to support and finance their education.

## 4.2. Transition to Higher Education and Interruption of Studies

One of the most important aspects of The Bologna reform of higher education is broadening the access to higher education, i.e. the inclusion of under-represented groups in higher education. An increase in the number of persons with higher education and broadening the access to higher education are also the goals of the Europe 2020 Strategy (2010), as well as the Strategy for the Development of South-East Europe 2020 (2013). The development goals regarding the broadening of access to higher education, *inter alia*, have at their core individuals who have not followed a so-called *traditional path to higher education*, what assumes direct continuation of education at HEIs after completing secondary school.

Therefore, the EUROSTUDENT V survey has also looked at the transition of students from secondary to higher education. An important dimension of this transition is whether students have had a delay between the different levels of education (secondary school and higher education institutions), as well as pauses between the two levels of study. Furthermore, the survey has examined to what extent students make significant pauses after enrolling in a higher education institution, and prior to obtaining their first degree, i.e. prior to completing the first level of studies.

At the same time, the policy of broadening the access to higher education must therefore take into account the individuals returning to higher education institutions after a longer break and incorporate the measures to facilitate the return of such individuals. Therefore, the EUROSTUDENT V survey pays special attention to the students with *delayed transition* to higher education institutions, i.e. having a delay of more than two years between secondary and higher education.

Thus, according to the obtained data, among the 3606 students responding to the question related to delayed transition to higher education institutions, the period between completing secondary school and enrolling in a higher education institution was under a year for 84.5% of them. A pause between one and two years was made by 8.4% of the students, while 7.2% of students made pauses of over two years between completing secondary school and enrolling in a higher education institution.

Additionally, the EUROSTUDENT survey has separately analysed data provided by students making a break of over two years between completing secondary school and enrolling in a higher education institution. The data obtained indicates that, after enrolling in a higher education institution, nearly one in

10 students (more precisely: 9.3%), make a break in their studies lasting over one year. On the other hand, 4% of the students make a break of over one year between two levels of study, i.e. after obtaining the first diploma and continued studies. Having this in mind, various aspects of delayed completion of studies will be shown below.

#### 4.2.1. Delayed Transition to Higher Education

As noted above, around 7% of the students in Serbia have made a break of over two years between secondary and higher education. Students from families with a lower educational status, i.e. children of parents without higher education, delay enrolment in higher education institutions more frequently (Table 33).

**Table 33: Delayed enrolment in higher education institutions depending on educational attainment of students' parents (in %)**

Type of enrolment	Parents without higher education (ISCED 0–4)	Parents with higher education (ISCED 5–8)
Direct enrolment	92.2	94
Delayed enrolment	7.8	6
Total	100	100

Likewise, students of non-university HEIs more frequently make longer pauses between completing secondary school and enrolling in a higher education institution (Table 34). However, it should be noted that students of non-university HEIs, compared to those enrolling in university HEIs, have more work experience prior to the enrolment to a higher education institution.

**Table 34: Delayed enrolment to a higher education institution depending on the type of higher education institution attended by the student (in %)**

Type of enrolment	University HEIs	Non-university HEIs
Direct enrolment	94.8	80.2
Delayed enrolment	5.2	19.8
Total	100	100

It is interesting to note that delaying studies does not affect the subsequent intensity of studies. These differences are not statistically significant, i.e. the progress of studies is the same for students who have delayed enrolment and those directly enrolling in higher education.

Students enrolling in higher education institutions in the field of services and education tend to delay enrolment in higher education institutions more than those studying agriculture, (natural) sciences, medicine and similar fields (Table 35).

**Table 35: Delayed enrolment in higher education institutions depending on field of study (in %)**

Field of studies	Direct enrolment	Delayed enrolment	Total
Education	86.6	13.4	100
Humanities and arts	90.2	9.8	100
Social sciences, law and business	94.7	5.3	100
(Natural) sciences, mathematics and informatics	95.2	4.8	100
Engineering, manufacture and construction	91.7	8.3	100
Agriculture and veterinary medicine	93.2	6.8	100
Medicine and related fields	97.1	2.9	100
Services	83.5	16.5	100

Students financing their studies from their own sources, such as employment, as well as students with other sources of income, delay enrolment to higher education institutions to a significantly greater extent (Table 36). Students financed from public sources of income (such as student scholarships and loans) mostly have a *traditional educational path*, i.e. they do not delay enrolment to higher education institutions. This result, once again, shows the importance of the system of public support for students and clearly indicates that students with a poorer material status, forced to work in order to finance living expenses, most likely delay enrolment in higher educational institutions for this reason.

**Table 36: Delayed enrolment of higher education institutions and dominant source of income (in %)**

Type of enrolment	Family as the dominant source of income	Own income from work as the dominant source of income	Public source of income as the dominant source of income	Other sources of income
Direct enrolment	93.9	82.4	97.2	82.3
Delayed enrolment	6.1	17.6	2.8	17.7
Total	100	100	100	100

Students delaying enrolment to HEI have been employed at different jobs more than colleagues directly enrolling in higher education (Table 37).

**Table 37: Work experience prior to studies and delayed enrolment in higher education institutions (in %)**

Work experience	Direct enrolment	Delayed enrolment
Paid work for over one year and 20 or more working hours per week	6.0	34.0
Paid work for under one year or less than 20 working hours per week	4.5	12.0
No work engagement	89.5	53.9
Total	100	100

### 4.2.2. Interruption of Studies

The efficiency of studying has been the focus of higher education reform for nearly the last ten years. In Serbia, prior to the adoption of the Law on Higher Education in 2005 that officially started the reform process, the so-called old system of studies was sharply criticized precisely from a perspective of efficiency, i.e. its basic dimension – the duration of studies. According to data from the survey implemented within the CONGRAD Tempus project on graduate students having graduated in 2007 and 2012, the introduction of the Bologna system of studies brought about a significant progress in increasing the efficiency of studies, i.e. a reduction of the number of years required for students to complete studies (Lažetić et al, 2014). The average duration of studies for graduate students studying according to the old, pre-Bologna programme was 7.28 years, while the average duration of studies for graduate students having completed the new, Bologna system of studies is 4.89 years (Lažetić et al, 2014). However, despite the increased efficiency of studies, it is important to consider all obstacles to efficient studying faced by students today.

Regarding data on students who interrupt their studies for a period of over one year to more, it is obvious that these are mostly students coming from families where at least one parent has higher education and where at least one parent has a non-manual occupation. This difference is statistically significant ( $p < 0.01$ ). It would seem that students coming from families with a higher socio-economic status more frequently make longer pauses in their studies, which can be interpreted by the fact that they have the “luxury” of making such a decision, more than students with a lower socio-economic status (Table 38).

**Table 38: Students interrupting education for more than one year by parental education and occupation (in %)**

Duration of interruption	Parent without higher education (ISCED 0–4)	Parent with higher education (ISCED 5–8)	Parent engaged in non-manual occupations (ISCO 1–5)	Parent engaged in manual occupations (ISCO 5–9)
Interruption longer than one year	11.6	14.4	13.8	8.5
No interruption longer than one year	88.4	85.6	86.2	91.5
Total	100	100	100	100

Students attending higher education institutions with study programmes in the field of education, humanities and arts, as well as services, show a greater rate of interrupting their studies for more than a year. Students of (natural) sciences and agriculture make fewer breaks (Table 39).

**Table 39: Students interrupting education for more than one year by field of study (in %)**

Field of studies	No interruption longer than one year	Interruption longer than one year	Total
Education	88.7	11.3	100
Humanities and arts	86.7	13.3	100
Social sciences, law and business	91.6	8.4	100
(Natural) sciences, mathematics and informatics	93.2	6.8	100
Engineering, manufacture and construction	90.1	9.9	100
Agriculture and veterinary medicine	96.1	3.9	100
Medicine and related fields	92.2	7.8	100
Services	84.5	15.5	100

The data shown in Table 40 indicates that breaks of over one year are made more frequently by self-supported students, while students relying on public sources of income show significantly fewer interruptions of their studies. This last bit of data is expected, knowing that, in Serbia, the efficient studying is a condition to get scholarships and loans, with the additional significance of the finding indicating that working while studying affects the efficiency of studying. This data should be regarded along with the above findings that students financing studies from their own income also delay enrolment to higher education institutions more frequently. (Chapter 7 will show a more detailed sub-sample of the students working while studying).

**Table 40: Students interrupting education for more than one year by dominant source of income (in %)**

Duration of interruption	Family as the dominant source of income	Own income from work as the dominant source of income	Public source of income as the dominant source of income	Other sources of income
No interruption longer than one year	92.1	82	97.2	87.5
Interruption longer than one year	7.9	18	2.8	12.5
Total	100	100	100	100

Students of non-university HEIs interrupt studies to a greater extent than students at universities, which may indicate that they need additional support during studies to increase efficiency and reduce the risk of dropping-out (Table 41).

**Table 41: Students interrupting education for more than one year by type of higher education institution attended (in %)**

Duration of interruption	University HEIs	Non-university HEIs
No interruption longer than one year	96.6	91.9
Interruption longer than one year	3.4	8.1
Total	100	100

The students dedicating less time to their study obligations have a higher tendency to interrupt their studies for more than one year (Table 42). It is possible that the cause for interrupting the studies is the same as for the low intensity of study.

**Table 42: Students interrupting education for more than one year by intensity of study (in %)**

Duration of interruption	Low intensity of studies	Medium intensity of studies	High intensity of studies
No interruption longer than one year	87.9	91.7	91.6
Interruption longer than one year	12.1	8.3	8.4
Total	100	100	100

#### 4.2.3. Transition to Master Studies

Comparing enrolment in master studies by secondary education of students, we may conclude that students with completed vocational secondary schools and with completed gymnasiums equally opt for the enrolment to master studies. There is no statistically significant difference between the students completing vocational secondary schools and gymnasiums at different levels of study. Likewise, parental education does not impact delaying enrolment in master studies. However, the transition to a higher level of studies is correlated with parental occupation. A break between bachelor and master studies is made more often by children of parents engaged in non-manual occupations (Table 43).

**Table 43: Break between two levels of studies depending on parental occupation (in %)**

Duration of interruption	Non-manual occupations (ISCO 1–5)	Manual occupations (ISCO 5–9)
No interruption longer than one year	95.6	97.5
Interruption longer than one year	4.4	2.5
Total	100	100

The break between the two levels of studies statistically significantly differs depending on the field of study. Students of (natural) sciences, medicine and related fields and agriculture are less prone to make breaks between the two levels of study, unlike students of services, engineering, manufacture and construction (Table 44).

**Table 44: Students interrupting education between the two levels of study for more than one year by field of study (in %)**

Field of studies	No interruption longer than one year	Interruption longer than one year	Total
Education	96.7	3.3	100
Humanities and arts	95.3	4.7	100
Social sciences, law and business	96.8	3.2	100
(Natural) sciences, mathematics and informatics	99.4	0.6	100
Engineering, manufacture and construction	93.3	6.7	100
Agriculture and veterinary medicine	96.9	3.1	100
Medicine and related fields	97.4	2.6	100
Services	93.2	6.8	100

Students dedicating less time to completing student obligations are more prone to making a pause of over one year between the two levels of studies and this difference is statistically significant (Table 45).

**Table 45: Students interrupting education between the two levels of study for more than one year by intensity of study (in %)**

Duration of interruption	Low intensity of studies	Medium intensity of studies	High intensity of studies
No interruption longer than one year	91.3	96.9	96.5
Interruption longer than one year	8.7	3.1	3.5
Total	100	100	100

An interruption of over one year between the two levels of studies is most frequently made by students financing their own studies. Interestingly, none of the students supported by public sources during studies made a break of over one year between the two levels of studies. This clearly indicates the importance of this type of support and the need to reconceptualise the systems of student standard and student support in Serbia (Table 46).

**Table 46: Students interrupting education between the two levels of study for more than one year by dominant source of income (in %)**

Duration of interruption	Family as the dominant source of income	Own income from work as the dominant source of income	Public source of income as the dominant source of income	Other sources of income
No interruption longer than one year	96.9	82	100	92.1
Interruption longer than one year	3.1	18	0	7.9
Total	100	100	100	100

### 4.3. Employment Prior to Studies

The survey paid special attention to the question of whether students have had work experience or paid internships before entering higher education. Work experience is categorized as 1) work or paid internship lasting for over one year and amounting to at least 20 working hours per week (long-term work engagement) 2) work or paid internship lasting under one year and amounting to less than 20 working hours per week (short-term work engagement).

Among the total number of students, 7.9% had long-term work experience before entering higher education, while 5% of the students had a short-term employment. Most of the students did not have any type of work experience prior to enrolling in a higher education institution (87.1%). These aspects of studying will be analysed in more detail below.

In the countries covered by the EUROSTUDENT V survey, students with work experience prior to higher education are more frequently older, without higher education background, with delayed transition, and dedicate less time to study obligations (i.e. studying with low intensity) (Hauschildt et al, 2015). The sample for Serbia showed that parental education does not affect prior work experience, while parental occupation is strongly correlated with students' previous work experience. Students whose parents work in non-manual occupations have more work experience prior to entering higher education (Table 47).

**Table 47: Work experience prior to studies by parents' occupation (in %)**

Work experience	Non-manual occupations (ISCO 1–5)	Manual occupations (ISCO 5–9)
Employment lasting over one year and involving 20 or more working hours per week	8.2	5.4
Employment lasting under one year with less than 20 working hours per week	5.6	2.9
No work engagement	86.2	91.7
Total	100	100

Work experience prior to enrolment in faculties is twice as frequent for students of non-university HEIs than students of university HEIs (Table 48).

**Table 48: Work experience prior to studies by type of higher education institution (in %)**

Work experience	University HEIs	Non-university HEIs
Long-term work engagement	6.8	16.2
Short-term work engagement	4.8	6.5
No work engagement	88.4	77.3
Total	100	100

Students dedicating less time to their studies had work experience prior to beginning their studies, which is in accordance with the above mentioned general findings of the EUROSTUDENT V survey (Table 49).

**Table 49: Work experience prior to studies by intensity of studying (in %)**

Work experience	Low intensity of studies	Medium intensity of studies	High intensity of studies
Long-term work engagement	9.9	7.5	6.8
Short-term work engagement	4.0	4.7	5.7
No work engagement	86.1	87.8	87.5
Total	100	100	100

Students with work experience prior to enrolling a higher education institution are, at the same time, students dominantly using their own sources of income from work during studies (Table 50). Although there is no correlation between work engagement prior to higher education and parental occupation as a component of socio-economic status, data indicate that most of the students who worked prior to the enrolment in higher education have retained the tendency of working during studies and used funds earned by previous work to cover living and studying costs.

**Table 50: Work experience of students prior to enrolling in a HEI by dominant source of income (in %)**

Work experience	Family as the dominant source of income	Own income from work as the dominant source of income <sup>15</sup>	Public source of income <sup>16</sup>	Other sources of income <sup>17</sup>
Long-term work engagement	5.8	31.3	2.8	18.2
Short-term work engagement	4.4	11.2	0	5.3
No work engagement	89.8	57.5	97.2	76.5
Total	100	100	100	100

15 This category includes income from a current job or a job the student had prior to the studies.

16 This category includes credits/loans, scholarships as the dominant source of income

17 E.g. pension, child support, private sources of finance

## 5. Progress of Studies, Satisfaction with Studies and Future Plans

This chapter presents the findings of the EUROSTUDENT V survey regarding: (1) progress of studies; (2) satisfaction with studies, (3) plans after studies. The section regarding the progress of studies shows the relation between study programmes, types of higher education institutions and basic characteristics of the student population. The second part gives analyses of satisfaction with the organization of studies and higher education institutions equipment, while the third section addresses students' plans regarding the further study and labour market activities.

### 5.1. Progress of Studies

In the Republic of Serbia, status of a budget-student and other types of the state financial support to students (subsidized housing, food, etc.) are only available to the students enrolled in the state founded higher education institutions (so-called public higher education institutions). This means that one-third of the surveyed students studying at the private higher education institutions do not have access to financial, or any other type of the state support. Among the total number of the students in a sample, nearly one third (28.1%) are financed from the budget of the Republic of Serbia. According to the Statistical Office of the Republic of Serbia data, nearly half, i.e. 44.56% of the student population is financed from the state budget (SORS, 2014b), while 55.4% finance their studies themselves. The distribution of students by type of institution and its ownership (i.e. public or private) is presented in Table 51.

**Table 51: Distribution of students by type and ownership of the institution (in %)**

Type of HE institution		Type of study financing		Distribution by owner of institution	
University HE	88.2	Budget-financed students	28.1	Public HEI	76.2
Non-university HE	11.8	Self-financed students	71.9	Private HEI	23.8
Total	100	Total	100.0	Total	100

The results of the EUROSTUDENT V survey indicate that there is a correlation between the educational and economic origin of students, measured by parental educational attainment and parental occupation. One third of the students whose parents do not have higher education is financed from the state budget, while this is the case with 24.6% of students whose parents have higher education. Table 52 indicates that the percentage of students financed by the state budget is similar for both types of occupation (manual and non-manual). In other words, when

someone enrolls in a higher education institution, he/she has nearly the same probability of getting the funding from the state budget regardless of parental occupation. However, students whose parents are engaged in manual occupations have smaller chances of enrolling in a faculty, as indicated by the fact that they represent only 15% of the total student population.

**Table 52: Studies financing status by educational attainment and occupational status of students' parents (in %)**

Status	Parental education		Parental occupation	
	Without higher education (ISCED 0–4)	Completed higher education (ISCED 5–8)	Non-manual occupations (ISCO 1–5)	Manual occupations (ISCO 6–9)
Budget-financed students	31.0	24.6	27.5	31.6
Self-financing students	69.0	75.4	72.5	68.4
Total	100	100	100	100

There is a significant difference between the source of student income and study status (Table 53). The vast majority of students primarily financed from public sources (scholarship, loans, etc.) are at the same time under the status of budget-financed students, while the vast majority of students financing their own studies are under the status of self-financing students. These percentages suggest that the self-financing status may put a certain number of students into a position of having to work to pay for their studies, which may affect the effectiveness and efficiency of study. A portion of the self-financing students from families with a lower socio-economic status are, therefore, forced to work during studies, what leaves them with less time to complete study obligations.

**Table 53: Studies financing status by dependence of student on source of financing (in %)**

Status	Dependence on source of financing				
	Dependence on family	Dependence on own income	Dependence on public support	Other	Total
Budget-financed students	29.5	20.1	94.6	27.9	29.8
Self-financing students	70.5	79.9	5.4	72.1	70.2
Total	100	100	100	100	100

There is no significant difference between budget and self-financing students regarding the intensity of studies, i.e. the time students spend completing obligations related to their studies. The organization of studies, i.e. the obligations which students have, are the same for all, so the finding that students spend the same time on their studies is expected. Although the differences are minimal, it should be noted that budget-financed students study with a somewhat higher intensity than self-financing students, most likely due to the fact that part of the self-financing students have to work to be able to cover the additional costs of studying (Table 54).

**Table 54: Studies financing status by intensity of studies (in %)**

Status	Intensity of studies			
	Low	Medium	High	Total
Budget-financed students	12.0	54.9	33.1	100
Self-financed students	14.8	52.4	32.8	100

Two-fifths of the students in the sample (40.5%) study in Belgrade, while 31.5% of students study in higher education institutions in Novi Sad. Only 28.0% of the students study outside the two largest university centres (Table 55). The concentration of the two-thirds of the student body in the two university centres has as its consequence, *inter alia*, in a large gap in the offer and demand of places in student dormitories. The correlation between parental education and occupation and place of study is also significant: namely, a higher percentage of children of highly educated parents, and children of parents whose occupations are in the group of non-manual occupations study in Belgrade and Novi Sad compared to children of parents without higher education or employed in some of the manual occupations. Thus, 12% of the children of parents without higher education study in a city with a population under 100,000, while this percentage among children of highly educated parents is only 3.8%. Likewise, nearly half the students of highly educated parents are in Belgrade, while just over one third of the students of parents without higher education study in Belgrade.

**Table 55: Place of study by parental education and occupation (in %)**

Population number in place of study	Parental education			Parental occupation		
	Without higher education (ISCED 0–4)	Completed higher education (ISCED 5–8)	Total	Non-manual occupations (ISCO 1–5)	Manual occupations (ISCO 6–9)	Total
Up to 100000	12.0	3.8	8.3	7.3	14.7	8.4
>100000 to 300000	25.8	12.1	19.7	17.4	29.8	19.4
>300000 to 500000	27.5	36.7	31.6	32.6	26.5	31.7
Capital	34.7	47.4	40.4	42.7	29.0	40.5
Total	100	100	100	100	100	100

The children of parents having non-manual occupations enrol in social sciences, business and law more frequently, while children of parents having manual occupations mostly enrol in study programmes in the field of education, agriculture, manufacture, electrical engineering and other engineering sciences. A significant difference between fields of study is also present in respect of the students gender: female students are more represented in social sciences, education and medicine, while male students are considerably more represented in engineering sciences, where there are nearly three times more male than female students (Table 56).

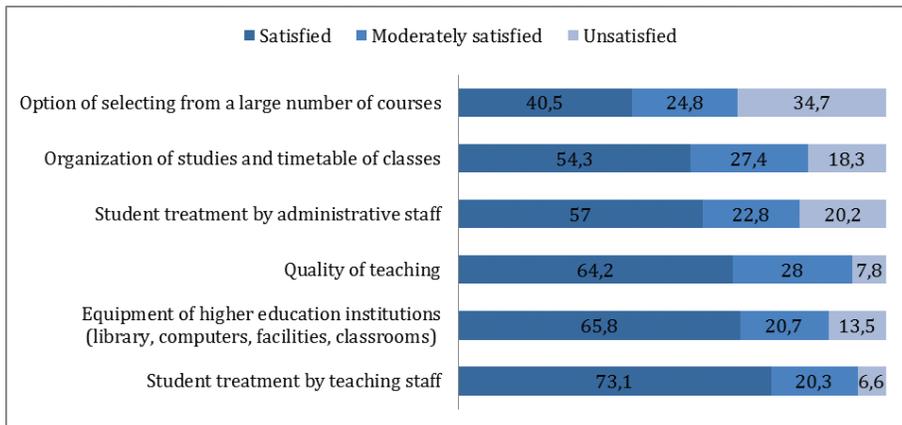


## 5.2. Satisfaction with Studies

Satisfaction with studies was measured under six dimensions related to the quality and organization of teaching (quality of teaching, organization of studies and timetable of classes, option to select from a large number of courses), student treatment by staff (student treatment by administration staff, student treatment by teaching staff) and higher education institutions equipment (library, computers, facilities, classrooms). The students assessed each dimension separately on a five-degree scale reduced to a three-degree scale in the analysis, as shown in Figure 11.

In most countries participating in the EUROSTUDENT V survey, the students are satisfied with their study programmes. Students' satisfaction is highest in the domain of quality of teaching and equipment of higher education institutions (Hauschildt et al, 2015). The results from Serbia show a somewhat different picture: students are most satisfied with treatment by teaching staff, while they are least satisfied with the organization of courses and options for selecting from a larger number of courses (Figure 11). In the comparative perspective of 26 countries within the EUROSTUDENT V survey, the results for Serbia are above the average of the 26 countries regarding faculty equipment, and below this average regarding the assessment of quality of teaching.

**Figure 11: Satisfaction with studies (in %)**



Satisfaction with the conditions for studies varies significantly among different study programmes. The highest degree of satisfaction is among students studying study programmes in the field of services which has got the best ratings for as many as three dimensions of the conditions for studying: quality of teaching, option for selecting from among a large number of courses, students treatment by teaching staff. The quality of teaching, organization of studies and timetable of lectures, as well as the equipment of faculties were assessed the worst by students of (natural) sciences. Students of medicine are the most unsatisfied with the option for selecting from a large number of courses and students' treatment by teaching staff (Table 57).

Table 57: Satisfaction with studies by field of studies (in %)

Aspects of studies and degree of satisfaction	Education	Humanities and arts	Social sciences, law and business	(Natural) sciences, mathematics and informatics	Engineering, manufacture and construction	Agriculture veterinary medicine	Medicine and related fields	Services	
Quality of studies	(very) satisfied	61.6	64.8	68.5	56.6	66.3	56.6	43.7	75.3
	neither satisfied or unsatisfied (somewhat) unsatisfied	27.5	27.5	25.2	29.1	26.1	36.5	45.7	17.4
Organization of studies and timetable of lectures	(very) satisfied	11.0	7.7	6.3	14.3	7.5	6.9	10.6	7.3
	neither satisfied or unsatisfied (somewhat) unsatisfied	47.7	48.0	60.3	35.2	61.2	45.7	35.6	58.1
Option of selecting from a large number of courses	(very) satisfied	33.4	31.8	24.8	30.6	25.0	37.5	30.6	27.1
	neither satisfied or unsatisfied (somewhat) unsatisfied	18.9	20.2	14.9	34.1	13.8	16.8	33.8	14.8
Treatment of students by administrative staff	(very) satisfied	35.6	36.2	44.5	30.8	45.2	41.1	22.0	48.0
	neither satisfied or unsatisfied (somewhat) unsatisfied	21.9	26.1	22.3	38.1	24.5	34.7	26.9	22.0
Treatment of students by teaching staff	(very) satisfied	42.4	37.7	33.2	31.1	30.3	24.1	51.1	30.0
	neither satisfied or unsatisfied (somewhat) unsatisfied	48.4	58.8	61.2	54.1	58.0	56.7	38.0	58.0
Faculty equipment (library, computers, facilities, classrooms)	(very) satisfied	25.2	23.5	21.2	21.9	21.3	25.2	35.4	11.0
	neither satisfied or unsatisfied (somewhat) unsatisfied	26.4	17.7	17.6	24.0	20.7	18.1	26.7	31.0
Treatment of students by teaching staff	(very) satisfied	64.6	71.7	78.7	72.3	70.6	65.4	59.7	82.2
	neither satisfied or unsatisfied (somewhat) unsatisfied	25.0	21.9	17.6	19.4	20.4	27.7	28.6	10.2
Faculty equipment (library, computers, facilities, classrooms)	(very) satisfied	10.5	6.3	3.7	8.3	9.0	6.9	11.7	7.6
	neither satisfied or unsatisfied (somewhat) unsatisfied	59.0	56.8	74.8	44.4	65.8	54.5	54.0	70.9
Faculty equipment (library, computers, facilities, classrooms)	(very) satisfied	26.7	28.8	14.5	34.2	21.9	27.0	25.1	13.9
	neither satisfied or unsatisfied (somewhat) unsatisfied	14.3	14.5	10.7	21.5	12.3	18.5	20.9	15.2

### 5.3. Further Studies and Employment after Studies

The reform of the educational system occurring after the Republic of Serbia became a signatory to the Bologna Declaration, i.e. more precisely upon coming into force of the Law on Higher Education in 2005, influenced not only a change in the system of studies, but also the introduction of the three study cycles that differed from the previous cycles. Thus bachelor, master and doctoral studies were reorganized in accordance with the above law, and after the first generations of “Bologna students” entered the labour market, the issue of the recognition of the new diplomas in the labour market has arisen. It should be also noted that high unemployment among youth, on the other hand, can influence the decision to prolong studies and thus delay entry into the labour market, simultaneously increasing knowledge and skills that may increase chances for finding adequate employment.

The EUROSTUDENT V results have shown that just over one tenth of the students have stated that they do not wish to continue studies, while over half the students from Serbia wishes to continue their studies one or several years after completing their current study programme.

The desire to continue studies is more prevalent among students with a high intensity of current studies, i.e. those who dedicate more than 40 hours per week to study-related obligations. Let us recall that a high intensity of study is shown by a majority of budget students and students financially dependent on the public sources of finance, i.e. primarily the most successful students. Likewise, students primarily financed from the public sources of financing (loans, scholarships) show a desire to continue studies to a considerably greater extent than their colleagues primarily financed by parents, or primarily self-financed. Students depending on their own income show the least tendency to continue studies.

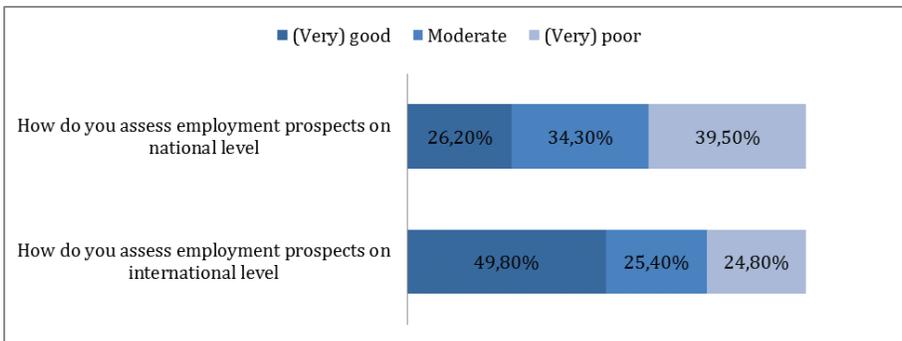
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Students were further asked to assess their employment prospects in the country or abroad. Assessments were given on a scale from 1 to 5, while in Figure 12 they are reduced to a three-degree scale to provide clarity. It should be noted that the question did not define the type of employment, i.e. it referred to any kind of prospective employment. The assessment of employment prospects reflects both, the perception of the quality of attained knowledge and potential for its application, and the perception of the situation in the labour market.

Results show that students studying in the Republic of Serbia assess their employment prospects outside the borders of Serbia as significantly better. Among the 25 EUROSTUDENT V countries with data on these dimensions, Serbia is among the total of 7 countries where students believe that they have better chances for employment outside their home country.<sup>18</sup> Less than 30% of *optimistic students* (students assessing their chances on the market as (very) good) probably speaks more in favour of their perception of the labour market in Serbia than about the perception of their qualifications, because nearly half the students think they have (very) good chances for employment abroad.

**Figure 12: Assessment of employment prospects**



Students' assessments vary by the field of studies/study programme they have completed, but the assessment of the same study programmes also differs regarding the national, and/or international level. Thus, the best assessment of employment prospects in the country are given by future engineers and agricultural students, while the *most optimistic* students in the assessment of employment prospects abroad are students of medicine and (natural) sciences (Table 59).<sup>19</sup>

18 The other six countries are: Bosnia and Herzegovina, Montenegro, Slovenia, Croatia, Hungary and Ireland. However, Hungary and Ireland have significantly more *optimistic students*, i.e. students assessing their chances as high, compared to the other countries in this group, thus a homogeneous group in this context include, in fact, students from Serbia, Bosnia and Herzegovina, Montenegro, Slovenia and Croatia.

19 The table shows the arithmetic means of the five-degree scale, where the value 1 is marked as "very good", while the value 5 is marked with "very poor". Thus, lower values

**Table 59: Assessment of employment prospects by field of studies  
(arithmetic mean of a five-degree scale)**

Employment prospect at the national level		Employment prospect at the international level	
Engineering, manufacture and construction	2.1	Medicine and related fields	1.8
Agriculture and veterinary medicine	2.2	(Natural) sciences, mathematics and informatics	1.8
Social sciences, law and business	2.3	Engineering, manufacture and construction	1.9
Medicine and related fields	2.3	Social sciences, law and business	2.2
(Natural) sciences, mathematics and informatics	2.3	Education	2.2
Services	2.5	Humanities and arts	2.3
Education	2.5	Agriculture and veterinary medicine	2.3
Humanities and arts	2.5	Services	2.4

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of arithmetic means signify higher chances for employment, and vice versa. Note that the scale was reversed in the questionnaire completed by students: 1 signified very poor chances, while 5 signified very good chances. The scale was reversed to be comparable to other EUROSTUDENT countries.

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## 6. Conditions of Student Life

The above chapters provided the socio-economic profile of the student population, elaborated the conditions for study and the progress of studies. This chapter and, to a large extent, the following one which deals with student employment, focus on the economic conditions of student life. The survey results presented in this chapter are an attempt to shed light on the way and conditions of student life in Serbia and to provide a comprehensive view of the costs of studies. The groups with particular financial difficulties are identified.

The dominant characteristic of students in Serbia distinguishing them from the colleagues from other EUROSTUDENT V countries is a significant dependence on parents as the main source of financing.

As noted, the dominant source of income in the EUROSTUDENT V survey is income providing for 50% or more in the total student income. In accordance with this definition, over 90% of students in Serbia are financially dependent on parents (Table 60) while merely 4.1% of the students are financially independent. Comparing with the other countries in the region, we may conclude that only in Montenegro the situation is significantly different and closer to the European average. Namely, 20% of Montenegro students primarily depend on their own sources of income, while the number of students with diversified sources of income (the category *other*, in which the majority comprise of the students with no source of income, and/or for whom no source of income is over 50%, as well as students whose income comes from sources other than family, themselves or public sources) is the largest in Republika Srpska. The primary dependence of students in Serbia on parents apparently does not have to be an obstacle, but it corroborates the fact that students in Serbia do not contribute to their own economic status to a significant extent and that, instead, parental status is directly reproduced. At the same time, this finding indicates a low share of public income (only 1.1%) in the income sources for students in Serbia, indicating an obviously inadequate system of student scholarships and loans. This reflects a need to harmonize student standard system with the students' needs. This finding, certainly, also confirms a necessity to change the very system of financing higher education.

**Table 60: Dominant source of student financing in Serbia, Montenegro, the Federation of Bosnia and Herzegovina and Republika Srpska (in %)**

Source of income	Serbia	Montenegro	Federation of B&H	Republika Srpska
Family as the dominant source of income	90.7	69.8	89.6	81.9
Own income from work as the dominant source of income	4.1	20.0	3.8	3.3
Public source of income as the dominant source of income	1.1	2.7	1.9	2.6
Other sources of income	4.1	7.5	4.7	12.3

The ensuing question is to what extent students experience financial difficulties. Taking into consideration the above data showing that a vast majority of students financially depend on their families and the fact that, during the gathering data on the costs of living and studying, a significant percentage of students has shown a lack of elementary financial literacy by being unable to realistically assess their own costs of living and studying, the issue of the subjective assessment of financial difficulties should not be directly linked with the real financial difficulties/burden faced by the students' families.

Based on their own assessment, somewhat below 10% of the students do not have any kind of financial difficulties, while nearly the same number of students believe they have very severe financial difficulties. Somewhat over two-fifths of the students believe to have medium financial difficulties. The greatest financial difficulties were reported by students primarily depending on their own sources of income who were, therefore, actually best aware of their own income and expenditures (Table 61).

**Table 61: Assessment of students' financial difficulties by source of student income (in %)**

Level of difficulties	Total	Family as the dominant source of income	Own income from work as the dominant source of income	Public source of income as the dominant source of income	Other sources of income
1 – No financial difficulties	9.5	9.1	9.5	11.5	15.1
2	18.6	18.8	12.7	15.4	15.1
3	41.0	41.4	40.5	42.3	30.3
4	21.0	21.3	18.3	23.1	27.7
5 – Severe financial difficulties	9.9	9.4	19.0	7.7	11.8

The self-assessment of financial difficulties shows a statistically significant correlation not only with the source of student income, but also with parental education, occupation and study programme of the student. Regarding parental education, despite the statistically significant difference, the true differences between students whose parents have not completed higher education and students whose parents have is small. On the other hand, bigger differences appear regarding parental occupation, where students whose parents are engaged in manual occupations experience financial difficulties to a considerably greater extent (Table 62).

**Table 62: Assessment of financial difficulties of students by educational attainment and occupation of students' parents (in %)**

Level of difficulties	Educational attainment of students' parents		Parental occupation	
	Without higher education (ISCED 0–4)	With higher education (ISCED 5–8)	Non-manual occupations (ISCO 1–5)	Manual occupations (ISCO 5–9)
1 – No financial difficulties	8.3	11.0	10.1	6.5
2	19.5	17.5	18.6	16.9
3	42.1	39.7	41.4	40.1
4	20.4	21.8	20.1	24.8
5 – Severe financial difficulties	9.7	10.0	9.8	11.7
Total	100	100	100	100

Severe financial difficulties are mostly reported by students of study programmes in the field of education and (natural) sciences, mathematics and informatics, while students studying programmes in the field of services report having less financial difficulties (Table 63).

**Table 63: Assessment of financial difficulties of students by field of studies (in %)**

Field of studies	1 – No financial difficulties	2	3	4	5 – Severe financial difficulties	Total
Education	9.7	12.5	38.9	25.7	13.2	100
Humanities and arts	9.0	15.6	43.2	20.5	11.7	100
Social sciences, law and business	9.0	23.0	37.4	20.9	9.7	100
(Natural) sciences, mathematics and informatics	9.9	14.9	43.3	18.4	13.5	100
Engineering, manufacture and construction	9.7	16.1	45.0	20.4	8.8	100
Agriculture and veterinary medicine	9.6	12.8	41.6	24.0	12.0	100
Medicine and related fields	10.8	14.5	44.3	21.2	9.2	100
Services	12.4	17.5	46.4	21.6	2.1	100

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## 6.1. Student Accommodation

Nearly half the students (48.1%) live with their parents, while somewhat over one fifth live independently (Table 64). There is no significant difference between female and male students regarding the type of accommodation, but differences do appear regarding parental education. Namely, children of parents with completed higher education live with their parents more frequently and rarely with other people. At the same time, students who financially primarily depend on public support live with other people nearly twice as often as students financially primarily depending on family, and over three times more frequently than students depending on their own income. The latter live with their partner and children significantly more frequently than the other two categories of students.

Regarding students living in dormitories, there is no considerable difference between male and female students, but differences do appear regarding sources of student financing. Students depending on public support live in student dormitories to a significantly greater extent (Table 65).

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Finally, it is also important to analyse student satisfaction with the housing conditions. Over 80% of the students are (very) satisfied with the housing conditions, with students living with parents being the most satisfied group: 90.4% (sum of categories 1 and 2) of the total number of students living with parents are (very) satisfied with the living conditions. However, the percentage of satisfied students is significantly lower among students living in student dormitories. Less than one third of the students (24%) is very satisfied with dormitory accommodation, compared to 73.5% of very satisfied students living with their parents (Table 66).

**Table 66: Student satisfaction with accommodation (in %)**

Satisfaction level	Total	With parents	Without parents (with other people or alone)	Students living in student dormitories
1 Very satisfied	59.0	73.5	42.9	24.0
2	25.3	16.9	34.5	41.9
3	11.0	6.8	15.9	23.9
4	3.4	1.7	5.2	8.1
5 Not satisfied at all	1.3	1.1	1.5	2.1
Total	100	100	100	100

## 6.2. Costs of Living and Studying

The costs of living during studies are a frequently neglected dimension in public discourse, mostly centred on the costs of studies, and usually around the amount of tuition. However, the costs of studying, most frequently, as shown, financed by the students' parents, represent a significant monthly expenditure for the entire family. Under the EUROSTUDENT V survey the costs of living represent the sum of the following expenditures:

1. Cost of accommodation (rent/mortgage including utilities, heating, water...)
2. Cost of food
3. Cost of transport
4. Cost of communication (telephone(s), internet, etc.)
5. Cost of healthcare protection (health insurance) – only for students paying their own health insurance
6. Cost of childcare
7. Payments of debts (other than mortgages)
8. Cost of leisure activities
9. Other costs of living (clothes, hygiene, cigarettes, pets, insurance – other than health insurance)

The costs of studying under the EUROSTUDENT V survey were calculated at a six-month semester level and include:

1. Tuition, enrolment fee, exam payments, administrative fee payments
2. Contributions for educational institutions and student organizations
3. Teaching materials (books, photocopying, materials, etc.)
4. Other regular costs related to studies (private tutors, additional courses, etc.)

Regarding the average monthly costs including both studying and living, self-financing students have, on average, higher costs than budget students. On a monthly level, according to the students' responses on their financing status, self-financing students spend RSD 37,273 on costs of living, while budget students spend RSD 24,018. A detailed breakdown of costs is given in the following tables. Since the costs of students who live and who do not live with their parents are very different, they will be shown separately.

**Table 67: Average monthly costs, including study costs, for students living with their parents (in RSD)**

	Self-financing students	Budget-financed students	Total cost	% in the structure of the total cost
Total cost of accommodation	556	9176	9731	28.3
Food	953	6603	7555	22.0
Transport	505	1838	2343	6.8
Communications (telephone(s), internet, etc.)	360	1469	1829	5.3
Healthcare costs (health insurance)	5	37	42	0.1
Childcare	57	140	197	0.5
Debt payments (other than mortgage)	122	218	340	1.0
Leisure activities	782	1411	2193	6.4
Other costs of living	1194	3404	4598	13.4
Tuition, enrolment fee, exam payments, administrative fees	641	3931	4572	13.3
Contributions for educational institutions and student organizations	2	25	27	0.1
Teaching materials (books, photocopying, materials, etc.)	106	446	552	1.6
Professional practice, travel	78	345	423	1.2
Total	5360	29043	34402	100

In addition to the costs of food, accommodation and other costs (e.g. clothes, hygiene), most of the total amount of costs of students living with parents is for tuition and other costs paid to higher education institutions (13%). The situation is similar for students not living with their parents.

**Table 68: Average monthly costs, including study costs, for students not living with their parents (in RSD)**

	Self-financing students	Budget-financed students	Total cost	% in the structure of the total cost
Total cost of accommodation	1614	7977	9590	28.8
Food	2039	6132	8171	24.5
Transport	677	1455	2132	6.4
Communications (telephone(s), internet, etc.)	408	1349	1757	5.3
Healthcare costs (health insurance)	14	15	29	0.1
Childcare	119	133	252	0.8
Debt payments (other than mortgage)	90	147	237	0.7
Leisure activities	742	1430	2172	6.5
Other costs of living	1269	3130	4398	13.2
Tuition, enrolment fee, exam payments, administrative fees	587	2912	3500	10.5
Contributions for educational institutions and student organizations	4	15	19	0.1
Teaching materials (books, photocopying, materials, etc.)	124	479	603	1.8
Professional practice, travel	97	340	437	1.3
Total	7785	25513	33298	100

Within a group of students not living with their parents according to the structure of their income, students with their own income spend more, as a consequence of the fact that they are mostly students who have started own families and thus have higher costs. The same situation applies to older students, and the same factor may be a reason for their higher costs.

**Table 69: Average monthly costs of studies for students not living with their parents by dominant source of income (in RSD)**

	Family as the dominant source of income	Own income from work as the dominant source of income	Public source of income as the dominant source of income
Costs of accommodation	9919	7183	2956
Costs of transport	1921	3537	1088
Tuition	3540	4620	1127
Total costs of studies	33074	42140	16905

**Table 70: Average monthly costs of studies for students not living with their parents by other characteristics (in RSD)**

	Male	Female	Without HE – parents	With HE – parents	Up to 21 years of age	Between 22 and 25	Between 25 and 30	Over 30 years of age
Costs of accommodation	9941	9221	9466	9778	8669	10222	11471	8151
Costs of transport	2317	1938	2129	2133	1905	1897	2160	3808
Tuition	4497	2450	2471	3409	3965	2760	5715	3446
Total costs of studies	34752	31767	32857	34081	29899	32718	40646	38560

## 7. Employment

In order to be able to draw valid conclusions regarding student employment in Serbia and to place data obtained through the EUROSTUDENT survey in an adequate context, it should be noted that: the transition of the economy in Serbia, since the year 2000, has been followed by structural changes characterised by a drop in a share of agriculture and industry on account of service activities, a lack of harmonization between the labour market offer and demand (a certain number of demanded available jobs remain vacant, while on the other hand there is a large number of persons with occupations not in demand on the labour market), and a large influx of surplus employees from restructured and privatized companies; an unfavourable age and qualification structure of employees; large regional disparities and low workforce mobility, as well as a large number of persons engaged in the grey economy.

According to the Labour Force Survey from 2013 (SORS, 2014c), the number of employed persons (aged 15+) rose to 2.311 million in Serbia in 2013. The employment rate of adults (15+) in the same year was 37.7%. Within the working age population (15 to 64 years of age) in 2013, the employment rate was 47.5%, with the employment rate for men (54.9%) higher than the employment rate for women (40.1%), and particularly low among youth aged 15–24, amounting to 13.1% in the first quarter of 2014 (SORS, 2014c).

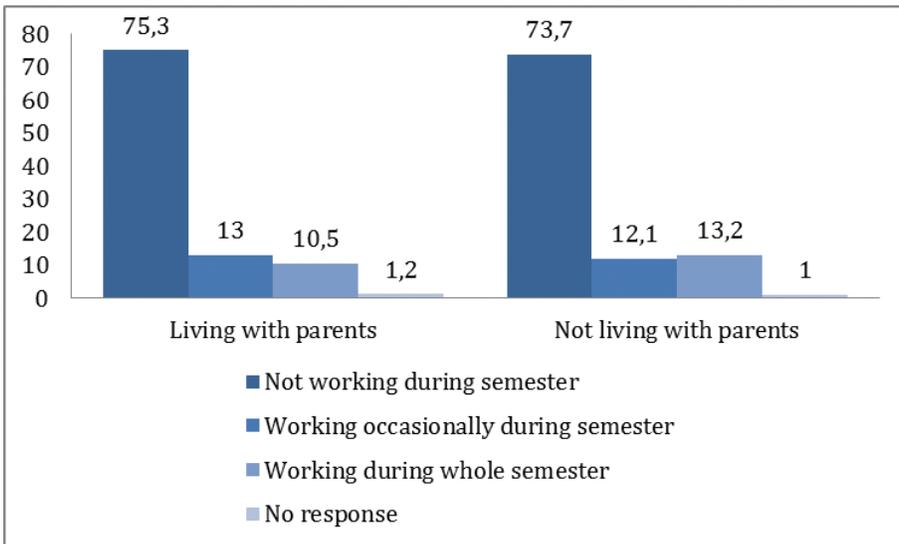
The youth unemployment rate is very high (49.4% in 2013 and 41.7% during the second quarter of 2014). The youth with HE diplomas are particularly affected by the crisis: during the 2008–2012 period, the unemployment rate for this youth doubled (to 55%), while the number of the youth who are unemployed, not in the educational system and not included in other forms of training was 19.5% of the total number of the youth aged 15–24 in 2013, or 25.3% of the youth aged 18 to 24 (Social Inclusion and Poverty Reduction Unit, 2014).

Regarding the students participating in this survey, data show that all students not living with their parents usually have to cover larger costs and thus are in a greater need to earn money. A somewhat larger number of students not living with their parents is employed (13.2%) compared to students living with their parents (10.5%). The percentage of employed students in Serbia is notably the same regardless of whether the students live with parents or independently. However, the poor functioning of the labour market is probably the main reason why a larger number of students is not employed while the bad economic situation forced even those students living with their parents to look for jobs. This is also confirmed by the rate of unemployment of the work capable population, amounting to 18.4% in Serbia during the third quarter of 2014 (SORS, 2014c), while the rate of unemployed in the age group of 15–24 during the last quarter of 2014 was 41.9% (SORS, 2015). The largest percentage of the total unemployment (15+) is for unemployed persons aged 25–34 years (28.9%), followed by persons aged 35–44 (22.8%). Additionally, based on EUROSTAT data, we may conclude that Serbia is characterised by constant and high rates of long-term unemployment. Compared to EU member states, the

rate of long-term unemployment in Serbia is three times larger than that of EU-28 and EU-15, amounting to 5.1% in 2013.

The same indicators in similar countries are as follows: In Croatia, 37% of the students living with their parents work over 5 hours per week during the semester, compared to 35.9% of those who do not. In Austria, 37.7% of the students living with their parents work during the semester, compared to 48% of those who do not. In Slovakia, 31.3% of the students living with their parents work, compared to 27.3% of students who do not.

**Figure 13: Distribution of students by employment status and whether they live with their parents or not (in %)**



Considering the similar status on the labour market for students living with their parents or on their own, the further analysis regarding students' labour market behaviour will not separate the student population by this characteristic. The following segment presents an analysis of students' behaviour on the labour market by socio-economic status, viewed through the level of parental education. Since, in this case, socio-economic status is seen as the parents' potential to provide financial support to their child and a factor influencing student's decision whether to look for job during studies, the presented data show that most of the students who work belong to the groups with the lowest and highest parental education level. Namely, among the group of students whose parents have completed primary school or less, 20.3% of them work during the semester while 18.8% work occasionally. Likewise, among the group of students whose parents have completed doctoral studies, 20% of them work throughout the semester while 12% work occasionally (Table 71). Since these percentages are not negligible, and we are starting from the assumption that the socio-economic status of the students rises with the level of parental education, we may assume that this situation has been significantly affected by the overall economic situation in Serbia, characterized by a poor job offer so that, students use available opportunities regardless of their socio-economic status.

**Table 71: Correlation of student employment status and educational attainment of students' parents (in %)**

What was the highest level of education your parents have attained?	No response	Yes, I've worked throughout the semester	Yes, I've worked occasionally during this semester	No, I did not work during this semester	Total
Up to primary school	0.0	20.3	18.8	60.9	100
Secondary school	0.5	9.6	11.3	78.6	100
Bachelor studies	2.8	13.9	13.5	69.8	100
Master studies	2.1	10.3	16.1	71.5	100
Doctoral studies	0.0	20.0	12.0	68.0	100
I do not know	0.0	57.1	0.0	42.9	100
Total	1.4	11.7	12.5	74.4	100

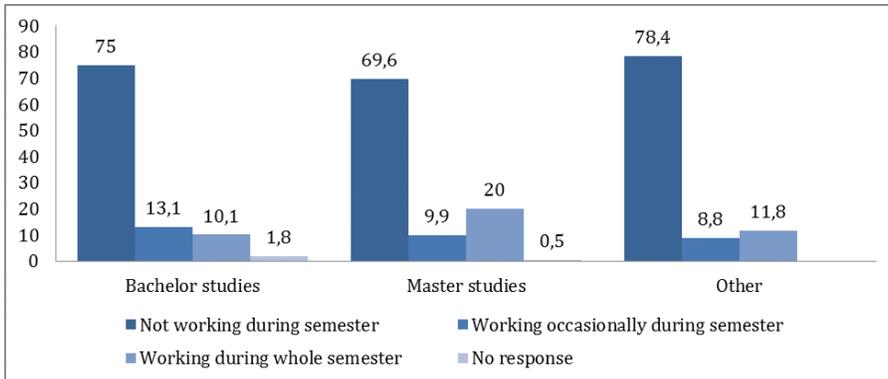
Table 72 shows the employment rate of students by a field of study. The goal of collecting this data was to obtain information on whether the students from some categories become employed more than others. Thus we can see that, during studies, students in the field of education, (natural) sciences, engineering and medicine work the most, while students of social sciences and humanities mainly hold temporary jobs. In a comparative perspective, we see that in Croatia, the employment rate for students of engineering is 15.4%, while for social sciences-humanities is 7.6%. In Slovakia, 10.5% of students of engineering are employed, while this is the case for 8% of social sciences and humanities students. There is no comparative data for Austria within the EUROSTUDENT V survey.

**Table 72: Correlation of student employment status and field of studies (in %)**

What study programme do you attend?	No response	Yes, I've worked throughout the semester	Yes, I've worked occasionally during this semester	No, I did not work during this semester	Total
Education	1.3	17.5	14.3	66.9	100
Social sciences and humanities	0.2	9.7	15.6	74.5	100
Business and law	1.2	9.9	12.4	76.5	100
(Natural) sciences, mathematics and informatics	8.5	18.5	7.4	65.6	100
Engineering	1.4	14.8	13.6	70.2	100
Agriculture and veterinary medicine	5.1	8.1	10.3	76.5	100
Medicine and related fields	0.0	13.2	10.9	75.9	100
Services	0.0	5.6	7.5	86.9	100
Total	1.5	11.7	12.5	74.3	100

Figure 14 presents the same data on student engagement in the labour market, but by level of study. The one fifth of students in master studies work which is notably more than in other levels of study. The lowest relative percentage of employed students by level of study is in the group of bachelor students.

**Figure 14: Distribution of students by employment status and level of studies (in %)**



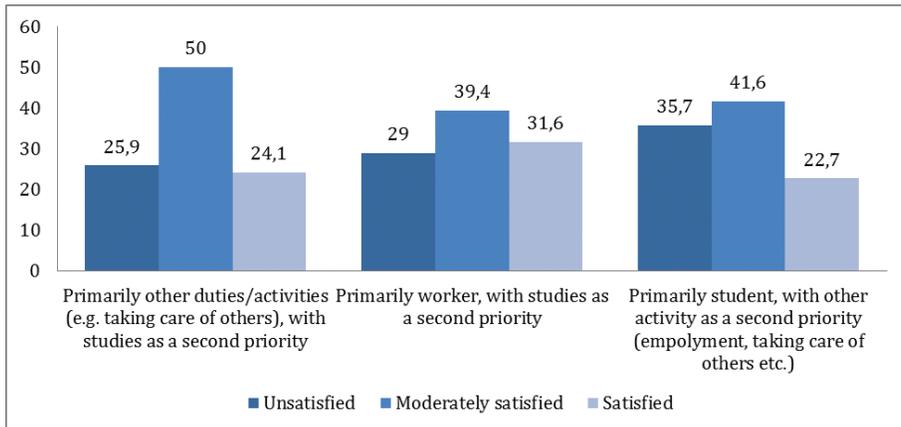
The following segment, through data presented in Table 73, shows an assessment of how students see their workload during the week. Particular attention is given to students who work during studies. Regarding student satisfaction with their studies and their job workloads (the entire sample is considered), the conclusion is that one third of the students is unsatisfied by the overall workload.

**Table 73: Student satisfaction with their workload at the workplace and in studies**

Satisfaction level	Workload of obligations regarding studies		Workload at paid jobs		Total workload	
	%	n	%	n	%	n
-						
Satisfied by workload	24	821	48	1154	28	851
Moderately satisfied by workload	41	1375	30	712	42	1273
Unsatisfied by workload	35	1173	22	532	30	929
Total	100	3368	100	2398	100	3053

Figure 15 presents the distribution of employed students according to their satisfaction with their workload and obligations in studies by primary activity during studies (study or work). As expected those students who primarily study, with work as a second priority, are less satisfied. However, there is an extremely large number of those unsatisfied with their study workload, amounting to around one third of the employed students.

**Figure 15: Distribution of students by workload satisfaction and primary activity during studies (in %)**



Looking at satisfaction with workload in studies, work and overall by gender, there is an even distribution of opinions of students of both genders, with slightly less satisfaction among males regarding workplace workloads (Table 74).

**Table 74: Correlation of gender and workload of students during studies (in %)**

Level of workload	Workload in studies			Workload in workplace			Total workload		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
1 Very satisfied	10.9	10.6	10.7	5.7	8.0	6.7	7.0	8.6	7.8
2	21.2	19.3	20.3	6.5	8.2	7.3	17.8	15.7	16.8
3	36.7	36.0	36.4	18.1	19.5	18.8	33.0	34.4	33.7
4	12.2	14.8	13.4	8.7	9.5	9.1	13.1	13.1	13.1
5 Very unsatisfied	7.8	8.7	8.3	22.4	20.4	21.5	9.1	9.8	9.4
No response	11.2	10.6	10.9	38.6	34.4	36.6	20.0	18.4	19.2
Total	100	100	100	100	100	100	100	100	100

The parental social status (in this case expressed through the students' perception of their parents' social status, rated 1 to 10) can largely influence students' future expectations, after completing studies. Regarding the prospect of employment in the country, within the group with a higher social status (rated 6/10) 28.72% of students assess their chances as good, 32.08% as neither good or poor, 30.78% as poor, and 8.44% cannot assess them. Within the group with a lower social status (rated 1–5), the expectations are far more pessimistic: 17.82% of students assess their chances as good, 23.36% as neither good or poor, 52.06% as poor, and 6.76% cannot assess them.

Table 75 and Table 76 show the assessment of employment prospects abroad upon the completion of studies, by existing social status. Within the group with

a higher social status (rated 6–10), the expectations are far more pessimistic: 44.24% of students assess their chances as good, 24.1% as neither good or poor, 16.86% as poor, and 14.8% cannot assess them. Within the group with a lower social status (rated 1–5), 35.19% of students assess their chances as good, 15.1% as neither good or poor, 32.63% as poor, and 17.08% cannot assess them.

**Table 75: Assessment of employment prospects at the international level upon completing the study programme (in %)**

Level of social status	(Very) good	Neither good or poor	(Very) poor	Cannot assess	Total
10 High social status	40.6	27.2	14.4	17.8	100
9	50.4	27.6	9.3	12.7	100
8	46.3	20.5	20.5	12.7	100
7	43.7	21.3	21.2	13.8	100
6	40.3	23.6	19.0	17.1	100
5	42.1	18.7	23.4	15.8	100
4	36.3	19.3	28.3	16.1	100
3	29.7	25.4	29.6	15.3	100
2	29.0	6.5	48.4	16.1	100
1 Low social status	38.9	5.6	33.3	22.2	100
No response	32.9	19.9	19.2	28.1	100
Total	42.0	21.4	21.0	15.5	100

**Table 76: Assessment of employment prospects at the international level upon completing the study programme (cumulative assessments in %)**

Assessment	(Very) good	Neither good or poor	(Very) poor	Cannot assess	Total
Rated 6 – 10	44.24	24.1	16.86	14.8	100.0
Rated 1 – 5	35.19	15.1	32.63	17.08	100.0

Comparing students by their current status in studies and whether they have had paid work during the semester, a similar structure is noted between self-financing students and students supported by the budget. Most of the students have not done any paid work, and the reason should be primarily sought in the poor state of the labour market, where it is very difficult to find a job, particularly if a student wishes to study and earn at the same time. According to the Statistical Office of Serbia Report (SORS, 2015), the employment rate for youth aged 15 to 24 was only 15.8% during the fourth quarter of 2014, clearly indicating a limited labour market regarding students. On the other hand, the percentage of students having found a job during studies is significantly greater compared to data for the 15 to 24 years population and amounts to 24.2%. Comparing the two groups, only a slightly larger percentage of self-financing students have had work experiences during the semester (Figure 16).

**Figure 16: Distribution of students by employment status and study status (in %)**

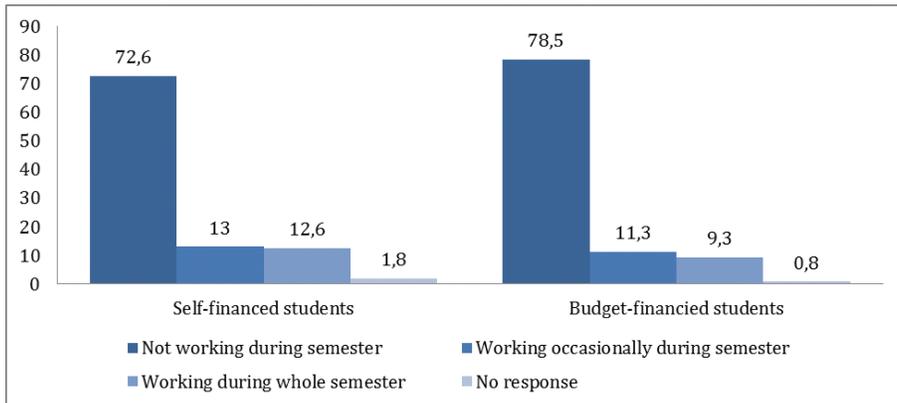
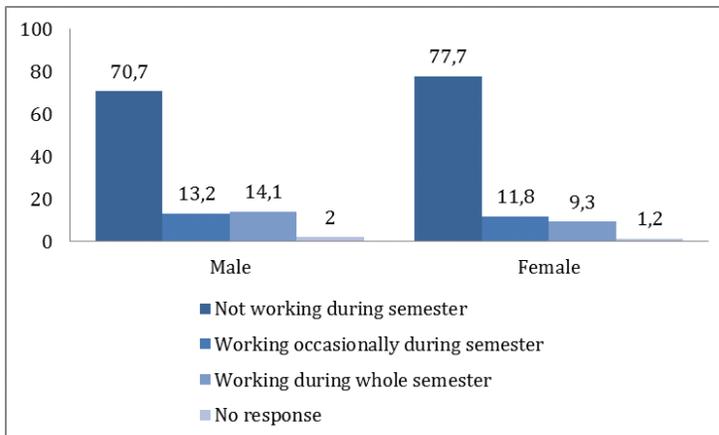


Figure 17 provides a comparative view of students of both genders regarding data obtained by the same question on the paid employment during studies. The conclusion is that a somewhat larger percentage of male students have found job during the semester. This difference in genders is somewhat lower than official statistical data on youth employment in the 15 to 24 age group by gender, amounting to 20.2% for males and 10.7% for females during the last quarter of 2014 (SORS, 2015).

**Figure 17: Distribution of employment status of students by gender (in %)**



Regarding the structure of students who have worked during the semester, the reasons for getting a job were primarily to improve their living standards and gain experience in the labour market, therefore this data (combined with data indicating the similar structure for budget and self-financing students regarding paid work during the semester) can indicate that student work, in some ways, represents a privilege in Serbia (Table 77).

**Table 77: Distribution of students by reason for getting job**

Degree of accordance	I work to survive		I work to improve my living standard		I work to gain experience in the labour market		I work because I have extra free time	
	n	%	n	%	n	%	n	%
Completely	165	24	332	47	237	37	48	8
Partly	76	11	187	27	155	25	53	9
Undecided	137	21	121	17	80	13	79	13
Partly no	91	13	28	4	61	10	131	21
Not at all	213	31	34	5	95	15	303	49
Total	682	100	702	100	628	100	614	100

A clearer view of how employed students see themselves is provided by the data in the following table. Among the group of the employed students, the largest number considers that they are primarily students, while one third of them has given a priority to work (Table 78).

**Table 78: Statements best describing the current situation of the student**

Response	Percentage	Number
I am primarily a student along with other activities	61	460
I am primarily employed, and additionally I study	31	237
I am primarily engaged in other activities in addition to studying	8	58
Total	100	755

Table 79 shows worrying data indicating that the problem is not just a small number of employed students, but that even more prominent problem lies in the connection between the employment and the study programme the employed students attend. Namely, only one third of students are doing work by which they can gain adequate experience related to their study programmes, while over one half are doing work very slightly or not at all connected with their study programme.

**Table 79: Link between students' work and their study programme**

Response	Number of students	Percentage
Highly connected	251	32
Moderately connected	122	15
Very slightly/not connected at all	418	53
Total	791	100

Figure 18 shows the correlation of student employment with the study programme they attend, by level of study. Notably, the percentage of students who can link their study programme with the work they have increases with higher levels of study. The problem is at the bachelor level where a job is hardly or not at all linked with their study programme. Should the correlation between

employment and study programmes during the first years of study increase, that would be surely transferred to the higher levels of study

**Figure 18: Distribution of students by level of study and correlation of employment with the study programme (in %)**

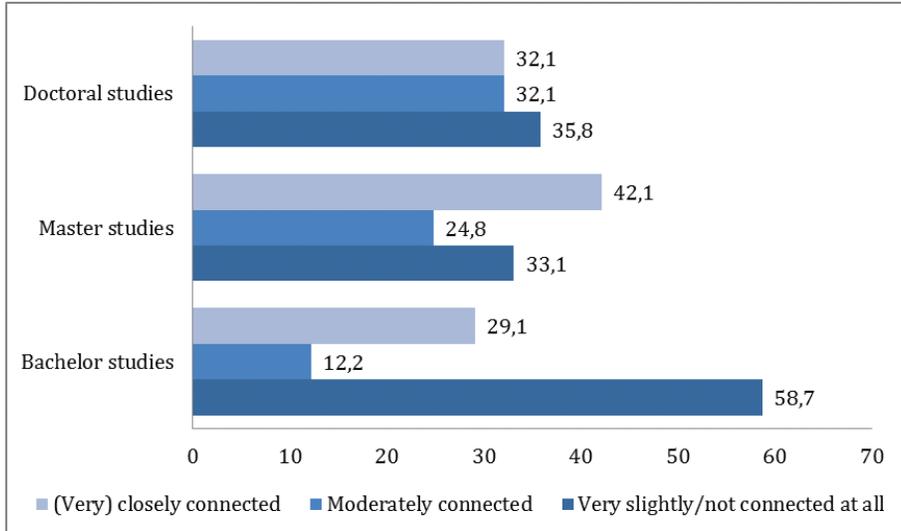


Table 80 shows how much have employed students worked during studies, regarding their own perception of the social status of their families. Regardless of whether the student has worked permanently or occasionally during the semester, or has not work at all, the perception of the socio-economic status is similar. In a situation where there are very few employment opportunities, clearly all students use employment opportunities when they are available. The overall conclusion regarding this data is that students are interested in working during studies regardless of their perception of social status.

**Table 80: Correlation of social and working status of students (in %)**

Level of social status	Yes, I've worked throughout the semester	Yes, I've worked occasionally during this semester	No, I did not work during this semester
10 High social status	3	6	4
9	6	3	6
8	8	5	7
7	14	19	17
6	26	21	19
5	13	12	15
4	17	20	21
3	7	8	6
2	4	3	4
1 Low social status	1	1	1
No response	2	1	1

Table 81 shows how many working hours per week on average the employed students spend at work in relation to their own perception of the social status of their families. Notably this number of working hours is lower than usual 40-hour work week duration. Likewise, there are no significant differences in the duration of the work week regarding perception of social status.

**Table 81: Correlation of the social status of students and number of work hours per week**

Level of social status	Average number of hours
No response	21.48
10 High social status	26.16
9	24.81
8	23.12
7	24.61
6	25.29
5	27.63
4	23.98
3	26.15
2	31.30
1 Low social status	22.19
General average	24.99

## 8. International Mobility

Promoting international student mobility in the European Higher Education Area is considered to be one of the key goals of the Bologna process. International student mobility is important for several reasons. On the one hand, it improves the quality of study programmes, contributes to the excellence in research and increases cooperation and competition among higher education institutions. It has a character that nurtures respect for diversity and encourages linguistic pluralism. On the other hand, international student mobility is equally important for the personal development of students, increases their prospects for obtaining better quality education and increases employment prospects. Due to all above, one of the goals of the European educational policy is to increase mobility in all countries and among all groups of students. The Leuven Communiqué (2009) states that at least 20% of graduate students should experience studying abroad by 2020.

Regarding the internationalization of higher education in Serbia, the Strategy for the Development of Education in Serbia by 2020 (2012), as well as the action plan for its implementation, involve establishing international mobility of students and researchers. Indicators for monitoring progress in this activity involve reliable data on the number of students by levels of studies carrying out mobility, the number of scholarships, granted loans, financed student visits as part of mobility, number of students gaining ECTS, etc. The above indicators show the importance of and great interest in collecting data on student mobility.

Likewise, determining the factors that affect student mobility is also of key importance. Existing studies on international mobility indicate that there is a significant link between student mobility and educational structure. The level of study, field of education, type of higher education institution are just some of the elements of the educational structure identified as significant predictors of mobility rates. In addition to differences in mobility by educational structure, a lot of attention is given to social factors, such as parental education, socio-economic status of students, etc.

In order to increase a mobility rate, except determining the factors influencing the implementation of student mobility, it is also very important to examine the expectations, desires, motivation, potential reasons, as well as potential obstacles for studying abroad.

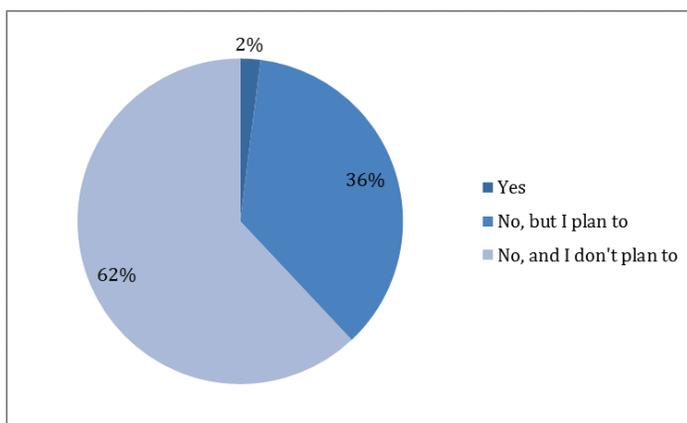
The goal of this chapter is to present the basic results of the EUROSTUDENT V survey on the mobility of students from Serbia and examine the key factors affecting students' attitudes towards the possibility of studying abroad.

Additionally, it should be pointed out that this EUROSTUDENT V survey is particularly important because it represents a unique source of data collected on international student mobility, thus enabling a detailed review of data on temporary student mobility and plans for future student mobility during studies. Therefore, the analysis presented below refers only to temporary study visits outside Serbia, i.e. the analysis excludes the students who have completed the entire study programme abroad.

The term temporary mobility in the EUROSTUDENT framework refers to the two options for study visits abroad: doing a part of the studies abroad and doing activities abroad related to the studies. Activities related to the studies include research work, study visits, foreign language courses, summer or winter schools, practical education or employment.

According to data from the implemented EUROSTUDENT V survey, only 2% of the students surveyed in Serbia have had experience with temporary studies abroad (Figure 19). Therefore, the 2% rate of mobility places Serbia among the countries with the lowest rate of student mobility in Europe. The average rate of mobility according to data available from the EUROSTUDENT V survey is around 10%. In addition to Serbia, an extremely low percentage of students with a mobility experience, i.e. 2%, is also present in Croatia, Ukraine and Slovakia, while the highest result is recorded in Scandinavian countries, reaching 18% of students in Norway with experience of studying abroad.

**Figure 19: Distribution of mobility rate among total student population**



However, regarding planned study visits abroad, according to the EUROSTUDENT V survey, Serbia stands out as a country with an extremely high percentage of students planning to do part of their studies abroad. This percentage is as much as 18 times higher than the percentage of students having done study visits abroad. The situation is similar in all the countries in the region – Bosnia and Herzegovina (B&H), Croatia and Montenegro. In most other countries, the percentage of planned visits is at most twice as high as the completed study visits. It should certainly be kept in mind that it would be very difficult to achieve the potential mobility rate due to the possible obstacles that may deter students from the planned study visits.

### 8.1. International mobility by student characteristics

The following table shows the mobility rates of students by type and founder of higher education institution and method of financing education. Regarding the regional and international mobility of students by type of higher education

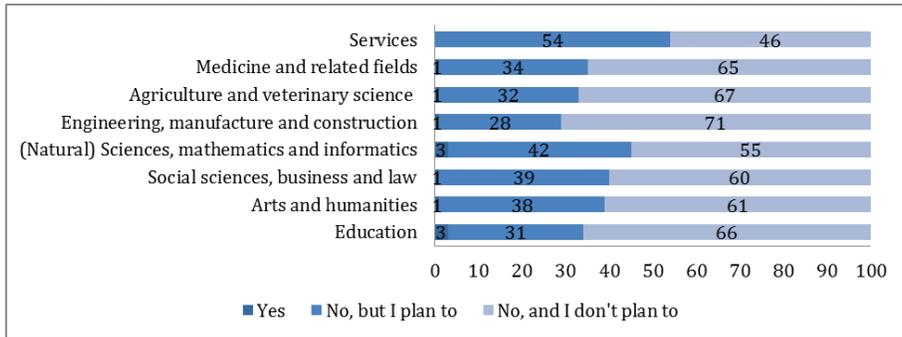
institution, students of non-university HEIs have had notably more experience with studying abroad (4%) than the university students (1%). However, the situation is different regarding the number of students planning future visits abroad during studies. The results show that 34% of university students have a positive attitude towards mobility and plan to spend part of their studies abroad, unlike non-university HEIs students where 29% plan mobility in the future. The differences in the rates of achieved student mobility between students of public and private HEIs seem almost negligible, while students of private HEIs show more interest in continuing part of their studies abroad (41%) than the students of public HEIs (35%). The method of financing studies appeared to be a negligible prediction factor for mobility. The rates of done, as well as planned mobility are balanced for budget and self-financed students.

**Table 82: Student mobility by type, ownership of HEI and student status (in %)**

Did you ever study abroad?	Self-financed	Budget-financed	Private	Public	Non-university HEIs	University HEIs
Yes	2	1	2	1	4	1
No, but I plan to	36	35	41	34	29	37
No, and I don't plan to	62	64	57	65	67	62
Total	100	100	100	100	100	100

According to the previous EUROSTUDENT surveys, a clearer view of the international mobility of students can be gained by correlating mobility rates with fields of education. One potential reason may lie in the fact that higher education institutions from different fields have different international orientation and cooperation with international institutions. One of the results noted in most countries with data available for the field of studies indicates considerable larger mobility among students whose field of study is in humanities and arts than among the students from the fields of technology, manufacturing and construction. One explanation of this phenomenon may lie in the fact that students of arts and foreign languages spend part of their studies abroad more frequently to improve the studied language proficiency and to learn about other cultures.

Regarding data for students from Serbia, the rates of realized mobility for Serbian students in the above fields are the same, while a difference is only noticeable for students planning to spend part of their studies abroad. This follows the trend of other European countries. Regarding the field of studies, the most positive attitude towards mobility have the students from the field of (natural) sciences, mathematics and information, as well as students from the field of education with a rate of 3% visits carried out. Among the surveyed students, the least mobile are students in the field of services. Within the surveyed sample no students from this field of education have had any experience with studying abroad, but as many as 54% have plans regarding mobility.

**Figure 20: Student mobility by field of studies (in %)**

In order to register other factors affecting student mobility in Serbia, the following figure presents the mobility of students by the level of studies enrolled and student age. The results show that the realized mobility rates for students of bachelor studies and students of master studies are approximately the same. Regarding planned studies abroad, the situation is somewhat different – students of bachelor studies plan studies abroad to a greater extent (37%) than the students of master studies (29%). One reason may be the fact that students of master studies have more work or family obligations, or have already experienced studying abroad. Comparing the tendency of students for studying abroad by age group, students over 30 years of age have been the most mobile, while the largest number of students under 21 years of age and students between 25 and 30 have plans regarding studying abroad.

**Table 83: Mobility of students regarding age and level of study (in %)**

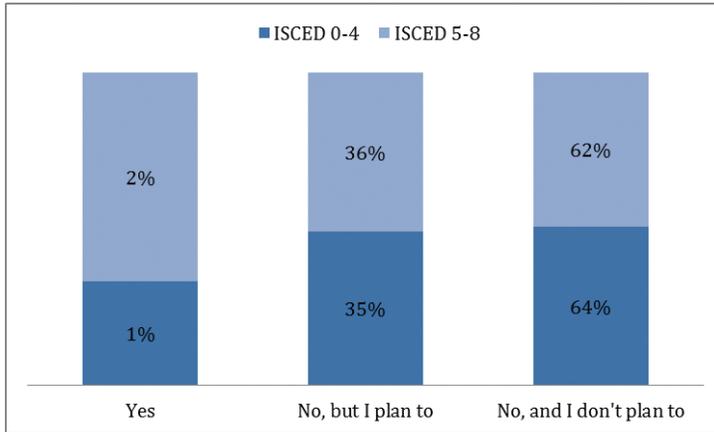
Did you ever study abroad?	Up to 21 years of age	Between 22 and 24	Between 25 and 29	Over 30 years of age	Bachelor studies	Master studies
Yes	1	2	1	5	2	2
No, but I plan to	37	35	37	33	37	29
No, and I don't plan to	62	63	62	62	61	69
Total	100	100	100	100	100	100

As already mentioned, the available literature on international mobility indicates that one of the key factors for student mobility is a very social origin of students, specifically, their parental education. In other words, access to international mobility is socially selective. According to data from the EUROSTUDENT V survey, this fact is particularly visible. In most states, students with higher social origin, i.e. students with parents with higher education, are more inclined towards studying abroad and more frequently plan studying abroad.

Figure 21 shows the influence of parental education on student mobility in Serbia. Based on the available data, the rates for both realized, as well as planned mobility of students with highly educated parents (ISCED 5–8) are

approximately the same as for students whose parents are not highly educated (ISCED 0–4). This balance between the rates of mobility and social origin is also shown by Armenia and Ukraine.

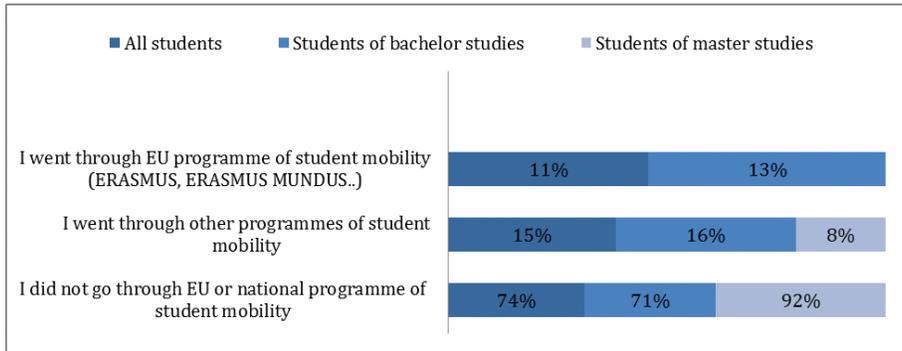
**Figure 21: Student mobility by level of parental education**



However, regarding the link between mobility and average monthly student income, the analysis has shown that there is a statistically significant correlation. In other words, as expected, students with higher monthly income show a more positive attitude towards international mobility.

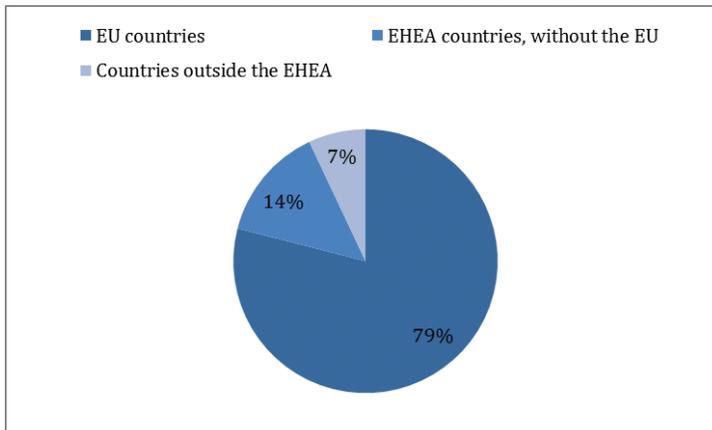
## 8.2. Student Mobility Programmes

Another advantage of the EUROSTUDENT V survey is the capacity to provide an overview of the organization and financing of study visits, as well as to respond to the question how well students are prepared for a visit abroad. According to data from the EUROSTUDENT V survey, students mostly opt for mobility programmes offered by the European Union. The most popular mobility programme appeared to be ERASMUS, with over 50% of the mobile students on average choosing this programme. The situation in Serbia differs considerably from the above data. Comparing the number of students with mobility officially supported through EU or state programmes and the number of students spending part of their studies abroad on their own initiative, among all the students studying abroad, the greatest percentage, as much as 74%, did not go through an organized programme. Only 11% of students stayed abroad within an EU programme, such as ERASMUS, ERASMUS MUNDUS, etc. while 15% used other mobility programmes. The above data places Serbia among the countries with the highest percentage of students studying abroad on their own initiative. None of the surveyed students of master studies has chosen EU programmes, while only 8% used other organized programmes. Students in bachelor studies choose organized mobility programmes considerably more.

**Figure 22: Distribution of student mobility by type of mobility programme**

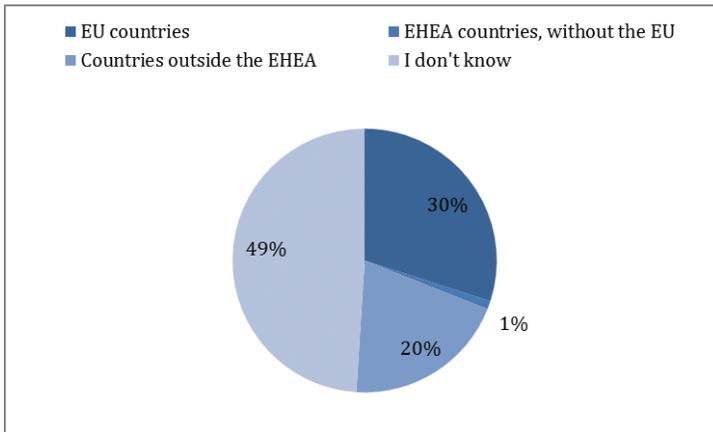
Regarding the most frequent mobility destinations for studies abroad, students notably choose mostly European Union countries. More specifically, European Union countries have hosted around 80% of realized mobility. Serbian students most frequently decide to spend part of their studies in Slovakia, Croatia, Italy and Austria. On average, they spend 5 months in study visits. Among the countries in the region, students from Serbia have most frequently attended schools in Bosnia and Herzegovina.

The differences between students at the first and second level of studies are balanced for the time being.

**Figure 23: Distribution of foreign countries where students studied**

Regarding students planning to spend part of their studies abroad, results indicate that students are still unprepared for planned visits, i.e. the following figure (regarding destinations for planned mobility) shows that nearly half the students showing interest for studying abroad still do not know in which country they would continue studies. The other half of the students chooses EU countries and EHEA member states. The most popular destinations for student mobility are Germany and USA, followed by Austria and Italy.

**Figure 24: Distribution of foreign countries where students would prefer to study**



Aiming to evaluate the flexibility of the openness of national systems towards different study programmes, students were also asked about the recognition of results obtained abroad by their home higher education institutions. ECTS points were fully recognized for one third of the “mobile” students, while the remaining students did not have a positive experience with the recognition of results (Table 84).

**Table 84: Recognition of certificates (ECTS, diplomas) obtained while studying abroad at home higher education institutions (in %)**

Response	Total number of students	Humanities and arts	Engineering, manufacture and construction
Yes, everything was recognized	34	27	87
Yes, but partly	24	6	6
No, nothing was recognized	2	5	4
I (still) do not know	13	40	3
I did not obtain a certificate during studies abroad	27	22	0

### 8.3. Obstacles for Studying Abroad

At the beginning of this chapter we have described the goal of European educational policy regarding an increase in mobility across all countries and all groups of students.. Having this in mind, as well as the extremely low rate of realised mobility among students from Serbia, it is essential to examine what are the obstacles for students to study abroad.

According to all previous studies, financial and institutional support are most important aspects that influence plans for the participation in academic

mobility study programmes. Likewise, according to all previous research, lack of motivation is an issue faced by the smallest number of students.

In most European countries, according to the latest EUROSTUDENT V survey, the expected additional financial costs represent a key obstacle dissuading students from the idea of completing part of their studies abroad. On average, 63% of students across all countries identify the financial obstacles as the most significant. Scandinavian countries are the only ones where the largest obstacles are separation from family, children and friends and validation of results obtained abroad by the home institution.

The analysis of obstacles for Serbian students is shown below, separately for three categories of students: students who realised visits abroad, students showing interest in studying abroad and students who do not plan to study abroad. As expected, the largest obstacle for studying abroad for students with mobility experience has been additional financial costs. Students have also stated that the problem of recognition of the results of studies and study outcomes obtained abroad upon return is also a large obstacle. This result is in accordance with the data above regarding recognized ECTS points, where only one third of the students have had all their results recognized. On the other hand, the smallest obstacles for leaving for a study visit were low grades in studies, language proficiency and lack of motivation.

**Table 85: Level and type of obstacle for studying abroad by students realizing international mobility (in %)**

Types of obstacles	Large obstacle	2 -	3 -	4 -	No obstacle at all
Language proficiency	1.8	8.8	28.1	19.3	42.1
Lack of information on studying abroad	0.1	15.4	42.3	15.4	26.9
Separation from partner, children, friends	14.5	21.8	23.6	10.9	29.1
Additional financial expenses	28.1	21.1	24.6	14	12.3
Loss of paid employment	17.9	16.1	12.5	1.8	51.8
Lack of motivation	13.7	19.6	15.7	11.8	39.2
Low benefit for studies in country	18.2	5.5	30.9	25.5	20
Hard to relate studies abroad to contents of my study programme in country	7.3	10.9	38.2	16.4	27.3
Problem of validating results gained abroad upon return	21.1	22.8	21.1	15.8	19.3
Problems in obtaining documentation	3.6	19.6	46.4	10.7	19.6
Low grades in studies	1.8	1.8	45.5	10.9	40
Limited number of available places in desired institution or desired study programme abroad	3.6	26.8	44.6	16.1	8.9

The following table presents the results of the analysis of the obstacles seen by students who have not experienced study stays abroad, but plan to realize them. Very similar results, but considerably more optimistic by frequency, were gained by analysing the responses of these students. The largest obstacles are notably additional financial costs, separation from family, as well as recognition of results. Likewise, administrative obstacles are seen as important obstacle in this case, i.e. potential problems in obtaining documentation for travel (visa, residence permit). On the other hand, the students are least worried about loss of paid work, lack of motivation and language proficiency, low benefits for studies home, as well as low grades in studies.

**Table 86: Level and type of obstacle for study abroad by students who have not realized study visits abroad, but plan to (in %)**

Types of obstacles	Large obstacle	2 -	3 -	4 -	No obstacle at all
Language proficiency	5.5	10.9	24.0	25.0	34.5
Lack of information on studying abroad	9.0	19.5	35.6	21.0	14.9
Separation from partner, children, friends	14.1	15.4	24.3	18.1	28.2
Additional financial expenses	26.4	31.3	25.8	7.9	8.6
Loss of paid employment	5.8	3.3	8.8	7.3	74.8
Lack of motivation	3.0	4.2	18.5	15.4	58.9
Low benefit for studies in country	6.0	7.7	27.5	15.3	43.5
Hard to relate studies abroad to contents of my study programme in country	7.3	13.3	30.2	22.0	27.2
Problem of validating results gained abroad upon return	13.0	15.0	28.4	16.5	27.0
Problems in obtaining documentation	10.1	16.0	29.4	20.1	24.3
Low grades in studies	3.0	8.2	20.7	23.4	44.7
Limited number of available places in desired institution or desired study programme abroad	8.3	20.7	34.9	19.3	16.7

One interesting finding is that the same obstacles deter students from continuing studies abroad. In other words, those students not planning studies abroad see additional financial costs as their largest obstacle. They also list separation from family and friends. The smallest obstacles are the loss of paid work and low grades in studies, as well as lack of motivation.

**Table 87: Level and type of obstacle for study abroad by students who have not experienced studies abroad, and do not plan to (in %)**

Types of obstacles	Large obstacle	2 –	3 –	4 –	No obstacle at all
Language proficiency	10.6	15.6	25.8	18.8	29.1
Lack of information on studying abroad	10.7	19.8	30.1	21.1	18.4
Separation from partner, children, friends	26.8	20.1	19.3	14.2	19.6
Additional financial expenses	41.2	24.7	18.6	7.1	8.3
Loss of paid employment	9.0	7.0	10.0	9.4	64.6
Lack of motivation	8.4	11.2	27.6	18.4	34.4
Low benefit for studies in country	7.2	6.9	35.0	18.0	32.9
Hard to relate studies abroad to contents of my study programme in country	8.8	15.5	28.8	19.5	27.5
Problem of validating results gained abroad upon return	11.7	15.0	27.5	19.3	26.5
Problems in obtaining documentation	11.3	16.8	26.6	19.2	26.1
Low grades in studies	5.4	9.7	26.0	18.4	40.6
Limited number of available places in desired institution or desired study programme abroad	8.2	14.6	37.0	16.4	23.8

As expected and in accordance with the results of all previous research, the largest obstacle perceived by all three groups of students is additional financial costs. Likewise, none of the three groups of students see language proficiency or lack of motivation as a potential obstacle.

#### 8.4. Short-Term Mobility

In addition to the questions regarding completed regular study courses abroad, the students also replied to questions on experiences abroad in activities related to studies, such as foreign language courses, summer schools, internships, etc. Regarding student activities abroad related to their studies, as many as 85% of students did not have any activity of this type. 6% of students have had experience with some activity different from the listed ones. The remained number is nearly equally distributed among the other offered activities.

Out of all types of short-term mobility (among offered activities) research work and study visits abroad are the most frequent for students in Serbia. A detailed overview is given in Table 88 showing data for all surveyed students, as well as for bachelor and master students. Based on the data shown, we may conclude

that students of master studies have had most experience with research work/study visits and internships. Likewise, all respondents were in EU countries, but only 6% obtained ECTS points through their student activity.

**Table 88: Type of short-term mobility by level of students' studies (in %)**

Type of short-term mobility	All students	Bachelor studies	Master studies
Research work/study visit	3	3	5
Internship/employment	2	1	5
Summer/winter school	2	2	2
Language course	2	2	3
Other	6	6	6
No activities	85	87	79

## 8.5. Foreign Language Proficiency

To complete the review of the results regarding mobility, we present the results regarding foreign language proficiency. This is particularly important because in the above analysis of obstacles, none of the groups of students has indicated lack of foreign language proficiency as an important obstacle for studying abroad. The percentage of students considering that they speak two foreign languages well varies drastically through countries participating in the survey. Serbia, with under half of the respondents believing that they have good proficiency in two foreign languages, is among the group of countries with the highest percentage of students speaking at least 2 foreign languages. Regarding specific foreign languages, most students speak English, followed by German and French. Regarding the teaching language, 98.7% of the surveyed students attend lectures in Serbian, while only 1.9% of them attend lectures delivered in English.

## Summary

### Socio-Economic and Demographic Profile of Students

In Serbia, there is a high degree of inequality in access to higher education due to socio-cultural and economic factors – students whose parents have simple occupations have significantly lower chances to access higher education. The largest number of surveyed students' parents have completed secondary school.

The share of students by gender is also unequally distributed – the percentage of female students is higher than the percentage of male students. The difference at bachelor studies is one of the lowest in Europe, while at the level of master studies it increases in favour of female students.

The total number of student parents is around 4%, and they are less satisfied than other students, because they experience greater financial difficulties. The threshold of serious financial difficulties is the arrival of the second child.

The highest percentage of students live with other persons, very few live alone, and in this domain there are no significant differences between students at bachelor and master studies.

According to gender, among the student population the percentage of female students with some form of impairment is somewhat higher compared to males, approximating the statistical data regarding the entire population in Serbia and the percentage of persons with disabilities.

Chronic diseases, psychological difficulties or other types of problems in Serbia represent a limiting factor regarding studies – nearly one quarter of students with some type of impairment see their impairment as a large obstacle for studying. Students with significant health problems seek counsel and support to a greater extent than their colleagues without such problems. A vast majority of students with some form of impairment believe that the institutional support during studies is low. The students with chronic health problems or impairments are more unsatisfied with their treatment by the administration of higher education institutions. Surprisingly, data shows that this group of students believe the infrastructure and equipment of higher education institutions are satisfactory. However, there is no significant difference between this group of students and those with no form of impairment regarding the decision to continue studies. Nevertheless, the group with health problems and impairments continue their studies later.

The least problems during studies have students with chronic health problems, while the greatest obstacles during studies have students with mental health problems and mobility difficulties. The greatest financial difficulties experience students with chronic health problems or impairments.

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## Education Prior to Studies

More students who have completed gymnasiums enrol in higher education institutions, but higher education in Serbia is very accessible to students of vocational secondary schools as well.

More students having at least one parent with higher education attend gymnasiums, while students whose neither parent has higher education have a higher tendency to attend vocational schools.

More students whose both parents have manual occupations attend vocational secondary schools, i.e. data on parental education and occupation indicate that students with a lower socio-economic status have a higher tendency to attend vocational secondary schools.

However, previous student education does not affect the intensity of their studies.

Students having attended vocational secondary schools finance their costs of living and education from the work they do to a significantly greater extent, and make greater use of public sources of income as the dominant sources of financing than students having attended gymnasiums. Combined with data on the socio-economic status of these students, we may conclude that these students are in a situation in which they have to work to finance their education.

Students of vocational secondary schools enrol more in higher education institutions with study programmes in education, humanities, engineering, manufacture and construction, and less in higher education institutions with study programmes in medicine and related fields, social sciences, law and business.

Nearly 93% of students have completed secondary school in Serbia, and higher education institutions in Serbia are attractive for students who do not have language barriers.

The most attractive study programmes for international students are programmes in the field of humanities and arts, services, medicine and related fields, while international students and students from Serbia do not differ regarding intensity of study, nor is there a statistically significant difference by dominant source of income they use to support themselves and finance their education.

For a vast majority of students there was less than a year from the moment they completed secondary school and enrolled in a higher education institution. A break between one and two years has been made by around 8% of students, while breaks longer than two years has made around 7% of students. Students from families with a lower educational attainment of their parents delay entry into higher education institutions more frequently. Likewise, students of non-university HEIs more frequently make longer breaks between completing secondary school and enrolling in a higher education institution, but compared to those enrolling in higher education, they have more work experience prior to the enrolment.

Upon enrolment, nearly one in ten students makes breaks in studying longer than one year. On the other hand, 4% of the students pause over one year between two levels of study, i.e. after obtaining the first diploma and the next level of studies.

It is interesting to note that delaying studies does not affect the subsequent intensity of studies.

Students enrolling in higher education institutions in the fields of services and education tend to delay enrolment in higher education institutions more, while those studying programmes related to agriculture, (natural) sciences, medicine and related fields show a lesser tendency.

Self-financing students, as well as students with other sources of income, delay enrolment to higher education institutions to a significantly greater extent.

Within the group of students with a higher tendency to break their studies for a period of over one year, the majority are students in the group of students with parents who completed higher education and where at least one parent has a non-manual occupation.

Students attending higher education institutions with study programmes in education more frequently interrupt their studies for over one year, which is also the case for students of higher education study programmes in humanities and arts, as well as services. Students of (natural) sciences and agriculture make less breaks.

Students of non-university HEIs interrupt their studies more than university students, while students dedicating less time to their study obligations have a higher tendency to make breaks longer than one year during studies. Likewise, an interruption longer than one year between the two levels of studies is most frequently done by students financing themselves during studies.

Comparing enrolment of students in master studies by secondary education of students, we may conclude that students having completed vocational secondary schools and those completing gymnasiums equally enrol in master studies, while parental education does not influence delays in enrolling in master studies. However, the transition to a higher level of studies is correlated with parental occupation. A break between bachelor and master studies is more often made by children of parents having non-manual occupations.

Students of (natural) sciences, medicine and related fields, and agriculture are less prone to make breaks between the two levels of studies than students of services, engineering, manufacture and construction.

A vast majority of students have not had any type of work experience prior to enrolling in a higher education institution. Parental education does not influence a previous work experience, while students whose parents have non-manual occupations have more work experience prior to enrolling a faculty/non-university HEIs. Students with work experience prior to enrolment to a higher education institution are, at the same time, students predominantly using their own sources of income during studies.

Work experience prior to enrolling in higher education for students of non-university HEIs is more than double than that of university HEI students, while students who have worked prior to the enrolment in higher education continue to work during studies. Regarding parental occupation, the children of parents having non-manual occupations are at greater percentage budget-financed students than the children of parents having manual occupations.

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## Progress of Studies, Satisfaction with Studies and Future Plans

A certain number of students with self-financing status must work to finance their studies, but regarding the intensity of studies there is no significant difference between budget and self-financing students.

Only 28% of students study outside the two largest university centres (Belgrade and Novi Sad). The students of highly educated parents and students with parents having non-manual occupations study in Belgrade and Novi Sad more frequently than children of parents without higher education or with manual occupations. The children of parents having non-manual occupations enrol in social sciences, business and law more frequently, while children of parents having manual occupations mostly enrol in study programmes in the field of education, agriculture, manufacture, electrical engineering and other engineering related study programmes. There are more female students in social sciences, education and medicine, while males are significantly more represented in engineering related study programmes.

Students are most satisfied with their treatment by teaching staff, and least satisfied with the organization of courses and options for selecting among a larger number of courses. Regarding HEI equipment the results are above average, while the results for assessing the quality of teaching are below the average for the EUROSTUDENT countries average.

The most satisfied are students studying service-related study programmes, while the quality of teaching, organization of studies and schedule of classes, as well as HEI equipment were assessed as the worst by students of (natural) sciences. Students of medical sciences are least satisfied with the option for selecting from among a large number of courses and student treatment by teaching staff.

Around one tenth of students has stated that they wish to continue studies, and over half of the students want to continue studies one or several years after completing their study programme. The desire to continue studies is significantly more present in students with a high intensity of current studies and in students primarily financed from public sources of funding.

Plans regarding continuation of studies do not have any correlation with parental education. The correlation with the type of parental occupation is not significant.

Results indicate that students assess that employment prospects outside the borders of Serbia are significantly better than in Serbia. Students differ in their assessments regarding the study programme they have completed, and thus the best assessments of employment prospects in the country are given by engineers, students of agriculture, students of medicine and (natural) sciences.

## Conditions of Student Life

Students do not contribute significantly to their own economic status, and there is a direct reproduction of the parents' status.

Based on their own assessment, somewhat below 10% of students have no financial difficulties whatsoever, while nearly the same number of students believe they have very severe financial difficulties. The greatest financial difficulties are reported by students primarily depending on their own sources of income.

Severe financial difficulties are mostly reported by students studying programmes in the field of education and (natural) sciences, while the least financial difficulties are reported by students studying programmes in the field of services.

Nearly half of the students live with their parents, while somewhat over one fifth live independently. Students with highly educated parents tend to live with their parents more frequently, and significantly more rarely with others. At the same time, students who financially primarily depend on public support live with other people nearly twice as often as students financially primarily depending on family, and over three times more frequently than students depending on their own income.

Over 80% of students are (very) satisfied with accommodation. Students living with their parents express the highest degree of satisfaction while percentage of satisfied students is significantly lower among the students living in dormitories.

The costs of living are the lowest for students living with their parents and increase with the age of students. The highest costs of living have students depending on their own income.

Students financing their own studies, as well as non-university HEIs students, have higher costs of studies.

## Employment

The percentage of employment among students is notably the same regardless of whether the students live with parents or independently.

Less than 25% of students are employed. The percentage of employed students is lower among students whose parents have not completed higher education. Due to the high unemployment rate among youth in the countries and the region, work is mostly a privilege not available to all.

A vast majority of students are financially dependent on their parents during studies, while the percentage of students who predominantly finance themselves is around 5%.

The highest percentages of students who work are in the groups with the lowest and highest socio-economic status. Students in the fields of education, (natural) sciences, engineering and medicine work most frequently, while students of social sciences and humanities most frequently work occasionally.

The lowest relative percentage of employed students by level of studies is noted for students of bachelor studies.

The number of those unsatisfied with the amount of the study workload is extremely high.

Regarding the current status of studies and whether they have done any paid work during the semester, there is no significant difference between self-financing and budget students.

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Among the employed students, most consider themselves to be primarily students. Only one third of the students have a job at which they may gain relevant experience related to their study programme.

## International Mobility

Only 2% of the surveyed students have had experiences with temporary studies abroad, while the achieved mobility rates for students of bachelor studies and students of master studies are approximately the same. However, there is a very high percentage of students intending to spend part of their studies abroad.

Students of non-university HEIs have had more experience with studying abroad, but 37% of university students have a positive attitude towards mobility and plan to spend part of their studies abroad, unlike non-university HEIs students where this percentage is 29%.

The method of financing studies was shown to be a negligible predictive factor for mobility.

The most positive attitude towards mobility have students from the field of (natural) sciences, mathematics and informatics, as well as students from the field of education.

More students of bachelor studies plan studies abroad compared to students of master studies, but students over 30 years of age are the most mobile.

Students with higher monthly income show a more positive attitude towards international mobility.

Serbia is among the countries with the highest percentage of students studying abroad on their own initiative, while a very low percentage uses benefits of organized programmes. Thus far, students have mostly chosen to spend part of their studies in Slovakia, Bosnia and Herzegovina, Croatia, Italy and Austria, spending, on average, 5 months there.

The greatest perceived obstacle for studying abroad for all groups of students (those with experience with international mobility, students without experience with studying abroad, but planning to, and students with no experience with studying abroad and not planning to) is additional financial cost. Likewise, none of the three groups of students see language proficiency or lack of motivation as a potential obstacle.

The most frequent type of short-term mobility is research work/ study visit abroad.

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