SOCIAL DIMENSION OF STUDYING IN BOSNIA AND HERZEGOVINA

EUROSTUDENT V

Report for the Federation of Bosnia and Herzegovina

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SOCIAL DIMENSION OF STUDYING IN BOSNIA AND HERZEGOVINA

EUROSTUDENT V
REPORT FOR THE FEDERATION OF BOSNIA AND HERZEGOVINA

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Social Dimension of Studying in Bosnia and Herzegovina

EUROSTUDENT V Report for the Federation of Bosnia and Herzegovina

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Social Dimension of Studying in Bosnia and Herzegovina
– EUROSTUDENT V
Report for the Federation of Bosnia and Herzegovina

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Abbreviations

CEEPUS	Central European Exchange Program for University Studies
EHEA	European Higher Education Area
EU	European Union
ECTS	European Credit Transfer System
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.

Foreword

The correlation between education, particularly higher education, economic growth and social development has been confirmed through a considerable volume of research, while the need to develop human capital and prepare citizens for occupations requiring higher qualifications is undisputed. Therefore, it is not surprising that an increasing number of countries are approaching reforms in the field of education systematically and strategically. During these reform processes higher education reforms have held an important position, but, for years, in European countries, they have primarily aimed at issues directly or indirectly related to economic growth and development (e.g. the creation of the European Higher Education Area, student and workforce mobility, etc.) prevailing over issues regarding the social dimension of higher education. Additionally, the EU 2020 Strategy, under its sections on higher education, states that one of its goals is that by 2020 the share of 30-34 year olds with tertiary educational attainment should increase by at least 40%, meaning that increasing equity and accessibility of education is one of the key strategic objectives.

Bosnia and Herzegovina (B&H), with all its entities, is no exception in the process of adjusting and harmonization of education to the context of modern 21st century society. The Constitution of Bosnia and Herzegovina, and the entity constitutions (of the Federation of Bosnia and Herzegovina (FB&H) and Republika Srpska) do not refer specifically to higher education, nor specifically mention higher education institutions and their status. Higher education is regulated by laws at the national, entity and cantonal level.

The highest legal act regulating higher education in the entire country is the Framework Law on Higher Education in Bosnia and Herzegovina, adopted in 2007, after four years of political discussion. It was amended in 2009. Article 63 of the law regulates that all issues in the field of higher education not regulated by this law will be regulated by the laws at the level of Republika Srpska and the cantons. Its implementation has been slow, because by the constitutional system, the responsibility for higher education remains at the level of entity, i.e. Republika Srpska, the cantons in the Federation of Bosnia and Herzegovina, and the independent administrative unit of the Brčko District of B&H. Chronologically, the law on higher education was first adopted in the Tuzla canton in 2008, then in the Una-Sana, Zenica-Doboj, West Herzegovina and Canton 10, followed by Brčko District in 2009, Bosnian Podrinje , Posavina, Sarajevo cantons and Republika Srpska in 2010, in the Herzegovina-Neretva canton in 2012 and finally in the Central Bosnia canton in 2013.

The process of reform in the field of higher education in Bosnia and Herzegovina has started by signing the *Bologna Declaration* in 2003. Bosnia and Herzegovina has launched the reforms that have been , like in other countries, the consequence of a wider wave of reform in the field of higher education, aiming to harmonize the higher education system with European

trends in higher education following the principles of the *Bologna Declaration* and the *Lisbon Convention*. Since 2004, Bosnia and Herzegovina has also been a signatory to the Convention of the Council of Europe/UNESCO on recognizing qualifications in higher education in the European region (Lisbon Convention, 1997). The reform of a higher education system in Bosnia and Herzegovina, during its initial phase, has included a restructure of the higher education system by introducing a three-cycle model of study, a modernization of study programmes, development of the quality assurance models, increasing student and higher education staff mobility, promoting European cooperation, recognizing study periods spent abroad, and development of the qualification frameworks (Branković & Branković, 2013). The reforms and the need for reform have subsequently spread to other higher education areas such as support to students, higher inclusion of underrepresented student groups and changes to the higher education system of financing. Likewise, several strategic documents related to higher education have been adopted as a result of the education reforms at the level of Bosnia and Herzegovina , with the most important being *Strategic Directions of Development of Education in Bosnia and Herzegovina with Implementation Plans for 2008-2015 (*Official gazette of B&H, no. 14/08*), Recommendations for the Implementation of Quality Assurance in Higher Education in Bosnia and Herzegovina (*2007*), Standards and Guidelines for Quality Assurance in Higher Education in Bosnia and Herzegovina (*2007*), National Action Plan for Recognition of Qualifications in Bosnia and Herzegovina (*2006*), Implementation of Framework for Higher Education Qualifications in Bosnia and Herzegovina (*2007*), Framework for Higher Education Qualifications in Bosnia and Herzegovina (*2007*).* Additionally, the *Agency for the Development of Higher Education and Quality Assurance and the Centre for Information and Recognition of Documents in the Field of Higher Education* have been founded at the level of Bosnia and Herzegovina. The Federation of B&H has adopted the Strategic Directions of Development of Higher Education 2012-2020.

Having in mind the above situation, characterized by a dispersed system of higher education in Bosnia and Herzegovina, the established strategic and legislative framework, and also numerous future reform processes envisaged by strategic documents, it is clear that the importance of research providing valid data comparable with higher education systems in other European countries is great. One such survey is the EUROSTUDENT survey implemented across the wider European area. Its goal is to analyse the socio-economic status of students and provide comparable, detailed and reliable data on the social dimension of higher education in Europe. The data collected through this survey primarily refer to social and economic indicators of the students' status and their living conditions. EUROSTUDENT also examines temporary international mobility. The basis for this research is the opinion that knowing the characteristics of students and their lives is a key for assessing the equity, efficiency and effectiveness of a higher education system. The relevance and usefulness of this survey is also reflected in the fact that the four cycles of the EUROSTUDENT survey have been implemented thus far, with the number of participating countries increasing with each subsequent survey cycle.

Thus, in 2012 Bosnia and Herzegovina has for the first time joined the fifth cycle of the EUROSTUDENT survey through the TEMPUS project "*Towards Sustainable and Equitable Financing of Higher Education in Bosnia and Herzegovina, Montenegro and Serbia - FINHED*", thereby 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.

Within the EUROSTUDENT survey data for Bosnia and Herzegovina (i.e. both its entities) was collected, but this report presents an analysis of data collected for the Federation of Bosnia and Herzegovina. The value of this report is reflected at three levels - firstly, it does not provide only data regarding the accessibility and equity of higher education in the above entity, but also the opportunity for a comparative review (regarding the assessment of strengths and weaknesses of the given higher education system); secondly, Bosnia and Herzegovina, and thus the Federation of B&H, like most countries in the region, is in the period of education reform, where adequate data facilitate adjusting higher education policy to the needs of students, and thirdly, analyses regarding the social dimension of higher education were done based on a targeted methodology providing for insight into various aspects of the social dimension of higher education in the Federation of Bosnia and Herzegovina. Hence, this survey represents the first comprehensive and targeted survey of the student population in the entity. In other words, the EUROSTUDENT questionnaire served as the instrument to collect and make available data for adopting policies that will stimulate equity both for European higher education and higher education in Bosnia and Herzegovina and the Federation of Bosnia and Herzegovina.

Regarding the structure of the report, it contains eight chapters. The first (introductory) chapter gives an overview of the context and the second chapter methodological explanations for the survey. The remaining six chapters contain systematized data and its analysis regarding the social and economic status and origin of the students, access to higher education, along with the correlation of previous education and the studies currently attended, the characteristics of the transition towards higher education, the progress of studies, satisfaction with the studies, plans after studies, student living conditions, employment and international mobility. Particularly important for gaining insight into the socio-economic status of students are the students' assessment prospects in the domestic and international labour market and their plans regarding further studies.

Moreover, wherever possible, the data obtained for the Federation of Bosnia and Herzegovina was compared with the data obtained for other countries participating in the fifth cycle of the EUROSTUDENT survey, making sure to present both, the data from countries with similarities with the Federation of Bosnia and Herzegovina (at the level of the economy, the educational system, historical heritage, etc.), and from Western European countries that differ from

B&H Federation in many ways but in certain ways represent good practice examples that could serve as a guide in elaborating the adjustment of a higher education system to the needs of students.

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 themselves and all other stakeholders interested in this topic.

1. Background

The constitution defines Bosnia and Herzegovina as an independent state composed of two entities: the Federation of Bosnia and Herzegovina (FB&H) and Republika Srpska (RS). Brčko District (BD) was founded as a separate administrative unit under the sovereignty of Bosnia and Herzegovina. The Federation of B&H consists of ten cantons. The executive government of the country comprises 14 governments - one at the national, two at the entity level, ten cantonal and one of Brčko District. This also means that there are fourteen different ministries/institutions dealing with education in the country: The Ministry of Civil Affairs of B&H at the national level, two entity ministries of education (Federal Ministry of Education and Science and the Ministry of Education and Culture of RS), 10 cantonal ministries of education and one Section for Education in the Brčko District Government. The Ministry of Civil Affairs of Bosnia and Herzegovina, in consultation with other relevant ministries, is responsible for general educational policy and international cooperation in the field of higher education at the national level, including the promotion of links between B&H and foreign higher education institutions and the student and staff mobility in the field of higher education in Europe and on the international level. In FB&H, the main function of the Federal Ministry of Education and Science is to coordinate activities of the ten cantonal ministries of education, while in Republika Srpska the Ministry of Education and Culture of RS is fully authorized to develop and implement higher education policy in this entity. Thus, it is difficult to speak about a single higher education system in Bosnia and Herzegovina. It is probably more realistic to speak about twelve different higher education "systems" existing in the country, i.e. ten in the Federation of Bosnia and Herzegovina, one in Republika Srpska and one in Brčko District. Therefore, it is clear that the constitutive complexity of Bosnia and Herzegovina reflects on the responsibilities regarding higher education.

However, that does not mean that there is not a certain degree of cooperation between these "systems". As stated, higher education in Bosnia and Herzegovina is regulated by the Framework Law on Higher Education in Bosnia and Herzegovina, adopted in 2007 and amended in 2009. According to this law, higher education is education acquired after secondary school, leading to an internationally recognized higher education level. Access to a higher education is available to everyone who has completed a four-year secondary school. The criteria for enrolment in higher education are adopted by university senates, at the proposal of the scientific-educational council of faculties. They may differ between HEI but all should respect the general criteria consisting of the educational attainment in secondary school, average grades in three subjects relevant for the field of study, and the results of the entrance exam. The enrolment quotas are approved by ministries, at the proposal of universities/faculties.

Higher education can be achieved by full time, part time, distance studies or by combination of these three methods of study. This is regulated by the statute of

the higher education institution. Higher education institutions are divided into universities and non-university HEIs[1].

According to information provided by the Ministry of Civil Affairs of B&H, enrolment quotas to higher education institutions are approved by the ministries at the proposal of universities/faculties. Within a quota, students can be budget-financed (those for whom tuition fees are fully or partly covered from the budget. These students are also entitled to scholarships and various other subsidies) and self-financing students (financing their own studies). The status (budget or self-financing) is determined according to the academic attainment, meaning that students are ranked down to a certain quota allowed for budget-financed students, financed from the public funds with the ministries bearing the costs of studies, while the remaining students who meet the criteria can enrol as self-financing students.

Higher education is organized in three cycles - the first cycle are bachelor studies (at least 180, and/or 240 ECTS points), the second master or equivalent studies (60 or 120 ECTS points)[2] and the third cycle are doctoral studies (180 ECTS points).

At the entity level, the main strategic document in the field of higher education in the Federation of B&H is the document *Strategic Directions for the Development of Higher Education in the Federation of B&H 2012-2022.* It is a product of the work of the Federal Ministry of Education and Science, adopted by the Government of the Federation of B&H in 2013. The intention of the federal ministry has been to produce a joint strategic directions for the development of higher education in the Federation of Bosnia and Herzegovina in accordance with the Bologna Declaration, the conclusions of the ministerial conferences on monitoring the further development of the implementation of the Bologna goals, the Framework Law on Higher Education and the Federation of B&H cantons' laws on higher education, bylaws, conclusions adopted at international roundtables organized during 2010 and 2011, and the results of the held public discussions on the draft document. Besides other strategically important issues, this document pays particular attention to various forms of partnerships and cooperation between higher education institutions and relevant ministries. It also emphasizes the importance of higher education for the cultural, social and economic development of the country.

Regarding legal regulations, higher education in the Federation of B&H is regulated by cantonal laws on higher education, harmonized with the Framework Law on Higher Education.

Regarding the management of higher education, within the Federation of B&H, the coordination is done by the Federal Ministry of Education and Science, i.e. its sector for higher education that, inter alia, participates in the implementation of student and academic staff exchange programmes, works on establishing a sustainable system of financing higher education and a system of financing the student standard, monitors and coordinates the implementation of provisions of international conventions, agreements and other documents in a field of

1 ISCED level 5 – short cycle (vocational) tertiary degree.

2 Throughout this report, students of the second cycle of studies will be referred to as students of master's studies, in order to provide comparability with other countries.

higher education signed by Bosnia and Herzegovina. This ministry cooperates closely with the cantonal, entity and state authorities having jurisdictions in the field of higher education and coordinates inter-university cooperation for the purpose of reforming a higher education system; it works on raising the quality of studies, initiates and supports the establishing and strengthening links between higher education institutions in the Federation of B&H and higher education institutions in other parts of Bosnia and Herzegovina.

Higher education in Bosnia and Herzegovina is mostly financed by the public funds from the entity and cantonal budget, the budget of Brčko district and the municipal budget, depending on the jurisdictions. Financing is still based on input parameters, such as a number of employees and number of students. It means that this model of financing stimulates institutional dependence on state support, with no systemic mechanisms stimulating higher education institutions to find a more efficient ways of spending public funds. Furthermore, the projected funds mostly cover higher education institutions operational costs. Financing higher education in the Federation of B&H is under cantonal jurisdiction. It has the characteristics of a decentralized model. The Federation of B&H allocates funds to cantons according to an agreed formula, but the income allocation formula does not contain provisions specifically related to financing higher education, thus funds planned for financing higher education institutions are unequally divided between cantons.

Considering the above, it may be concluded that the system of student support in the Federation of Bosnia and Herzegovina is still inadequate. However, the Federation of Bosnia and Herzegovina considers higher education reform as a strategically important issue. Another fact corroborating this statement is that Bosnia and Herzegovina supports the project "Towards the Sustainable and Equitable Financing of Higher Education in Bosnia and Herzegovina, Serbia and Montenegro", under which this report is produced. The goal of the project is to contribute to the improvement of the 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 at the sustainability of results and their dissemination across the region.

We may also conclude that the above strategic directions and measures stated in the strategic documents of Bosnia and Herzegovina and its entities constitute a good baseline for creating and implementing individual support measures for students. However, it is important to determine the true needs of the student population, examine the degree in which the operationalization of these commitments is clear and applicable to the student population, find out whether there are any significant obstacles preventing students in realizing their rights to have a quality education under equal conditions, and, based on the data obtained, what could be the pillars for decision makers in the process of creating adequate support measures for students. The following chapters address those issues.

2. Research Methodology

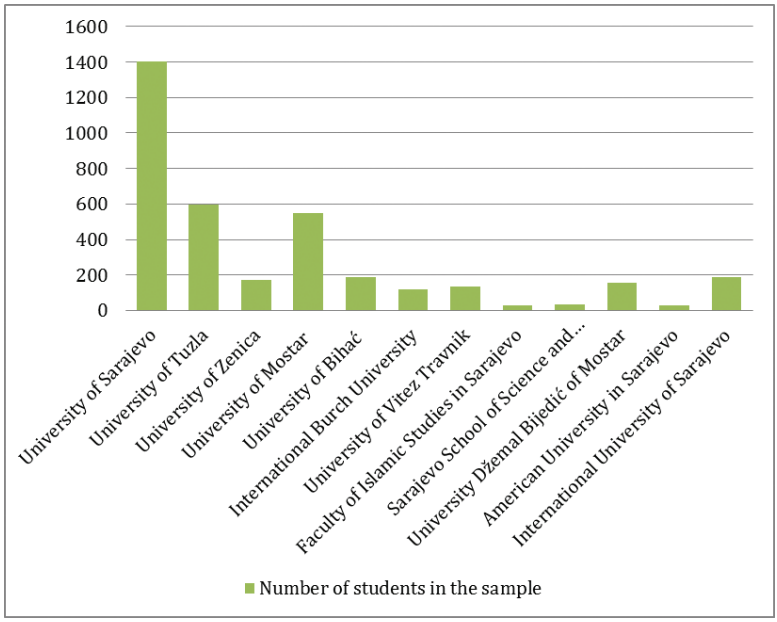
Bosnia and Herzegovina has started preparations for the implementation of the fifth cycle of the EUROSTUDENT survey on the social dimension of higher education in Europe in 2012 immediately upon joining it. The survey was implemented during the summer semester of the 2013/14 school year.

The survey instrument was a paper-based questionnaire. The interviewers were members of the citizens' association "Nešto više" from Sarajevo who have received the adequate training prior to a field work.

A representative sample was formed based on data available from the Agency for Statistics of B&H and the Federal Institute for Statistics. The sample represents a combination of a stratified and a quota sample.

The questionnaire was completed by a total of 3991 students from 12 different higher education institutions from 6 cities in the Federation of B&H. Following a detailed control of the completed questionnaires, carried out according to the rules of the EUROSTUDENT survey, part of the questionnaires was excluded from further data analysis due to the insufficient number of responses to mandatory questions. Thus, the final analysis covers 3593 responses (making up around 5% of the contacted students), with 39.1% from the University of Sarajevo (Figure 1).

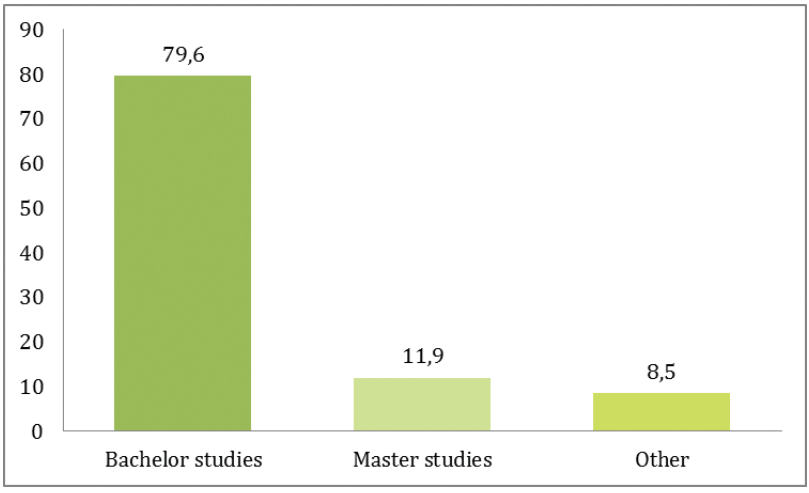
Figure 1: Sample distribution by higher education institution



The sample was weighted using the variables: gender, age, higher education institution, status, level of study and a field of education.

Figure 2 presents the distribution of students within the sample based on a level of the enrolled studies. We can see the students of bachelor studies are dominant, followed by students of masters' studies, while the smallest percentage is for the category *other* which includes students still studying according to the pre-Bologna system, students of integrated academic studies, students of vocational studies and doctoral students.

Figure 2: Sample distribution by level of study

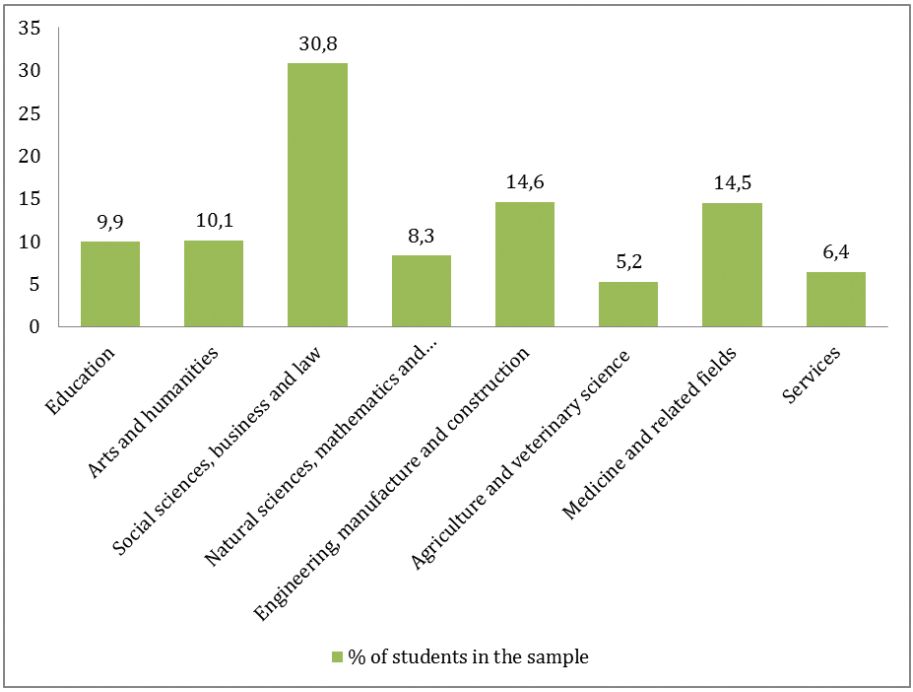


The sample consists of 57.6% female and 42.3% male students. Using data from the Agency for Statistics of B&H (the general population uses data from the Preliminary Results of the Census of the Population, Households and Residences in Bosnia and Herzegovina 2013, while the student population data is from the statements on higher education for the academic year 2013/14, when the EUROSTUDENT survey was being implemented) along with data obtained by the EUROSTUDENT survey, we may conclude that the structure of genders in the sample is balanced and corresponds to the distribution of students by gender in the overall student population (44% male and 55% female students), i.e. the distribution of genders in the overall population.

Regarding fields of education, most of the students in the sample study programmes in the field of social science, law and business, followed by students of programmes in the field of engineering, manufacture and construction, and medicine and related fields.

The lowest percentage of students in the sample comes from higher education institutions offering programmes in the field of agriculture and veterinary medicine (Figure 3).

Figure 3: Distribution of students within the student population and sample by field of education



The questionnaire for the students participating in the EUROSTUDENT survey in the Federation of B&H (Appendix 1) was developed based on the generic English language questionnaire received from the EUROSTUDENT consortium, adjusted to the characteristics of the student population, conditions of study in the Federation of B&H and the specifics of the higher education system in the Federation of B&H. For example, a question was added regarding whether the student is the budget or self-financed which is not an option in other countries, yet represents a key student characteristic, and/or point of division regarding the student population in the Federation of B&H. The team adjusting the questionnaire made every effort to keep the changes to a generic version to a minimum, in order to retain the possibility of comparing different national higher education systems.

3. Socio-Economic and Demographic Profile of Students

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

Furthermore, the data regarding the socio-economic status of students is particularly important because if we accept the perspective that socio-economic status represents a composite measure of the educational attainment of parents, parental occupation, the level of prestige of their occupation, the material status and cultural resources at the disposal of the family (Baucal, 2012), or if we define it more broadly as a status within a social hierarchy influencing the availability of financial funds, power and prestige (Sirin, 2005), it becomes clear that an individual's socio-economic status will influence both his/her current, as well as future life, and certainly education as well. 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. Firstly, access and full utilization of the possibilities offered by education largely depends on the economic resources an individual possesses. Secondly, 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 means that what theorists call cultural or class reproduction is frequently enacted through the education system , i.e. the inability of those with a lower socio-economic status, regardless of the work and effort they invest and their abilities, to secure a better socio-economic status (Bourdieu & Passeron, 1977/1990). At the same time this means that if the educational system is organised so that everyone has equal access, and thereafter, quality education, it ceases to be a channel for the reproduction of social inequality (Čekić Marković and Jokić, 2015).

Since this data should serve as the basis for creating and improving existing policies in the field of education and as the "image" of the Federation of B&H in this area regarding other European countries having participated in this survey, the general data providing insight into the student population in the Federation of B&H, as well as general data on the socio-economic status of students was analysed separately under this chapter. The significant amount of this data will also be the basis for the analysis of data in subsequent chapters.

Likewise, part of the data was analysed in a comparative perspective to create a clearer view of the situation in the Federation of B&H compared to select countries and where adequate data was available. The results for the Federation of B&H were compared to the results of certain other European countries. Therefore, in addition to the countries of the region, the most frequently used

results were those from Croatia, Austria and Slovakia. The choice of Austria was based due to the fact that Austria is one of the first countries in Europe to introduce and implement support measures for students on a systemic level. Croatia was chosen because it features the same historical heritage as the Federation of B&H (the heritage of former Yugoslavia), but in the processes of establishing systemic support measures for students, *inter alia*, it has competed the harmonization with the educational systems of European Union countries, having become a member state in mid-2013. Slovakia was chosen because it has been a member of the European Union for over a decade, therefore it was significant to view the current status of their educational system, as well as the subsystem of higher education and its measures of student support, and to see whether the remnants of a centralized education system in this country (as is the case with the Federation of B&H) are still a challenge, or this country today is more similar to "old members" of the European Union.

3.1. Age Structure and Origin of Students

Regarding the age of students in the Federation of B&H within the realized sample, a student in the Federation of B&H is on average 23.1 years old (the median is 22.5 years), one year more than the average of EU27 countries where the average age of students is 22.1 years.

Within the student population, the smallest percentage belongs to the oldest students, those above 30 years of age (3.4%), indicating a relatively adequate pace of study.

This data is in accordance with the data obtained in the CONGRAD survey showing that the time of study became significantly shorter after the Bologna reform, thus achieving one of the main goals of the systemic changes in higher education. The comparison of the age structure of students in master and bachelor studies, show the trend of a relatively successful mobility towards master studies based on student age (Lažetić et al, 2014).

Figure 4: Age of students in the Federation of B&H by level of study (in %)

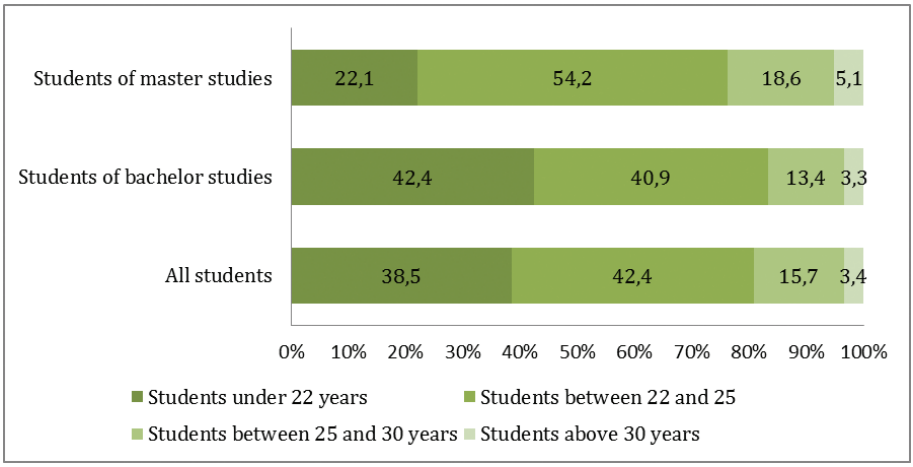


Figure 5 shows that most of the students in higher education institutions in the Federation of B&H were born in the same country as their parents (82.1%).

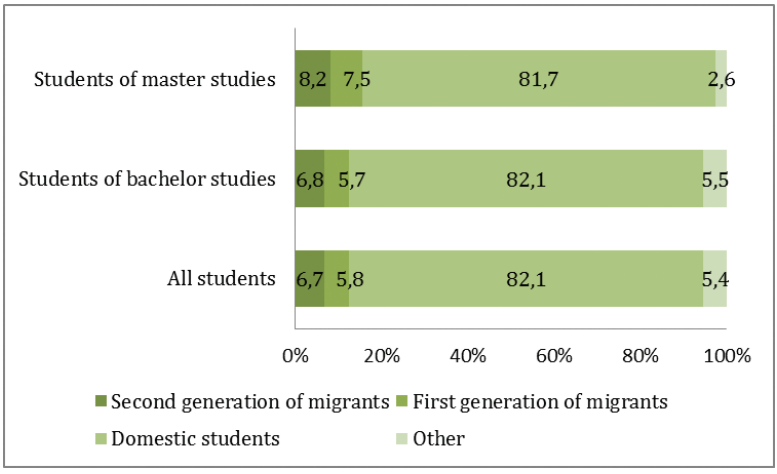
The situation is similar regarding students of bachelor and masters' studies - in both cases, domestic students dominate.

The percentage of students whose parents were not born in the student's country of study, but the student was (second generation of migrants) is higher than the first generation of migrants (where the students were not born in the country of study), although not significantly. This data is important to enable creating additional support measures for these students.

However, it is important to note that first and even the second generation of migrant students could be students from the territory of former Yugoslavia, since the EUROSTUDENT survey views migration through the birthplace of parents and students compared to currently existing state borders.

In order to direct the planned measures in a better and more adequate way towards the target groups, the next cycle of the EUROSTUDENT survey needs to separate students considered migrants (although this does not impact their social status, because they moved to the Federation of B&H in waves of labour or other migrations during the existence of former Yugoslavia) from students whose families are refugees from the territory of former Yugoslavia or were internally displaced, which can significantly impact their socio-economic status.

Figure 5: Migrant students by level of study (in %)



3.2. Basic socio-economic characteristics of students in the Federation of B&H

The basic socio-economic characteristics of students in the Federation of B&H are presented in the following table (Table 1) based on indicators such as educational attainment of parents, parental occupation type, family situation of the student, etc. These indicators were chosen to provide a general view and

comparability of the Federation of B&H with other EUROSTUDENT countries, because these indicators are monitored in all countries.

Table 1: Basic socio-economic characteristics of students in the Federation of B&H (in %)[3]

Question	Results for the Federation of B&H
Students whose fathers do not have tertiary education	59.6
Students whose mothers do not have tertiary education	65.6
Students whose parents are manual workers	20.5
Students with children	3.1
Female students in bachelor studies	57.7
Female students in master studies	53.6
Students whose parents are workers without tertiary education compared to the total number of manual workers	79.9
Students in bachelor studies whose parents do not have tertiary education	51.8
Students in master studies whose parents do not have tertiary education	49
Students assessing their parents to be at a lower half of the scale regarding their social status (mark 4 or below on a scale of 1 to 10)	12
Students whose parents have a low social status (1-4 on a scale of 1 to 10) and no tertiary education compared to other students	8.8
Students in bachelor studies with a lower social status	12.1
Students in master studies with a lower social status	11.4

The following data show the highest level of education that the students' parents have attained. 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 relatively reliably enable international comparisons using the International Standard Classification of Education (ISCED)[4]. The focus is actually on the students coming from families with a lower educational attainment of parents and where these students are the first members of their closer families who have entered higher education.

The level of studies by parental social status, expressed through the highest level of education attained by the parents, once again indicates that the degree

3 For all situations referencing parents, the meaning is either of the two parents.

4 http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx

of inequality in social status is reflected through higher education, with non-university HEI students mainly coming from families where neither parent has higher education.

Table 2 shows the distribution of students by level of study according to the highest level of education attained by their parents. The focus is on the characteristics of parents, i.e. the indicators that should point towards groups with unequal status regarding access to higher education.

Most of the parents of students in the Federation of B&H sample have completed secondary school, followed by students whose parents have completed higher education.

Regarding the population of the Federation of B&H, according to data from the Agency for Statistics of B&H, the percentage of a working population having completed only primary education is 16.6% in the Federation, while the overall percentage in B&H is 18.8%. The percentage of the population with higher education is 12.6%. In the student population in the sample, around 36% of students come from highly educated families (at least 1 parent has completed a HEI). Thus, according to this data, we may conclude that there is unequal representation of different social groups in higher education in the Federation of B&H. It is very difficult for the parents with a low level of education to provide for their children's studies, with the caveat note that here the comparison of somewhat different issues was done - the percentage of the population with higher education and the number of families where at least one parent is highly educated.

Due to a better insight into the situation regarding the educational attainment of parents in the Federation of B&H compared to other countries, , it should be noted that, for example, in Austria, according to EUROSTUDENT V survey data, the percentage of parents of bachelor students with primary education is 5.2%, secondary education 61.6% and tertiary education 33.2%. In Croatia, these indicators 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%.

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

Highest level of educational attainment of parents?	What study programme do you currently attend?		
	Bachelor studies	Master studies	Total
Primary school	3.2	3.2	3
Secondary school	48.6	48.6	48.7
Higher education	35.5	35.5	36.3
Master studies	8.1	8.1	7.7
Doctoral studies	4.6	4.6	4.3
Total	100.0	100.0	100.0

Regarding the level of educational attainment of parents compared to the gender of the students, the indicator by gender is uniform, except for the students of doctoral studies, where women are significantly under-represented.

Comparing the employment structure of the students' parents and the employment structure of the entire population of the country, with attention paid to parents employed in low-qualification occupations and with low personal income, we can conclude that students with less educated and poorer parents have lower chances to access the higher education system. Likewise, based on data from this survey (shown in Table 3), the structure of students' parents occupation differs from the population of the Federation of B&H, based on data from the Agency for Statistics of B&H, i.e. the percentage of students' parents having non-manual (management, expert and artistic) occupations is nearly double than their share in the overall population. This means that students whose parents hold simpler jobs (i.e. in crafts, agriculture, services or trade) have significantly lower chances to access higher education. The situation is similar in other Eastern-European countries covered by the survey.

Table 3: Distribution of the parents of students by type of current or last occupation (in %)

Occupation	Current or last occupation of father	Current or last occupation of mother
Manager (executive), senior official or law officer	15.2	6.4
Expert or artist	12.4	15.6
Engineer, associate professional or technician	11.0	8.3
Clerk or administration worker	9.9	14.7
Service or sales worker	9.8	16.6
Skilled agricultural, forestry, fishery or similar worker	4.2	2.4
Craft or related trades worker	16.3	4.6
Plant and machine operator, assembler or driver	9.9	0.8
Simple occupations	1.3	3.1
Defence forces	4.5	0.6
I do not know	3.7	3.2
Was never on the labour market	1.9	23.6
Total	100.0	100.0

The percentage of the surveyed students' fathers with manual occupations in the Federation of B&H is 31.7%, while for mothers it is 10.9%. Comparing these results with the countries selected from the EUROSTUDENT V survey, these percentages in Croatia are 35.4% and 22.9%, in Slovakia 42.6% and 19.4%, while the same data for Austria is unavailable.

The percentage of manual workers without tertiary education among the total number of manual workers is around 90%. The Table 4 shows the distribution of student's parents according to occupation and level of education for manual occupations (agricultural, forestry, fishery or similar worker, craft or related worker, plant and machine operator, assembler or driver and simple occupations (e.g. cleaner, agricultural worker on another person's property, waste disposal worker). In Serbia, the percentage of manual workers without tertiary education among the total number of manual workers is 88%, in Croatia 87.2%, in Slovakia 96.9%, while the same data is not available for Austria.

Table 4: Ratio of educational attainment of student's parents and current/last occupation of parent (in %)

Parents with manual occupations	Highest level of educational attainment of parents		
	Without higher education	With higher education	Total
Skilled agricultural, forestry, fishery or similar worker	85.4	14.6	100.0
Craft or related trades worker	79.5	20.5	100.0
Plant and machine operator, assembler or driver	67.9	32.1	100.0
Simple occupations	76.2	21.9	100.0

Table 5 represents an overview of students' perceptions of the social status of their parents. The purpose of these results is to try to assess the socio-economic status of students in a more comprehensive way, not just through the educational and occupation structure of parents. A simple comparison of the proportion of students at the ends of the scale provides information on their perception of their own social status, representing a very wide conceptual framework for self-evaluation. Based on the data obtained, we may conclude that 36% of female students assess that their parents are at the lower half of the scale regarding social status, while for male students the percentage is 35.3% (mark 5 and below). Comparisons with the results of the EUROSTUDENT V survey with other countries show that in Croatia the percentage is 54.2%, in Austria 20.1% and in Slovakia 33.8%.

Table 5: Students' perceptions of the social status of their parents by gender of students (in %)

Level of social status	Female	Male
10 High social status	6.9	7.3
9	5.6	5.2
8	17.3	18.4
7	19.7	17
6	14.4	16.8
5	25.7	21
4	5.3	7.5
3	3.1	3.1
2	0.7	2.2
1 Low social status	1.3	1.5
Total	100.0	100.0

Table 6 shows the perception of social status depending on the level of educational attainment of the parents. This links the subjective assessment of social status with one of the relatively reliable indicators for the very same factor. The data shows that the perception of the social status of students is correlated with the level of educational attainment of their parents. Generally speaking, considerably fewer students whose parents have completed only primary school perceive themselves as having a high social status compared to the students whose one of the parents has higher education or a doctorate. This is most likely correlated to a real family income and objective quality of life.

Table 6: Students' perceptions of social status by educational attainment of students' parents (in %)

Level of social status	Total	Primary school	Secondary school	Bachelor studies	Postgraduate studies	Doctorate
10 High social status	7.1	7.4	4.5	6.9	11.5	26.2
9	5.4	3.2	2.2	6.4	13	19.3
8	17.7	6.4	10.7	23.8	31.4	27.6
7	18.5	9.6	17.9	19.4	21.8	15.9
6	15.4	22.3	16.3	15.6	12.6	4.8
5	23.8	27.7	31.4	19.9	5.4	4.1
4	6.2	7.4	8.3	4.8	2.3	1.4
3	3.1	9.6	4.6	1.6	0.4	0.7
2	1.4	1.1	2.5	0.3	0.4	0
1 Low social status	1.3	5.3	1.5	1.2	1.1	0
Total	100.0	100.0	100.0	100.0	100.0	100.0

The following table (Table 7) presents a combination of student perceptions of the social status of their parents and the two levels of study. The presented data come from the responses to the question of whether there are significant differences between different levels of study 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 90.3%, while for those with lower social status it is 9.6%. Within the category of master students, the percentages are 64.1% and 35.8%.

Regarding other countries from the EUROSTAT V survey, in Croatia, there are 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 is the case with 34.6% of students.

Table 7: Students' perceptions of the social status of parents by a level of students' studies (in %)

Level of social status	Total	Bachelor studies	Master studies
10 High social status	6.9	11.5	7.1
9	6.4	13	5.4
8	23.8	31.4	17.7
7	19.4	21.8	18.5
6	15.6	12.6	15.4
5	19.9	5.4	23.8
4	4.8	2.3	6.2
3	1.6	0.4	3.1
2	0.3	0.4	1.4
1 Low social status	1.2	1.1	1.3
Total	100.0	100.0	100.0

At the European level, the proportion of male and female students is not equal, both from the aspect of study programmes and the aspect of other important characteristics, as shown by the fourth and fifth cycle of the EUROSTUDENT survey.[5] The gender profile of the student population is changing over time and the share of female students is increasing.

5 http://www.eurostudent.eu/results/reports

The percentage of students by gender in the Federation of B&H is rather equally distributed.

Figure 6 shows that the share of female students is somewhat higher both in the total number of students in the sample and at both levels of study. The difference for primary studies, though minimal, is in favour of female students, while their share is decreasing in master studies. Regarding the results of the EUROSTUDENT V survey in other countries used in the comparative analysis, the share of female students is increasing with higher levels of study, except in Austria. In Croatia, the share of female students in bachelor studies is 55.5%, in master studies 57.2%, in Austria the share of female students in bachelor studies is 53% and in master studies 47.2%, while in Slovakia the percentage in bachelor studies is 58.1%, while in master studies it is 60%.

Figure 6: Distribution of students by gender and level of study

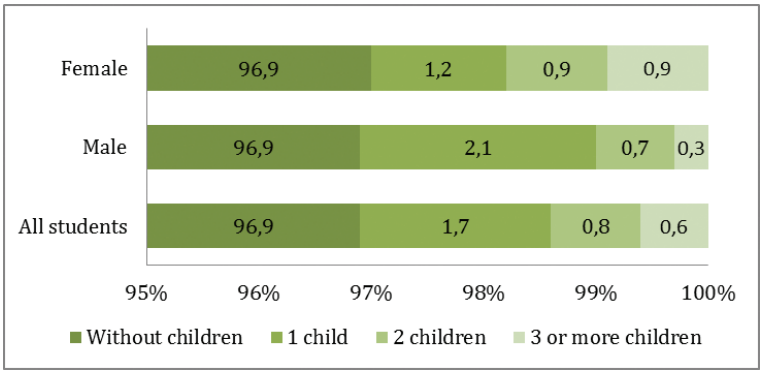
In certain situations students have to distribute their resources, i.e. their time and money, between themselves and their children. This causes additional burden for students, placing them in a subordinate situation compared to the students without children. In most of the EUROSTUDENT participant countries and in the Federation of B&H as well, the important factor is not just the existence of children, but also their age which significantly affects the distribution of resources.

Figure 7: 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 3.1%. The distribution by gender is equal in the category of students with two children, while there are more women in the category of students with one and three or more children..

It should be underlined that in the Federation of B&H, student-parents are potentially in a significantly more unequal situation compared to student-parents in most of the countries covered by the EUROSTUDENT survey, because Bosnia and Herzegovina belongs tothe countries without organized childcare programmes within HEI and student dormitories. Student-parents also do not have an option to follow lectures and fulfil other obligations in a way adjusted to their situation.

Regarding other countries, in Croatia the percentage of students with children is 3.3%, in Austria 8.9% and in Slovakia 7.1%.

Figure 7: Distribution of students with children by gender and a number of children



Within the Federation of B&H, as expected, there are most student parents in the category of students over thirty years of age. Comparing a number of student-parents and other students by the level of study, the number of students who are not parents prevails in both - bachelor and master studies, and their percentage is uniform - around 95.5%. Regarding students with children, the most numerous are students of master studies with one child.

Comparison of students by number of children with by their level of satisfaction with their workload during studies (Table 8) shows that student parents are less satisfied with their workload than other students.

Table 8: Distribution of students by level of workload satisfaction during studies compared to parental status, i.e. number of children (in %)

Satisfaction with obligations	No children	With children
Very satisfied (5)	7.7	4.3
(4)	21.5	2.9
(3)	42.6	62.9
(2)	17.2	15.7
Very unsatisfied (1)	11.0	14.3
Total	100.0	100.0

Regarding the financial difficulties experienced by student-parents (Table 9), compared with students without children, student parents experience greater financial difficulties.

Table 9: Distribution of students by financial difficulties they experience compared to the parental status, i.e. number of children (in %)

Level of difficulties	No children	With children	Students overall
I have very serious financial difficulties	9.0	26.2	9.7
I have serious financial difficulties	15.5	16.7	15.5
I have moderate financial difficulties	36.9	34.5	36.9
I don't have financial difficulties	18.2	13.1	18.0
I don't have any financial difficulties	20.3	9.5	19.9
Total	100.0	100.0	100.0

The Federation of B&H students' responses to the question with whom they live during studies show that most students in the Federation of B&H live with their parents (58.4%), while a significantly smaller number of students live alone (11.5%). The smallest percentage of students live with their partner (and children, if any) (5.5%). Likewise, a significant share of the students reports living with other persons (24.7%), including roommates in student dormitories or in rented accommodation.

3.3. Students with Impairments

The total number of students with some type of impairment, chronic health problem or functional limitation is 8.8%. The distribution of students with impairments within the sample by type of health problem is shown in the following table (Table 10) indicating that the most numerous are students with sensory impairments, followed by students with chronic diseases and students with other health problems. The total number of students with health problems is lower than the sum of all percentages, because some students have multiple health problems.

Table 10: 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	1
Mobility difficulties	0.6
Sensory impairment (e.g. vision or hearing problems)	4
Learning problem (e.g. ADHD, dyslexia)	1
Other health problems	1.5
Total number of students with some type of impairment, chronic health problem or functional limitation	8.8

According to the results of the EUROSTUDENT V survey on having some type of impairment, chronic health problem or functional limitation, in Croatia, 14.1% of students report such problems, in Austria 14.5%, while in Slovakia this is the case with 22.1% of students. However, direct comparisons of the number of students regarding the type of health problem of students from different countries is impossible, because different countries have different traditions in defining and categorizing health problems which qualify for additional support by the state.

Table 11 provides insight into the perceptions of student with some form of impairment regarding the severity of obstacles they face during studies. As many as 70% of student with some form of impairment see their impairment as a small obstacle for study, 17.7% see it as medium, and 12.2% as large. The data obtained should be considered seriously, because besides such a large percentage of students seeing their impairment as a large obstacle, we should keep in mind that it is also very likely that a large number of those with significant impairments has not even begun studying due to a lack of adequate conditions.

Regarding students with impairments in higher education in other countries, in most cases the percentage is around 30% (Spain, Finland, France, etc.). In Croatia, the percentage is 45.6%, in Slovakia 35%.

Table 11: Student perception of the level of obstacle for studies caused by the impairment

Size of obstacle	Percentage
Large obstacle	12.2
Medium obstacle	17.7
Small or no obstacle	70.1

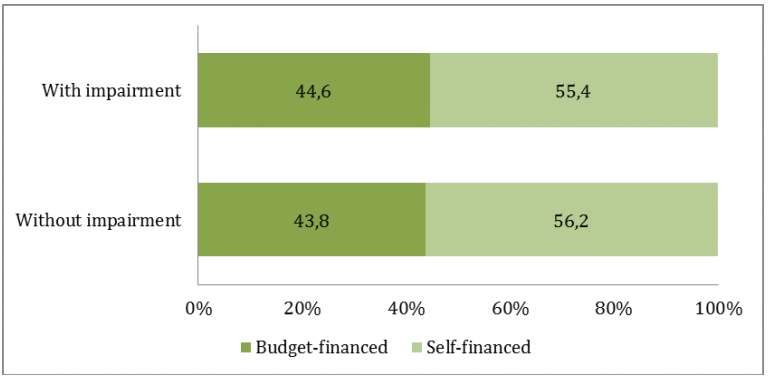
Additionally, the following table shows to what extent student see their impairment, chronic health problem or functional limitation as an obstacle. The highest percentage of students seeing their problem as a large obstacle comprise students with learning disabilities (e.g. ADHD, dyslexia).

Table 12: Type of student health problem compared to level of obstacle the problem presents (in %)

Type of health problem	Large obstacle (5)	(4)	(3)	(2)	Small or no obstacle (1)	Total
Chronic diseases	8.6	5.7	5.7	25.7	54.3	100.0
Mental health problems	3.4	3.4	34.5	17.2	41.4	100.0
Mobility difficulties	6.7	20.0	13.3	26.7	33.3	100.0
Sensory impairments (e.g. vision or hearing problems)	0.8	5.7	14.8	29.5	49.2	100.0
Learning problems (e.g. ADHD, dyslexia)	33.3	12.5	41.7	4.2	8.3	100.0
Other chronic health problems	0.0	4.3	13.0	32.6	50.0	100.0

Their health problem is seen as the largest obstacle for studying by those having learning problems (e.g. ADHD, dyslexia), because these problems are most directly reflected on the quality of studying. Regarding the distribution of students with some form of impairment by studies financing status (Figure 8), their share in different statuses (budget or self-financing) coincides with the percentages of students without impairments.

Figure 8: Distribution of students with impairments regarding studies financing status



The data in the following table can also indicate a bad status of students with impairments in Bosnia and Herzegovina, because it shows that most of the students suffering from some kind of impairment believe that institutional support during studies is small (67.7%). Students with chronic health problems believe that they receive the smallest , while the lowest percentage of students with mental health problems report small institutional support (rank 5).

Table 13: Type of health problem of students compared to the institutional support they receive during studies (in %)

Type of health problem	A lot of support (1)	(2)	(3)	(4)	Little support (5)	Support not needed/ requested	Total
Chronic diseases	0.0	0.0	6.5	3.2	67.7	22.6	100.0
Mental health problems	0.0	0.0	0.0	0.0	92.9	7.1	100.0
Mobility difficulties	0.0	0.0	18.2	9.1	54.5	18.2	100.0
Sensory impairments (e.g. vision or hearing problems)	3.4	2.5	0.0	1.7	69.5	22.9	100.0
Learning problems (e.g. ADHD, dyslexia)	4.2	0.0	4.2	16.7	62.4	12.5	100.0
Other chronic health problems	4.2	0.0	2.0	0.0	64.4	29.2	100.0
All students with some type of health problem	2.4	1.7	2.1	2.8	69.2	21.8	100.0

Additional analysis of the data indicate 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 the students' from this group decision to continue studies the comparison of students with some form of impairment with students without chronic health problems or limitations has not shown any significant difference between the two groups. However a somewhat greater number of students with health problems and limitations is planning to continue studies. Students without chronic health problems and limitations are more indecisive regarding future studies. Most of the students with chronic health problems do not plan to continue studies.

Table 14: Student plans to continue studies after completing the current study programme (in %)

Response	Without chronic health problems or impairments	With chronic health problems or impairments
Yes, within one year after completing the study program I currently attend	39.2	40.1
Yes, but within a period longer than one year after completing the study program I currently attend	17.5	19.9
I do not plan to continue my studies	8.9	13.2
I still do not know	34.4	26.8
Total	100.0	100.0

It is worth considering how much the students with chronic health problems or limitations are satisfied with the organization of studies and timetable of classes, compared to other students (Table 15). Based on the data shown, the percentage of unsatisfied in the group with health limitations is higher, indicating that higher education institutions have not invested sufficient efforts to ensure a satisfying level of organization of studies and classes for students with certain health impairments.. According to this survey data, we may also conclude that students with chronic health problems or limitations are more unsatisfied with the way a higher education institutions administration treats them.

Table 15: Satisfaction with the organization of studies and timetable of classes (in %)

Satisfaction level	Without chronic health problems or impairments	With chronic health problems or impairments
Satisfied	42.6	30.0
Moderately satisfied	31.0	35.8
Unsatisfied	26.4	34.2
Total	100.0	100.0

The treatment of students by teaching staff also shows that students with chronic health problems or limitations have a more disapproving attitude the, but it is not so much different from the other students' attitude (Table 16).

Table 16: Satisfaction with treatment of students by teaching staff (in %)

Satisfaction level	Without chronic health problems or impairments	With chronic health problems or impairments
Satisfied	54.7	50.4
Moderately satisfied	27.1	26.6
Unsatisfied	18.2	23.0
Total	100.0	100.0

Regarding the satisfaction with the infrastructure and equipment of higher education institutions data show that, again, students with chronic health problems or limitations are less unsatisfied.

Regarding financial difficulties, data from the table below indicates that both groups of students, with or without a form of impairment, experience financial difficulties, but students with chronic health problems or limitations experience them slightly more.

Table 17: Assessment of financial difficulties (in %)

Degree of financial difficulties	Without chronic health problems or impairments	With chronic health problems or impairments
I have very serious financial difficulties	9.6	12.0
I have serious financial difficulties	14.8	21.7
I have moderate financial difficulties	37.6	35.2
I don't have financial difficulties	18.0	18.1
I don't have any financial difficulties	20.0	13.0
Total	100.0	100.0

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 prior education of students, to be able to derive conclusions on whether access to higher education or the intensity of studies depends on the prior education of students, and, *inter alia*, whether some areas of study are preferred by students differing by a type of completed secondary education. Likewise, it is important to determine if 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.

90.9% of the students participating in the EUROSTUDENT V survey in the Federation of B&H, responded to this question (N=3267). Out of this number, 45% (N=1469) come from four-year vocational secondary schools, while 51.4% (N=1678) come from gymnasiums[6]. A very low number of students (0.5%, N=17) has completer three-year vocational education training schools while 3.1% of students (N=102) have completed secondary education outside the Federation of B&H by

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

The general conclusion based on data on the educational attainment of parents and occupation for students from the sample is that the students whose parents did not complete higher education, and students whose parents are engaged in manual occupations mostly attend vocational secondary education programmes.

Regarding educational attainment of parents, we see that students from families where at least one parent has higher education tend more towards attending gymnasiums, while students from families where neither parent has higher education tend more towards attending vocational schools (Table 18).

In the entire sample of students in the Federation of B&H, 51.5% of the students have parents without higher education, 48.2% have parents with higher education, and 0.3% of the students do not know their parents' education.

6 General track of secondary education.

Table 18: Previous education of students and the educational attainment of students' parents (in %)

Previous education	Without higher education (ISCED 0-4)	With higher education (ISCED 5-8)	Previous education for all students
Three-year vocational secondary school	0.7	0.4	0.5
Gymnasium	40.5	63.5	51.4
Four-year vocational secondary school	56.6	32.0	44.8
Foreign qualifications	2.2	4.1	3.1
Total	100.0	100.0	100.0

A higher percentage of students from families where both parents have manual occupations attended vocational secondary schools (Table 19). Data on the educational attainment and occupation of parents indicates that more students with a lower socio-economic status have attended vocational secondary schools.

Table 19: Previous education of students and parental occupation (in %)

Previous education	Three-year vocational secondary school	Gymnasium	Four-year vocational secondary school	Foreign qualifications	Total
Manager (executive), senior official or legislator	0.0	70.3	23.7	6.0	100.0
Expert or artist	0.4	64.0	32.4	3.2	100.0
Engineer, associate professional or technician	0.3	53.8	43.5	2.4	100.0
Clerical support worker	0.5	52.5	44.1	2.9	100.0
Service worker or sales worker	1.1	43.7	52.2	3.0	100.0
Skilled agricultural, forestry, fishery or similar worker	1.8	30.6	63.2	4.4	100.0
Craft or related trades worker	0.6	40.6	56.7	2.1	100.0
Plant and machine operator, assembler or driver	0.7	32.2	67.1	0.0	100.0
Simple occupations	0.0	26.8	68.3	4.9	100.0

Regarding the time which students having completed secondary vocational education and gymnasiums dedicate to completing study obligations per week, there are no differences between students who have completed vocational

secondary schools and those who have completed gymnasiums. In other words, we may conclude that previous students' education does not impact the intensity of their studies (Table 20).[7]

Table 20: Previous education of students and intensity of studies (in %)

Previous education	Low intensity of studies[8]	Medium intensity of studies	High intensity of studies	Total
Four-year vocational secondary school	21.0	45.5	33.5	100.0
Gymnasium	24.1	46.5	29.4	100.0
All students	23.1	46.0	30.9	100.0

A somewhat higher percentage of students who have come from vocational secondary schools finance their living expenses and education from the work they do, and make greater use of public sources of income as the dominant source of income compared with the students from gymnasiums (Table 21). The fact that students who have completed vocational secondary schools make greater use of their own income earned by 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 the educational attainment and occupation of parents) suggests the fact 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 21: Previous education of students and dominant source of income (in %)

Previous education	Family as the dominant source of income[9]	Own income from work as the dominant source of income	Public source of income as the dominant source of income	Other sources of income[10]	Total
Four-year vocational secondary school	87.7	4.1	2.5	5.7	100.0
Gymnasium	91.0	3.8	1.4	3.8	100.0
All students	89.5	3.9	1.9	4.7	100.0

7 Due to a low number of students having completed three-year educational profiles in vocational secondary schools, only students with four-year vocational secondary schools were considered hereafter.

8 Low intensity of studies denotes students dedicating under 20h ours 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 is in regards to those students dedicating over 40 hours per week to completing study obligations.

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

10 10 Other sources of income encompass pensions, child support, private sources of financing, but also students without any of the dominant sources of income from the above categories.

Comparing the ratio of students having completed vocational secondary schools and those having completed gymnasiums at higher education institutions of different fields of study, statistically significant differences can be found (Table 22).

Table 22: Field of studies depending on secondary education (in %)

Field of studies	Vocational secondary school	Gymnasium	Foreign qualifications	Total
Education	44.9	52.0	3.1	100.0
Humanities and arts	59.9	36.9	3.2	100.0
Social sciences, law and business	54.8	42.2	3.0	100.0
Sciences, mathematics and informatics	60.7	35.9	3.3	100.0
Engineering, manufacture and construction	58.5	38.7	2.9	100.0
Agriculture and veterinary medicine	27.7	64.7	7.6	100.0
Medicine and related fields	46.7	50.2	3.1	100.0
Services	40.5	59.5	0.0	100.0

4.1. International Students

In this survey, international students are students having completed their previous level of education outside the borders of Bosnia and Herzegovina. Data on international students is important in order to find out what type of students are attracted by higher education institutions in Bosnia and Herzegovina to enable formulating recommendations to strengthen incoming mobility by increasing the attractiveness of higher education institutions in Bosnia and Herzegovina for secondary school students from other countries.

Data obtained by this survey shows that out of the total number of students, 94.6% have completed secondary schools in Bosnia and Herzegovina. Among those who have completed secondary school outside B&H borders and have named the country in which they have completed secondary school, most of the students completing secondary school abroad are from Croatia (67%), Serbia (19%) and Montenegro (6%), meaning that only 8% of the students have obtained foreign qualifications outside the borders of a former Yugoslavia. This data indicates that higher education institutions in the Federation of B&H are most attractive to students from former Yugoslav countries. The number of students coming from other countries is very low. The data indicates that higher education institutions are attractive to students without language barrier. In the context of increasing mobility towards the Federation of B&H 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, a significantly greater number of them have parents with higher education (Table 23). Within B&H, 0.4% of the students reported not knowing the educational attainment of their parents, while 0.6% of the international students have given the same answer.

Table 23: International students compared to the educational attainment of parents and type of HEI (in %)

Type of student	Educational attainment of parents	
	Without higher education (ISCED 0-4)	With higher education (ISCED 5-8)
Students from B&H	52.5	47.1
International Students	38.8	60.7

The number of international students additionally varies depending on the field of study. The most attractive study programmes for international students are programmes in the field of science, mathematics and informatics, and agriculture and veterinary medicine (Table 24), while least attractive are service study programmes.

Table 24: International students by field of studies (in %)

Field of studies	Students from B&H	International Students	Total
Education	92.6	7.4	100.0
Humanities and arts	92.3	7.7	100.0
Social sciences, law and business	95.4	4.6	100.0
Sciences, mathematics and informatics	91.1	8.9	100.0
Engineering, manufacture and construction	95.4	4.6	100.0
Agriculture and veterinary medicine	91.8	8.2	100.0
Medicine and related fields	95.8	4.2	100.0
Services	100.0	0.0	100.0

It is important to note that the data indicates that international students and students from the Federation of B&H do not differ by intensity of study. There is also not statistically significant difference for 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 access to higher education, i.e. the inclusion of underrepresented

groups in higher education. An increase in the number of persons with higher education and the broadening of access to higher education are also the goals of the Europe 2020 Strategy (2010), as well as the South-East Europe Strategy 2020 (2013). The development goals regarding broadening access to higher education, *inter alia*, have at their core individuals who have not followed a so-called *traditional path to higher education*, involving direct continuation of education at HEIs after completing secondary school.

Therefore, the EUROSTUDENT V survey has also examined the transition of students from secondary to higher education. An important dimension of this transition is the issue of whether students have had a delay between different levels of education (secondary school and higher education institutions), as well as pauses between the two levels of study. Furthermore, it has examined to what extent students make significant pauses after enrolling at 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 access to higher education must take into account individuals returning to higher education institutions after a longer break and incorporate 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 school and higher education.

Regarding delayed enrolment to a higher education institution, for 83.9% of students the delay was less than a year from the moment they completed secondary school and enrolled in a higher education institution. A delay between one and two years was made by 8.5% of the students, while delays longer than two years between completing secondary school and enrolling at a higher education institution were made by 7.6% of students.

Additionally, the EUROSTUDENT survey has separately analysed data provided by students making a break of more than two years between completing secondary school and enrolling in a higher education institution. The data obtained indicates that, upon enrolling at a higher education institution, 7.4% students make a break in studies lasting longer than one year. On the other hand, 2.1% of the students make a break longer than a year between the two levels of study, i.e. after obtaining their first diploma and continued studies. Having this in mind, various aspects of the delayed completion of studies will be shown below.

4.2.1. Delayed Transition to Higher Education

As noted above, around 7.6% of the students in the Federation of B&H made a break longer than two years between secondary school and higher education. It was shown that educational attainment of parents had no influence on a delayed beginning of studies (Table 25).

Table 25: Delayed enrolment in higher education institutions by educational attainment of students' parents (in %)[11]

Type of enrolment	Parents without higher education (ISCED 0-4)	Parents with higher education (ISCED 5-8)	Total
Direct enrolment	57.9	41.9	99.8[11]
Delayed enrolment	59.2	40.8	100.0

Likewise, an additional analysis of the data leads to the conclusion 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 delaying enrolment and those directly enrolling in HEI.

Students enrolling in higher education institutions in the field of services, humanities and business show the highest tendency to delay enrolment in higher education institutions, while those studying educational profiles related to agriculture, engineering, manufacture, construction and sciences show the lowest tendency (Table 26).

Table 26: Delayed enrolment in higher education institutions depending on a field of study (in %)

Field of studies	Direct enrolment	Delayed enrolment	Total
Education	90.4	9.6	100.0
Humanities and arts	93.1	6.9	100.0
Social sciences, law and business	90.8	9.2	100.0
Sciences, mathematics and informatics	96.0	4.0	100.0
Engineering, manufacture and construction	96.7	3.3	100.0
Agriculture and veterinary medicine	98.6	1.4	100.0
Medicine and related fields	92.1	7.9	100.0
Services	92.5	7.5	100.0
All fields	92.8	7.2	100.0

Students financing their studies from 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 27). 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. It should be added that there were no students delaying enrolment to HEI among those students in the sample financed from public sources of income as the dominant source.

11 The sum of percentages is under 100, because 0.2 percent of the students do not know the educational attainment of their parents.

Table 27: Delayed enrolment in 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	Total
Direct enrolment	91.0	2.7	2.1	4.2	100.0
Delayed enrolment	79.9	13.0	0.0	7.1	100.0
All students	90.2	3.5	1.9	4.4	100.0

The employed students delay enrolment more than their colleagues directly enrolling in higher education (Table 28).

Table 28: Work experience prior to studies and delayed enrolment in higher education institutions (in %)

Work experience	Direct enrolment	Delayed enrolment	Total
Paid work for over one year and 20 or more working hours per week	67.5	32.5	100.0
Paid work for under one year or less than 20 working hours per week	85.4	14.6	100.0
No work engagement	94.3	5.7	100.0
All students	92.8	7.2	100.0

4.2.2. Interruption of Studies

The efficiency of studying has been in a focus of higher education reform for nearly ten years. In Bosnia and Herzegovina, prior to signing the Bologna Declaration that officially started the reform processes, 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 significant progress in increasing the efficiency of studies, i.e. a reduction in 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 more often interrupt their studies for a period longer than a year, it is not much influenced by the parents' educational

attainment. However, students having highly educated parents tend to make breaks more often. . It seems that students coming from families with a higher socio-economic status more frequently make longer breaks in their studies, which can be interpreted by the fact that they have a "luxury" to make such decision, more than students with a lower socio-economic status (Table 29).

Table 29: Students interrupting education for over one year by educational attainment and occupation of parents (in %)[12]

Duration of interruption	Parents without higher education (ISCED 0-4)	Parents with higher education (ISCED 5-8)	Total
Interruption of over one year	49.5	50.5	100.0
No interruption of over one year	52.5	47.3	99.7[12]

Students attending higher education institutions with study programmes in education interrupt their studies for over one year more frequently. This is also a case for the students of higher education institutions offering programmes in humanities and arts, social sciences, law and business. Agriculture students make minimum breaks (Table 30).

Table 30: Students interrupting education for more than one year by field of study (in %)

Field of studies	Interruption longer than one year	No interruption longer than one year	Total
Education	11.3	88.7	100.0
Humanities and arts	11.1	88.9	100.0
Social sciences, law and business	11.7	88.3	100.0
Sciences, mathematics and informatics	10.5	89.5	100.0
Engineering, manufacture and construction	6.2	93.8	100.0
Agriculture and veterinary medicine	3.9	96.1	100.0
Medicine and related fields	6.4	93.6	100.0
Services	11.0	89.0	100.0
All fields total	9.6	90.4	100.0

The data shown in Table 31 indicates that breaks of over one year are made more frequently by students supported by their own income, while students

12 The sum of percentages is under 100, because 0.3% of students do not know the educational attainment of their parents.

relying on public sources of income show significantly less interruptions to their studies. This last bit of data is expected, knowing that in the Federation of B&H efficient studying is a condition for obtaining scholarships and loans, with the additional significance of the finding indicating that working while studying affects the efficiency of studying. (Chapter 7 shows a more detailed sub-sample of the students who work while studying).

Table 31: Students interrupting education for more than one year per 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	Total
Interruption of over one year	80.8	9.9	0.5	8.9	100.0
No interruption of over one year	90.6	3.2	2.0	4.3	100.0
All students	89.7	3.8	1.9	4.7	100.0

Those students dedicating less time to their study obligations have a higher tendency of making breaks of over one year in their studies (Table 32).

Table 32: 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	Total
Interruption of over one year	37.5	40.0	22.5	100.0
No interruption of over one year	21.8	46.6	31.6	100.0
All students	23.2	46.0	30.8	100.0

4.2.3. Transition to Master Studies

Comparing enrolment in master studies by secondary education of students, we may conclude that students having completed vocational secondary schools opt for enrolment in master studies less, albeit slightly. Likewise, the educational attainment of parents does not affect 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 more often made by children of parents having non-manual occupations.

The break between the two levels of studies depending on the field of study shows statistically significant difference. Students of social science, law and business and services are more prone to make breaks between the two levels of studies than students of agriculture and education (Table 33).

Table 33: Students interrupting education between the two levels of study for over one year by field of study (in %)

Field of studies	No interruption longer than one year	Interruption longer than one year	Total
Education	99.0	1.0	100.0
Humanities and arts	98.2	1.8	100.0
Social sciences, law and business	96.7	3.3	100.0
Sciences, mathematics and informatics	97.8	2.2	100.0
Engineering, manufacture and construction	98.4	1.6	100.0
Agriculture and veterinary medicine	100.0	0.0	100.0
Medicine and related fields	98.5	1.5	100.0
Services	97.1	2.9	100.0
All fields of study	97.9	2.1	100.0

Students dedicating less time to completing study obligations are more prone to making a break of over one year between two levels of studies. This difference is statistically significant (Table 34).

Table 34: 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	Total
No interruption longer than one year	22.7	46.1	31.2	100.0
Interruption longer than one year	50.0	40.6	9.4	100.0
All students	23.2	46.0	30.8	100.0

Students financing their own expenses during studies most frequently make an interruption of over one year between the two levels of studies. . Interestingly, none of the students supporting themselves from public sources of income during studies has made a break of over one year between the two levels of study (Table 35).

Table 35: 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	All students
No interruption longer than one year	90.1	3.5	1.9	4.5	100.0
Interruption longer than one year	69.7	14.0	0.0	16.3	100.0
Total	89.6	3.8	1.9	4.7	100.0

4.3. Employment Prior to Studies

The survey paid special attention to the question whether students have had work experience or paid internships before entering higher education. Work experience is categorized as 1) work or paid internship lasting 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).

Out of the total number of students, 5.1% have had a long-term employment before entering a HEI, while 1.8% of the students have had a short-term employment. Most of the students have not had any type of work experience prior to enrolling in a higher education institution (93.1%). These aspects of studying will be analysed in more detail below.

In the countries covered by the EUROSTUDENT V survey, students with work experience before entering higher education are more frequently older, without higher education background, with delayed transition, and dedicate less time to study obligations (i.e. studying with a low intensity) (Hauschildt et al, 2015). The sample for the Federation of B&H has shown that the educational attainment of parents does not influence 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 faculty.

Students dedicating less time to their studies have had work experience prior to tertiary education. This is in accordance with the above general findings of the EUROSTUDENT V survey (Table 36).

Table 36: Work experience prior to studies by intensity of studying (in %)

Work experience	Low intensity of studies	Medium intensity of studies	High intensity of studies	All students
Long-term work engagement	42.6	38.3	19.1	100.0
Short-term work engagement	29.4	50.0	20.6	100.0
No work engagement	22.0	46.3	31.6	100.0
All students	23.3	46.0	30.7	100.0

Students with work experience prior to enrolment in a higher education institution are, at the same time, students dominantly using their own sources of income from work during studies (Table 37). Although there is no correlation between a work engagement prior to faculty and parental occupation as a component of socio-economic status, data indicate that most of the students who have worked prior to enrolling in a HEI have retained the tendency of work engagement during studies and use funds obtained from previous work for current support and education.

Table 37: 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[13]	Public source of income [14]	Other sources of income[15]	All students
Long-term work engagement	77.6	12.8	0.0	9.6	100.0
Short-term work engagement	77.2	9.1	2.3	11.4	100.0
No work engagement	90.6	3.2	2.0	4.2	100.0
Total	89.7	3.8	1.9	4.6	100.0

13 This category includes income from a current job or a job the student worked at prior to their studies.
14 This category includes credit/loan, scholarship as the dominant source of income.
15 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 and (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 equipment of higher education institutions, while the third section addresses student plans regarding further study and labour market activities.

5.1. Progress of Studies

Within the Federation of B&H, the budget and other forms of financial support to students by cantons and entities (subsidised housing, food, etc.) are available only to students of higher education institutions founded by the canton (so-called public higher education institutions). The distribution of students by type of institution, owner of the institution and status of studies is presented in Table 38.

Table 38: Distribution of students by type of institution and status of studies (in %)

Type of HE institution		Type of study financing		Distribution by owner of institution	
University	98.2	Budget financing	43.9	Public	86.1
Other HE institution	1.8	Self-financing	56.1	Private	13.9
Total	100.0	Total	100.0	Total	100.0

The results of the EUROSTUDENT V survey indicate that there is a correlation between the educational origin of students and parental occupation.

It should be also noted that the criteria for acquiring the status of budget student are based solely on student's success during studies.

A larger share of all budget students are from families without higher education (60.1%), while more self-financing students come from highly educated families (55,5%) (Table 39) which actually implicitly indicates the possibility that those students who cannot afford paying the tuition actually do not study, while students from families with a higher socio-economic status have significantly more resources to afford paying for their studies. This is even more clearly indicated by a significantly greater share of parents with non-manual occupations among self-financing students.

Table 39: Studies financing status by educational attainment and occupational status of students' parents (in %)

Status	Educational attainment of parents		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	60.1	39.9	73.4	26.6
Self-financing students	44.5	55.5	83.6	16.4
All students	23.3	46.0	30.7	69.3

There is a significant difference between the source of student income and study status (Table 40). Self-financing students depend on their own income more than budget students. These percentages suggest that the status of self-financing puts a certain number of students into a position that they have to work to finance their studies, which may influence the effectiveness and efficiency of studies. A portion of the self-financing students from families with a lower socio-economic status are, therefore, forced to work during studies, thus having less time for study obligations.

Table 40: 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	89.5	2.2	3.5	4.8	100.0
Self-financing students	90.0	5.4	0.4	4.2	100.0
All students	89.8	3.8	1.9	4.5	100.0

There are significant differences between budget and self-financing students regarding the intensity of studies, i.e. the time students spend completing obligations related to their studies - more self-financing students have a low intensity of studies (Table 41). This could indicate that part of the self-financing students have to work to help covering the additional costs of studies. However, it does not preclude the fact that these may be the students with a "privilege" of studying more slowly.

Table 41: Studies financing status by intensity of studies (in %)

Status	Intensity of studies			
	Low	Medium	High	Total
Budget-financed students	13.4	47.8	38.8	100.0
Self-financed students	33.4	43.9	22.8	100.0
All students	23.2	46.0	30.8	100.0

As expected, most of the students study in cities with populations over 100,000. Additionally, data obtained by cross-referencing data regarding educational attainment and occupation of parents and place of study indicate the higher percentage of children of parents without higher education and children of parents working in non-manual occupations studying in the capital.

Children of parents without higher education enrol in programmes in the field of agriculture and services to a greater extent. Regarding the educational attainment of parents, most of the children of parents engaged in non-manual occupations enrol in programmes from the field of social sciences, law and business and sciences. The difference between fields of study is particularly visible regarding the distribution of students by gender: there are more female students in social sciences and humanities, education, agriculture and medicine, while male students are significantly better represented in engineering, sciences and in services (Table 42).

Table 42: Field of studies by educational attainment and occupational status of students' parents and student gender (in %)

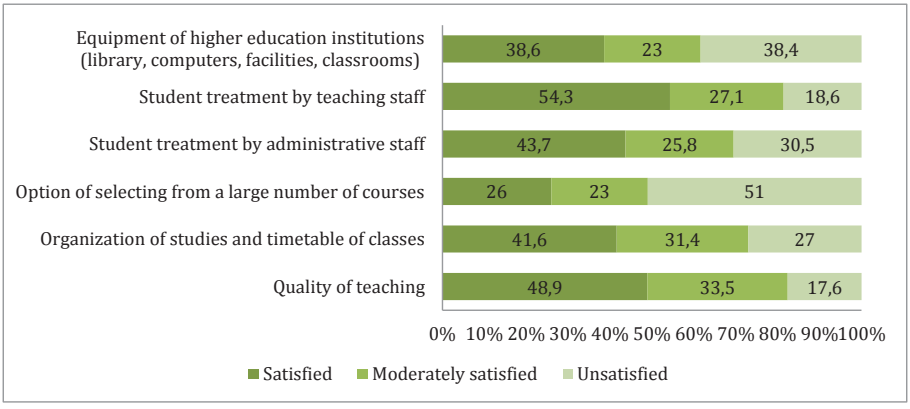
Field of studies	Educational attainment of parents			Parental occupation			Gender		
	Without higher education (ISCED 0-4)	Completed higher education (ISCED 5-8)	Total	Non-manual occupations (ISCO 1-5)	Manual occupations (ISCO 6-9)	Total	Female	Male	Total
Education	59.8	40.2	100.0	73.1	26.9	100.0	64.8	35.2	100.0
Humanities and arts	47.1	52.9	100.0	79.9	20.1	100.0	71.0	29.0	100.0
Social sciences, law and business	43.9	56.1	100.0	86.6	13.4	100.0	61.7	38.3	100.0
Sciences, mathematics and informatics	57.1	42.9	100.0	80.1	19.9	100.0	48.3	51.7	100.0
Engineering, manufacture and construction	45.8	54.2	100.0	75.3	24.7	100.0	42.5	57.5	100.0
Agriculture and veterinary medicine	71.8	28.2	100.0	64.4	35.6	100.0	57.4	42.6	100.0
Medicine and related fields	55.2	44.8	100.0	80.6	19.4	100.0	62.7	37.3	100.0
Services	65.3	34.7	100.0	66.1	33.9	100.0	40.2	59.8	100.0
Total	51.5	48.2	100.0	79.2	20.8	100.0	57.6	42.4	100.0

5.2. Satisfaction with Studies

Satisfaction with studies was measured through 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 equipment of higher education institutions (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 9.

In most countries participating in the EUROSTUDENT V survey students are satisfied with their study programmes. Student satisfaction is highest in the domain of quality of teaching and equipment of higher education institutions (Hauschildt et al, 2015). Results from the Federation of B&H show a somewhat different view: students are most satisfied with teaching staff treatment of students (54.3% very satisfied), and least satisfied with equipment and range of courses to select (Figure 9).

Figure 9: Satisfaction with studies (in %)



Satisfaction with the conditions of studies varies significantly between different study programmes. The most satisfied are students studying study programmes from the field of humanities and arts, highly rating two dimensions of the conditions for studying in a high percentage: the quality of teaching and teaching staff treatment of students. The option of selecting from a large number of courses is the worst rated dimension, rated so by a large percentage of students from five of the total of eight fields of study (Table 43).

Table 43: Satisfaction with studies by field of studies (in %)

Aspects of studies and degree of satisfaction		Education	Humanities and arts	Social sciences, law and business	Sciences, mathematics and informatics	Engineering, manufacture and construction	Agriculture and veterinary medicine	Medicine and related fields	Services
Quality of studies	(Very) satisfied	38.7	61.2	53.2	43.9	52.5	42.5	39.9	45.5
	Neither satisfied or unsatisfied	37.7	27.2	29.1	38.1	34.6	40.2	37.7	37.8
	(Somewhat) unsatisfied	23.6	11.5	17.7	18.0	12.9	17.3	22.4	16.7
Organization of studies and timetable of classes	(Very) satisfied	29.1	41.4	47.4	38.1	48.6	36.4	32.8	44.2
	Neither satisfied or unsatisfied	31.2	30.7	28.9	30.8	32.6	34.5	34.0	34.6
	(Somewhat) unsatisfied	39.7	27.9	23.7	31.1	18.8	28.1	33.2	21.2
Option of selecting from a large number of courses	(Very) satisfied	20.6	27.4	30.2	18.0	33.8	20.5	15.3	32.9
	Neither satisfied or unsatisfied	26.6	22.3	21.5	26.8	22.2	21.0	24.2	22.4
	(Somewhat) unsatisfied	52.8	50.3	48.3	55.2	44.0	58.5	60.5	44.7
Treatment of students by administrative staff	(Very) satisfied	29.7	41.6	48.4	38.5	57.5	48.9	34.3	35.0
	Neither satisfied or unsatisfied	31.6	20.4	22.6	27.8	25.2	26.1	29.9	33.4
	(Somewhat) unsatisfied	38.7	38.0	29.0	33.7	17.3	25.0	35.8	31.6
Treatment of students by teaching staff	(Very) satisfied	40.9	61.6	58.1	50.4	61.3	55.4	45.3	51.7
	Neither satisfied or unsatisfied	37.8	24.4	23.4	31.0	25.1	22.9	29.1	33.0
	(Somewhat) unsatisfied	21.3	14.0	18.5	18.6	13.6	21.7	25.6	15.3
Faculty equipment (library, computers, facilities, classrooms)	(Very) satisfied	33.9	40.7	46.5	28.3	41.2	32.2	26.4	43.0
	Neither satisfied or unsatisfied	28.5	26.3	21.4	26.8	17.7	19.9	26.9	17.5
	(Somewhat) unsatisfied	37.6	33.0	32.1	44.9	41.1	47.9	46.7	39.5

5.3. Further Studies and Employment after Studies

The reform of the educational system that occurred after Bosnia and Herzegovina has become a signatory to the Bologna Declaration has not introduced only a change in the system of studies, but also the three study cycles that differed from the previous cycles. Thus bachelor, master and doctoral studies have been reorganized in accordance with the above reform processes, and after the first generations of "Bologna students" entered the labour market, the issue of the degree of true recognition of new diplomas in the labour market has arisen. .

On the other hand, high unemployment among youth can influence the decision to prolong studies and thus delay entry into the labour market, simultaneously increasing knowledge and skills that may give better chances for finding adequate employment.

The EUROSTUDENT V results for the Federation of B&H show that more than 39.3% of the students wish to continue studies within up to one year of completing the attended study programme. Only 9.2% of the students do not plan to continue studies, while 17.7% of the students plan to continue studies, but not within one year, and 33.8% of the students still do not have clear plans regarding continuation of studies.

The desire to continue studies is more prevalent among students with a high intensity of current studies, i.e. those who spend more than 40 hours per week dedicated to study-related obligations. Likewise, students primarily financed from public sources of financing (loans, scholarships) have the greatest desire to continue studies. These findings can be explained by the fact that students financed from public sources are those students who are on budget and, nearly as a rule, they are the most successful students. However, the percentage of such students is not significantly higher than the percentage of their colleagues primarily financed by parents who also want to continue studies to a large extent. One difference that occurs in the group of students primarily depending on their own income during studies is that they constitute the smallest percentage of those wanting to continue studies.

A larger number of students of bachelor studies plan to continue studies - 42.1% plan to continue studies within one year of completing their current study programme, while 17% plan to do this within a period longer than one year. Unlike them, 27.9% of master students plan to continue studies within a period of one year of completing their current study programme, while 16.6% plan to do this within a period of over two years. However, among the group of master students, 22.1% do not plan to continue studies compared to the 7.8% of bachelor studies students. The number of those who still do not decide whether they want to continue studies is equal in both groups of students (around 33%).

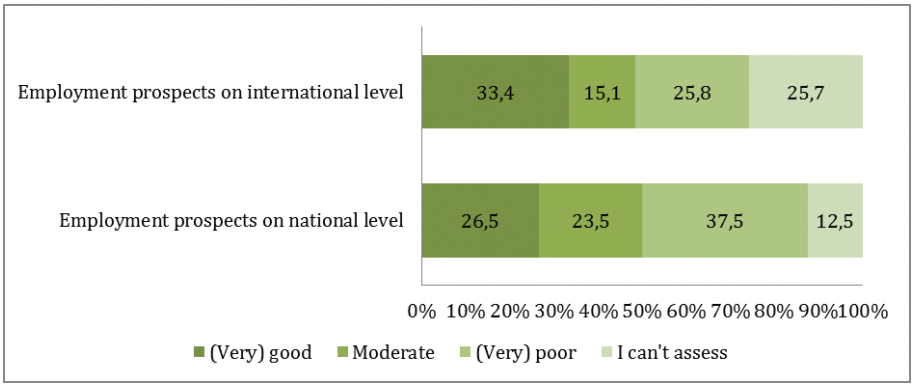
Table 44: Continuation of studies by intensity of studies and by dependence of students on sources of financing (in %)

Response	Total	Intensity of studies		Dependence on source of financing			Study level	
		Low	High	Dependence on family	Dependence on own income	Dependence on public support	Bachelor studies	Master studies
Yes, within one year after completing the study program I currently attend	39.3	33.8	38.9	38.8	35.6	41.9	42.1	27.9
Yes, but within a period longer than one year after completing the study program I currently attend	17.7	9.0	25.4	18.6	19.6	30.2	17.0	16.6
No, I do not plan to continue my studies	9.2	14.9	7.4	8.7	8.0	9.3	7.8	22.1
I do not know	33.8	42.3	28.3	33.9	36.8	18.6	33.1	33.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Students were also asked to assess their employment prospects in the country or abroad. Assessments were given on a scale of 1 to 5, while in Figure 10 they are reduced to a four-degree scale to provide clarity. The question itself did not define the type of employment. It referred to any kind of employment that could be found. The assessment of employment prospects reflects both the perception of a quality of the attained knowledge and potential for its application and the perception of the state of the labour market.

Results show that students studying in the Federation of B&H assess their employment prospects outside the borders of the Federation of B&H as significantly better. Among the 25 EUROSTUDENT V countries with data on these dimensions, Bosnia and Herzegovina is among the total of 7 countries where students believe they have better chances for employment outside the borders of their country.[16] Almost 19% *of optimistic students* (students assessing their chances on the domestic market as (very) good) more probably reflect their perception of the labour market in the Federation of B&H than the assessment of their qualifications, because a higher percentage of students think that they have (very) good chances for employment abroad.

Figure 10: Assessment of employment prospects (in %)



The students' assessments differ between the study programme they have completed. The assessments within the same study programmes also differ regarding the level of observation: national, and/or international level. Thus, the future engineers assess having the best employment prospects within the country and internationally, while students of medicine and related fields assess having the the prospects of employment abroad (Table 45 and Table 46).

16 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 are, in fact, students from Serbia, Bosnia and Herzegovina, Montenegro, Slovenia and Croatia.

Table 45: Assessment by students of bachelor studies of employment prospects at the national level by field of study

Employment prospects	Education	Humanities and arts	Social sciences, law and business	Sciences, mathematics and informatics	Engineering, manufacture and construction	Agriculture and veterinary science	Medicine and related fields	Services
(Very) good	14.1	15.6	18	25.9	23.5	14	16.5	19.1
Moderate	28.2	25.5	23.8	22.4	31.8	21	19.7	32.5
(Very) poor	46.4	46.5	50	41.4	34.7	43.3	47.7	37.6
Cannot assess	11.3	12.4	8.2	10.3	10	21.7	16.1	10.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 46: Assessment by students of bachelor studies of employment prospects at the international level by field of study

Employment prospects	Education	Humanities and arts	Social sciences, law and business	Sciences, mathematics and informatics	Engineering, manufacture and construction	Agriculture and veterinary science	Medicine and related fields	Services
(Very) good	27	37	35.9	37.7	54.4	22	39.6	41.4
Moderate	28.4	19.4	21.2	24.1	20.3	25.3	21.7	21.1
(Very) poor	32.3	27.9	28.5	24.1	13.2	31.4	20.8	21.1
Cannot assess	12.3	15.7	14.4	14.1	12.1	21.3	17.9	16.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100

6. Conditions of Student Life

The above chapters presented a 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 addresses with student employment, focus on the economic conditions of student life. The chapter attempts to shed light on how and under what conditions students live in the Federation of B&H. It also offers a comprehensive view of the costs of studies with particular emphasis on groups with significant financial difficulties.

One specific characteristic of students in the Federation of B&H, shared by their colleagues in the region, is their great dependence on parents as their main source of financing.

As noted, the dominant source of income in the EUROSTUDENT V survey is income participating with 50% or more in the total student income. In accordance with the above definition, 89.6% of the students in the Federation of B&H financially depend on parents, while only 3.8% of them are financially independent (Table 47). Regarding data for other countries in the region, only the situation in Montenegro is close to the European average. The primary dependence of the Federation of B&H students on parents apparently does not have to be an obstacle, but it corroborates the fact that students in the Federation of B&H 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 percentage of public income (only 1.9%) in the income sources for students in the Federation of B&H, This indicates an obviously inadequate system of student scholarships and loans, and shows a need to harmonize the student standard system with the needs of students. This finding, certainly, also confirms the need for changing the very system of financing higher education.

Table 47: Dominant source of student financing in Serbia, Montenegro, the Federation of B&H 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	3.1
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	12.4
Total	100.0	100.0	100.0	100.0

The ensuing question is to what extent students experience financial difficulties. Taking into consideration the above data showing that a vast majority of students are financially dependent on their family, as well as the fact that during the collection of data on the costs of living and studying, a significant percentage of students has not been able to realistically assess their own costs of living and studying, the issue of the subjective assessment of financial difficulties should not be directly correlated with real financial difficulties/burden faced by the students' families.

Based on their own assessment, around 15% of the students do not have any financial difficulties, while 11% of the students believe they have very severe financial difficulties. The largest financial difficulties have been reported by students primarily depending on their own sources of income and thus have been factually best aware of their own income and expenditures (Table 48).

Table 48: Assessment of financial difficulties of students 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	15.2	15.7	7.4	7.9	14.6
2	17.6	17.7	25.9	13.2	12.4
3	39.8	39.7	38.3	44.7	40.4
4	16.5	16.6	8.6	21.1	18.0
5 - Severe financial difficulties	10.9	10.3	19.8	13.1	14.6
Total	100.0	100.0	100.0	100.0	100.0

The self-assessment of financial difficulties shows a significant correlation not only with the source of student income, but also with the educational attainment of parents, occupation and study programme of the student. Regarding the educational attainment of parents, there is a statistically significant difference between students whose parents do not have higher education and students whose parents have. Students whose parents do not have higher education experience financial difficulties to a greater extent. There are also differences regarding parental occupation. The students whose parents are engaged in manual occupations experience financial difficulties to a considerably higher extent (Table 49).

Table 49: 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	9.4	30.8	24.3	6.4
2	15.5	21.2	20.2	12.4
3	44.3	29.3	35.2	44.8
4	18.5	11.7	12.3	23.8
5 - Severe financial difficulties	12.3	7.0	8.0	12.6
Total	100.0	100.0	100.0	100.0

Students studying study programmes in the field of sciences, medicine and similar areas report having more financial difficulties than the students studying programmes in the field of social science, law and business (Table 50).

Table 50: 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	17.6	17.3	37.3	18.8	9.0	100.0
Humanities and arts	18.4	16.6	35.3	19.1	10.6	100.0
Social sciences, law and business	24.0	20.9	33.3	14.1	7.7	100.0
Sciences, mathematics and informatics	14.0	20.7	32.9	18.0	14.4	100.0
Engineering, manufacture and construction	22.8	17.8	40.4	12.4	6.6	100.0
Agriculture and veterinary science	18.4	9.5	51.7	8.8	11.6	100.0
Medicine and related fields	11.9	14.8	40.7	17.5	15.1	100.0
Services	15.3	20.4	40.8	15.3	8.2	100.0

6.1. Student Accommodation

Over half of the students (58.4%) live with their parents, while 11.5% of students live independently (Table 51). The largest number of students live with parents, both those with and without higher education, and mainly depend on family financial support. Students with their own source of income most frequently live with their partner. Interestingly, students living in student dormitories also most frequently rely on family financial support.

Regarding students living in dormitories, there is no considerable difference between male and female students, nor regarding sources of student financing (Table 52).

Table 51: Accommodation of students by gender, educational attainment of students' parents and source of financing (in %)

Place of residence	Total	Gender		Parent educational attainment		Dependence on source of financing		
		Female	Male	Without higher education (ISCED 0-4)	Completed higher education (ISCED 5-8)	Dependence on family	Dependence on own income	Dependence on public support
With parents	58.3	55.2	62.9	53.2	64.0	54.7	46.1	79.5
With partner/children	5.5	6.0	4.6	5.7	5.2	4.4	25.8	2.3
With other people	24.7	28.2	19.7	31.7	17.3	30.1	14.6	15.9
Alone	11.5	10.6	12.8	9.4	13.5	10.8	13.5	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 52: Students living in student dormitories by gender, educational attainment of students' parents and source of financing (in %)

Place of residence	Gender		Parent educational attainment		Dependence on source of financing		
	Female	Male	Without higher education (ISCED 0-4)	Completed higher education (ISCED 5-8)	Dependence on family	Dependence on own income	Dependence on public support
Students not living in student dormitories	59.3	40.7	51.2	48.5	89.7	3.9	1.8
Students living in student dormitories	52.3	47.7	63.6	35.8	88.5	2.9	3.6

Finally, it is also important to analyse student satisfaction with housing conditions. Over 60% of the students are (very) satisfied with their housing conditions, with students living with parents being the most satisfied group: 91.8% (the sum of categories 1 and 2). However, the percentage of satisfied students is significantly lowers among students living in student dormitories. Around one third of students are satisfied with dormitory housing (Table 53).

Table 53: 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	60.7	77.2	37.5	16.3
2	21.9	14.6	32.1	27.1
3	12.5	6.1	21.6	32.5
4	3.2	1.4	5.6	14.5
5 Not satisfied at all	1.7	0.7	3.2	9.6
Total	100.0	100.0	100.0	100.0

6.2. Costs of Living and Studying

The costs of living during studies are frequently neglected dimension in public discourse which is typically focused on the costs of studies, mainly on 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:

Cost of accommodation (rent/mortgage including utilities, heating, water...)

1. Cost of food
2. Cost of transport
3. Cost of communication (telephone(s), internet, etc.)
4. Cost of healthcare protection (health insurance) - only for students paying their own health insurance
5. Cost of childcare
6. Payments of debts (other than mortgages)
7. Cost of leisure activities
8. 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.)

Since the costs for students living and not living with their parents are very different, they will be shown separately.

Regarding the average monthly costs including both studies and living expenses, it appears that the self-financing students who live with their parents, on average, have much lower costs than budget students. Self-financing students spend EUR 51.5 on costs of living and studies, while budget students spend EUR 524.4. Since the difference in costs between these two groups of students is very large, this result should be taken with a reserve. Likewise, data for students living with parents and those living alone will be presented separately.

Table 54: Average monthly costs, including study costs, for students living with their parents

	Paid by the student from their own income		Paid by parents for the student		Total cost	
	EUR	%	EUR	%	EUR	%
Total cost of accommodation	2.9	5.7	127	24.2	130	22.6
Food	9.4	18.4	105.9	20.2	115.4	20.0
Transport	5.05	9.8	43.4	8.3	48.4	8.4
Communications (telephone(s), internet, etc.)	3.5	6.9	29.5	5.6	33.1	5.8
Healthcare costs (health insurance)	1.2	2.4	1.8	0.4	3.07	0.5
Childcare	0.01	/	1.5	0.3	1.57	0.3
Debt payments (other than mortgage)	0.12	0.2	6.5	1.3	6.7	1.2
Leisure activities	6.9	13.6	21.2	4.1	28.2	4.9
Other costs of living	14.9	29.0	70.4	13.4	85.4	14.8
Tuition, enrolment fee, exam payments, administrative fees	5.1	10.0	97.5	18.6	102.7	17.8
Contributions for educational institutions and student organizations	0.1	0.3	1.3	0.2	1.4	0.3
Teaching materials (books, photocopying, materials, etc.)	1.72	3.3	14.9	2.8	16.6	2.9
Professional practice, travel	0.2	0.4	2.95	0.6	3.1	0.5
Total	51.5	100.0	524.4	100.0	576	100.0

In addition to the costs of food, accommodation and other costs of living (e.g. clothes, hygiene), self-financing students who do not live with their parents spend most of the funds for the tuition and other costs paid to higher education institutions (13%). The same situation is for students whose costs of studies are born by parents, although they do not live with them.

Table 55: Average monthly costs, including study costs, for students not living with their parents

	Paid by the student from their own income		Paid by parents for the student		Total cost	
	EUR	%	EUR	%	EUR	%
Total cost of accommodation	42.9	29	179.1	35	222	33.6
Food	34.5	23.3	106.4	20.8	140.9	21.3
Transport	10.5	7.1	28.6	5.6	39.2	5.9
Communications (telephone(s), internet, etc.)	7	4.8	22.8	4.5	29.8	4.5
Healthcare costs (health insurance)	0.5	0.3	1.8	0.4	2.3	0.4
Childcare	6.1	4.2	4.3	0.8	10.4	1.6
Debt payments (other than mortgage)	5.8	3.9	7.7	1.5	13.5	2.1
Leisure activities	6.7	4.5	14.7	2.9	21.3	3.2
Other costs of living	18.8	12.8	52.3	10.2	71.2	10.8
Tuition, enrolment fee, exam payments, administrative fees	11.8	8	79.4	15.4	91.3	13.8
Contributions for educational institutions and student organizations	0.2	0.1	0.9	0.2	1.1	0.2
Teaching materials (books, photocopying, materials, etc.)	2.6	1.8	12.1	2.4	14.8	2.2
Professional practice, travel	0.2	0.2	1.7	0.3	2	0.3
Total	147.6	100.0	511.8	100.0	660.3	100.0

Comparing the students not living with their parents by the structure of their income, students with their own income spend more, as a consequence of the fact that these are mostly students who have started families and thus have

higher costs. The total costs of studies is higher than presented (Table 56) because the list of items related to costs of studies is not exhaustive and e the percentage of total costs of studies refers to the percentage of costs for studies compared to the overall expenses of a student. This is also valid for the next table (Table 57).

Table 56: Average monthly costs of studies for students not living with their parents by dominant source of income

	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	
	EUR	%	EUR	%	EUR	%
Costs of accommodation	222.3	34.6	201.6	20.7	66.1	22.2
Costs of transport	37.1	5.8	76.8	7.9	43.5	14.6
Tuition	89.8	14	154.2	15.8	66.5	22.3
Total costs of studies	643.1	54.4	974.4	44.4	298.4	59.1

Regarding the age structure, the students 25 to 30 years old have the highest costs of living. Students whose parents have attained higher education levels spend more, while the male and female students have approximately same costs (Table 57).

Table 57: Average monthly costs of studies for students not living with their parents by other characteristics

	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	
	EUR	%	EUR	%	EUR	%	EUR	%	EUR	%	EUR	%	EUR	%	EUR	%
Costs of accommodation	222.4	33.7	221.1	33.4	201.2	34.1	261.5	32.9	214.2	35.8	232.9	33	259.2	21.2	214.2	35.8
Costs of transport	37.8	5.7	41.8	6.3	33	5.6	50.9	6.4	30.6	5.1	34.7	4.9	111.9	9.1	30.6	5.1
Tuition	95.4	14.5	83.1	12.6	80.6	13.7	111.6	14	87	14.5	88.6	12.6	167.4	13.7	87	14.5
Total costs of studies	659.5	53.9	661.8	52.3	589.4	53.4	795.6	53.3	598.5	55.4	705.1	50.5	1225.5	44	598.5	55.4

7. Employment

To draw valid conclusions regarding student employment in the Federation of B&H and to enable placing the data obtained by the EUROSTUDENT survey in an adequate context, it should be noted that the transition and restructuring of the economy throughout Bosnia and Herzegovina has led to an increasing inadequacy of workforce qualifications, a low rate of formal and a high rate of informal employment, high unemployment, inactivity of the working age population and an increase of a long-term unemployment. Furthermore, the labour market in B&H is not flexible, and workforce mobility is very low (Agency for Labour and Employment, 2012). Changeable trends of economic stability and recession, visible in Bosnia and Herzegovina during the last decade, are largely the consequence of the global economic stage developments . However, it can be said that Bosnia and Herzegovina has reached the level of maintaining macroeconomic stability, i.e. the stability of nominal economic indicators (stability and convertibility of the local currency, fixed foreign exchange rate and low inflation rate), but real economic indicators are still showing an economic lagging (constantly high unemployment rate, high deficit of the trade and payment balance, sustaining foreign debt with international aid and transfers from abroad).

Non-qualified workers and workers holding the third-degree professional qualifications are dominant in the structure of the unemployed population. . According to data from the Agency for Statistics in B&H, the number of legally employed persons in B&H in January 2013 was 651,342, with 265,668 females. Compared to December 2012, the total number of the employed has increased by 0.3%. The number of employed women also increased by 0.8%. According to the same source, the rate of registered unemployment for January 2013 was 46.0% what is an increase of 0.1% compared to December 2012.

According to data from the Federal Institute of Employment of the Federation of Bosnia and Herzegovina, there is a large imbalance between formally registered unemployment (366,705), with a rate of 47% and the unemployment determined by a survey done in accordance with the standards of the International Labour Organization, showing unemployment between 16% and 20%, which could indicate that a large number of people works in a grey economy. The largest number of the unemployed are qualified and non-qualified workers. The unemployment is highest in the Tuzla canton (Federal Institute of Employment, 2014).

Having in mind the above situation in Bosnia and Herzegovina and the data available for the Federation of B&H, it is important to analyse data regarding the work status/employment of students in the Federation of B&H.

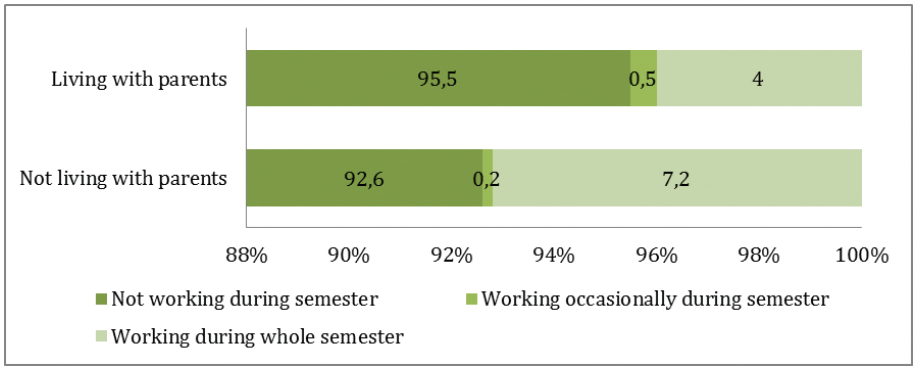
All students not living with their parents usually have to cover larger expenses and thus face a larger need to earn money. A somewhat larger number of students not living with their parents work (7.4%) than the students living

with their parents (4.5%). The poor functioning of the labour market is probably the main reason why a larger number of students is unemployed. A bad economic situation forces even those students living with their parents to look for work.

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 throughout the semester while 35.9% of students living alone work. In Austria, 37.7% of the students living with their parents work throughout the semester, compared to 48% of those living alone. In Slovakia, 31.3% of the students living with their parents work, compared to 27.3% of students living alone.

Considering the similar status on the labour market for students living with or away from their parents, the further analysis will not separate the student population by this characteristic in respect of the labour market behaviour.

Figure 11: Distribution of students by employment status and whether they live with their parents



The following segment represents an analysis of student behaviour in the labour market compared to the socio-economic status viewed through the level of educational attainment of parents. In this case, socio-economic status is viewed as the potential of parents to provide financial support to their child what also influences student's decision whether to look for work during studies.

Based on the data presented, the highest percentage of students who work can be found within the group of students whose parents have not attained higher education – 54.7%. (Table 58). However, since the differences between the students having parents with and without higher education are not considerable while the baseline assumption is that the socio-economic status of the students rises with the level of educational attainment of their parents, we may assume that this situation was significantly affected by the overall economic situation in Bosnia and Herzegovina, characterized by a poor job offer. Therefore, the students use the available employment opportunities regardless of their socio-economic status.

Table 58: Correlation of student employment status and level of educational attainment of students' parents (in %)

	Without higher education (ISCED 0-4)	Completed higher education (ISCED 5-8)	Total
No, I did not work during this semester	46.5	53.0	100.0
Yes, I've worked occasionally during this semester	52.3	47.5	100.0
Yes, I've worked during this semester	54.7	45.0	100.0

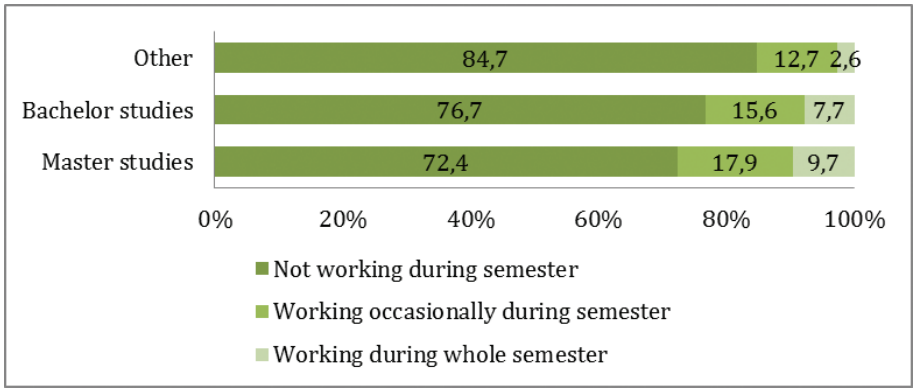
In a comparative perspective, we see that in Croatia the employment rate for engineering students is 15.4% and social sciences-humanities i 7.6%. In Slovakia, 10.5% of engineering students are employed, while this is the case for 8% of social sciences and humanities students. Table 59 shows the employment rate of students by field of study. The goal of collecting this data was to find out whether students from some categories become employed more than others. Thus we can see that, during studies, students from the fields of social science, business and law, and sciences work the most, while students from the fields of services, agriculture and medicine work the least.

Table 59: Correlation of student employment status and field of studies (in %)

What study programme do you attend?	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	7.7	11.9	80.5	100.0
Humanities and arts	5.4	16.8	77.8	100.0
Social sciences, law and business	11.0	17.2	71.8	100.0
Sciences, mathematics and informatics	9.2	15.8	75.0	100.0
Engineering	6.5	15.4	78.1	100.0
Agriculture and veterinary medicine	3.7	12.3	84.0	100.0
Medicine and related fields	3.6	16.8	79.6	100.0
Services	6.4	9.2	84.4	100.0

Figure 12 presents the same data on student engagement in the labour market, but by level of study. The participation of students in master studies is somewhat higher. The lowest relative percentage of employed students by level is noted for students in the category *other*.

Figure 12: Distribution of students by employment status and level of studies (in %)



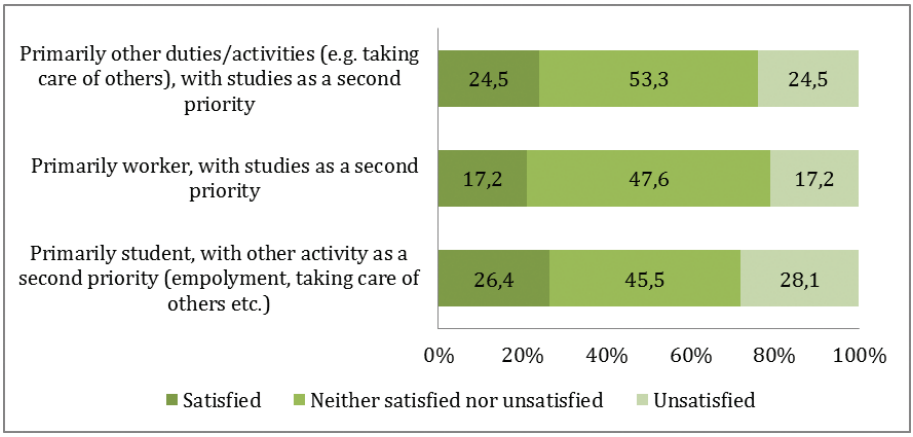
The next segment shows an assessment of how students see their workload during the week through data presented in the following table (Table 60). Particular attention is given to students who are employed during studies. Regarding student satisfaction with their studies workload and their job workload (the entire sample is considered), the conclusion is that nearly one third of the students are unsatisfied with the overall workload.

Table 60: Student satisfaction with their workload at the workplace and in studies

Satisfaction level	Workload at studies		Workload at paid jobs		Total workload	
-	%	n	%	n	%	n
Satisfied by workload	27.7	596	16.3	247	25.6	486
Moderately satisfied by workload	43.8	941	32.2	489	46.9	891
Unsatisfied by workload	28.5	614	51.5	780	27.5	523
Total	100.0	2151	100.0	1516	100.0	1900

The following figure (Figure 13) presents the distribution of employed students according to their satisfaction with their workload and obligations in studies by whether they primarily study or primarily work. Notably, those students who primarily study, with work as a second priority, are most unsatisfied. However, there is an extremely large number of those unsatisfied with their study workload, amounting to around one third of the employed students.

Figure 13: Distribution of students by workload satisfaction and primary activity during studies



Regarding satisfaction with workload in studies, work and overall by gender, there is an even distribution of the opinions of students of both genders, with slightly less satisfaction among females regarding study and workplace workloads (Table 61).

Table 61: 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
Completely satisfied	6.9	8.8	7.6	6.4	8.3	7.2	8.1	8.9
2	19.7	20.7	20.1	9.1	8.9	9.0	17.0	17.4
3	44.2	43.0	43.7	30.3	34.9	32.3	45.4	49.0
4	17.1	17.7	17.4	17.7	22.8	19.9	16.5	14.8
Completely unsatisfied	12.1	9.8	11.2	36.5	25.1	31.6	13.0	9.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The effect of parental social status (in this case expressed through the students' perception of their parents' social status, rated 1 to 10) can very much affect student future expectations, after completing studies. Table 62 and Table 63 show the assessment of employment prospects abroad after studies, by current social status. Within the group with a higher social status (marks 6-10), 44.3% of the students assess their chances as good. Among the group with a lower social status (marks 1-5), the expectations are significantly more pessimistic.

Table 62: 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	53.1	18.0	19.0	10.0	100.0
9	46.2	22.4	17.3	14.1	100.0
8	50.4	20.3	16.2	13.2	100.0
7	40.4	18.2	22.0	19.3	100.0
6	36.8	27.8	19.8	15.6	100.0
5	27.2	24.5	31.2	17.1	100.0
4	31.3	20.7	36.4	11.6	100.0
3	35.4	17.1	29.3	18.3	100.0
2	34.9	20.9	34.9	9.3	100.0
1 Low social status	22.5	15.0	37.5	25.0	100.0
Total	38.6	21.9	23.9	15.6	100.0

Table 63: Assessment of employment prospects at the international level upon completing the programme (cumulative assessments in %)

Assessment	(Very) good	Neither good or poor	(Very) poor	Cannot assess	Total
Rated 6 - 10	44.3	21.4	19.1	15.2	100.0
Rated 1 - 5	28.7	22.8	32.3	16.2	100.0

Comparing students by current study status and by whether they have done any paid work during the semester, most of the students did not do any paid work. The reason for this should primarily be sought in the bad situation at the labour market, where it is very hard to find employment, particularly if one wishes to study and earn parallelly. Comparing the two groups, a significantly larger percentage of self-financing students have had work experience during the semester (Figure 14).

Figure 14: Distribution of students by employment status and study status (in %)

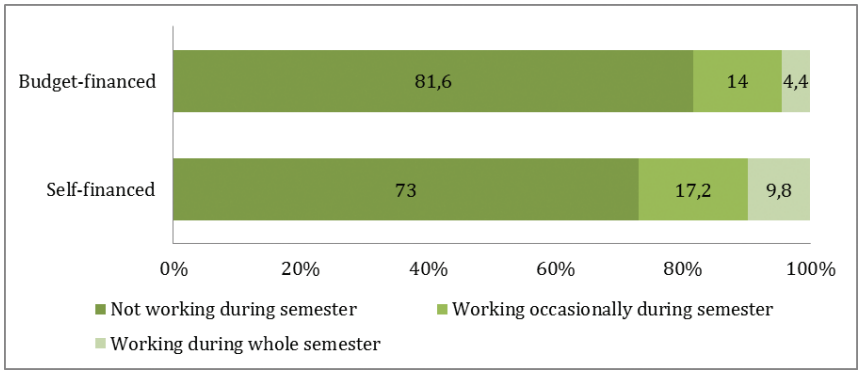
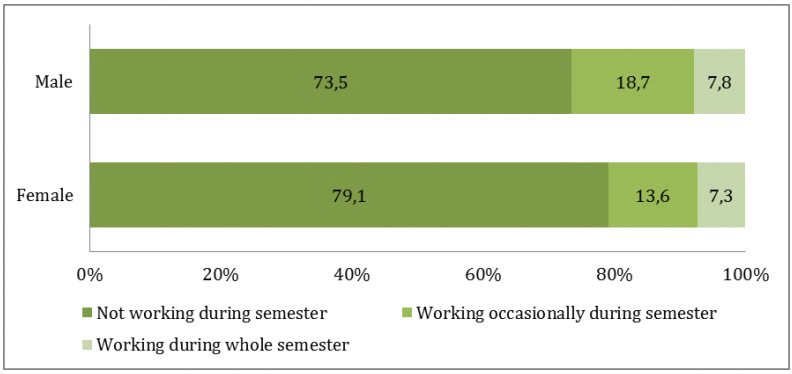


Figure 15 gives a comparative view of students of both genders regarding data obtained by the same question regarding paid employment during studies. The conclusion is that a somewhat higher percentage of male students find employment during the semester.

Figure 15: Distribution of employment status of students by gender (in %)



Regarding the structure of students who have worked during the semester, the reasons for finding work were primarily to improve their living standards and to gain experience at the labour market, therefore this data (combined with data indicating a 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 the Federation of B&H (Table 64).

Table 64: Distribution of students by reason for getting a 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	126	25.9	207	38.6	207	42.8	81	17.6
Partly	42	8.6	166	30.9	104	21.5	64	13.8
Undecided	71	14.5	104	19.3	87	18.0	87	18.8
Partly no	62	12.7	25	4.6	37	7.8	58	12.6
Not at all	187	38.3	35	6.6	48	9.9	171	37.2
Total	488	100.0	537	100.0	483	100.0	461	100.0

A clearer view of how employed students see themselves is provided by the data in the following table. Among the group of employed students, the largest number consider themselves primarily as students, while nearly 21% of them gives priority to work (Table 65).

Table 65: Statements best describing the current situation of the student

Response	Percentage	Number
I am primarily a student along with other activities	69.8	395
I am primarily employed, and additionally I study	20.8	118
I am primarily engaged in other activities in addition to studying	9.4	53
Total	100.0	566

Table 66 shows worrying data indicating that the problem is not just a small number of employed students, but that it is even more prominent problem lies in the connection between employment and the employed students' study programmes. Namely, only 27.9% of the students have a job at which they can gain adequate experience related to their study programmes, while over one half are at jobs slightly or not at all connected with their study programme.

Table 66: Correlation between students' work and their study programme

Response	Number of students	Percentage
Highly related	166	27.9
Moderately related	102	17.1
Very slightly/not related at all	327	55.0
Total	595	100.0

The following figure (Figure 16) shows the correlation of student employment with their study programme, by level of study. We can see that the percentage of students whose study programme is connected with employment increases with higher levels of study, although slightly. 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 16: Distribution of students by level of study and correlation of employment with the type of studies

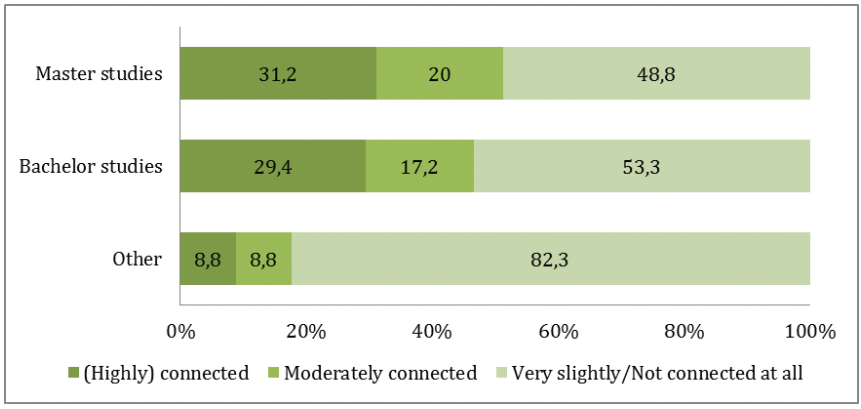


Table 67 shows the extent to which employed students have worked during studies, viewed according to their own perception of the social status of their families. Students who work have a similar perception of social status as students who do not work. The overall conclusion regarding this data is that students are interested in employment during studies regardless of the perception of social status, confirming the previous analyses conclusion that work is a privilege in a situation of an increased unemployment rate.

Table 67: 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	10.2	4.7	7.2
9	4.8	4.9	4.6
8	11.8	14.6	18.0
7	11.8	18.3	18.1
6	12.4	16.5	15.1
5	35.5	25.7	24.2
4	6.5	9.6	6.5
3	2.2	4.0	3.4
2	1.6	1.2	1.7
1 Low social status	3.2	0.5	1.3
Total	100.0	100.0	100.0

Table 68 shows how many working hours per week on average employed students spend at work, viewed according to their own perception of the social status of their families. It can be seen that their number of working hours is smaller than usual 40-hour working week, except for students with the lowest social status. Likewise, there are no significant differences in the duration of the work week regarding perception of social status.

Table 68: Correlation of the social status of students and the number of work hours per week

Level of social status	Average number of hours
10 High social status	19.6
9	18.2
8	16.8
7	18.1
6	20.0
5	21.0
4	18.7
3	13.3
2	24.1
1 Low social status	41.7
General average	19.8

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 excellence in research and increases cooperation and competition among higher education institutions. Its character nurtures respect for diversity and encourages linguistic pluralism. On the other hand, international student mobility is equally important for the personal development of students, it increases the prospects for obtaining better quality education and prospects for employment. Due to everything 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 and Louvain-la-Neuve Communique (2009) states that at least 20% of graduate students should experience studying abroad by 2020.

The Ministry of Civil Affairs of Bosnia and Herzegovina is responsible for international cooperation in the field of higher education at the national level, including the promotion of links between Bosnia and Herzegovina and foreign higher education institutions and the promotion of the mobility of students and faculty in the field of higher education. Public universities and some private universities participate in international projects aimed at supporting processes of modernization of higher education, such as Tempus and Erasmus Mundus programms. At the institutional level, international cooperation is supported by offices for international relations, providing students with information on international study programmes, student exchange programmes and international events. Bosnia and Herzegovina has been a member of the Central European Exchange Program for University Studies (CEEPUS) since 2007. The primary activity of the CEEPUS programme is the creation of university networks developing and implementing joint programmes that should, ideally, lead to diplomas that may be cross-validated. CEEPUS provides mobility grants for students and teachers within this framework The main goal of this programme is the development of academic cooperation in Central, Eastern and South-Eastern Europe and contribution to the development of the European Higher Education Area, with the use of regional academic mobility as a strategic tool for the implementation of the objectives stated in the Bologna Declaration (European Commission, 2010).

Having this in mind, it is of key importance to determine the highest possible number of factors influencing student mobility. Existing studies on international mobility indicate the significant link between student mobility and educational system structure. The level of studies, field of education, and type of higher education institution are just some of the elements of the educational structure noted as significant predictors of the mobility rate. In addition to differences in mobility by educational structure, a lot of attention is given to social factors,

such as educational attainment of parents, socio-economic status of students and others.

To increase the mobility rate, besides determining the factors influencing the implementation of student mobility, it is also very important to examine the expectations, desires, motivation, 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 the Federation of B&H and examine the key factors affecting student attitudes towards the possibility of studying abroad.

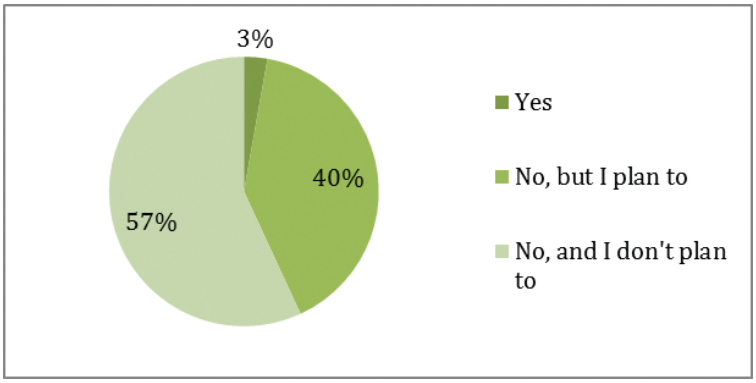
Additionally, this EUROSTUDENT V survey is particularly important because it represents a unique source of data collected on international student mobility, thus enabling a detailed review of data on temporary student mobility and plans for student mobility during studies. Therefore, the analyses presented below are only related to temporary study stays outside the Federation of B&H, i.e. the analyses exclude the students who have completed their entire study programme abroad.

The term temporary mobility in the EUROSTUDENT framework involves two options for study stays abroad: realization of part of the studies abroad and realization of study-related activities abroad. Study-related activities include research work, study visits, foreign language courses, summer or winter schools, practical education or employment.

According to data from the EUROSTUDENT V survey, only 3% of the students in the Federation of B&H sample have experienced temporary studies abroad (Figure 17). The 3% mobility rate places the Federation of B&H among the countries with the lowest student mobility rates in Europe. The average mobility rate according to data available from the EUROSTUDENT V survey is around 10%. Within a comparative perspective this rate is much closer to mobility rates in the countries in the regionwhere, e.g. Serbia and Croatia have an even lower mobility rate of 2%. Ukraine and Slovakia also have low mobility rates. Montenegro, with a mobility rate of 7%, is the regional country closest to the European average, while the highest rate is recorded for Scandinavian countries, with 18% of Norwegian students having experience with studying abroad.

However, regarding the planned study stays abroad, according to the EUROSTUDENT V survey, the Federation of B&H has a significant percentage of students intending to spend part of their studies abroad. The situation is similar in all countries in the region - Montenegro, Croatia and Serbia. In most other countries, the percentage of planned stays is around twice as high as the realized study stays. It should certainly be kept in mind that it would be difficult to achieve the desired mobility rate due to potential obstacles that may deter students from the planned study stays.

Figure 17: Distribution of mobility rates among total student population



8.1. International mobility by student characteristics

The following table (Table 69) shows the mobility rates of students by type and method of financing education. The realized mobility rates are equal for self-financing and budget students, but planned mobility rates are higher for students financing their studies. The achieved mobility rate is higher for university students, but students of non-university HEIs plan mobility at a greater percentage, while nearly the same percentage of both, university and non-university students, do not plan international mobility. It is also interesting to note that not a single student within the sample of non-university HEIs has reported realized student mobility.

Table 69: Student mobility by type and ownership of HEI and student status (in %)

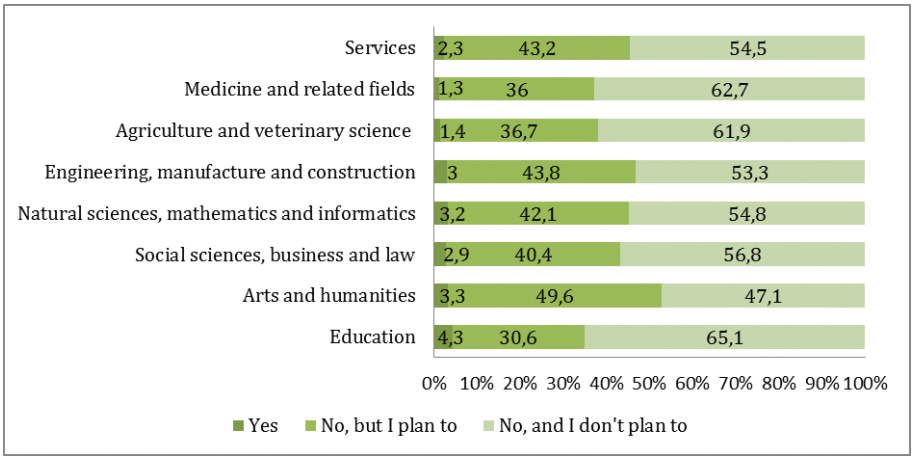
Did you ever study abroad?	Self-financing	Budget	Universities	Non-university HEIs
Yes	2.8	2.9	2.9	0
No, but I plan to	43.4	37.6	40.2	43.5
No, and I don't plan to	53.8	59.5	56.9	56.5
Total	100.0	100.0	100.0	100.0

According to 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 of education have different international orientation and cooperation with international institutions. One of the results noted in most countries participating in the EUROSTUDENT survey (with data available for the field of education) indicates considerable higher mobility of students whose field of education is within the area of humanities and arts than of 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 their language proficiency and learn about other cultures.

Regarding the data obtained for students from the Federation of B&H, the situation is the same, i.e. the rates of implemented student mobility are highest for students from the fields of education (4.3%) and arts (3.3%), followed by students of sciences, mathematics and informatics, technology, manufacture and construction, social sciences, business and law, with mobility rates at around 3%. The most positive attitude towards future mobility have students studying programmes in the field of arts, where nearly 50% plan international student mobility. Among the surveyed students, the least mobile are students in the field of education, where 65% do not plan international student mobility (this data is interesting because the highest percentage of them has realized student mobility, while the lowest percent plans to realize it), with the similar percentage of students of agriculture and medicine.. Within the perspective of countries in the region, the rates of realized mobility for students from Montenegro are nearly twice higher than those in the Federation of B&H, which are closer to the results from Serbia.

Figure 18: Student mobility by field of studies



To register other factors influencing student mobility in the Federation of B&H, the following table (Table 70) presents the mobility of students by level of studies enrolled and student age. Results indicate that the realized mobility rates for bachelor students and master students are considerably different. Postgraduate students' mobility rate is almost double - 5% compared to 2.5% bachelor students mobility rate. Regarding planned stays abroad, the situation is different - students of bachelor studies plan studies abroad to a greater extent. Comparing the students' tendency to study abroad by age group, students between 25 and 29 years old are the most mobile, while the largest number of students under 21 years of age have plans regarding studying abroad. The largest number of students not planning studies abroad is among the group of over-30 students.

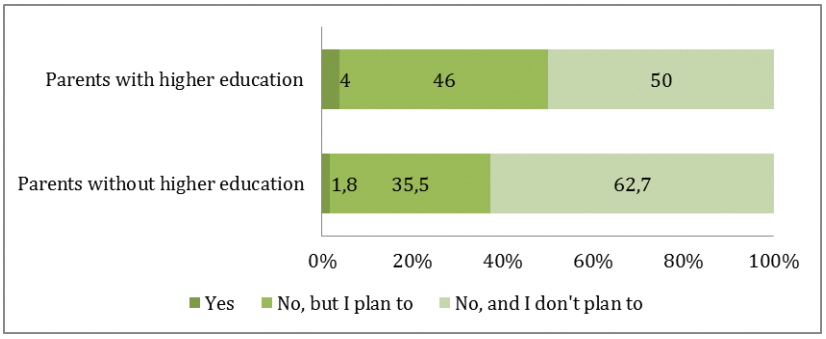
Table 70: Mobility of students regarding student age and level of study (in %)

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	2.2	2.5	4.9	2.0	2.4	5.0
No, but I plan to	44.4	41.9	31.9	22.0	41.1	33.0
No, and I don't plan to	53.4	55.6	63.2	76.0	56.5	62.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

As stated in the introduction, available literature on international mobility indicates that one of the key factors for student mobility is precisely the social origin of students, specifically, the educational attainment of their parents. In other words, access to international mobility is socially selective. Data from the EUROSTUDENT V survey makes this fact particularly visible. In most countries, students with higher social status, i.e. students whose parents are highly educated, are more inclined towards studying abroad and more frequently plans studying abroad.

Figure 19 shows the influence of the educational attainment of parents on student mobility in the Federation of B&H. Based on the available data, the rates for both realized and planned mobility are highest for students with highly educated parents (ISCED 5-8). The situation is different regarding students without mobility plans, i.e. students whose parents have not attained higher education do not plan to continue studies abroad in a large percentage. Regarding the link between mobility and average monthly student income, a statistically significant correlation is found. As expected, students with higher monthly income show a more positive attitude towards international mobility.

Figure 19: Student mobility by level of educational attainment of parents (in %)



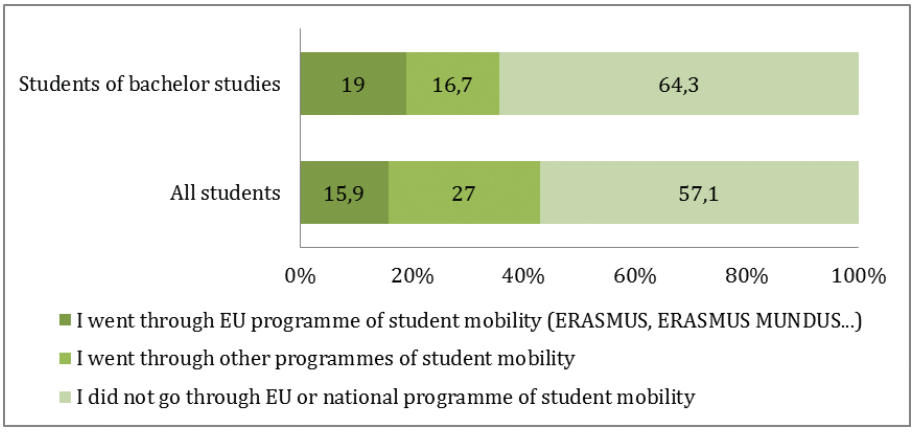
8.2. Student Mobility Programmes

Another advantage of the EUROSTUDENT V survey is the capacity to provide an overview of the organization and financing of study stays, and to respond to

the question of how well prepared students are for their stay abroad. According to data from the EUROSTUDENT V survey, students mostly choose mobility programmes implemented by the European Union. The most popular mobility programme appears to be ERASMUS, with over 50% of the mobile students on average choosing this programme. The situation in the Federation of B&H is far below the European average for organizing studies and study visits through EU programmes. The situation is similar in all the countries in the region, with the exception of Montenegro, where the percentage of students achieving mobility through organized EU programmes is close to the European average.

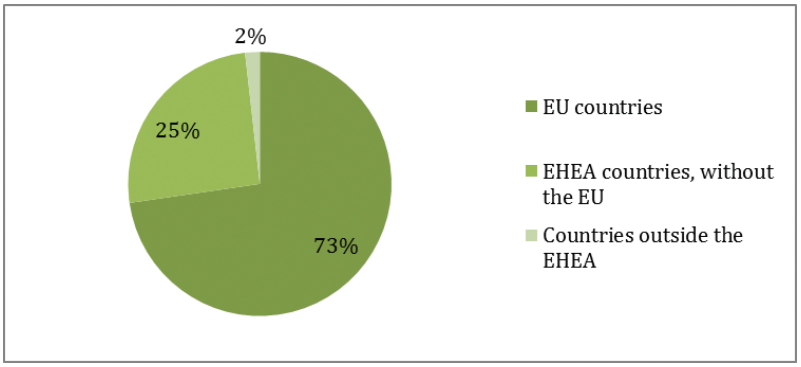
In the Federation of B&H, among the students having stayed abroad, 16% have used EU programmes, such as ERASMUS and ERASMUS MUNDUS, while 19% of bachelor students have done the same. There is no data for master students from the Federation of B&H. Mobility rates for students using other organized mobility programmes are higher than the mobility rates for students using EU mobility programmes. It should also be added that the rates of mobility for students organizing their student mobility independently are significant - both in the total number of students in the sample, as well as for students of bachelor studies (64.3% and 57.1%).

Figure 20: Distribution of student mobility by type of mobility programme



Regarding the most frequent mobility destinations for studies abroad, mobile students mostly choose European Union countries, followed by EHEA countries (Figure 21). Students face most frequently chosen Germany, Austria and Croatia. Students spend on average 14.4 months abroad - students of master studies 6 months, bachelor students 15.5 months. Only 2% of the students have studied in countries outside the EHEA, most frequently in the USA and Turkey.

Figure 21: Distribution of foreign countries where students studied (in %)



Regarding students planning to spend part of their studies abroad, the results presented in the following figures (Figure 22 and Figure 23) indicate that students are still unprepared for planned stays. Figure 22 shows that 43% of students interested in studying abroad still do not know in which country they would continue studies. The remaining students choose mostly EU countries, followed with similar percentages for EHEA member countries (5%) and non-member countries (6%).

The most popular destinations for the planned student mobility are Germany, Austria and Turkey.

Regarding mobility programmes, the situation is very similar. Namely, just over 49% of all students do not know what mobility programme they would opt for, and the situation is uniform for students of bachelor and postgraduate studies. Only 22% of students plan their mobility within organized EU mobility programmes.

Figure 22: Distribution of foreign countries where students would prefer to study (in %)

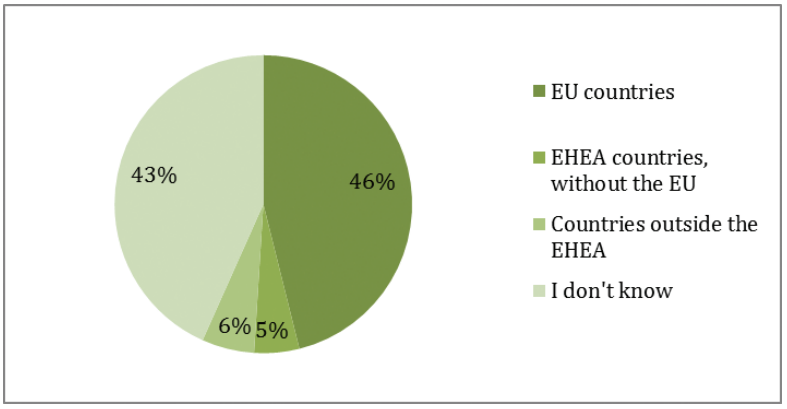
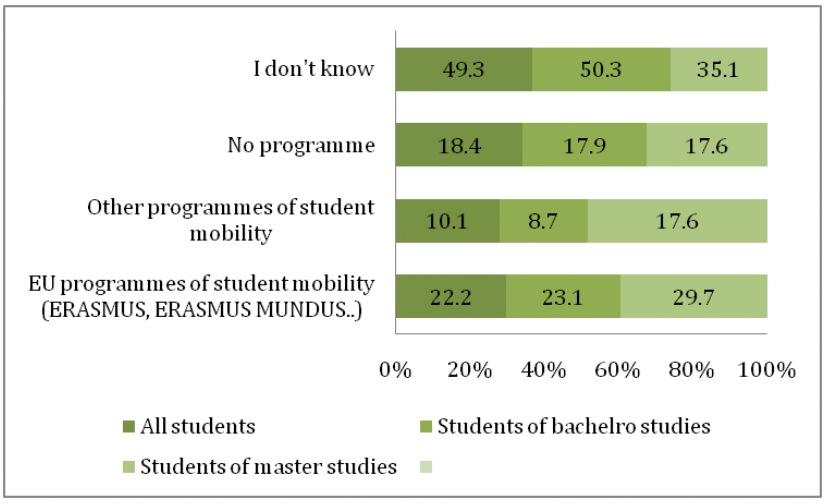


Figure 23: Distribution of planned student mobility by type of mobility programme (in %)



In order to evaluate the flexibility of the openness of national systems by different study programmes, students were also asked about the recognition of results obtained abroad by their home higher education institutions. ECTS credits are fully recognized for over 34% of "mobile" students, mostly in the group of students studying in the field of engineering, manufacture and construction, as is the case in all other countries in the region. The percentage of students who do not know whether studying abroad will be recognized and the percentage of students not obtaining a certificate during study stays abroad is the same, and amounts to 18.8%. Interestingly, as many as 50% of mobile students in the field of humanities and arts have not obtained a certificate during studying and staying abroad (Table 71).

Table 71: Recognition of certificates (ECTS, diplomas) obtained while studying abroad by the home higher education institution (in %)

Response	Total number of students	Humanities and arts	Engineering, manufacture and construction
Yes, everything was recognized	34.4	25	42.9
Yes, but partly	17.2	12.5	28.5
No, nothing was recognized	10.8	12.5	0
I (still) do not know	18.8	0	14.3
I did not obtain a certificate during studies abroad	18.8	50	14.3
Total	100.00	100.00	100.00

8.3. Obstacles for Studying Abroad

At the beginning of this chapter we have described a goal of European educational policy regarding an increase in mobility across all countries and for all groups of students. Having in mind the very low rates of student mobility in the Federation of B&H, it is very important to examine which aspects represent the smallest, and which the largest obstacles for studying abroad.

According to all previous studies, the financial and institutional support are most important factors influencing the realization of plans for participation in academic mobility study programmes. Likewise, according to all previous research, the smallest number of students lacks the motivation.

In most European countries, according to the latest EUROSTUDENT V survey, the expected additional financial costs represent the most critical obstacle dissuading students from the idea of completing part of their studies abroad. On average, 63% of the students across all countries identify financial obstacles as the largest one. 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 students from the Federation of B&H is shown below, separately for the three categories of students: students with realized stays abroad (Table 72), students interested in studying abroad (Table 73) and students who do not plan to study abroad (Table 74).

The largest obstacle for studying abroad for students with mobility experience was the problem of recognizing results gained abroad upon returning to the country, followed, as expected, by additional financial expenses. Students have also stated that one of the significant obstacles is a lack of information on studying abroad. On the other hand, a loss of paid work, language proficiency and lack of motivation have been identified as the smallest obstacles for leaving for a study stay abroad. The fact that over 22% of students have reported that finance is not an obstacle may be explained by the fact that mobile students come from families where parents have higher education, most frequently followed by higher socio-economic status.

Table 72: Level and type of obstacle for study abroad for students realizing international mobility

Types of obstacles	Large obstacle (1)	2	3	4	No obstacle at all (5)	Total
Language proficiency	4.0	0.0	14.8	24.1	53.7	100.0
Lack of information on studying abroad	0.0	17.8	15.6	33.3	33.3	100.0
Separation from partner, children, friends	5.0	10.0	20.0	12.0	48.0	100.0
Additional financial expenses	8.0	14.3	30.6	16.3	22.4	100.0
Loss of paid employment	1.0	2.1	18.8	16.7	60.4	100.0
Lack of motivation	5.0	4.2	25	6.3	54.2	100.0
Low benefit for studies in country	1.0	6.1	20.4	26.5	44.9	100.0
Difficult to relate studies abroad to contents of my study programme in country	2.0	4.3	25.5	25.5	40.4	100.0
Problem of validating results gained abroad upon return	9.0	8.0	24.0	18.0	32.0	100.0
Problems in obtaining documentation	4.0	6.0	22.0	26.0	38.0	100.0
Low grades in studies	2	6.4	34	12.8	42.6	100.0
Limited number of available places in desired institution or desired study programme abroad	2	8.5	38.3	10.6	38.3	100.0

The following table presents the results of the analysis of the obstacles as seen by students who have not experienced study stays abroad, but plan to realize them. As expected, the largest obstacle for studying abroad present additional financial expenses. Students have also stated that the problem of recognition of the results and study outcomes obtained abroad upon return, along with problems in obtaining documentation are large obstacle too. On the other hand, students are least worried about potential loss of paid work, lack of motivation, (lack of) language proficiency, as well as low benefits for studies in the country.

Table 73: 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 (1)	2	3	4	No obstacle at all (5)	Total
Language proficiency	8.1	11.8	20.2	19.2	40.7	100.0
Lack of information on studying abroad	9.3	13.6	29.7	24.7	22.7	100.0
Separation from partner, children, friends	11.3	16.3	24.8	18.8	28.8	100.0
Additional financial expenses	26.3	24.4	26	12.1	11.2	100.0
Loss of paid employment	5.5	5.6	10.6	9.4	68.9	100.0
Lack of motivation	2	5.2	14.9	18.2	59.7	100.0
Low benefit for studies in country	3.7	5.3	23.7	19.7	47.6	100.0
Difficult to relate studies abroad to contents of my study programme in country	10.2	16.2	26.9	19.8	26.9	100.0
Problem of validating results gained abroad upon return	12.1	12.5	25.8	17.5	32.1	100.0
Problems in obtaining documentation	12.2	15.1	22.2	18.6	31.9	100.0
Low grades in studies	4.7	8.2	23.3	27.2	36.6	100.0
Limited number of available places in desired institution or desired study programme abroad	10.6	16.2	27.5	22.2	23.5	100.0

At the same time, financial problems are deterring students from plans to start, or continue studies abroad, as seen in Table 74. At the second place is separation from family, partner and friends. The smallest obstacle is a loss of paid work.

Table 74: 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 (1)	2	3	4	No obstacle at all (5)	Total
Language proficiency	9.8	11.6	26.4	19.1	33.2	100.0
Lack of information on studying abroad	11.1	16.3	31.6	20.8	20.2	100.0
Separation from partner, children, friends	26.5	20.2	21.2	11.3	20.8	100.0
Additional financial expenses	40.7	22.8	19.3	7.8	9.3	100.0
Loss of paid employment	9.9	5.7	14.9	12.4	57.1	100.0
Lack of motivation	6.1	11	27.2	21.7	34	100.0
Low benefit for studies in country	4.2	8.7	33	20.3	33.7	100.0
Difficult to relate studies abroad to contents of my study programme in country	12.7	16.9	34.7	15	20.8	100.0
Problem of validating results gained abroad upon return	12.6	17.1	29.2	18.3	22.8	100.0
Problems in obtaining documentation	12.3	18.6	27.6	16.5	25	100.0
Low grades in studies	4.0	10.9	31.6	23.2	30.4	100.0
Limited number of available places in desired institution or desired study programme abroad	10.0	14.0	34.6	20.2	21.2	100.0

As expected and in accordance with the results of all previous research, the largest or a large obstacle for the all three groups of students is additional financial cost. 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 regarding activities related to studies, such as foreign language courses, summer schools, internships, etc. Regarding study-related student activities abroad, the largest percentage of the surveyed students have not experienced any activity of this type. 5% of students have experienced some activity different from the listed

ones. The remaining number is nearly equally distributed among the other offered activities. Still, the best represented type of short-term mobility (among the offered remaining activities) for students in the Federation of B&H are research/study visits abroad. A detailed overview is given in the following table (Table 75) showing data for the all surveyed students and for students of bachelor and master studies. Based on the data shown, we may conclude that students of master studies have had the most experience with study visits, internships and summer/winter schools.

Table 75: 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	5.0	5.0	6.0
Internship/employment	2.0	2.0	4.0
Summer/winter school	3.0	3.0	6.0
Language course	3.0	3.0	4.0
Other	6.0	7.0	6.0
No activities	81.0	80.0	74.0
Total	100.0	100.0	100.0

8.5. Foreign Language Proficiency

To complete the review of the results regarding mobility, the results regarding foreign language proficiency are presented. It is particularly important because in the above analysis of obstacles, none of the groups of students has indicated a lack of foreign language proficiency as an important obstacle for studying abroad. The percentage of students considering themselves as speaking well two foreign languages varies drastically among countries participating in the survey. In the Federation of B&H, 35% of the students believe they are proficient in one foreign language, while 25.5% of the students are proficient in the two foreign languages. Regarding concrete foreign languages, most students speak English, followed by German and French. Regarding the language of teaching in higher education institutions in the Federation of B&H, 84.6% of the surveyed students attend classes in their mother tongue, 14.3% of surveyed students attend classes in English, while only 1.1% of students attend classes in another language.

Summary

Socio-Economic and Demographic Profile of Students

A student in the Federation of B&H is on average 23.1 years old. The lowest percentage belong to the students over 30 years of age, indicating a relatively adequate pace of study. Most of the students in higher education institutions in the Federation of B&H were born in the same country as their parents, and the percentage of students whose parents were not born in the student's country of study but the student was (second generation of migrants) is slightly higher than the first generation of migrants, where the students themselves were not born in the country of study.

Most of the parents of students in the sample have completed secondary school, followed by students whose parents have completed a non-university HEI, indicating an unequal representation of various social groups in higher education in the Federation of B&H. The genders are uniformly represented in bachelor and master studies, while there is a slightly smaller number of female students in postgraduate studies. Within the structure of educational attainment of parents, parents engaged in non-manual occupations prevail. .

The perception of the social status of students is linked to the educational attainment of their parents, i.e. considerably fewer students whose parents have completed primary school perceive themselves as having a high social status compared to students with at least one of the parents having higher education or a doctorate. In the Federation of B&H 36% of female students assess their parents to belong to the lower half of the scale regarding social status, while for male students the percentage is 35.3%. There are substantial differences in the perception of social status among students at bachelor and master studies - students of master studies consider their status to be lower.

The percentages of students by gender in the Federation of B&H are equally distributed. The total number of students with children is 3.1%. Uniformity by gender is visible in the category of students with two children, while there are more women in the category of students with three or more children and one child, with student parents most numerous in the category of over-30 students. Regarding level of satisfaction with their workload during studies, the conclusion is that student parents are less satisfied than other students.

Most students in the Federation of B&H live with their parents (58.4%), while a significantly smaller number of students live by themselves (11.5%). The smallest percentage of students live with their partner (and children, if any) amounting to 5.5%. Likewise, a significant share of the students report living with other persons (24.7%), including living with roommates in student dormitories or rented accommodation.

The percentage of students with some kind of impairment, chronic health problem or functional limitation in the overall population is 8.8%, and within this group of students the most numerous are students with sensory

impairments, followed by students with chronic diseases and students with other health problems. As many as 70% of the students with some kind of impairment see their impairment as a small obstacle for study, 17.7% as medium, and 12.2% as large. The highest percentage of students with learning difficulties (e.g. ADHD, dyslexia) see their health status as a large obstacle. Regarding the distribution of students with some kind of impairment according to status of study, their share per different statuses coincides with the share of students without impairments. The vast majority of students with some type of impairment believe that institutional support during studies is low, and less them plan to continue studies. Students with chronic health problems or limitations are more dissatisfied with their treatment by administration in higher education institutions, the treatment of students by teaching staff, as well as with the infrastructure and equipment of higher education institutions. All students, regardless of whether they have impairment or not, experience financial difficulties during studies, but those difficulties are somewhat more experienced by students with chronic health problems or limitations.

Education Prior to Studies

Students of parents without completed higher education, as well as students whose parents are engaged in manual occupations, have completed secondary vocational education programmes more frequently. However, higher education in the Federation of B&H is accessible to students having completed secondary vocational schools.

Previous student education does not affect the intensity of their studies, but students who have completed vocational secondary schools finance their costs of living and education from the work they do in a greater extent, and make greater use of public sources of income as the dominant sources of income compared to students who have completed gymnasiums. Most of the students have completed secondary school in their native country, while international students have parents with higher education at a significantly higher percentage.

The most attractive study programmes for international students are programmes in the field of sciences and agriculture. International students and students from the Federation of B&H do not differ by intensity of study. There is no statically significant difference between them regarding dominant source of income used to support and finance their education.

For 83.9% of students there was less than a year between the moment they have completed secondary school and enrolled in a higher education institution. A break of between one and two years was made by 8.5% of the students, while breaks of over two years between completing secondary school and enrolling at a higher education institution were made by 7.6% of students.

After enrolling in a higher education institution, 7.4% students make a break in their studies longer than one year, while 2.1% of the students make a break longer than a year between two levels of study, i.e. between obtaining their first diploma and continuing studies.

The educational attainment of parents does not influence delayed enrolment, and delayed enrolment does not influence the subsequent intensity of studies. Students delaying enrolment have been employed more than their colleagues directly enrolling in HEIs.

Students enrolling in higher education institutions with study programmes in services, humanities and business show the highest tendency to delay enrolment in higher education institutions while those studying educational profiles related to agriculture, engineering, manufacture, construction, and sciences show the lowest tendency.

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, while students financed from public sources of income mostly have a *traditional educational path*. Studies are interrupted to a greater extent by students coming from families where at least one parent has higher education.

Students attending higher education institutions with study programmes in education interrupt their studies for over one year more frequently, which is also the case for students of higher education institutions offering programmes in humanities and arts, as well as students studying social science, law and business. Agriculture students make the fewest breaks. Those students dedicating less time to their study obligations have a higher tendency of making breaks in their studies lasting over one year.

Less students having completed vocational secondary schools choose to enrol in master studies. The transition to a higher level of studies is correlated with parental employment - a break between bachelor and master studies is more frequently made by children of parents engaged in non-manual occupations. Students of social sciences, law and business and services are more prone to make breaks between two levels of studies, unlike students of agriculture and education.

Among the total number of students, 5.1% have had a long-term employment before entering a HEI, while 1.8% of the students have had a short-term employment. Most of the students have not had any kind of work experience prior to enrolling in a higher education institution (93.1%). The educational attainment of parents does not influence previous work experience, while students whose parents are engaged in non-manual occupations have more work experience prior to enrolling a faculty. Work experience prior to faculty have students dedicating less time to studying. Students with work experience prior to enrolment at a higher education institution are, at the same time, students predominantly using their own sources of income during studies.

Progress of Studies, Satisfaction with Studies and Future Plans

There is a correlation between the educational context and status in studies - among self-financing students there are more of those with highly educated parents, and thus a higher socio-economic status, enabling them to pay more

easily for their studies. A significant share of the self-financing students from families with a lower socio-economic status is forced to work during studies and more self-financing students show a low intensity of studies.

Children of parents without higher education in a larger number enrol in programmes in the field of agriculture and services.. Regarding the educational attainment of parents, most of the children with parents engaged in non-manual occupations enrol in programmes from the field of social sciences, law and business and sciences. There are more female students in social sciences and humanities, education, agriculture and medicine, while males are significantly better represented in engineering, sciences, and services.

Students are most satisfied with their treatment by teaching staff, while they are least satisfied with the equipment of HEIs and options to select from a larger number of courses. The most satisfied are students studying study programmes from the field of humanities and arts, highly rating in a high percentage the quality of teaching and teaching staff treatment of students. The option of selecting from a large number of courses is the worst rated dimension by by a large percentage of students from five of the eight fields of study.

Over 3.93% of students want to continue studies either within one or more years upon completing their current study programme. Only 9.2% of students do not plan to continue studies. The desire to continue studies is present more among students with a high intensity of current studies and students primarily financed from public sources of funding. Students of bachelor studies plan to continue studies to a greater extent.

Students studying in the Federation of B&H assess their employment prospects outside the borders of the Federation of B&H as significantly better than within the country. The best employment prospects within the country and internationally are assessed by future engineers, while students of medicine and related sciences assess the prospects of employment abroad as the best.

Conditions of Student Life

Nearly 70% of the students in the Federation of B&H are financially dependent on parents. 20% of students are financially independent. Based on their own assessment, around 15% of the students do not have any financial difficulties, while 10% of the students believe that they have very severe financial difficulties during studies. The greatest financial difficulties were reported by students primarily depending on their own sources of income. The financial difficulties are experienced more by students whose parents do not have higher education and by students whose parents are engaged in manual occupations.

Severe financial difficulties are mostly reported by students studying study programmes in the field of sciences, medicine and similar areas, while the less financial difficulties are reported by students studying programmes in the field of social sciences, law and business.

Over half the students live with their parents, while 11.5% of the students live independently. Students depending on public support live in student dormitories to a significantly greater extent. Over 60% of the students are (very) satisfied with housing conditions, with students living with parents being the most satisfied group. Regarding the average monthly costs covering both studies and everyday expenses, among those students living with parents, students who finance the costs during studies by themselves on average have far lower costs compared to students for whom the costs are borne by the parents. In addition to the costs of food, accommodation and other costs of living (e.g. clothes, hygiene), all students spend the largest share of the funds for tuition and other costs paid to higher education institutions.

Employment

A somewhat larger number of students not living with their parents is working. Most of the students who work belong to the group of students whose parents have not completed higher education. Students of master studies work most frequently.

During studies, students from the fields of social science, business and law, and humanities and arts work the most, while students from the fields of services work the least. Nearly one third of the students are unsatisfied with the total workload, with the least satisfied being those students who primarily study, with work as a second priority. Female students are less satisfied with both study workload and workplace workload.

Regarding employment prospects in the country, among the group with higher social status the prospects are rated more positively. The same is true for the employment abroad. Most of the students have not done any paid work, but a significantly greater percentage of self-financing students have had work experiences during the semester. More male students have worked during the semester. The reasons for employment are primarily the improvement in the living standard and gaining experience in the labour market, but less than one third of the students are doing work in which they can gain adequate experience related to their study programmes, while over one half are doing work very slightly or not at all related to their study programme.

The percentage of students who can correlate their study programme with employment increases with the higher levels of study. The number of students' working hours is lower than the usual 40-hour working week, except for students with the lowest social status.

International Mobility

Only 3% of the surveyed students in the Federation of B&H have experienced temporary studies abroad. However, regarding the planned study stays abroad, there is a a significant percentage of students from the Federation of B&H intending to spend part of their studies abroad.

The realized mobility rate is higher for university students, but students of non-university HEIs plan mobility at a higher rate, while nearly the same percentage of both do not plan international mobility. The achieved student mobility rates are the highest for students in the field of education and arts, followed by students of sciences, mathematics and informatics, technology, manufacture and construction, social sciences, business and law. The most positive attitude towards future mobility have students studying programmes in the field of arts.

Postgraduate studies students' mobility rate is double compared to bachelor students.. Regarding planned stays abroad, the situation is different - students of bachelor studies plan studies abroad to a greater extent. Students between 25 and 29 years of age are the most mobile, while the largest number of students under 21 years of age have plans regarding studying abroad. The largest number of students not planning studies abroad is among the group of over-30 students.

The rates of both achieved and planned mobility are higher for students whose parents are highly educated and students whose monthly income is higher, thus they are showing a more positive attitude towards international mobility. In the Federation of B&H, nearly 16% of all students have stayed abroad under EU programmes such as ERASMUS and ERASMUS MUNDUS, while this is the case for 19% bachelor students.. The mobility rates of students organizing their student mobility individually are significant - both in the total number of students in the sample, as well as for students of bachelor studies. Students have mostly chosen European Union countries (Germany, Austria and Croatia), followed by EHEA countries. The students from the entire sample on average spend 14.4 months abroad, students of master studies 6 months and students of bachelor studies 15.5 months. Only 2% of the students studied in countries outside the EHEA, most frequently in the USA and Turkey.

Regarding students planning to spend part of their studies abroad, 43% of the students showing interest in studying abroad still do not know in which country they would continue studies. The remainder mostly chooses for EU countries, followed by EHEA member countries in a similar percentages (5%) and non-member countries (6%). Likewise, nearly half of all students do not know what mobility programme they would choose, and the situation is uniform for students of bachelor and postgraduate studies. Only 22% of the students plan their mobility within organized EU mobility programmes.

ECTS credits are fully recognized for as many as over 34% of "mobile" students, mostly in the group of students studying in the field of engineering and manufacture. As many as 50% of the mobile students in the field of humanities and arts have not obtained a certificate during studying and staying abroad. All students consider that the additional financial expenses are the largest obstacle for studying abroad , while the smallest obstacles are language proficiency and lack of motivation. In the Federation of B&H, 35% of students believe that they are proficient in the use of one foreign language, while 25.5% of students are proficient in the two foreign languages. The most frequent type of short-term mobility is research/study visit abroad.

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