# CONTENT

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>General information</td>
<td>3</td>
</tr>
<tr>
<td>Part 1: SOCIO-BIOGRAPHIC DATA</td>
<td>5</td>
</tr>
<tr>
<td>Part 2: EDUCATION PRIOR TO UNIVERSITY STUDIES</td>
<td>9</td>
</tr>
<tr>
<td>Part 3: PERIOD OF STUDIES</td>
<td>12</td>
</tr>
<tr>
<td>3.1. First cycle of studies</td>
<td>12</td>
</tr>
<tr>
<td>3.2. Second and third cycle of studies</td>
<td>19</td>
</tr>
<tr>
<td>Part 4: CONDITION OF STUDY AND COMPETENCE</td>
<td>23</td>
</tr>
<tr>
<td>Part 5: EMPLOYMENT</td>
<td>28</td>
</tr>
<tr>
<td>5.1. The first employment</td>
<td>28</td>
</tr>
<tr>
<td>5.2. Current working status</td>
<td>30</td>
</tr>
<tr>
<td>Part 6: PROFESSIONAL ORIENTATION AND SATISFACTION</td>
<td>41</td>
</tr>
<tr>
<td>CONCLUDING REMARKS</td>
<td>45</td>
</tr>
</tbody>
</table>
Introduction

The analysis of Tracer study presented in this paper is the result of activities implemented within the project "Higher Education and Research for Innovation and Competitiveness" (INVO), which aims to strengthen the quality and relevance of higher education and research in Montenegro through the reform of the funding system of higher education and quality assurance and strengthening research and development skills.

As one of the subcomponents of the quality assurance project, support is provided in relation to data collection and use of data in order to effectively create policies and interventions. In order to achieve this, the Tracer Study of those higher education graduates who recently graduated from one of the Montenegrin universities or independent faculty units has been implemented and focused on generating objective, standardized information on the experience of graduates after graduation. The data collected includes various information, for example on possible employment after studies, but also other socio-economic and other basic information about graduates (e.g. on parents’ education, etc.) in order to enable taking into account possible differences in the results of enrollment, length of study, employment, etc.

The goal is that to make information provided in this analysis beneficial to all stakeholders - policy makers and high school students, university students, university managers, employers, etc. In addition, this analysis can also serve as an initiative for further development of the system of data collection on education (with topics and frameworks) and serve to further promotion of the regular implementation of research activities on young graduates at certain time intervals.

The analysis was carried out by an independent expert on the basis of the developed methodology, which enabled the analysis of collected data for two years (students who graduated in 2009 and 2013) through custom software and the preparation of a detailed analytical report that would support the use of data in effective policy making.

General information

The number of students who graduated in the two observed years (2009 and 2013) on some of the faculties covered by the Tracer study was 5,805 out of which 4579 (or 78.9%) at 19 faculties of the University of Montenegro, 179 (3.1%) at 5 faculties of the University of Donja Gorica,
233 (4%) at six faculties of the University of Mediterranean, while 814 (14%) of students graduated during this two years at one of the 7 faculty units that do not belong to the mentioned universities.

Out of this number of graduated students, the number of students entered in Tracer was 3632, or 62.5% of total graduates. The highest student intake in the Tracer database was recorded at the faculties that belong to the University of Donja Gorica and the University of the Mediterranean (100%), while approximately 60% of graduates from the University of Montenegro were entered into the database.

However, the most relevant is the percentage of graduated students who responded to a survey within the Tracer study. About 31.3% of the number of graduates enrolled in the database responded to the survey, or about 20% of all graduates who graduated from one of the faculties of three universities or independent faculty units involved in the study. The highest percentage of completed surveys, i.e. the largest response rate for completing the survey by universities, was recorded at the University of Donja Gorica (30.3% of the total number of graduates), then at the Mediterranean University (22.8%), while 20.3% from the faculty of the University of Montenegro filled out the survey. Observed by faculties, the highest percentage of completed surveys in relation to the total number of graduates was recorded by graduates from the Faculty of Information Systems and Technologies of the University of Donja Gorica (57%), followed by graduates of the Faculty of Visual Arts at the University of the Mediterranean (44%), Faculty for International Economy, Finance and Business of the University of Donja Gorica (40%) and the Faculty of Philosophy of the University of Montenegro (36%). The response rate of graduates from all faculties belonging to one of the three Montenegrin universities was above 20%, except for the Faculty of Electrical Engineering (5%) and the Faculty of Tourism and Hotel Management (8%) of the University of Montenegro. A generally low response rate was recorded among graduates from faculty units that do not belong to one of the mentioned universities.
**Part 1: SOCIO-BIOGRAPHIC DATA**

This section presents an analysis of the basic socio-biographical data on graduates who graduated in 2009 and 2013 and participated in the monitoring study and completed the survey. These data include information about sex, residence before and after the completion of studies, citizenship, members of the household in which the respondent lives, as well as information on parents' education. This information is of great importance in order to provide a qualitative analysis in the following chapters.

When it comes to the gender structure of respondents, it is noticeable that in the total number of respondents surveyed who graduated in 2009 and 2013, 60% are female respondents.

The highest number of graduates was born in the Central region - 57.3% (graduated in 2009) and 55.3% (graduated in 2013), followed by students born in the Northern region, 17.8% (2009) and 20.6% (2013). The smallest number of students who graduated during the observed two years was born in the Coastal region - 14.2% (2009) and 15% (2013). Also, about 10% of students who graduated in the observed two years were not born in Montenegro. Also, there was an increase in the participation of students who were born in the Northern and the Coastal region, while the participation of graduated students from the Central Region recorded a decline.

Prior to the studies, dominant residence of graduates was also the Central Region (64% for those graduated in 2009 and 55% for graduated in 2013), but in this case the Coastal region is
the second for both years (17.8% (2009) and 23.7% (2013)), indicating the potential migration of students born in the Northern region to this or Central region in the period up to the beginning of the study. The Northern region was place of residence prior to the study for 15.8% of those who graduated in 2009, and 19.2% of students who graduated in 2013, which is lower than the indicated place of birth for both years. Also, it was evident that a large number of those who were not born in Montenegro during the period prior to the study moved to Montenegro. Only 1.6%, and 1.8% of graduated students stated that their place of residence prior to their studies was abroad.

However, the residence after graduation, i.e. current residence of graduated students can be considered as best indicator of the dynamics of migratory movements of students. These data indicate significant migration of students from the Northern region, so only 8-9% of graduates from both years stated that their current residence is Northern Region, which is significantly lower than the percentage of students that previously lived in this region. This means that less than half of the students is returning to the Northern Region after graduation. On the other hand, the share of those who stated that their residence after graduation is Central Region (74.4% (2009) and 66.9% (2013)) is much higher than the share of those who marked this region as a place of residence before the studies, indicating the fact that students from the North mostly stay in the Central Region after studying. Also, a slight decrease is recorded in the number of those who cited Coastal Region as the place of residence after the studies, while the percentage of those who go abroad increases. Namely, 3.2% and 2.4% of the graduated in 2009 and 2013 respectively indicated that their place of residence was after their studies outside Montenegro, which is more than the number of those whose residence was abroad before the studies.

Montenegrin citizenship had 97.1% of students who graduated in 2009, while this percentage for students who graduated in 2013 was slightly lower and amounted to 96.6%. Among students who graduated in 2009, students with citizenship of Bosnia and Herzegovina are in the
second place (1.3%), while among the graduates in 2013, this place belongs to citizens of the Republic of Serbia (2%).

Majority of students who graduated in 2009 live with their spouse / partner (47.6%), while in the case of students who graduated in 2013 the majority of students live with parents (57.5%). About 12% of students graduated in the two observed years live alone.

When it comes to the level of education of parents of graduated students, it is evident greatest representation of those students whose parents have secondary education, followed by students whose parents finished faculty. Nevertheless, the participation of students whose
mother has completed secondary education is less for those who graduated in 2013, while for the same students the participation of those whose mother has completed the faculty is higher. The number of graduated students whose mother or father has only elementary education is 6-8% among graduated from both years.

Graph 5b: Parents’ education (2009)

Graph 5b: Parents’ education (2013)
Part 2: EDUCATION PRIOR TO UNIVERSITY STUDIES

Most of the respondents who graduated at one of the faculties completed gymnasium (59% of those who graduated in 2009, or 57% of those who graduated in 2013). The others had a VET high school diploma. What is noticeable is that there are significantly more women in the among those who finished gymnasium. Namely, two thirds of students graduating in 2009 who previously attended gymnasium were women, while this percentage among graduates who graduated in 2013 was 70%. In the case of students who graduated during 2009 and 2013 study who had attended other high schools, women also have a mild numerical advantage.

Graph 6a: High school prior to university studies (2009)  Graph 6b: High school prior to university studies (2013)

Almost half of graduated students from both observed years had an excellent success during high school, while in an even greater percentage (over 60%) excellent success was achieved in a mature exam. Those with a very good success in high school made about two-fifths of all graduated students. Although the percentage of the graduated students who had sufficient success in high school was very small, its increase is noticeable for those who graduated in 2013 compared to those who graduated in 2009.
Also, an increase can be observed when it comes to the participation of graduated students who have repeated/retake the year. A significantly lower percentage of those who repeated one of the school years during the university studies who graduated in 2009 had previously completed gymnasium (16.7%). However, the situation is completely different among those who repeated one of the years of study and who graduated in 2013, since about 70% of them previously finished gymnasium. Parents of students who have repeated one of the study years, have acquired lower levels of education.

When it comes to employment after high school, it can also be noted that there is a significantly greater share of those who worked or had employment after high school among the graduated students who graduated in 2013, so every third student who graduated during 2013 had a working experience before studying, while among those who graduated 4 years earlier, almost every fourth student had a job after high school. Viewed by universities, around 40% of students graduating from the University of Mediterranean and the University of Donja Gorica had employment after secondary school, while that percentage is 27% for students graduated.
at University of Montenegro. Also, a significant increase of those who had employment after secondary school was also registered within students who graduated from one of the faculties not belonging to one of these universities (25% (2009) and 61% (2013)).
Part 3: PERIOD OF STUDIES

3.1. First cycle of studies

Among the students who graduated in 2009, around 96% obtained a diploma at one of the faculties of the University of Montenegro, while 4% obtained a degree in some of the independent faculties. On the other hand, the answers to the survey were also given by students who graduated in 2013 from the other two universities. (University of Donja Gorica could not have graduates in 2009). Among those who graduated in 2013, around 76% were from the University of Montenegro, followed by those who graduated from one of the independent faculties that do not belong to any of the three universities, while the least graduates (7%) were from the University of Donja Gorica.

Graduated students from the University of Montenegro who graduated during 2013 had a slightly lower average grade during their studies (7.95) compared to graduates from the same university who graduated 4 years earlier (8.13). During 2009 there were no graduated students at the University of Donja Gorica, hence there is no data on the average grade. However, data for 2013 indicate that the average grade for those who graduated at UDG was 8.36, while the highest average grade was recorded for those who graduated at the faculties of the Mediterranean University (8.46). Generally, among graduated male students, it is noticeable a lower average grade during studies compared to female students who graduated during both observed years.
Observed by study programs, most graduated students were on study programs related to economics, followed by Laws. Observed at the faculties, as expected, most of them graduated from the Faculty of Economics of the University of Montenegro.

Almost three fifths (59%) of students who graduated in 2009 studied in Podgorica, while every fifth (21%) of graduated students studied in Nikšić. They are followed by those who studied in Kotor (8.7%), Cetinje (5.5%), Bijelo Polje (3.6%), etc. The situation is somewhat different when it comes to those who graduated in 2013, as the number of those studying in Podgorica (62%) is increasing, while the number of those studying in Nikšić (16.9%), Kotor (5.6%), Bijelo Polje (1.1%) and Cetinje (1.6%) is decreasing. There is also an increase in the number of students who graduated in Herceg Novi (8.4% of all graduated in 2013).

A higher percentage of students who graduated in 2009 used a scholarship (30% compared to 24.8% of those who graduated in 2013). Of those who used the scholarship, two-thirds had previously completed a gymnasium, while among those who did not use a scholarship there is slightly more those who completed the gymnasium. Among those who graduated in 2013 who received a scholarship, three quarters had previously completed a gymnasium.

Also, among those who graduated in 2009 and used a scholarship, almost every fifth student had some kind of employment after high school, while there is a slightly higher percentage of those who had a job after secondary school and did not receive a scholarship during their studies (25.5%). Among students who graduated in 2013 and used a scholarship, 36% had employment after secondary school.
The most frequently used scholarship was provided by national government institutions (81% of all scholarships for those who graduated in 2009 and 79.6% for those who graduated in 2013), while second place was related to scholarships received by foreign private companies of those who graduated in 2009 (8.6%), while for those who graduated in 2013 this place is related to scholarships received from foreign state institutions (7.3%).

Among the students who graduated in 2009, and among students who graduated 4 years later, the most common way of learning about a higher education institution was through guides (informers) for future students (37.9% and 40.4%, respectively), while also a significant source
of information was through friends or relatives (32% and 33.4%, respectively). There is noticeable growth in the information gaining through the website of the educational institution (from 6.8% to 12.9%).

Graph 14: How did you find out about a higher education institution?

The choice of the institution dominantly depended on the interest of the students for specific area (about 70%), while at the second place prevailed opinion that the selection of that program would make easier finding employment after the completion of the studies (about 20%). These reasons are followed by the status or reputation of the profession, then the influence of parents, relatives and peers, as well as the ability to earn a good salary after completing the studies.
Graduated students from both observed years were mostly satisfied with the higher education institution they attended (89.3% satisfied among those who graduated in 2009 and 85.1% were satisfied among those who graduated in 2013.) The highest percentage of satisfied students was recorded among students who graduated at the faculties of the University of Donja Gorica (96.3%), and the smallest percentage of satisfied (although high) was among the graduates of the University of Mediterranean (80.3%). The percentage of satisfied graduates from the University of Montenegro was 83.8% (drop compared to the satisfaction of graduated students from this university in 2009), while on other faculties satisfaction was also high (92%). These data refer to students who graduated in 2013, when other universities alongside the University of Montenegro had their own graduates.
Most students completed their studies within the stipulated study deadlines. However, this percentage is slightly lower for students who graduated in 2013. Within this target group, observed by universities, the highest percentage of students who completed studies within the stipulated deadline is from the University of Mediterranean (85%), while this percentage is similar for students of the University of Montenegro and the University of Donja Gorica (71% and 72%, respectively). Among students who graduated at some of the faculties that do not belong to one of these three universities, a very high percentage of study completion was recorded within the stipulated study deadlines (95%).
When it comes to the reasons for extending the time required to complete the studies, none of the reasons greatly contributed to such a situation. The highest ranking belongs to personal reasons (e.g. lack of interest in courses, lack of motivation, poor organization during studies), then employment, poor organization of teaching, a large number of subjects (exams) in the study program, etc.

Graph 18: Reasons for extending the time required to complete the studies (1 - not at all, 5 - to a large extent)

As the most significant source of income for students who graduated in 2009 and those who graduated in 2013, is recognized financial support from parents and/or relatives who received a score of 4.2 and 4.1 on the scale 1-5, respectively. However, it is important to note that at the second place in both groups of students is placed own income from work during the studies and/or during the summer break (2.5), while the third place is related to scholarships.
3.2. Second and third cycle of studies

Continuation of studies was recorded in almost two thirds of students who graduated in 2009 and 2013. Among students who continued their studies after graduation, the percentage of women are higher - 60% (graduated in 2009) and 63% (graduated in 2013). Among those who continued their studies, 82% completed their regular studies within the stipulated deadline, while this percentage was slightly lower for those who continued their studies and graduated in regular studies in 2013 (76%). Observed at faculties, of those who graduated in regular studies in 2009 and continued their studies, about 95% are from one of the faculties of the University of Montenegro, while about 5% are from other faculties. The situation is somewhat different with those who graduated in 2013 and continued their studies, because other graduates also had other universities in those years. Also, the largest share in the total number of those who continued their studies are graduate students from the University of Montenegro, but their participation is significantly lower than among students who graduated 4 years earlier, 71.5%, while the participation of students from the Mediterranean University and the University of Donja Gorica 10.8% and 9.1% respectively. Of the faculties that do not belong to one of these universities come 8.6% of all those who continued their studies after graduating from regular studies. However, it should be noted that out of the total number of graduates who graduated from one of the faculties of the University of Donja Gorica during 2013, 90.7% continued their studies, while this percentage was also high for those who graduated in the same year at one of the faculties of Mediterranean University (87.9%).
Of those who graduated in 2009 and who continued their studies, the most frequent cycle of studies that were continued was master studies, while specialist studies in the case of those who continued their studies after graduating in 2013.

Students successfully completed specialist studies, which is the case with those who graduated from regular studies in 2009 and 2013. After graduation, students mostly studied at educational institutions in Montenegro (especially when it comes to specialist and master's studies).
Students also expressed their opinion on whether they want to continue their studies. Of those who graduated in 2009, about 40% planned to continue studies, while this percentage is slightly higher for those who graduated in 2013. Among the graduates from 2009 who planned to continue their studies, approximately the same percentage is women and men, while this percentage is significant in favor of women (65.4%) among those who planned to continue their studies in 2013 years. Also, among those who do not plan to continue their studies in both groups (2009 and 2013), women are more represented (63% (2009) and 68% (2013) respectively).
As the most important reason for the continuation of studies in both groups of graduated students, self-improvement is indicated, followed by the desire for higher salary and conviction that it will be easier to get to work.

Graph 24: Reason for continuation of studies

<table>
<thead>
<tr>
<th>Year</th>
<th>Self improvement</th>
<th>The desire for a higher salary</th>
<th>Conviction that I will easily get to work</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>81.3</td>
<td>16.7</td>
<td>22.9</td>
<td>8.3</td>
</tr>
<tr>
<td>2013</td>
<td>89.5</td>
<td>21.8</td>
<td>18.8</td>
<td>6.0</td>
</tr>
</tbody>
</table>

On the other hand, among those who do not plan to continue studies, the reasons for such a decision vary with two groups of graduates. Those who graduated in 2009 as the most important reason why graduates are not planning to continue their studies is the lack of money for education (the year of the crisis), while those who graduated in 2013 as the main reason in the majority of cases is the opinion that acquired knowledge is sufficient. Also, a significant reason is the lack of motivation in both groups of graduated students.

Graph 25: The reasons why students are not planning a continuation of studies

<table>
<thead>
<tr>
<th>Year</th>
<th>Lack of money for schooling</th>
<th>Lack of motivation</th>
<th>The opinion that acquired knowledge is sufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>81.4</td>
<td>54.3</td>
<td>48.6</td>
</tr>
<tr>
<td>2013</td>
<td>29.4</td>
<td>40.5</td>
<td>47.2</td>
</tr>
</tbody>
</table>
Part 4: CONDITION OF STUDY AND COMPETENCE

Students who graduated in 2009 and 2013 had the opportunity to assess the conditions of study during basic studies. When it comes to the conditions of organization of classes within the study program which students completed, they had the opportunity to give an evaluation in the interval 1-5 (1 - very low, 5 - very high). The assessment for virtually all conditions ranges between 3 and 4 for students of both generations, but a slight decrease in satisfaction with all conditions is noticeable. The professional competence of teachers is best assessed (3.9 and 3.7), while at the very least it is assessed the presence of practical contents within the lecture exercises (3, or 2.9), as well as the use of modern teaching approaches (3.2 and 3.1).

When it comes to satisfaction with the same conditions in specialist studies, grades are slightly lower. Apart from the conditions that they were least satisfied with basic studies, at specialist studies there is less satisfaction in organization of classes within the courses, as well as the contents of the study program. As with basic studies, the greatest satisfaction is the professional competence of teachers.
Graph 27: Assessment of the conditions of organization of teaching within the study program completed by the student - Specialist studies (1 - very low, 5 - very high)

The level of satisfaction with the conditions of organization of student services within the study program which the student finished is fairly equal in all issues with those who graduated in 2009 and those who graduated in 2013. The work of the student service (3.7 for the two generations) is best rated, and the availability of professional literature (3.6 (2009) and 3.5 (2013)), while the least satisfaction is expressed in accessing information on employment opportunities provided by Career center (2.4 for both generations).

Graph 28: Assessment of the conditions for the organization of student services within the study program completed by the student (1 very low, 5 very high)

What worries is that only one third of students had some form of practice (obligatory or optional) during basic studies in the generation that graduated in 2009, while this percentage is
slightly higher for those who graduated in 2013 - 38.9%. However, the length of practice varied and generally lasted up to one month for those who graduated in 2009, while in the generation that graduated in 2013 it was slightly longer.

Graduated students had the opportunity to assess satisfaction with acquired knowledge, skills and abilities by the time they graduated, giving a grade in the range 1-7 (1 - not much, 7 - very much). The greatest satisfaction within the both generations of students is with acquired ability of team work, as well as using computers and the Internet (the average grade for both generations of graduated students was 4.8). It is followed by satisfaction with the acquired ability to detect their own gaps in knowledge and their bridging (4.7).

However, it is a concern that the least satisfaction is expressed for managing knowledge from other study fields or disciplines (3.7), which points to a high level of specialization and a lack of general education. Also, a lower level of satisfaction is reflected in the ability to apply acquired theoretical knowledge and skills in practice, as well as the ability of written and oral communication in a foreign language (4.2).
Graph 30: Satisfaction with acquired knowledge, skills and abilities up to the moment of graduation (1 - not much, 7 - very much)

In general, the satisfaction with the overall study program on the scale 1-10 is slightly higher for those who graduated in 2009 (average grade 6.8), compared to those who graduated in 2013 (6.6). The highest percentage of those who gave the lowest grade for satisfaction to the study program are among the graduates of one of the faculties that do not belong to any of the three Montenegrin universities (16.7%). Among the graduated students from these faculties, the highest grade of 10 gave 23.1%. Of students who graduated in 2013 at the University of
Montenegro completely dissatisfied (grade 1) was 6.4%, while those who were very satisfied with the study program were 9.4% (rated 10). At the University of Donja Gorica there were no graduate students who gave a grade 1 (not satisfied), while as much as 53.7% were very satisfied with the study program (grade 10). When it comes to the Mediterranean University, rating 1 gave 3% of those who graduated from one of the faculties of this university in 2013, while the highest score was given by 16.7%.

Graph 31: Satisfaction with the study program (1 - not at all, 10 - very much)

On average, 86-87% of students who graduated in 2009 and 2013 would be enrolled in studies again, while around 80% would enroll in the same study program and the same faculty.

Graph 32: Experience during studies - satisfaction
Part 5: EMPLOYMENT

5.1. The first employment

More than half of respondents got a job after graduation. In comparison to the graduates from 2009, this percent is slightly lower in 2013. In total 13% (2009) and 11% (2013) had continued the existing job after graduation. On the other side, very small percent of graduates is self-employed.

Out of the total number of respondents, a quarter of those who graduated in 2009 had not been employed after completing their studies. This percentage is slightly higher when it comes to graduates from 2013, where almost a third (31.3%) did not have a job after graduation.

Graph 33: Start or continuation of employment which was last more than six months (%)

Observed by gender, a higher number of women compared to men started a new job after graduation (61% versus 39%). Also, a higher percentage of women started their own business after graduation (75%), but more men were already self-employed (80%).
Almost half of the students who graduated in 2013 was hired by the Employment Agency of Montenegro (47%). Compared to graduates from 2009, this percentage is significantly higher for students who graduated in 2013. Also, a higher number of graduates from 2013 get a job by visiting employers compared to those who graduated four years earlier. On the other hand, the comparison of these two groups of graduates indicates that employment through personal contacts, as well as ads in newspapers and internet is less present with graduates from 2013 compared to 2009. In addition, the smallest number of graduates found a job through the employment fair.

Graph 35: Connection between studies and the first emplotment and self-employment (1 –not at all, 5 –to a very large extent)
Research among graduates found that those who graduated in 2009 rated the link between studies with first employment and self-employment with a higher average grade than students who completed studies in 2013. Observed by sex, men gave higher ratings than women. The analysis of the answers of graduates from 2013, according to the universities / faculties where the students obtained diplomas, showed that the least grades were given by students who completed studies at one of the independent faculty units, while graduates from the University of Donja Gorica gave the highest grade to relationship between their studies and the first job (3.6, on a scale from 1 to 5).

5.2. Current working status

Out of the total number of students who graduated in 2009, 81.7% are currently employed, while this percentage is slightly lower when it comes to graduates from 2013 (66.3%). Observed by the university / independent faculty, the highest percentage of graduates (2013) who are employed has completed the University of Donja Gorica (85.2% of the total number of graduates is currently employed). Almost two thirds of students (65%) who obtained a degree at the University of Montenegro are employed, while a slightly lower percentage of employed graduates are from the University of the Mediterranean. Out of the total number of students who completed some of the independent faculties, which are not a part of above mentioned universities, 69.2% currently have a job.
When it comes to reasons of unemployment, the most common is inadequate labour supply which is more pronounced for graduates from 2013 than those who completed studies in 2009. In addition, further advancement is reason of unemployment to 10% of graduates.

Graph 37: Reasons for the unemployment

The highest number of students get a job after graduation. Survey among graduates from 2013 shows that 71.2% of them have found a job after graduation, while this percent is higher among graduates from 2009 (80.8%). On the other side, number of students who were employed before and during the studies is growing. Out of total number of employees (employed graduates), 15.1% worked during the study (2013), while this percentage among graduates from 2009 was 8.6%.

Majority of students work in Podgorica (52.1% of graduates who get a diploma in 2009, and 38.8% graduates from 2013). On the other side, employment in other cities is at much lower level (among other cities the highest employment is noticed in Niksic – 6%).

Graph 38: When did you get a job?
Graduates from 2009 were in the largest percentage waiting for a job up to 6 months (44%). On the other hand, every fourth graduate was waiting for a job from 6 to 12 months, and every fifth from 1 to 3 years. Out of the total number of students, one in ten was waiting for a job more than three years.

When it comes duration of unemployment, the survey showed slightly better results for the graduates from 2013, than those from 2009. From the total number of graduates, 57% got a job in the first six months after graduation. Also, 22% have been employed in the period from six months to one year after completing studies, while 19% of them got a job in the period from one to three years after graduation.
Most of the graduates found a job by accompanying ads in newspapers and web sites, as well as through personal contacts (every third graduate student). The smallest number of them found information about the job by private employment agencies (2%). Compared to those who graduated in 2009, it was noticed that the role of the Employment Agency as an intermediary between the graduates and the labor market was higher for those who obtained a degree in 2013.

The survey among both crops of graduates shows that the highest percentage of them is employed in the private sector (more than half of those who graduated in 2013, and 44% of those who graduated in 2009). In addition, important sector for employment of graduates is public sector. In comparison to 2013, higher number of graduates have been employed in public sector in 2009 (40% vs. 32%). On the other hand, the smallest number of students are employed in the non-governmental sector. Observed by sex, out of the total number of employed women, the largest number is employed in the state-owned public sector (42%) and the private sector (42%). On the other hand, almost half of employed men work in the private sector (47%).
Analysis of the employment status of graduates from 2009 and 2013, indicates that fix-term employment is more present at graduates from 2013 than those who obtain diploma in 2009. Namely, out of the total number of students who graduated in 2009, 37.6% have a fixed-term employment contract and 59.6% permanent contract. On the other hand, 58.4% of the graduated students from 2013 have a fixed-term contract with the employer, while 34.5% have permanent contract. There is also higher number of cases where the employment status is not regulated by a contract in 2013 compared to those who graduated in 2009.

Observed by sex, there are no significant differences in terms of contracts for a fixed or permanent period for men and women. However, evident difference is related to the number of cases of unregulated employment status, where more women have unregulated employment status than men (5% of women vs. 0% of men - in 2009, 7% of women vs. 5% of men - 2013).
One of the indicators of labor market is connection between occupations and employment. According to survey among graduates, three quarters of graduates from 2009 work in the profession, while this percentage is slightly lower among graduates from 2013 (two thirds of graduates work in the profession). On the other hand, a higher percentage of graduated students in 2013 does not work in the profession compared to those in 2009. Higher percent of mismatch between types of jobs and profession is present more in women compared to men in both groups of graduated students. Analyzing graduates who do not work in the profession, 71% of those who graduated in 2009 would like to work in the profession, while this percentage is higher for those who graduated in 2013 (84%).

Graph 44: At currently job, to what extent do you use the knowledge and skills that you acquired during your studies? (1 – not at all, 5 – to a very large extent)

Graph 45: Do you want to work in the profession?

On a scale from 1 to 5, graduates assessed the level of usage of knowledge and skills acquired during studies at the current job with an average grade of 3.9 and 3.8 (students graduated in 2009 and 2013 respectively). Differences in average grades per gender are not significant, but there are differences depending on the university/faculty where students have obtained a diploma. The highest average grade was given by graduate students (2013) of the University of Donja Gorica, who assessed the level of knowledge and skills acquired during their studies by average grade 4.5, while students who completed the University of Mediterranean assessed the use of knowledge 4.1. In addition, graduate students of the University of Montenegro assessed the extent to which they used the knowledge and skills that acquired during their studies at current job by an average grade of 3.8. The smallest grade was given by students of independent faculties (2.4).
About four-fifths of graduated students said they had the opportunity to progress at work. A comparison of a group of students who graduated in 2013 with the one who obtained the degree in 2009 indicates that graduates from 2009 had greater opportunities for career advancement. This possibility is more pronounced among men than women. Also, observed by universities / faculties, 60% of graduated students of the University of Montenegro, 50% of students from Mediterranean University and 74% of students who graduated at University of Donja Gorica stated that they have the opportunity to progress in their career, while this percentage among graduates from independent faculties is 65%.

When it comes to career advancement, 73% of students who graduated in 2009 have advanced in terms of higher monthly wage, while 70% have advanced in the field of gaining a higher title. A slightly lower percentage of students who graduated in 2013 has advanced. Namely, 69% of graduates advanced in terms of higher wage, and 58% in terms of higher title. The gender analysis suggests that men are more advanced than women.

An important indicator of the quality of studies and links between studies and labor market is the monthly wage of graduate students. Namely, most of those who graduated in 2013 earn...
from 300 to 500 EUR (37%) and from 500 to 800 EUR (31%). A higher percentage of those who receive higher salaries is among those who graduated in 2009, which is logical given their longer work experience. Observed by sex, survey has shown that men earn more than women.

More than four fifths of employed graduates work eight hours a day. Compared to graduates in 2009, a higher percentage of graduates from 2013 work overtime and half-time.

Almost half of the graduate students have changed at least one employer. On the other hand, every third student who graduated in 2013 and every fourth that graduated in 2009 has changed two employers. A small percentage of graduated students has changed more than five employers (6% of graduates from 2009 and 3% of graduates from 2013). The main reasons for change job are better employment conditions (72% for graduate students in 2009 and 59% for graduate students in 2013), while other reasons are to a lesser extent important for deciding on
change of employer (factors, such as higher wage, work in the profession and permanent contract, in average makes under 30% of cases).

Graph 51: Which study program, in your opinion, was the most relevant to your employment? (in %)

In the almost half of cases, the study programs that students completed were the most appropriate for their employment. The smaller percentage of graduates stated that the related study program was the most suitable for finding a job (35%). On the other hand, for each tenth student, any study program responded to employment.

Graph 52: Which level of education, in your opinion, was the most relevant to your employment? (in %)

When it comes to the level of education and employment of graduates, in the most cases, specialist’s degree and bachelor’s degree corresponded to employment. Compared to graduates in 2009, diploma of high school was significantly more relevant to finding a job with students who graduated in 2013 (18.9% versus 11.4%). However, the reversed situation is noticeable when it comes masters and doctoral degree, as well as college degree.
On a scale from 1 to 5, graduates assessed the link between workplace and completed studies. Considering all the aspects of the workplace, the degree to which the work corresponds with the education gained during the studies was rated with an average grade of 3.7 (graduates from 2009) and 3.5 (graduate students from 2013). Analysis by universities/faculties indicates that students who graduated at University of Donja Gorica gave the highest grade to the link between the workplace and completed studies (4.0), while students who obtained a diploma at University of Mediterranean and University of Montenegro gave slightly lower grades (3.8 and 3.5, respectively). The lowest grades were given by graduate students from independent faculties (2.6).

Also, the level of fulfillment of expectations that students had when they started their studies, on a scale from 1 to 5, was rated by 3.5 (graduate students from 2009) and 3.2 (graduate students from 2013). The highest expectations were met by the graduates of the University of Donja Gorica (4.0), while students who graduated from the University Mediterranean rated expectations by 3.5 and students graduated from the University of Montenegro with 3.1.
Within the research, various aspects of employment were analyzed, i.e. their importance to the employer in recruitment of graduates. The most important aspect for the employer is the level of education. Also, a significant category in recruitment is the knowledge of a foreign language and IT (computer) skills. On the other hand, the least important aspect is the final exam - thesis, the experience of studying abroad and the willingness to work without a job contract.
Part 6: PROFESSIONAL ORIENTATION AND SATISFACTION

Professional orientation is an important issue when it comes to the relationship between studies and job. On the scale from 1 to 5 the importance of different aspects of employment was evaluated. Graph 55 gives an overview of 17 different categories. The smallest grade was given to possibilities of dealing with scientific work 3.1, while the greatest grade was given to favorable working environment, opportunities for career advancement and possibilities of reconciliation of work with family life.

Graph 55: Importance of certain aspects for employment (1 - not important, 5 - very important)
The degree of achievement of certain aspects of employment in the current job is given in Graph 56. Similarly, in the case of importance assessment, the possibility of engaging in scientific work was assessed with the lowest rating (2.7 (2009) and 2.8 (2013)). On the other hand, a favorable working environment has been largely achieved on the current job.

Graph 56: To what extent some aspects of employment have been achieved (1—not at all, 5—to a very large extent)

Nine of ten graduates - employees are satisfied with the current job. There are small differences between graduates in 2009 and 2013, where greater dissatisfaction was expressed with a group of students who graduated in 2013.
Two out of three graduate students in 2013 who are dissatisfied with the job, have indicated low salaries and inability to progress as reasons of dissatisfaction. These are, to a smaller percent, the most significant reasons for dissatisfaction with 2009 graduates. On the other hand, irregular income is the reason for dissatisfaction of the smallest number of graduated students.

In total, 65% of graduated students from 2009 and 54% from 2013 are satisfied with the monthly wage. Out of total number, 70% of graduate students from University of Donja Gorica are satisfied with the monthly income, while this percentage is lower for students who graduated at University of Montenegro (51%) and University of Mediterranean (45%). Also, two
out of three students who have obtained a degree at one of the independent faculties is satisfied with the monthly salary.
CONCLUDING REMARKS

Tracer Study conducted among graduates in 2009 and 2013 indicates that most students enrolling faculty graduate from gymnasium and that students whose parents have a higher level of education often continue their education after secondary school. Most students received a degree at the University of Montenegro (96% - 2009, 76% - 2013), while the average grade was highest among students who completed the Mediterranean University.

The most common form of getting information about about university/faculty among graduated students is the informer for future students, while the reason for enrollment and selection of a particular higher education institution and study program is the interest of students. The research showed that 3 out of 4 students completed studies within the time frame stipulated by study rules, while over 85% were satisfied with the studies. During the studies, fewer than 30% of students used a scholarship, and in most cases the parents financed education. When it comes to the second cycle of studies, two-thirds of students enroll in specialist, master or doctoral studies. The main reason for the continuation of education of graduated students after basic studies is self-improvement, while on the other hand the main reason why students do not continue studies are the lack of money for education (for graduated in 2009) and the opinion that the acquired knowledge is sufficient (among graduated in 2013).

Students are generally satisfied with the organization of teaching within the study program that they have completed (average grades from 2.9 to 3.9 on a scale of 1 to 5), while the rating of satisfaction with the study program on the scale from 1 to 10 is rated at 6.8 (2009) and 6.6 (2013). However, a high percentage of students (67% - 2009 and 61% - 2013) had no practice during the studies.

When it comes to first job, more than half of the respondents got a job after completing their studies. A total of 13% (2009) and 11% (from 2013) respondents continued their existing work after graduation, while very low percentage is self-employed. Also, research among graduates showed that 2009 graduates rated the link between studies with first-time employment and self-employment with a higher average grade than graduates from 2013. In addition, the analysis of results by universities/faculties indicates that students from the University of Donja Gorica rated the relationship between employment and studies with a higher average grade than students from other universities/faculties.
The results of the survey showed that out of the total number of students who graduated in 2009, 82% are currently employed, and 66% of those who graduated in 2013. Observed by universities/faculties, students who completed the University of Donja Gorica are mostly employed (85%), while this percentage is lower for students who have completed the University of Montenegro (65%) and Mediterranean University (61%). In most cases (over 70%), of students are employed after graduation, while 44% of graduated in 2009 and 57% of graduated in 2013 were waiting for employment up to six months after graduation. Of the total number of employees, over half (2013) works in the private sector and has a fixed-term contract (58% - 2013). Also, four out of five graduates work full time and about half of them have changed at least one employer.

Additionally, 75% and 67% of graduated students from 2009 and 2013 are employed in the profession and about 80% have the opportunity to progress in their careers. When it comes to earnings, 37% (2013) and 32% (2009) of graduated students earn between 300 EUR and 500 EUR per month, while about one-third of graduates earn from 500 EUR to 800 EUR. The link between workplace and study was assessed by students with 3.7 (2009) and 3.5 (2013) on the scale from 1 to 5. Also, out of the total number of employees, over 85% are satisfied with the job.

Based on the results of the research, the following recommendations were defined:

- **Further promotion of opportunities for scholarships.** Since nearly every third student who graduated in 2009 and every fourth that graduated in 2013 used the scholarship, it is necessary to further promote the opportunities for scholarships. Also, out of the total number of scholarships beneficiaries during the studies, 4 out of 5 students received a scholarship from the national government institutions, while significantly fewer scholarships are awarded by other institutions. In this regard, further scholarships from foreign state institutions and domestic and foreign companies should be further promoted.

- **On a scale of 1 to 5 graduated students assessed the presence of practical content in lectures and exercises with 3.0 (2009) and 2.9 (2013).** Having in mind this assessment and in order to better train students for the labor market, it is necessary to strengthen the practical dimension of lectures and exercises.

- **About two-thirds of students (67% - 2009 and 61% - 2013) said that they had no practice during the studies.** Hence, it is necessary to introduce and/or strengthen practical teaching at faculties.

- **Given that graduated students rated the offer of exchange programs with an average score of 2.8 on a scale of 1 to 5, it is needed to consider further providing information on the opportunities for participation in exchange programs.**
• Of the total number of students who did not continue their studies at specialist and master courses, a total of 54% (2009) and 41% (2013) was not motivated to continue studies after the completion of basic studies. To this end, it is necessary to increase the awareness of students about the positive aspects of continuing studies.

• Given that a very small percentage of graduates find employment through employment fairs (below 1%), it is necessary to consider other channels of cooperation with employers in order to employ students.

• Motivate students to look for work during the studies, given the low percentage of those who found employment during studies (15% - 2013).

• The study found that a very small percentage of students are self-employed (below 5%). In this regard, it is necessary to further stimulate entrepreneurship during studies and motivate students for self-employment.

• Having in mind that during employing an employer considers level of education and knowledge of a foreign language and computer skills as the most important, additional emphasis should be placed on these aspects during the studies. Also, one of the aspects relevant for employment that employers’ value is practical experience, which implies the need to organize practical lessons during the studies.

• On a scale of 1 to 5, graduates assessed the link between workplace and completed studies with an average grade of 3.7 -2009 and 3.5 - 2013. Considering the drop in the average grade and the space for further improvement, it is necessary to further tailor the study programs to the requirements of the labor market.

• A total of 15% of graduated students (2013) do not work in the profession, which points to the need to further adapt studies to labor market and its requirements.