Room for progress can be sought exactly where UB is the weakest compared to these three universities. The advantage of focusing on these groups lies in the fact that research within this area is relatively cheaper than in other groups, which is important for Serbia, given the limited capacity of the state to invest in science. However, in order for this to happen, universities must raise the quality of doctoral studies within this group, especially with regard to the methodology. Colleges must open for top-level professors, as well as start a trend of visits of our prominent experts who would teach at master and doctoral studies, thus bringing young researchers closer to the current scientific trends. Enabling doctoral students and assistants to study at foreign universities is also crucial.

It would be very interesting to explore the development of an institution such as the University of Belgrade and how it is that one group has institutionally evolved completely differently than natural or technical sciences, and explore more deeply the reasons behind this poor performance. We have shown that socialist structure is not the answer because other countries with a similar past are better ranked. This is an interesting idea for more serious research. Also, in addition to this, we should keep in mind that the Shanghai Ranking is only one of the many studies on university ranking. It would be interesting to compare the results of the Shanghai Ranking with other studies and to create a qualitative assessment about the position of Serbian universities in the region, but also wider within Central and Eastern Europe.

Highlight 2. Status of Youth[1] in Serbian Labor Market

Nemanja Vuksanović [2]

Introductory considerations

Most significant global social changes in the labor market, such as changes in state regimes and policies resulting from the collapse of socialism, crisis of welfare states and neoliberal regimes, have fundamentally influenced the lives of young people (Furlong, Cartmel, 2007). The growing interest in the position of youth in labor market has been induced over recent years by the fact that young people make a group that is related to a higher risk of poverty and social exclusion, and that the unsuccessful transition from school to work can have negative consequences on other life transitions. Changes on the global level since the 1970s have contributed to rising unemployment and difficult conditions for young generations to enter into the labor market. The transition from school to work increasingly loses its standard form and becomes prolonged and fragmented (Du Bois-Reymond and Chisholm, 2006). Therefore, it is not surprising that in most countries youth unemployment rates are almost twice the unemployment rate of the adult population. As stated in the article of the Labor Market Research Institute (Kluve, 2014), this can be explained by the fact that lack of work experience, weaker job search skills, and structural problems, such as inadequate education and training and restrictive labor market regulation, are the main causes of such high unemployment rates of young people. In this regard, the analysis of transition of young people from the moment of graduating to the moment of finding a job is becoming important.

The youth employment crisis represents a special challenge that Serbia faces. Moreover, for this employment crisis it could be said that it's one aspect of the job crisis, and it is linked not only to the level and duration of youth unemployment in the labor market, but also to the decline in the quality of jobs available to young people. The difficult transition from school to work in Serbia was negatively influenced by the last economic crisis in 2008, whose consequences were mostly felt by young people. Namely, the experience of other countries shows that in time of economic crisis, due to a decline in demand for companies with labor, companies not only employ less people, but also lay off workers and often the ones they employed last. Certainly, it should be noted that young people in labor market of Serbia, even before the aforementioned economic crisis, faced certain problems, but this already unfavorable situation was significantly worsened by this crisis.

In this Highlight, the subject of the analysis will be the status of youth in Serbian labor market. The first part will show the movement of employment and unemployment rates of young population. After that, categories of young people's employment on the labor market will be observed according to different criteria, such as age, educational level and material status of the household. Also, we will analize the average time needed to get the first job and importance of work during education for the length of transition from school to work. A special part of this Highlight will be dedicated to examining the importance of education for the future salaries of a young person, as well as the differences in average salary that result from various fields of study.

1 The term "Youth" in this text refers to a person of age from 15 to 29 years, unless otherwise indicated.

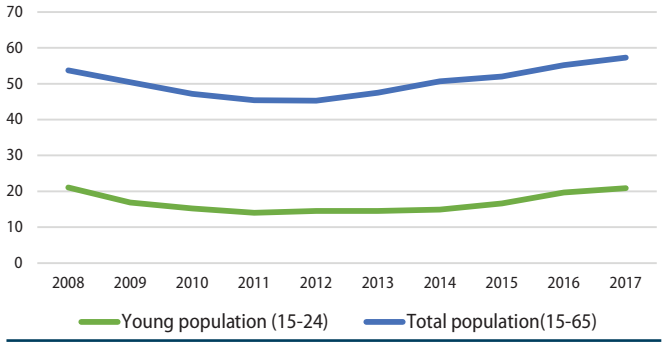
2 Faculty of Economics University of Belgrade

Youth activity in Serbian labor market

The worldwide concern about youth employment and extensive research carried out on this topic helped raise the level of awareness about the fact that a significant number of young people today face difficulties in entering and remaining on the labor market. Also, there is a noticeable growth of understanding among the public policy makers that failing to find quality employment after finishing school contributes to a long-term negative effect regarding earnings that a person can achieve during his lifecycle (Elder, 2009). This was influenced by the realization that transition from school to work represents a very important segment of transition to growing up, whose success largely predetermines the success in other segments of youth growth. For example, the way and pace of transition from graduating to finding work influence the family transition as well, and it refers to youth decisions to leave parents and rely on themselves, getting married and become parents (Tomanovic et al., 2012). Graduation and job search are very important moments in the life of a young person. After years spent in school, young people tend to find employment that will match their preferences and where they will be able to apply the knowledge gained during their education. However, today's transition from school to work is characterized by great uncertainty, and entry into the labor market for many young people across Europe is a major challenge and the process of searching for suitable employment can be time-consuming (Eurofound, 2014).

The fact that young people are particularly sensitive group in Serbian labor market is best reflected in data from the Statistical Office of the Republic of Serbia on the employment and unemployment rate of young people aged 15-24. In 2008, the employment rate of young people in Serbia was slightly below 22%, while in 2017 this rate was around 20%. This indicates that the youth employment rate did not even reach the level it had before the outbreak of the economic crisis. Moreover, in 2013, when negative effects of the economic crisis started weakening, the employment rate of young people in Serbia was by about 30 percentage points lower than the same rate for the adult population. Of course, we should not ignore the fact that this state, due to the unavailability of data on young people from 15 to 29 years for such a long period of time, is largely a result of the fact that almost all young people under the age of 19 and a significant share of young people under the age of 24 are in the educational process.

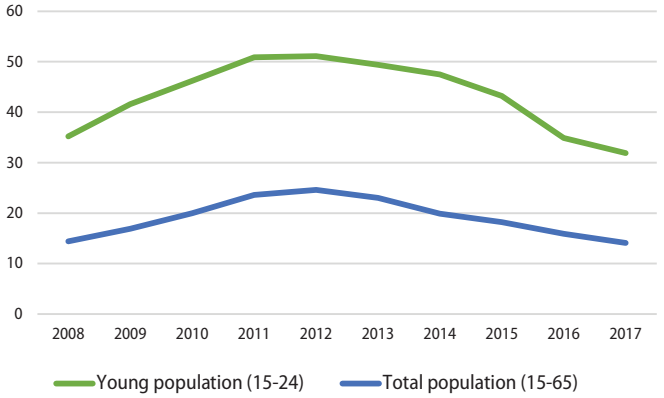
Graph 2-1. Employment rate of young and adult population in Serbia from 2008 to 2017 (in%)



Source: Statistical Office of the Republic of Serbia

Particularly difficult position of young people on the labor market in Serbia is indicated by the fact that the youth unemployment rate in 2012 even reached 51% and was by 15 percentage points higher than in 2008. It can also be noticed that the unemployment rate of young population during the whole period was 1.5 to 2 times higher than the unemployment rate of total population. Although deviations of the labor market indicators between the young population and the total population are also characteristic for other countries of the European Union, the level of these deviations in Serbia are worrisome.

Graph 2-2. Unemployment rate of young and adult population in Serbia from 2008 to 2017 (in%)



Source: Statistical Office of the Republic of Serbia

The status of the activity of a young person on the labor market is an important feature that indicates the extent of the risk to which the young person is exposed. According to the School to Work Transition Survey (SWTS)[3] from 2015 in Serbia, it can be noticed that the percentage of young people who are exclusively in

3 For the first time in 2015 Serbia implemented the School to Work Transition Survey under the Work4Youth partnership. Data collection and sampling was carried out by the Statistical Office of the Republic of Serbia, while the International Labor Organization provided a standardized survey instrument. Field work was carried out during March and April 2015, and in that period about 3,100 persons aged 15 to 29 were interviewed.

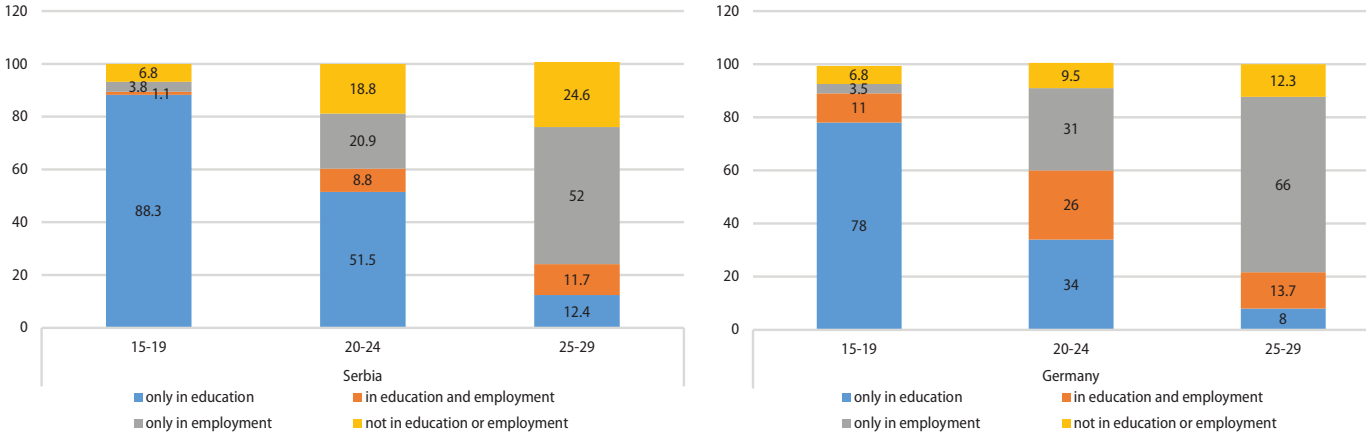
education is decreasing, while the percentage of young people who are exclusively employed increases with age. More precisely, almost 90% of young people belonging to the age group from 15 to 19 years of age were still exclusively in education, while in the age group 25-29 this percentage was 7 times lower. Also, almost 4% of young people from the lowest age group and slightly more than 55% of young people from the highest age group were exclusively employed. Such a ratio should not be surprising because it is known that as age increases, the probability of transition from school to work grows. However, we should pay attention in particular on the category of young people who are not in education, employment or training – NEET, although the category of young people who work while in school can be considered as somewhat risky, depending on the volume and quality of labor market regulation. It is noticeable that the rate of young people who are not in education, employment or training, and the rate of young people who work while they are in education is growing with age. Such an outcome can indicate the particularity of education-labor transition in Serbia: education is prolonged in the late twenties, but because of various financial pressures the completion of higher education is prolonged through a combination of education with temporary and occasional work.

It may be useful to compare the distribution of young people according to the status on the labor market in Serbia and Germany. Already in the 15 to 19 age group there are noticeable differences in the distribution of young people on the labor market. The first significant difference relates to the fact that in Serbia, a number of young people who are exclusively in education is by about 10 percentage points lower when compared to Germany. Another important difference is that the number of young people in Serbia who work and study is 10 times lower compared to Germany - only 1.1% in Serbia vs. 11% in Germany. These differences can primarily be justified by the existence of a dual education system in Germany. Of course, the biggest difference is in the middle age group. Namely, in the 20-24 age group in Serbia the rate of young people who are exclusively in education is almost 20 percentage points higher than in Germany, and the rate of young people who work and study is almost 3 times lower. Such distribution of young people in the middle age group can explain the significant difference between Serbia and Germany in terms of the rate of young people who are neither in education, nor employment in the highest age group. Thus, the percentage of young people who are not in education, nor employment or training in Serbia in 2015 was twice as high as in Germany among young people in the 25-29 age group. Acquiring work experience during education, even with jobs that do not require qualifications, makes it easier for young people to make a transition from school to work. Research suggests that young people who work while in education, and especially people who have a job while in secondary education, latter have less difficulties to get a job, and hence have a faster transition.

Average time of school to work transition and quality of work of young people in Serbia

The average time of transition from school to work indicates the complexity of employment after graduation. The longer this time is, the greater the likelihood that the young person will fall into a status in which he is neither in education nor working, which can consequently lead to exclusion from the labor market (www.mons.rs). On average, in Central and Eastern European countries young people reach the first job on average about 7 months after they complete their education, although this time varies considerably between countries. For example, in Germany, the Czech Republic, Poland

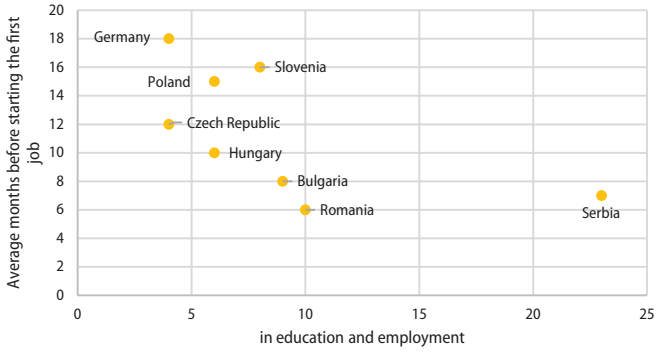
Graph 2-3. Status of a young person on the labor market of Serbia (left) and Germany (right) in 2015 (in%)



Source: School to work transition survey, Statistical Office of the Republic of Serbia and Eurostat

and Hungary, a young person on average needs about 5 months to reach the first job, while a young person in Slovenia, Bulgaria and Romania finds the first job after 10 months. Compared to these countries, the average time for finding the first job for young people in Serbia, according to the School to Work Transition Survey from 2015, was just over 20 months. Therefore, young people in Serbia wait considerably longer for the first job compared to their peers in Central and Eastern European countries. One of potential explanations of this situation on the labor market can be the very low percentage of young people who are working while in education. Setting the ratio of the average time needed to find the first job and the percentage of young people who work while in education, established a negative ratio. In other words, the greater the percentage of young people who are working while in education, the shorter the time needed to find the first job. This conclusion should not be surprising given that young people who work during their education gain experience that enables them to get to their first job easier.

Graph 2-4. The relationship between the average time needed to find the first job and the percentage of young people working while studying for Serbia and the selected countries of Central and Eastern Europe in 2015



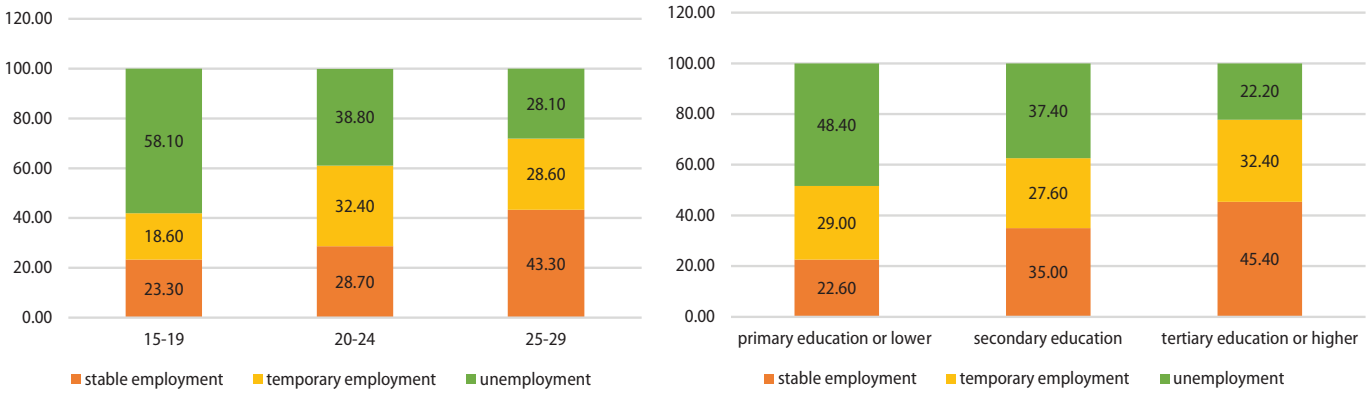
Source: School to Work Transition Survey, Statistical Office of the Republic of Serbia and Eurostat

Data from the School to Work Transition Survey from 2015 in Serbia suggest that, as expected, employment increases with age and educational level. Thus, if we observe young people who have completed their education process, the share of those who are steadily employed is twice lower, and the share of those who are unemployed is twice higher in the 15 to 19 years age group than in the 25 to 29 years age group. The data also point to the fact that the educational level crucially determines the category of employment young person will find itself after school. Among young people with completed primary education, 48% are unemployed, and only 23% are steadily employed. Young people with completed higher education have a significantly better position on the labor market, because the share of steadily employed is about 45% and the share of the unemployed is 22%. Therefore, the more the young person is older and educated the risk that this person will be unemployed is lower. This can be an argument for the introduction of compulsory secondary education, since it appears that only after the completion of secondary school, people are trained for the labor market.

The employment category of young people in Serbia can be linked to the socioeconomic status of the family of that young person.[4] It is expected that young people coming from families with better material status will do better after graduation. The results of the School to Work Transition Survey in Serbia in 2015 confirm this expectation, but not quite unambiguously. Namely, in the category of the best financially situated households the share of steadily employed is 6 times higher than the share of the unemployed, but steadily employed, although twice as low as the unemployed, are also present in the worst situated households. It is likely that

4 The socioeconomic status of the family in the School to Work Transition Survey is determined on the basis of the working status and educational level of the parents of the young person.

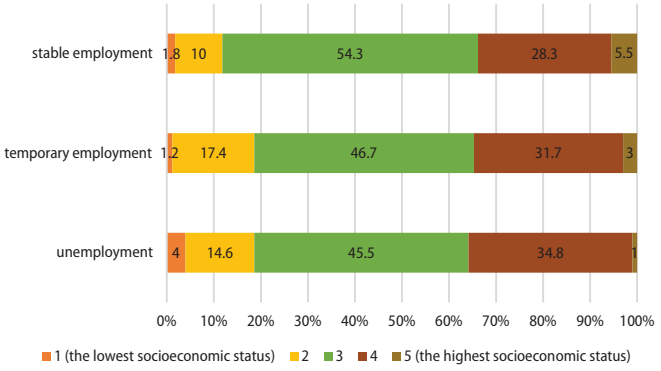
Graph 2-5. Categories of employment of young people by age (left) and educational level (right) in Serbia in 2015 (in%)



Source: School to Work Transition Survey, Statistical Office of the Republic of Serbia

such a conclusion is imposed as there is a difference in the quality of jobs that young people accept in different socioeconomic status, i.e. young people in poorer households usually accept lower paid jobs.

Graph 2-6. Categories of employment of young persons according to the material status of the household, in Serbia in 2015 (in%)



Source: School to Work Transition Survey, Statistical Office of the Republic of Serbia

Educational level as a determinant of the earnings of a young person in Serbia

In addition to the difficulty of finding a stable job, a young person in Serbia, even when employed, receives a salary that is significantly lower than the average salary. Data from the School to Work Transition Survey from 2015 indicate that the average monthly net salary for the young population amounted to 29,500 RSD, while the average monthly net salary for the total population amounted to about 44,500 RSD. In other words, young people in Serbia in 2015 received a salary which is about 30% lower than the average salary. Such unfavorable salary ratio is also typical for other European countries and is in line with the theory, so Serbia is no exception. Namely, as the age interval of the cohort of young people is rather narrowly defined and covers a large number of people who are still in the process of education, finding an employed young person not at his/hers first job or a young person with many years of work experience is quite rare. Having in mind the results of a large number of studies that show that work experience, if we exclude the level of education, is the dominant determinant of earnings, it becomes clear why young people are in a subordinate position (Vuksanović et al., 2018).

The importance of educational level and field of study for the average earnings achieved by a young person is best seen in the results of the analysis where the higher education earnings premium was examined according to different fields of study (i.e. how much the average earnings of a person with higher education deviates from the earnings of a person with lower education level). Namely, the results indicate that in almost all areas of study, higher education earnings premium is positive, which means higher levels of education bring higher earnings. Education, agriculture and veterinary are the exception, as the young person who graduated in one of these fields earns less on average than the lower educated person. School to Work Transition Survey from 2015 shows that areas 1) Human Sciences and Arts, (2) Social sciences, Economics and Law, 3) Natural Sciences, Mathematics and Informatics, (4) Engineering, Production and Construction and 5) Health are characterized by positive and areas (1) Agriculture and Veterinary, and (2) Education, by negative deviation from the average earnings of a person with primary and secondary schools. Also, there are great variations in these differences by the fields of study. For example, a young person in Serbia who graduated in the field of Natural Sciences, Mathematics and Informatics has average earnings of 42,000 RSD, which is about 40% higher than the average earnings achieved by a young person with lower education. According to the same data, a young person who graduated in the field of Agriculture and Veterinary earns an average salary of 25,000 RSD, which is almost 15% less than the average salary of a young person with lower level of education.

Table 2-7. Average earnings and deviation in relation to the total average earnings of a lower educated person by area of study of a young person in Serbia in 2015 (in RSD)

Field of study	Average salary	Deviation
Humanities and arts	34200	16.62
Social science, business and law	32047	9.28
Natural science, mathematics and computing	41889	42.84
Engineering, manufacturing and construcion	29979	2.23
Agriculture and veterinary science	25333	-13.62
Health	29914	2.01
Education	28036	-4.40

Source: School to Work Transition Survey, Statistical Office of the Republic of Serbia

However, when the socioeconomic factors, i.e. the material status of the family of the young person, are included in the analysis these differences in higher education premium generally decline. The most drastic decline in higher education premium rates is in the field of Natural Sciences, Mathematics and Informatics and Human Sciences and Arts (after the inclusion of the material status of the family in the analysis, higher education premium in these fields is lower), while overcrowded growth is noticeable in the fields of Agriculture and Veterinary Medicine (after including the material status of the family in the analysis, the premiums on higher education in these areas is higher). Of course, it should be borne in mind that the analysis refers to (1) young people who have just entered the labor market and do not have many years of work experience, and (2) that, during their lifetime, higher

education premium is increased because highly educated employees have greater possibility of advancement.

Graph 2-8. Premium to higher education of young people before and after control of socioeconomic status

Field of study	Returns on education before controlling socioeconomic status (in %)	Returns on education after controlling socioeconomic status (in %)
Humanities and arts	18.79	8.96
Social science, business and law	11.31	6.30
Natural science, mathematics and computing	45.50	36.21
Engineering, manufacturing and construcion	4.13	2.33
Agriculture and veterinary science	-12.01	-3.60
Health	3.90	1.81
Education	-2.62	-1.52

Source: School to Work Transition Survey, Statistical Office of the Republic of Serbia

Conclusion

This Highlight analyzes the position of young people in the labor market in Serbia. More precisely, the trend of employment and unemployment rates of the young population over the past decade has been presented and this trend is compared with the movement of these rates for the adult population. This comparison came to the conclusion that young people in the Serbian labor market fall into a particularly vulnerable group, because the observed labor market indicators are significantly less favorable for young people. The analysis of the youth workforce distribution in the labor market in Serbia in 2015 suggests that the percentage of young people who are exclusively in education is declining, and the percentage of young people who are exclusively employed increases with age. It is also noticeable that with age there is a growing rate of young people who are not in education, employment or training and the rate of young people who are working while in school. The distribution of young people according to the activity status in the Serbian labor market significantly deviates from the one characterizing the German labor market, as a benchmark. These differences can be primarily justified by the existence of a dual education system in Germany, and it seems that acquiring work experience while in education makes it easier for young people to make a transition from school to work. Also, young people in Serbia have to wait significantly longer for their first job than their peers in Central and Eastern European countries. One of the potential explanations for this kind of situation in the labor market is the low percentage of young people who work while in education. By setting the ratio of the average time needed to find the first job and the percentage of young people who work while in education, we can conclude that the greater the percentage of young people who are working while in education, the shorter the time needed to find the first job.

Furthermore, by analyzing the categories of youth employment in Serbia in 2015 according to the age and education level we notice that as the young person is older and more educated, the risk of this person being unemployed is lower. The data confirm the expectation that young people coming from families with better material status pass better after graduation, but not quite unambiguously. In this Highlight we came to the conclusion that a young person in Serbia, even when employed, receives salary that is considerably lower than the average salary, since according to 2015 data average monthly net salary for the young population was about 30% lower than the average salary. The analysis of the higher education earnings premium in different fields of study points to the importance of the educational level and the field of study for the average income earned by a young person. According to the results of this analysis in almost all fields of study (with the exception of Education and field of Agriculture and Veterinary) higher education premium is positive, which means that higher education levels bring higher earnings. As expected, with the inclusion of socioeconomic factors in the analysis, i.e. the material status of the family of a young person, these differences related to higher education premium are declining but still remain significant.

Literature

1. Du Bois-Reymond, M., Chisholm, L. (2006). Young Europeans in a Changing World, in: Du Bois-Reymond, M. and L. Chisholm (eds). *The Modernisation of Youth Transitions in Europe*. New Directions for Child and Adolescence Development, pp. 1-10.
2. Elder, S. (2009). *School to work transition survey: Basic concepts, roles and implementation process*. International Labor Office.
3. Eurofound (2014). *Mapping youth transitions in Europe*. Publications Office of the European Union.
4. Furlong, A., Cartmel, F. (2007). *Young People and Social Change. Individualisation and Risk in Late Modernity*. Open University Press.
5. Kluve, J. (2014). *Youth labor market interventions*. IZA World of Labor: 106.
6. Tomanovic et al. (2015). *Mladi u Srbiji 2015.: Stanja, opažanja, verovanja i nadanja*. Friedrich Ebert Stiftung: SeConS Grupa za razvojnu inicijativu.
7. Vuksanović, N. et al. (2018). School to work transition in Serbia: returns to investment in education of youth. *Industry*, 46 (1), pp. 115-136.
8. www.mons.rs
9. https://ec.europa.eu/eurostat
10. http://www.stat.gov.rs/