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Impact of Student Workers on the European Labor Markets

The stubbornly high levels of unemployment in Europe have led to a protracted period of heightened competition for jobs. One often discussed phenomenon is the so-called “crowding out” effect, where skilled workers take unskilled jobs and “squeeze out” the unskilled workers from the labor market. Literature on whether this is actually happening is mixed. This is why we try to contribute to the debate by an analysis of student labor, which is often perceived as being particularly likely to crowd out unskilled workers, particularly in areas such as hospitality or retail. We, however, find that depending on the age of the student and the profile of student workers, their profiles closely match those of non-students of medium to high educational attainment.

Key words: student workers, crowding out effect, student employment

Introduction

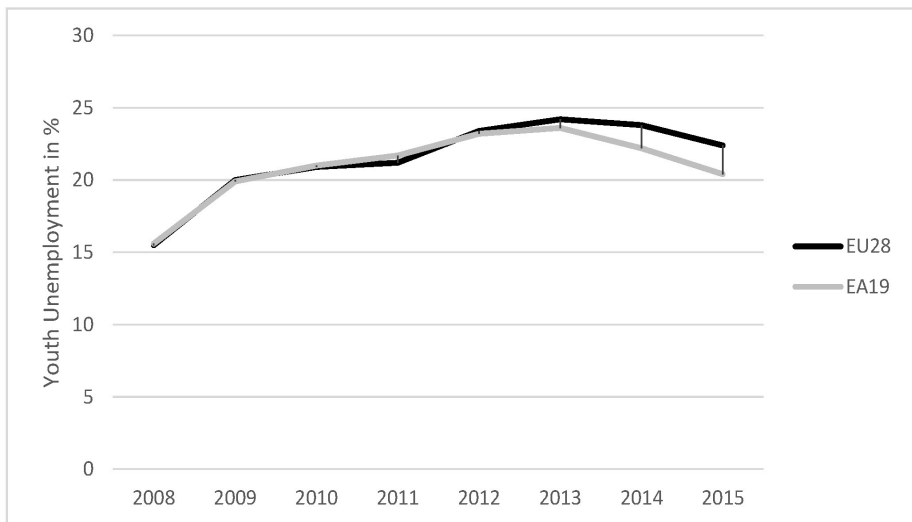
Youth unemployment is one of the top policy concerns of European policy-makers, though there have always been major differences between individual member states. The crisis itself has served to increase this difference. Youth unemployment has grown sharply. This is particularly true of the Mediterranean countries, such as Greece, Croatia, Italy, Cyprus and Spain. At the same time, particularly the Baltic and Central European nations now register lower youth unemployment than in 2010. Overall, as seen in Figure No. 1, youth unemployment in general is still five percentage points above the pre-crisis level.

The European Union has deployed a range of policies to tackle the issues including, but not limited to:

- A Youth employment package, in particular the youth guarantees,

- The Youth Employment Initiative aimed at the most troubled regions,
- Promotion of flexicurity in labor market policies,
- Youth on the Move aimed at increasing the mobility of young workers, and
- The revised New Jobs and Skills agenda.

Figure No. 1. Change in youth unemployment: March 2015 – January 2010



Source: Eurostat

Particularly the last two packages strive to equip Europe’s youth with the right set of skills to alleviate skill mismatches, which keep young people unemployed even when companies face constraints in growth due to lack of availability of workers equipped with specific skillsets. Meanwhile, there remains the issue of those who cannot, for whatever reason, participate in training and increase their skill level. These are people who are “left behind” in the general push towards a high skill workforce and are often dependent on the availability of unskilled jobs, particularly in the service sector. Because, as we shall show, young people enrolled in universities are increasingly likely to seek work on the side, there are fears that the unskilled workers will be forced to face undue competition for unskilled jobs with working students.

At the same time, looking in terms of the wider economy, massification of tertiary education means that a significant percentage of young people participates in tertiary education while also working. They can be seen as a threat. In addition to the potential crowding out effect, there are concerns regarding the effect of work-

ing on the students themselves. Is it wise to spend time on a menial job instead of focusing on education? Alternatively, this trend can be perceived as an opportunity: Work while studying might be seen as a natural way for a large percentage of young people to gain experience and contact with the labor market without the need for massive government programs.

In this paper we present evidence based on EU Labor Force Survey (EU LFS) data as well as data obtained through the EUROSTUDENT project to shed light on the topic in question.

This paper summarizes findings from research conducted within the framework of the STYLE EU FP 7 project, published and available as working papers (Beblavý et al., 2015; Beblavý and Fabo, 2015a) and as a commentary (Beblavý and Fabo, 2015b). The research is complemented with empirical analysis done within the framework of the EDUWORKS EU FP7 project, which has not been published until now.

Literature Review

The number of student workers has grown immensely over recent decades (Baffoe-Bonnie and Golden, 2007; Häkkinen, 2006; Moreau and Leathwood, 2006). The share of working students varies significantly across countries. In general, however, higher education students are significantly more likely to reconcile work and study, except for countries with strong apprenticeship systems—Denmark, Germany, Austria, and the Netherlands (Quintini and Martin, 2014).

The growth of student employment has been attributed to different factors. One factor refers to the changes in the composition of aggregate labor supply shaped by the massification of tertiary education, which has, in some countries, been paralleled by decreasing government investment in higher education and the introduction of tuition fees. This has forced many students, especially from disadvantaged socio-economic backgrounds, to seek employment in parallel with their studies in order to finance their education (Beblavý et al., 2013; Moreau and Leathwood, 2006). Fees are not the only reason for student work, however. Certain studies document the importance of work experience among employer preferences, which increases the incentives for young people to seek practical experience during their studies (Quintini and Martin, 2014). Other recent research argues that there could be complementarities, not only substitutability, between paid work and education (Hall, 2010).

The second perspective considers the issue of student work in the context of broader structural changes caused by technological change and the rise of the service sector, resulting in a significant reorganization of labor demand. Specific segments

of the growing service sector are characterized by a demand for general skills and flexible labor, both of which student workers can effectively fill (Curtis and Lucas, 2001). Researchers also forecast a skill polarization between high- and low-skilled occupations—i.e. an increase in employment at the extremes of the job-quality distribution. This has been accompanied by a process of displacement of low-skilled workers by more educated ones who are being pushed out of medium-level jobs (Autor and Dorn, 2009; Manning, 2004).

Whatever the reasons behind student employment, there are several traits that differentiate student employment from most of the labor market. These are the predominance of temporary, part-time, and informal employment (Hall, 2010; Quintini and Martin 2014). Research into the student employment and graduate labor market in the UK shows that there are openings for young workers across different sectors, including in highly skilled specialized sectors. The degree of skill substitutability and displacement among the low-skilled workforce is very different across different types of occupations (Purcell and Elias, 2003).

Quintini and Manfredi (2009) show that students who work and study at the same time have a greater likelihood of obtaining a favorable labor market outcome after graduation. However, this does not seem to be true for students who work outside their field of study (Quintini and Martin, 2014). Häkkinen (2006) estimates the return to in-school work experience after graduation and at the beginning of the working career, and finds that one additional year spent working yields a considerable increase in earnings one year after graduation. However, this effect decreases and becomes statistically insignificant in later years. At the same time, it is likely that working increases the duration of study, and taking this into account, the effect of work experience on earnings is much lower and statistically insignificant for all years. To date, very few analyses have been made available regarding the proportion of student workers, particularly in low-skilled jobs. Maxwell (2006), in analyzing the Californian labor market in the early 2000s, finds that 45% of low-skilled individuals are under thirty years of age, compared to 34% in medium-skilled and 21% in high-skilled employment. A young workforce is also preferred in the retail, tourism, hospitality, and catering sectors that try to attract younger clients and develop a youthful corporate image (Curtis and Lucas, 2001).

The debate about whether there is real competition for low-skilled jobs between youth/student workers and low-educated workers truly appears to be open (Eichhorst et al., 2013; Pollmann-Schult, 2005). There are views based on the job competition model and crowding-out hypothesis (lump-of-labor theory), which believe that job opportunities are limited and workers compete with each other. This view holds that demand for labor in the economy is fixed and needs to be divided among differ-

ent groups (Eichhorst et al., 2013). In the context of broader structural transformation, this creates an inherently competitive environment whereby employers fill jobs with qualified workers, jobs that would otherwise have been filled with unqualified persons. This is because higher qualifications are associated with lower training costs and higher productivity (Pollmann–Schult, 2005). This view is reflected in policy application: Especially in the 1970s and 1980s, many countries responded to rising unemployment levels by decreasing labor supply and introducing generous early retirement schemes (Eichhorst et al., 2013). However, the lump–of–labor theory is considered by many economists to be a fallacy. They argue that the economy is not static and labor demand should, in the long run, adjust to labor supply and its structure—a view in line with the empirical evidence (Gruber and Wise, 2010).

Methodology

The presented evidence is based on the EU–LFS dataset. Although the EU–LFS does not aim to determine the size of the student population, it provides a sufficient sample of student and non–student workers to carry out an in–depth comparison of the two groups. For the purpose of this report, we use EU27 data. While the EU–LFS is conducted annually and allows developments to be observed over time, the extent to which this is possible is limited by the availability of historical data. For this reason, the bulk of the information presented in this report is based on cross–sectional data. Where appropriate, the findings are also supplemented by the data collected within the framework of the Eurostudent project, which are available in the form of aggregated statistics on the project website. The aim of the project, which took place between 2008 and 2011, was to collect comparable data on the social dimension of student education.

In the LFS survey, a student is understood to be someone who has been in a formal and regular study program or apprenticeship within the previous four weeks. The characteristics of regular and formal education are as follows:

1. Purpose and format are predetermined,
2. It is provided through a system of schools, colleges, universities, and other educational institutions,
3. It normally constitutes a continuous ladder of education,
4. It is structured in terms of learning objectives, learning time, and learning support and is normally intended to lead to a certification recognized by national authorities qualifying for a specific education/program, and
5. It corresponds to the programs covered by the UOE questionnaires (Eurostat, 2010).

For the purpose of this report, the student category is limited to individuals currently pursuing an ISCED 5 (tertiary) or 6 (postgraduate) level of education (variable EDUCLEVL). Secondary–education students are not covered.

A worker, as understood in this paper and in line with the LFS methodology, is someone who has reported (variable ILOSTAT) that they either worked for pay or profit during the reference week—one hour or more (including family workers, but excluding conscripts in compulsory military or community service)—or were not working, but had jobs or businesses from which they were absent during the reference week (including family workers, but excluding conscripts in compulsory military or community service).

This particular definition of a worker has implications in the treatment of students participating in paid or unpaid on–the–job training schemes such as internships, traineeships, or research assistantships. According to the LFS methodology, these programs count as work if they are paid, but do not if they are not paid, even though there is no other difference between them. This methodological choice is likely to inflate differences between the percentages of working students across countries.

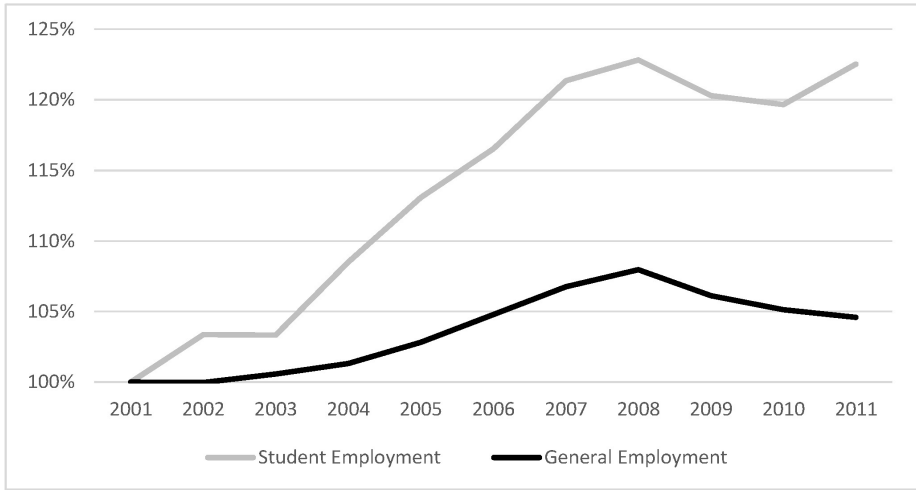
Empirical Findings

Finding 1: There are a lot of student workers and the number is growing and includes many women.

In just the decade between 2001 and 2011, the number of working students in the EU 27 grew from 5.2 to 6.4 million. This figure represents a growth of 23% compared to just 4% growth of general employment in the EU (Figure No. 2).

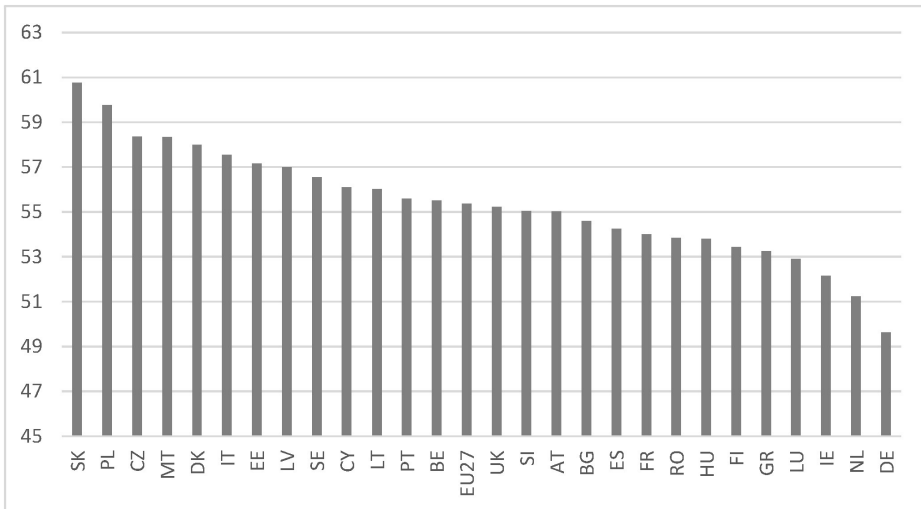
The gender aspect of student work is an under–researched topic. The LFS data show that in all countries except Germany, where the gender ratio is about equal, there are more females than males in the working student population. Slovakia is a particularly pronounced case with over 60% of working university students being female. The share of female working students is approximately the same as the share of women in the entire student population when taking all students into account, but higher when only students below the age of twenty–five are considered. This is encouraging evidence, given the struggles associated with EU 2020 efforts of achieving the equal participation of men and women in the labor force due to the lagging participation of women (Mills et al., 2014).

Figure No. 2. Growth of employment and student employment 2001–2011



Source: EU-LFS, Eurostat

Figure No. 3. Share of women among working students under twenty-five years of age



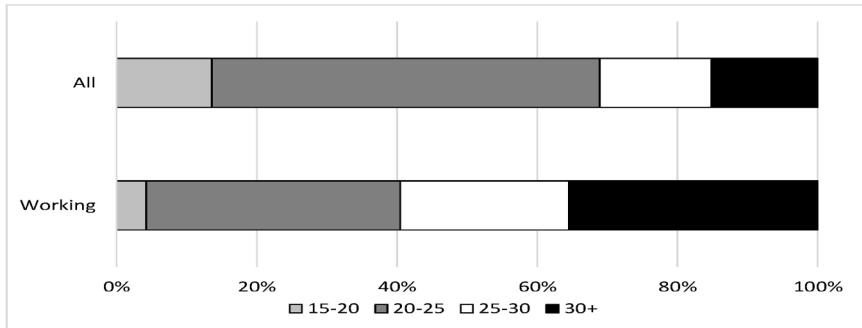
Source: EU-LFS

Finding 2: Student workers are not predominantly 18-year olds in McDonalds.

The massification of tertiary education has led to an erosion of the traditional role of the student as a young person preparing for a future career, perhaps doing

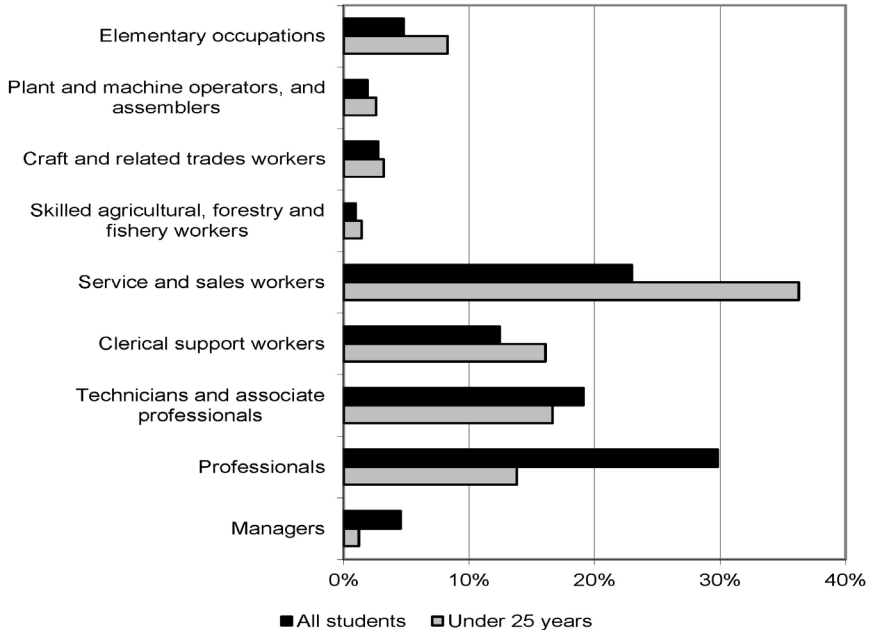
odd jobs on the side. As is visible in Figure No. 4, a third of all students are older than twenty-five and they represent 60% of all working students.

Figure No. 4. Age distribution of students and working students in 2011 in EU27



Source: EU – LFS

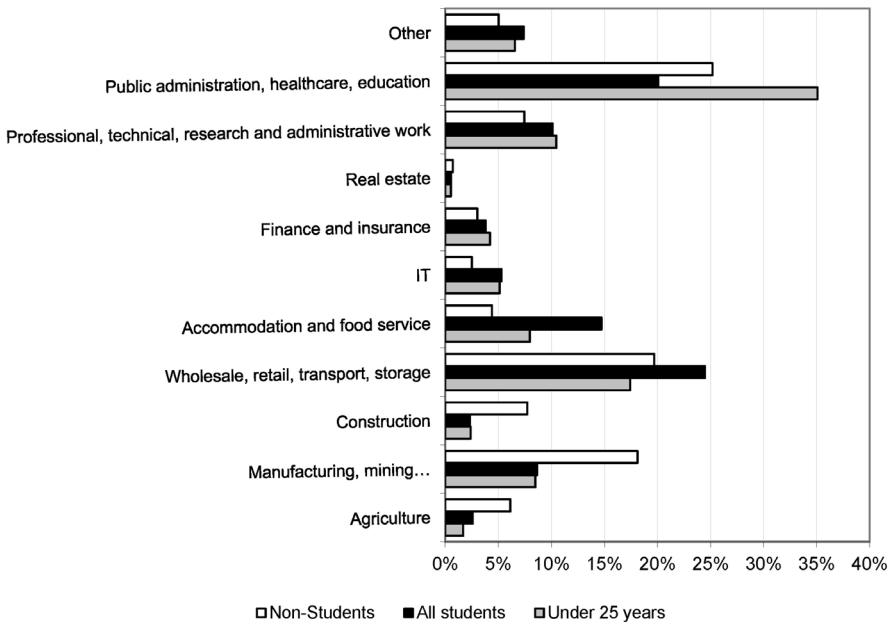
Figure No. 5. Share of occupational groups in population of working students in 2011



Source: EU-LFS

One out of three working students works in a professional position (Figure No. 4), though most (but not all) working students in this category belong to the 25+ category. The share of working students in elementary occupation is less than 5% and students are also not present in other blue-collar occupations. They are predominantly present in medium- and high-skilled white-collar jobs.

Figure No. 6. Average share of industrial sectors in student labor for those aged under twenty-five, all students and non-students in 2011

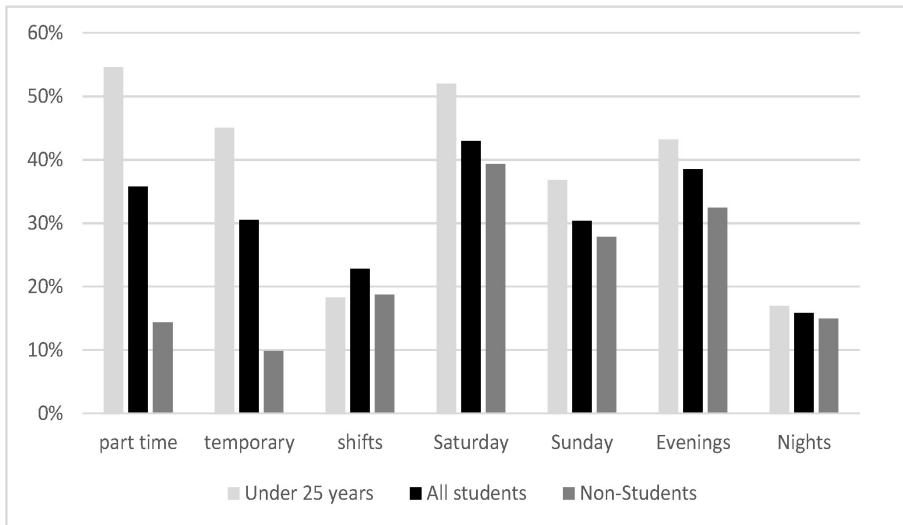


Finding 3: Students prefer work that is flexible and complementary to their studies.

Students fit a specific role on the labor market by providing very flexible labor. Students, particularly young students, are much more likely to work part-time (55% compared to 14% for non-students), on temporary contracts (45% compared to 10% of non-student workers), and also to work on weekends and evenings. This correlation, however, is not clearly visible in shift and night work (Figure No. 7).

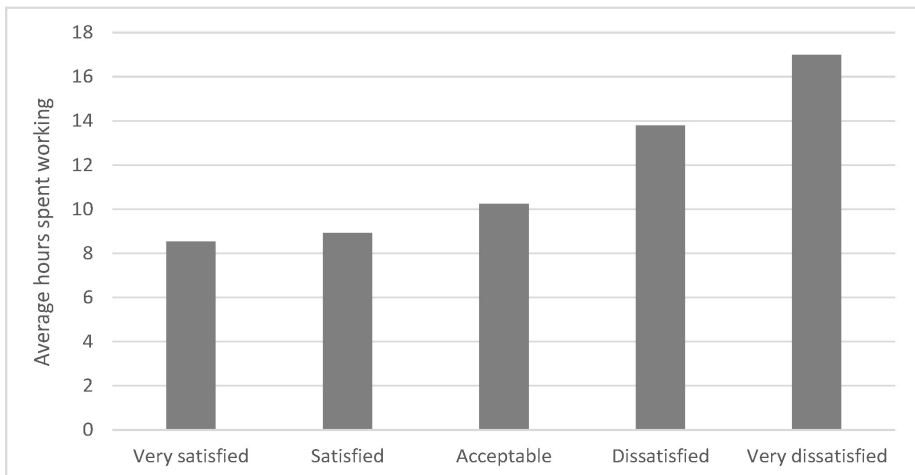
Flexible work tends to reflect student preferences. The data on social aspects of tertiary education gathered within the framework of the Eurostudent project show that students prefer to work about eight hours per week, and get increasingly dissatisfied as their working commitment grows (Figure No. 8).

Figure No. 7. Share of workers in part-time, temporary, and unusual contracts among non-students, student workers in general and students under twenty-five years of age



Source: EU – LFS

Figure No. 8. Average hours worked per level of satisfaction with time spent working



Source: EUROSTUDENT

At the same time, student jobs tend to be present at the higher end of the skill range, rather than in the precarious segment. It is, therefore, reasonable to see student labor as a complementary force answering demands for flexible labor in sectors where the job complexity rules out taking advantage of the reserve of low-skilled unemployed and underemployed workers.

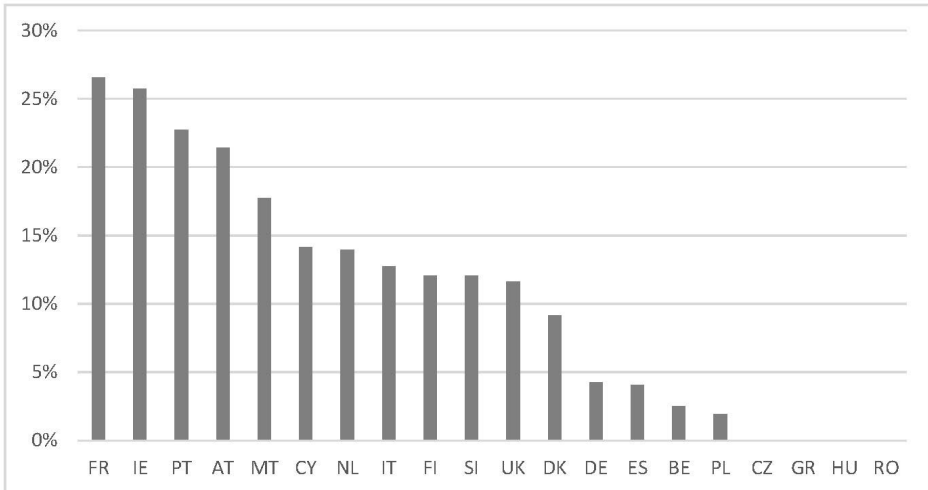
Finding 4: Student labor is often very cheap.

EU-LFS data also allow us to take a look at the wages of workers, although the dataset as distributed to researchers only contains the wage variables per decile. Nonetheless, we are still able to determine the differences in probabilities of having a low income, understood as belonging to the lowest decile of the income distribution. Our analysis is based on the standard Mincer earning function (Mincer, 1979), which is formalized as follows:

$$\ln y = \ln y_0 + rS + \beta_1 X + \beta_2 X^2$$

With y denoting earnings, S years of education, and X years of potential work experience. We implement a further control for gender, working hours, supervisory position, region of work, type of working contract, size of company, and sector of employment.

Figure No. 9. Marginal probability of workers in sales and service occupations belonging to the lowest income decile conditional on the student status



Source: Own calculation based on EU-LFS

What we found (Figure No. 9) is that the effect of being a student does not always come with heightened chance of being low-paid. Indeed, we found no such statistically significant effect in the Czech Republic, Greece, Hungary, and Romania. In France and Ireland, on the other hand, the effect is quite strong and the marginal probability of being low-paid increases by over 25% for student workers. Furthermore, while this is not something that can be researched with our dataset, the share of poorly compensated student workers is largely even higher due to the prevalence of unpaid internships.

Discussion

The youth unemployment problem in Europe is here to stay and higher education is certainly a part of the answer. In spite of the rapid massification of tertiary education, students tend to enter relatively lucrative segments of the labor market and largely stay out of the low-skilled jobs. A combination of flexibility and human capital tends to be particularly in demand during the uncertain times, when employers look to expand without permanently increasing overhead.

Little evidence has been found suggesting that working students are particularly threatened by a precarious labor market position in the low-skilled jobs. Instead, participation in higher education is increasingly common for Europeans well into their thirties in professional positions, although as a complementary activity to their careers. In general, establishing the balance between work and study is important for the students, most of whom appear to have a preference for a work arrangement of about eight hours per week.

In spite of the fast growing number of those enrolled, study still offers a way towards meaningful, quality employment. It, therefore, seems useful to continue the focus on overcoming barriers that prevent young Europeans from enrolling in higher education combined with work in a skilled position. In addition to the existing labor market demand for student workers, which seems resilient to the crisis and possibly even benefits from the reluctance of employers to create regular jobs, the working student experience is equally accessible to both men and women. Consequentially, student employment might contribute to bridging the gender gap in employment.

Nonetheless, we show that student work comes with a risk of receiving a very low wage. While this is to a degree natural, due to characteristics of student workers, we see that even when controlled for this characteristic, the negative effect associated with being a student does not disappear. Rather than focusing on competition for unskilled work, which does not seem to be the most pressing issue, we should perhaps focus more on low-paid skilled work.

Acknowledgements:

The initial research was conducted within the framework of the STYLE research project that received funding from the European Union's Seventh Framework Program for Research, Technological Development and Demonstration under Grant Agreement No. 613256.

Brian Fabo acknowledges the financial support of the Eduworks Marie Curie Initial Training Network Project (PITN-GA-2013-608311) of the European Commission's 7th Framework Program, which allowed extension of the research for journal publication.

The authors declare this is the first time this research piece is submitted for a journal publication.

References

- Autor D. H. and Dorn D. (2009), "Inequality and Specialization: The Growth of Low-Skill Service Jobs in the United States," IZA, Discussion Paper No. 4290.
- Baffoe-Bonnie, John, and Lonnie Golden (2007), "Work-Study: Time Use Tradeoffs, Student Work Hours and Implications for Youth Employment Policy," *SSRN eLibrary*, December, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1078688.
- Beblavý, Miroslav, Sophie Lehouelleur, and Ilaria Maselli (2013), "Useless Degrees or Useless Statistics? A Comparison of the Net Present Value of Higher Education by Field of Study in Five European Countries," <http://www.voced.edu.au/content/ngv58859>.
- Beblavý, M. and Fabo, B. (2015a), "Students in Work and Their Impact on the Labor Market," CEPS Working Document No. 410/July 2015, <https://www.ceps.eu/publications/students-work-and-their-impact-labour-market>.
- Beblavý, M. Fabo, B., and Beblavý, M. (2015b), "Are Student Workers a Threat or a Solution?" CEPS Commentary, July 14, 2015.
- Beblavý, M., Fabo, B., Mýtka-Kureková, L., and Žilínčíková, Z. (2015), "Are Student Workers Crowding Out the Low-Skilled Youth?" STYLE WP 5.3., http://www.style-research.eu/wordpress/wp-content/uploads/ftp/D_5_3_Are_student_workers_crowding_out_the_low_skilled_youth_FINAL.pdf.
- Curtis, Susan, and Rosemary Lucas (2001), "A Coincidence of Needs? Employers and Full-Time Students," *Employee Relations*, 23 (1): 38-54.
- Eichhorst, Werner, Tito Boeri, Michela Braga, An De Coen, Vincenzo Galasso, Maarten Gerard, Michael J. Kendzia, et al. (2013), "Combining the Entry of Young People in the Labor Market with the Retention of Older Workers," *IZA Research Reports*, 53, Institute for the Study of Labor (IZA), <http://ideas.repec.org/p/iza/izarrs/53.html>.

- Gruber, Jonathan, and David A. Wise (2010), *Social Security Programs and Retirement around the World: The Relationship to Youth Employment*, University of Chicago Press.
- Häkkinen, Iida (2006) "Working while Enrolled in a University: Does It Pay?" *Labor Economics*, 13 (2): 167–89.
- Hall Ralph (2010), "The Work–Study Relationship: Experiences of Full University Students Undertaking Part–time Employment," *Journal of Education and Work*, 23(5): 439–49.
- Manning A (2004), "We Can Work It Out: The Impact of Technological Change on the Demand for Low–Skill Workers," *Scottish Journal of Political Economy*, 51(5), 581–608.
- Maxwell, Nan L. (2006), *The Working Life: The Labor Market for Workers in Low–Skilled Jobs*, WE Upjohn Institute.
- Mills, Melinda; Tsang, Flavia; Präg, Patrick; Kai, Ruggeri, Miani, and Celine and Stijn Hoorens (2014), "Reconciling Work, Private and Family Life in Europe," http://ec.europa.eu/justice/gender-equality/files/documents/140502_gender_equality_workforce_ssr_en.pdf.
- Mincer, J. A. (1974), *Schooling, Experience, and Earnings*, NBER.
- Moreau, Marie–Pierre, and Carole Leathwood (2006), "Balancing Paid Work and Studies: Working (–Class) Students in Higher Education," *Studies in Higher Education*, 31 (1): 23–42.
- Pollmann–Schult and Matthias (2005), "Crowding–out of Unskilled Workers in the Business Cycle: Evidence from West Germany," *European Sociological Review*, 21 (5): 467–80.
- Quintini, Glenda, and Manfredi Thomas (2009), "Going Separate Ways? School–to–Work Transitions in the United States and Europe," *OECD Social, Employment and Migration Working Papers*, No. 90, OECD Publishing, <http://dx.doi.org/10.1787/221717700447>.
- Quintini, Glenda, and Sébastien Martin (2014), "Same Same but Different: School–to–Work Transitions in Emerging and Advanced Economies," *OECD Social, Employment and Migration Working Papers*, 154. http://www.oecd-ilibrary.org/social-issues-migration-health/same-but-different-school-to-work-transitions-in-emerging-and-advanced-economies_5jzbb2t1rcwc-en.

Wpływ studentów aktywnych zawodowo na europejskie rynki pracy

Streszczenie

Niezmienne wysoki poziom bezrobocia w Europie doprowadził do przedłużającego się okresu zwiększonej konkurencji o pracę. Jednym z powszechnie omawianych zjawisk jest tzw. efekt wypierania, w którym wykwalifikowani pracownicy podejmując się prac niewymagających wyższych kwalifikacji, wypierają z rynku pracy pracowników niewykwalifikowanych. W literaturze przedmiotu zdania co

do rzeczywistego, aktualnego występowania tego zjawiska są podzielone. Z tego też względu niniejsza praca ma być przyczynkiem do debaty na ów temat poprzez przedstawienie analizy pracy podejmowanej przez studentów, jaką często kojarzy się ze znacznym wzrostem możliwości wyparcia z rynku pracowników niewykwalifikowanych, zwłaszcza w hotelarstwie i handlu detalicznym. Niemniej jednak wyniki badania wskazują, że zależnie od wieku i profilu studentów aktywnych zawodowo, i osób nieposiadających statusu studenta o wykształceniu na poziomie średnim czy wyższym są w dużej mierze podobne.

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