



# **Assessment of the people not in employment, education and training (NEETs) in Bulgaria and policy measures to effectively address their integration**

(VC/2019/017)

Written by Institute for Market Economics (IME)  
September 2019

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**European Commission**  
Directorate-General for Employment Social Affairs and Inclusion  
Directorate B - Employment

**EUROPEAN COMMISSION**

Directorate-General for Employment, Social Affairs and Inclusion  
Directorate B — Employment  
Unit B.5 — Romania, Bulgaria

Contact: [EMPL-B5-UNIT@ec.europa.eu](mailto:EMPL-B5-UNIT@ec.europa.eu)

*European Commission  
B-1049 Brussels*

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## **ACKNOWLEDGMENTS**

The preparation of this document was commissioned by Unit EMPL B.5 to gain a better understanding of the level and distribution of people not in employment, education and training (NEETs) in Bulgaria. Insights from this study can complement policy analysis and support the assessment of the efficiency of active labour market policies and initiatives such as the Youth Guarantee.

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Manuscript completed in September 2019

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Luxembourg: Publications Office of the European Union, 2019

PDF ISBN 978-92-76-09713-6

doi:10.2767/768177

KE-01-19-716-EN-N

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### **SUMMARY**

Inactivity among young people not in employment, education or training (NEETs) is rarely a single-factor issue, but is driven by a variety of personal and socio-economic characteristics. This is all too clear in the case of Bulgaria – a country where the labour market and educational institutions have been struggling to provide inclusion opportunities for a significant share of young people, despite record-high employment and record-low unemployment rates.

The need for better understanding of the factors that determine youth inactivity in the 15-34 age group under review requires using additional sources of information, apart from the headline numbers contained in the Labour Force Survey (LFS). The European Survey on Social Inclusion and Living Conditions (EU-SILC) provides arguably the most comprehensive dataset that may be used to supplement existing information on NEETs, while maintaining representativeness and allowing additional insight into the issues that this group faces. Comparing EU-SILC and LFS data, taking into account necessary methodological considerations, has helped us not only to confirm already established motives and factors in youth inactivity, but also has enabled us to shed light on some additional issues.

Our analysis shows that:

- The total share of NEETs (aged 15-34), as calculated in the SILC dataset for 2017 (22.6%), is three percentage points higher compared to that calculated in the LFS (19.5%).
- SILC estimates show a slightly higher share of NEETs for men and in regions with higher concentration of ethnic minorities, but a slightly lower share of NEETs for groups with high school or tertiary education compared to the LFS.
- The new findings on the basis of EU-SILC data (that cannot be estimated in the LFS dataset), show alarmingly high shares of NEETs both among Roma and among poor households, with NEETs making up more than half of the population in both groups within the age parameters of the study (15-34).
- The observed age distribution of NEETs in the LFS and EU-SILC studies, as well as Employment Agency (EA) data on the age distribution of the registered unemployed show that 30-34-olds form a significant share of all NEETs in the 15-34 age group at national level. NEETs aged 30-34 are also the most numerous age group in two of the country's six regions – the Southwestern and the Northeastern.
- We find that the EU-SILC survey has a better record in reaching out to particular ethnic groups such as Roma, thus providing better coverage in regions where they are prevalent. For instance, the SILC estimation shows the South Central Region of the country as having the highest NEET rate of 31.8% for the 15-34 age group. This significant (8 percentage point) difference, compared with the LFS assessment, means that the South Central Region surpasses the Northwestern Region - usually considered to have the worst labour market conditions in the country.
- It is largely reassuring that there are not many inactive youths in the school-aged group, between 15 and 19, with the exception of the Southern Central and Southeastern regions of the country. This, again, seems to be correlated with the larger presence of Roma in those regions. Breaking down the share of NEETs by education shows that the apparent "breaking point" is the completion of high school (the 12th grade), which significantly decreases the probability of having NEET status.
- Having children appears to be a key point of difference between male and female NEETs, regardless of family size. There are many more female NEETs with children in the household, showing that policies aiming at reducing NEET rates need to look at providing support to young mothers. While a little more than one in ten Bulgarians is in the 15-34 NEETs group, this is true for about one in three of Turkish ethnicity and two in three in the Roma ethnic group. This finding (notably absent from the LFS results) has significant policy implications, as it shows that while the education system and the labour market (including public employment ) manage to a significant extent to encompass those of Bulgarian ethnicity, regardless of their education,

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region or gender, they generally fail to provide the same opportunities to ethnic minorities.

- The data show that being in poor health – and, likely, having a disability – also greatly diminish the possibility of participating actively both in the labour market and in education. This finding, while not surprising, shows the effects that inequality in opportunities (for instance, an accessible environment) can have on socio-economic outcomes among young people.

### **Review of current policies related to NEETs**

Since Bulgaria first presented a Youth Guarantee<sup>1</sup> Implementation Plan on 20 December 2013, NEETs have been one of the priority target groups of active labour market policies (ALMPs). The main emphasis of the government's efforts regarding NEETS is to achieve the goals of the European Youth Guarantee (EYG), while implementation gets significant support under the Youth Employment Initiative (YEI). At the same time, there is no single dedicated system for tracking and mapping NEETs in Bulgaria. This creates a problem for analysis, aggravated by the lack of a tool to systematically evaluate labour market outcomes among EA clients.

Because of these issues, evaluations of the effects of various programs and measures, including the measures under the National Action Plan on Employment (NAPE), are usually done using surveys among participants. For instance, the latest such evaluation of YEI measures shows that positive employment outcomes are observed among the participants of all four key measures financed under the YEI with "Youth Employment" posting the highest 73% share and "Active" and "Ready for work" both registering 16%.

By the end of 2018, the four key measures financed under the YEI (the fourth being "Employment and Education for Young People") involved more than 52.6 thousand young people aged 15-29 and generated total expenditure of more than 150 million leva. These four operations pertain to all target groups under the YEI in Bulgaria, but the extent to which they manage to contribute to the achievement of the 2023 goals set out in the "Human Resources Development" Operational Program varies. In particular, the target number of Roma aged 15-24 and 25-29 to be included by 2023 has already been surpassed 3.3 and 4.5 times, respectively. At first glance, this makes it look as if the work of Roma mediators and other labour market initiatives has been relatively successful. In fact, closer examination shows that the initial goal for Roma inclusion was set far too low.

Despite some shortcomings of the strategic planning process, our review of current identification and activation policies show that the significance of the ethnicity factor has clearly been recognised by the authorities – Roma are the only ethnic group that have dedicated mediators (who are usually Roma themselves) under a targeted economic activation programme run by the Employment Agency.

Roma constitute a significant share (50.2%) of all the 10 000 people activated by the EA in 2018 under the "Activating Inactive People" program. At the same time, they account for only 7% of the 18 000 people involved in education and training programs (8.5% among young Roma). However, since more than half of all activated people in 2018 have primary or lower education (close to 60% in the regions of Burgas and Plovdiv), it is not surprising that labour offices struggle to provide them with employment opportunities, which shows the negative effect of poor educational outcomes on labour market prospects.

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1 The European Youth Guarantee states that youth living in an EU country will receive a good-quality offer of employment, continued education, apprenticeship or traineeship within four months of becoming unemployed or leaving formal education.

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The discrepancy in the ability of public institutions to activate and then secure employment/training for Roma is especially visible in the territory covered by Regional Employment Service Directorate (RESD) of Plovdiv (the districts of Plovdiv, Pazardzhik and Smolyan), where the high share of activated Roma has not translated into higher-than-average involvement in labour market initiatives.

Our review of policies that we identified as relative to NEETs has also shown that:

- The sum dedicated annually to implementing the National Action Plan on Employment (NAPE) has remained flat at about 73 million leva since 2010, despite changing labour market conditions such as the significant increase in the minimum wage (from 240 leva in 2010 to 560 leva in 2019). This dynamic has meant that the scope of some ALMPs had to be scaled back - if we exclude youth policies, there has been no significant shift in the structure of these policies in line with the labour market situation.
- Our calculations using 2018 administrative data provided by the EA show that the participation of young unemployed people in employment and training programs is indeed higher than that of other age groups. While registered unemployed aged 15-29 accounted for 11.1% of all registered unemployed in 2018, they made up 15.9% of all unemployed included in employment and training programs. Based on the amounts actually spent on each of the national programs and the share of young people that they include, we estimate that in 2018, 16.7% of all expenditure under the national employment programs was targeted at unemployed aged 15-29.
- EA's latest available data shows that the age distribution of the registered unemployed supports the significance of the 30-34 year olds in the extended 15-34 age bracket of NEETs, that we established in our analysis of LFS and SILC data.

### **Regional Focus Groups**

To gain further insight into what keeps young people out of education and the labour market, the IME convened six focus groups in places we identified as the three regions with the highest concentration of NEETs (both in terms of their share, as well as their number). In each of these regions, we held two separate meetings (in two different districts) with local representatives of labour bureaus, social services, educational institutions, municipal administrations, NGOs, industrial associations, as well as youth and Roma mediators, among others. To acquire quantitative data on some of these issues, all focus group participants were asked to fill in an anonymous survey, which, apart from confirming our overall assessment of the situation of NEETs in these regions, also showed that:

- The most prevalent personal reason for youth inactivity was unrealistic wage expectations, followed by reliance on the income of other household members (especially those working abroad);
- Lack of jobs (both in general and suitable for young people in particular) is viewed as having a more significant effect on young people in Northwestern Bulgaria than in other parts of the country;
- Local experts are reluctant to recommend the services of private labour intermediation agencies, especially when it comes to seeking employment opportunities abroad.

### **Recommendations**

While record-high employment and record-low unemployment rates, combined with active policies to identify and activate young people have yielded some positive results in the past few years, more could be done to ensure the sustainable inclusion of young people.

Most of the recommendations of this study confirm the main challenges facing the implementation of the Youth Guarantee in Bulgaria, as outlined by the European Commission.

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- Even though the increasing focus on activation measures in recent years has had a positive effect on both national and local NEET rate levels, the efforts of responsible institutions could be better channelled if some regional characteristics are taken into account. For instance, **our analysis clearly shows that there should be more emphasis on identification and activation measures carried out in the South Central Region.**
- In most regions of the country, Roma activation policies have yielded positive results, which is why **the absence of Roma mediators from some of the district centres with high concentration of Roma should be addressed.**
- Daily labour migration is hindered by the lack of sufficient organized transportation in some parts of the country. **Limited use is made of current measures to support daily workers, which shows that the criteria for them may be too restrictive.** Because supporting the mobility of an employed person is bound to have a positive net fiscal effect - even on the minimum wage - when compared to the cost of paying out unemployment and/or social benefits, it may be necessary to review these measures.
- **Improving the coordination between youth mediators and labour bureaus** is an important step to make activation efforts effective. The lack of sufficient feedback that youth mediators receive regarding the outcome of the registration process is part of a broader issue - the lack of ways of tracking labour market outcomes among participants in various employment and training schemes.
- Our analysis of LFS, EU-SILC and EA data has underlined the significance of the 30-34 year age subgroup to the total NEET rate of the 15-34 age group. Thus a significant share of young people, that otherwise meet all the criteria for being classified as NEETs, are referred to general employment support programs. While setting age limits for determining access to different employment and education programs is vital to ensure they are effective, it is probable that **widening the scope of at least some measures to include the 30-34 year olds** may have a positive effect on their future employment prospects.
- Because young people lack experience in the labour market, they have unrealistic wage expectations. Addressing this is a challenging task. **Further development of career guidance services and building up a sufficient number of success stories** might help both youth and Roma mediators in their activation efforts.
- The recently introduced mechanism<sup>2</sup> aimed at improving educational outcomes targets a very small fraction of current NEETs (because of its implied upper age limit). **Making it function smoothly and readjusting it in the light of the problems identified may be vital to lowering NEET rates, because it addresses one of the main factors, dropping out of school.** Even though dropout rates declined in both 2017 and 2018, the overall trend is far from encouraging, and these rates have stagnated in two of the country's regions with the largest share of the Roma population (Southeastern and South Central).
- Our study also revealed a number of important methodological considerations that should be taken into account by the relevant institutions. It is important that **the National Statistical Institute (NSI) moves forward with introducing a more contemporary means of surveying the population**, as a way to reduce the non-response rate. Reducing the number of districts for which data on NEETs is not sufficiently representative is vital to shaping region-specific policy responses.

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2 The formal name of the mechanism is "Mechanism for cooperation of the institutions responsible for the enrolment and retention in the educational system of children and students in compulsory pre-school and school age".

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## **INTRODUCTION**

While NEETs represent a relatively narrow group of the general population and NEET rates in Bulgaria have been going down, the significance of this particular group to the current and future socio-economic development of the country cannot be overstated. Bulgaria's economy is faced with deteriorating demographic conditions and record-high labour shortages, so the country has to strive to make the most of its available human resources. This underlines the need for the development and maintenance of tools for the timely identification and labour market integration of inactive young people.

The findings of this study and the ensuing policy recommendations are based on three separate analytical efforts: 1) a statistical analysis of LFS and EU-SILC anonymised microdata, providing new evidence for the significance of some of the factors driving youth inactivity; 2) a policy analysis based on the latest available information for the implementation of programs and measures related to NEETs; 3) meetings with representatives of responsible institutions (including six regional focus groups).

Our analysis points to the need for further policy and operational efforts by responsible institutions to come up with successful responses to the issues of youth inactivity in Bulgaria. We provide evidence of the need for special emphasis on some groups in particular, such as NEETs living in South Central Bulgaria, as well as NEETs in the 30-34 age group, and women from ethnic minorities. We find that increasing the reliability of NEET-related data and introducing the practice of tracking labour market outcomes among participants in various measures and programs would be an important step to make them more effective.

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## **LITERATURE REVIEW**

The concept of youth not in employment, education or training (henceforth NEETs) is relatively new, and is a part of focused efforts to identify subgroups in the labour market, particularly as targets of policy measures. The need to measure young NEETs is part of a broader push to narrow the target populations of social policies and to focus these on those most in need of assistance. This, combined with the policy focus on the transition from education to the labour market, has led to the need to precisely measure the share of youth that fall in the NEET category – an effort spearheaded by Eurostat and the International Labour Organization (ILO).

However, this does not mean that there is a single, universally accepted definition of the term. On the contrary, as Elder (2015)<sup>3</sup> demonstrates how the use of competing definitions can lead to somewhat different estimates of the NEET population. In the broadest sense, she differentiates between a “strict” definition of NEET youth, which covers only those who meet both requirements (not in education or training, and unemployed) and a “broad” one, which includes only unemployed students. Elder finds that the difference between the two definitions is about 1.4% on average over 41 countries, which is quite significant, considering that these estimates are used for targeting social policies and the allocation of funds. In most cases (particularly in Europe, with which this study is concerned) the “strict” definition is preferred, as it narrows down the group.

The oldest use to be discussed here is the one proposed by Hussmanns et.al (1990)<sup>4</sup>, who set the standards for the ILO measurements of the characteristics of the labour force. Their treatment of registering unemployment for students is of particular interest here, as they set the same standard for classifying students and youth as unemployed, as for the general population. This, in turn, paves the way for the operationalization of the concept of NEETs and the application of the same methodological apparatus to it as to the general study of the specifics of the labour force.

Two decades later, the ILO is focusing increasingly on the issues of youth unemployment and inactivity. From a methodological standpoint, the currently used definition of NEETs is found in the organization’s “Decent Work Indicators”<sup>5</sup> handbook for producers of statistical information, which details the exact procedure and data used to compute the share of NEETs in a given population. It explicitly stipulates the definition, even though the suggested application is to a significantly smaller age group, between 15 and 24 years old (as differentiated from the Eurostat approach, which usually covers the 15-29, and more recently, the 15-34 age group), and solidifies the above described “strict” approach to the concept.

The ILO is also responsible for the most comprehensive analysis of youth unemployment and inactivity, the annual Global Employment Trends for Youth, last published in 2017<sup>6</sup>. On the global scale, the ILO finds that youth unemployment is a growing problem, but this growth is largely confined to the developing world. In Europe, the trend is the opposite – since 2013 youth unemployment has been diminishing, and the report partially attributes this to the focus of social policy on youth and the transition from education to work. The report, however, acknowledges that there are still significant differences in terms of the gender distribution of NEETs, as well as between the different countries in the European Union (EU).

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3 Elder, S. (2015). What Does NEETs Mean and Why is the Concept so Easily Misinterpreted? ILO.

4 Hussmanns, R., Mehran, F., & Varmā, V. (1990). Surveys of Economically Active Population, Employment, Unemployment, and Underemployment: An ILO Manual on Concepts and Methods. ILO.

5 ILO. (2013). Decent Work Indicators: Guidelines for Producers and Users of Statistical and Legal Framework Indicators.

6 International Labour Office. (2017). Global Employment Trends for Youth 2017: Paths to a Better Working Future.

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Naturally, Eurostat provides a much more detailed focus on the developments in the education and labour market activity of youth in the EU, chiefly in its flagship publication "Being Young in Europe Today"<sup>7</sup>. It broadly confirms the findings presented in the ILO report above, focusing more on the particularities and differences among the member states. According to the latest publication, the main issues concerning NEETs are providing solutions for long-term unemployed youth and addressing the issues preventing the easier access of young women to the labour market.

Some earlier work by Bruno et al. (2013)<sup>8</sup> focuses on the regional aspect of the NEET phenomenon, and particularly the way the 2009 economic crisis affected the dynamics of the NEET rates at the regional level. Broadly, they find that NEET rates are quite robust over the period they study in most regions, but that different types of youth react differently to crisis conditions, with males in particular being more sensitive to changes in economic growth (here used as a proxy for economic crisis). The authors find that there are significant differences between the different parts of the EU at regional level, grouped according to their geographical distribution. According to the models presented in the paper, NEET rates in Continental Europe are the least sensitive to changes in economic growth, while those in the Mediterranean are very sensitive, and at the same time the Continental and Northern regions have the easiest time in the post-crisis recovery of the labour market as relative to youth.

O'Reilly et al. (2015)<sup>9</sup> focus on the predictors of NEET rates across Europe, as well as the implications of EU policy on the phenomenon. They claim that the current conditions on the labour market demand that youth possess more flexible work skills and adapt more frequently to changes in market conditions. The authors say that there is a risk of a vicious spiral, of youth with no work experience falling behind their peers in terms of job eligibility as time progresses, thus becoming less capable of finding jobs, in turn resulting in lower living standards, self-esteem and general attitude towards the political and economic system.

Some studies, similarly to the current one, focus on the particularities of the NEET group in different countries. Alfieri et al. (2015)<sup>10</sup>, for instance, examine the backgrounds of Italian inactive youth, focusing on the impact of family background. They find that the characteristics of the household (and particularly the education of the parents) are a strong predictor of NEET status for both genders. The results are less conclusive when it comes to the operationalized family environment characteristics, such as intrusiveness and parental support. In addition, Vancea and Utzet (2018)<sup>11</sup> study the transition between education and work in Spain, remarking that in recent years this transition has become increasingly difficult. As expected, the types and length of education are of the highest importance in predicting NEET status, as well as previous periods of unemployment, suggesting a vicious cycle of unemployment. Vancea and Utzet also emphasise the importance of the family environment and psychological barriers.

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7 While the full publication is from 2015, all the online data and explanatory texts have been updated in 2017: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Being\\_young\\_in\\_Europe\\_today](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Being_young_in_Europe_today)

8 Bruno, G. S., Marelli, E., & Signorelli, M. (2013, August). Young People in crisis: NEETs and Unemployed in EU Regions. *In 53rd ERSA Congress*, Palermo, 27-31.

9 O'Reilly, J., Eichhorst, W., Gábos, A., Hadjivassiliou, K., Lain, D., Leschke, J., ... & Russell, H. (2015). Five Characteristics of Youth Unemployment in Europe: Flexibility, Education, Migration, Family Legacies, and EU Policy. *Sage Open*, 5(1), 2158244015574962.

10 Alfieri, S., Sironi, E., Marta, E., Rosina, A., & Marzana, D. (2015). Young Italian NEETs (Not in Employment, Education, or Training) and the Influence of Their Family Background. *Europe's Journal of Psychology*, 11(2), 311.

11 Vancea, M., & Utzet, M. (2018). School-to-Work Transition: The Case of Spanish NEETs. *Journal of Youth Studies*, 21(7), 869-887.

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**1. MAPPING OF NEETs AND ASSESSING CONSISTENCY BY USING THE LABOUR FORCE SURVEY (LFS) AND THE EUROPEAN UNION STATISTICS ON INCOME AND LIVING CONDITIONS (EU-SILC)**

To be able to compare the share, characteristics and specifics of NEETs in the age group between 15 and 34 in the LFS and SILC datasets, it is necessary to apply the same definition and corresponding variables in the two datasets, or at least match them as closely as possible. The starting point is the singular definition of NEET status used by Eurostat; in order to be classified in this group, a person needs to fulfil two criteria:

- 1) She/he needs to be not employed i.e. unemployed or inactive according to the definition of the ILO<sup>12</sup>, and
- 2) She/he needs to have not received formal and informal education in the four-week period before the survey takes place<sup>13</sup>.

The age group is irrelevant to this definition; it can be applied to any narrower or broader part of the workforce, as long as its participants are eligible for both employment and educational activities.

The larger issue with applying this definition both to the LFS and the SILC datasets is the second condition of the definition, particularly its relatively short time-frame (four weeks). This is not an issue as far as the LFS study is concerned, as the questions relating to the educational status of the interviewees are worded to reflect the specifics of this definition, and thus cover both short-term and long-term education and training. The SILC study, however, asks only about a long-term educational status, and is not as sensitive to short-term changes.

This means that every comparison between the estimated shares of NEETs in the two datasets must take into account the **difference between the questions regarding education** included in them - the LFS questionnaire is much more sensitive to changes in the educational status than the SILC one. For instance, a student that is between high school and university, or between university degrees will temporarily move in and out of the NEET group between the quarterly rounds of the LFS, regardless of his intention to continue his or her education<sup>14</sup>.

Another issue with matching the estimation of the share of NEETs is the **lower bracket of the age group in the LFS survey**, as SILC data contain the educational status of the individuals included in the study only for the age group of 16 and above. This means that the definition of NEETs between the ages of 15 and 16, based on SILC statistics, will be incomplete. This issue can be partially remedied by adjusting the share with the official school dropout rate and enrolment rate for this particular age cohort as reported by the National Statistical Institute (NSI), under the assumption that the majority of 15-16 year olds would still be in school (as education is mandatory until reaching 16 years of age) as long as they are not reported as dropouts or not enrolled as students.

Table 1 lists the variables from the two datasets that will be used to meet the above definition best.

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12 See here full definitions of the terms and relevant applications here <https://www.ilo.org/public/english/bureau/stat/download/module.pdf>

13 Full definition in the Eurostat glossary here <https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:NEET&redirect=no>

14 While there are individual-level attempts to correct for this effect in the process of questioning the interviewees, this is not always possible.

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**Table 1. Variables from the SILC and LFS used for estimating the share of NEETs**

Criterion	SILC variables	LFS variables
Age	RB080 – year of birth	YEARBIR – year of birth
Educational status	PE010 – current education activity	EDCUSTAT – students or apprentice during the last four weeks (formal education) COURATT – attendance to taught learning activities in the last four weeks (informal education)
Occupational status	RB210 – basic activity status	WSTAOR – labour status during the reference week SEEKWORK – seeking employment in the previous two weeks
Additional cross-check variables	PL031 – self-defined current economic status PL035 – worked at least one hour during the previous week PL020 – actively looking for work PL025 – available for work	STAPR01Y – economic activity MAINSTAT – main labour status EDUC4WN - education or training received during the preceding four weeks (formal + non-formal)

Source: LFS and SILC dataset documentation

### 1.1. Investigating the Diversity of NEETs

Based on the variables described above, this section outlines the estimations of the share of NEETs in the 15-34 age group according to the SILC and LFS datasets. The estimates at the level are supplemented by estimates based on gender, region, poverty status and other key variables.

This section then compares the obtained estimates against the corresponding estimations derived from the LFS dataset, where this is possible. Table 2 outlines the main findings of the alternative computations.

**Table 2. Shares of NEETs in the 15-34 age group in the SILC and LFS studies**

Indicator	SILC estimation	LFS estimation
Overall share of NEETs	22.6%	19.5%
Share of female NEETs	25.5%	24.1%
Share of male NEETs	19.8%	15.1%
Northwestern Region	30.3%	30.6%
Northern Central Region	23.1%	21.5%
Northeastern Region	24.2%	21.2%
Southeastern Region	27.9%	24.8%
Southern Central Region	31.8%	23%
Southwestern Region	11.5%	10.9%
Bulgarian ethnicity	14.1%	N/A
Turkish ethnicity	30.1%	N/A

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Roma ethnicity	61.3%	N/A
Other ethnicity	(12%)	N/A
Poor (SILC definition)	54.7%	N/A
Non-poor (SILC definition)	13.3%	N/A
Severely materially deprived	43.6%	N/A
Non-severely materially deprived	13%	N/A
Less than primary education	(87.3%)	31.7%*
Primary education	66%	
Lower secondary education	30.1%	
Upper secondary education <sup>15</sup>	14.2%	16.1%
Vocational secondary education	17.8%	N/A
Tertiary education	8.8%	10.7%
Urban	12.7%	12.4%
Town or suburb	25.6%	21.7%
Rural	35.9%	31.2%

*Source: Official Eurostat and NSI data based on LFS, IME estimations based on SILC microdata. Figures in parentheses have lower statistical accuracy due to a small number of representatives included in the overall SILC sample of the age group. \*Data from the LFS group together those three levels of education, while SILC data breaks them down.*

Overall, the estimations of the share of NEETs in the 15-34 age group in the SILC dataset are quite close to those derived from the LFS. While in most cases the former are slightly higher, this could at least partially be attributed to statistical accuracy and precision (as these measures are not precise, but rather ballpark estimates which can differentiate as much as 1-2% from the actual real-world distribution, depending on the country<sup>16</sup>). Hence, the SILC-based estimates of the NEETs population broadly corroborate the findings of the LFS survey.

The total share of NEETs as calculated in the SILC dataset for 2017 is three percentage points higher than that calculated in the LFS, but when considering this, we need to keep in mind that the possible statistical error of both estimates for Bulgaria is slightly above 1%. This means that in a scenario in which the LFS slightly underestimates, and the SILC slightly overestimates, the share of NEETs the difference practically disappears, potentially to less than 1%. It is, however, much more important to examine the breakdowns by region, education, ethnicity and gender, as these offer much more insight both into the differences between the two datasets, and into the specifics of NEETs in Bulgaria. In this section we examine only the relative share of NEETs in these categories, leaving the nominal distributions for the next one.

The estimations derived from SILC and LFS seem to be significantly closer when it comes to women compared to men. Given the lower general employment rate of females and the previously described particularities of extended maternity in Bulgaria, the gap between the share of male and female NEETs seems quite self-explanatory. **Yet, the ability of SILC to filter in more male NEETs, while reaching practically the same conclusion as**

15 Lower and Upper secondary education correspond to ISCED Levels 2 and 3, respectively. For Bulgaria, ISCED Level 2 is considered finished at the end of the 7<sup>th</sup> grade, and Level 3 – at the end of the 12<sup>th</sup> grade.

16 On the accuracy of the data included in the SILC dataset, see Verma and Betti (2010), available online here: [https://www.researchgate.net/profile/Donald\\_Williams5/publication/228217367\\_Educational\\_Intensity\\_of\\_Employment\\_and\\_Polarization\\_in\\_Europe\\_and\\_the\\_US/links/02e7e529737cc3bbbf000000.pdf#page=59](https://www.researchgate.net/profile/Donald_Williams5/publication/228217367_Educational_Intensity_of_Employment_and_Polarization_in_Europe_and_the_US/links/02e7e529737cc3bbbf000000.pdf#page=59)

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**LFS regarding women** is quite curious. This can be a function of the slight gender imbalance of the SILC sample, which contains more men than women in this age group. It is also notable that the overall increase in the share of NEETs (according to the SILC study compared to the LFS-based figures) is primarily driven by the increase in the share of men not in employment or education.

As far as the shares of NEETs in the six regions of Bulgaria (NUTS 2) is concerned, estimating them on the basis of SILC data brings about a significant reshuffling, and in different direction for the separate regions. The most important difference by far is that the **SILC estimation puts the South Central Region of the country as the region with the highest NEET rate** of 31.8% (a quite significant 8 percentage point difference compared to the LFS) in the 15-34 age group, toppling the Northwestern Region, usually considered to have the worst labour market situation in the country, by a large margin. Judging from the results of other regions, the **LFS and SILC data are pretty close when it comes to regions with a low share of ethnic minorities**. The results for the Southwestern and North Central regions, for instance, are very close to each other according to both datasets. However, when it comes to regions with higher shares of ethnic minorities (the South Central and the Southeastern regions, in this case) the differences are clearly visible. In other words, a tentative conclusion can be reached that the **SILC survey does a better job in reaching out to particular ethnic groups**, thus providing better coverage in regions where those are prevalent. Unfortunately, the LFS microdata do not provide information on the ethnicity of the respondents, which could corroborate this claim further.

Across the three major ethnic groups in Bulgaria, the calculated shares of NEETs are in line with preliminary expectations. While a little more than one in ten Bulgarians is in the group that neither studies, nor works, this is true for about one in three for the Turkish ethnicity and **two in three people for the Roma ethnic group**. This finding (notably absent from the LFS results) has significant policy implications, as it shows that while the education system and the labour market (including the public employment service) manage to a significant extent to involve those of Bulgarian ethnicity, regardless of their education, region or gender, they generally fail to provide the same opportunities to ethnic minorities. The same can be seen in the difference of the share of NEETs between poor- and non-poor households<sup>17</sup>, as **more than half of the poor people in the 15-34 age group are estimated to be NEETs, and nearly half of those, who live in severe material deprivation**. It is widely accepted that both finding work and participating in education are key drivers for alleviating poverty<sup>18</sup>, but it seems that the poor young are failing to find both work and education opportunities, which in turn sharply raises the probability of them remaining in poverty in the future.

Breaking down the share of NEETs by education also brings little surprise. The apparent “breaking point” here is the completion of high school (the 12<sup>th</sup> grade) which significantly decreases the probability of having NEET status. As expected, fewer **than one in ten people with tertiary education are NEETs**. Here, there are also noticeable differences between the SILC and LFS estimations, as according to SILC, the share of NEETs among the population with high school (12<sup>th</sup> grade) and the one among those with tertiary education are both significantly lower compared to those estimated by the LFS.

Finally, as far as urbanization is concerned, both SILC and LFS give a similar assessment of the shares of urban NEETs, but diverge when it comes to their prevalence in towns and rural areas; this difference is most likely a consequence of the inability of LFS, discussed

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17 It has to be noted that while the shares of NEETs in the table above are derived from the personal data files of the SILC microdata, the SILC study considers poverty at the level of the household, and not at the individual level due to shared income and expenses; thus, individuals in the same household have the same poor or non-poor status.

18 Nikolova, D. et al. (2016). Poverty in Bulgaria: Education and Employment as Factors Driving Income and Social Inequality. Institute for Market Economics. Sofia, Bulgaria.

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above, to successfully reach certain groups, particularly poorer people and ethnic minorities, which are typically more often found in sparsely populated areas. As for the shares themselves, these are as expected – **less populated areas with tighter job markets and fewer opportunities for education have a larger share of NEETs**, up to more than a third of the population under review here in rural areas.

To summarise this comparison: SILC estimates a slightly higher share of NEETs in the 15-34 age group, especially when it comes to men and to regions with higher ethnic minority population, but a slightly lower share of NEETs for the groups with high school or tertiary education compared to the LFS. The new findings on the basis of SILC data that are not estimated in the LFS dataset, show alarmingly high shares of NEETs both for Roma and for poor households, with NEETs making up more than half of the people in both groups within the age bounds of the study (15-34).

One of the goals of this study is to assess whether previously available LFS data over- or underestimates the number of NEETs in Bulgaria and in respect of which groups. While this was referred to a certain extent earlier in the text, Table 3 below shows the difference between the estimations based on the two datasets, attempting to systematize the assessments of over- or underestimations.

**Table 3. Difference between the estimations of the share of NEETs in the 15-34 age group based on the SILC and LFS studies**

Indicator	Difference between LFS and SILC estimations
Overall share of NEETs	-3.1%
Share of female NEETs	-1.4%
Share of male NEETs	-4.7%
Northwestern region	+0.3%
North Central region	-1.6%
Northeastern region	-3%
Southeastern region	-3.1%
South Central region	-8.8%
Southwestern region	-0.6%
Tertiary education	+1.9%
Upper secondary education	+1.9%
Urban	-0.3%
Town or suburb	-3.9%
Rural	-4.7%

*Source: Official Eurostat and NSI data based on LFS, IME estimations based on SILC microdata.*

As can be clearly seen in the table above, the initial expectation that the LFS study overestimates the share of NEETs holds true only in several cases. LFS actually underestimates the number of NEETs in most cases, at least compared to estimates based on EU-SILC. This is not to say that either study is “correct”, but that they complement each other quite well. It is also evident that there are some areas – especially the South Central region of the country – where the LFS fails to accurately represent the real distributions of the population and their economic activity. We need to also mention, however, that the samples of all studies carried out do not represent the current population precisely, as it is expected that there will be significant corrections in sampling after the 2021 census in Bulgaria. Here we also need to bear in mind that both studies have among the highest standard errors for Bulgaria among the EU countries, so when we account for the permissible inaccuracies the estimations based on them are even closer together.

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**Key characteristics and distribution of NEETs in the 15-34 age group**

It is also worthwhile to examine some of the key factors and characteristics of the NEET population as a first step to determining the key drivers behind their status. This section will do so on a descriptive basis; modelling the causes of the NEET status is reserved for a later part of the study. It will focus on describing primarily the self-described reasons for the lack of employment – this allows further narrowing the scope of the NEET group, particularly for the purposes of policymaking.

While it is indisputable that policies aimed at labour market activation and employment should be able to activate NEETs towards either employment or education opportunities, narrowing the scope to those who actually need assistance in returning to education or (re)entering the labour market would greatly improve the efficiency and results of those programs.

Here we also aim to compare the number of NEETs in different demographic, regional and educational groups estimated via the SILC and LFS studies and further quantifying the differences presented in the previous section.

**Table 4. Number of NEETs in the 15-34 age group (SILC and LFS), 2017 estimates**

Indicator	SILC estimation (thousands)	LFS estimation (thousands)
<b>Overall number of NEETs</b>	<b>353.3</b>	<b>309.3</b>
Number of female NEETs	193.1	182.5
Number of male NEETs	159.6 <sup>19</sup>	121.7
Northwestern Region	43.3	47.1
Northern Central Region	39.2	35.6
Northeastern Region	50.7	45.8
Southeastern Region	61.8	52.9
Southern Central Region	96.9	69.7
Southwestern Region	59.1	58.1
Bulgarian ethnicity	166.1	N/A
Turkish ethnicity	40.1	N/A
Roma ethnicity	135.2	N/A
Other ethnicity	1.3	N/A
Poor (SILC definition)	189.8	N/A
Non-poor (SILC definition)	161.7	N/A
Severely materially deprived	211.5	N/A
Non-severely materially deprived	140.5	N/A
Less than primary education	35.7	145.5*
Primary education	49.1	
Lower secondary education	115.9	

19 The number of male and female NEETs do not add up to the total number of NEETs due to rounding and the precision and permitted error of the shares calculated on the bases of the studies; in this case adding up the male and female NEETs according to SILC is 600 people “short” of the calculated total number. This will be true for the rest of the subgroups.

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Upper secondary education <sup>20</sup>	41.9	124.8*
Vocational secondary education	78.5	
Tertiary education	28.5	35.1
Urban	93	98.6
Town or suburb	97.6	71.9
Rural	161.3	136.2

*Source: IME estimations based on LFS and SILC microdata and demographic data from the NSI. Figures in parentheses have lower statistical accuracy due to a small number of representatives included in the overall SILC sample of the age group. \*Data from the LFS group together those three levels of education, SILC data breaks them down.*

The distribution of the number of NEETs in the 15-34 age group paints a slightly different picture compared to the shares, and, again, helps in assessing the differences between the estimations based on the two datasets. First, it appears that SILC has managed to “include” 44 000 more NEETs compared to the LFS. These, however, are far from evenly distributed – while there are about 10 000 “additional” female NEETs, there are almost 38 000 males. The estimations for most regions, based on the SILC datasets are quite close to the LFS-based statistics, with differences within 5000 in most regions. The odd one out here is the Southern Central region, where there is a difference of close to 30 000 NEETS between the two studies. Comparisons can also be drawn between the NEETs estimates as broken down by education levels. According to SILC, the largest group of NEETs are people who have lower secondary education – 116 000, or almost a third of the NEETs in Bulgaria. It is also curious that the number of those with tertiary education is lower according to SILC-based estimations, with the difference being 7000 people. The same is true for urban NEETs, as the increases are mostly in rural areas.

Broken down by the various types of inactivity, according to EU-SILC most NEETs in the 15-34 age group are unemployed – those are about 204 000 people, and the second largest group are those carrying out domestic activities – 75 000. These numbers are quite encouraging, as the former group are people who by definition are seeking work, and given favourable labour market conditions, are likely to find jobs in the future, while the latter are fulfilling an alternative social function. The other two groups – those with permanent disabilities or who are medically unfit for work and the “other” inactive, however, add up to 25 000 and 48 000 people, respectively.

While according to the SILC estimations there are still more female than male NEETs, the difference becomes significantly smaller – 34 000 instead of 61 000. As far as the regional distribution is concerned, NEETs seem to be relatively evenly distributed around the country, with the exception of the South Central region, which according to the SILC data, contains almost a third of all of the inactive youth in Bulgaria, which again underscores the need to focus more policy attention on this particular region. It should also be noted that the estimations based on LFS also put the South Central region in the lead in terms of the total number of NEETs, but its NEET population is much closer to the rest of the regions.

As expected, the largest number of NEETs is found in the majority ethnic group – Bulgarians - 166 000 according to the SILC estimations. A close second, however, is the number of Roma NEETs – 135 000, even though the overall number of Roma is significantly smaller. It notable that the distribution of NEETs from poor and non-poor households is almost identical, which in turn means that poverty is by no means the only reason for inactivity. This is not true, however, for severe material deprivation, where a significantly larger number of NEETs fall in this category. Based on the longitudinal component of the SILC survey, it would be interesting to explore whether it is more likely for poor or non-

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<sup>20</sup> Lower and Upper secondary education correspond to ISCED Levels 2 and 3, respectively. For Bulgaria, ISCED Level 2 is considered finished at the end of the 7<sup>th</sup> grade, and Level 3 – at the end of the 12<sup>th</sup> grade.

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poor NEETs to find employment or education over the course of several years. Yet, this is beyond the scope of this study and could be the focus of future research efforts.

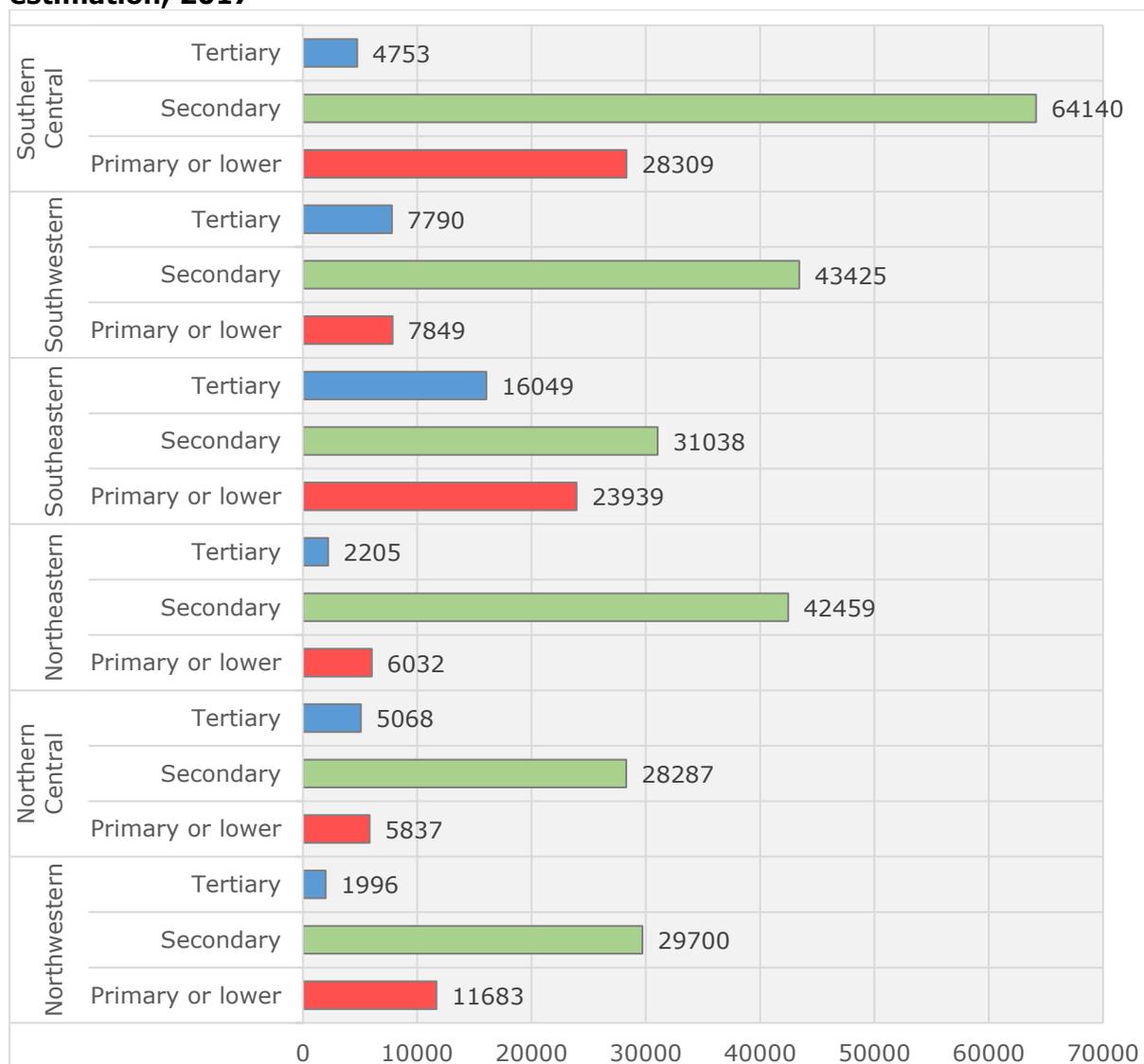
On the education side, the number of NEETs with primary or less-than-primary education is relatively small – 49 000 and 36 000, respectively. As is evident from the following models, however, those are the inactive youth that are least likely to find employment, as they lack even basic skills needed for work. As expected, the largest number of NEETs have lower or upper secondary education, since this is by far the most common type of education found in the population at large. As calculated on the basis of SILC, those with lower secondary education comprise by far the largest group of inactive youth (116 000 people); it is no accident that **this is also the stage of school education at which the risk of dropping out is largest**. Another interesting finding is the large number (79 000) of NEETs with vocational education. A likely reason behind this is the significant mismatch between the types of vocational education offered and the needs of the labour market, as well as the lack of general adoption of the dual education approach in more vocational schools.

Finally, almost half of NEETs in the 15-34 age group in Bulgaria live in rural areas, where there are much fewer educational and employment opportunities. It is curious, though, that the distribution between urban areas, and suburbs or smaller towns is almost identical; however, we need to take into account the different distribution of the total population between the different urbanized areas.

These distributions point to several areas where more detailed analysis would be needed. Due to statistical power considerations, we will focus on the regional, educational and ethnic groups; this aims to profile NEETs in the different groups further. First, we examine the distribution of NEETs by region and education, as presented in Figure 1 below.

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**Figure 1. Number of NEETs in the 15-34 age group by region and education, SILC estimation, 2017**

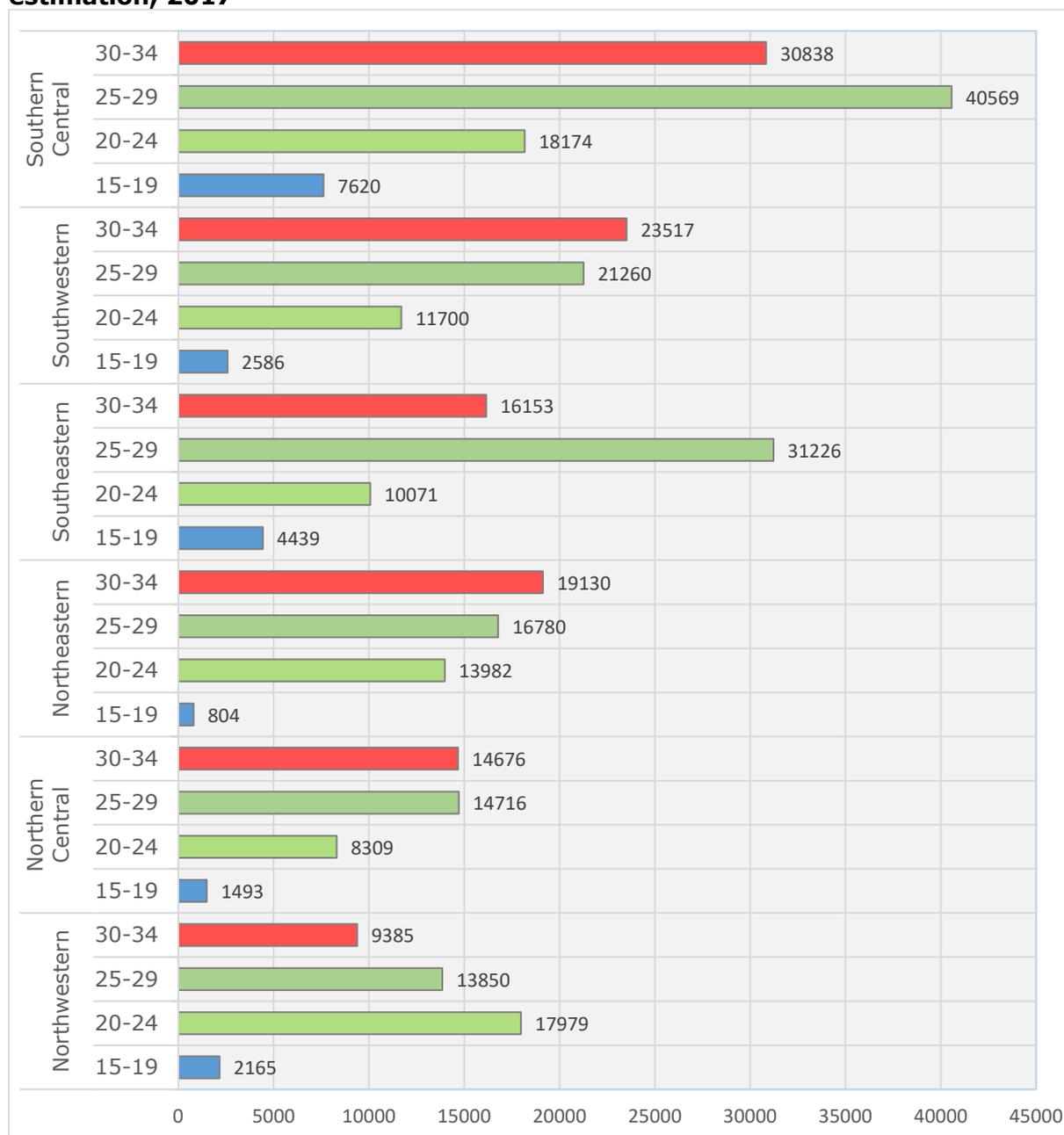


*Source: SILC 2017, NSI, IME calculations. The granular education types included in SILC have been compressed in broader groups for clarity. The exact numbers are subject to the normal statistical allowances and error margins of SILC for Bulgaria.*

As may clearly be seen, in all regions most NEETs have secondary education, and the secondary education NEETs have more or less equal distribution, barring the Southern Central region, which according to the SILC estimations has both the largest share and the largest number of inactive youth overall. Quite alarming, however, is the relatively large number of NEETs with tertiary education, particularly in the Southeastern region. This, however, can be indicative of seasonal work or reliance on money from abroad, and strong seasonality is quite characteristic of this particular region, due to its high reliance on tourism as a driver of the local economy. At the same time, most NEETs who have primary or lower education are in the Southern Central and Southeastern regions, a consequence of the high concentration of Roma there. There are also significant differences in the distribution by region and age group, presented in Figure 2. below.

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**Figure 2. Number of NEETs in the 15-34 age group by region and age group, SILC estimation, 2017**



*Source: SILC 2017, NSI, IME calculations. The granular education types included in SILC have been compressed in broader groups for clarity. The exact numbers are subject to the normal statistical allowances and error margins of SILC for Bulgaria.*

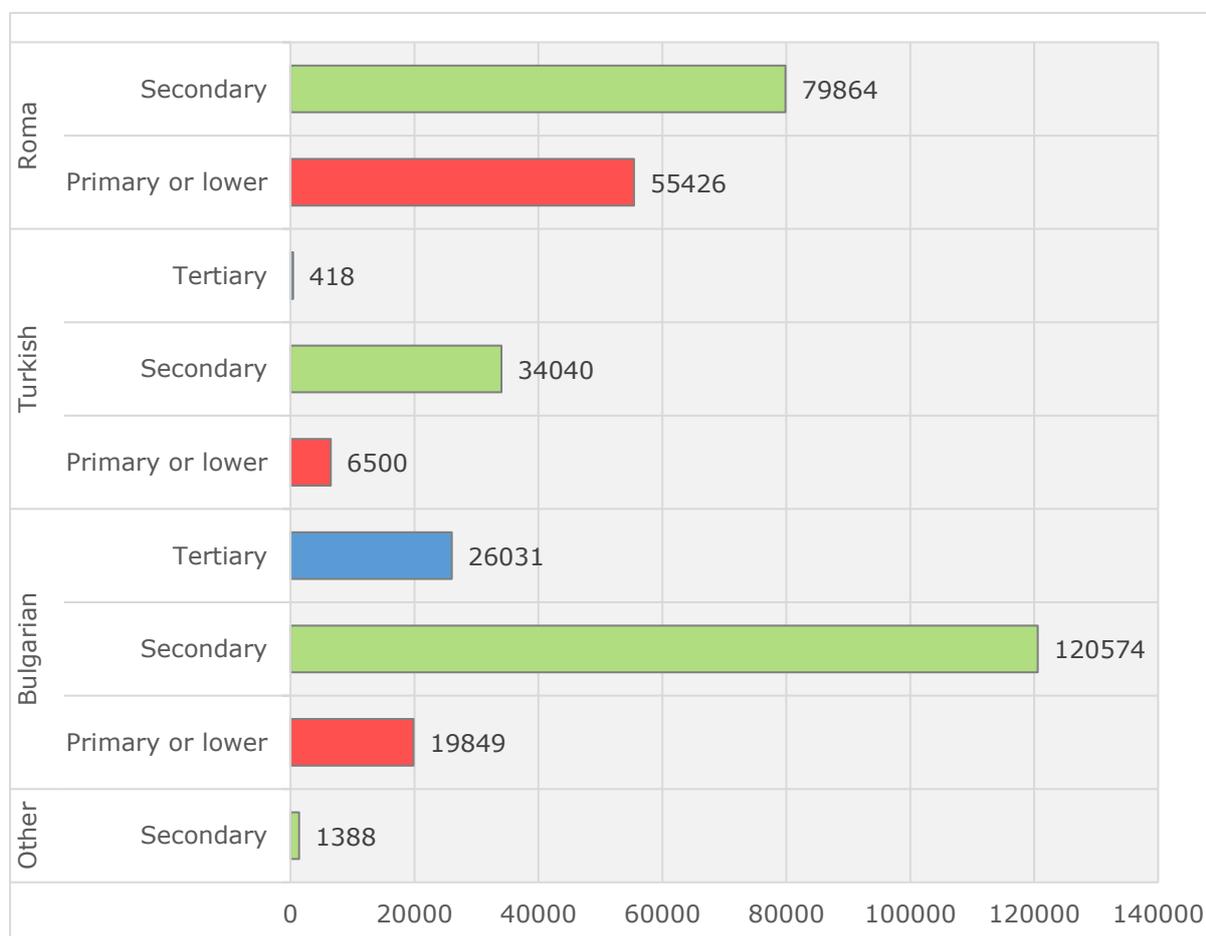
As is evident in the graph, all the regions have quite distinct distributions of NEETs in the smaller age brackets. It is largely reassuring that there are not many inactive youths in the school-aged group, between 15 and 19, with the exception of the Southern Central and Southeastern regions of the country. This, again, seems correlated with the larger presence of Roma in those regions. In most cases (barring the Northwestern region) the second smallest group is 20-24 year olds – the typical age for acquiring tertiary education, particularly a bachelor's degree. Thus, the lack of good opportunities for tertiary education locally largely explains the large number of NEETs in the 20-24 age group in the Northwestern region, as those who seek such education are forced to move to a different region (unattractive job market conditions compared to other regions play a role as well, of course).

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In most regions, the predominant age group is 25-29, which is mostly to be expected, since this is the period where many have already finished tertiary education, but are yet to find jobs and are just entering the job market. There are, however, two regions – the Northeastern and Southwestern ones, where the largest NEET age group is the highest that this study is concerned with, namely the 30-34 one. Overall, however, this distribution points to a need to tailor policy measures to the particular specifics of the NEETs they are addressing in each region, as the predominant age group may point to the most effective and most ineffective measures, respectively – i.e., it is likely that younger NEETs will benefit more from measures that aim at returning them to school or assisting them in entering the next tier of education, while older ones will be better affected by ones that attempt to re-introduce them to the labour market and assist them in finding jobs.

Next, we examine the distribution of NEETs by ethnicity and education, summarized in Figure 3 below.

**Figure 3. Number of NEETs in the 15-34 age group by ethnicity and education, SILC estimation, 2017**



Source: SILC 2017, NSI, IME calculations. The granular education types included in SILC have been compressed in broader groups for clarity. The exact numbers are subject to the normal statistical allowances and error margins of SILC for Bulgaria.

The distribution by ethnicity and education is also quite telling. Practically all NEETs with tertiary education are of Bulgarian ethnicity, and there are almost no such Roma<sup>21</sup>. The number of NEETs of Turkish ethnicity with tertiary education is very low. This does not mean that there are no Turkish or Roma with tertiary education, but rather that almost all

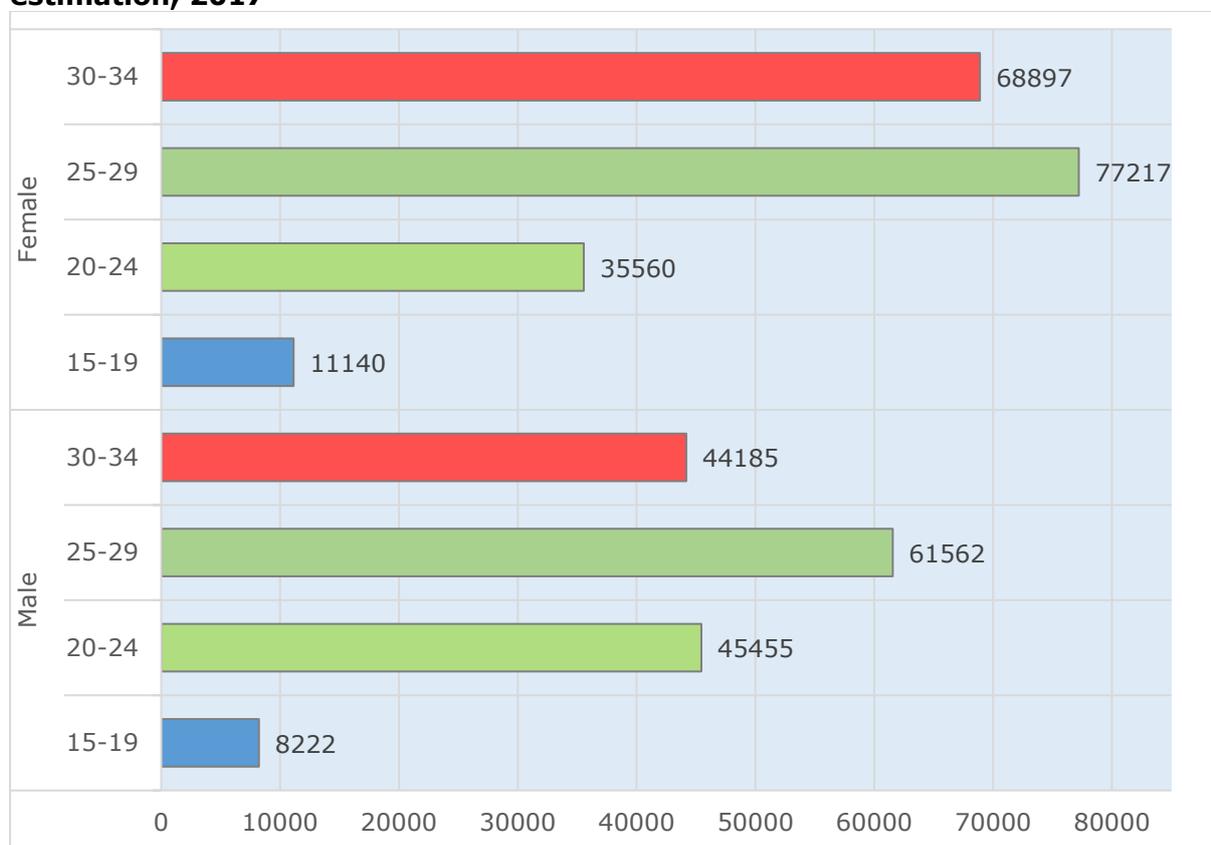
21 The fact that SILC estimates no such Roma and there are none on the graph is unlikely to be true for the full population of NEETs in Bulgaria. This estimation is the result of the very small number of Roma with tertiary education in the SILC dataset, not one of which happen to be classified as NEET in the 2017 edition of the study.

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of them are engaged in employment or education. This implies that for a significant share of NEETs with tertiary education, inactivity is more likely a choice than a necessity. The balance between NEETs with primary or lower education and those with secondary education is more or less the same for the Bulgarian and Turkish ethnicities. The ratio between the number of NEETs with primary or lower education and those with secondary level is between 5:1 and 6:1, which corresponds to the ratios of the 2011 population census. While secondary education is still more prevalent among Roma NEETs, there are almost as many inactive youths with primary or lower education. This, however, mostly reflects the overall educational structure of the ethnic group, and does not constitute a particular deviation.

Finally, we also examine the differences in the distribution of NEETs in the 15-34 age group by gender. First, Figure 4 summarizes the distribution by sex and age, based on the SILC estimations.

**Figure 4. Number of NEETs in the 15-34 age group by sex and age, SILC estimation, 2017**



*Source: SILC 2017, NSI, IME calculations. The exact numbers are subject to the normal statistical allowances and error margins of SILC for Bulgaria.*

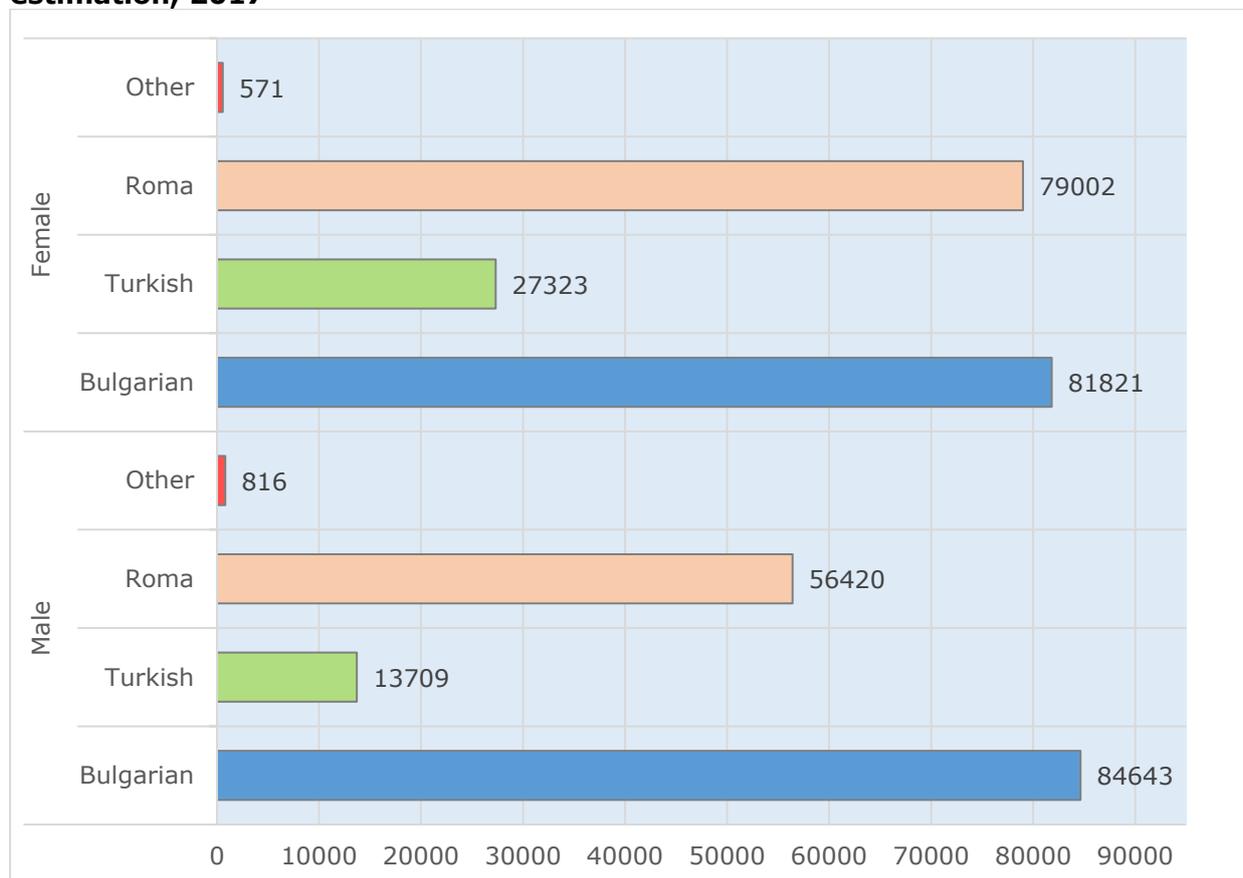
Visibly, there are significant differences in the age distribution of male and female NEETs. Most inactive male youth are in the 25-29 age group, i.e. just after tertiary education, and an almost equal number - 45 000 for both groups - are in the 20-24 and 30-34 age groups. For females, however, the difference in the number of NEETs in the 25-29 and 30-34 groups is smaller (share-wise), most likely reflecting the choice of more women than men to remain at home and focus on housework and family care. It is also worth noting that while overall there are more female NEETs, there are more male NEETs in the 20-24 age group - this is, again, a consequence of the higher enrolment rates for women in tertiary education, particularly in its first stage. In the same time, there are significantly more

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inactive women in the 15-19 age group, which is likely related to the reluctance of some ethnic groups, particularly Roma, to let older female children attend school<sup>22</sup>.

The final distribution that we are going to examine here is by sex and ethnicity, presented in figure 5 below.

**Figure 5. Number of NEETs in the 15-34 age group by sex and ethnicity, SILC estimation, 2017**



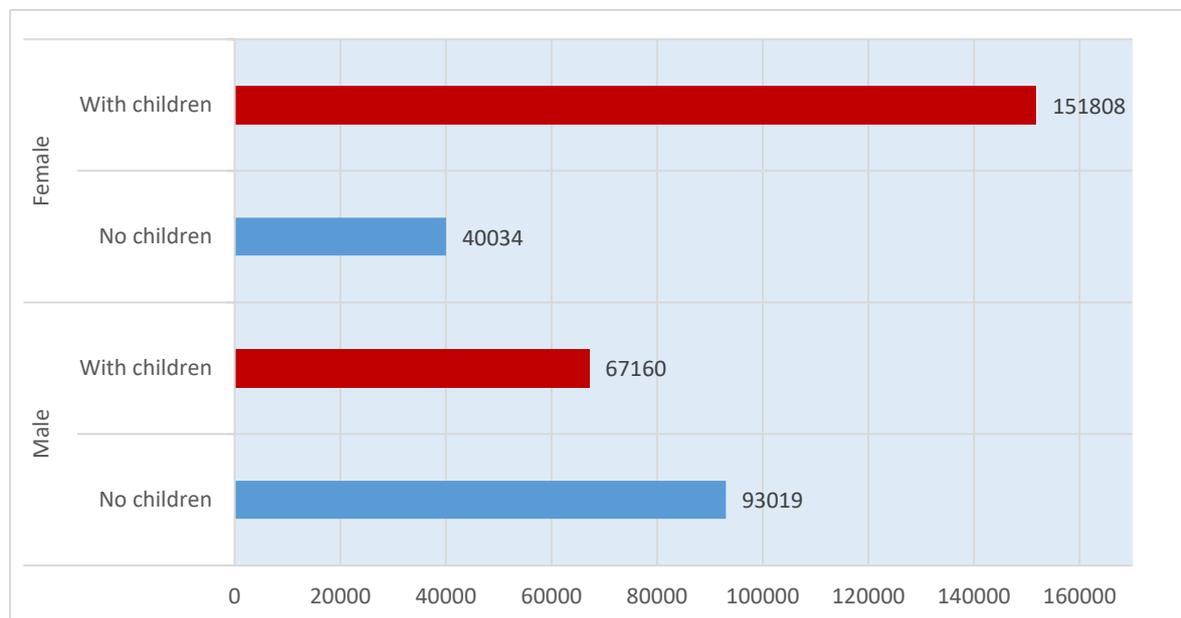
*Source: SILC 2017, NSI, IME calculations. The exact numbers are subject to the normal statistical allowances and error margins of SILC for Bulgaria.*

There are visible differences in the male-female balance among the different ethnic groups. While inactivity among men appears to be typical primarily of Bulgarians (and to a lesser extent Roma) and quite rare among men of Turkish ethnicity, the distribution among women is somewhat more even. While the number of NEETs among Bulgarian women and men is basically the same, there are noticeably more inactive Roma women than men, and more than twice as many inactive Turkish women than men. Thus, it can be concluded that the primary driver of the difference between the NEET shares among men and women are differences in the minority groups, where cultural issues play a strong role.

Figure 6 in next page examines the distribution of NEETs by gender and presence of children in the household (while the EU-SILC study does not allow for direct tracking of mother-child relations, here we assume that in households with inactive people aged 15-34, caregiving is among the primary reasons for their NEET status).

22 This was a commonly held opinion during the focus groups that IME carried out with key stakeholders in the field of labour and education policy in six Bulgarian districts with high shares and numbers of NEETs.

**Figure 6. Number of NEETs in the 15-34 age group by sex and presence of children in the household, SILC estimation, 2017**

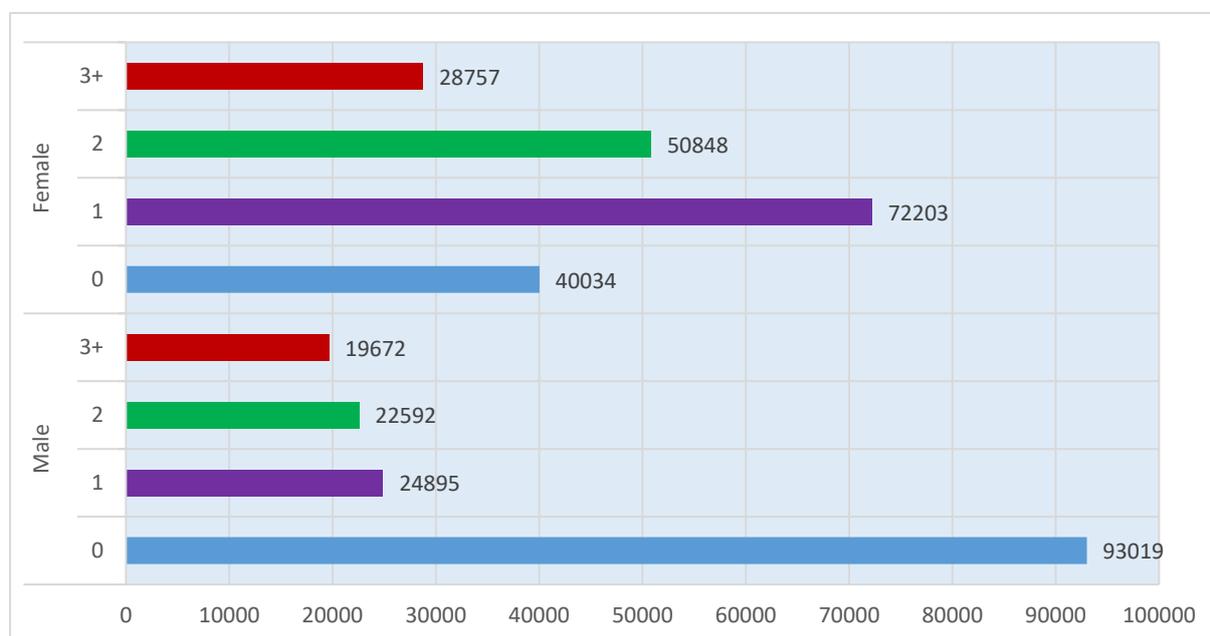


*Source: SILC 2017, NSI, IME calculations. The exact numbers are subject to the normal statistical allowances and error margins of SILC for Bulgaria.*

The differences in the gender distribution of NEETs in the presence of children is more than obvious. While there are far more childless male NEETs in the age group under review in this study, almost four times more inactive women live in households that have underage children than not. In other terms (as can also be seen from the models presented in section 1.3) caring for children is among the key drivers for inactivity for women, and policy measures aimed at reducing NEET rates need to focus on providing more opportunities for young mothers and caregivers to be reintroduced into the labor force. It is also interesting to establish whether family size matters when it comes to those differences. Figure 7 below compares the number of female and male NEETs as distributed by the number of children in their respective households.

There does not seem to be a significant difference in the distribution of male and female NEETs according to the number of children in the household. If we exclude NEETs that have no children, there are significantly more female NEETs than male across family types, which in turn means that having any children at that age significantly increases the risk of inactivity. In policy terms, this distribution shows that the need to further provide support for young mothers does not differentiate between different family sizes.

**Figure 7. Number of NEETs in the 15-34 age group by sex and number of children in the household, SILC estimation, 2017**



Source: SILC 2017, NSI, IME calculations. The exact numbers are subject to the normal statistical allowances and error margins of SILC for Bulgaria.

Key takeaways from the comparisons between the LFS- and SILC-based estimations of the shares and distributions of NEETs:

- Estimations derived from the 2017 EU-SILC study for Bulgaria put the share of NEETs higher compared to those derived from the LFS study, but, taking into account the statistical error of the two studies, the results broadly corroborate each other;
- Estimations from the SILC study put the share of male NEETs significantly higher compared to those based on LFS;
- There are some differences between the estimations based on the two datasets at the regional level, especially regarding the Southern Central and Southeastern regions, which may suggest a better ability of SILC to reach and include Roma in its sample;
- Estimating the share of NEETs on the basis of SILC allows breakdowns by ethnicity and poverty. The calculations in this study demonstrate that youth inactivity is a problem particularly characteristic for Roma and poor households, the NEET rate for both groups being more than half the population;
- More detailed data on educational attainment not only confirms the strong relationship between higher education and labour market success, but also points to a mismatch between vocational education and the current labour market, as the share of NEETs with vocational education is disproportionately large;
- In raw numbers, the difference between the estimations based on SILC and the LFS, respectively, are about 50 000 inactive youth in the 15-34 age group, most of them males;
- The Southern Central region stands out as the region with the highest number of NEETs; according to the SILC estimation the number of inactive youth there is close to 100 000;
- Even though Roma make up less than 10% of the overall population, almost half of the total number of NEETs in Bulgaria are Roma. At the same time, more than half of NEETs live in poor households;

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- The distribution of NEETs by region and education shows that each of the regions has a specific profile, likely a result of the specific conditions of the local labour market, the availability of local educational establishments and cultural issues, particularly with regard to ethnic minorities. The same is true for the distribution of NEETs by region and age group;
- The distribution of NEETs by ethnicity and education point to a significant difference between the profile of inactive youth of the different ethnicities. While for those of Bulgarian or Turkish ethnicity the dominant group among NEETs are those with secondary education, for Roma there is a balance between inactive youth with primary (or lower) education, and those with secondary education. This in turn points to a higher risk of Roma remaining in the NEET group for longer periods;
- There are significant differences in the distributions by sex and age, and by sex and ethnicity – there are significantly more female NEETs in the 20-24, 25-29 and 30-34 age groups in comparison to male NEETs in the same groups, and among the Turkish and Roma ethnic groups;
- Having children appears to be a key point of difference between male and female NEETs, regardless of family size. There are many more female NEETs with children in the household, showing that policies aimed at reducing NEET rates should envisage providing support to young mothers.

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## 1.2. Estimating the accuracy of the statistical and administrative data on the number of inactive young NEETs

When it comes to accessing the share of NEETs in Bulgaria, there are a number of country-specific factors that have to be taken into account:

- Bulgaria is a **net donor of labour force** both in terms of seasonal work, as well as long-term and permanent labour migration. The problems that the relevant institutions experience in tracking migration (including internal migration) are arguably the main reason behind the significant revision of population numbers in the most recent census. One of the reasons for this is Bulgaria's being a part of the European Single Market and the right that Bulgarians have to travel and work in other EU member states without registering their absence from the country. For instance, while current demographic statistics (estimations in-between censuses, which are carried out once every 10 years) evaluated the 2001-2011 migration towards the capital at 44.5 000 people, the 2011 census showed that this estimate amounted to just 37% of the actual migration that had taken place in that period.
- Under current Bulgarian legislation, **mothers that are in their second year of maternity leave are considered economically inactive** and as such are included in headline NEET figures, despite the fact that they do have a job to return to after their leave is over. Since the length of maternity leave in Bulgaria is an outlier among EU countries, it distorts the share of NEETs in the country.

Summarized information on the number of mothers in their second year of maternity leave (from NSI's data) shows that their share is 4.2% of the NEET population in the 15-34 age interval.

**Table 5: Mothers in maternity leave as share of NEETs, 15-34 years of age**

	2015	2016	2017
Total number (thousands), of which:	<b>384,0</b>	<b>371,2</b>	<b>309,3</b>
- in maternity leave for raising a child up to 2 years of age (thousands)	14,0	17,5	13,2
Share (%)	3,6	4,7	4,3

Source: NSI, IME calculations

- Population figures are also affected by the fact that **official statistics count some of the children of Bulgarian origin born to a Bulgarian mother abroad as living in the country**. This is because some Bulgarians do not register a change of permanent address when moving abroad. Under Bulgarian legislation such children automatically receive Bulgarian citizenship and are also automatically registered at the official address of their mother. According to expert estimates<sup>23</sup>, this may be the case with 8-10% of all newborns – a figure that is likely to already affect the number of NEETs particularly in the lower range of the 15-34 age bracket, in the light of migration trends in the past two decades.
- The **relatively high share of the shadow economy** in the country<sup>24</sup> means that it is difficult to make use of official administrative data (such as labour contracts registered at the National Revenue Agency, NRA) to cross-check Labour Force Survey (LFS) results. While employment (as reported by the LFS) does include some of the undeclared work practices under the "work without a labour contract" division, it relies entirely on self-reporting. This means that some respondents, who have concerns about self-reporting their undeclared work relations (for fear of losing the job or being sanctioned) cannot be captured by the Labour Force Survey. **LFS does**

23 This estimate was cited at a meeting between IME researchers and representatives of the NSI demographic statistics department.

24 The latest IMF estimates put the shadow economy in Bulgaria just below 21%. See Medina, L. Nad Schneider, F. (2018). *Shadow Economies Around the World: What Did We Learn Over the Last 20 Years?* IMF Working Paper

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**not attempt to be a precise tool for the evaluation of the actual scope of informal labour relations.**

- At **present there is no single dedicated administrative system for registering, tracking and mapping NEETs in Bulgaria**. NSI's LFS data is not representative at the district level (it is representative only at national and regional level), which hinders the efforts of the Employment Agency (EA) to efficiently deploy its resources in order to better tackle the issue at the municipal level, where EA's labour bureaus operate.
- Following meetings with NSI and EA officials, their representatives share the view that **remittances** received from family members working abroad and seasonal employment (including abroad) **strongly affect the overall economic activity of some young people**. While no official data on this has been compiled, our questionnaire<sup>25</sup> among local experts shows that the only factor that has a stronger effect on the activity of young people than income received from "household members living abroad" is "unrealistic wage expectations".

### *1.2.1. Reliability of Statistical Data on NEETs*

The representativeness of NSI's LFS data is in line with general Eurostat requirements, but sample sizes and their structure are based on the somewhat controversial 2011 census. In 2014 the NSI published a critical report<sup>26</sup> on the 2011 census in accordance with Regulation (EC) No 763/2008 of the European Parliament and of the Council (July 9<sup>th</sup>, 2008). This report included a comprehensive review of the census and its outcomes, stating that:

- The online component of the census was carried out hastily, without enough preparation and without taking into account the experience (limited as it may have been) of other countries. In light of the ill-structured media campaign, encouraging citizens to take part in a flawed online census system, in order to "avoid being visited" by census workers, as well as the earlier-than-planned census schedule and the low pay and extremely short training of census workers, the current demographic data and projections of the NSI have to be extremely carefully considered.
- The division of settlements in control areas and census plots was carried out in extremely short timeframes, with the update of existing census sections being delegated to census workers, which is deemed "unacceptable".
- The 2011 census failed to include a total of 140 000 buildings, resulting in information on 64 000 fewer buildings than the 2001 census, despite the construction boom in the 2000s.
- The report says that the actual population of the country is likely to be overstated by the 2011 census, even after the administrative inclusion of 166 000 citizens that have a current address in the country and/or evidence of residence (such as an active labour contract), but have not been actually visited by census workers, or taken part in the online census.
- The people that have been "added" without being subject to the census itself are all distributed in single-member households, which in NSI's assessment results in "unrealistic" data on the number of households – an important indicator for statistical estimations. In the decade between the last two censuses, single member households have thus increased by 263 000, despite a total increase in the number of households by 84 000 and a population drop of over 1 million people.

The overall assessment of the 2011 census is quite critical and one of the three recommendations in the quality report stated that a micro-census should be carried out prior to the next census in 2021 – a recommendation that has gone unheeded by subsequent governments.

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25 More information on this subject is available in Section 4.3.

26 The report is [available in Bulgarian on NSI's website](#).

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However, even if we put aside potential sample and representativeness issues, stemming from the above-stated shortcomings of the 2011 Census, NSI's approach to the LFS leaves plenty of methodological question marks, most of which result from insufficient funding and/or the delayed implementation of more contemporary methods of both collecting and verifying data.

For instance, as outlined in the 2017 Labour Force Survey Quality Report<sup>27</sup>, most EU countries conduct LFS interviews only with computerised questionnaires. Six EU countries (The Czech Republic, Germany, Greece, Malta, Poland and Slovakia) use both computerised and paper questionnaires. Bulgaria is among the three countries (along with Romania and Montenegro) that rely solely on paper questionnaires. Paper questionnaires slow down interview times, which, together with the overall significant length of the questionnaire, raises concern about the reliability of the recorded responses, while limiting possibilities of follow-up control and verification of data – an opportunity provided by telephone interviews, which are recorded.

We also find that:

- Bulgaria is one of four EU countries in which interviewer feedback is not used as a method for reducing measurement errors (the other three being the Czech Republic, Greece and Romania).
- In addition, the fact that interviews are carried out only on paper means that other data collection facilities and methods of reducing errors such as online checks of the respondents' answers, telephone recording checks and remote monitoring of fieldwork by directly contacting respondents are not used or applicable. Once again – this is more of an exception rather than the trend at the EU level, affecting just two, eleven and six other EU countries respectively.
- The quality report points to over-coverage of unoccupied dwellings as one of the main reasons for Bulgaria's LFS outcomes with non-contacts (the 8<sup>th</sup> highest in the EU) forming the main share of the non-response rate (14.3% of a total of 19.7%).
- The 95% confidence limits for the employment variables included in the LFS show that figures for Bulgaria, while in no way unprecedented among Member States, are still well below the accuracy of EU-average estimates, especially in regard to youth unemployment.

**Table 6: Confidence limits for employment variables, annual average 2017 (%)**

	<b>EU-28</b>	<b>Bulgaria</b>
Employment rate as a percentage of the population (20-64)	72.1 ±0.1	71.3 ±1.8
Unemployment rate as a percentage of labour force (15-74)	7.9 ±0.1	6.2 ±0.4
Youth unemployment rate as a percentage of labour force (15-24)	16.8 ±0.3	12.9 ±1.8

Source: Eurostat

### *1.2.2. Data on NEETs and Ethnic Minorities*

In order to cross-check the adequacy of the headline numbers of NEETs and to better evaluate the main reasons behind their high share, we need a better understanding of their socio-economic background. In the case of Bulgaria, EU-SILC data has revealed a strong relationship between a person's ethnic background and their socio-economic status.

Before 2017, when the NSI included an ethnic component in its EU-SILC survey, the only source of information on the ethnicity of the population was the census. Yet, the share of

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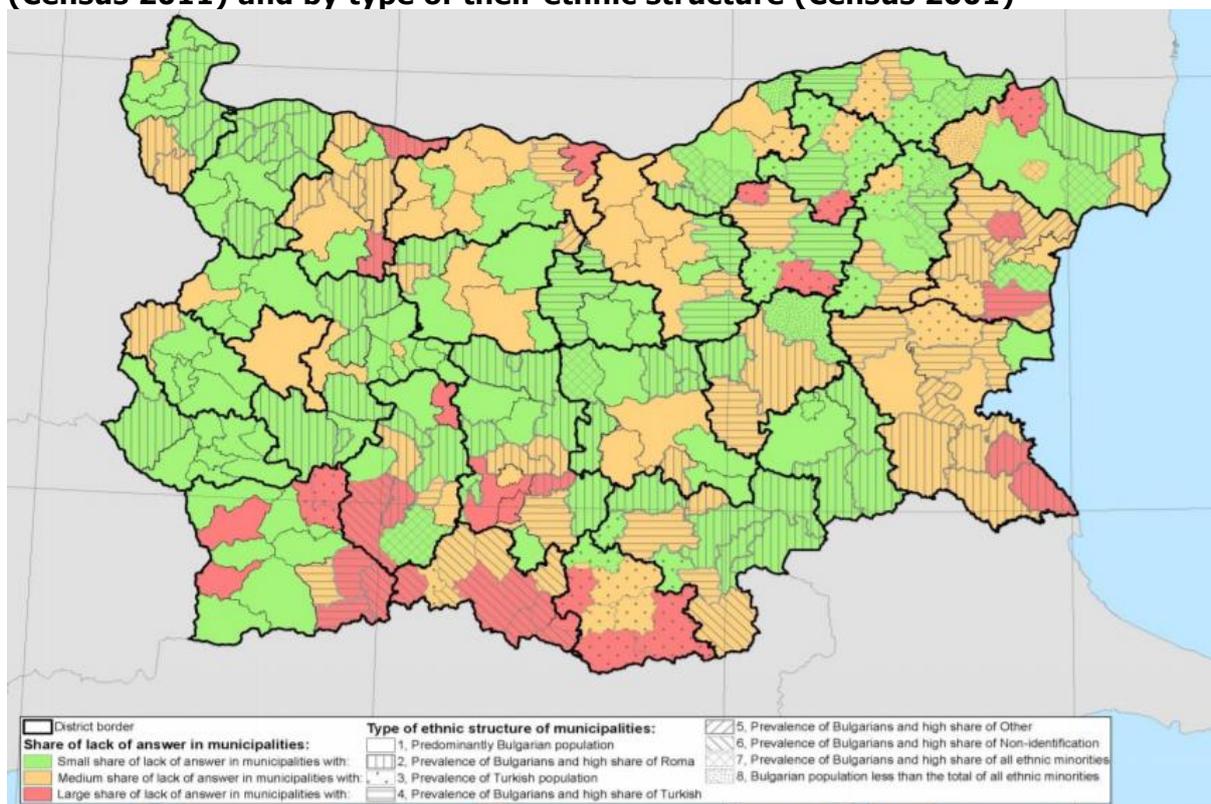
<sup>27</sup>Eurostat. (2019). Quality report of the European Union Labour Force Survey 2017. Luxembourg: Publications Office of the European Union.

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non-responses to the optional (non-compulsory) question on ethnic identity increased thirty times between the 2001 and 2011 census, which resulted in a 15.2% non-response rate, regardless of the option to not identify with any specific ethnicity<sup>28</sup>. It has to be noted that NSI's LFS and SILC samples are based on the results of the 2011 Census.

After carrying out a comparative analysis of the 2001 and 2011 census, Haralampiev and Blagoev (2014) conclude<sup>29</sup> that in general in municipalities with a high share of ethnic Bulgarian population, the high rate of missing ethnic identification occurs much less often than in all the other municipalities. They point out that the relation between ethnic identity and lack of ethnic self-identification is not a direct one but is mediated through the specific ethno-demographic structure within the respective municipality.

**Figure 8. Geographic distribution of municipalities by share of no-response (Census 2011) and by type of their ethnic structure (Census 2001)**



Source: Haralampiev and Blagoev (2014)

Poverty is relatively equally spread among low-educated persons from all ethnicities - for instance, the 2016 EU-SILC data show that 58% of working Bulgarians and 59% of working Roma with primary or lower education live in poverty. However, the relative share of people with low education is much higher among Roma than it is among ethnic Bulgarians. Since low education negatively affects employability<sup>30</sup>, it also leads to low motivation to seek work in the first place and thus to economic inactivity. **The statistical significance of the ethnicity factor has clearly been recognised by the authorities** – Roma are the

28 It has to be noted that the recently adopted legislation regarding the 2021 census has made the ethnic self-identification obligatory, while still providing respondents with the option of “no ethnic self-identification”.

29 Haralampiev, K. Blagoev, D. (2014). Ethnicity non-identification in the 2011 census in Bulgaria. “St. Kliment Ohridski” University of Sofia, p. 10

30 Nikolova, D. et. al. (2016). Poverty in Bulgaria: Education and Employment as Income and Inequality Factors. Institute for Market Economics (IME).

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only ethnic group that have dedicated mediators (who are Roma themselves) under a targeted economic activation programme run by the Employment Agency.

In an attempt to overcome the fact that the representativeness of the samples based on the 2011 census decreases every year, the current demographic statistics also integrates records from administrative registers such as those of the National Revenue Agency, the National Social Security Institute, the uniform system of civil registration, etc. The samples for the LFS (on the basis of which the number of NEETs is estimated) are based on current demographic statistics and have recently been updated - for instance, the sample for capital city Sofia has been enlarged. This, however, may also be one of the reasons for the increasing number of districts, in which the NSI either provides data with larger than acceptable statistical error, or provides no data at all.

In the light of the unquestionable importance of the issue of NEETs to a Bulgarian economy struggling with negative demographic trends and labour shortages, a dedicated statistical survey of young people may well be the most efficient way to ensure better informational support for active labour market policies. An alternative would be the inclusion of a special module in regular LFS surveys. As confirmed at our meeting with NSI representatives, no such module is currently being considered for the next few years due to the rather large length of the current questionnaire and concerns that if further questions are added, this would additionally undermine the reliability of the data received and reduce the response rate.

### **1.3. Individual Characteristics and Reasons for Inactivity among NEETs**

#### *1.3.1. Modelling the Factors Determining the NEET Status*

This section attempts to establish the key factors driving and determining the NEET status of particular individuals on the basis of individual-level data from the LFS and SILC studies. The statistical analysis is carried out in the form of determining linear probability via probit regression<sup>31</sup>. This test makes it possible to identify, rank and compare the effects of various predictors of NEET status.

Since the LFS data allow only to identify the relative weight and importance of the geographical location, age, sex and education, constructing models on the basis of individual-level SILC data allows the addition of many factors that we hypothesize will be of importance in predicting a NEET status, such as income, ethnicity, poverty status, and the like. Table 3 lists the variables from the SILC and LFS datasets to be included in the models.

**Table 7: Variables from the SILC and LFS datasets to be included in the models**

Variable	LFS	SILC
Gender	SEX - Sex	RB090 - Sex
Age	YEARBIR - year of birth	PB140- year of birth
Region	REGION - region of household	DB040 - region of household
ISCED education level	HATLEVEL - highest educational attainment level	PE020 - ISCED level currently attended
Ethnicity	N/A	E4 - Ethnicity, added to the standard SILC distribution

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<sup>31</sup> The analysis will be carried out via the standard distribution of R 3.5.3 'Great Truth' and several complementary packages - dplyr, car, caret.

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Income	N/A	HY020 - total disposable household income PY010G/PY010N - employee cash or near-cash income
Urbanization	DEGURBA - degree of urbanisation	DB100 - degree of urbanisation
At risk of poverty	N/A	Composite measure, under SILC definition
General health	N/A	PH010: general health

*Source: LFS and SILC dataset documentation*

The variables have been scaled and normalized in order to achieve comparable effect sizes and appropriate measurements of statistical significance. Binary and ordinal variables are dummyfied. The dependent variable in the models, as expected, is the NEET status of respondents. The effects are estimated among the different age groups within the wider 15-34 age group, as some factors are stronger determinants of the NEET status in one age group, and less significant in others.

As can be seen in the table above, the SILC questionnaire contains virtually all the data necessary to estimate the factors behind an individual's NEET status; the benefit from using the LFS as well is that it is the source of the official Eurostat data usually applied when NEET-related issues are considered. The best approach in this case is to apply (approximately) the same methods to both datasets, in order to validate the consistency of the results and thus reinforce and add additional robustness to the findings.

Prior to statistical testing, the initial hypothesis is as follows:

**H1: The key determinants of NEET status are educational attainment, ethnicity, region, urbanization, and sex.**

There is significant risk of collinearity between some of the selected variables, especially ethnicity, regional distribution and educational attainment. This has been taken into account in the modelling procedure by keeping variance inflation within certain bounds, and applying the same modelling scheme to a different set of variables, taking out the collinear ones in turn.

### *1.3.2. Probit Regression Based on LFS Data*

The following table contains the results of a probit regression on the key predictors of NEET status for the 15-34 age group in Bulgaria in the 2016 Labour Force Survey dataset. Despite the original intention to include income brackets in the statistical estimations, those were omitted in the final analysis due to the high non-response rate among the survey respondents in Bulgaria.

**Table 8. Results of probit regression on the NEET status of respondents to the 2016 LFS survey in Bulgaria in the 15-34 age group**

Variable and level	NEET status
<b>Intercept</b>	-1.50 (0.06) ***
<b>Gender:</b> Female	0.29 (0.04) ***
<b>Education:</b> High school education	0.08 (0.05) *
<b>Education:</b> Primary or no education	0.34 (0.06) ***
<b>Urbanization:</b> Rural area	0.59 (0.04) ***

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<b>Urbanization:</b> Town or suburb	0.41 (0.05) ***
<b>Region:</b> Northwestern	0.46 (0.06) ***
<b>Region:</b> Northern Central	0.12 (0.07) *
<b>Region:</b> Northeastern	0.14 (0.06) **
<b>Region:</b> Southeastern	0.29 (0.06) ***
<b>Region:</b> Southern Central	0.22 (0.05) ***
N	6440

*Source: LFS 2016, IME calculations. Marginal effects, standard error in parentheses. Statistical significance: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .*

A cursory glance at the results shows that all the variables included have statistically significant impact, most of them at the 99% confidence level, not counting high school education and living in the North Central and North Eastern regions, which are still significant, albeit at lower confidence levels. For the sake of comparability, from the four variables above (sex, education, urbanization and region) all the levels are compared to the hypothesized best-case scenario, in which **the probability of an individual respondent being classified in the NEET group is the lowest – a male person, with tertiary education living in an urban area in the Southwestern region of the country** (which contains the capital city, which has the most dynamic and active labour market and educational opportunities); this is the baseline for the models. Thus, the model presented above compares the impact of education relative to the tertiary level, the impact of sex relative to male, the impact of urbanization relative to large cities and the impact of regions relative to living in the Southwestern Region. This allows for direct one-to-one comparison and ranking of the probabilities and directional effects presented in the table above.

First of all, it is clear that all the effects are in the expected direction – e.g. any change from the above described “perfect” condition results in an increased probability of a given respondent falling in the NEET group. It is worthwhile, however, to also examine the individual probabilities, as they signify the relative importance of the separate factors. **Females in the 15-34 age group are 29% more likely to be NEET** compared to the baseline best-case scenario presented above; the reason for this is most likely the combination of lower employment rates for women and the fact that mothers in their second-year maternity leave are considered by LFS as inactive (these are however partly offset by higher enrolment in tertiary education compared to men). The results on the impact of the levels of education are also quite interesting, as the difference in **change relative to the baseline for high school education is a mere 8%**. The real difference comes between primary or lower education, and high school or tertiary education, which increases the probability dramatically. The probability of a NEET status for a person with primary or lower education is 34% more relative to the baseline. In other words, the highest risk of staying out of the labour market and education comes from leaving school before finishing secondary education and having only primary or lower education. Addressing this while not a one-size-fits-all solution to reducing NEETs, would be among the most important factors.

**Urbanization ranks as the most important factor** among those included in the models; especially in rural areas, young people are 59% more likely to not participate both in the labour market and education. Those living in smaller towns have a smaller, but still significant probability at 41%, which in turn means that the real difference comes from living in highly urbanized areas. This conclusion is, however, quite expected, as urban areas concentrate most of the labour market opportunities and all institutions of higher education, and even the transition to a smaller city marks a significant decrease in the variety of both. As far as the impact of the NUTS-2 regional distribution is concerned, all regions fare worse compared to the Southwestern one, all being in the 10-30% range, with the sole exception of the Northwestern Region, which increases the probability of NEET status by 46%.

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To summarize, based on the results of the basic probit model of NEET status, we can create a worst-case scenario of a person with the highest risk of NEET status for the 15-34 age group: **a female, with primary or lower education, living in a rural area in the Northwestern Region**<sup>32</sup>.

Next, we will break down the dependent variable into the most common causes of inactivity, using the same predictors as before. It has to be noted, however, that the results listed in the table below are not as reliable as the ones above, due to the significant skewness of the dataset – i.e. there are much more employed than unemployed young people, which can lead to certain coefficient inflation.

**Table 9. Results of probit regression on certain types of inactivity of respondents to the 2016 LFS survey in Bulgaria in the 15-34 age group**

Variable and level	Unemployment	Domestic work	Illness or Disability	Other
<b>Intercept</b>	-1.81 (0.08) ***	-2.74 (0.11) ***	-6.00 (76.10)	-2.08 (0.10) ***
<b>Gender:</b> Female	-0.18 (0.04) ***	1.46 (0.09) ***	-0.02 (0.10)	-0.06 (0.05)
<b>Education:</b> High school education	0.14 (0.07) **	-0.13 (0.07) *	3.36 (76.10)	0.16 (0.09)
<b>Education:</b> Primary or no education	0.08 (0.07)	-0.02 (0.08)	3.88 (76.10)	0.64 (0.10) ***
<b>Urbanization:</b> Rural area	0.56 (0.05) ***	0.25 (0.07) ***	0.15 (0.12)	0.39 (0.06) ***
<b>Urbanization:</b> Town or suburb	0.43 (0.06) ***	0.09 (0.08)	0.10 (0.14)	0.29 (0.07) ***
<b>Region:</b> Northwestern	0.65 (0.07) ***	0.24 (0.10) **	0.23 (0.16)	-0.13 (0.10)
<b>Region:</b> Northern Central	0.22 (0.08) ***	0.11 (0.10)	0.00 (0.18)	-0.07 (0.09)
<b>Region:</b> Northeastern	0.30 (0.08) ***	0.07 (0.10)	0.02 (0.17)	-0.13 (0.09)
<b>Region:</b> Southeastern	0.33 (0.08) ***	0.34 (0.09) ***	-0.01 (0.17)	-0.03 (0.09)
<b>Region:</b> Southern Central	0.25 (0.06) ***	0.10 (0.08)	0.07 (0.14)	0.11 (0.07)
N	6440	6440	6440	6440

Source: LFS 2016, IME calculations. Marginal effects, standard error in parentheses. Statistical significance: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

The results of the four models focusing on the four primary types of inactivity, presented in Table 8 above - unemployment, domestic work, illness/inactivity, other - are also quite revealing, as far as the key drivers of those states are concerned. Virtually all of variables are of certain importance in the case of unemployment, with the exception of the lowest grade of education. Being female in this case actually reduces the probability of being unemployed, which reflects the larger stock of unemployed males – a rather curious dynamic, given that being female increases the probability of inactivity in general. The most important factors here again are living in rural areas, which increases the probability of unemployment by 56%. Similarly, living in a smaller town increases the probability of

32 Unfortunately, the probabilities are not directly additive, so based only on that model it is not possible to compute the cumulative difference in probability of NEET status between the best- and worst case scenario.

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unemployment by 43% relative to the baseline. It is important to note that in regard to unemployment, while maintaining statistical significance across the board, the impact of regions is larger compared to general inactivity for all of them, pointing to significant problems with local labour markets. The lack of significant impact of the education variables is likely the result of the least educated part of the labour force being discouraged and not seeking employment, thus remaining outside of the definition of unemployment.

**Inactivity due to domestic work and/or family care, on the other hand, appears to be a typically female issue**, as being female increases the probability of this type of inactivity by 146% (the largest significant coefficient found in any of the above models); in other words, women are much more likely to be housewives, stay-at-home mothers or engage in domestic duties in general, while foregoing formal employment. At the same time, this type of inactivity is much more likely in rural areas compared with urban ones; the fact that there are also significant effects for some of the regions, but not others, points to this being rooted in social groups with more traditional values, especially in the Southeastern and Northeastern parts of the country, while the significant effect for the Northeastern region is more likely a result of overall poorer labour market performance in the past years. This, unfortunately, can only be determined definitely using ethnic identity data, not found in the LFS datasets. Another part of the explanation could be the alternative cost of staying at home in terms of the potential wage that could be obtained – both regions feature less developed labour markets, where average wages equal about 75-80% of the average wage for the country and 60-65% of the best performing regions.

It is quite telling that there is not a single significant predictor for inactivity due to disability or illness, showing that its distribution is more or less random in the Bulgarian labour force. It is likely that some patterns on this type of inactivity can be found across the income groups, which is explored in the modelling of SILC data. Finally, the data on the otherwise unclassified inactivity broadly reflect the results of the general NEET model, with the exception of regional effects not being significant, as those seem to be randomly distributed across the country.

*1.3.3. Probit Regressions Based on SILC Data*

In order to assess the validity and reliability of the models based on the LFS microdata, here we apply the same model structure to the microdata from the latest SILC study. It has to be noted that due to the specifics of the two datasets, it is not possible to replicate the structure completely, mostly due to the more granular representation of educational attainment in the SILC dataset. The models presented below, however, are significantly richer compared to those based on the LFS data, as they introduce ethnicity, poverty and health to the mix of predictor variables, which were hypothesized to play an important role as drivers of NEET status (and account for larger share of NEETs)

**Table 10. Results of probit regression on NEET status of respondents to the 2017 SILC survey in Bulgaria in the 15-34 age group**

Variable and level	NEET status
Intercept	-1.77 (0.11) ***
Gender: Female	0.30 (0.06) ***
Ethnicity: Turkish	0.34 (0.09) ***
Ethnicity: Roma	0.78 (0.09) ***
Ethnicity: Other	0.08 (0.30)
Region: Northwestern	0.31 (0.10) ***
Region: Northern Central	0.29 (0.11) ***
Region: Northeastern	0.28 (0.10) ***
Region: Southeastern	0.11 (0.10)

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Region: Southern Central	0.24 (0.09) ***
General health: poor <sup>33</sup>	1.45 (0.22) ***
Education: Less than primary	1.17 (0.23) ***
Education: Primary	0.60 (0.16) ***
Education: Lower secondary	0.14 (0.10) *
Education: High secondary	0.32 (0.11)
Education: Vocational	0.24 (0.10) ***
Poverty (SILC definition)	0.62 (0.08) ***
Urbanization: Town or suburb	0.18 (0.08) ***
Urbanization: Rural	0.20 (0.08) ***
N	2734

*Source: SILC 2017, IME calculations. Marginal effects, standard error in parentheses. Statistical significance: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .*

The results from the base probit model on SILC data are very similar to those on LFS data, and they broadly corroborate each other. It is, however, quite noticeable that the coefficients of the SILC model are somewhat larger than those in the LFS model, pointing to more extreme polarization between the NEETs and non-NEETs in the 15-34 age group. This, however, is most likely the result of variance inflation, caused by collinearities between some of the variables included in the models, for which there is slightly more evidence in the LFS model<sup>34</sup>; this in turn means that the coefficients should not be compared between the models, but only within them, and their **relative importance for determining NEET status in both datasets should be primarily considered**.

Just as before, the dummyfied variables included in the model are compared against a theoretical best-case scenario, in this case **a man of Bulgarian origin, living in an urban area in the Southwestern region of the country, with tertiary education, in good health and living in a non-poor household**; a deviation in any of those conditions is hypothesized to increase the probability of falling in the NEETs category. The above model based on SILC microdata confirms that pre-modelling assumption, as only the intercept is negative, and all other variables increase the probability of being classified as NEET.

As far as statistical significance is concerned, unlike the base LFS model, in the SILC one there are some effects that do not meet the minimum requirements, even at the 90% confidence level, namely high secondary education, the Southeastern region and ethnicity other than Bulgarian, Turkish or Roma. In the case of education, this is most likely the result of the further fragmentation of the different types in the SILC dataset. With regard to the "other" ethnic group, the likely explanation is the extreme skewness of the data and the low number of cases in this category. Edging on significance is also the impact of lower secondary education, but there can be little doubt about the effects of the rest of the variables.

The effect of gender is essentially the same in both the LFS and SILC models, in both cases increasing the **probability of falling in the NEETs category by almost a third for women compared to men**. Again, this is likely the consequence of second-year maternity

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33 Defined as "Bad" or "Very Bad" on the 5-point general health scale of the PH010 of the SILC dataset.

34 More precisely, the highest square root of VIF for any predictor included in the models is 1.68 for lower secondary education in the SILC model and 1.78 for Southeastern region in the LFS model, respectively. None of the predictors crosses the threshold square root of VIF of 2 which would cause us to consider dropping it from the models, but there is some evidence for mild interference which could result in variance inflation.

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and the higher probability for women, especially those from ethnic minorities to be engaged in various types of domestic work and thus forgo formal employment or education. As expected by the descriptive statistics presented in the previous chapters, ethnicity plays a key role in driving the NEET status of those aged 15 to 34. While being part of the Turkish minority group only increases the probability of falling in the inactive group by about a third compared the baseline, **being Roma almost doubles the probability**, and given that the likelihood that, given past experience at censuses and studies similar to LFS and SILC, a number of Roma had reported their ethnicity as Bulgarian or Turkish, the real-world probability is likely larger.

The differences between SILC and LFS in estimating the regional shares of NEETs are also evident in the models. While in the LFS models the Northwestern region of the country was by far the strongest regional predictor, **in SILC the effects of living in a particular region compared to the Southwestern one are pretty close to each other**, reflecting SILC's ability to "identify" more NEETs in them, especially in regions with a higher concentration of ethnic minorities. It still has to be noted, however, that all of the regions increase the probability of being classified in the NEET group by almost a third relative to the Southwestern one, where the capital is located.

One of the major additions from the variables not found in the LFS, health, is the single strongest predictor in the SILC model. Operationalized as "poor health" for the fourth and fifth grade of the general health of SILC for the sake of using only dichotomous variables in the model, **being in bad health increases the probability of falling into the NEETs category by 145%**. In other words, being in poor health – and, likely, having a disability – greatly diminishes one's ability to participate actively in both the labour market and in education. Should a policy decision be derived from this part of the analysis, it points out chiefly to the need to integrate disabled young people and people in poor health into the labour force, likely via some targeted programs and systems.

A comparably large effect is observed for lower than **primary education, with a 117% increase in probability of being classified as NEET**. Even primary education (only the first four years of the school curriculum) has twice as small of a coefficient, albeit being among the largest, at 60%. The somewhat smaller effects in the SILC model compared to the LFS one are, we believe, primarily the result of the finer segmentation of the various types and degrees of education.

As expected, poverty is a key factor, and its impact is comparable with that of the lower stages of education; it has to be noted, however, that the above indicators are among the strong predictors of poverty itself, so there is likely some interplay between the variables (even though there is little statistical evidence of such). Finally, compared to the LFS based model, the impact of urbanization is relatively small, and very similar both for smaller towns and rural areas, increasing the probability of being NEET by about 20% for each, compared to urban areas.

Based on the SILC data, therefore, we can conclude that the **worst-case scenario for staying out of both work and education in the 15-34 age group would be a Roma female with less than primary education and long-term poor health, living in a poor household, in a rural area in the Northwestern region of the country**. Next, we examine the models on SILC data for the different types of inactivity in the 15-34 age group. The data skewness caveat that was applied to their LFS counterparts still applies, so the results presented in the table below should be treated more as indicative evidence for the impact of certain characteristics of NEETs, and not so much as predictive instruments.

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*Table 11. Results of probit regression on the different types of inactivity of respondents to the 2017 SILC survey in Bulgaria in the 15-34 age group*

<b>Variable and level</b>	<b>Unemployment</b>	<b>Illness or Disability</b>	<b>Domestic work</b>	<b>Other inactivity</b>
Intercept	-1.76 (0.12) ***	-7.73 (233.68)	-8.10 (87.70)	-2.31 (0.17) ***
Gender: Female	-0.17 (0.06) ***	-0.48 (0.21) **	5.63 (87.70)	0.37 (0.09) ***
Ethnicity: Turkish	0.27 (0.11) ***	0.09 (0.28)	0.50 (0.17) ***	-0.04 (0.17)
Ethnicity: Roma	0.55 (0.10) ***	-0.82 (0.39) *	0.83 (0.16) ***	0.20 (0.15)
Ethnicity: Other	0.27 (0.32)	-5.99 (880.27)	0.92 (0.45) **	0.15 (0.47)
Region: Northwestern	0.27 (0.12) **	0.29 (0.36)	0.16 (0.22)	0.26 (0.17)
Region: North Central	0.28 (0.12) **	0.22 (0.36)	0.34 (0.22)	0.09 (0.20)
Region: Northeastern	0.09 (0.12)	0.65 (0.32) **	0.49 (0.20) **	0.26 (0.17)
Region: Southeastern	0.06 (0.12)	-0.50 (0.43)	0.57 (0.19) ***	0.13 (0.17)
Region: South Central	0.25 (0.10) ***	-0.07 (0.34)	0.42 (0.17) **	0.29 (0.14) **
General health: poor	-0.45 (0.26) *	3.05 (0.27) ***	-0.48 (0.42)	-0.49 (0.44)
Education: Less than primary	0.15 (0.21) *	6.54 (233.69)	1.11 (0.32) ***	0.35 (0.28)
Education: Primary	0.02 (0.17)	5.99 (233.69)	1.32 (0.27) ***	0.18 (0.24)
Education: Lower secondary	0.02 (0.12)	5.25 (233.69)	0.69 (0.22) ***	-0.09 (0.17)
Education: High secondary	0.02 (0.13)	5.10 (233.69)	0.18 (0.25)	0.05 (0.17)
Education: Vocational	0.20 (0.08) *	4.92 (233.69)	0.13 (0.22) **	-0.13 (0.17)
Poverty (SILC definition)	0.77 (0.08) ***	-0.27 (0.27)	-0.04 (0.14)	0.21 (0.13) *
Urbanization: Town or suburb	0.19 (0.09) **	-0.33 (0.32)	-0.13 (0.16)	-0.01 (0.13) *
Urbanization: Rural	0.17 (0.09) **	0.28 (0.24)	0.11 (0.14)	0.05 (0.12)

*Source: SILC 2017, IME calculations. Marginal effects, standard error in parentheses. Statistical significance: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .*

First off, unemployment again follows broadly the effect sizes and significance of the general NEET model, with some exceptions – most effects of education fall behind statistical significance, likely as a result of the fragmentation of the different stages. Some of the regional effects are also not significant, but those which are, are distributed very close together, between 25-30% increased chance. Also interesting is the reversed effect of sex – while women are more likely to be NEET overall, they are less likely than men to be unemployed, pointing to other reasons for inactivity, most likely housework, maternity, family member care or related reasons. Poor health also appears here with and opposite

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effect direction, meaning that those in poor health are much less likely to seek work, and fall in the other categories. Otherwise, people from ethnic minorities are more likely to be unemployed than Bulgarians, and the most impactful characteristic here is poverty.

While in the models based on the LFS there were no significant predictors for illness or disability, in those based on SILC data (somewhat self-explanatory), poor health stands out as a key determinant. In fact, this effect is so singularly strong that the model included perfect linearity between predictor and outcome variable, and practically the other effects can be disregarded. In the domestic work model, it is quite curious that the effect of sex is not significant; it has most likely been “cannibalized” by the very large and significant effects of other variables, including ethnicity and education.

Overall, the five models based on SILC data largely corroborate and provide additional validity to those based on the LFS. Barring some minor differences in the ranking and strength of the effects, the two series of models are very close to each other, which gives us sufficient confidence in their results and further policy implications. Furthermore, SILC adds additional details to the conclusions based solely on the LFS by introducing the impact of ethnicity, health and poverty among the key determinants of NEET status in the 15-34 age group in Bulgaria.

### **Key takeaways from the regression models**

- The models based on SILC and LFS data broadly corroborate each other, providing additional assurance that the observed relationships and influences are not spurious;
- According to the LFS-based model, the highest risk of inactivity in Bulgaria is for females, with primary or lower education, living in a rural area in the Northwestern Region; the SILC based models add to that Roma ethnicity, long-term poor health and living in poverty;
- According to the LFS-based models, the most important risk factors are living in a rural area of a region with bad labour market conditions and low education; SILC-based models also show poor health and belonging to the Roma ethnicity as the most important factors contributing to NEET risk;
- In both datasets, models predicting unemployment follow the ranking and significance of the effects of those predicting general NEET status, while being female and belonging to a minority stand out as key risk factors for housework.

## **2. INDEPENDENT ASSESSMENT OF THE RECENT SITUATION OF TARGETING THE NEETs**

### **2.1. Assessing the Current Administrative Register Systems that Map and Track the NEETs**

From the time that Bulgaria first presented a Youth Guarantee Implementation Plan on 20 December 2013, NEETs have been a focus of active labour market policies (ALMPs). In line with the European Council's 2017 recommendations, the government has recognised NEETs as a priority vulnerable labour market group. At the same time, there is no single dedicated system for tracking and mapping NEETs in Bulgaria.

Information on the number and share of NEETs is provided via regular official statistical surveys. In particular, the Labour Force Survey (LFS), by the National Statistical Institute (NSI), is the main source of information regarding NEETs, as it tracks the number of NEETs as part of the Europe 2020 Strategy and in line with Eurostat's requirements. Other regular statistical surveys, such as the EU-SILC, may be used to gain additional insight into issues related to NEETs, even though they use a slightly different methodological apparatus.

It is important to note that while the LFS may shift the status of young people that rely primarily on seasonal employment between "employed" and "inactive", the Ministry of Education and Science (MES) and the Employment Agency (EA) have no means to identify them, if they have already completed their education. The only way that this might happen is if these young people register as unemployed. However, if they had been engaged in informal labour relations, they have lower incentives to do so, as they would not be eligible for unemployment benefits.

### **2.2. Investigating the Effectiveness of Policies for Reintegrating NEETs, Including the General ALMP and Specifically the Implementation of the Youth Guarantee**

Most policy measures that target NEETs are coordinated by the Ministry of Labour and Social Policy (MLSP) and its subsidiary<sup>35</sup> – the Employment Agency<sup>36</sup>. MLSP is the institution responsible for carrying out the National Action Plan on Employment (NAPE), which contributes to meeting the country's objectives and commitments under the Europe 2020 strategy and the measures included in the National Reform Program (2017-2020), the Council Recommendation of 01/07/2017, the Stability/Convergence Program, as well as the Government Program to 2021.

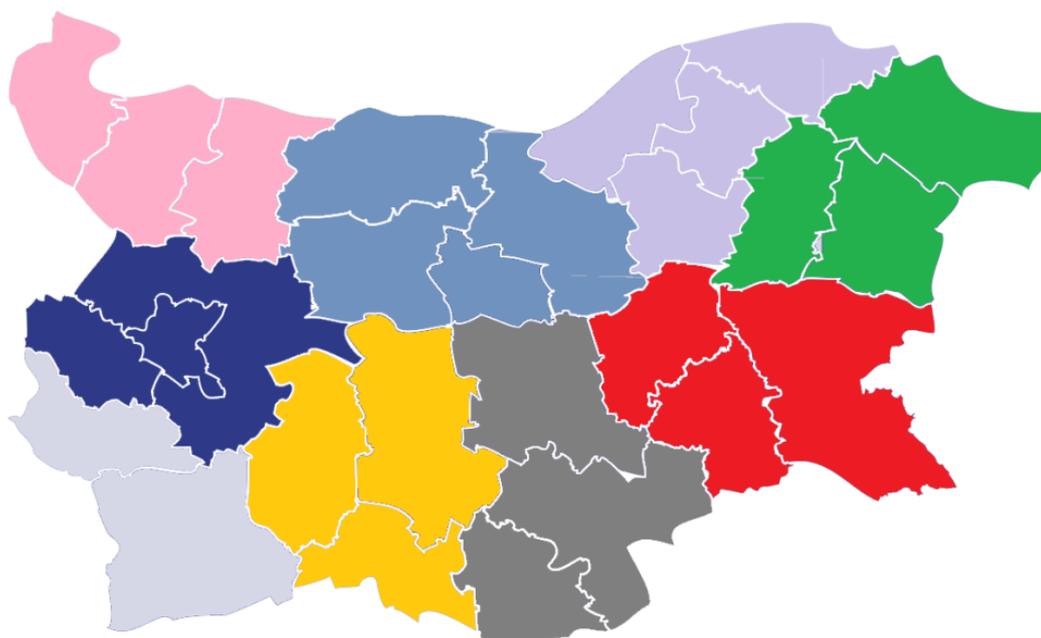
The EA provides labour intermediation services both to unemployed young people and NEETs who have been identified by the information on dropouts and school leavers provided by the MES and then "activated" (registered with the EA). Information on the implementation of labour market policies is summarized by the Regional Employment Service Directorates (RESDs). Their distribution across the country is presented in the figure below.

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35 The role of the other MLSP subsidiary that has formal contact with NEETs - the Agency for Social Protection (ASP) and its regional departments (Social Assistance Directorates, SADs) – is secondary. The provision of some types of social benefits, such as the guaranteed minimum income (GMI) requires that beneficiaries have been registered with the EA for a specific period.

36 The Employment Agency (EA) is an executive agency to the Minister of Labour and Social Policy for the implementation of the state policy on employment promotion, including adult education and the provision of labour mediation services. It includes 9 Regional Employment Service Directorates (RESDs) and Labour Office Directions in 107 different settlements.

**Figure 9: Regional Employment Service Directorates (RESDs) of the Employment Agency (EA)**



<p><b>RESD BLAGOEVGRAD</b></p> <p>Blagoevgrad and Kyustendil</p>	<p><b>RESD BURGAS</b></p> <p>Burgas, Sliven and Yambol</p>	<p><b>RESD VARNA</b></p> <p>Varna, Dobrich and Shumen</p>
<p><b>RESD LOVECH</b></p> <p>Lovech, Veliko Tarnovo, Pleven and Gabrovo</p>	<p><b>RESD MONTANA</b></p> <p>Montana, Vidin and Vratsa</p>	<p><b>RESD PLOVDIV</b></p> <p>Plovdiv, Pazardzhik and Smolyan</p>
<p><b>RESD RUSE</b></p> <p>Ruse, Silistra, Razgrad and Targovishte</p>	<p><b>RESD SOFIA</b></p> <p>Sofia (cap.), Sofia and Pernik</p>	<p><b>RESD HASKOVO</b></p> <p>Haskovo, Kardzhali and Stara Zagora</p>

Source: EA, IME

MES implements the National Strategy to Reduce the Share of Early School Leavers (2013-2020) and the National Lifelong Learning Strategy (2014-2020). In addition to their usual function related to management and control of the school system within a given district, Regional Departments of Education are responsible for the implementation of district-level policies for vocational education and training, as well as for reducing the number of dropouts, which are both closely related to NEETs. Schools are obliged to annually update their program/strategy for development in relation to the changing policy environment and the measures being undertaken at the national, regional or local level. They are also responsible for monitoring and supporting potential dropouts in terms of both their attendance and their grades.

Other institutions that are involved in the implementation of the Youth Guarantee are the Ministry of Youth and Sports (MYS), the National Centre "European Youth Programs and Initiatives", the National Council for Cooperation on Ethnic and Integration Issues

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(NCCEII), the National Association of Municipalities in Republic of Bulgaria, the nationally representative organizations of the employers and employees, NGOs and others.

While tracking NEETs is a challenging task due to the lack of formal contact between a significant share of the representatives of this group and public institutions, the situation is exacerbated by some of the characteristics of the labour market, including undeclared work practices, intense emigration and seasonal employment patterns. In addition, there are few incentives for inactive persons to declare their actual place of residence, especially when it comes to young people who have no dependants, hindering the institutions' ability to come into contact with a large part of actual NEETs.

Government efforts regarding NEETS are built around achieving the goals of the European Youth Guarantee<sup>37</sup>. More specifically, these are embodied in:

- Initiatives under the Human Resources Development Operational Program;
- National programs and projects (funded under the state budget);
- Measures under the Employment Promotion Act.

**Table 12: Main MLSP operations targeted at NEETs in 2019 funded by the Human Resources Development Operational Program (2014-2020)**

NAME	TARGET GROUP	AGE	2019 BUDGET
Youth Employment	Unemployed young people	Up to 29 years	BGN 14 million
Description	<ul style="list-style-type: none"> <li>• Providing 6-month financial support for the organisation of apprenticeships and training programs (incl. transport expenses for the first month of work/training), that support the transition from education to the labour market</li> <li>• Covering health and social contributions for a 6-month period in case of a permanent labour contract</li> </ul>		
Employment and Education of Young People	Unemployed young people (activated by the EA) / people with lower secondary education and Inactive/unemployed NEETs with disabilities	Up to 29 years	BGN 25 million
Description	<p>The program consists of two components:</p> <p><b>Component I: Unemployed young people that have active registration with the EA</b> Priority groups include:</p> <ul style="list-style-type: none"> <li>• Young people activated by the EA;</li> <li>• Young people with lower secondary education;</li> <li>• Young people registered as unemployed for 12 or more months;</li> <li>• NEETs included via the 2018 "Active" operation.</li> </ul> <p><b>Component II: Unemployed young people or NEETs with disabilities</b></p> <ul style="list-style-type: none"> <li>• Young people with disability rate over 75% are considered priority group;</li> <li>• Gathering specific job offers from employers and then either providing opportunities for subsidized employment, or using a voucher system to provide candidates with qualification courses in line with the requirements of the job postings (incl. key competences such as foreign languages and digital skills)</li> </ul>		

37 The European Youth Guarantee states that youth living in an EU country will receive a good-quality offer of employment, continued education, apprenticeship or traineeship within four months of becoming unemployed or leaving formal education.

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	<ul style="list-style-type: none"> <li>• Securing funding for mentors (in case no additional training is needed) for up to 3 months for young people who have started working directly</li> <li>• Component II also includes public institutions</li> <li>• Under Component I the required period for employment is up to 6 months, while under Component II it is 24 months</li> </ul>		
<b>Ready for Work</b>	NEETs	Up to 29 years	BGN 7.7 million
Description	<ul style="list-style-type: none"> <li>• Identification and activating of NEETs</li> <li>• Facilitation of job search and provision of psychological support</li> <li>• Organization of labour exchanges</li> </ul>		
<b>Parents in Employment</b>	Vulnerable labour market groups	Jobseekers aged up to 29 years Inactive and unemployed people aged 30+	BGN 13.5 million
Description	<ul style="list-style-type: none"> <li>• Gathering requests from parents of children aged 0-12</li> <li>• Training adults in childcare skills</li> <li>• Matching parents who need someone to look after their child full-time (for children who do not attend nursery or kindergarten) or part-time (for children aged 0-12 years who attend kindergarten or school) with unemployed/inactive people that have undergone training</li> </ul>		
<b>Training for adults who have undergone literacy courses</b>	Unemployed people with low education who are registered with the EA	16+	BGN 0.58 million
Description	<p>While this program is not specifically targeted at NEETs, unemployed people aged 24 or younger are considered the priority group.</p> <p>It foresees general efforts for increasing employability, such as professional counselling, psychological support and inclusion in labour exchanges and other activities.</p>		
<b>Support for entrepreneurship</b>	Inactive, unemployed, or employed people who want to start their own business	N/A	BGN 8.3 million
Description	<ul style="list-style-type: none"> <li>• General entrepreneurial support incl. training, consultancy, mentorship, etc.</li> </ul>		

Source: Employment Action Plan 2019

The implementation of the Youth Guarantee in Bulgaria gets significant support under the Youth Employment Initiative (YEI). Until the end of 2018 the four key measures financed under the YEI have included more than 52.6 000 young people aged 15-29 and have generated total expenditures of more than 150 million leva, as follows:

- "Youth Employment" (BGN 59.7 million and 18.7 thousand people);
- "Active" (BGN 15.4 million and 4.7 thousand people);
- "Employment and Education of Young People" (BGN 73.1 million and 23.5 thousand people);
- "Ready for Work" (BGN 1.8 million and 5.8 thousand people).

MLSP data<sup>38</sup> suggest that the distribution of different types of young people engaged in training and employment schemes is broadly representative of the general 15-29 age

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group, but there are also some notable differences between the profile of the participants across these four measures.

For instance, while “Youth Employment” posts the highest positive share in terms of employment outcomes (73% of all participants are in employment the following year), it is also the one in which the largest share of participants (30%) have tertiary education. On the contrary, schemes such as “Active” and “Ready for Work”, that aim at identifying and activating young people through a variety of methods such as psychological support, job search studios and labour exchanges, generally attract people with lower education, in line with the profile of most NEETs. Under these measures positive labour market outcomes are observed in 16% of all cases with most remaining participants being redirected to other employment or training initiatives.

It has to be noted, that as of the beginning of 2019 the EA still does not possess a tool for the systematic evaluation of labour market outcomes among its clients. Assessments such as the one cited in Table 14, are made via statistical surveys as part of one-off studies, which implies some conditionality to the data provided.

**Table 13. Distribution of participants in 2016-2017**

	Active	Youth Employment	Ready for Work	Employment and Education of Young People	Population aged 15-29
<b>Distribution by type of settlement</b>					
Urban areas	79%	62%	74%	87%	<b>76%</b>
Rural areas	21%	38%	26%	13%	<b>24%</b>
<b>Distribution by age</b>					
15-24 years	68%	51%	64%	48%	<b>64%</b>
25-29 years	32%	49%	36%	52%	<b>36%</b>
<b>Distribution by gender</b>					
Male	56%	44%	45%	47%	<b>52%</b>
Female	44%	56%	55%	53%	<b>48%</b>
<b>Distribution by level of education</b>					
Tertiary education	3%	30%	11%	8%	<b>15%</b>
Upper secondary education	29%	54%	49%	37%	<b>47%</b>
Lower education	69%	16%	40%	55%	<b>38%</b>
<b>Distribution by outcome</b>					
Remained with employer	8%	51%	8%	22%	<b>n.a.</b>
Employed somewhere else	8%	22%	8%	39%	<b>n.a.</b>

Source: MLSP

These four operations pertain to all target groups under the YEI in Bulgaria, but the extent to which they manage to contribute to the achievement of the 2023 goals<sup>39</sup> set in the

<sup>39</sup> “Human Resources Development” Operational Programme (2014-2020), p. 64

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“Human Resources Development” Operational Program varies. In particular, the target number of Roma aged 15-24 and 25-29 to be included by 2023 has already been surpassed 3.3 and 4.5 times respectively. This may make it seem that the work of Roma mediators and other labour market initiatives has been relatively successful, but instead it is clear that the initial goal for Roma inclusion was set far too low.

This conclusion is supported by the fact that the two target groups that register the worst performance in terms of their overall goal completion rate as of 31 December 2017 are NEETs aged 15-24 (35.2%) and NEETs of Roma origin aged 25-29 (31.6%). Apart from the already discussed difficulties that the public institutions experience in identifying and tracking NEETs, this relative underperformance of activation measures is also likely connected with the later start of the implementation of the “Active” (in 2016) and the “Ready for Work” measures (in 2017).

**Table 14: Selected National Programs that Target NEETs (2019)**

NAME	TARGET GROUP	AGE	2019 BUDGET
Career Start	Unemployed young people, registered with the EA	Up to 29 years	BGN 4.2 million
Description	<ul style="list-style-type: none"> <li>Securing internships in the public sector (central, district and municipal administrations) for 760 young people with tertiary education that have no previous experience in their respective field of specialization</li> </ul>		
Activating Inactive Persons	Inactive, unemployed people, NEETs, able-bodied people receiving social benefits	No limits	BGN 3.8 million
Description	<ul style="list-style-type: none"> <li>Individual work with identified inactive or discouraged people</li> <li>Facilitation of general and specialized labour exchanges and motivating people to be active on the labour market</li> <li>Case-managers and psychologists are appointed for unemployed people with “specific” needs</li> </ul>		
Employment and Education of Long-term Unemployed	Long-term unemployed	No limits	BGN 4.5 million
Description	<ul style="list-style-type: none"> <li>Young people aged up to 29 years are a priority group, together with recipients of social benefits and unemployed aged 50+</li> <li>Employment in critical response teams</li> <li>This program includes professional qualification courses, as well as opportunities for 12-month subsidized employment in the private or public sectors</li> </ul>		
Regional Employment Programs	NEETs, unemployed aged 15-29 and other vulnerable labour market groups	No limits	BGN 8.8 million
Description	<ul style="list-style-type: none"> <li>Securing 3-6 month employment across all of the country’s 28 districts</li> </ul>		

*Note: In addition, there are a number of other programs, which, while not specifically targeted at NEETs, provide opportunities for training and employment of young people registered with the EA. Among these are “Assistants for People with Disabilities”, “Melpomena” and “Beautiful Bulgaria”. Cumulatively, they have provided employment for 278 unemployed aged 15-29 years in 2018.*

*Source: National Action Plan on Employment (NAPE) for 2019*

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The information for the implementation of the national programs for 2018 that we received from the EA and MLSP's 2019 programme budget report allow us to make the following **observations**:

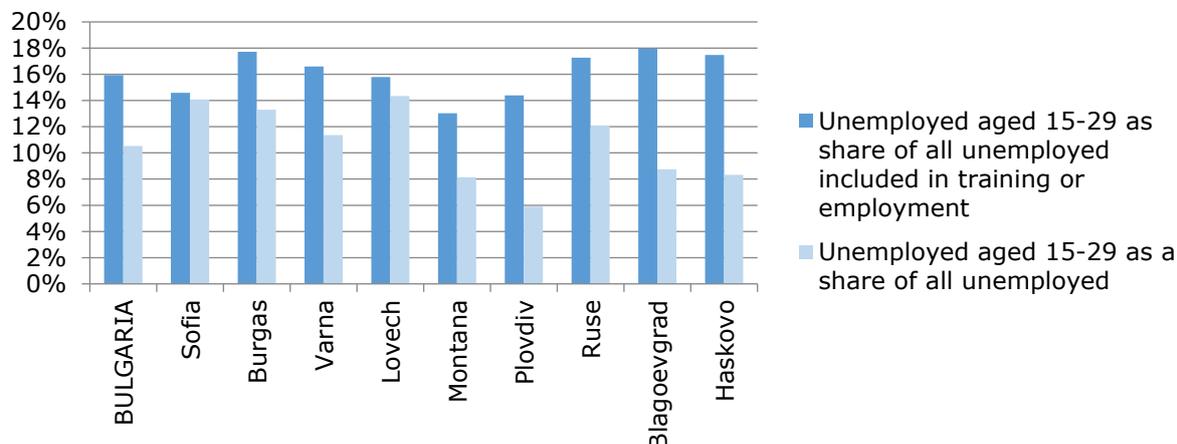
- The sum dedicated annually to implementing the National Action Plan on Employment (NAPE) has remained flat at about 73 million leva since 2010, despite changing labour market conditions such as the significant increase in the minimum wage (from 240 leva in 2010 to 560 leva in 2019). This dynamic means that the scope of active labour market policies (ALMP) has had to be scaled back - if we exclude youth policies, there has been no significant shift in the structure of ALMPs in line with the labour market situation.
- Despite EA's efforts, it is evident that more has to be done in terms of making the public intermediation service more attractive<sup>40</sup> to potential employers and employees alike (including NEETs). NSI's LFS data show that in 2018 only 40.1% of the people that are actively looking for work use labour bureaus. The ability of the institutions to reach out to this vulnerable labour market group and influence its behaviour is additionally hindered by some cultural peculiarities such as early marriages in some Roma communities<sup>41</sup>, as well as the overall lack of administrative capacity, especially at the local level.
- While these results imply that labour supply and demand dynamics as registered by job postings and job seekers registered with labour bureaus are not fully representative of the broad economy, they give a clear perspective on a significant share of low-skilled workers, including NEETs. The latest data provided by EA shows that in 2018, 76% of all job postings in labour bureaus were for workers with no specific qualification. At the same time only 40% of all registered jobseekers that started work in 2018 possessed no actual qualification.
- It may be argued that the administration's focus remains on subsidized employment, rather than on the education and training of both employed and unemployed. Based on the amounts actually spent on each of the national programs and the share of young people that they include, we estimate that in 2018, 16.7% of all expenditure under the national employment programs was targeted at unemployed people aged 15-29.
- The review of the 2018 administrative data, provided by the EA, shows that the participation of young unemployed people in employment and training programs is indeed higher than that of other age groups. While registered unemployed aged 15-29 accounted for 11.1% of all registered unemployed in 2018, they made up 15.9% of all unemployed people included in employment and training programs.

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40 In our view, one of the main shortcomings of ALMPs targeted at NEETs has been the use of inappropriate informational channels – i.e. ones that are not commonly used by the target group. The government's most recent response has been the "Stop Doing Nothing!" campaign – a series of promotional videos, as well as some videos demonstrating success stories, that have been broadcast across major TV stations and have also found their way online. The success of this measure is yet to be evaluated, but the overall shift away from traditional communication channels used by the administration is a welcome step towards potentially reaching out to a larger share of the inactive youth.

41 UNICEF. (2016). Report on Social Norms that Hinder the Access of Roma Girls to Education, 45-64.

**Figure 10: Participation in employment and training national programs by RESDs (2018)**



Source: EA, IME calculations

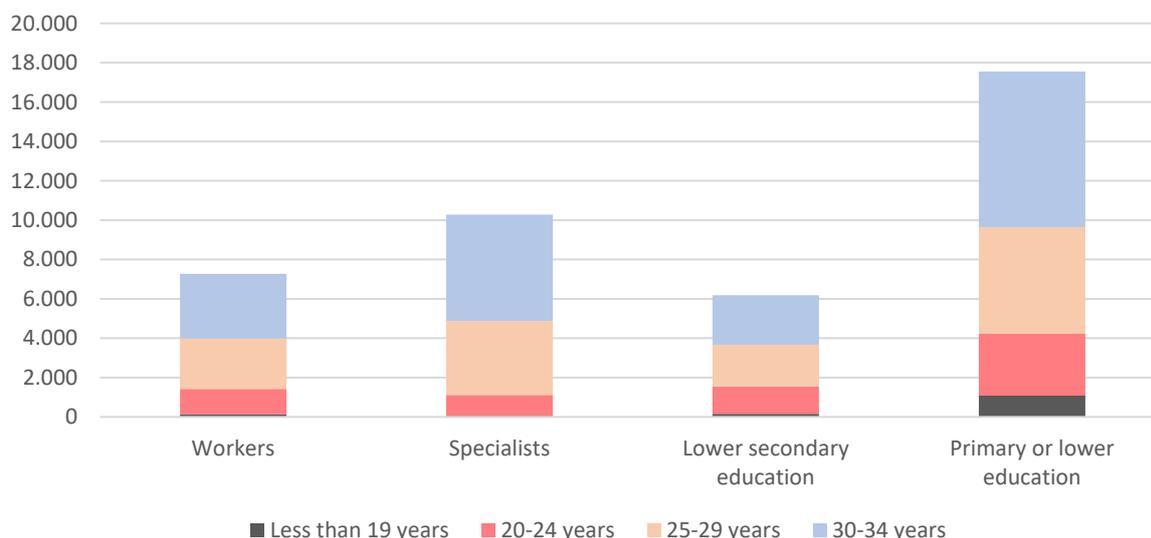
- The “Career Start” Programs is by far the most significant employment initiative targeted at NEETs (and the unemployed subgroup in particular). It covers 23.3% of all young people included in education and training via EA’s schemes in 2018 and is the only national program that is solely targeted at young people. The relative share of young people in the other national programs is mixed, ranging from less than 10% in “Assistants for People with Disabilities” and “Regional Employment” to about 25-30% in “Activating Inactive Persons” and “Melpomena”. At the same time, the “Career Start” Program is targeted at young people with higher education, who (as mentioned in our analysis) are by far the least risky group of NEETs in terms of potential labour market outcomes. The program offers higher payment (650 leva a month in 2019) than most other national employment initiatives, which is understandable in view of the higher requirements for applicants and the government’s effort to provide enough incentives for young people with higher education to not only become active on the labour market, but to remain in the country. At the same time, in view of the below-average education outcomes<sup>42</sup> among Roma, it is not surprising that only 2 of the 788 unemployed included in “Career Start” 2018 are of Roma background.
- NEETs (and unemployed young people in particular) are one of the target groups and are often included in the state-funded projects managed by the social partners. In 2018 a total of 985 unemployed aged 15-29 have taken parts in such projects, managed by the Bulgarian Chamber of Commerce and Industry (BCCI), the Bulgarian Industrial Association (BIA), the Confederation of Employers and Industrialists in Bulgaria (CEIB), the Bulgarian Industrial Capital Association (BICA), the Confederation of Independent Trade Unions in Bulgaria (CITUB) and the Confederation of Labour “Podkrepa”. These projects include training in key competences, soft skills training, as well as acquiring specific qualifications in a wide variety of professions such as cooks, bartenders, gardeners, social workers, security officers, office managers, hairdressers, etc. According to MLSP data for 2018, after the successful completion of the initial phase, the social partners secure a minimum of 3-month non-subsidised employment contracts for between 35 and 49% of all participants who have undergone training (this share varies across the different projects). Furthermore 2-10% of participants in these projects receive 3-month subsidised employment contracts.
- EA’s latest available data shows that the age distribution of the registered unemployed supports the significance of the 30-34 year olds in the extended 15-34

42 According to Census 2011 only 0.35% of Roma have higher education and only 6.8% have upper-secondary education.

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age bracket of NEETs, that we established in our analysis of LFS and SILC data. As Figure 9 clearly shows, they form by far the most numerous age group of registered unemployed, while at the same time (by the current definition) falling outside of the scope of policies that target NEETs.

**Figure 11: Number of the registered unemployed by age and education (May, 2019), %**



- *Source: EA, IME calculations*
- There is a clear difference in the share of young people that participate in the national programs managed by the two types of nationally representative organisations – industrial associations and labour unions, respectively. Unemployed young people constitute 18.6% of all people involved in education and training programs managed by the employer organisations, compared to a share of 9.6% in the programs managed by the trade unions.

The scope and significance of the labour market measures under the EPA that target NEETs is secondary to those of the national programs and the initiatives under the Human Resources Development Operational Program. In 2018 expenditures related to these measures accounted for just below 2.1 million leva, which is indicative of an ongoing shift in preferences of both employers and unemployed young people.

**Table 15. Annual expenditure on measures under the Employment Promotion Act (BGN, thousands)**

	2015	2016	2017	2018
Encouraging employers to hire unemployed persons (aged 29 or less)	1,705	3,154	3,112	1,351
Encouraging employers to hire unemployed persons with disabilities, as well as young people from social care services (aged 29 or less)	124	411	100	662
Encouraging employers to hire unemployed persons part-time (aged 29 or less)	249	258	120	89
Encouraging employers to hire unemployed persons that have completed secondary or higher education, but have no working experience (aged 29 or less)	495	0	0	0

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Encouraging employers to provide internships for unemployed persons (aged 29 or less)	227	241	110	107
Encouraging employers to provide apprenticeships for unemployed persons (aged 29 or less)	270	287	182	111
Securing additional labour compensation for covering mentorship costs for employed apprentices (aged 29 or less)	106	109	65	44
Encouraging the territorial mobility of unemployed persons across regions	30	30	30	62
Encouraging the territorial mobility of unemployed persons across regions (over 50 km)	0	0	480	240
<b>Total</b>	<b>3,208</b>	<b>4,489</b>	<b>4,200</b>	<b>2,071</b>

Source: MLSP

### 3. POLICY DISCUSSION

#### 3.1. Focus on Roma and Activation Policies

Bulgaria's Social Scoreboard supporting the European Pillar of Social Rights classifies<sup>43</sup> the two indicators related most closely to NEETs as *"weak but improving"*. These are the relative share of early leavers of education and training aged 18-24 and the share of NEETs among the population aged 15-24. According to the Commission *"this situation translates into poor labour market outcomes for young women"*, an observation that is directly related to NEETs and is supported by our analysis of the latest available LFS and EU-SILC data.

One of the main ways that the government is trying to address NEETs in one of the most at-risk groups – Roma youths, is by using Roma mediators who try to encourage the inactive to return to education, or register as unemployed in order to be able to make use of existing labour intermediation and training services<sup>44</sup>. This specific approach has proven necessary due to a variety of cultural reasons (including language barriers) – some Roma communities to this day remain sceptical of non-Roma public workers, which limits the ability of the latter to achieve activation goals.

Roma constitute a significant share (50.2%) of all the 10 000 people activated by the EA in 2018 under the Activating Inactive People program. At the same time, they account for only 7% of the 18 000 people involved in education and training programs (8.5% among young Roma).

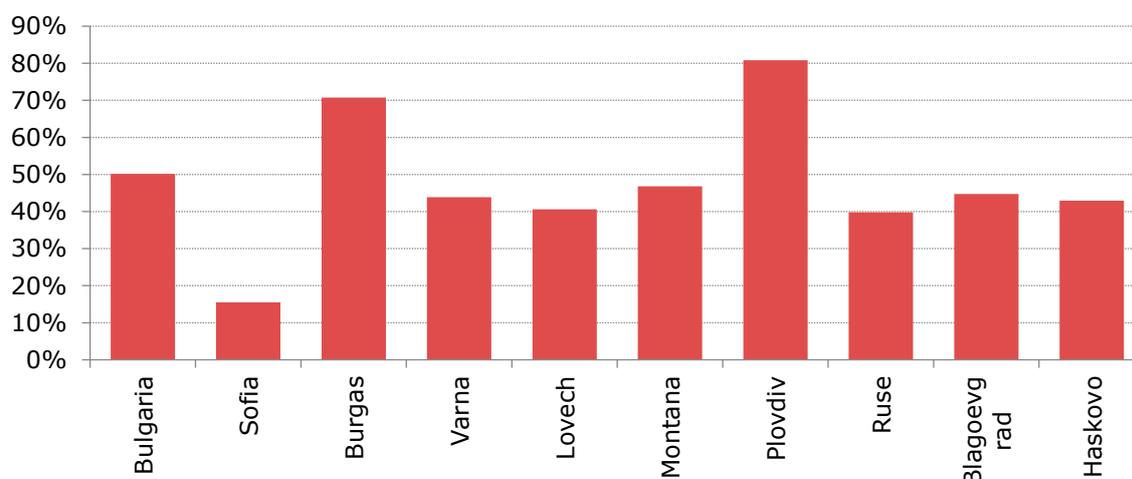
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43 European Commission. (2019). [Country Report - Bulgaria \(2019\)](#), p. 35

44 The ability of the institutions to reach out to and influence the behaviour of this vulnerable labour market group is additionally hindered by some cultural peculiarities such as early marriages in some Roma communities. More information on cultural issues is provided by UNICEF. (2016). Report on Social Norms that Hinder the Access of Roma Girls to Education

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**Figure 12: Relative share of Roma among all activated persons, %, 2018**



Source: EA, IME calculations

However, since more than half of all activated people in 2018 have primary or lower education (close to 60% in the regions of Burgas and Plovdiv), it is not surprising that labour offices struggle to provide them with employment opportunities, an indication of the negative effect of poor educational outcomes on labour market prospects<sup>45</sup>.

While the activity of Roma mediators is not limited to young people, young Roma are in fact one of the main target groups of both Roma mediators and the youth mediators under the "Activation of Inactive Persons" national programme. The annual reports that accompany the government's employment action plans give mixed evidence regarding the effectiveness of Roma mediators. Still, if we consider the latest available data<sup>46</sup>, about 44% of the registered, previously inactive Roma have received some kind of labour market involvement<sup>47</sup> (including apprenticeships and training).

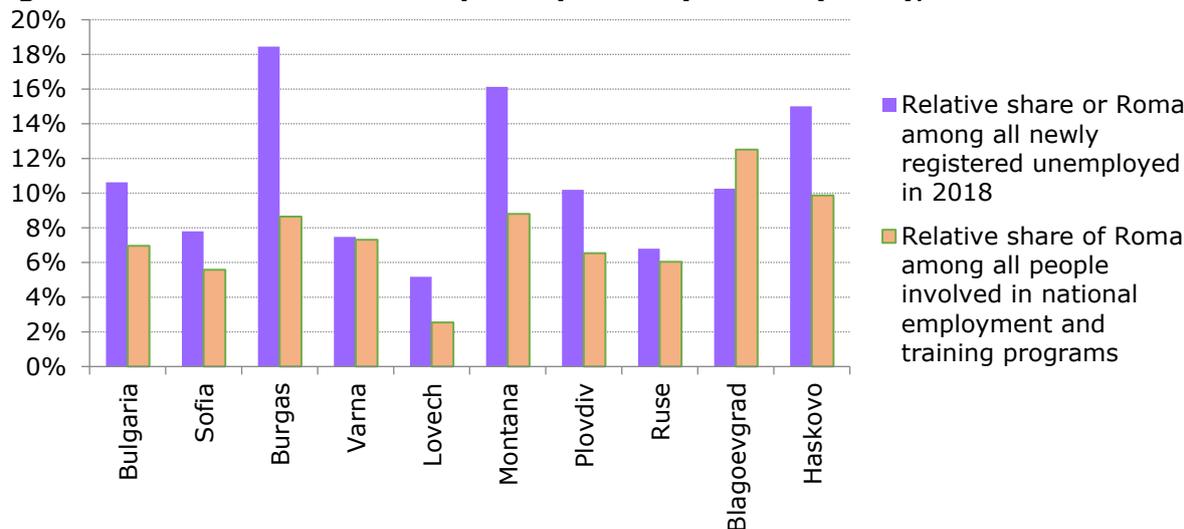
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45 While reducing of the share of dropouts is one of the key prerequisites for addressing the still high number and share of NEETs in the country, more efforts towards increasing enrolment are also necessary. In Bulgaria's 2019 Country Report the Commission classifies the low enrolment rate of young children (0-3 years) in formal childcare as a "critical" issue, as the rate is more than three times lower than the EU average of 30%.

46 Data quoted from the 2019 National Employment Action Plan, available at [MLSP's website](#).

47 Since 2018 the work of youth mediators with NEETs has been supported by a specially developed guide.

**Figure 13: Indicators on Roma participation by RESDs (2018), %**



Source: EA, IME calculations

The discrepancy in the ability of public institutions to activate and then secure employment/training for Roma is especially visible in the territory covered by RESD Plovdiv (the districts of Plovdiv, Pazardzhik and Smolyan)<sup>48</sup>, where the high share of activated Roma has not translated into higher-than-average involvement in labour market initiatives.

### 3.2. Education Outcomes Remain Key

All issues discussed so far go hand-in-hand with the main challenges facing the implementation of the Youth Guarantee in Bulgaria, as outlined by the Commission: 1) High dropout rates; 2) Need for strengthening workplace education and introducing dual education; 3) Inefficient targeting of NEETs; 4) Necessity for more diversity in the programs and measures in line with the profile of the unemployed; 5) Identifying skill needs.

After some progress in 2009-2011, the share of early leavers steadily increased in 2013-2016, before returning to a downward trend in 2017-2018. The goal to reduce the share of early school leavers to 11% by 2020, set in the National Strategy to Reduce the Share of Early School Leavers<sup>49</sup> (2013-2020) seems achievable. Yet, given the lack of a sustainable downward trend throughout the years, it might be premature to tick the problem as resolved, even if the goal is reached<sup>50</sup>.

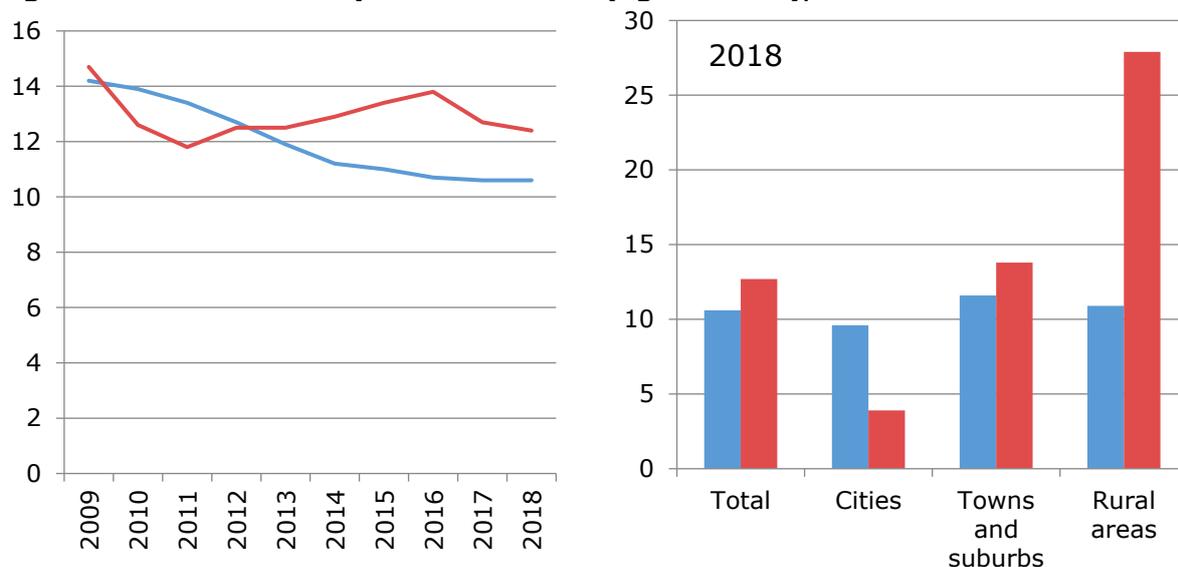
48 The education and qualification structure of unemployed young people aged 15-29 is actually better than that of older age groups, but there are parts of the country in which the share of unqualified young people among those registered as unemployed is above 50%. Such is the case in 17 of the country's 28 districts, with one of the poorest districts in the country, Sliven, posting the highest share – 75.2%.

49 [National Strategy to Reduce the Share of Early School Leavers \(2013-2020\)](#)

50 [Interim Report on the Implementation of the National Strategy to Reduce the Share of Early School Leavers \(2013-2020\)](#)

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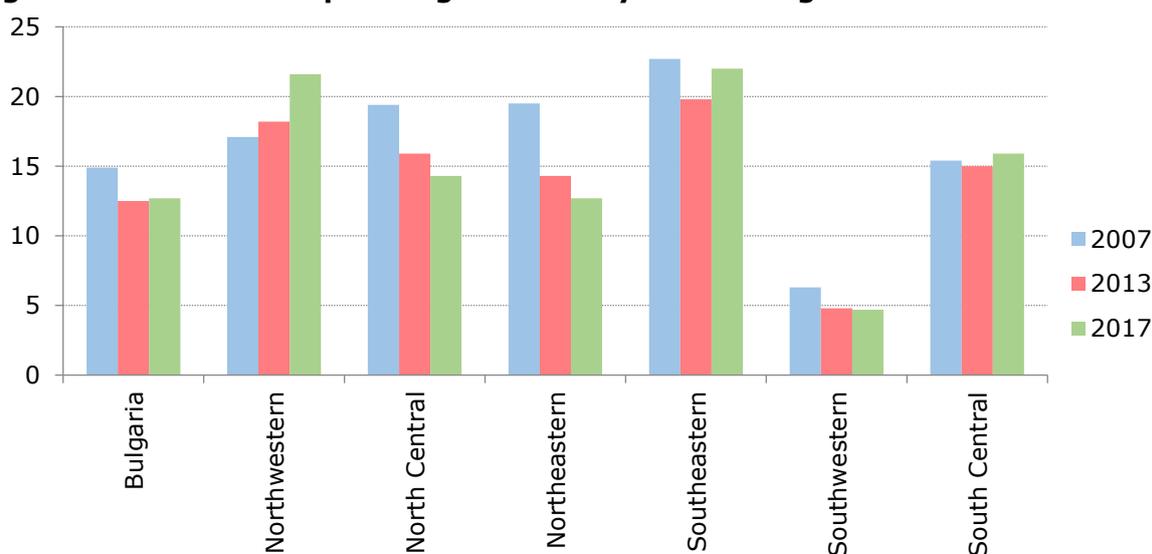
**Figure 14: Share of early school leavers (aged 18-24), %**



Source: Eurostat

Regional level data make it clear that the dropout rates have stagnated in two of the country's regions with the largest share of the Roma population (Southeastern and South Central, which include large part of the territory administered by RESD Burgas and RESD Plovdiv) and have deteriorated further in EU's poorest NUTS-2 Region – Northwestern Bulgaria.

**Figure 15: Share of dropouts aged 18-24 by NUTS-2 regions**



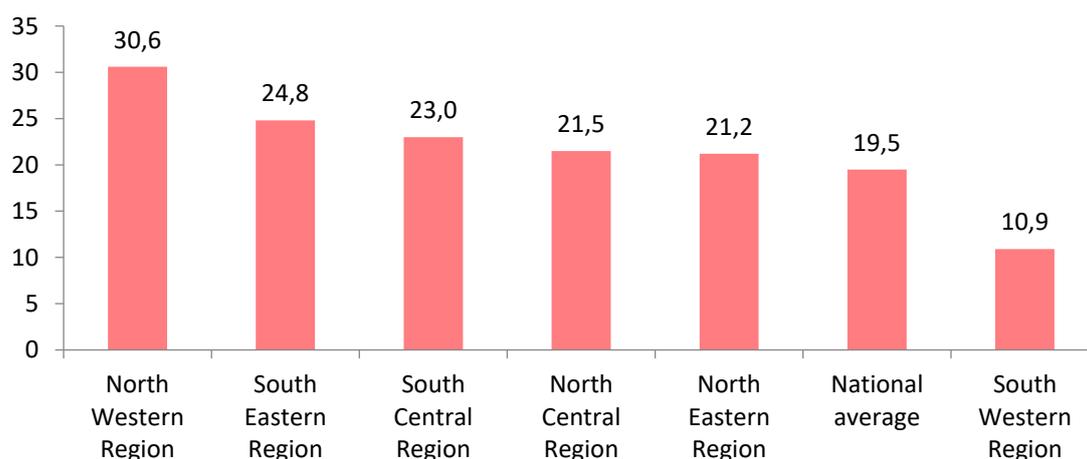
Source: Eurostat

#### 4. FIELD WORK IN THE REGIONS WITH THE HIGHEST NEETs RATES

##### 4.1. Selection of Suitable NUTS-2 and NUTS-3 Regions

According to the latest NSI LFS data<sup>51</sup>, the three regions with the highest NEET rates for the 15-34 age group are the Northwestern, the Southeastern and the South Central regions. NEET rates in these regions exceed the national average of 19.5% for 2017 even if the Northwestern Region, traditionally, stands out with the highest rate, outstripping the rest of the regions with a notable distance.

**Figure 16. NEETs share for the population aged 15-34 years, % (2017)**



Source: NSI, LFS, data provided upon request

Each region consists of several districts (between 4 and 6 per region) with specific characteristics that may vary significantly. In line with the idea to consider not only NEET rates, but also the total number of NEETs when selecting specific districts for the purposes of the field study, a combined criterion was calculated after the readings of the two indicators were normalized to a unit scale, with equal 50% weights of each of the two in the combined indicator. Thus, the two districts with the highest concentration of NEETs (as measured by the combined indicator of absolute numbers and NEET rates) in each of the three regions were picked up for the field trips.

The use of a composite indicator for NEET concentration is a more methodologically sound approach, as it takes into account aforementioned differences between Bulgarian districts.

- High relative share of NEETs can be indicative of structural labour market, education and social issues that usually do not pertain only to this specific age group, but rather are descriptive of the general socio-economic environment;
- A high absolute number of NEETs, even if largely influenced by population density, is particularly important from a policy point of view - local government and non-government organizations, working with NEETs, have much bigger experience due to the broad base of their clients.

The results from the application of the composite indicator and the selected districts in the three regions that feature the highest concentration of NEETs according to 2017 data, are listed in the table below.

51 Since NEET data for the 15-34 age group is published neither by the National Statistical Institute (NSI), nor by Eurostat, the IME obtained it after requesting and purchasing this statistical information from NSI.

**Table 16: Districts with the highest concentration of NEETs in the Top 3 regions with highest NEETs rates for the 15-34 year olds, 2017**

Region	District	NEET rate (15-34 years)	Number of NEETs (15-34 years), thousands	Composite indicator for NEET concentration*
Northwestern Region	Montana	34.3	8.8	61.6
	Pleven	30.8	16.4	68.8
South Central Region	Pazardzhik	28.9	16.8	66.0
	Plovdiv	19.4	30.2	72.4
Southwestern Region	Burgas	25.9	22.7	71.0
	Sliven	33.1	12.6	66.2

*Source: NSI, LFS (requested data), IME calculations*

*\*The composite indicator is an average of the NEET rate and absolute number of NEETs for each district, after these have been normalized to a 1-100 scale.*

For the purposes of this field study, the IME visited the municipalities that serve as administrative centres for each of the six identified districts, since this is where most local branches of government bodies are typically located (e.g. regional directorates of the social services, local labour bureaus, regional education management bodies, etc.). As local labour bureaus are main point of contact and key stakeholders with regard to NEETs, five of the six regional meetings with local government and non-government representatives were held in the building of local labour bureaus, while the sixth took place in the district administration of Montana.

The regional focus groups were attended by a total of 39 local experts, representing a wide array of stakeholders such as:

- Local labour bureaus (including subsidiaries);
- Regional Employment Services (where present);
- Local offices of the Social Assistance Agency;
- Roma mediators (employed by local labour bureaus);
- Youth mediators (employed by municipalities);
- Municipal officials;
- Regional Education Management bodies of the Ministry of Education and Science;
- Industrial associations;
- Locally active NGOs that work on issues related to NEETs.

## **4.2. Results from the Regional Focus Groups**

The regional meetings were held in the form of focus groups, following a dedicated focus group guide that covers all major issues related to NEETs. In order to provide quantitative information on some of these issues, all focus group participants were asked to fill in an anonymous survey, consisting of 4 questions, the results of which help shed more light on **the significance of some of the key individual and socio-economic factors** that stand behind the NEET issue.

The results of the IME survey are presented in the next page.

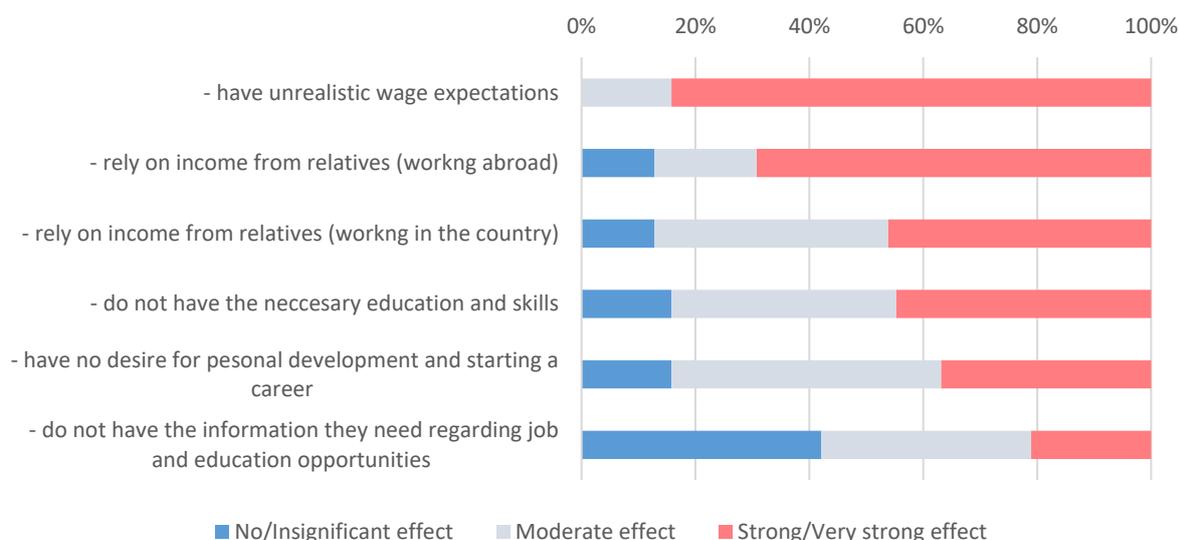
## Assessment of the people not in employment, education and training (NEETs) in Bulgaria and policy measures to effectively address their integration

Q1. How would you rate the effect of the following individual factors on the activity of young people?

**Average mark** on the scale from 1 to 5, where: 1 – no effect; 2 – insignificant effect; 3 – moderate effect; 4 – strong effect; 5 – very strong effect

Inactive people aged 15-34:	South East	South Central	North West	Average
- have unrealistic wage expectations	4.40	4.21	4.00	4.24
- rely on income from relatives (working abroad)	4.06	3.71	4.22	3.97
- rely on income from relatives (working in the country)	3.75	3.21	3.89	3.59
- do not have the necessary education and skills	3.73	3.50	3.33	3.55
- have no desire for personal development and starting a career	3.40	3.00	3.67	3.32
- do not have the information they need regarding job and education	2.63	3.00	2.56	2.74

### Distribution of received answers



Source: IME regional focus group questionnaire

Unrealistic wage expectations are by far the highest ranked personal reason for NEET inactivity, with a country average mark of 4.24/5.00 and a 4.00 or higher mark in all observed regions. Reliance on parents' income is also an important factor, with household income from abroad (3.97) understandably seen as a more significant factor than household income generated in other parts of the country, given the wage differences between Bulgaria and most other EU member states. In line with preliminary expectations, the South Central Region of the country is the least affected in this regard, most probably due to increased employment opportunities in the past few years. In the opinion of regional experts surveyed, the lack of information regarding employment and training opportunities is the least significant personal factor that affects youth economic activity.

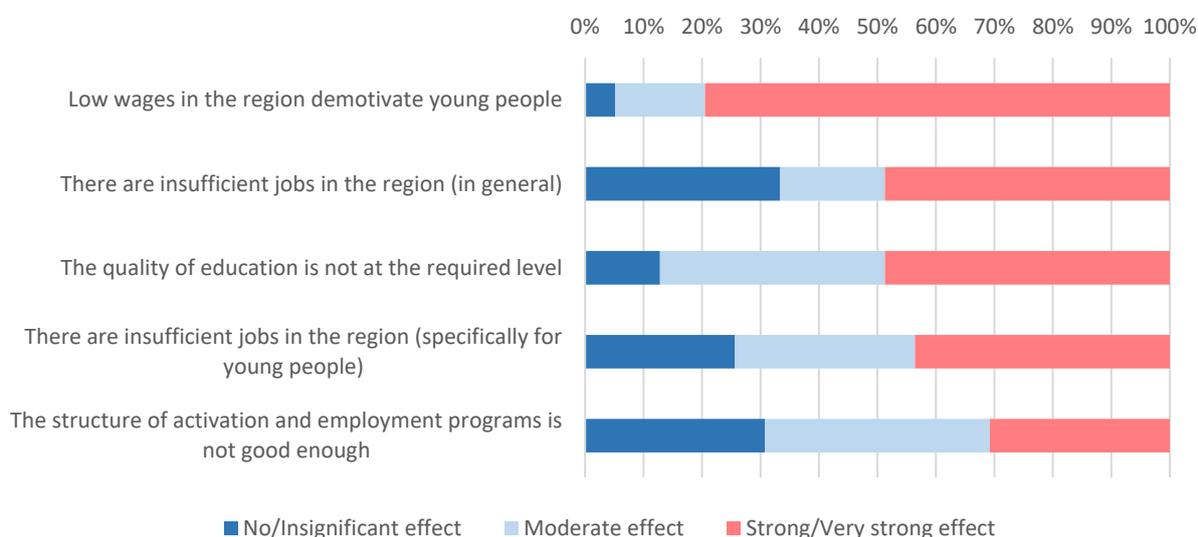
Q2. How would you rate the effect of the following factors of the environment on the activity of young people?

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**Average mark** on the scale from 1 to 5, where: 1 – no effect; 2 – insignificant effect; 3 – moderate effect; 4 – strong effect; 5 – very strong effect

	South East	South Central	North West	Average
Low wages in the region demotivate young people	4.19	4.14	4.33	4.21
The quality of education is not at the required level	3.38	3.64	3.56	3.51
There are insufficient jobs in the region (specifically for young people)	3.06	3.14	3.67	3.23
There are insufficient jobs in the region (in general)	3.19	2.93	3.67	3.21
The structure of activation and employment programs is not good	2.81	3.21	3.11	3.03

**Distribution of received answers**

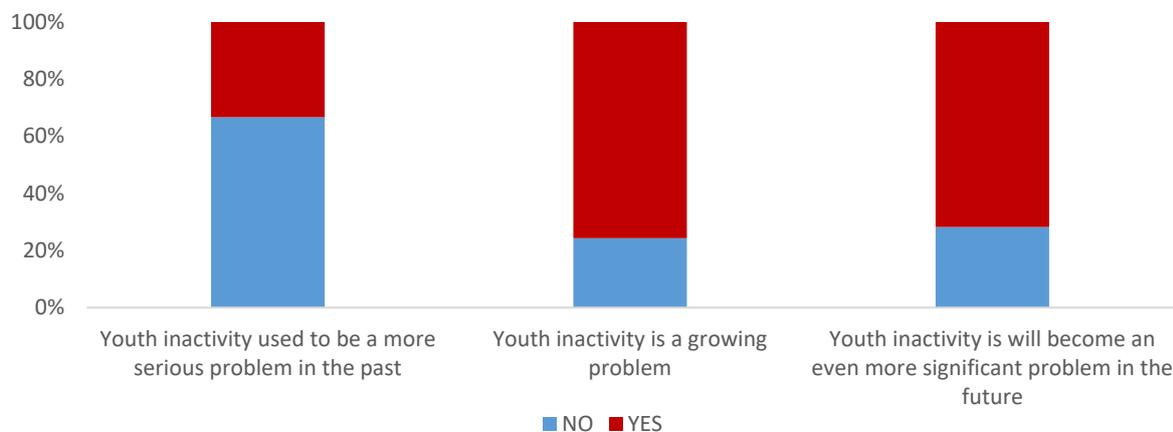


Source: IME regional focus group questionnaire

Low wages are considered the primary socio-economic factor behind youth inactivity, with 80% of regional experts describing it as having a “strong effect”, or a “very strong effect”. Lack of jobs (both in general and suitable for young people in particular) is viewed as having a more significant effect on young people mainly in Northwest Bulgaria than in other parts of the country, which is in line with the still poor labour market performance in this region. While local experts are somewhat split on the issue of their effectiveness, the structure of activation and employment programs is deemed a secondary in terms of the factors of the socio-economic environment that affect young people.

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**Q3. How would you rate the effect of the following factors of the environment on the activity of young people?**



Source: IME regional focus group questionnaire

Contrary to what the official statistical data show, perceptions on the ground regarding youth inactivity seems to suggest that it is a growing problem that will continue to become an even more serious issue. While there may be a number of reasons for this perception, arguably the most reasonable explanation is that young people that are still inactive, despite favourable labour market conditions in the past few years, are in a precarious position that shows their lasting inability/reluctance to engage in education, training or employment. This shows that while the number of NEETs is falling, young people who are still in this position are viewed as more unlikely to follow in the steps of their counterparts. The opinion that youth inactivity will become an even more significant problem in the future may also be indicative of a lack of trust in the education system.

**Q4. What would be your advice for an inactive young person from your region, who asks for your guidance?**

**Average mark** on the scale from 1 to 5, where: 1 – no effect; 2 – insignificant effect; 3 – moderate effect; 4 – strong effect; 5 – very strong effect

	South East	South Central	North West	Average
Try to find a job by himself/herself or with the support of family and relatives	3.21	3.77	3.88	3.57
Enroll in a program with the goal of acquiring new skills/qualifications	3.50	3.62	3.25	3.49
Register as an unemployed and rely on labour bureaus to find them a job	4.21	2.85	3.13	3.46
Seek the services of a private labour intermediation agency	2.14	3.08	2.75	2.63
Seek the services of a private labour intermediation agency (for work abroad)	1.93	1.77	2.00	1.89

Source: IME regional focus group questionnaire

Local experts are reluctant to recommend the services of private labour intermediation agencies, especially when it comes to seeking employment opportunities abroad. This is probably the result of relatively widespread illegal labour intermediation practices throughout the years, especially among Roma, which sometimes bear the risk of work

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without contract, continuous exploitation and sometimes even evolve into human trafficking<sup>52</sup>.

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52 For more information on human trafficking in Bulgaria and the region see AMIF. (2018.) [\*Safe and Adequate Return, Fair Treatment and Early Identification of Victims of Trafficking from Third Countries outside the EU.\*](#)

## **5. POLICY RECOMMENDATIONS**

### **Addressing data considerations**

Improving the quality of data related to NEETs would be a main precondition to shaping successful policy responses to the issues that they face.

At present NSI's LFS data on NEETs is not fully representative at the district level, which may hinder the efforts of the Employment Agency (EA) to efficiently deploy its resources in order to better tackle the issue. While this is an understandable and (from a statistical point of view) fully acceptable consequence of the characteristics of the survey sample, there are steps that can be made to try to increase both response rates and the quality of data provided.

It is important that the NSI moves forward with **introducing more contemporary means of surveying the population**, as a means to reduce the non-response rate. While most EU countries conduct LFS interviews only with computerised questionnaires, Bulgaria, Romania and Montenegro continue to rely solely on paper questionnaires. This approach raises concerns about the reliability of the recorded responses, not only due to the increased duration of interviews, but also due to the more limited possibilities of follow-up checks and verification of data (an opportunity provided by telephone interviews). Since **over-coverage of unoccupied dwellings** is the leading reason for Bulgaria's LFS outcomes with non-contacts (forming 14.3% of the 19.7% non-response rate), the introduction of a telephone-based approach seems an appropriate first step in that direction. In addition, digitalised questionnaires might make the data-mining process both more efficient (in terms both of data collection and data processing), as well as more attractive to representatives of newer generations – the target group of NEET-related policies.

The problems that the NSI has been experiencing with reaching a large enough number of respondents in some of the country's districts would be difficult to address before the data from the upcoming Census is available, especially when it comes to such a specific group within the surveyed population. While our meetings with NSI representatives have revealed little initial support for the inclusion of a specialised NEETs module in regular LFS surveys, it stands to reason that no such effort should be undertaken before the results of the 2021 Census. In addition, there are concerns that if further questions were added to the already significant length of the current LFS questionnaire, this would additionally undermine the reliability of the data received and reduce the response rate.

An alternative might be the **facilitation of a dedicated statistical survey** (whether one-off or regular) of young people, which could help shed further light on the main drivers of youth inactivity. The methodological development of such a statistical survey, as well as its subsequent implementation, however, would need additional government funding.

The ongoing preparation of the 2021 Census has to take into account and address the identified shortcomings of the previous Census. In particular, the responsible institutions have to make sure that:

- The online component is comprehensively tested and functions smoothly and that it is ready to cope with a potentially larger than expected number of respondents at the same time;
- The census workers are both trained and compensated adequately in order to ensure the quality of their work and the data received;
- The adopted communication strategy serves the goals of the census and especially its online component – namely to convince people that the data they willingly provide would remain strictly confidential and that its quality would support the adequate analysis and policy response of any issues that the Bulgarian society might face during the following decade;

### **Improving coordination between youth mediators and labour bureaus**

The assessment of the effectiveness of active labour market policies is hindered by the lack of instruments that continuously track labour market and educational outcomes among Employment Agency clients. While this is a general issue that is not limited to programs and measures targeted at NEETs, it has an impact not only on the evaluation of NEET policies, but also on the day-to-day work of some of the key stakeholders.

The current framework in which youth mediators operate has some advantages, since it provides an alternative contact point for young people with local institutions. Our meetings with currently employed youth mediators have revealed that some of the successfully activated young people either had no knowledge of existing public labour intermediation and training services, or were reluctant to try to make use of them without guidance and support from youth mediators. This is especially true of some of the most at-risk labour market groups such as previously inactive young people that are also illiterate (or only minimally educated) due to early school dropout.

At the same time, the fact that youth mediators are hosted by the municipal administration, while most of the subsequent services that identified NEETs can make use of are administered by the labour bureaus, suggests the need for smooth informational exchange between these institutions. While **some municipal administrations and local labour bureaus have managed to achieve a remarkable level of coordination** (due to their mutual goodwill and efforts), this seems to be more of the exception rather than the rule. The problems with the existing relationship between youth mediators and labour bureaus can be summarized as follows:

1. Youth mediators and local labour bureaus frequently do not have an active day-to-day relationship. In some cases, they possess little to no information about each other's activities, despite the fact that they share and service a common target group.
2. Once a youth mediator successfully activates a young person, by helping him register as unemployed, the mediator receives no further information on the outcome of follow up labour intermediation or training services. Unless the youth mediator actively engages with his former clients (or vice-versa), the system of labour intermediation has no means of providing follow-up information on separate cases.
3. This data vacuum leads to an inability for subsequent evaluation (including self-evaluation) of the work of youth mediators, which makes it difficult to identify good practices and success stories that can help improve the outcome of labour intermediation policies.

As mentioned, the issue of tracking the outcome of labour market measures is not limited to the work of youth mediators, which is why any **efforts for its resolution should be part of a broader push for more active and effective data collection** on behalf of the Employment Agency in particular.

### **Adjustment of the scope of active labour market programs and measures**

The observed age distribution of NEETs in the LFS and EU-SILC studies, as well as the data on the age distribution of the registered unemployed, show that the 30-34 olds form a significant share of all NEETs in the 15-34 age group at the national level. NEETs aged 30-34 are also the most numerous age group in two of the country's six regions – the Southwestern and the Northeastern.

IME's meetings with youth mediators working in the six district centres visited for this study said that they are indeed often contacted by young people from this particular age bracket. While youth mediators tend to still provide assistance with registration at the labour bureaus, subsequent institutional efforts for their follow up labour market integration fall outside of the scope of labour market measures targeted at NEETs.

Thus a significant share of young people, that otherwise meet all the criteria of being classified as NEETs, are referred to general employment support programs. While setting age limits for determining access to different employment and education programs is vital for ensuring their effectiveness, it may well prove to be the case that **increasing the**

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**scope of at least some measures** to include the 30-34 year olds may have a positive effect on their future employment prospects.

### **Regional dimensions**

Even though the increasing focus on activation measures in recent years has had a positive effect on both national and local NEET rate levels, the efforts of responsible institutions could be better channelled if some regional level data-driven adjustments were to be made.

- Regional level data make it clear that the dropout rates have stagnated in two of the country's regions with the largest share of the Roma population (Southeastern and South Central, which include large part of the territory administered by RESD Burgas and RESD Plovdiv). In addition, our meetings with local labour bureaus have revealed that at the time there were no employed Roma mediators in two of the district centres in these regions - Pazardzik and Sliven, which are also two of the districts with the highest number of Roma in the country.
- The Southern Central region, which according to the SILC estimations has both the largest share and the largest number of inactive youth overall, contains almost a third of all of the inactive youth in Bulgaria. This is also the region in which the discrepancy in the ability of public institutions to activate and then secure employment/training for Roma is most visible (especially on the territory covered by RESD Plovdiv - the districts of Plovdiv, Pazardzhik and Smolyan). Here the higher than average share of activated Roma has not translated into higher-than-average involvement in labour market initiatives.

The lack of adequate means of organized transportation in some parts of the country is another growing problem that hinders labour mobility from municipalities with high unemployment and inactivity rates in municipalities experiencing labour shortages. While larger companies are sometimes able to find a way around this issue, even this often results in excessively long travel times due to the need to take on workers from different settlements, which might act as a demotivating factor for employment (especially for young people with no dependants). Despite the fact that some measures for the support of labour mobility have been introduced, their limited use by employers and employees shows that the criteria set in the legislation might still be too restrictive. In any case, the net fiscal effect of supporting the mobility of an employed person (even on the minimum wage), more positive than the cost of unemployment and/or social benefits that he or she would receive otherwise. So far, the EA has been trying to address another side of this issue – the difficult access to labour intermediation services, by **testing mobile units** that in cooperation with local authorities (usually the mayor) organise presentations of available employment and training programs in settlements not otherwise served by the labour bureaus. Provided these initial efforts prove successful, they should also be replicated in other parts of the country.

### **Other recommendations**

- While there has been some progress in the government's efforts to coordinate the efforts of local educational institutions, social services and labour bureaus, our meetings with local representatives of these institutions have revealed that there is still no clear practice in applying the Mechanism for cooperation of the institutions responsible for the enrolment and retention in the educational system of children and students in compulsory pre-school and school age. While this mechanism is still relatively new and targets a very small fraction of current NEETs (because of its implied upper age limit), its smooth functioning and **readjustment in line with any identified problems** might prove to be vital for ensuring lower NEET rates in the future, since it addresses one of its main reasons - school dropout.
- The fact that in spite of severe labour shortages, employers are relatively reluctant to make use of the existing employment support measures under the Promotion of Employment Act implies the need for a **re-evaluation of their scope and characteristics**. In particular, MLSP's assessment of the effectiveness of active

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labour market policies shows a large share of employers find existing red tape to be excessive.

- While addressing unrealistic wage expectations among young people is a challenging task, given their lack of experience in the labour market, **further development of career guidance services and the accumulation of a sufficient number of success stories** might help both youth and Roma mediators in their activation efforts. This, however, would imply the introduction of additional data collection tools and/or direct contact with previous clients of the labour bureaus.

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