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Tax-benefit policies to fight poverty among young adults in Europe

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Tax-benefit policies to fight poverty among young adults in Europe

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Abstract

European countries offer a large amount of policies to protect the population against the risk of poverty and social exclusion but Young adults generally do not have access to unemployment benefits since their period of contribution is relatively short and in some countries they do not have access to minimum income. In times of high unemployment in Europe, is it possible for young people to access autonomy without family resources? This paper aims to compare the budgetary constraints of young adults to understand the various strategies implemented by different European countries. I rely on microsimulation and hypothetical data to compare identical individuals and to isolate the effect of different tax-benefit systems on the budget constraint of young adults. I find that European countries can be classified into five groups concerning the design of social assistance policies for young people. Belgium, Finland and Denmark, which consider young people as an independant household, while taking into account the situation of cohabitation, are on average more effective in reducing the intensity of youth poverty.

Keywords: Youth, Income, Microsimulation

JEL classification: D31, J13, H20

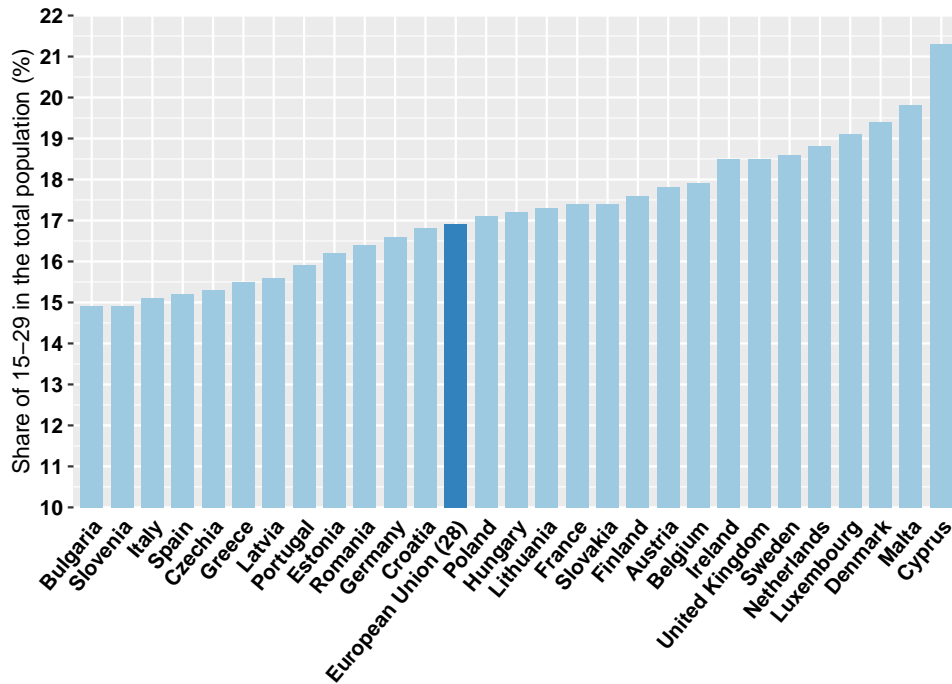
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The results presented here are based on EUROMOD version I2.0+. EUROMOD is maintained, developed and managed by the Institute for Social and Economic Research (ISER) at the University of Essex and the Joint Research Centre (JRC) of the European Commission, in collaboration with national teams from the EU member states. We are indebted to the many people who have contributed to the development of EUROMOD. The process of extending and updating EUROMOD is financially supported by the European Union Programme for Employment and Social Innovation "EaSI" (2014-2020). The results and their interpretation are the author's responsibility. The author also thanks Alessio Fusco, Philippe Van Kerm and the participants of the 7th World Congress of the International Microsimulation Association for their helpful comments.

1 Introduction

The transition to adulthood is a pivotal period for all individuals. During this period, young people experience many upheavals: they finish their studies, enter the labour market, leave the parental home and create a new household (Modell et al., 1976). The transition from dependent to independent youth status is generally accompanied by a period of economic fragility. In all European countries, support mechanisms exist for people in economic difficulty but there are different approaches to ensure social inclusion among youth. In some countries, people under 25 do not have access to minimum income and in most countries, unemployment benefits are only available for people who have contributed for a certain period of time (Carcillo et al., 2015). This is rarely the case for youth. Other countries have introduced universal assistance for young people regardless of their family situation. Despite these differences, social inclusion among youth is a crucial issue for European countries as young people represent a large part of the population but also because their socio-economic situation has been deteriorated.

Figure 1: Share of young people in the total population in Europe (2019)



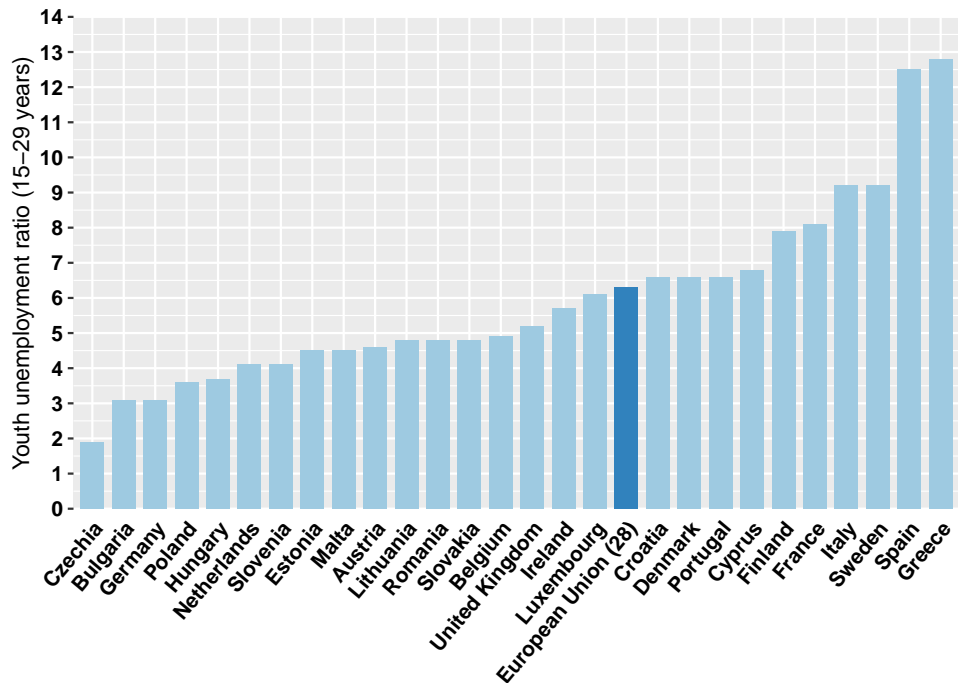
Source: Author's elaboration using Eurostat data (yth_demo_020).

Although it is difficult to confine young people to an age group, it is necessary to define one to provide with an overview of the socio-economic situation of this group. In this study we define them as people between 15-29 years old. As shown in Figure 1, the share of young people in the total population ranges from 14.9% in Bulgaria and Slovenia to 21.3% in Cyprus. Southern European countries are characterized by the lowest (Italy, Spain, Greece, Portugal) and highest rates (Cyprus and Malta) while Central and Eastern European countries have relatively low rates (between 14.9% and 17.4%). With the exception of Latvia, Estonia and Germany, the Northern and Western European countries

have a proportion of young people in their population above the European average in 2019. Despite these differences, in all cases, this group represents a significant part of the population; the economic and social situation of this age group is therefore of particular interest.

The socio-economic situation of young people is fairly precarious, as shown by the youth unemployment ratio (the proportion of young people who are unemployed) in Europe which is equal to 6.3 in 2019. These rates are high in many European countries, particularly in Greece and Spain where this ratio exceeds 12% (figure 2). However, there is a strong heterogeneity between European countries. Indeed, in some countries the youth unemployment ratio is low (under 3.5%), as in Bulgaria and Germany and even lower than 2% in Czechia.

Figure 2: Youth unemployment ratio in Europe (2019)



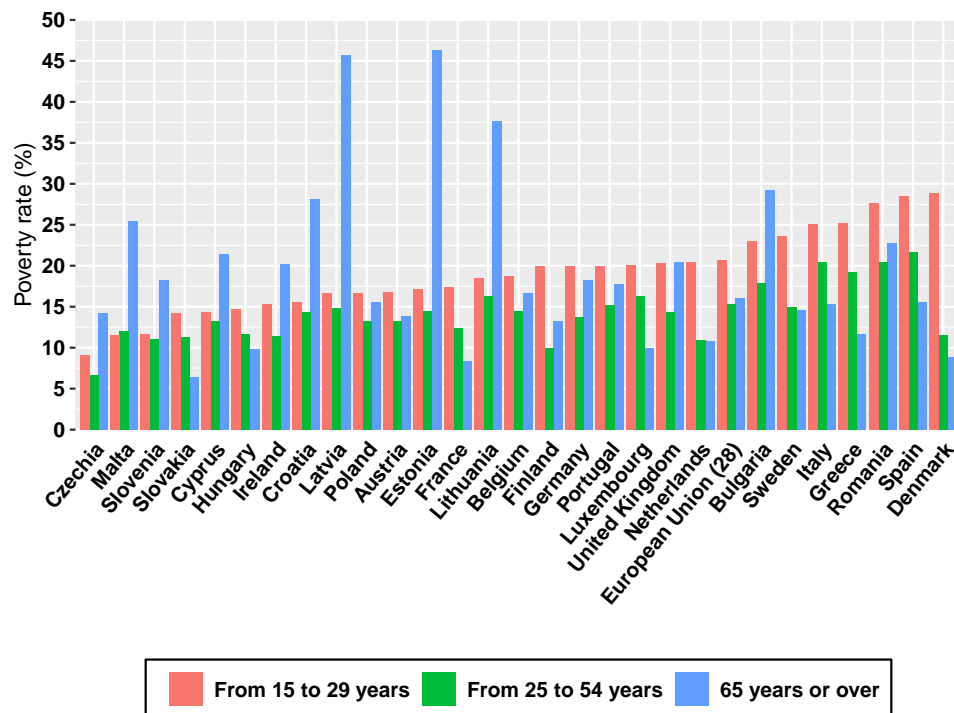
Source: Author’s elaboration using Eurostat data (yth_ empl_ 140).

Difficulties for young people to enter the labour market can lead to a high poverty rate among young adults (figure 3). In all European countries except Malta the poverty rate of 15 to 29 years old people is higher than the rate for people from 25 to 54 years in 2018. The difference is sometimes very important, as in Denmark, where it reaches 17.4 percentage points. Moreover, in 17 of the 28 countries in the European Union, the poverty rate of young people is higher than that of people aged 65 and over. Overall, in the EU, the poverty rate for young people reaches 20.7% in 2018 compared to 15.3% for people from 25-54 years and 16.1% for the person aged 65 or over.

This high level of poverty among young people hides a heterogeneity in the situation of young people according to cohabitation status. Figure 4 shows that living with parents

is an important protection against poverty. Only in Latvia, Poland, Ireland, Malta and Portugal, poverty rates are higher if you live with your parents. Again, the largest difference is attributed to Denmark where the poverty rate for 16-29 years old group living with their parents is 5.5% compared to 42.4% for those living alone in 2018. As with child poverty, the risk of youth poverty depend on the resources of other adults living with them or on transfers received from the parental household. Without this financial support from the family, young adults can quickly be at risk of poverty and social exclusion and the State has an important role to play. The lack of financial support from the state can encourage young adults to stay with their parents for a long time.

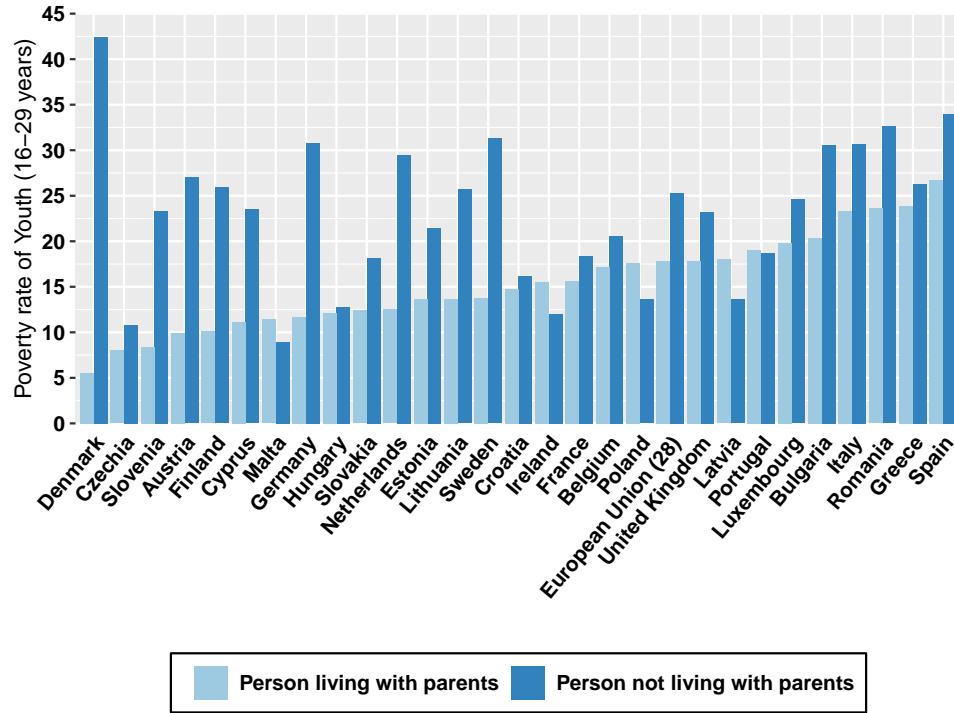
Figure 3: Poverty rate in Europe by age group (2018)



Source: Author's elaboration using Eurostat data (ilc_li02).

However, the lessons from Figure 4 must be approached with some caution because the equivalised disposable income measure used by Eurostat to calculate poverty rate can bias the comparisons between young adults co-residents and young adults living without their parents. Equivalised disposable income takes into account, in an equivalent way, the own income of young adults as well as the income of people who live with them. Thus, for young people living with their parents, the parents' resources are fully taken into account when calculating the equivalised disposable income, which is not the case for young people living alone. The latter could receive significant parental transfers, however, these parental transfers are generally only partly taken into account by the EU-SILC survey used by Eurostat to measure income. There is therefore a risk of overestimation of the poverty of young people living without their parents and of underestimation of that of young people living with their parents.

Figure 4: Youth poverty rate in Europe by cohabitation status (2018)



Source: Author's elaboration using Eurostat data (yth_inc060).

Moreover comparisons of youth poverty rates do not allow *ceteris paribus* comparisons of the situation of young people between countries. Indeed, the youth poverty rate in a country depends both on tax-benefit system of the country but also on the structure of the youth population. If the proportion of young people in a situation of financial dependence (unemployed, students, etc.) is important in a country then the poverty rate is likely to be higher in this country. A country may have a higher poverty rate because it has a higher proportion of young students (who do not receive income from work...) but this does not necessarily mean that the assistance provided by the state is lower.

The health crisis of covid-19, by slowing down the economic activity, particularly affects young people living conditions. They are facing increased difficulties in accessing the job market and also important financial difficulties. Young people are numerous in sectors particularly affected by the crisis (Accommodation and food service activities, Wholesale and retail trade...) and are often the first victims of job cuts. The issue of support for young adults is therefore essential.

In this paper I study how a young adult in a particular situation is supported by the state for each of the EU Member States. In order to compare, *ceteris paribus*, the policies apply to increase social inclusion of young adults in Europe I use model-family analysis. I applied the EUROMOD microsimulation model to these reference household cases in order to measure income after taxes and public transfers. Different situations are studied in order to better understand the various measures adopted across Europe. This study is the first comparative study which analyses the safety net available for youth adults in Europe using model family simulations and help to highlight a typology of monetary policies concerning young adults in Europe. The remaining part of the paper proceeds as

follows: the next section examines the literature which have study young adult poverty. The third section presents the method and data. Section 4 discusses the results. Lastly, I conclude the paper.

2 Literature review

With the phenomenon of destandardization of the transition to adulthood in European countries (Elzinga and Liefbroer, 2007), youth poverty has become a major concern for public policy makers. The greater participation of young people in higher education and the worsening situation on the youth labour market has created a situation of greater financial dependence. Young people have become dependent on family resources and state support to achieve economic self-sufficiency.

Despite this situation, there is a rather small body of literature that is concerned with youth poverty and youth autonomy. Kangas and Palme (2000), for example, by studying OECD countries, focused, among other things, on youth poverty. They show that in many countries, the poorest group of people are the young ones, instead of the elderly as they were in the past. It seems as well that pension policies have played a role in improving the situation of older people and that longer education and higher unemployment have deteriorated the situation of youth. Iacovou and Berthoud (2001) describe, using ECHP data, the diversity of young adults' situations in Europe in terms of employment, cohabitation, education or living standards. Young people are more likely to live in a poor household than older people in all the countries studied. Youth people of Nordic countries are the ones who are most likely, during youth, to be, at the same time, poor, without family support and no job. But one limitation here is that family support is measured by cohabitation with parents or a working partner.

Although they are more concerned with poverty, welfare states help to limit the incidence of youth poverty. Indeed, Smeeding and Ross Phillips (2002), by studying seven European countries, with data from 1989 to 1995, measured the proportion of young people above the poverty line before and after taxes and social transfers. They show that all welfare states increase the ability of young adults to become independent, but this article also highlights the importance of cohabitation with parents in protecting against poverty.

The incidence of youth poverty is not homogeneous within Europe. For example, Aassve et al. (2006), using ECHP data for 13 countries, showed that the youth poverty rate is particularly high in Denmark, Finland and the Netherlands, while these countries are characterised by a relatively low poverty rate for the general population. People, in these countries, leave the parental home very early, so they do not necessarily have the resources needed to exceed the poverty line. It would also appear that poverty are short-spell in these countries. By contrast, in conservative countries (France, Germany, Belgium, Austria), the difference between the general population and young people is much smaller.

Analysis of the persistence of poverty gives another picture of the extent of youth poverty in European countries. For example, Mendola et al. (2009) do not find higher poverty among Danish youth (representing the Scandinavian countries in this study) in comparison with other countries. It also seems that socio-economic variables do not play an identical role in social protection systems. For example, the level of education reduces

the persistence of poverty only in Southern European countries. The authors also show that welfare regimes play a role to explain differences in the persistence of poverty between European countries.

The cohabitation status seems important for understanding youth poverty. Aassve et al. (2007), using ECHP data, study the causal relationship between leaving parental home and the entry into poverty among youth. They find that in most of the European countries studied, young people anticipate the risk of becoming poor when they choose to leave the parental home except in Finland and Norway. Of course, other factors, such as social norms, can also play a role. Parisi (2008), focusing on the countries of Southern Europe (Portugal, Spain, Italy and Greece), analyses the impact of parental income on the risk of becoming poor, given the cohabitation status of the young adult. In all of these countries, the economic situation of parents reduce the likelihood that a young person will be poor when leaving the parental home. Finally, Ayllon (2015) studies the link between youth poverty, employment and leaving the parental home in 8 European countries. She shows that leaving the parental home is associated with employment in Southern European countries and that this departure is not accompanied by poverty. In contrast, in the Nordic countries and to a lesser extent in the conservative countries, leaving the parental home is associated with short-spell poverty.

The importance of the welfare state in the situation of young adults had already been discussed by Billari (2004), Lesnard et al. (2011) or Van de Velde (2008) regarding the timing of the transition to adulthood but, all the previous studies are based on real data and do not make it possible to isolate the effect of the tax-benefit systems. For instance, the proportion of young people exceeding the poverty line before and after redistribution depends on the tax-benefit system but also on the structure of the population. Our objective here is to isolate the effect of the tax-benefit system. In line with the work of Carcillo et al. (2015), which presents the social policies that young NEETs in Europe are eligible, we try to understand the different types of safety net policies concerning young adults in Europe. I decided to use model family simulations as Marchal et al. (2019) who are building minimum income indicators across Europe for different family types. They use EUROMOD to simulate the disposable income of these family but the households they selected do not highlight the potentially specific social and fiscal treatment applied to young adults. My paper by using family models try to overcome the disadvantage of other studies on youth poverty that based on observed data and do not allow isolating the effect of tax-benefit systems. Unlike Marchal et al. (2019), I have a specific focus on young adults and I look at intensity of poverty to measure how tax-benefit system reduce poverty. In addition, I try to develop a typology of social protection systems for young adults in Europe.

3 Method and Data

My study is based on the EUROMOD microsimulation model¹. This model makes it possible to simulate the effect of taxes and cash benefits on a representative sample of the population or on reference cases. Each European Union member country are represented. As presented in Gasior and Recchia (2020) or Tine et al. (2019), we used in this paper

¹See the paper of Sutherland and Figari (2013) for a more detail presentation of this model

the Hypothetical Household Tool (HHoT) from EUROMOD to create unique and similar household on whom we simulate the effect of the tax-benefit system of each European country². The differences in disposable income therefore only result from differences in tax-benefit systems. We have decided to focus on a small number of reference cases. Table 1 summarizes the reference households that were constructed for this study.

Table 1: Characteristics of the hypothetical households

| | Age | Highest level of education | Marital status | Economic status | Hours of work | Work history | Labor income | Previous labor income | Housing costs |
|-------------|-----|----------------------------|----------------|-----------------|---------------|--------------|-------------------|-----------------------|----------------------------------|
| Household 1 | 20 | Upper secondary | Single | Unemployed | 0 | 0 | 0 | 0 | 0 |
| Household 2 | 40 | Upper secondary | Single | Unemployed | 0 | 0 | 0 | 0 | 0 |
| Household 3 | 20 | Upper secondary | Single | Unemployed | 0 | 0 | 0 | 0 | average rent for 1-bedroom flat* |
| Household 4 | 20 | Upper secondary | Single | Employee | 40 | 0 | 100% minimum wage | 0 | 0 |
| Household 5 | 50 | Upper secondary | Married | Unemployed | 0 | 0 | 0 | 0 | 0 |
| | 50 | Upper secondary | Married | Inactive | 0 | 0 | 0 | 0 | 0 |
| Household 6 | 50 | Upper secondary | Married | Unemployed | 0 | 0 | 0 | 0 | 0 |
| | 50 | Upper secondary | Married | Inactive | 0 | 0 | 0 | 0 | 0 |
| | 20 | Upper secondary | Single | Unemployed | 0 | 0 | 0 | 0 | 0 |
| Household 7 | 50 | Upper secondary | Married | Employee | 40 | 240 | 100% mean wage | 100% mean wage | 0 |
| | 50 | Upper secondary | Married | Inactive | 0 | 0 | 0 | 0 | 0 |
| Household 8 | 50 | Upper secondary | Married | Employee | 40 | 240 | 100% mean wage | 100% mean wage | 0 |
| | 50 | Upper secondary | Married | Inactive | 0 | 0 | 0 | 0 | 0 |
| | 20 | Upper secondary | Single | Unemployed | 0 | 0 | 0 | 0 | 0 |

*2019 current market rents, ISRP (OECD) and Eurostat. Source: Author's elaboration.

Household 1 is composed only of a 20-year-old person, non-student and with no labor income. We can then measure the amount of benefits receive by this young person in each European country. Household 2 is composed of an individual who is identical to household 1, but older (40 years old). By comparing household 1 with household 2, we can highlight in which country young people are less well covered than middle age people. Indeed, we said in the introduction that some countries do not grant certain benefits under an age threshold (often 25 years).

Household 3 shows whether or not the assistance provided by the State depends on the fact that young adult pays a rent. Some countries may be more generous for these young people, in order to allow them to gain autonomy, others, could avoid this kind of policy to reduce incentive, for young adult, to leave the parental home.

Household 4, allows us to study the standard of living of an individual paid at the minimum wage. Young adults are more often involved in jobs payed at the minimum wage than older people. This hypothetical household make it possible to study whether minimum wage policies allow individuals to exceed the poverty line in each country.

We also compare households 5 and 6. These two households are identical with two 50 years old adults without labor income. The difference between the household 5 and 6 is the presence of a young adult, without resources, in household 6. We can see, making the difference in income between the two households, if, even while living with his parents, the young person receives social assistance and if this assistance is directly intended for him or if this assistance is channelled through the parents.

Finally, we compare households 7 and 8. These two households are identical with two 50 years old adults as in household 5 and 6 but now one member of the couple is paid at

²Refer to Burlacu et al. (2014) for the advantages and disadvantages of hypothetical models and Tine et al. (2019) for those of HHoT.

the mean wage observed in EU-SILC. Again, the difference between the household 7 and 8 is the presence of a young adult, without resources, in household 7. This scenario shows whether the benefits received by the young adult is dependent on parents' income level.

The results of the simulations are monetary amounts but it is not the absolute value of income that really interest us here. Indeed, it is not surprising to observe lower absolute level of allowances in a country where the wage level and the cost of living are lower. To overcome this drawback we measure the intensity of poverty resulting from the social protection system with the poverty gap. The poverty gap index measures the relative gap between the median standard of living of the poor population and the poverty line. Since we are interested in hypothetical households and not in the entire poor population, we calculate the poverty gap only for the household under study, we call the intensity of poverty measure the *hypothetical poverty gap*. The hypothetical poverty gap for the young adult i , living in country j is:

$$\text{Hypothetical poverty gap}_{ij} = \frac{l_j - y_{ij}}{l_j} \quad (1)$$

with l_j the poverty line (60% of median equivalised income in the general population) in country j and y_{ij} the disposable income of the hypothetical youth i in country j . For youth living with parents y_{ij} is equal to:

$$y_{ij} = y_{h6j} - y_{h5j} \quad (2)$$

with y_{h6j} is the disposable income of household 6 (resp.8) which includes the young adult and y_{h5j} is the disposable income of household 5 (resp.6) in which there is no young adult.

The closer the *hypothetical poverty gap* is to 0, the lower the poverty intensity.

We also look at the replacement rate for a young adult if he is working (at the minimum wage) in comparison to a young adult who has never worked (or at least, are not eligible to unemployment) and has no work income. In this way, we can identify the potential work incentives for the different social protection systems in Europe. Replacement rate corresponds to the proportion of income received by a inactive young adult compared to a young adult working full-time at the minimum wage.

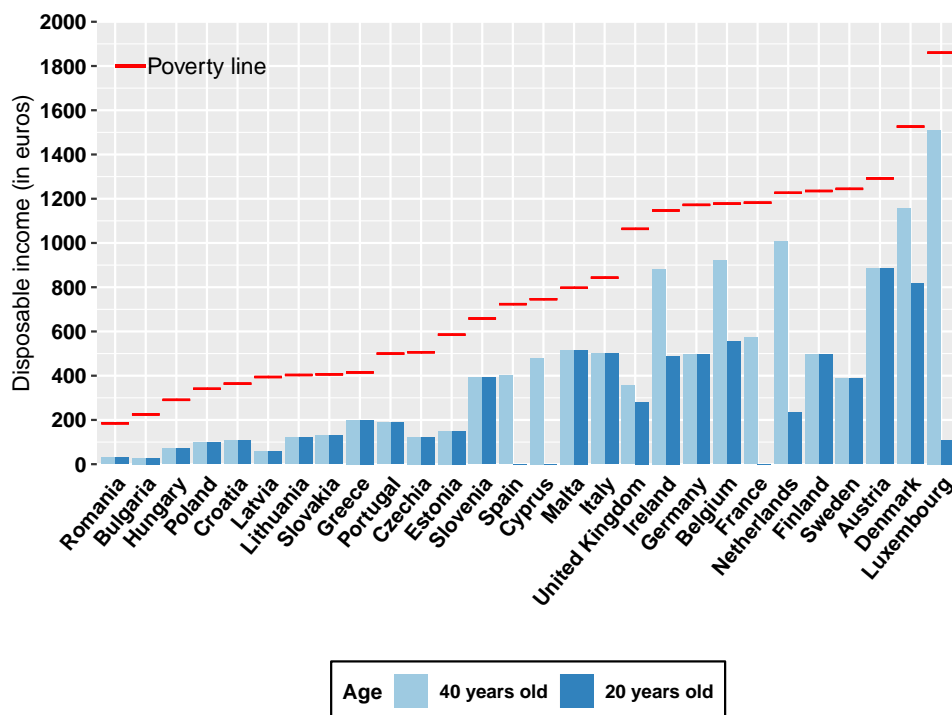
The use of hypothetical models has advantages as well as disadvantages, as discussed by Marchal et al. (2019). First of all, the HHoT tool makes it possible to isolate and compare social systems in Europe.³ Its integration into EUROMOD allows researchers to take into account the complexity of the tax system and not only to study eligibility for a specific policy. In addition, the HHoT tool of EUROMOD is more flexible than the tax-benefit web calculator of OECD by allowing the construction of complex households. However, HHoT tool (as well as the Tax-benefit web calculator of OECD) excludes the calculation of the share of individuals who are eligible to different policies and do not permit me to account for the complexity and variety of situations encountered by the population.

³A description of tax-benefit systems of each country can be found in the country reports <https://www.euromod.ac.uk/using-euromod/country-reports>. Additional information can also be found in Mutual Information System on Social Protection (MISSOC).

4 Results and discussion

After performing our simulations, we obtained the disposable income of each household in each European country in 2019 (EU-28).⁴ We have converted the amounts into euros for countries that do not use euro in order to obtain a comparable basis between countries. In the rest of the paper we use the term "minimum income scheme" to define the non-contributory safety net that the States dedicate to working age individuals who are unemployed but able to work : this is the income in last resort. The latter may include both minimum income (as defined in some States) or unemployment assistance and other means-tested allowances .

Figure 5: Social assistance schemes across Europe depending on age (2019)



Source: Author's elaboration using EUROMOD policy year 2019.

Figure 5 presents the results of simulation for household 1 and household 2. The red lines represent the poverty line measured using the EUROMOD microsimulation model applied to a representative sample of household for each country. The poverty line is the level of income below which an individual is considered poor in each country.⁵ The poverty line varies between 185 euros in Romania and 1 860 in Luxembourg. Countries of Central and Eastern Europe have, in general, a low poverty line, while the countries of Western and Northern Europe have a much higher poverty line. Differences in living costs and level of wages explain, at least in part, these differences. Figure 5 shows the situation of a 40-year-old adult with no labour income. This reference individual has access to social benefits in all the countries studied. The correlation between the disposable

⁴In some countries, social policies are dependent on the region of residence, in this case we have selected the region of the country's capital

⁵Information on poverty lines is available at the following website: <https://www.euromod.ac.uk/using-euromod/statistics>

income for household 2 and the poverty line is 0.91 which means that the poverty line increases with the level of benefits granted to people without resources. However, this is not always true, the level of social assistance is relatively low in Germany, France, Sweden or Finland, while the poverty line is relatively high. The correlation coefficient between household 1's disposable income (young adults without labor income) and the poverty line is only 0.58. The link between social assistance and the poverty line is much less clear for young adults. However, comparing the levels of social assistance in Figure 5, it can be seen that the difference between young and middle-aged people is only observed in some countries.

As explained in the previous section, rather than the absolute value of income, what interests us is the gap between the poverty line and the disposable income for the reference household: the *hypothetical poverty gap*. The *hypothetical poverty gap* of a middle age single is less than 30% (i.e. the disposable income of this hypothetical household is less than 30% below the poverty line) in Netherlands, Luxembourg, Belgium, Ireland and Denmark (figure 6). The tax-benefit system of these countries reduce the intensity of poverty of people without resources. In the opposite, Romania, Latvia and Bulgaria have an hypothetical poverty gap above 80%. In these countries, even if social assistance exists, it does not significantly reduce the intensity of poverty of middle age person.

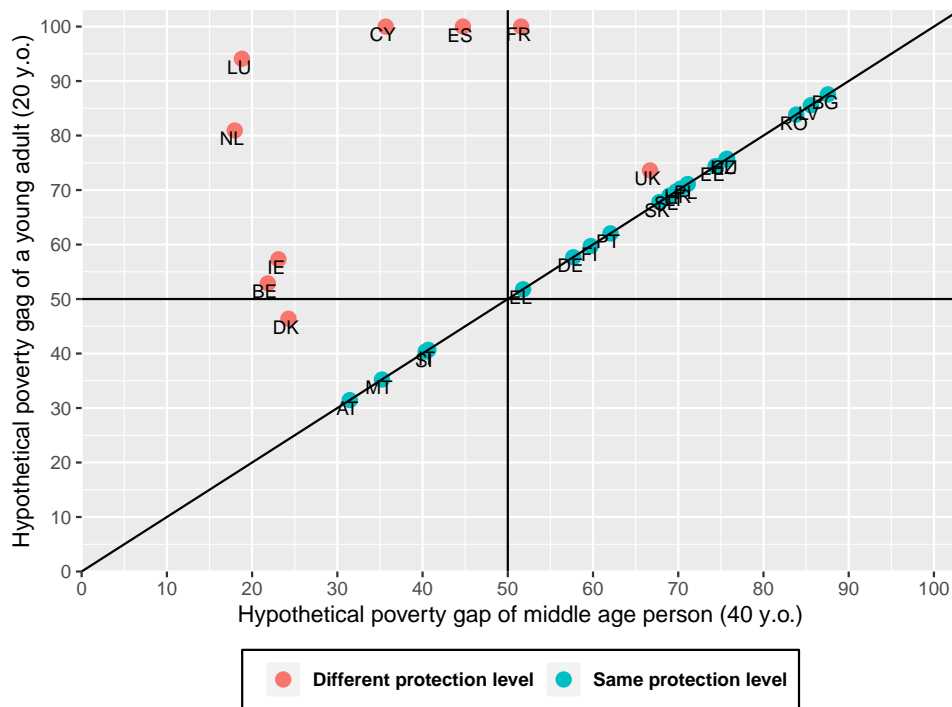
The question is whether these countries have different eligibility conditions or policies according to the age of the claimant. As we can see in figure 5 and 6, in 8 European countries young people are excluded or have restrictions to access these policies. These countries are Spain, Cyprus, the United Kingdom, France, Netherlands, Denmark, Ireland and Luxembourg. Therefore, the hypothetical poverty gap is, while relatively low in the Netherlands and Luxembourg for a middle-age person (less than 30%) is very high for a similar person but younger (more than 80%). In Spain, Cyprus and France, young people do not even have access to any social benefits, unlike the older ones. Smaller differences in treatment between young and middle-age class are observed in Ireland, the United Kingdom and Denmark. There are 2 types of strategies, on the one hand, countries that propose a reduced minimum income for young adults (United Kingdom for young between 18 and 24 years old, in Netherlands until 20 years old, in Denmark until the age of 29 and in Ireland between 18-24) and on the other hand, those that completely exclude young adults from the social assistance (in France and Luxembourg until 25 years old and 28 in Cyprus). In Spain, the Minimum Income Guarantee is defined at the level of the 17 Autonomous Communities. The guaranteed minimum income excludes people until 25 (or sometimes 23) in most of these communities. Even if they do not have access to the guaranteed minimum income before the age of 25, young Luxembourgers can still receive the *expensive life allowance*. In addition, figure 6 shows that it is the countries that most strongly reduce the intensity of poverty of middle-age people that discriminate against young people's access to minimum income.

There are several possible reasons for the lack of social assistance for young people. Some will consider that family policies (family allowances, taxation depending on family structure...) already permit to reduce the intensity of poverty among young people but this often implies that young people are still living with their parents. Later in this paper, we will analyze in which country, family-based supports reduce the intensity of poverty among young adults. Another reason to exclude young people from social assistance is

that it can create a situation of inactivity trap, i.e., young people could be encouraged to stay at home instead of working. We will explore this question further by comparing, later, the disposable income of a young person working at the minimum wage level and an inactive one.

Although minimum income does not lift people out of poverty in any country, it reduces the intensity of poverty in most of European countries. However, minimum income policies (or unemployment assistance) are not the only ones policies that have an impact on living condition. Access to autonomy also requires the possibility of renting or buying a home. In Figure 7 we compare the disposable income of a young adult, without labor income, who rents an accommodation and the same youth but with no rent. The results are based on the assumption that the young adult has succeeded in becoming a tenant in the private sector (which is not necessarily easy for a young adult), in the capital city with a rent equal to the average rent for a 1-bedroom flat in this city. For the rent, I decided to use data from the Estate agency rent surveys carried out by the International Service for Remunerations and Pensions (ISR) at the OECD and Eurostat.

Figure 6: Hypothetical poverty gap index across Europe depending on age (2019)

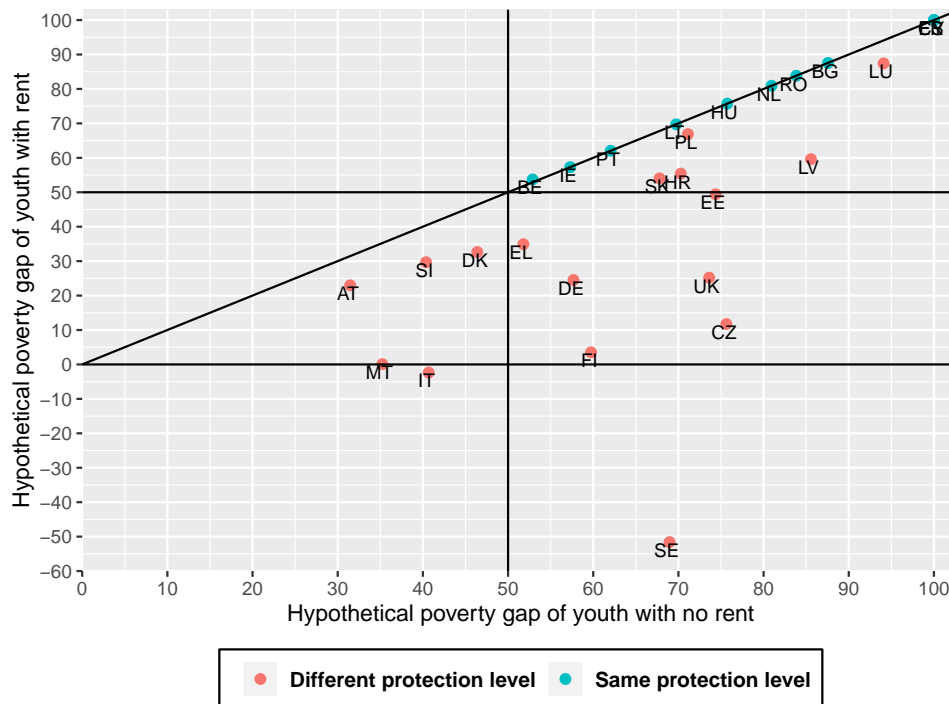


Source: Author's elaboration using EUROMOD policy year 2019.

It can be seen that some countries do not offer housing allowances (at least for youth). For example, in Belgium, Hungary, Lithuania, Portugal, Romania or Spain, there is no housing benefits (at least at national level). In the Netherlands, Ireland and France, a housing assistance system exists but the average rents used for hypothetical households are too high to allow the young adult to be eligible. Many other countries allow young adults to be closer to the poverty line, and in some countries this allows them to rise above the poverty line. This is the case in Italy and particularly in Sweden. In Sweden, this

is due to specific rules. Indeed, in Sweden, the beneficiaries of the guaranteed minimum income receive a total coverage of the rent, then the benefits is very high as we used the average rent in Stockholm which is very high. The housing allowance is less generous for a household not receiving the minimum income.

Figure 7: Poverty gap of youth across Europe depending on housing status



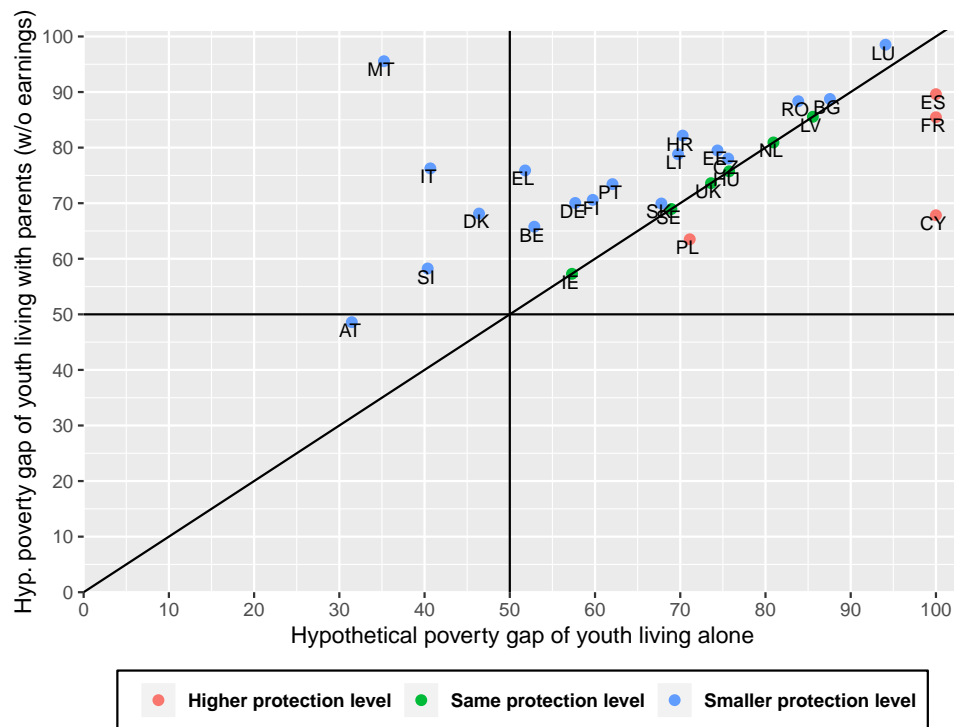
Source: Author's elaboration using EUROMOD policy year 2019.

It seems that the countries that best reduce the intensity of youth poverty (without housing benefits) are the most generous in terms of housing benefits. It is, however, important to note that the poverty line is calculated before deducting housing costs. Also, although housing benefits for renters bring them closer to the poverty line, this does not mean that their disposable income after housing costs have increased because they have to pay a rent every month, unlike household 1.

Some countries prefer to provide assistance at the household level and therefore the assistance will be channeled through family allowances or tax reductions. I study here how a young adult's disposable income varies in a situation where the young lives alone or in a situation where he lives with his parents. I measure the amount of benefit received by a young by making the difference between the family's disposable income with and without the presence of the young adult. The first case compares the income of a couple without children and without work income to an identical couple but living with a young adult of 20 years without any resources. In Figure 8, we observe that in France, Cyprus, Spain and Poland a young person living with his parents will receive (or least via his family) a greater amount of benefit than by living alone. The difference is explained, for all of these countries except Poland, by the increase in the amount of minimum income received by the parents because of the presence of this adult child in the household. In

these 3 countries, young people can not receive the minimum income for themselves, but they can be considered as dependent children for the calculation of the parents' minimum income. In Poland, the minimum income is limited to PLN 480 for a single person. However, for a family, only the difference between the eligibility amount and the income is taken into account. Thus, in our scenarios, the family will receive a higher amount for the young adult than if he/she lived alone. Therefore, living with parents will reduce more strongly the intensity of poverty of youth in these four countries and mainly at Cyprus with a reduction in the intensity of poverty of more than 30 percentage points (figure 8).

Figure 8: Social assistance schemes across Europe depending on cohabitation status

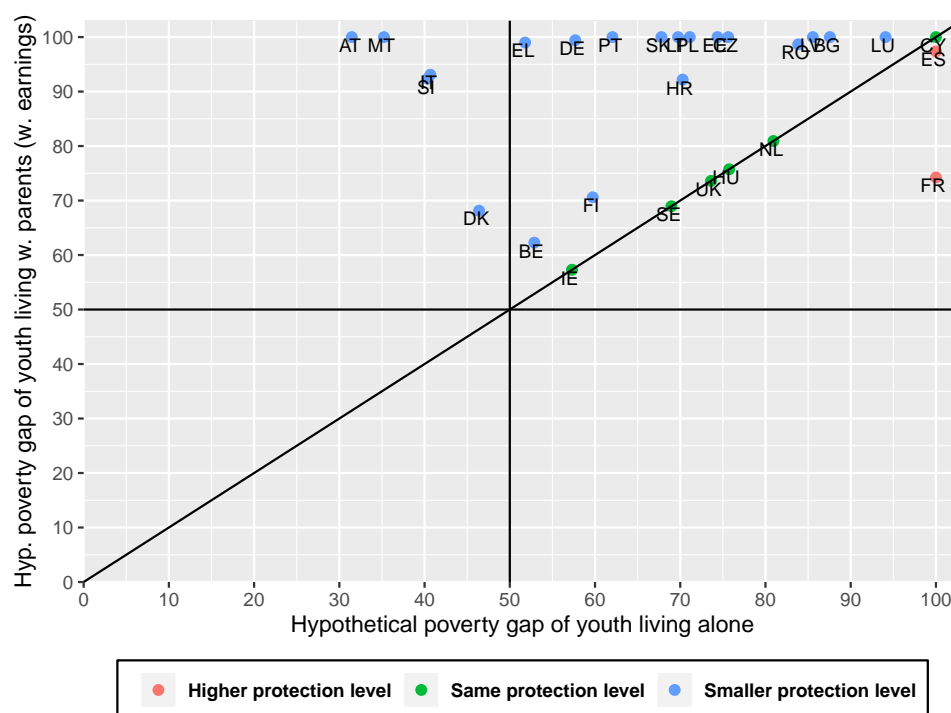


Source: Author's elaboration using EUROMOD policy year 2019.

Some other countries do not distinguish between those who live alone or with their parents. For example, in Sweden, Ireland or Netherlands, the single young adult will be considered an independent household whether he lives with his parents or not (green points in figure 8). Finally, in other countries, support for youth will be less important if they live with their parents. For example, in Denmark, Belgium or Finland, a young person living with his parents will receive a reduced amount of social assistance.⁶ The level of support for an additional dependent person is low in Malta, which explains the significant difference between a young person living alone (receiving the full amount of the minimum income) and a young person living with his/her parents. In Luxembourg, the family receives a supplement for the expensive life allowance (*Allocation de vie chère*). For all of the other countries, although young adults living alone can be eligible for the minimum income, they are considered as dependent children for this policy if they live with their parents. However, the amounts granted as a dependent child are less important.

⁶I consider that the young adult is eligible to "revenu d'insertion" in Belgium.

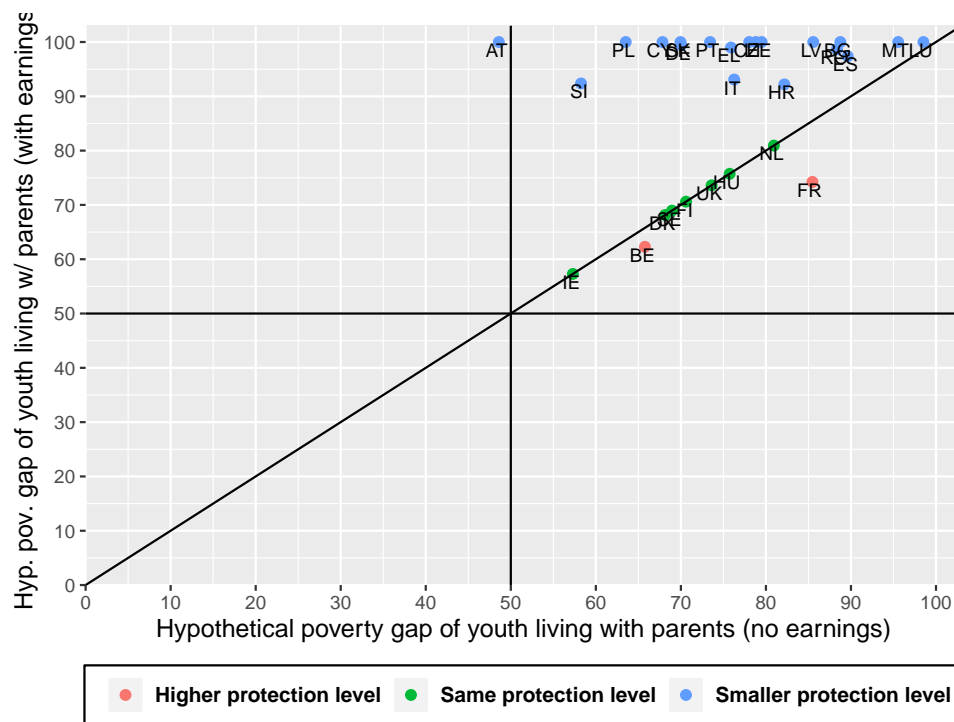
Figure 9: Poverty gap of youth across Europe depending on cohabitation status



Source: Author's elaboration using EUROMOD policy year 2019.

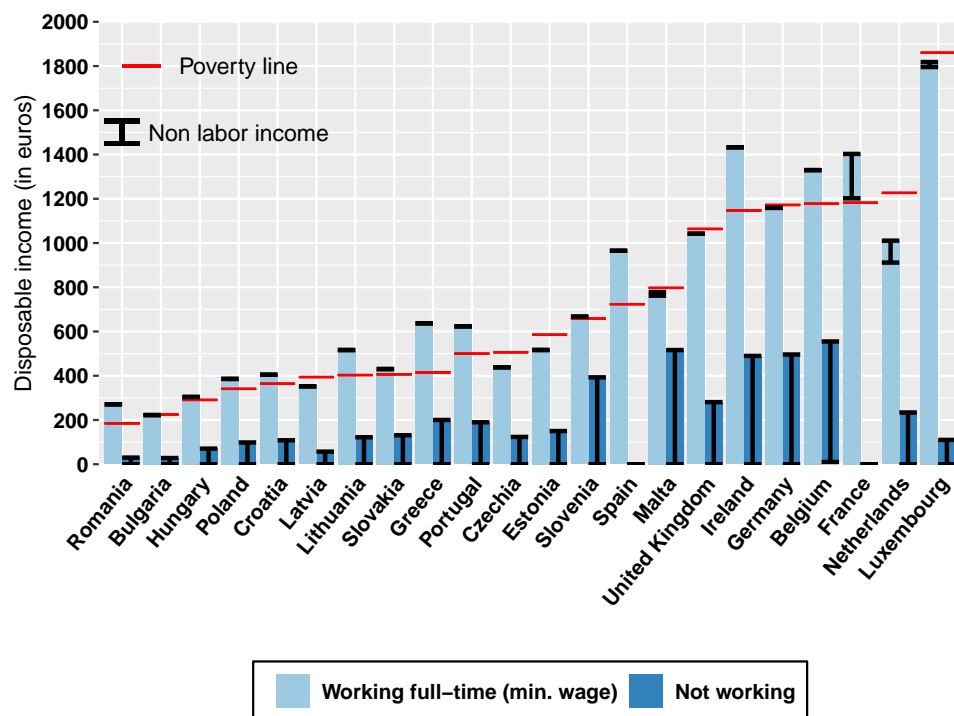
In figure 9, I study how parents' incomes will have an impact on the benefits received by or for the young adult. In countries where the young cohabitant is considered as dependent on parents, the amount of social assistance disappears when parents earn the equivalent of an average full-time wage (Austria, Malta, Portugal...). However, in some of these countries parents are eligible to a tax reductions related to the presence of young adults. As can be seen in the figure 10, comparing between youth living with parents who do not have a job versus a youth living with one parent has a job equal to the average wage, the amounts are (very) small. This is the case of, for example, Spain, Romania, Slovenia or Croatia. In France, in addition to some tax deductions, the family is now eligible to an in-work benefit ("Prime d'activité"). On the other hand, even if parents earn an average wage, young adults of Denmark, Sweden, Finland, Netherlands, Belgium, Ireland, United-Kingdom and Hungary without their own income continue to receive social assistance on an individual basis but at a reduced rate in Belgium, Denmark and Finland as youth live with parents (cf. 9). The figure 10 highlights that compared to the situation where parents do not have labor income, having a working parents deteriorated the amount receive by/for the young adults in most of country. In country where young adults receive for themselves social assistance there is no changes. Finally, in Belgium and France, the situation of youth increase again as parents are now eligible to in-work benefit or/and tax deductions.

Figure 10: Poverty gap young adults with working parents vs. no working parents



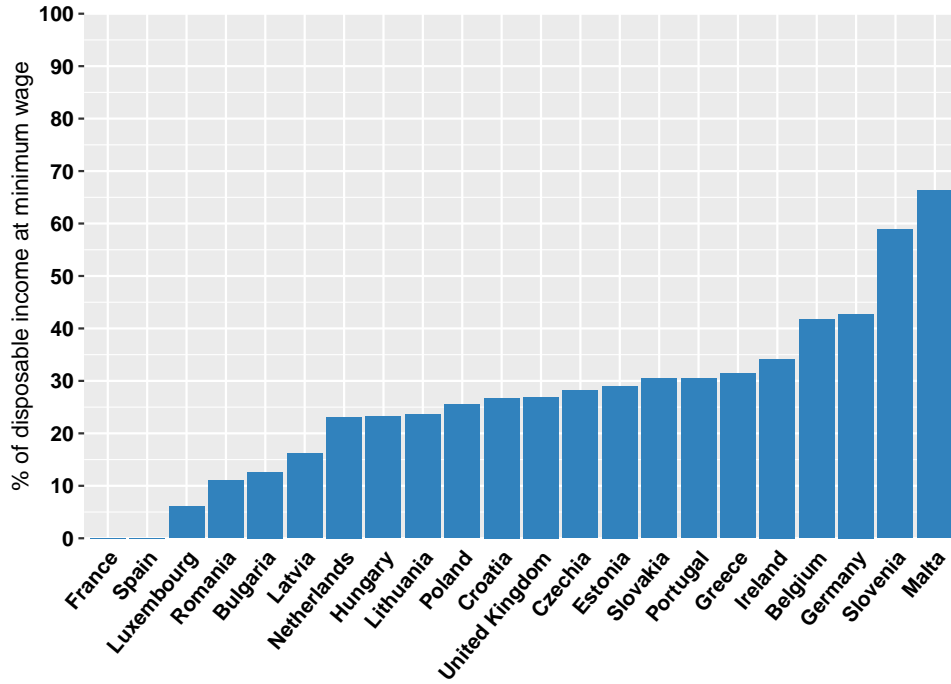
Source: Author's elaboration using EUROMOD policy year 2019.

Figure 11: Minimum wage and minimum income for youth in Europe



Source: Author's elaboration using EUROMOD policy year 2019.

Figure 12: Replacement rate of minimum income vs minimum wage



Source: Author's elaboration using EUROMOD policy year 2019.

Finally, I looked at the issue of minimum wage policies. These policies target the entire population, but young people are more often concerned by jobs paid at this level of remuneration. In figure 11 we can see that in most countries the minimum wage makes it possible to exceed the poverty line or to be very close to it. However some countries do not allow the poverty line to be exceeded, even if the intensity of poverty is much lower in these cases, such as Netherlands, Latvia, Czechia, Estonia or Luxembourg. Some countries allow minimum wage workers to also receive means tested benefits in order to increase incomes of these workers. This is the case in five countries: France, Netherlands, Luxembourg, Malta or Lithuania. Overall, compared to the disposable income for a young adult without work, all countries allow working young people to have a better social situation (at least with a full-time job). However, the incentives to enter the labour market are not the same. Thus, as shown in figure 12, in France and Spain, where young people living alone, without job and not eligible to unemployment benefits receive 0% of the minimum wage, incentives to work are high. In contrast, in Slovenia, or Malta, the level of minimum income is very high compared to the minimum wage (more than 50% of the disposable income of a minimum wage earner). At first glance, these systems are more likely to create inactivity trap phenomena.

The analysis carried out on hypothetical data and with the EUROMOD microsimulation model allow us to distinguish 5 broad categories of policies implemented in Europe to protect young people against poverty (table 2). Group 1 is characterized by countries that do not allow young people to receive social assistance on an individual basis but the level of social assistance for older person is quite high as shown in table 3 with a poverty gap for middle age person about 37.7%. During the transition to adulthood, the young adult in these country must rely on family solidarity. These countries are the only exceptions

in Europe, in all the other groups young people can perceive, if they live alone, social assistance. However, countries in groups 2 and 3 offer a reduced amount for young adults. While the amount is independent of the cohabitation status in Ireland, Netherlands or United-Kingdom, youth who live with parents receive a reduced amount of social assistance in Denmark or Belgium. In all countries in groups 2 and 3, the amount of the benefit received by the youth is independent of parental income. The level of public support for youth living alone is the highest in group 2 (poverty gap equal to 49.6%) but the level of public support for youth living with parents is similar in group 2 and 3 (around 65-70%).

Countries of Group 4 make no distinction between young and middle age people as well as between cohabitation status: young people are considered as independent households therefore the amount of social assistance is independent of the parents' resources. Although no distinction exists on age or cohabitation, the level of public support is relatively low in these countries. Finally, countries in group 5, the majority of European countries, allow young people to receive social assistance under the same conditions as older people if they live alone but if they live with their parents they are considered as dependent children in the calculation of social assistance. The household is thus defined in the broad sens of those who live under the same roof. Therefore the amount of the allowance decreases with the resources of the parents. Therefore, if the parents have some labor income, the level of public support for no earning cohabitant young adult is close to zero in these countries. In a general way, comparing the poverty gaps in table 3, we note that in almost all groups, public support for youth without individual economic resources and who live with parents receive a (very) low level of public support. Although in a different extends, European Countries rely on family solidarity to help youth adult to cope with the economic difficulties they encounter during the transition to adulthood.

Table 2: Typology of social assistance schemes for youth in Europe

| | Living alone | Living with parents | Relationship of amount of benefit with parental income |
|--|--------------|----------------------|--|
| Group 1 : CY, FR, ES, LU | exclusion | dependant child | \searrow |
| Group 2 : BE, DK | reduced rate | reduced reduced rate | = |
| Group 3 : IE, NL, UK | reduced rate | reduced rate | = |
| Group 4 : HU, SE | normal rate | normal rate | = |
| Group 5 : AT, BG, CZ, DE, EE, EL, FI, HR, IT, LT, LV, MT, PL, PT, RO, SK, SI | normal rate | dependant child | \searrow |

Source: Author's elaboration.

Table 3: Mean poverty gap by group of countries and type of household

| | Poverty gap middle age | Poverty gap youth alone | Poverty gap youth living with no working parents | Poverty gap youth living with working parents |
|---|---------------------------|----------------------------|---|--|
| Group 1 : CY, FR, ES, LU | 37.7 | 98.5 | 85.4 | 92.9 |
| Group 2 : BE, DK | 23.1 | 49.6 | 67.0 | 65.2 |
| Group 3 : IE, NL, UK | 35.9 | 70.6 | 70.6 | 70.6 |
| Group 4 : HU, SE | 72.3 | 72.3 | 72.3 | 72.3 |
| Group 5 : AT, BG, CZ, DE, EE, EL, FI, HR, IT, LT, LV, PL, PT, RO, SK, SI | 62.6 | 62.6 | 75.5 | 96.8 |

Source: Author's elaboration.

5 Conclusion

This paper highlights the different strategies adopted by European countries to fight poverty among young adults. Regarding minimum income, it was noted that all European countries have a guaranteed minimum income policy in 2019 for middle-aged people. There is also a significant correlation between the poverty line and the monetary level of minimum income. For young adults living alone, three strategies are in place. More than half of the countries do not make any distinction in relation to age for eligibility for minimum income. Some countries, such as the United Kingdom or Denmark, impose a reduced amount of minimum income for young adults. Finally, countries such as France, Cyprus and Luxembourg do not allow young adults to have access to minimum income. Regarding the cohabitation status, some countries consider that a young adult living with his parents is dependent on his/her parents and form a common household from a point of view of the minimum income policy while others consider that the young adult form a separate household. Denmark and Belgium are at the intersection of these two family approaches, because they consider the young person as a separate household for the eligibility for minimum income but still take into account the cohabitation status for the benefit amount. Finally, this paper highlight a typology of 5 types of safety net policies implemented in Europe for young people and to what extend each group provide public support for youth adult to cope with economic difficulties encounter during the transition to adulthood. A better knowledge of the different existing models can help policy makers to reflect on the most effective policies to put in place to increase living conditions of young adults.

My paper focuses only on hypothetical households and the results are dependent on the assumptions on family composition, age of household members as well as on wages and housing cost. Despite these limitations, this approach has the advantage of allowing a comparison, *ceteris paribus*, of tax-benefit systems. However, this research focus only on the tax-benefit side of the public support of youth adult. Focusing on monetary support, especially in times of crisis like the COVID-19 pandemic are essential, the youth being the first to suffer from closure of some activity sectors that usually employs low-skilled young adult or students (like bars/restauration). However, other kind of public policies, like labour market policies, may also be put in place by European Countries to help young adults and are not taken into account here. In addition, in order to fully understand the poverty of young adults and cohabitation behaviors, other elements come into play such

as culture, access to higher education or to the labor market. Future research should examine the effect of different safety net policies for youth adult along with these other factors.

References

- Aassve, A., Daria, M. A., Iacovou, M., and Mazzuco, S. (2007). Does Leaving Home Make You Poor? Evidence from 13 European Countries. *European Journal of Population*, pages 315–338.
- Aassve, A., Iacovou, M., and Mebcarini, L. (2006). Youth poverty and transition to adulthood in Europe. *Demographic research*, pages 21–50.
- Ayllon, S. (2015). Youth poverty, employment, and leaving the parental home in Europe. *The review of income and wealth*, 61(4):651–676.
- Billari, F. (2004). Becoming an Adult in Europe: a macro(/micro)-demographic perspective. *Demographic research*, (3):15–44.
- Burlacu, I., O’Donoghue, C., and Solognon, D. M. (2014). Hypothetical models. In O’Donoghue, C., editor, *Handbook of Microsimulation Modelling*, chapter 2, pages 23–46. Emerald Publishing Limited.
- Carcillo, S., Fernandez, R., Königs, S., and Minea, A. (2015). Neet youth in the aftermath of the crisis: Challenges and policies. *OECD Social, Employment and Migration Working Papers*, (47).
- Elzinga, C. H. and Liefbroer, A. C. (2007). De-standardization of Family-Life Trajectories of Young Adults: A Cross-National Comparison Using Sequence Analysis. *European Journal of Population*, 23(3–4):225–250.
- Gasior, K. and Recchia, P. (2020). The use of hypothetical household data for policy learning: comparative tax-benefit indicators using euromod hhot. *Journal of Comparative Policy Analysis: Research and Practice*, 22(2).
- Iacovou, M. and Berthoud, R. (2001). Young people’s lives: A map of europe. Technical report, Institute for Social & Economic Research, Colchester: University of Essex.
- Kangas, O. and Palme, J. (2000). Does social policy matter? poverty cycles in oecd countries. *International Journal of Health Services*, 30(2):335–352.
- Lesnard, L., Cousteau, A.-S., Le Hay, V., and Chanvrlil, F. (2011). Trajectoires d’entrée dans l’âge adulte et états-providence. *Informations sociales*, (165-166):16–24.
- Marchal, S., Siöland, L., and Goedemé, T. (2019). Using hhot to generate institutional minimum income protection indicators. Technical Report EUROMOD Working paper series EM 4/19.
- Mendola, D., Busetta, A., and Aassve, A. (2009). What keeps young adults in permanent poverty? A comparative analysis using ECHP. *Social Science Research*, 38(4):840–857.
- Modell, J., Furstenberg, F. F., and Hershberg, T. (1976). Social change and transitions to adulthood in historical perspective. *Journal of Family History*, 1(1):7–32.
- Parisi, L. (2008). Leaving home and the chances of being poor: The case of young people in southern european countries. *Labour*, 22(1):89–114.

- Smeeding, T. and Ross Phillips, K. (2002). Cross-national differences in employment and economic sufficiency. *The Annals of the American Academy of Political and Social Science*, 580:103–133.
- Sutherland, H. and Figari, F. (2013). EUROMOD: the European Union tax-benefit microsimulation model. *International Journal of Microsimulation*, 1(6):4–26.
- Tine, H., Goedemé, T., Gasior, K., Leventi, C., Manios, K., Rastrigina, O., Recchia, P., Sutherland, H., Van Mechelen, N., and Gerlinde, V. (2019). The hypothetical household tool (hhot) in euromod: a new instrument for comparative research on tax-benefit policies in europe. *International Journal of Microsimulation*, 12(3):68–85.
- Van de Velde, C. (2008). L’autonomie des jeunes adultes, une affaire d’état ?. Des politiques publiques aux cultures familiales en Europe. *Informations sociales*, (145):112–121.

