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**Social transfers and poverty in Europe:
comparing social exclusion and targeting across welfare regimes**

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Abstract

This paper studies whether there are systematic differences in the ability of cash transfers, belonging to different welfare systems, to reach the poor and to lift them out of poverty. We structure the analysis following the classic breakdown of the various European welfare states into welfare regimes, in search of specific features of them that can explain the variable results shown in the ability to effectively tackle economic poverty. The analysis is carried out both with a cross-sectional approach as well as using a more long-run definition of persistent poverty.

Introduction

The aim of this work is to study to what extent the European welfare systems reach poor individuals with cash transfers and to observe if the coverage rate of these transfers varies according to specific socio-economic characteristics. There is indeed some evidence that the probability of receiving cash transfers is strongly influenced, not only by individual characteristics, but also by the specific features of different systems of social protection, for example the degree of targeting. The identification of

determinants of the probability of not receiving social transfers allows us to verify the existence of a relationship between transfer exclusion and specific individual profiles.

Much of the literature on cash transfers focuses on their success in reducing the risk of poverty across the whole population and among its specific subgroups. We study the other side of the coin: who is left behind or totally excluded in the fight against economic poverty? To this end, two aspects are examined:

1) Which characteristics have those people who are still poor after cash transfers?
2) How many poor persons do not receive cash transfers at all, and who they are?

Not getting a subsidy despite being in poverty may be the result of different factors, in particular the technical and administrative design of each transfer and the inability or unwillingness of requesting it despite the presence of a legitimate title. Separating these factors would require a detailed analysis of each single transfer; an impossible task for a general multi-country study like the present one. The combined effect of these factors may produce strong differences in the share of poor people who are left behind. This total share, and its composition, is the main focus of this paper.

In the analysis we apply Probit models to the following outcome variables: (i) poverty status after social transfers, (ii) the non-receipt of transfers given the poverty status.

The estimates help us to show, respectively, which characteristics are associated with poverty status and which ones are linked with the non-receipt of social transfers. For each welfare regime the same regression models are estimated, in order to verify if the level of the outcome variables varies across the welfare systems, in particular if a specific system tends to exclude certain social groups from social transfers more than others.

Poverty is, for many, a transitory condition, but some individuals may find themselves stuck in it for many years, depending on the nature of their problems, on the structure of the maintenance schemes and on the labour market efficiency. Those who are persistently poor may be at least partly different from those who are poor only for short spells. We study the ability of a welfare system, always with respect to the other European systems, in reaching the poor using also a longitudinal perspective, since it is possible that part of the differences in the results obtained in a cross-sectional setting depends on the transitory nature of poverty for some of the poor. In brief, the research questions from this point of view are the following:

1) How does the ability of the various welfare systems in reaching the poor change if we move from a cross-sectional definition of poverty to a longitudinal one?
2) Are there differences between the transitory poor and the persistently poor that are excluded from cash transfers?

There are few studies that, using a microeconomic approach, investigate the effect of social cash transfers on poverty reduction. They will be presented in the next section. However, these papers do not precisely focus on the characteristics of individuals that, despite their poverty status, are excluded from social benefits.

Several comparative researches show that, even if European countries are the biggest spenders on social protection in the world, huge differences are still present among them. These differences are mainly historically founded and largely depend on welfare systems. For this reason, our analysis is led not at the country level, but at a welfare regime level.

The paper is organized as follows. In Section 1 we provide a review of the literature regarding the effect on poverty alleviation of social cash transfers, while Section 2 describes some methodological aspects of the analysis and the datasets we used. Sections 3 and 4 contain, respectively, the cross-sectional and longitudinal analysis of the poverty status and the non-receipt of social transfers among the poor, reporting for each welfare system both descriptive and econometric results. Finally, Section 5 concludes.

1. Literature review

In the last few years, various studies have attempted to evaluate whether and to what extent social transfers play a crucial role in reducing poverty. For example, Fabrizi, Ferrante and Pacei (2014) study how poverty status is influenced by transfer receipt in Italy. The effect of poverty alleviation is often seen in a trade-off between targeting and universalism. In fact, while some authors like Marx, Salanauskaite and Verbist (2013) argue that, particularly in cases of budget constraint, targeting is the most efficient and effective way to reduce poverty, others underline that in the long term targeting weakens the electorate's acceptance of an active and massive involvement of government in the welfare state (Huber & Stephens, 2001) and (Pierson, 2004).

According to Ferrarini, Nelson and Palme (2016), however, it is not just a matter of trade-off between universalism and targeting, since the major contribution to poverty reduction is given by the size of transferred income. This may explain why high poverty rate reductions are observed both in systems traditionally oriented toward universalism (e.g. Denmark, Sweden) and in countries with strong emphasis on targeted measures (e.g. United Kingdom, Ireland). This is confirmed also by Marx, Salanauskaite and Verbist (2013), who reach the conclusion that the best performing countries in term of redistributive impact employ "targeting within universalism", which however does not represent the guarantee for strong redistribution in itself if not accompanied by a high level of spending.

Most of the studies mentioned above analyze the overall impact of social transfers on poverty adopting a macroeconomic approach without recognizing that the impact of social transfer on poverty

may vary according to individual or household characteristics. There is anyway important evidence that pre-transfer poverty as well as the probability of receiving social transfers and being pulled out of poverty may be explained by individual and household-related factors. Nevertheless, this can be proved only adopting a microeconomic approach, as for example Lohmann (2008) did by studying transfers' effect on in-work poverty reduction. The author conducts two separate analyses (using logit models) to bring out the factors related with pre-transfer poverty and those connected with transition out of poverty due to transfers. He demonstrates that, at least for some groups (self-employed immigrants, low-skilled workers), a pre-transfer poverty condition is not necessarily correlated with a higher probability of having their poverty rate reduced after transfers.

A further relevant paper for our purpose is the study of Fabrizi, Ferrante and Pacei (2014) in which the authors, using a trivariate probit model, estimate for Italy the conditional probability for a household to receive social transfers given that it is poor and the consequent conditional probability that a family moves out of poverty given that it receives social transfers. They find that some groups of the population are more likely to be left behind by national social policies and argue that it could be due to a chronic lack of policy coordination, as well as their assignment on the basis of professional and demographic characteristics of individuals not considering that poverty acts at the household level.

Another important issue to take into account in the assessment of the welfare system capability to reach individuals in need is the take-up rate of its transfers. For this purpose, Matsaganis, Paulus and Sutherland (2008) provide the take-up rate for some European countries policies estimating the effects of non-take-up on the performance of social assistance benefits in poverty reduction. Other authors like Riphahn (2001) and Warin (2014) examine the main reasons why people fail to claim the benefits they are entitled to, while Flevotomou and Matsaganis (2009) estimate a probit model to identify the determinants of non-take-up for two relevant Greek social benefits.

Finally, another important issue concerns poverty measurement. As some authors like Ozdemir & Ward (2010) argue, the at-risk-of-poverty concept used by the EU may not be the most appropriate one to represent poverty status. For this purpose, under the hypothesis that a temporary income loss is not necessarily associated with a condition of real difficulty, they distinguish between persistent (calculated with EU-SILC longitudinal data) and temporary poverty status. By comparing the two different concepts of poverty above mentioned, an important aspect is to check whether persistently and temporary poor have different characteristics (Biewen, 2014), as well as to identify whether some socio-demographic characteristics can be associated with the transition in and out of poverty (Andriopoulou & Tsakloglou, 2011).

2. Data and Methodology

This paper provides a comparative analysis of the effects of social transfers on poverty alleviation across different European welfare regimes. Such research requires comparable and detailed data. For this purpose, the EU-SILC cross-national data on income and living conditions of European households can be considered the most appropriate data source to fulfill our needs.

Social transfers are very different from each other, especially in an international context, but they may be divided in two main categories: cash transfers and 'in kind' transfers (i.e. services provided for free or with a lower price than the market one). However, since EU-SILC data do not provide information about the monetary value of 'in kind' services benefited by each individual, we focus only on social cash transfers. The latter may be distinguished also through their means-test condition and contributory requirements. The strictness of these conditions determines how much a social transfer is really 'pro-poor'. For example, since poor people have low income levels generally because of their work intensity status, a means-tested and non-contributory social transfer can be considered more 'pro-poor' than other types of transfer.

The most recent available version (2014) of EU-SILC data, the one we use in this study, makes it possible for the first time to distinguish benefits according to their means-test condition and contributory requirements, but not all countries have still adopted this distinction. Hence we decide to consider all social cash transfers, regardless of their non means-tested or contributory nature. For the same reason, we include in social transfers also old-age and survivor's pensions, that like other social transfers can be more or less 'pro-poor'.

EU-SILC data separate social transfers in individual and household-based ones. With regard to individual transfers, we have six types of benefits:

- Unemployment benefits (full or partial unemployment benefits, payments to early retired for labour market reasons, vocational training allowances, mobility and resettlement benefits, severance and termination payments, redundancy compensation, and other cash benefits to the long-term unemployed);
- Old-age benefits (old age pensions, anticipated old age pensions, partial retirement pensions, care allowances, disability cash benefits paid after the standard retirement age, lump-sum payments at the normal retirement date, other cash benefits);
- Survivor's benefits (survivor's pensions, death grants, other cash benefits);
- Sickness benefits (paid sick leave, paid leave in case of sickness or injury of a dependent child, other cash benefits to people in connection with sickness or injury);

- Disability benefits (disability pension, payments to early retired in the case of a reduced ability to work, care allowances, economic integration of the handicapped, disability benefits to disabled children in their own right, irrespective of dependency, other cash benefits)
- Education-related allowances (grants, scholarship, and other assistance for education received by students).

Household-based social transfers are classified in the following three groups:

- Family/children related allowances (income maintenance benefit in the event of childbirth, birth grant, parental leave benefit, family or child allowance, alimonies or supports paid by government, other cash benefits to help households meet specific costs);
- Housing allowances (rent benefits, benefit to owner-occupiers);
- Social exclusion not elsewhere classified (income support to people with insufficient resources, other cash benefits to help alleviate poverty or assist in difficult situations).

The main interest of this paper is the study of the poor who are left behind by the various welfare systems, i.e. individuals who despite being poor are not reached by cash transfers. Given the universalistic structure of some systems, however, the number of families in the sample with zero transfers is extremely low in some countries, so we adopt a less strict but substantially equivalent choice: we define as recipient of social transfers an individual living in a household which receives a transfer that represents, including all of the benefits listed above, at least 3% of household disposable income. In this way, we can focus on persons for which cash transfers are null or represent a negligible share of their income.

Since the available data do not allow us to distinguish among the various reasons of the non-receipt, we cannot derive any data-driven conclusion about the relative importance of non-take-up and eligibility, the major factors influencing the coverage rate. Nevertheless, in the analysis we consider non-take-up as a possible explanation for some results we obtain, given that non-take-up is a relevant issue for all countries we refer in our analysis (Van Oorshot, 1991).

In order to identify poor people, we use for the cross-sectional analysis the Eurostat poverty definition. In this sense, an individual is considered poor when he/she lives in a household whose total income is below the standard poverty threshold, defined as 60 percent of the national median equivalised income. This one is obtained correcting total disposable household income (including social transfers) for the modified OECD equivalence scale, which gives a value of 1 to the household head, 0.5 and 0.3 to each additional adult and child, respectively.

For the longitudinal analysis, we adopt a definition of persistent poverty. Generally, poverty persistence is assessed on the basis of the number of consecutive spells in poverty condition. This

methodology, however, may be biased by temporary changes in household incomes. Therefore, we decided to build our definition of persistent poverty taking into account the household 'permanent' income, which we define as the average yearly household equivalised income over the period 2010-13, and likewise the 'permanent' poverty threshold as the quadrennial average of annual poverty thresholds at the national level. In conclusion, we consider as persistent poor those living in a household whose permanent income is below the permanent poverty threshold.

Since there is strong evidence that the effectiveness of social transfers varies across countries because of differences in welfare systems, with respect to both level and composition of total expenditure, the analysis is carried out separately for each welfare regime. The welfare systems classification adopted in this work is that proposed by Esping-Andersen (1990) as revised by Ferrera (1996), who considered the Mediterranean countries (Greece, Italy, Portugal and Spain) as a separate group from the Corporativist ones. Furthermore, we include some Central and Eastern European Countries, which are developing a welfare model of their own, including and combining Bismarckian social insurance, communist egalitarianism, and a liberal market orientation (Cerami, 2006). After having dropped observations with missing values in our variables of interest[1], the sample consists of 488,527 observations distributed by welfare system as described in Table 1.

Table 1 – Observations and countries by welfare system in the cross-sectional sample

Welfare system	*Countries*	*No. Observations*	*Population (mln.)*
Scandinavian	DK, FI, IS, NO, SE	80,756	25.4
Anglo-Saxon	IE, MT, UK	47,463	66.4
Continental	AT, BE, DE, FR, LU, NL	113,594	176.4
Mediterranean	CY, EL, ES, IT, PT	128,604	128.2
Central and Eastern Europe	CZ, HU, PL, SI, SK	118,110	62.3

Source: EU-SILC UDB 2014 – version 1 of January 2016.

In order to assess the persistence both in the poverty status and in the non-recipient status among persistently poor people, in the second part of the study we use the 2010-2013 EU-SILC longitudinal dataset. It consists of a four-waves rotating-panel where a quarter of the sample is followed from 2010 to 2013. The same methodology of cross-section analysis is used in the panel one, but the sample is different since households are not the same and German longitudinal observations are missing. The balanced panel sample contains 90,666 individuals, for a total of 362,664 observations, distributed by welfare systems as described in Table 2.

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[1] They however represent only 1.4% of the original sample (details are available upon request).

Table 2 – Observations and countries by welfare system in the longitudinal sample

Welfare system	Countries	No. Observations
Scandinavian	DK, FI, IS, NO, SE	56,032
Anglo-Saxon	IE, MT, UK	23,492
Continental	AT, BE, FR, LU, NL	95,796
Mediterranean	CY, EL, ES, IT, PT	88,104
Central and Eastern Europe	CZ, HU, PL, SI, SK	99,240

Source: EU-SILC LONGITUDINAL UDB 2013 – version 2 of January 2016.

3. Cross-sectional analysis

3.1. Descriptive statistics

In order to evaluate the targeting efficiency (in reducing poverty) and effectiveness (in reaching the poor) of the welfare systems defined above, using the EU-SILC 2014 dataset, it is useful to start our analysis with a descriptive overview of the five welfare systems to verify their ability to allocate resources to the population groups more affected by poverty, as well as their redistributive effect.

Table 3 – Coverage rate of social benefits by welfare system and poverty status before social transfer receipt

Welfare system	Poor	Non-poor	Total population
Scandinavian	92.6%	75.7%	77.9%
Anglo-Saxon	88.7%	64.1%	68.3%
Continental	91.3%	74.6%	77.1%
Mediterranean	68.6%	63.2%	64.3%
CEE	82.1%	63.0%	65.9%
Total	82.0%	68.5%	70.8%

Source: EU-SILC UDB 2014 – version 1 of January 2016

Table 3 shows the coverage rate both for poor and not-poor individuals. The regime with the greatest share of poor receiving social transfers is the Scandinavian one. It includes countries with a universal welfare system characterized by high social protection spending and high social assistance coverage. Among all Scandinavian countries, 92.6% of at-risk-of-poverty individuals are covered by social assistance, and 75.7% of non-poor persons receive some kind of support. Looking at the Anglo-Saxon countries, a rather high coverage rate among the poor (88.7%) is combined with a relatively low social assistance coverage among the non-poor (64.1%). This is a typical feature of the liberal welfare state

which, being based on means-tested assistance and modest universal transfers, concentrates social benefits among low-income persons (Marx, Salanauskaite, & Verbist, 2013). On the other hand, the Mediterranean countries show a relatively low coverage in comparison to the other systems, both for poor and non-poor individuals. The distinctive features of this welfare regime are low levels of provision and duration, and an extremely incomplete coverage (Maitre, Nolan, & Whelan, 2005), the latter due to the predominance of categorical transfers missing many of those not in employment or without a contributive record. Finally, as concerns the Central and Eastern European countries, even if their social system was traditionally based on a Bismarckian model, after 1989 they are developing a specific model that can be considered a mixture of the three types outlined by Esping-Andersen (1990). In fact, the rather high coverage rate among poor puts this set of countries quite close to the Continental ones and, to a certain extent, to the Anglo-Saxon countries. On the other hand, OECD's statistics[2] show that the countries we included in the CEE regime have a very limited share of means-tested cash benefits (from 1.8% of all cash transfers for the Czech Republic, to 8.8% for Slovenia), an aspect they have in common with countries belonging to the social-democratic regime. This is probably the reason why, despite a very low coverage among the non-poor, most of the expenditure on social transfers is addressed towards individuals who are not at-risk-of-poverty. A significant expenditure leakage is also a peculiarity of the Mediterranean pattern and it is mainly caused by the small portion of means-tested cash benefits, as well as the predominance of categorical transfers. Further information regarding both the composition of social expenditure among welfare systems and the distribution of population by social transfers receipt and poverty status can be found in Appendix Tables 1-3.

One of the main purposes of this work consists in highlighting potential dissimilarities in the degree of exclusion from social transfers between welfare systems. Given that we include also old-age pensions in the definition of social transfers, in Table 4 we distinguish the exclusion rates from all transfers (these values sum to 100% with those in Tab. 3), old-age pensions and transfers different from the pensions.

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[2] OECD Social Expenditure database, www.oecd.org/els/social/expenditure.

Table 4 – Exclusion rates from social transfers by poverty status.[3]

Welfare system	Poor			Non-poor		
	All transfers	Pensions	Other transfers	All transfers	Pensions	Other transfers
Scandinavian	7.4%	75.7%	18.9%	24.3%	73.7%	25.7%
Anglo-Saxon	11.3%	72.8%	31.9%	35.9%	71.3%	47.6%
Continental	8.7%	73.5%	25.6%	25.4%	69.5%	41.0%
Mediterranean	31.4%	78.0%	43.9%	36.8%	61.7%	54.7%
CEE	17.9%	72.4%	31.9%	37.0%	59.9%	60.2%
Total	18.0%	74.9%	33.4%	31.5%	66.6%	47.4%

Source: EU-SILC UDB 2014 – version 1 of January 2016

Consistently with the results reported before, the Mediterranean system has the highest level of exclusion from social benefits, regardless of the type of transfer and the poverty status. Nearly 1/3 of the poor living in the Mediterranean countries do not receive transfers of any kind. On the other hand, the Scandinavian countries are those with the lowest percentage of excluded persons, followed by the Continental ones. In detail, the universalism of the Scandinavian welfare regime is perceivable looking at the very low exclusion rates from transfers other than pensions among non-poor (for more details see Appendix 2).

In comparative welfare system analysis, another interesting matter is to check whether and to what extent the transfer system is effective in reducing the poverty rate. As Maitre, Nolan and Whelan (2005) argue, the literature would lead us to expect significant differences across regimes in this matter. The expectation is that transfers would be most effective in lifting recipients above income thresholds in the Scandinavian regime, less successful in the corporatist regime, and least successful in the Mediterranean one. As concerns the capability of the Anglo-Saxon and the CEE regime in reducing poverty rate, looking at the data presented above, we would expect the former to be the most effective, thanks to the predominance of means-tested social benefits, and the latter to be more similar to the Southern European welfare model because of expenditure leakages in favor of relatively wealthy households.

We also calculate poverty rate with regard to pre-transfers situation. To make this, contrarily to the standard Eurostat's approach, we do not use the same poverty threshold, but we re-define the poverty threshold as 60 percent of the national median equivalised income before social transfers.

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[3] As an additional information, Table 4 is reported distinguishing between household with or without members aged 60 in Appendix tables 4 and 5.

**Table 5 – At-Risk-Of-Poverty-rate before and after social transfer**

Welfare system	Before social transfers	After social transfers	Change (in % points)
Scandinavian	33.6%	12.6%	-21.0%
Anglo-Saxon	36.1%	17.1%	-19.0%
Continental	35.5%	14.9%	-20.6%
Mediterranean	35.1%	20.6%	-14.5%
CEE	32.0%	15.1%	-16.9%
Total	34.9%	16.7%	-18.2%

Source: EU-SILC UDB 2014 – version 1 of January 2016

Table 5 shows the at-risk of poverty rate before and after social transfers. The general reduction in poverty rates is an evidence of their overall redistributive effect; if we look at each group, our expectations seems to be confirmed since the Scandinavian countries are those with the highest poverty reduction (-21.0 pp) and, on the other hand, in the Mediterranean and the CEE ones the impact of social transfers is rather low (respectively 14.5 and 16.9 pp) because the majority of the expenditure is concentrated among the non-poor (See Appendix 3).

Before the econometric analysis, we provide a focus about the degree of exclusion from social transfers for some specific categories of poor individuals. Our main interest is to observe the level of exclusion of some groups across welfare systems, considering as benchmark the average exclusion rate of each welfare regime.

Chart 1 – Share of poor individuals excluded from social transfers
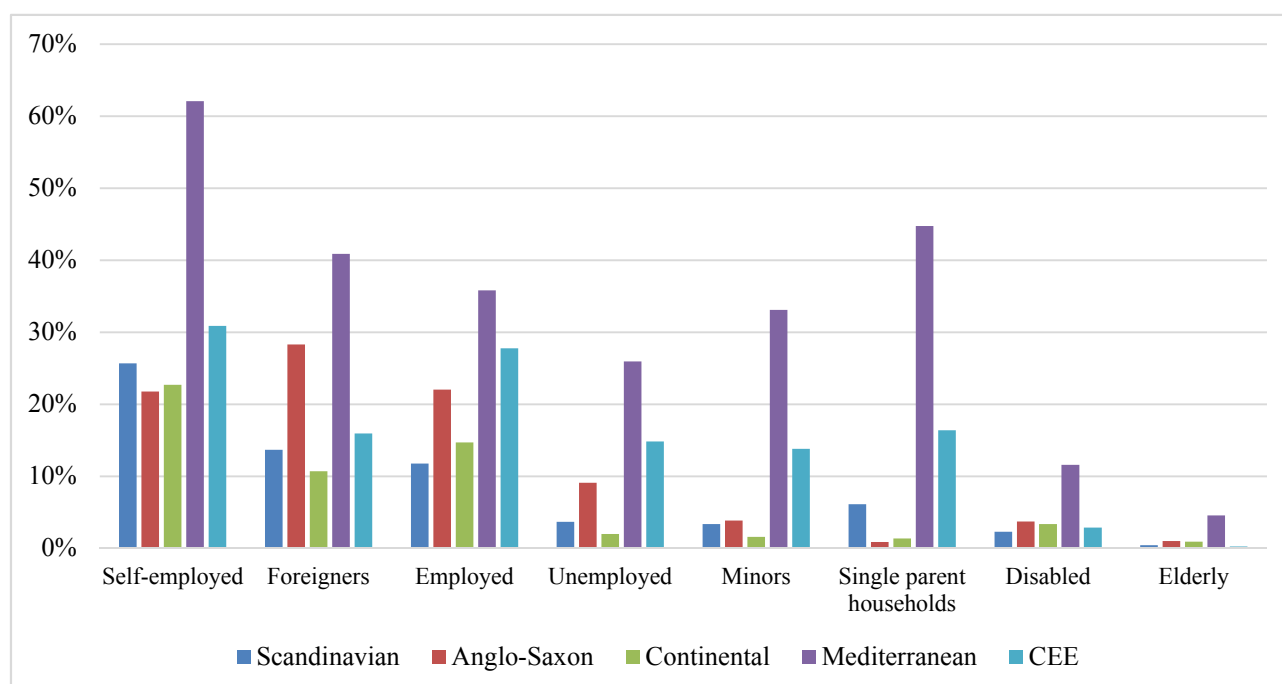
Source: EU-SILC UDB 2014 – version 1 of January 2016

If at the general level we observe a low rate of exclusion both for elderly and disabled, as well as a high rate for employed (in particular self-employed) and foreigners, **Errore. L'origine riferimento non è stata trovata.** allows us to compare, in terms of level of social transfers exclusion, the relative position of each welfare system. There is an important evidence that the Mediterranean system is the one with the highest exclusion rates, independently from the socio-demographic group considered, followed by the CEE system (with the sole exception of foreigners). Despite the clear predominance of pensions' expenditure, the Mediterranean countries have the highest percentage of excluded poor persons also among the elderly. Instead, for the other regimes there is no clear relationship. For example, the Anglo-Saxon system excludes more than the other ones the category of foreigners, while for the Scandinavian and Continental systems we observe relatively low exclusion rates for all categories of poor people, particularly with regard to unemployed, minors and single parent households.

3.2. Econometric analysis

We run two probit models with the following dependent variables:

$$y_{1i} = \begin{cases} 1 - \text{if the i-th individual is poor after social transfers} \\ 0 - \text{otherwise} \end{cases}$$

$$y_{2i} = \begin{cases} 1 - \text{if the i-th poor individual does not receive social transfers} \\ 0 - \text{otherwise} \end{cases}$$

These models allow us to analyse whether and to what extent some socio-demographic characteristics influence both the probability of being poor and the probability of not receiving social transfers for poor individuals. Individual characteristics, for each household member, are referred to the household head except for gender and age which are included at individual-level. This mixed approach depends on the fact that household head's characteristics can have significant effects on lifetime poverty of any other member, but on the other hand it is important to isolate the specific poverty experience of individuals (Devicienti, 2002).

Table 6 reports the results of a probit estimation for the outcome *poverty status after receipt of social transfers*. Separate estimations are provided for each welfare system. Although our aim is to observe the socio-economic characteristics of individuals excluded from social transfers, we think it could be

useful to develop a framework for the analysis describing how poverty is distributed among the different welfare systems after social security intervention.

Table 6 – Probability of being poor after cash transfers (Probit marginal effects) [4]

Y = Poverty status REGRESSORS	Scandinavian	Anglo-Saxon	Continental	Mediterranean	CEE
Gender (Base: Female)					
Male	-0.006***	-0.005	-0.003	-0.007***	-0.003*
Age (Base: 65 and over)					
0-17	0.042***	0.068***	0.056***	0.065***	0.061***
18-35	0.063***	0.072***	0.076***	0.077***	0.066***
36-49	0.022***	0.062***	0.043***	0.061***	0.056***
50-64	0.003	0.077***	0.045***	0.051***	0.056***
Citizenship of the head (Base: Foreign)					
Local	-0.043***	-0.038***	-0.078***	-0.114***	-0.043***
Education of the head (Base: Primary or less educ.)					
Lower secondary education	-0.025***	0.089***	-0.022***	-0.059***	-0.061***
Upper secondary education	-0.041***	0.040***	-0.059***	-0.128***	-0.142***
Bachelor or more	-0.072***	-0.020***	-0.103***	-0.189***	-0.223***
Household type (Base: Single person)					
Two adults	-0.109***	-0.046***	-0.047***	-0.042***	-0.068***
Household without children	-0.114***	-0.053***	-0.041***	-0.029***	-0.067***
Single parent household	-0.035***	0.012	0.070***	0.139***	0.048***
Household with 1-2 children	-0.101***	0.006	-0.004	0.025***	-0.011**
Household with 3+ children	-0.036***	0.072***	0.080***	0.104***	0.116***
Tenure status (Base: Ownership)					
Rent	0.073***	0.030***	0.100***	0.089***	0.033***
Free	0.118***	0.077***	0.103***	0.088***	0.054***
Household with at least					
One employed	-0.102***	-0.224***	-0.147***	-0.199***	-0.157***
One self-employed	0.022***	-0.037***	0.004	-0.025***	0.016***
One unemployed	0.040***	0.096***	0.060***	0.122***	0.129***
One retired	-0.031***	-0.045***	-0.038***	-0.113***	-0.086***
One disabled	0.001	0.000	0.044***	0.009***	0.022***
Observations	80,756	47,463	113,594	128,604	118,110
Pseudo R-squared	0.250	0.170	0.216	0.222	0.242

*Notes: Standard Errors are clustered by individual ID; *** p<0.01, ** p<0.05, * p<0.1; Average Marginal Effects.*

On average, a higher education level is correlated with lower poverty rates. Focusing on each welfare system, this relationship is no more so obvious, since it disappears for the Anglo-Saxon countries and seems to be weaker for the Scandinavian and Continental ones. On the contrary, among Mediterranean and CEE countries, individuals living in households whose head attained at least a bachelor degree show a 20-24% lower probability of being poor in comparison to those with a lower level of education. This is probably correlated with the share of individuals with a tertiary education level, which exceeds 30% both in the Scandinavian countries and in the Anglo-Saxon ones, the same countries in which a higher education has the lowest effect on the probability of being poor.

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[4] Note: Marginal effects are average effects calculated for each individual.

As concerns poverty distribution across age groups, in comparison with people aged 65 or over, younger individuals are everywhere more likely to be poor. For all systems, the 18-35 age group appears more disadvantaged with the sole exception of the Anglo-Saxon system, in which individuals more likely to be poor are those aged between 50 and 64 years.

Looking at the household composition, we observe a sharp distinction between families composed by persons having a source of sustained and reliable income (employed and retired), and those whose members have no occupation or are self-employed. This conclusion does not seem to apply for Anglo-Saxon and Mediterranean countries, for which we note a lower probability of being poor if at least a self-employed member lives in the household. Once again, we can perceive a significant difference between the Mediterranean and CEE systems and the other European countries. In fact, even if pensioners are among the most protected all over Europe, in Southern and Eastern countries their relative position seems to be even better if compared to other categories. Furthermore, tenure status appears to be a significant aspect in determining poverty status. In particular, being tenant or living in a free-rent house implies a higher probability of being poor in comparison to individuals living in their own house.

Considering household type, individuals more likely to suffer from poverty are those living in families with children, in particular in single parent and in three-or-more-children households. This seems to be a common pattern across all European welfare systems, except for the Scandinavian one, where families with a large number of children are not at the bottom of the income distribution as it usually happens in other countries. The only system where households with 1 or 2 children are more likely to be poor than single-person households is the Mediterranean one, which has also the highest probability of poverty, together with the CEE one, for families with at least 3 children.

Once the socio-economic covariates of poverty have been defined, the analysis turns to the identification of the individuals who are more likely to be left out from social security and to verify if this pattern can be associated to specific socio-economic attributes. Table 7 shows average marginal effects estimated by a probit model for the outcome *non-receipt of social transfers* conditioning on being poor. The first effect we intend to report is related to the poverty gap (understood as the distance between the poverty threshold and the household income after transfers): the positive marginal effects observed for any welfare system, with the exception of CEE, mean that the most excluded individuals are also the poorest. Since we look at income including social transfers, it could happen that people receiving them would be lifted near to the line of poverty; in this way, people with lowest income turn out to be the more likely to be excluded.

Table 7 – Probability of not receiving cash transfers when poor (Probit marginal effects)

Y= Non-receipt of social transfers among the poor REGRESSORS	Scandinavian	Anglo-Saxon	Continental	Mediterranean	CEE
Logarithm of poverty gap	0.012***	0.014***	0.011***	0.024***	-0.002
Gender (Base: Female)					
Male	0.007	0.010*	0.001	0.004	0.003
Age (Base: 65 and over)					
0-17	0.094***	0.064***	0.070***	0.191***	0.209***
18-35	0.094***	0.069***	0.079***	0.199***	0.202***
36-49	0.094***	0.071***	0.072***	0.194***	0.216***
50-64	0.109***	0.055***	0.060***	0.199***	0.186***
Citizenship of the head (Base: Foreign)					
Local	-0.056***	-0.057***	-0.051***	-0.085***	-0.043***
Education of the head (Base: Primary or less educ.)					
Lower secondary education	-0.010	-0.004	0.013**	0.039***	-0.057***
Upper secondary education	-0.033	0.028***	0.036***	0.099***	0.027***
Bachelor or more	-0.018	0.060***	0.038***	0.137***	0.074***
Household type (Base: Single person)					
Two adults	-0.099***	-0.003	-0.028**	-0.043***	-0.021
Household without children	-0.137***	-0.034*	-0.129***	-0.084***	-0.107***
Single parent household	-0.145***	-0.212***	-0.213***	-0.144***	-0.191***
Household with 1-2 children	-0.196***	-0.205***	-0.214***	-0.195***	-0.212***
Household with >3 children	-0.209***	-0.212***	-0.226***	-0.266***	-0.267***
Tenure status (Base: Ownership)					
Rent	-0.035***	-0.023***	-0.026***	-0.011*	-0.034***
Free	-0.034***	-0.013	0.020	0.023***	-0.002
Household with at least					
One employed	0.070***	0.067***	0.054***	0.060***	0.088***
One self-employed	0.095***	0.032***	0.063***	0.214***	0.117***
One unemployed	-0.030***	-0.038***	-0.049***	-0.063***	-0.019***
One retired	-0.064***	-0.056***	-0.057***	-0.370***	-0.281***
One disabled	-0.008	-0.066***	-0.045***	-0.111***	-0.143***
Observations	6,497	7,892	14,141	24,585	16,791
Pseudo R-squared	0.253	0.347	0.325	0.244	0.276

Notes: Standard Errors are clustered by individual ID; *** p<0.01, ** p<0.05, * p<0.1; Average Marginal Effects.

With regard to education level, more educated householders are significantly less likely (in particular in Mediterranean countries) to receive transfers than those poorly educated. This trend appears common to all systems, with the only exception of Scandinavian countries. Anyway, there is strong evidence that this relationship depends on the lower take-up rate associated to higher educated persons. It may happen that more educated individuals do not apply for social benefits because they may be more susceptible to stigma (Eurofound, 2015) or because they trust in their own capability to contrast a temporary poverty status. As concerns age differences, there is a common trend in all welfare systems: individuals aged 65 or over are less likely to be excluded from social transfers. Furthermore, this gap is much higher among individuals in the CEE and Mediterranean countries where persons aged less than 65 have a larger probability of being non-recipient in the range from 19% for the former to 20% for the latter. This better

social protection related to the elderly is certainly due to old age and survivor's benefits, which cannot be entirely considered as social transfer, but also as primary income.

In line with these results, the retirement condition is an important guarantee for receiving social transfers, in particular among Mediterranean countries in which households with retired members show a 37% lower probability of being non-recipient in comparison to families without retired components. A common trend concerns the higher probability of being excluded from social transfers for individuals living with self-employed people and a greater likelihood to be protected by social security system if at least one of the household members is unemployed.

To conclude, Table 7 provides also average marginal effects for the probability of transfer exclusion given that a poor individual belongs to a certain household type. Members of large families with children are less likely to be left out of social transfers when they are affected by poverty. This is particularly true for the Mediterranean and, to some extent, for the CEE system where the coefficients are considerably lower if in the household live at least three children. Apart from the presence of children, members living in one person households tend to be the most excluded from social transfers, regardless of the system to which they belong.

By presenting these results, one aspect is remarkable. All welfare systems have a similar propensity to include some types of individuals and exclude others from social transfers receipt, according to specific socio-economic characteristics. The signs of the estimated coefficients are indeed almost the same for the various regressions. What seems to be different is the degree of inclusion or exclusion for each category, i.e. the intensity of the association between a characteristic and the probability of being excluded, not its direction.

4. Longitudinal analysis: who are the excluded among the persistently poor?

In the previous section we used only the EU-SILC cross-sectional dataset for the year 2014 (2013 incomes). Here we extend the analysis to the most recent four-years longitudinal data from the same survey. The individual risk of poverty, like all economic variables, varies across time. It basically depends on household income, and thus on any change in household structure or in the economic conditions (e.g. employment status, work intensity, and salary) of its members. In this section we build a balanced panel, keeping only the individual observations that are present in each of the four available years. The panel contains for each year 90.666 observations.[5] Table 8 shows how the share of poor people varies over the period covered by our analysis according to the cross-sectional definition. Despite

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[5] Details about the longitudinal dataset are provided in Section 2.

the severe reduction of GDP in most of the countries during these years, relative poverty rates do not change very much, as expected given the widespread impact of the Great Recession all over the income distribution and the presence of a variable poverty line. The poverty rate is much lower for the Scandinavian and Continental countries in comparison to the Anglo-Saxon and the Mediterranean countries.[6]

Table 8 – At-Risk-Of-Poverty rate and share of non-recipient poor by welfare system and year (after cash transfers)

At-Risk-Of-Poverty rate					
Welfare system	*2010*	*2011*	*2012*	*2013*	*Average 10-13*
Scandinavian	10.5%	11.0%	10.7%	11.3%	10.9%
Anglo-Saxon	18.6%	14.5%	17.3%	16.4%	16.9%
Continental	11.2%	12.0%	12.1%	12.1%	11.8%
Mediterranean	18.0%	18.6%	18.7%	18.1%	18.3%
CEE	15.3%	14.8%	13.8%	14.7%	14.8%
Total	15.2%	14.7%	14.7%	14.4%	14.8%
% of Non-recipients poor					
Welfare system	*2010*	*2011*	*2012*	*2013*	*Average 10-13*
Scandinavian	3.7%	5.5%	5.5%	5.5%	5.0%
Anglo-Saxon	4.1%	8.4%	7.8%	5.7%	6.1%
Continental	6.5%	6.2%	6.8%	6.1%	6.4%
Mediterranean	30.1%	27.5%	31.6%	28.2%	29.3%
CEE	19.3%	16.9%	15.2%	15.8%	17.6%
Total	18.4%	16.6%	16.9%	15.1%	17.0%

Source: EU-SILC LONGITUDINAL UDB 2013 – version 2 of January 2016.

Table 8 also shows that the Mediterranean countries are by far the worst in terms of the probability, for the poor, of not receiving any transfer. Consistently with the results shown in the previous section, also in this sub-sample more than one poor out of four is excluded from social transfers in each year in these countries. The CEE system seems to have some targeting problem as well (on average, 17.6% of non-recipients among the from 2010 to 2013), while in the Northern welfare states only a small share of individuals who are poor on a yearly basis do not receive any social transfer. The Scandinavian system has the best performance in terms of protection of the poor, although the share of non-recipients

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[6] Notice that the poverty rates and the percentages of recipients among the poor in Table 8 are quite different from the results presented in Table 5. Beyond the fact that interviewed households are not the same, overall they appear also smaller than those in Table 5 because here we keep for each year only the observations that belong to the balanced panel. Since panel datasets are affected by attrition, sample selection bias might characterize our sample. In particular, the sample seems to be more educated and less poor than the whole population.

among them increases after 2010, contrary to what happens in the total sample, where the non-coverage rate decreases from 18.4% to 15.1%.

4.1. Poverty and non-receipt persistence

To complement the analysis of the previous section about the probability of being excluded from social transfers, we focus here on a particular category: those who are persistently poor. As explained in Section 2, we define as persistently poor an individual whose permanent household income is below the permanent poverty threshold. We are interested in assessing the entity and the determinants of non-receipt persistence among those who are persistently poor. Also in this case we refer to the permanent income approach, defining as persistently non-recipient those individuals living in households whose 2010-2013 average amount of received social transfers represents less than 3% of the permanent household income during the same period. Table 9 contains both the share of individuals suffering from poverty persistence in the entire population and the share of the persistent poor who do not receive any benefit.[7]

Table 9 – Poverty and non-receipt persistence by welfare system

Welfare system	% Persistent poor		% Persistent non-recipient among persistent poor		
	All individuals	Among the poor at least once	All social transfers	Pensions	Other transfers
Scandinavian	10.8%	57.1%	2.1%	57.6%	25.5%
Anglo-Saxon	15.3%	46.0%	3.2%	67.7%	22.7%
Continental	10.3%	47.0%	2.7%	71.9%	14.0%
Mediterranean	18.3%	58.6%	17.2%	71.8%	32.3%
CEE	13.1%	50.4%	8.5%	64.2%	22.2%
Total	13.4%	52.0%	9.0%	69.2%	23.9%

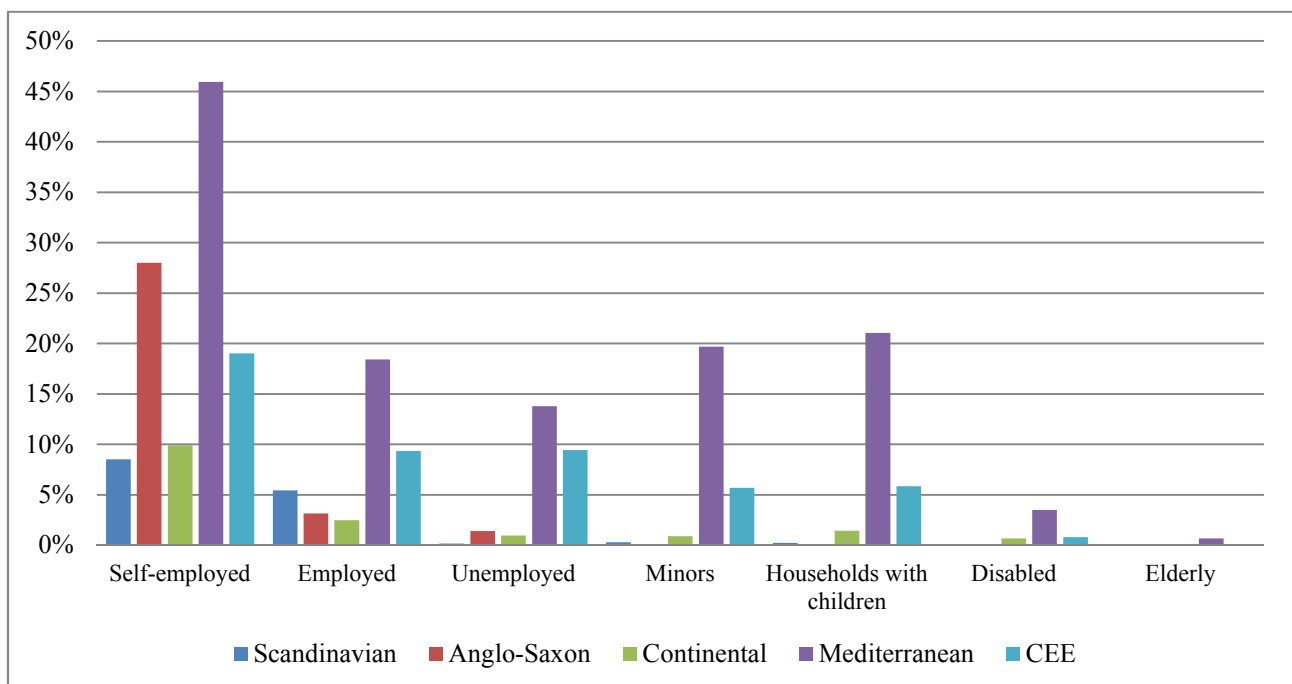*Source: EU-SILC LONGITUDINAL UDB 2013 – version 2 of January 2016.*

Like cross-sectional poverty, in accordance with other studies on the topic (Jenkins, & Van Kerm, 2013), Table 9 shows that poverty persistence is lower in the Continental and Scandinavian systems, while in the Mediterranean countries poverty persistence is more common, involving 18.3% of total population. Poverty persistence in the Mediterranean countries appears also more widespread among those who are at-risk-of-poverty at least once during the reference period (58.6%), while the Scandinavian system shows the second highest share in this case (57.1%). The latter means that in the

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[7] As an additional information, Table 9 is reported distinguishing between household with or without members aged over 60 in Appendix tables 6 and 7.

Scandinavian countries remaining in poverty status for a long run is quite rare, but most of those who fall in poverty at least once tend not to change their condition. Except for the Anglo-Saxon (46.0%) and Continental (47.0%) systems, the persistent poor are always more than temporary ones (i.e. poor at least once from 2010 to 2013) in the reference period. This conclusion appears to be confirmed by Polin, Raitano (2012) in their study based on pre-recession longitudinal data (EU-SILC 2005-2007), pointing out a preexistence of the problematic phenomenon all over the European countries already before the Great Recession.

Similarly to the incidence of poverty persistence, a high share of the persistently poor who do not receive transfers appears to be a prerogative of the Mediterranean countries (Table 9, right panel), since in other welfare systems this category represents only a very small share of persistently poor, especially the Scandinavian one (2.1%). Looking at the specific types of social transfers, the majority of persistent poor do not receive pensions (i.e. old-age and survivor's benefits), a sign that their age is on average low. As regards pensions, the Scandinavian system seems to be the best one in terms of coverage rate, while the Continental and the Mediterranean systems are the worst. Nevertheless, taking into account social transfers other than pensions, the Continental system has the lowest percentage of excluded among persistently poor (14.0%), while the Scandinavian countries show here the second highest share, only below the Mediterranean ones.

Chart 2 – Share of the persistent poor who persistently excluded from social transfers

Source: EU-SILC LONGITUDINAL UDB 2013 – version 2 of January 2016.

The descriptive results reported in Chart 2 show that social transfers are not in favour of the working families in all welfare systems, regardless of whether they are or not persistently at risk of poverty.[8] Indeed poor households whose head is employed or self-employed are more likely to be excluded from all kinds of benefit. The disabled and elderly, on the other hand, are surely the most protected categories: across all systems, on average, respectively 1.6% and 0.2% of the persistent poor in these categories are excluded from social transfers. The Mediterranean system has the highest rates of non-receipt persistence in all categories, while the Scandinavian and Anglo-Saxon countries show several 'zeros' in non-receipt persistence rates (Chart 2), pointing out that in these systems some specific categories of persistent poor (e.g. elderly, disabled, and households with children) are particularly supported by benefits.

The eligibility criteria of social transfers, as well their potential variability or adjustments over time, have an important role in avoiding poverty persistence. In order to point out which categories have a higher probability of being persistently poor and not receiving transfers, a multivariate analysis is now conducted estimating two different probit models. In the first one, the dependent variable is a binary variable equal to 1 if the individual is persistently poor and 0 otherwise. The second model is estimated only on persistent poor and the dependent variable is a binary equal to 1 if the person lives in a household receiving social transfers, 0 otherwise. All regressors refer to the most frequent (i.e. prevalent) individual or household characteristics during the four years. As in the cross-sectional analysis, individual characteristics included in the models refer to the household head except for gender and age. Tables 10 and 11 show the results of the two models.

The categories with a higher probability of being in persistent poverty are similar across the systems (Table 10). In general, young and middle-aged individuals (i.e. aged less than 65 years) are more likely to be persistently poor, as well as people living in households with poorly educated heads, the renters and people living in households with children or at least one self-employed, unemployed, or disabled. Moreover, Table 10 shows the absence of a significant relationship between gender and poverty persistence in the reference period.

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[8] With respect to the discussed Chart 1 in Section 3, here we do not report foreigners because this characteristic is not provided in longitudinal data.

Table 10 – Determinants of poverty persistence (Probit marginal effects)

Y = Poverty Persistence REGRESSORS	Scandinavian	Anglo-Saxon	Continental	Mediterranean	CEE
Gender (Base: Female)					
Male	0.000	-0.009	-0.002	-0.011**	-0.005
Age group (Base: 65 and over)					
0-17	0.009	0.067***	0.035***	0.054***	0.045***
18-35	0.034***	0.060***	0.045***	0.038***	0.037***
36-49	-0.008	0.058***	0.020**	0.040***	0.037***
50-64	-0.010	0.052***	0.021***	0.014*	0.028***
Education of the head (Base: Primary or less educ.)					
Lower secondary education	-0.071**	0.026*	-0.055***	-0.044***	-0.042***
Upper secondary education	-0.101***	-0.001	-0.095***	-0.100***	-0.143***
Bachelor or more	-0.138***	-0.074***	-0.144***	-0.158***	-0.214***
Household type (Base: Single person)					
Two adults	-0.094***	-0.026*	-0.037***	-0.043***	-0.062***
Household without children	-0.109***	-0.053***	-0.029***	-0.063***	-0.075***
Single parent household	-0.007	0.068**	0.098***	0.096***	0.024
Household with 1 or 2 children	-0.076***	0.014	0.015**	0.020*	-0.005
Household with 3 or more children	-0.022	0.107***	0.125***	0.109***	0.087***
Tenure status (Base: Ownership)					
Rent	0.073***	0.056***	0.073***	0.102***	0.046***
Free	0.185***	0.042	0.097***	0.112***	0.049***
Household with at least					
One employed	-0.099***	-0.189***	-0.127***	-0.208***	-0.156***
One self-employed	0.022***	-0.007	0.005	-0.028***	0.033***
One unemployed	0.055***	0.111***	0.077***	0.130***	0.118***
One retired	-0.029***	0.011	-0.052***	-0.082***	-0.051***
One disabled	0.003	-0.019	0.018***	0.015**	0.011**
Observations	14,008	5,873	23,949	22,026	24,810
Pseudo R-squared	0.274	0.175	0.247	0.220	0.276

Notes: Standard Errors are clustered by individual ID; *** p<0.01, ** p<0.05, * p<0.1; Average Marginal Effects

There are also some relevant differences among the systems. For example, results do not point out any difference between males and females, except for the Mediterranean system where males have a lower probability to be persistently poor. In the Scandinavian system the only age group that over time is poorer than the elderly is the 18-35 one. In the Anglo-Saxon countries, only a very high education level (i.e. bachelor or more) can prevent persistent poverty. In the Scandinavian system households with children, in particular with 1 or 2 children, are significantly less poor than single persons. Finally, in the Mediterranean system living with at least one self-employed reduces the probability of being persistently poor, while in the Anglo-Saxon one having a retired or a disabled member in the household does not determine any effect on the variable of interest; the latter also applies in the Scandinavian countries.

Concerning the factors leading to a higher probability of being persistently excluded from any social transfer despite the condition of persistent poverty, we can observe a similarity among the five welfare systems (Table 11). The first common point is the unexpected sign of marginal effects of the logarithm of poverty gap. Contrary to expectations, the further the distance of the household income from the

poverty threshold the higher, *ceteris paribus*, the probability to be persistently excluded from social transfers despite persistent poor, especially in the Mediterranean and the Continental systems.

As well the poverty persistence, the condition of non-receipt persistence does not denote a gender difference among persistent poor. On the other hand, Table 11 shows that the persistent poor under the age of 60 years are more excluded, such as those having a very high education level, the latter especially in the Anglo-Saxon and CEE systems. Families with many members in the condition of poverty persistence, in particular those with children, have a lower probability to be persistently non-recipient than single persons in all welfare systems, while living in a rented house rather than in ownership determines a positive effect on the dependent variable except in the CEE countries. Finally, living in a household with at least one worker (i.e. employed or self-employed) always leads to a greater non-receipt persistence among the persistent poor in all welfare systems, although the Mediterranean one highlights the greater effects on the variable of interest.

Table 11 – Determinants of persistence of benefits non-receipt among persistent poor (Probit marginal effects)

Y = Non-Receipt persistence REGRESSORS*	Scandinavian	Anglo-Saxon	Continental	Mediterranean	CEE
Logarithm of Poverty Gap	0.001	0.008**	0.003	0.026***	-0.000
Gender (Base: Female)					
Male	0.011	0.007	0.003	0.002	0.003
Age group (Base: 60 and over)					
0-17	0.055**	0.004	0.039**	0.162***	0.083***
18-35	0.050**	0.027*	0.051***	0.170***	0.086***
36-49	0.030	-0.003	0.053***	0.169***	0.086***
50-59	0.064***	0.031**	0.034***	0.153***	0.073***
Education of the head (Base: Low-medium education)					
Upper secondary education	-0.014	-0.010	0.010	0.017	0.045***
Bachelor or more	0.025	0.053***	0.010	0.028	0.121***
Household type (Base: Single person)					
Household without children	-0.102***	-0.057**	-0.009	-0.103***	-0.082**
Household with children	-0.135***	-0.081**	-0.076***	-0.142***	-0.171***
Tenure status (Base: Ownership)					
Rent	-0.043***	-0.001	-0.023***	-0.013	0.024*
Free	0.076	0.016	0.021	-0.010	-0.015
Household with at least					
One employed	0.049***	0.035***	0.009	0.060***	0.032***
One self-employed	0.041***	0.026**	0.017**	0.214***	0.095***
Observations	1,007	834	2,252	3,625	2,908
Pseudo R-squared	0.311	0.377	0.257	0.179	0.267

Some regressors have been changed in the econometric model because of a very small sample size. In particular: last two age groups are now '50-59' and '60 and over'; lower secondary education goes to the base; households without or with children are grouped together; dummies for household with at least one unemployed, one retired, or one disabled are not included.

*Notes: Standard Errors are clustered by individual ID; *** $p<0.01$, ** $p<0.05$, * $p<0.1$; Average Marginal Effects.*

5. Conclusions

Our analysis of the EU-SILC 2014 cross-sectional data shows that all welfare systems share a common propensity to include some types of individuals and exclude others from social transfers receipt, according to specific socio-economic characteristics. The signs of the estimated coefficients are indeed almost always the same for the various regressions, especially when the dependent variable is the probability of not receiving cash benefits when poor. Given these results, we may state that there is a common European welfare system with the following features:

- A share of poor people, however small, is everywhere excluded from cash transfers.
- The probability of not receiving any benefit when poor is in most welfare systems higher for specific groups: young, foreigners, highly educated, and those who live alone.

What seems to be different among the European welfare systems is the degree of inclusion or exclusion for each category, i.e. the intensity of the association between a characteristic and the probability of being excluded. For example, estimation results show that the young who are poor are much more likely to be excluded than the older ones in the Mediterranean and CEE systems; the Mediterranean system tends to penalize more foreigners, self-employed and the poor with high education level.

Moreover, Northern systems have both a higher effectiveness in fighting poverty and reaching their real targets, i.e. poor households. In particular, Anglo-Saxon countries report the greatest poverty reduction thanks to social transfers, while cash benefits of the Scandinavian system have the highest coverage rate, both among the poor and non-poor, showing a relevant propensity towards 'universalism' of social policies. The Mediterranean and CEE systems seem instead more category-based and, for this reason, they report lower coverage rates among the poor, a higher share of social transfers expenditure among non-poor, and a lower total effectiveness in fighting the risk of poverty.

Moving to a medium-run point of view thanks to the EU-SILC 2010-2013 longitudinal data, thus removing the effect of temporary drops in the poverty status, our conclusions remain substantially the same, the welfare systems that are more likely to exclude the temporary poor from cash transfers, tend also to exclude the same categories among those who are persistently poor: young people, families without children and sthe elf-employed, even when affected by a persistent poverty status, are more likely to be excluded from cash transfers.

Overall, it may be said that, on the one hand, the European welfare systems we analyzed have turned out to be more similar than we expected, in particular as concerns their target characteristics; on the other hand, there are still important differences in terms of coverage rates, both among the poor and the non-poor. This is a sign that, among European countries, there is a common framework for social

policies, while large differences are still present in terms of universalism degree, and thus in relation to the level of resources allocated to the fight against poverty.

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Appendix

Appendix 1 – Distribution of population by social transfers (ST) receipt and poverty status

Welfare System	Recipient, Poor before ST		Not Recipient, Poor before ST	Recipient, Not Poor	Not Recipient, Not Poor	Total	Coverage Rate
	Not Poor after ST	Poor after ST					
	(A)	(B)	(C)	(D)	(E)	(A+B+C+D+E)	(A+B / A+B+C)
Scandinavian	21.96	11.03	0.61	44.88	21.52	100	98.18
Anglo-Saxon	21.16	14.03	0.89	33.14	30.79	100	97.54
Continental	22.42	12.44	0.64	42.22	22.28	100	98.20
Mediterranean	19.51	12.11	3.43	32.72	32.23	100	90.22
CEE	19.83	11.01	1.13	35.07	32.96	100	96.48
Total	21.05	12.31	1.52	37.43	27.70	100	95.64

Source EU-SILC UDB 2014 – version 1 of January 2016

Appendix 2 – Social expenditure composition

Category of social transfer	Scandinavian	Anglo-Saxon	Continental	Mediterranean	CEE
Unemployment	8.3	6.8	7.4	10.0	2.1
Old-age	58.6	62.8	70.7	73.4	70.7
Survivors	1.6	2.1	2.5	7.6	5.6
Sickness	4.5	0.7	1.0	0.6	1.8
Disability	13.6	6.2	5.2	4.7	9.2
Education	2.6	1.3	0.7	0.6	1.0
Family/children	8.5	12.2	8.6	2.2	7.4
Social exclusion	0.7	3.0	2.0	0.8	1.7
Housing	1.6	4.9	1.7	0.3	0.4
Total	100.0	100.0	100.0	100.0	100.0

Source:EU-SILC UDB 2014 – version 1 of January 2016

Appendix 3 – Share of expenditure by category of social transfers and poverty status

Category of social transfer	Scandinavian		Anglo-Saxon		Continental		Mediterranean		CEE	
Poverty Status	poor	non-poor	poor	non-poor	poor	non-poor	poor	non-poor	poor	non-poor
Unemployment	55.5	44.5	67.5	32.5	57.3	42.7	32.9	63.1	43.7	56.3
Old-age	83.0	17.0	81.3	18.7	84.2	15.8	71.4	28.6	76.0	24.0
Survivors	55.9	44.1	72.6	27.4	79.1	20.9	70.0	30.0	67.4	32.6
Sickness	31.8	68.2	66.2	33.8	51.2	47.8	39.8	60.2	16.9	80.1
Disability	64.2	35.8	73.9	26.1	72.4	27.6	58.5	41.5	61.7	38.3
Education	42.7	67.3	39.3	60.7	38.0	62.0	26.5	73.5	26.4	73.6
Family/children	21.2	78.8	57.3	42.7	23.4	76.6	30.6	69.4	34.7	65.3
Social exclusion	80.0	20.0	82.0	18.0	84.1	15.9	78.1	21.9	76.7	23.3
Housing	71.0	29.0	92.6	7.4	79.8	20.2	44.3	55.7	74.2	25.8

Source: EU-SILC UDB 2014 – version 1 of January 2016

Appendix 4 - Exclusion rates from social transfers by poverty status for individuals living WITH at least one member aged over 60

Welfare System	Poor			Non-Poor		
	All transfers	Pensions	Other transfers	All transfers	Pensions	Other transfers
Scandinavian	1.8%	11.5%	50.4%	8.8%	18.0%	53.5%
Anglo-Saxon	5.2%	13.1%	71.3%	8.9%	9.3%	71.8%
Continental	3.4%	18.6%	62.1%	6.8%	11.5%	75.4%
Mediterranean	10.7%	26.2%	60.3%	5.6%	10.4%	67.6%
CEE	3.3%	15.7%	49.9%	3.4%	7.1%	69.3%
Total	6.1%	19.7%	60.9%	6.3%	10.5%	70.4%

Source: EU-SILC UDB 2014 – version 1 of January 2016

Appendix 5 - Exclusion rates from social transfers by poverty status for individuals living WITHOUT any member aged over 60

Welfare System	Poor			Non-Poor		
	All transfers	Pensions	Other transfers	All transfers	Pensions	Other transfers
Scandinavian	9.3%	97.2%	8.3%	30.3%	95.5%	14.8%
Anglo-Saxon	13.8%	96.9%	16.0%	46.6%	96.1%	37.9%
Continental	10.7%	94.0%	12.0%	33.5%	94.8%	26.0%
Mediterranean	39.1%	97.3%	37.8%	56.9%	95.1%	46.4%
CEE	23.8%	95.4%	24.6%	58.3%	93.5%	54.4%
Total	22.5%	95.9%	22.9%	44.2%	94.9%	35.7%

Source: EU-SILC UDB 2014 – version 1 of January 2016

Appendix 6 - Poverty and non-receipt persistence by welfare system for individuals living WITH at least one member aged over 60

Welfare system	% Persistent poor		% Persistent non-recipient among persistent poor		
	All individuals	Among poor at least once	All social transfers	Pensions	Other transfers
Scandinavian	13.0%	72.9%	0.4%	5.6%	56.5%
Anglo-Saxon	16.8%	45.3%	1.1%	10.0%	57.8%
Continental	8.4%	50.3%	2.6%	16.1%	45.1%
Mediterranean	15.0%	57.8%	4.6%	16.8%	52.6%
CEE	12.2%	58.1%	1.2%	12.2%	38.1%
Total	12.1%	55.2%	2.7%	14.0%	49.4%

Source: EU-SILC LONGITUDINAL UDB 2013 – version 2 of January 2016.

Appendix 7 - Poverty and non-receipt persistence by welfare system for individuals living WITHOUT any member aged over 60

Welfare system	% Persistent poor		% Persistent non-recipient among persistent poor		
	All individuals	Among poor at least once	All social transfers	Pensions	Other transfers
Scandinavian	9.7%	50.0%	3.4%	94.7%	3.4%
Anglo-Saxon	14.7%	46.4%	4.2%	97.5%	4.5%
Continental	11.2%	45.9%	2.7%	91.7%	3.0%
Mediterranean	20.3%	58.9%	22.7%	95.5%	23.5%
CEE	13.6%	47.1%	12.4%	92.1%	13.6%
Total	14.1%	50.7%	11.8%	94.0%	12.4%

Source: EU-SILC LONGITUDINAL UDB 2013 – version 2 of January 2016.