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NEET Status & Income Inequalities: A Comparative Analysis



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Aim of the Study

- We aimed to analyse the relationship between different micro-level familial characteristics and the status of NEETs* so as to understand what is the role of the socio-family background, especially the level of education of the parents, when it comes to a propensity towards NEET status
- We also aimed to identify whether, within this complex process of intergenerational transmission**, the conditions are created that make it more likely for young people to enter into NEETs status;

* NEETs - social class

** Intergenerational transmission - the transfer of certain psycho-individual, physical characteristics but also some goods/capital (material, social, cultural) from parents to children.





Theoretical Framework

Intergenerational Transmission

- The **sociological** perspective where there is a transmission of cultural, and educational capital from parents to children
- The **psychological** perspective that analyses the behaviours, the attitudes that parents form in their children (desire for school success, performance, high educational and professional aspirations, etc.)
- The **economic** perspective where emphasis is placed on understanding education as a good investment and its inclusion within household budget priorities





Theoretical Framework

Intergenerational Transmission

• The educational, and socio-professional success of a young person is closely linked to the socio-familial, economic and cultural environment

(Coleman & Hoffer, 1987; Byoung-hoon & Jong-sung, 2012; Alfieri, Sironi, Marta, Rosina & Marzana, 2015; Crawford, Gregg, Macmillan, Vignoles & Wyness, 2011; Feinstein & Sabates, 2006; Macmillan 2010)

• The educational, socio-professional success or failure depends on the young person's individual ability to manage risky situations, to capitalise on opportunities

(Beck & Beck-Gernsheim, 2002; Beck, Giddens & Lash, 1994)





Intergenerational Transmission Channels

Parents transmit norms and values, which can be also seen as an important factor influencing the educational attainment and career orientation of young adolescents. Not only moral values and clear rules but also work ethics and a positive attitude towards achievement and performance



(Tosun & Pauknerova, 2021)



Young people consciously choose not to pursue a high level of education, and more easily accept unemployment or NEETs status as part of their socio-professional path or give more interest to the time spent with friends, family than to get a job.

(Roca, et.al. 2021; Achche, 2000; Anctil, 2006)





Intergenerational Transmission Channels

The region or area of residence is also a factor in the limited availability of educational opportunities, additional costs with education, difficulties in finding a job, or risk of accentuating social exclusion, social capital.

> (Gordon & Monastiriotis, 2006; Bauer & Riphahn, 2007; Atkinson & Kintrea, 2001)





With economic crises, the costs of education increase with the perched value of education diminished by inflation, by the precarious employment. In addition families on low incomes, a large no. of children encourage their children to leave school early or guide them towards short forms of education.





(Birdsall & Carol, 1999; Alfieri et al. 2015; Crawford et al., 2011; Furlong et al., 2003)

Country Selection

Berloffa, Matteazzi & Villa (2017)

Nordic (DK, FI, NL, NO, SE); Continental (AT, BE, FR, DE, CH); English-speaking (CY, IE, MT, UK); Mediterranean (EL, IT, ES, PT); CEE-low (CZ, PL, RO, SI, SK)

CEE-high (BG, EE, HR, HU, LT, LV)

Following the classification established by Berloffa et al. (2017) the following counties were included in this study: Italy, as representative of the Mediterranean sub-protective model, Ireland, as English-speaking and liberal countries, Romania and Lithuania, representative of *CEElow and CEE-high groups, respectively

Neagu et al. (2022)

Mediterranean model, Sub-protective - Italy

English-speaking countries, Liberal - Ireland

CEE-low - Romania

CEE -high - Lithuania.





* CEE - Central and Eastern Europe

*EU-SILC, 2019 ad hoc module on the intergenerational transmission of the disadvantage





Age class considered in the study: 15-34 years (students and those in compulsory military service are excluded).

European official survey on living conditions and professional status provided:

- Information on the parents' education and professional condition when the respondent was 14 years old
- Information on the place of residence of respondents when they were 14 years old





* EU-SILC - European Union Statistics on Income & Living Conditions

Research Questions

- Step 1: Is there a dependence of the students' educational outcomes/ propensity to NEET status on the parents' educational level of attainment?
- Step 2: Do these differences persist after we control for other observed characteristics (individual characteristics and characteristics linked to the place where the individual has grown)?
- Step 3: Is this propensity to NEET status observed in people coming from a disadvantaged background due to their lower human capital characteristics or does it depend on other unobserved factors?





Research Questions & Steps Taken

• Step 1: Is there a dependence of the students' educational outcomes/ propensity to NEET status on the parents' educational level of attainment?

Analysis of the intergenerational transmission of disadvantage on:

the educational level: (the probability of being low-educated) $Pr(low - educated = 1) = \beta(Parents' level of education) + e_1$





Research Questions & Steps Taken

• Step 2: Do these differences persist after we control for other observed characteristics (individual characteristics and characteristics linked to the place where the individual has grown)?

Analysis of the intergenerational transmission of disadvantage on:

The professional condition: (the probability of becoming NEET)Pr (NEET = 1) = $\alpha + \beta 1 educ + \beta 2X2 + e2$

where:

educ is the personal number of years in education X_2 is the vector of variables controlling for familial, personal, and geographical characteristics





Research Questions & Steps Taken

- Step 3: Is this propensity to NEET status observed in people coming from a disadvantaged background due to their lower human capital characteristics or does it depend on other unobserved factors?
 - A. Based on the results of the previous analysis, we split the sample into the subgroups of disadvantaged and not disadvantaged
 - B. We calculated the difference in the probability of being NEET between the most disadvantaged group and the less disadvantaged one
 - C.According to the Oaxaca & Romson methodology, we deduce the difference in these probabilities is in part due to personal **characteristics** (observed characteristics) and in part due to the **coefficients** (how these characteristics are rewarded)

$$Pr(A) - Pr(B) = [X_A - X_B]\beta^A + X_B(\beta^A - \beta^B)$$

characteristics effect

coefficient effect





Socio-Economic Characteristics

Socio-economic characteristics	Italy	Ireland	Lithuania	Romania
	Mean (sd)	Mean (sd)	Mean (sd)	Mean (sd)
Parents' level of education				
Low-educated father	59.19 (0.49)	30.17 (0.46)	9.67 (0.30)	19.68 (0.40)
Medium-educated father	30.38 (0.46)	44.81 (0.50)	61.99 (0.49)	73.55 (0.44)
High-educated father	10.43 (0.30)	25.02 (0.43)	28.34 (0.45)	6.76 (0.25)
Low-educated mother	62.13 (0.49)	23.77 (0.43)	31.07 (0.46)	25.62 (0.44)
Medium-educated mother	30.58 (0.46)	55.54 (0.50)	43.62 (0.50)	68.05 (0.47)
High-educated mother	7.29 (0.26)	20.69 (0.40)	25.31 (0.47)	6.32 (0.24)
Parents' professional condition				
Father Not employed	1.36 (0.11)	4.44 (0.21)	0.60 (0.08)	0.08 (0.03)
Father Employee or self-employed	97.12 (0.24)	92.88 (0.26)	97.50 (0.15)	97.81 (0.25)
Father Inactive	1.52 (0.25)	2.67 (0.16)	1.90 (0.14)	2.11 (0.28)
Father With manager position	13.60 (0.34)	19.06 (0.39)	10.85 (0.31)	5.20 (0.22)
Mother Not employed	0.22 (0.05)	0.37 (0.06)	0.24 (0.05)	0.03 (0.05)
Mother Employee or self-employed	45.33 (0.50)	58.40 (0.49)	88.93 (0.36)	68.48 (0.46)
Mother Inactive	54.45 (0.50)	41.23 (0.49)	10.83 (0.31)	31.49 (0.45)
Mother with manager position	5.81 (0.23)	9.11 (0.29)	7.16 (0.26)	2.26 (0.15)





Socio-Economic Characteristics

Socio-economic characteristics	lte hr	Irelend	l ithuania	Domonio
	Italy	Ireland	Lithuania	Romania
	Mean (sd)	Mean (sd)	Mean (sd)	Mean (sd)
Number of children in the household				
one	38.88 (0.49)	24.26 (0.43)	22.66 (0.42)	29.61 (0.46)
two	45.29 (0.50)	38.85 (0.49)	56.79 (0.50)	44.64 (0.50)
three	11.38 (0.32)	18.48 (0.39)	13.79 (0.34)	16.38 (0.37)
more than three	4.45 (0.21)	18.41 (0.39)	6.76 (0.25)	9.37 (0.29)
Immigration index ^(*)	1.60 (10.41)	14.67 (32.65)	1.16 (9.74)	0.19 (3.47)
Poverty index ^(*)	0.11 (0.21)	0.08 (0.17)	0.09 (0.19)	0.13 (0.23)
Personal Characteristics				
Gender: females	48.96 (0.50)	53.30 (0.50)	47.69 (0.50)	48.01 (0.50)
Low-educated	20.08 (0.40)	7.66 (0.27)	7.75 (0.27)	18.96 (0.39)
Medium-educated	50.47 (0.50)	21.04 (0.41)	34.53 (0.48)	52.62 (0.50)
High-educated	29.45 (0.46)	71.30 (0.45)	57.72 (0.50)	28.42 (0.45)





Socio-Economic Characteristics

Socio-economic characteristics	Italy	Ireland	Lithuania	Romania
	Mean (sd)	Mean (sd)	Mean (sd)	Mean (sd)
Degree of urbanisation				
Rural	9.30 (0.29)	23.94 (0.43)	34.54 (0.48)	39.47 (0.49)
Moved from rural area to town	15.63 (0.36)	11.41 (0.32)	1.34 (0.11)	13.97 (0.35)
Moved from rural area to city	6.68 (0.25)	9.60 (0.29)	6.35 (0.24)	5.80 (0.23)
Moved from town to rural area	6.91 (0.25)	4.14 (0.20)	11.40 (0.32)	1.50 (0.12)
Town	24.44 (0.43)	10.40 (0.31)	0.01 (0.09)	9.21 (0.29)
Moved from town to city	15.18 (0.36)	14.26 (0.35)	12.10 (0.33)	12.66 (0.33)
Moved from city to rural area	1.90 (0.14)	1.21 (0.11)	1.39 (0.12)	0.21 (0.14)
Moved from city to town	6.75 (0.25)	5.06 (0.22)	0.10 (0.03)	2.06 (0.14)
City	13.30 (0.34)	19.98 (0.40)	32.763 (0.47)	15.13 (0.36)





Mean (sd) Mean (sd) Mean (sd) Mean (sd) Mean (sd) Degree of urbanisation State State
Rural 9.30 (0.29) 23.94 (0.43) 34.54 (0.48) 39.47 (0.49) Moved from rural area to town 15.63 (0.36) 11.41 (0.32) 1.34 (0.11) 13.97 (0.35) Moved from rural area to city 6.68 (0.25) 9.60 (0.29) 6.35 (0.24) 5.80 (0.23)
Moved from rural area to town 15.63 (0.36) 11.41 (0.32) 1.34 (0.11) 13.97 (0.35) Moved from rural area to city 6.68 (0.25) 9.60 (0.29) 6.35 (0.24) 5.80 (0.23)
Moved from rural area to city 6.68 (0.25) 9.60 (0.29) 6.35 (0.24) 5.80 (0.23)
Moved from town to rural area6.91 (0.25)4.14 (0.20)11.40 (0.32)1.50 (0.12)
Town 24.44 (0.43)10.40 (0.31)0.01 (0.09)9.21 (0.29)
Moved from town to city 15.18 (0.36) 14.26 (0.35) 12.10 (0.33) 12.66 (0.33)
Moved from city to rural area 1.90 (0.14) 1.21 (0.11) 1.39 (0.12) 0.21 (0.14)
Moved from city to town 6.75 (0.25) 5.06 (0.22) 0.10 (0.03) 2.06 (0.14)
City13.30 (0.34) 19.98 (0.40) 32.763 (0.47)15.13 (0.36)





Share of NEETs	Italy	Ireland	Lithuania	Romania
Parents' level of education				
Low-educated father	27.00	18.98	35.26	32.04
Medium-educated father	19.08	16.32	18.30	14.78
High-educated father	9.47	8.22	8.19	3.48
Low-educated mother	27.42	25.03	42.21	31.19
Medium-educated mother	13.80	11.58	18.97	13.49
High-educated mother	19.67	11.28	8.62	4.21





Share of NEETs	Italy	Ireland	Lithuania	Romania
Parents' professional condition				
Father Not employed	64.28	26.62	12.65	33.68
Father Employee or self-employed	21.99	14.09	17.67	16.88
Father Inactive	34.10	29.87	5.61	33.37
Father With manager position	18.28	9.55	14.93	10.04
Mother Not employed	21.64	-	0.00	13.20
Mother Employee or self-employed	17.07	10.22	16.65	12.04
Mother Inactive	27.38	21.58	31.67	30.71
Mother with manager position	17.55	9.81	22.01	5.09





Share of NEETs	Italy	Ireland	Lithuania	Romania
Number of children in the household				
one	24.04	15.51	12.92	13.06
two	21.23	11.97	16.91	15.92
three	22.50	12.48	16.17	18.48
more than three	32.25	23.36	34.81	37.84
Personal Characteristics				
Gender: females	30.26	19.22	22.45	29.83
Low-educated	43.74	52.01	45.25	40.91
Medium-educated	19.54	18.10	20.06	14.93
High-educated	14.64	10.13	11.58	6.81





Share of NEETs	Italy	Ireland	Lithuania	Romania
Degree of urbanization				
Rural	21.26	14.57	25.75	26.13
Moved from rural area to town	26.15	20.90	24.67	18.19
Moved from rural area to city	35.38	7.36	13.97	11.37
Moved from town to rural area	17.66	11.60	22.12	9.51
Town	21.41	17.49	11.14	10.08
Moved from town to city	24.29	14.38	14.16	11.04
Moved from city to rural area	18.99	16.39	29.68	0.00
Moved from city to town	18.46	16.56	0.00	0.00
City	21.06	15.27	7.34	10.32





Data – Unconditional models (step 1)

Pr(being low-educated)	Italy	Ireland	Lithuania	Romania
Low educated father	0.5253***	0.4639	0.6110*	1.7605***
Medium educated father	-0.3815**	0.2881	-0.0789	0.9628**
Low educated mother	0.6720***	0.4513	1.3722***	1.5696***
Medium educated mother	-0.1881	0.0940	0.4860**	0.9088**
Constant	-1.5931***	-1.9172***	-1.9180***	-3.1569***
Ν	2946	583	676	1268
Wald chi2	179.79***	11.54**	30.95***	144.09***
Pseudo R2	0.1597	0.0458	0.1775	0.2055

Strong connections in Italy, Lithuania, and Romania





Data - Unconditional Models (Step 1)

Pr(being NEET)	Italy	Ireland	Lithuania	Romania
Low educated father	0.4885***	0.2939	0.3019	0.5734**
Medium educated father	0.3797***	0.5019**	0.1331	0.3542
Low educated mother	-0.1779	0.3711*	0.7949**	0.5156*
Medium educated mother	-0.5614***	-0.2346	0.2221	0.0520
Constant	-0.8837***	-1.3538***	-1.2295***	-1.5111***
Ν	2946	583	676	1268
Wald chi2	54.59***	16.28***	11.63**	30.81***
Pseudo R2	0.0269	0.0422	0.0394	0.0488

In Romania, both parents play a crucial role, in Ireland and Lithuania only the mothers' level of education; in Italy only the fathers' one





Pr(NEET)	Italy	Ireland	Lithuania	Romania
Parents' professional condition (ref. not employed)				
Employee or self-employee father	-0.3595***	-0.0756	0.2106	-0.0177
Father with the manager position	-0.1122	-0.2124	0.0560	0.0455
Employee or self-employed mother	-0.1188	-0.3938**	-0.1180	-0.3570***
Mother with the manager position	0.1040	0.0181	0.3149	-0.4697
Number of children in the household (ref. >3)				
One	0.0595	-0.2296	-0.4149*	-0.4353**
Two	-0.1795	-0.3043	-0.2732	-0.3097*
Three	-0.1747	-0.4246*	-0.5152*	-0.3590*
Immigration index	0.0023	0.0027	0.0011	0.0605***
Poverty index	0.3475*	0.7223*	0.5067	0.5089**
Personal characteristics				
Gender (ref. male)	0.5828***	0.5974***	0.4829***	1.0360***
Degree of urbanization (ref. rural-rural)				
Moved from rural area to town	0.0581	0.1915	-0.2688	-0.2891*
Moved from rural area to city	0.2197	-0.2975	-0.4083	-0.4882*
Moved from town to rural area	-0.1872	-0.2153	0.0265	-0.7147*
Town	0.0135	-0.0759	-0.3348	-0.4853**
Moved from town to city	0.0904	0.0463	-0.1913	-0.4010**
Moved from city to rural area	-0.1719	-0.0310	0.1791	-6.3609***
Moved from city to town	-0.1475	-0.0979	-4.3294***	-6.2368***

Extended model for the determinants of being NEETs (step 2)

Fathers' characteristics strongly affect Italian children performance; In Ireland and Romania the role of the mother's professional condition is stronger



Extended model for the determinants of being NEETs (step 2)

Pr(NEET)	Italy	Ireland	Lithuania	Romania
	Italy	Ireland	Lithuania	Romania
egion of residence				
Iorth West	-0.4660***			
forth East	-0.6023***			
entre	-0.4197***			
D1				-0.2452
)2				-0.3328**
03				-0.2452
nstant	-0.5797	0.9662	0.1166	-0.4205
vel of education				
w-educated father	-2.0973***	-1.4385***	-1.8320	-7.0438***
dium educated father	-0.6465**	-1.5549***	-0.4587	-7.3428***
w-educated mother	-2.0900***	-2.0688***	-6.6804***	-2.7541*
dium-educated mother	-0.0847	-0.1221	-3.0551***	-1.9211
nstant	15.1079***	17.2834	13.2422***	15.5955***
r(e.education)	12.2256	14.8294	65.8081	54.0435
rr(e.education,e.NEET)	0.0665	0.2080	0.5378***	0.1518
	2946	583	676	1248
ıld chi2	174.42***	87.89***	65.56***	174.62***

Step 3

Sub-groups	Italy		Ireland		Lithuania		Romania	
	Total gap	Explained gap	Total gap	Explained gap	Total gap	Explained gap	Total gap	Explained gap
Low educated father	0.0960***	0.0959***	0.0541	0.0710**	0.1974*	0.2508**	0.1771***	0.1557***
Low educated mother	0.1147***	0.1000***	0.1302***	0.0950***	0.2625**	0.2909***	0.1803***	0.1593***
Unemployed father	0.1619***	0.0118	0.1151*	0.1451**	-0.0367	-0.0151	0.0991*	0.0936
Regional gap	0.1624***	0.0417***					-0.0250	0.0268
Migration background	0.0761**	-0.0173	0.0520	-0.0025				
Gender	0.1411***	-0.0116	0.0868***	-0.0607**	0.0998**	-0.0287	0.2363***	0.0355**
Level of education	0.2612***	-0.0217	0.3960***	0.0554	0.3018***	0.2391	0.2698***	0.0754***
Rural/urban	-0.0377	-0.0161	-0.0122	-0.0018	0.1463***	0.04522	0.1361***	0.0996***

Women have a higher propensity to the NEET status despite the high human capital characteristics!





Young people with low educated parents show lower human capital characteristics!

Short Overview of Results & Analysis

□ there is a direct relationship between the parent's education level and the NEET status;

- the former communist countries feel the effect of communist policies (Torul & Öztunali, 2017): downward educational mobility because the parents of today's young people had reached a high level of education under communism;
- population from former communist countries (Jecan & Pop, 2012) consider that education has become a symbolic power that makes difference between those who can afford to stay in school until the highest level and those who do not have the resources to invest in education;
- □ in Ireland and Italy, access to high-level education is conditioned by the existence of high financial resources because this type of education is very expensive, and the parents with a low level of education, with low incomes, do not possess financial resources.
- ❑ the relationship between the education level of the parents and the professional outcomes of their children is much closer in Italy and Ireland: young people with low educated parents are more at risk of becoming NEET. This makes some countries in Europe, especially those in the South of Europe like Italy, appear to be immobile. (Causa & Johansson 2010).





Short Overview of Results & Analysis

□ By including the region in our analysis and data analysis, we see that the argument presented in Raaum, Salvanes & Sørensen (2006) is supported: regional characteristics are the ones that affect the educational results of young people: the poor population would not have the resources to support their children in school, nor the models to follow, nor the confidence and aspirations that they could succeed educationally and professionally. And this is not related to the country: although different, both in Italy and in Romania the risk of becoming NEETs is much more likely in the case of young people who come from families living in poorly developed regions.

In Ireland and in the two ex-communist countries, migration for work has become a more accessible solution for young people from socio-economically and culturally disadvantaged families than continuing school to the highest level. Our analysis reveals that belonging to a migration environment significantly increases the probability of being NEET.







One of the most important results revealed by our analysis is that the recognition and acceptance of this distinct socio-economic category - NEETs - contributes to changing the perspective of approaches to studies on intergenerational transmission: in the socio-economic, education hierarchy, current generations no longer occupy a position higher or lower than previous generations, but they may end up in a position that their parents have not experienced: the status of NEETs.

✓ The second important result we found based on the analysis of the data is that although NEETs are an external group heterogeneous in terms of level and type of education, level of professional qualification, aspirations, motivations, etc., in terms of socioeconomic, family, cultural origin, the degree of heterogeneity tends to be closer: this category of the population comes from disadvantaged socio-economic, family, cultural backgrounds in any of the countries included in the analysis.





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Thank you for your attention!

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