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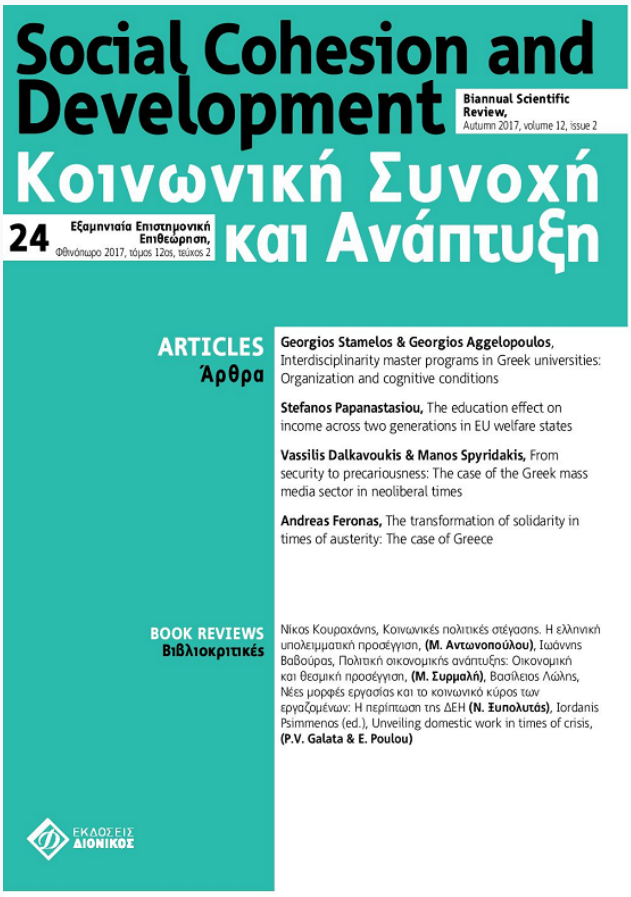

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The education effect on income across two generations in EU welfare states

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Η επίδραση της εκπαίδευσης στο εισόδημα μεταξύ δύο γενεών σε κράτη πρόνοιας της ΕΕ

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ABSTRACT

By utilizing EU-SILC 2011 microdata and employing regression techniques in four EU welfare states (i.e., Greece, France, Ireland and Sweden), this paper demonstrates the diminishing education effect on income attainments between two generations. This finding puts into doubt the main argument of the mainstream academic and political discourse over the prominent role of education for income acquisition. Instead, this paper stresses the importance of other factors explaining income attainments, such as social interconnectivity. The latter can produce or reproduce inequality as long as people gain access to powerful positions through the usage of social connections. Thus, the upper social classes with extended social networking preserve their social privileges across generations despite the argument that the contemporary society boasts high social mobility attained through formal education.

KEY WORDS: Education, income, social mobility, welfare state, EU.

ΠΕΡΙΛΗΨΗ

Αξιοποιώντας μικροδεδομένα της EU-SILC του 2011 και χρησιμοποιώντας τεχνικές παλινδρόμησης σε τέσσερα κράτη πρόνοιας της ΕΕ (δηλ. Ελλάδα, Γαλλία, Ιρλανδία και Σουηδία), το άρθρο αυτό καταδεικνύει τη μειούμενη επίδραση της εκπαίδευσης στα εισοδηματικά επιτεύγματα μεταξύ δύο γενεών. Το εύρημα αυτό θέτει υπό αμφισβήτηση το κύριο επιχείρημα του κυρίαρχου ακαδημαϊκού και πολιτικού λόγου γύρω από τον πρωτεύοντα ρόλο της εκπαίδευσης για την άντληση εισοδήματος. Αντίθετα, το άρθρο αυτό τονίζει τη σημασία άλλων παραγόντων για την ερμηνεία των εισοδηματικών επιτευγμάτων, όπως η κοινωνική διασυνδεσιμότητα. Η τελευταία μπορεί να παράγει ή να αναπαράγει την ανισότητα εφόσον τα άτομα αποκτούν πρόσβαση σε ισχυρές θέσεις μέσω της χρήσης των κοινωνικών συνδέσεων. Έτσι, οι ανώτερες κοινωνικές τάξεις με εκτεταμένη κοινωνική δικτύωση διατηρούν τα κοινωνικά προνόμια μεταξύ των γενεών παρά το επιχείρημα ότι η σύγχρονη κοινωνία επιδεικνύει υψηλή κοινωνική κινητικότητα που επιτυγχάνεται μέσω της επίσημης εκπαίδευσης.

ΛΕΞΕΙΣ-ΚΛΕΙΔΙΑ: Εκπαίδευση, εισόδημα, κοινωνική κινητικότητα, κράτος πρόνοιας, ΕΕ.

1. Introduction

The family ties have long been recognized as playing a central role in the reproduction of social inequality, and it is clear that a host of life outcomes are tied to the family of origin in complex ways. Children from lower socioeconomic backgrounds generally tend to have poorer

outcomes along many dimensions: health, school, job, money, etc. (Bianchi, Hotz and Seltzer, 2011). The relations across generations have been the main channel by which social inequality persists through time (Papanastasiou and Papatheodorou, forthcoming). It was also argued that social inequality itself tends to create the circumstances for its self-reproduction over time, a process coined "circular cumulative causation" by Myrdal (1963; 1944).

Social inequality is multidimensional caused both by aggregated factors such as macro-economic, social and labor policies and by individual factors like social interactions, health status and education level (Grudiza and Vilaplana-Lopez, 2013).For many decades, however, the emphasis in tackling social inequality was placed on various forms of education both on the supply and demand side (Nolan et al, 2011). Compatible with the Pareto's principle of optimality, education gained the status of the "great leveler" of individuals' life chances (Bernardi, 2016; Cremin and Kendell, 2003). However, despite extensive education reforms in the past decades, inequality of opportunity still persists in modern societies at an alarming level (OECD, 2017). Thus, the empirical evidence put into question the main rationale of the "human capital" theory (Becker et al, 2015; Becker and Tomes, 1986; 1979) over the prominent role of education for life attainments.

Against this backdrop, this paper analyzes the education effect along the income dimension between two generations by utilizing EU-SILC 2011 microdata and employing proper sociometric techniques in four EU welfare states (Greece, France, Ireland and Sweden). Next, we delineate the "human capital" theory's arguments and assess its compatibility with the empirical reality. Then, we describe the data and methodology of the analysis and present empirical estimates on the education effect on income across generations in the EU context. Finally, we summarize the main empirical findings and make concluding remarks.

2. Human capital and income

The family of origin is the main determinant of a person's welfare prospects both in childhood and adulthood. This occurs by transmitting genetic characteristics, material resources, social networks, cultural experiences, etc. The theoretical views over the family background effect on offspring's attainments differ considerably. Unarguably, though, the human capital interpretation has gained great popularity by cultivating the belief that social inequality is due to low productivity because of insufficient education and training among the poor (Becker, 1993; Schultz, 1966;Mincer, 1958).

The human capital theory investigates poverty reproduction through the parental practices to invest family resources in the children's human capital to maximize their welfare (Becker et al, 2015; Becker and Tomes, 1986; 1979). Becker and Tomes' model takes the following form:

$$\ln Y_c = (1 + r)\ln Y_p + n_c + \lambda_c$$

in which Ycdenotes the children's income and r the degree of economic return of parental investment in the children's human capital, while Ycdepends on the parental income Yp, the inherited traits ncκαι luckλc.The parents influence their children's welfare unwittingly by inheriting genetic traits, cognitive abilities and cultural values/attitudes (nature),but also wittingly by allocating the limited family recourses to invest in their children' human capital (nurture).Becker and Tomes (1979,1986) assumed that when there are no liquidity constraints the parents will be investing in

their children's human capital as long as the marginal benefit surpasses the marginal cost.By contrast, when there are credit constraints, the children's welfare depends on heritability (i.e., innate abilities), given that the parents cannot borrow money to invest in their children's human capital. That occurs among poor families having no other choice but to reduce the investment in their children's human capital. On the contrary, more well-off families do not face the same dilemma because, despite the liquidity constraints, the opportunity cost by investing in the children's human capital is lesser and, thus, they can keep investing in an optimal way. In that sense, the regression of income to the mean evolves slower in poor families compared to more affluent families.

The abovementioned empirical findings exerted great influence on the scientific thinking and policy making in the developed world. Insofar as the causes of intergenerational social immobility are related to the lack of poor families' economic resources as best practice is considered to be the redistribution of income in favor of the less well-off families to finance the accumulation of the children's human capital. Nevertheless, Becker and Tomes are skeptical over an income redistribution strategy. In contrast, they are in favor of a wide scale human capital redistribution from rich to poor families. In that sense, the best policy interventions are direct public investments in health, childcare, typical education, job-related training, etc. of children. This strategy appears to be compatible with the Pareto's principle because it reinforces the acquisition of human capital by poor families without causing changes in the broader income distribution. This "soft" strategy tends to favor the priorities of the political and economic elite, as they do not wish a wide income redistribution strategy that could shake the power relations in contemporary societies.

Nonetheless, the educational reforms during the second half of the 20th century did not bring about the expected results in terms of the equalization of opportunities among individuals from different socioeconomic backgrounds (Heineck and Riphahn, 2007). Contrary to Becker and Tomes' model, empirical findings indicate that the differences in the public investment in education cannot explain the variation of intergenerational social mobility among the developed countries (Esping-Andersen, 2007; Erikson and Jonsson, 1996; Shavit and Blossfeld, 1993). What is more, many remain skeptical over the levelling of the playing field through widening the educational opportunities, inasmuch as the typical education tends to disproportionately benefit the children from rich families as compared to the children of poor families (Esping-Andersen, 2005; Blanden and Machin, 2004; Blandenand Gregg, 2004; Acemoglu and Pischke, 2001; Ellwood and Kane, 2000).

This argument can be viewed from the perspective of the economic return of tertiary education. Even if investing in human capital regresses to the mean between poor and rich families due to public education policies, the social inequalities may persist as long as the economic returns from education remain uneven between rich and poor people (Corak, 2006; Mayer and Loppo, 2004; Musick and Mare, 2004). Corak (2006) demonstrated that the extent to which the human capital is rewarded in the market has implications for intergenerational social mobility. Countries exhibiting high private rewards to education appear to be having low intergenerational income or wage mobility. The magnitude of inequality depends on the degree of compression of the wage structure in the labor market. In consequence, eliminating poverty reproduced across generations depends not only on the widening of access to tertiary education of children from poor families, but mainly through widening the prospects of capitalizing the economic returns from tertiary education. Thus, labor market policies aiming at reducing the wage dispersion among workers is essential for eliminating the importance of social inheritance as determinant of individual welfare. Empirical studies put into question even the main as-

sumption of Becker and Tomes' model over the primacy of education for future income or wage (Erikson and Goldthorpe, 2002; Breen and Goldthorpe, 2001). In this context, Warrenet al(2002) estimated that the direct effect of education on future wage is low and is getting even lower during someone's work career. Moreover, Card (1999) estimated that education can explain only the 1/5 of the variability in wages.

The human capital approach has come under great criticism, since subsequent studies do not corroborate its main findings, insofar as intergenerational social "stickiness" appeared to be lower among high-income families rather than low-income ones (Graw και Mulligan, 2002). Corak and Heisz (1999) estimated that the association in income among parents and children takes the form of an inversed U, implying that intergenerational social mobility is low at the lower and upper part of the income distribution and high in the middle. Grawe (2004) moved a step forward by arguing that the shape of mobility along the income distribution was not affected by the presence or not of credit constraints in the economy and it can take whichever form. Over the last years, sociometric studies found non-linear intergenerational social mobility by utilizing non-parametric techniques (Grawe, 2004a,b; Corak and Heisz, 1999). These findings reinforce the argument that the relationship between income or wage among parents and children is mediated by non-observable factors related to the family or broader structures and institutions of modern societies (Corak, 2006). Bowels and Gintis (2002) argued that there might be different mechanisms acting on different points in the parents and children's income distribution, which are not captured by studies focusing on estimating intergenerational income or wage elasticity. These studies may capture intergenerational social mobility in an average number, but they lack in investigating other mechanisms playing major role within intergenerational social mobility (Bratsberget al, 2006).

Moreover, subsequent empirical studies pointed out that Becker and Tomes had underestimated intergenerational income elasticity (0.2), because they relied on a non-representative homogenized sample and used the income of one year instead of a longer timespan(Solon, 1999; 1992; 1989).As a consequence, Becker and Tomes' model suffers from a downward bias of the β_1 coefficient due to sample homogeneity, transitory fluctuations of income and life-cycle differences between parents and children (Mazumder, 2005; 2001; Bratberget al, 2003; Deardenet al, 1997; Zimmerman, 1992; Solon, 1992). Subsequent studies showed that employing the income of one year as proxy of permanent income introduces a transitory component in the standard equation of intergenerational social mobility including both observable and non-observable effects. In consequence, the β_1 coefficient tends to become underrated, even after the statistical control of the observable effects, due to the existence of the non-observable ones. Therefore, many researchers have questioned the finding that the income is regressing to the mean rapidly in the developed countries.

Newer studies overcame to a large extent many of these weaknesses by utilizing newer and of better quality data and methodologies and by computing the parental income for a timespan much longer than one year. They found that intergenerational income elasticity was much greater instead of the Becker and Tomes' previous rather optimistic estimates (Mazumder, 2005; 2001; Solon, 1992; Zimmerman, 1992). In particular, Mazumder's (2005) study belongs to the third generation of studies on intergenerational social mobility overcoming many shortcomings of the previous two generations by calculating income for a very long timespan further reducing the downward bias of the ß1 coefficient due to minimizing the transitory fluctuations of income, but also by using more reliable data dealing with the sample's small size and attrition.

3. Data, methodology and empirical estimates

The main dataset used in the analysis is EU-SILC, which is the reference source for comparative statistics on income distribution and social inclusion in the EU. It is used for policy monitoring within the OMC. EU-SILC is a multi-purpose instrument which focuses mainly on income. Detailed data are collected on income components, mostly on personal income. The reference population in EU-SILC includes all private households (Eurostat, 2016).

Secondary variables are collected in the so-called ad-hoc modules. They include information either at household or personal level about specific topics, such as the intergenerational transmission of disadvantages in the 2011 dataset, which is at the core of this analysis. The information was provided for all current household members or if applicable for all selected respondents, aged 25-59. The eligible persons were those with a year of birth comprised between 1951 and 1985, both years being included. The reference period was when the interviewee was around 14 years old (Eurostat, 2012).

The main methodological choice was quantile regression along with the standard linear regression for several reasons. OLS summarizes the average association between a set of regressors and the outcome variable based on the conditional mean function. However, this provides only a partial view of the association, whereas quantile regression is capable of describing the association at different points in the conditional distribution of y (Cameron and Trivedi, 2010).

Median regression is more robust to outliers than OLS and is semiparametric as it avoids assumptions about the parametric distribution of the error terms (Koenker, 2005). This feature makes quantile regression especially suitable for heteroskedastic data (Cameron and Trivedi, 2010). What is more, a certain type of quantile regression estimated the model with bootstrap standard errors, retaining the assumption of independent errors but relaxing the assumption of identically distributed errors. Thus, they are analogous to robust standard errors in OLS (Baum, 2013).

The response variable was the net employee cash or near cash income, which corresponds to the gross income but the tax at source, the social insurance contributions, or both, are deducted. Negative or zero values as well as outliers and influential observations were omitted from the analysis (although quantile regression is far less sensitive to the presence of outliers unlike OLS, as already mentioned). The natural logarithm of the net income was used to further reduce heteroskedasticity and achieve a reasonably symmetric distribution.

The sample comprising both men and women was reduced to the productive 30 to 60 years on the age scale to achieve income maturity and consistency by avoiding income fluctuations among young people and income ceilings among the older ones. Another reason for the choice of the specific age category instead of a more condensed one was the adequacy of the sample size (N) in all countries.

The countries under study were old EU member states, that is, France, Greece, Ireland and Sweden, which represent the four welfare regimes (i.e., Conservative-Corporatist, South-European, Liberal and Social-democratic respectively) according to Esping-Andersen's (1990) typology and the relevant debate on the welfare states of the south European countries (Liebfried, 1993; Ferrera, 1996; Papatheodorou and Petmesidou, 2005; 2004).

The main predicting variable was education, of both father's and offspring's, as certain assumptions over the education effect on income across generations were explicitly tested. The education variable was split into two categories to satisfy the purposes of this analysis: 1) moderate (i.e., pre-primary, primary, lower secondary, upper secondary and post-secondary

non-tertiary) and 2) high (i.e., first and second stage of tertiary education). This categorization was based on the International Standard Classification of Education 1997 (ISCED-97) and Wald tests showed no considerable loss of information by merging the various categories. Other control variables included number of children in the household, presence of both spouses, gender, health status and locality.

The epicenter of this analysis was the education effect on income across generations in EU countries representing different welfare systems. Due to heteroskedasticity of the data, the natural logarithm of income was used as the dependent variable. The independent variables were used as dummies except for the number of children, which retained its initial numeric format. The logarithmic transformation of income provided fairly symmetric distributions in all countries. The empirical analysis utilized both OLS and quantile regression techniques to get a complete picture of the human capital effect on income from an intergenerational point of view. The results from OLS as well as QR at specific quantiles (.25, .50. 75) are presented for each country in Table 1. The QR standard errors use the robust formula except for the last median regression model obtaining bootstrap standard errors.

As shown in Table 1, the OLS regression estimates indicated that the highest and statistically significant income premium by father's education was in Ireland and the lowest one and statistically non-significant one in Sweden. Nevertheless, the ß coefficients differed considerably across quantiles in all countries, showing a different picture when running QR. First, in terms of standard errors, we achieved more precision in the median regression, especially when bootstrap standard errors were obtained. Second, the effect of father's education on offspring's income became larger as we move up on the quantile scale, especially in Ireland, Greece and France. However, the picture changed when it came to child's education, as the education effect on offspring's income declined drastically along the quantile scale (with the exception of Sweden). So, what might be other determinants explaining offspring's income when education is losing in importance, especially among the high social status families?

Figure 1 illustrates the cross-country differences in the education effect, of both father's and offspring's, along the income dimension by quantiles. There appeared to be an income premium for those children coming from high social status families as we move along the quantiles, especially in Greece and France. However, the analysis showed that offspring's education is enormously losing in importance for income attainments in Greece, Ireland and France, whereas there are great income premiums or penalties among offspring of high vs. moderate social status families, with the exception of Sweden in which the regressors' line is pretty straight. This is strong evidence that education becomes less important as we move up on the educational ladder for income acquisition, implying that other factors might explain income attainments. This certainly brings to the forefront Bourdieu's (1979) position over social capital and the way it can be employed to reproduce inequality, showing that people gain access to powerful positions through the usage of social connections. Bourdieu (1979) emphasized how upper social classes preserve their social privileges across generations despite the argument that the contemporary society boasts high social mobility attained through formal education.

Table 1: OLS and QR regressions (results)

A. Greece

Ln(income)	OLS	QR.25	QR.50	QR.75	BSQR
Father's high education	.077 (.048)	.030 (.072)	.078* (.034)	.118* (.031)	.078* (.032)
Child's high education	.372** (.025)	.459*** (.042)	.288*** (.020)	.248*** (.018)	.288*** (.016)
N	2,239				

B. France

Ln(income)	OLS	QR.25	QR.50	QR.75	BSQR
Father's high education	.067 (.039)	.015 (.053)	.059* (.019)	.168* (.024)	.059** (.023)
Child's high education	.536*** (.023)	.472*** (.034)	.378*** (.012)	.400*** (.015)	.378*** (.012)
N	7,746				

C.Ireland

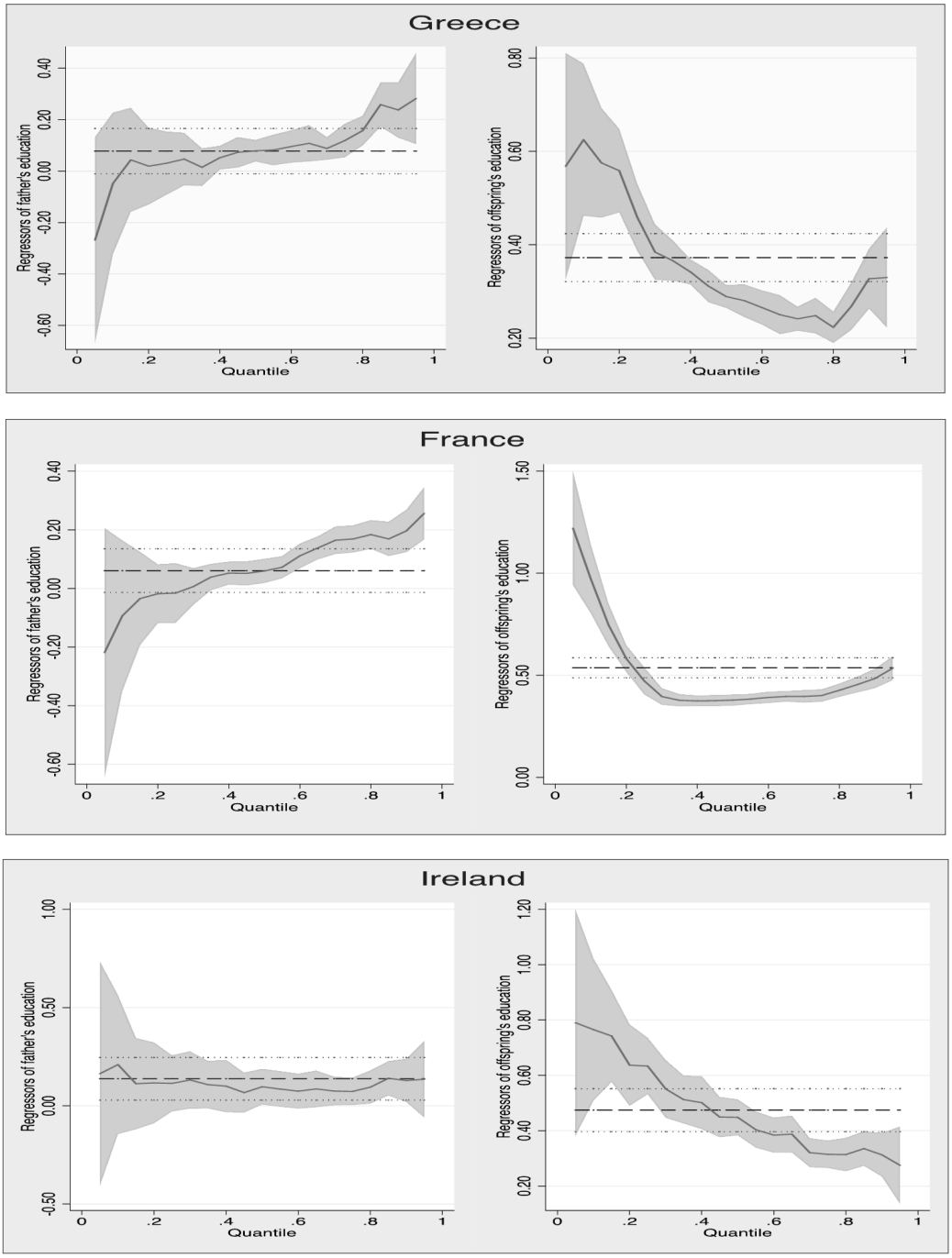
Ln(income)	OLS	QR.25	QR.50	QR.75	BSQR
Father's high education	.137** (.049)	.011 (.078)	.089* (.049)	.168 (.038)	.089 (.047)
Child's high education	.474*** (.040)	.633*** (.056)	.440*** (.035)	.314*** (.027)	.440*** (.035)
N	1,643				

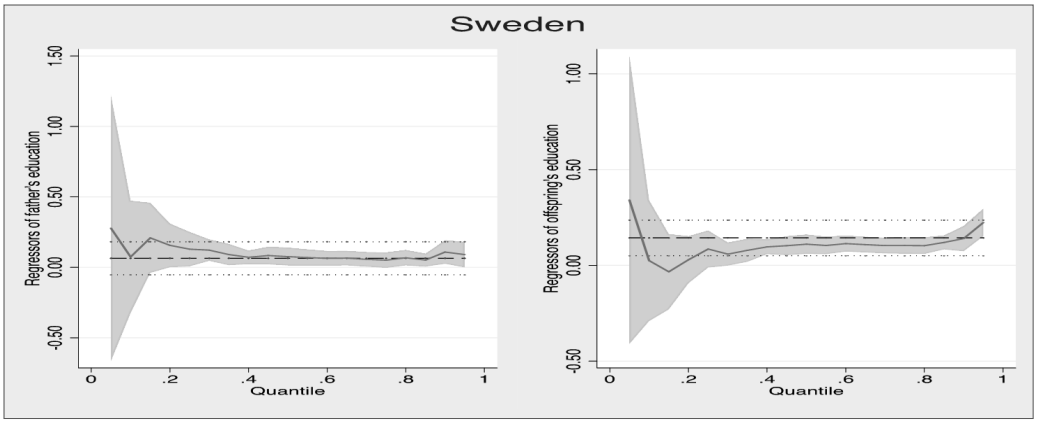
D. Sweden

Ln(income)	OLS	QR.25	QR.50	QR.75	BSQR
Father's high education	.063 (.066)	.012* (.058)	.074** (.029)	.050 (.027)	.074** (.028)
Child's high education	.143** (.048)	.085 (.046)	.111*** (.023)	.104*** (.021)	.111*** (.021)
N	1,757				

Source: Elaboration of EU-SILC 2011 microdata. Control variables were included. The constant term is omitted. Standard errors in parenthesis. *=.05, **=.01 and ***=.001.

Figure 1: The education effect on income across generations





Source: Elaboration of EU-SILC 2011 microdata

4. Concluding remarks

The aim of this paper was to assess the relationship between education and income from an intergenerational point of view in EU member states considered to be representative of the welfare state types in the EU. The main empirical findings when using OLS regression indicated that the largest and statistically significant income premium by father's education was documented in Ireland and the lowest and statistically non-significant one in Sweden. In some countries, the picture changed considerably when employing quantile regression techniques, as the father's education effect on offspring's income increased across the quantiles, particularly in Greece and France.

However, the most interesting finding is the diminishing effect of offspring's education on income across the quantiles in Greece, Ireland and France. In Sweden, the approximately straight line of the regressors indicates that there were no great income differences by father's or offspring's education, as we go up on the quantile scale, suggesting the achievement of equalization of outcomes.

Overall, the empirical findings suggest that education is losing in significance as a determinant of income across generations in the EU. Once education was considered the biggest stepping stone for a great occupational career, but lately it becomes of less importance for income acquisition, especially as we go up on the educational ladder, while other factors like social interconnectivity appear to be playing increasingly more crucial role for income attainments, an argument profoundly elaborated by Bourdieu (1979).

Bibliographical references

Acemoglu D. and Pischke J.-S. (2001), "Changes in the wage structure, family income and children's education", *European Economic* Review, vol. 45 (4-6), pp. 890-904.

Baum C. (2013), *Applied econometrics*, Boston College, available at: http://fmwww.bc.edu/EC-C/S2013/823/EC823.S2013.nn04.slides.pdf

Becker G., Kominers S., Murphy K. and Spenkuch J. (2015), *A theory of intergenerational mobility***,** available at: https://ssrn.com/abstract=2652891.

Becker G. and Tomes N. (1986), "Human capital and the rise and fall of families", *Journal of Labor Economics*, vol. 4, pp. 1-39.

Becker G. and Tomes N. (1979), "An equilibrium theory of the distribution of income and intergenerational mobility", *Journal of Political Economy*, vol. 87, pp. 1153-1189.

Bratberg E., Nilsen Q. and Vaage K. (2003), *Assessing changes in intergenerational earnings mobility*, IZA Discussion Paper No. 797, Bohn: Institute for the Study of Labour, available at: http://ftp.iza.org/dp797.pdf.

Bianchi S., Hotz J. and Seltzer J. (2011), *Understanding the different mechanisms underlying the intergenerational transmission of advantage and disadvantage*, New York: Russell Sage Publications.

Bernardi F. (2016), "Education as the great equalizer: a theoretical framework" in: F. Bernardi and G. Ballarino (eds), *Education, occupation and social origin: A comparative analysis of the transmission of socioeconomic inequalities* (pp. 1-19), Cheltenham: Edward Elgar.

Blanden J. and Gregg P. (2004), *Family income and educational attainment: a review of approaches and evidence for Britain*, London: Centre for the Economics of Education, available at: https://pdfs.semanticscholar.org/f9c3/3c082a32bdbd49b9ad8896fb4758b9947ea2.pdf.

Blanden J. and Machin S. (2004), "Educational inequality and the expansion of UK higher education", *Scottish Journal of Political Economy*, vol. 51(2), pp. 230-249, available at: http://eprints.lse.ac.uk/17497/1/__lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Content_Blanden,J%26Machin,S_Educational%20inequality_Blanden_Educational%20Inequality_2014.pdf.

Bourdieu P. (1979), *Distinction: A social critique of the judgement of taste*, Cambridge, Massachusetts: Harvard University Press.

Breen R. and Goldthorpe J. (2001), "Class, mobility and merit: The experience of two British birth cohorts", *European Sociological Review*, vol. 17 (2), pp. 81-101.

Bratsberg B., Jäntti M., Roed K., Raaum O., Naylor R., Österbacka E., Bjorklund A. and Eriksson T. (2006), *Nonlinearities in intergenerational earnings mobility: Consequences for cross-country comparisons*, Warwick Economic Research Paper No 782, University of Warwick, available at: https://www2.warwick.ac.uk/fac/soc/economics/research/workingpapers/2007/twerp_782.pdf.

Cameron C. and Trivedi P. (2009), *Microeconometrics using Stata*, College Station: Stata Press.

Card D. (1999), "The causal effect of education on earnings", in: Ashenfelter O. and Card D. (eds), *Handbook of Labor Economics*, vol. 3A, Amsterdam: Elsevier Science, available at: https://web.stanford.edu/group/scspi/_media/pdf/Classic_Media/Card_1999_Education.pdf.

Corak M. (2006), *Do poor children become poor adults? Lessons from a cross country comparison of generational earnings mobility*, Discussion Paper No. 1993, Bonn: IZA, available at: http://ftp.iza.org/dp1993.pdf.

Corak M. and Heisz A. (1999), "The intergenerational earnings and income mobility of Canadian men: Evidence from Longitudinal Income Tax Data", *Journal of Human Resources,* vol. 34(3), pp. 504-533.

Cremin L. and Kendell K. (2003), *American education: The national experience*, New York: Macmillan.

Dearden L., Machin S. and Reed H. (1997), "Intergenerational mobility in Britain", *The Economic Journal*, vol. 107, pp. 47-66.

Ellwood D. and Kayne T. (2000), "Who is getting a college education? Family background and the growing gaps in enrolment", in: Danziger S. and Waldfogel J. (eds), *Securing the future*, New York: Russell Sage Foundation, pp. 283-324.

Erikson R. and Jonsson J. (1996), *Can education be equalized? The Swedish case in comparative perspective*, Boulder, Col: Westview Press.

Esping-Andersen G. (2007), *Investing in children and their life chances*, Paper prepared for the Foundation Carolina International Workshop 'Welfare State and Competitivity', Madrid.

Esping-Andersen G. (2005), "Social inheritance and equal opportunities policies", in: Delorenzi S., Reed J. and Robinson P. (eds), *Maintaining momentum, promoting social mobility and life chances from early years to adulthood*, London: Institute for Public Policy Research, pp. 10-30.

Esping-Andersen G. (1990), *The three worlds of welfare capitalism,* Oxford: Policy Press.

Eurostat (2016), *Glossary: EU Statistics on Income and Living Conditions (EU-SILC)*, available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:EU_statistics_on_income_and_living_conditions_(EU-SILC).

Eurostat (2012), *EU-SILC 2011 module on intergenerational transmission of disadvantages*, available at: http://ec.europa.eu/eurostat/documents/1012329/6071326/2011_Module_Intergenerational_transmission_of_disadvanta.pdf/d3efe6be-81eb-422f-9f2f-92c5d4b39de6.

Ferrera M. (1996), "The 'Southern Model' of welfare in social Europe", *Journal of European Social Policy*, vol. 6, pp. 17-37.

Grawe N. (2004a), "Intergenerational mobility for whom? The experience of high and low earnings sons in international perspective", in: Corak M. (ed.), *Generational income mobility in North America and Europe*, Cambridge: Cambridge University Press.

Grawe N. (2004b), "Reconsidering the use of nonlinearities in intergenerational earnings mobility as a test for credit constraints", *Journal of Human Resources*, vol. 39 (3), pp. 813-827.

Graw N. and Mulligan C. (2002), "Economic interpretations of intergenerational correlations", *Journal of Economic Perspectives*, vol. 16 (3), pp. 45-58.

Grudiza S. and Vilaplana-Lopez C. (2013), *Persistence of individual disadvantage factors through two generations*, available at: http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Intergenerational_transmission_of_disadvantage_statisticsandoldid=164287.

Heineck G. and Riphahn R. (2007), *Intergenerational transmission of educational attainment in Germany: The last five decades*, Discussion Paper No. 2985, Bohn: IZA, available at: http://repec.iza.org/dp2985.pdf.

Koenker R. (2005), *Quantile regression*, Cambridge University Press.

Leibfried S. (1993), "Towards a European welfare state? On integrating poverty regimes into the European Community", in: C. Jones (ed.), *New perspectives on the welfare state in Europe,* London and New York: Routledge, pp. 133-156.

Mayer S. and Lopoo L. (2004), "What do trends in the intergenerational economic mobility of sons and daughters in the United States mean?", in: Corak M. (ed.), *Generational income mobility in North America and Europe*, Cambridge: Cambridge University Press, pp. 90-121.

Mazumder B. (2005), "Fortunate sons: New estimates of intergenerational mobility in the US using social security earnings data", *Review of Economics and Statistics*, vol. 87(2), pp. 235-255.

Mazumder B. (2001), *Earnings mobility in the US: A new look at intergenerational inequality*, Federal Reserve Bank of Chicago, available at: https://fraser.stlouisfed.org/files/docs/historical/frbchi/workingpapers/frbchi_workingpaper_2001-18.pdf.

Mincer J. (1958), "Investment in human capital and personal income distribution", *Journal of Political Economy*, vol. 66, pp. 281-302.

Musick K. and Mare R. (2004), *Recent trends in the inheritance of poverty and family structure*, Working Paper CCPR-002-04, California Centre for Population Research, Los Angeles: University of California, available at: http://papers.ccpr.ucla.edu/papers/PWP-CCPR-2004-002/PWP-CCPR-2004-002.pdf.

Myrdal G. (1944), *An American dilemma: The negro problem and modern democracy*, New York/London: Harper and Row.

Myrdal G. (1963), *Challenge to affluence*, London: Gollancz.

OECD (2017), *A broken social elevator? How to promote social mobility*, Paris: OECD Publishing.

Papanastasiou S. and Papatheodorou C. "Causal dynamics of poverty reproduction in EU countries", *International Journal of Social Welfare*, Wiley (forthcoming).

Papatheodorou C. and Petmesidou M. (2005), "Inequality, redistribution and welfare regimes: Comparing Greece to other EU countries", in: G. Argeitis (ed.), *Economic changes and social contradictions in Greece: The challenges in the beginning of the 21st century*, Athens: Typothito - G. Dardanos, pp. 213-254 (in Greek).

Papatheodorou C. and Petmesidou M. (2004), "Inequality, poverty and redistribution through social transfers: Greece in comparative perspective", in: M. Petmesidou and C. Papatheodorou (eds), *Poverty and social exclusion*, Athens: Exantas, (pp. 307-366) (in Greek).

Shavit Y. and Blossfeld H. (1993), *Persistent inequality*, Boulder: Col: Westview Press.

Schultz T. (1966), *Investment in poor people*, Office of Manpower Policy Evaluation Research, Washington: Department of Labor, available at: http://files.eric.ed.gov/fulltext/ED018581.pdf.

Solon G. (1992), "Intergenerational income mobility in the United States", *American Economic Review*, vol. 82(3), pp. 393-408, available at: http://www.uh.edu/~adkugler/Solon.pdf.

Warren J., Hauser R. and Sheridan J. (2002), "Occupational stratification across the life course", *American Sociological Review*, vol. 67, pp. 432-455.

Zimmerman D. (1992), "Regression toward mediocrity in economic stature", *American Economic Review*, vol. 82(3), pp. 409-429.

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