Anno LIV, 2020, 3 *Economia & Lavoro* *Saggi, pp. 7-30*

WORKLESS MOTHERS AND WORKLESS FATHERS. AN ANALYSIS OF THE INTERGENERATIONAL LEGACY IN EUROPE*

by Gabriella Berloffa, Eleonora Matteazzi, Alina Şandor, Paola Villa

This paper examines how the intergenerational transmission of worklessness varies according to the gender of parents, and the gender of their children, across different groups of European countries. In particular, it aims at disentangling the relative role of mothers and fathers in influencing the risk of not being successfully employed for their sons and daughters (in the early stage of their working life), and at assessing the extent to which these effects are mediated by education and other individual characteristics. To this end, we use a sample of men and women aged 25-34 from the EU-SILC cross-sectional data (2011), and information about the working condition of their parents when young adults were aged about 14. We show that fathers and mothers play different roles in different country groups. Fathers' effect is generally mediated by education and other individual characteristics (with only few exceptions), whereas mothers play a role also after controlling for individual characteristics, particularly for their daughters. Our results call for new policy initiatives to improve labour market efficiency and to reduce the inequalities linked to paternal (and maternal) employment in Mediterranean (and CEE) countries.

Keywords: intergenerational legacy, worklessness, young adults, gender, European countries.

Questo articolo esamina come la trasmissione intergenerazionale della mancanza di lavoro varia a seconda del sesso dei genitori e del sesso dei loro figli, per diversi gruppi di Paesi europei. In particolare, mira a distinguere il ruolo relativo delle madri e dei padri nell'influenzare il rischio di insuccesso occupazionale per i/le figli(e) (nella fase iniziale della loro vita lavorativa) e a valutare in che misura questi effetti sono mediati dal livello di istruzione e da altre caratteristiche individuali. A questo scopo, utilizziamo un campione di giovani uomini e donne di età compresa tra 25 e 34 anni (indagine EU-SILC 2011), e informazioni sulle condizioni di lavoro dei loro genitori quando i giovani adulti avevano circa 14 anni. I risultati mostrano che padri e madri svolgono ruoli diversi in diversi gruppi di Paesi. L'effetto dei padri è generalmente mediato dall'istruzione e da altre caratteristiche individuali (con poche eccezioni), mentre le madri svolgono un ruolo anche dopo aver controllato le caratteristiche individuali, soprattutto per le figlie. I risultati suggeriscono la necessità di politiche volte a migliorare l'efficienza del mercato del lavoro e ridurre le disuguaglianze legate all'occupazione paterna (e materna) nei Paesi mediterranei (e dell'Europa centrale e orientale).

Parole chiave: trasmissione intergenerazionale, mancanza di lavoro, giovani adulti, genere, Paesi europei.

Gabriella Berloffa, Department of Economics and Management, University of Trento, Via Inama 5, 38100 Trento (Italy); gabriella.berloffa@unitn.it.

Eleonora Matteazzi, Department of Economics and Management, University of Verona, Via Cantarane 24, 37129 Verona (Italy), and EconomiX-CNRS, Avenue de la République 200, 92001 Nanterre cedex (France); eleonora.matteazzi@univr.it.

Alina Şandor, Joseph Rowntree Foundation, The Homestead 40 Water End, YO306WP York (UK); alinamihaela.sandor@unitn.it.

Paola Villa, Department of Economics and Management, University of Trento, Via Inama 5, 38100 Trento (Italy); paola.villa@unitn.it.

* This study is based on research carried out within the STYLE project (http://www.style-research.eu/). This project received funding from the European Union's Seventh Framework Programme for Research, Technological Development and Demonstration under Grant Agreement no. 613256.

Codici JEL / JEL codes: J16, J62, J64.

ISSN 0012-978X

1. Introduction

Young people have been severely hit by the Great Recession of 2008-2009. The share of individuals not in employment, education, or training (NEET) over time provides an overall measure of those individuals more likely to become disenfranchised and to suffer from poverty and social exclusion. For young people aged 20-34, the share of NEETs in the EU-28 jumped from 16.5% in 2008, to 20.1% in 2013, then decreasing to 17.2% in 2017. Being NEET has severe adverse consequences for the individual, society, and the economy. It can have long-term scarring effects on labour force participation and future earnings (hence raising problems in old age in terms of securing a decent pension), leading also to various health and social problems.

From a policy perspective, it is crucial to understand what are the key risk factors for young adults not being successfully employed. Over the past 20 years, welfare states have evolved towards a "new" model of welfare that focuses on labour market participation, and emphasises individual responsibility (Hudson and Kühner, 2009). If the key risk factors derive from circumstances that are not under the individual's control, the growing emphasis on individual responsibility can lead to new forms of marginalisation and restricted access to welfare benefits and support for individuals most in need (Pintelon *et al.*, 2013). In terms of individual characteristics, low education, belonging to certain ethnic minorities, and poor health all increase the probability of being NEET. And these characteristics tend to be related to the family and its social background (Mascherini, 2019). The role of the family in shaping children's tastes for education and in developing their skills has been largely documented in the literature on the intergenerational transmission of disadvantage. But these effects can extend beyond education, directly affecting young individuals' labour market outcomes. Various empirical analyses at country level have shown that children's unemployment or inactivity is closely related to their fathers' or mothers' employment status during adolescence. But we know little about the extent to which these effects vary across European countries, and even less about the distinct role of fathers and mothers.

This paper exploits the 2011 *ad hoc* module on intergenerational transmission of disadvantages of the European Union Statistics on Income and Living Conditions (EU-SILC) cross-sectional data, focusing on young adults aged 25-34, who provide information on their family background during adolescence (around 14 years of age). We analyse the extent to which parents' employment status during children's adolescence affects their probability of being NEETs as young adults, across Europe. A better understanding of this transmission is important for policy design. Indeed, if this transmission exists, policies should provide adequate social protection for those young adults whose "exclusion" from the labour market derives from the legacy of family differences (O'Reilly *et al.*, 2019). Furthermore, policies should pay attention to children who grow up with non-working parents (i.e. inactive or unemployed), and provide specific support for the development of attitudes and skills that will facilitate their successful labour market integration.

The contribution of this work is threefold. First, we analyse the intergenerational transmission of disadvantages in the labour market according to the gender of both parents and children, in order to disentangle the relative role of mothers and fathers in influencing the risk for their sons and daughters of not being successfully employed. Second, we show the extent to which the experience of parental worklessness during adolescence matters for young adults' labour market outcomes, before and after controlling for factors that may affect individuals' employment opportunities, including education. Third, we document

the extent to which the intergenerational correlation in worklessness varies across European country groups. Our hypothesis is that national-specific socioeconomic structures are likely to affect the various channels through which the intergenerational transmission of labour market disadvantages between parents and children occurs.

The paper is structured as follows. Section 2 discusses the background literature on the intergenerational transmission of disadvantages into the labour market. Section 3 discusses the various channels through which parents' disadvantage in the labour market (i.e. not in employment) during their children's adolescence may affect their children's employment outcomes as young adults. It furthermore advances some hypotheses on the differences of these effects for sons and daughters and across country groups. Section 4 presents the methodology and some descriptive statistics of the data. Section 5 illustrates the main empirical findings, and Section 6 concludes.

2. Background literature

The analysis of intergenerational inequality and social mobility has attracted increasing attention in the past few decades. Several studies analyse the influence of family background on educational and occupational attainments (see Black and Devereux, 2010, for a survey), on income mobility (Jerrim and Macmillan, 2015; Gregg *et al.*, 2017), as well as on other social risks (Pintelon *et al.*, 2013; Kauppinen *et al.*, 2014). In the rich literature on intergenerational income mobility, many studies focus on the father-son correlations of income, leaving unexplored gender differences in intergenerational income, and the intergenerational role of both parents. Furthermore, the limited number of studies that examine the intergenerational transmission of disadvantage in the labour market are focused on the correlation either between fathers and sons or between mothers and daughters. However, as pointed out by Sirniö, Martikainen and Kauppinen (2013, p. 466), "Paternal and maternal roles in managing households differ, and gender differences in labour markets have a diverse influence on women's and men's socioeconomic outcomes".

The evidence on the intergenerational link between mothers' and daughters' labour market participation is quite robust. Daughters of working women are more likely to be in paid employment than daughters who have grown up with non-working mothers (Fernández, 2007; Farré and Vella, 2013). Similarly, sons' unemployment is positively correlated with their fathers' unemployment, although the effect does not appear to be causal (O'Neill and Sweetman, 1998; Macmillan, 2014; Mäder *et al.*, 2015). Only a few studies examine the influence of fathers or both parents on their sons and daughters (Ekhaugen, 2009; Gregg *et al.*, 2012; Pintelon *et al.*, 2013; Zwysen, 2015), but generally they do not distinguish between the father's and the mother's unemployment experience, or between sons and daughters. Hérault and Kalb (2016), using Australian data, examine the intergenerational correlation of labour market outcomes, considering simultaneously the gender of parents and that of their children. They find evidence of a positive correlation between fathers and sons and between mothers and daughters, but little evidence of other cross-gender intergenerational correlations.

Besides focusing on the link either between fathers and sons or between mothers and daughters, these studies consider a single country. There are numerous studies that compare intergenerational correlations in income or education across European countries / member countries of the Organisation for Economic Co-operation and Development (OECD)

(Raitano and Vona, 2015; Jerrim and Macmillan, 2015), showing that social mobility is higher in Nordic countries, and lower in southern countries, the United Kingdom, and the USA. But cross-country differences in the intergenerational correlation of employment statuses are much less investigated.

Very recently, three studies have analysed the intergenerational correlation of labour market disadvantages in a cross-country perspective. McGinn *et al.* (2019) explored the relationship between maternal employment during their children's adolescence and adult daughters' and sons' employment (and domestic) outcomes for a sample of 29 countries. Results reveal that daughters raised in families where mothers were employed while growing up had a higher likelihood of being employed, whereas no significant impact emerged for sons. However, only the average effect over the pooled sample of countries was estimated, without showing how it varied across countries. Berloffa, Matteazzi and Villa (2019) considered the employment status of young adults (aged 25-34) in five groups of European countries, and showed that having had a working mother during adolescence reduced the likelihood of being workless for both daughters and sons in all country groups, except in the Nordic countries; in contrast, the effects of fathers' employment status were less widespread. However, the authors did not distinguish between the gross and the net effects of parents' employment (i.e. before and after controlling for individual characteristics), and did not address the issue of the endogeneity of individuals' education. Macmillan *et al.* (2018) examined the association between experiencing a jobless household during adolescence, and various adult outcomes (education, joblessness, and poverty) in 16 European countries. They showed significant differences among countries in this association, separately for sons and daughters, but not considering the distinct role of mothers and fathers.

This paper investigates the intergenerational transmission of disadvantages in the labour market according to the gender of both parents and children in Europe. By accounting for the employment condition of both parents separately, we avoid the risk of attributing to either the father or the mother what is due to the other parent (especially where assortative mating in partnership is more pronounced). Furthermore, by considering a large number of European countries, we can observe whether the magnitude of parental effects on their adult children's labour market outcomes varies across Europe, and provide some interpretations of these differences, as influenced by the prevailing institutional settings.

3. Channels of influence and research hypotheses

There are various channels through which parental employment status experienced during adolescence can affect children's labour market outcomes in early adulthood (Raitano and Vona, 2015). Besides educational choices, which are not the focus of this paper, parents' employment status during adolescence can affect their children's labour market outcomes through two channels: *a*) the shaping of cultural values and attitudes; and *b*) the inheritance and development of non-cognitive skills. Parents' employment status during adolescence is likely to be correlated with their prevailing employment condition 10 years later, i.e. when their children enter adulthood (25-34 years). And this is the time, in a life-course perspective, when parents have both the economic resources and the social networks to help their children overcome the difficulties faced in the labour market. This implies that labour market outcomes for young adults in 2011 were affected by two other

channels: *c*) the availability of parents' social networks; and *d*) an income effect due to different household economic resources.

After a brief discussion of each channel, and its consequences in terms of same-gender or cross-gender transmission, we will present our hypotheses concerning how their overall strength can vary across European countries. It is important to make clear that, in this paper, we do not examine the relative role of these channels, because the data do not allow us to do so. However, discussion of these channels of influence is crucial for the formulation of our research hypotheses and for interpreting the results of our empirical analysis, in terms of both gender and cross-country differences. Indeed, the analysis is carried out across European country groups characterised by distinct institutional settings (labour market regulation and policies, including welfare benefits, and cultural values and attitudes towards labour market participation).

First, experiencing parental worklessness during adolescence may impact on offspring's preferences, values, and attitudes. We label this the "cultural channel". Specifically, parental work experience during adolescence can affect young adults' aspirations and attitudes towards labour market participation. The cultural channel plays a role in shaping the conceptualisation of gender roles (hence, the individual evaluation of paid work), the sense of stigma associated with worklessness, and attitudes towards relying on welfare benefits (Fernández, 2007; Eckhaugen, 2009; Macmillan, 2014; Zwysen, 2015). We have no *a priori* hypothesis on the differentiated effects of mothers' and fathers' worklessness on their daughters' and sons' sense of stigma or attitudes towards welfare dependency. But we expect the transmission of gender role attitudes towards labour market participation to be different for sons and daughters. In developed countries, the social norm is that all men of working age (after leaving education) enter the labour market, independently of their specific view on gender roles. This is not the case of women. Female labour force participation is favoured by a more egalitarian view of gender roles within the family of origin and in the country's institutional setting. Keck and Saraceno (2013) show that social policies, an important component of a more complex institutional and cultural framework, shape options and constraints that affect female labour market participation. And differences in welfare systems reflect differences in social norms about gender roles (Siim and Borchorst, 2017). Furthermore, there is quite robust empirical evidence that the impact of mothers is somewhat stronger than that of fathers on the development of gender stereotypes and on the transmission of gender role attitudes (Stevens and Boyd, 1980; Tenenbaum and Leaper, 2002; Endendijk *et al.*, 2013). To sum up, the cultural channel should generate a stronger effect between mothers and daughters than between mothers and sons, or between fathers and all their children. It should also generate a stronger effect between mothers and daughters in countries with more traditional gender norms compared with countries with a more egalitarian view of gender roles.

Second, the inheritance and development of cognitive and non-cognitive skills (i.e. soft skills such as motivation, self-discipline, communication skills, perseverance, confidence, and self-esteem) within the family have been acknowledged to influence children's educational and labour market outcomes, as well as career advancements (Bowles and Gintis, 2002; Heckman *et al.*, 2006). Parents play a role in both the genetic transmission and the development process of these soft skills. Children learn behaviours and values through imitation of their parents, and parents explicitly teach children their beliefs and attitudes (Apgar and McManus, 2018). And some of these skills are valued in the labour market, such as the ability to organise and manage time and activities, to be flexible and/or

to work under pressure. Soft skills may affect participation because individuals with lower self-esteem and motivation are more likely not to participate. They may also influence individuals' unemployment probability by making it more difficult to find a job or easier to lose it. This type of influence should be stronger in periods of high unemployment and in countries with selective education systems and/or competitive labour markets. Indeed, Macmillan (2013) shows that non-cognitive skills and behavioural outcomes partly account for the intergenerational transmission of worklessness in the United Kingdom, and that these skills seem to matter more as unemployment rises. Therefore, this channel should lead to larger correlations in countries characterised by high unemployment and/or selective education systems. Furthermore, it should generate larger same-gender correlations (i.e. between mothers and daughters, and between fathers and sons) and smaller cross-gender correlations in countries with high occupational gender segregation.

Third, parents' social networks are another important channel to be borne in mind when interpreting our results. It is well-known that family members' employment status can play a role through the social network on which young individuals can rely when searching for a job (Montgomery, 1991; Granovetter, 1995). O'Neill and Sweetman (1998) and Corak and Piraino (2010) show that sons of non-working fathers are more disadvantaged in the labour market compared with sons whose fathers are working and maintain a network. The effectiveness of social networks depends on the characteristics of the job seeker, his/her social ties, and the labour market institutions (Ioannides and Datcher Loury, 2004). In principle, both parents could provide support for sons and daughters alike. However, in contexts where the occupational structure is highly gender-segregated, fathers may play a more important role than mothers for their sons, and mothers for their daughters. But this channel should have little importance in countries with high participation in activation-support policies, well-developed vocational education and training (VET) systems, and relatively efficient Public Employment Services (PES).

Finally, parents' employment is generally associated with higher household income and wealth. The economic condition of the family of origin may affect young adults' employment status and their job-search process not only by ensuring them a better-quality education as children, but also by shaping their attitudes and by affecting their choices as young adults facing the labour market (i.e. setting their reservation wage, and benefitting from family economic support, in order to overcome the difficulties encountered in entering secure employment or in starting up a business). Unfortunately, our dataset does not include a measure of family income and wealth when the individual was 14. But in the empirical analysis we control for parents' occupation and/or education, which are better proxies than the simple employment status for households' economic resources (both at the time of adolescence and in 2011, as young adults). Hence, most of the effects related to this channel are captured by these variables and should not influence the coefficients associated with parental employment status. For this reason, we do not discuss either the relative role of mothers and fathers through this channel, or existing differences across country groups.

Our hypothesis is that these channels operate differently across European countries according to national-specific socioeconomic contexts (including labour market institutions, welfare systems, and gender norms). First, we expect the effect of parents' employment status during adolescence on their children's labour market outcomes to be larger in countries with high youth unemployment and weak labour market policies (e.g. Mediterranean countries, and some Central and Eastern European – CEE – countries),

compared with countries with high participation in activation-support policies (e.g. Nordic countries), well-developed VET systems (e.g. Continental countries), and relatively efficient and/or developed PES (Hypothesis 1). All these characteristics signal efficiency in the functioning of the labour market (i.e. job matching) and the presence of various forms of support for low-skilled individuals; hence, we expect a less significant role of parental social networks and skill transmission. Conversely, in situations of high unemployment and lack of institutional support in entering secure jobs, both parental social networks and the transmission of soft skills are expected to play an important role.

Second, we expect mothers' influence on their daughters to be stronger in countries characterised by traditional gender roles and a familistic welfare system, where women are expected to provide care for their frail family members (e.g. Mediterranean countries, but also CEE countries), but weaker in countries characterised by cultural values and a welfare system centred on the so-called "adult worker model" (e.g. Nordic countries) (Hypothesis 2). It is not possible to formulate *a priori* expectations on parental influence for countries characterised by competitive labour markets (e.g. the United Kingdom) because two opposing effects are at work: on the one hand, soft skills are expected to play an important role, increasing parental influence; on the other hand, social networks should play a limited role, reducing parental influence.

4. Methodology and descriptive statistics

This paper is based on EU-SILC data, which encompass comparable household and individual microdata for 29 European countries. We exploited the 2011 wave because it provides information on parental educational and occupational background through the *ad hoc* module on the intergenerational transmission of disadvantages. In the survey, respondents were asked to recall from their childhood questions about their parents. Measures of joblessness in the parents' generation are based on the main activity status of parents in the household when the survey respondent was 14 years old. Each parent is defined as jobless if his/her main activity status when the respondent was 14 was unemployed, fulfilling domestic tasks and care responsibilities, or other inactive. The young adults in the sample are defined as workless if they are unemployed or inactive at the time of the interview.

We selected a sample of young adults aged 25-34. We modelled their self-declared employment status (workless or in paid employment)[1] as a function of individual characteristics at the time of the interview and of family educational and occupational background characteristics at the time when the individual was around 14 years old.[2]

4.1. Methodological choices

Before presenting some descriptive statistics of our sample of analysis, three important methodological choices need to be discussed: *a*) the focus on young adults (aged 25-34);

[1] The expression "workless individuals" refers to persons who are unemployed or inactive but not in education (i.e. NEETs). Considering also individuals who are still in education does not affect our main results (see Berloffa, Matteazzi and Villa, 2019).

[2] Individual characteristics (at the time of the interview) include gender, age, education, citizenship, cohabitation with parents, partnership status, partner's education level, and parenthood status. Parental background characteristics (during adolescence) include the presence of parents, parents' employment status (worklessness), parents' employment status interacted with the GDP growth rate at the time parental worklessness was experienced, and mothers' birth cohort. See Section 4.2 for details about empirical specifications.

b) the decision to group the 29 European countries into six clusters; and *c*) the choice of considering "worklessness" for both parents and adult children.

Young adults. We investigated the role of the family of origin in the shaping of inequalities of opportunities (i.e. labour market outcomes) for young adults, in the initial phase of their labour market experience. We focus on young adults because individuals' initial labour market experience is crucial in determining long-term outcomes (participation and earnings). It is also a lifecycle phase in which the influence of the family of origin on young people's cognitive and non-cognitive skills (i.e. traits, attitudes, and aspirations), developed during adolescence, plays a fundamental role. Labour market outcomes later in life (e.g. for individuals aged 40-50) depend to a large extent also on individuals' work experience and networks, and the influence of the family of origin tends to fade as the lifecycle evolves. Our assumption is that the parental transmission of attitudes and skills, as well as the possibility to rely on parental networks, can play a crucial role for young adults, especially in years of high youth unemployment (as in 2011, the year to which our data refer). Hence, we limited our analysis to individuals aged 25-34.[3]

Country groups. The estimation of a different model for each country was not possible because of the very small number of workless fathers in almost all countries (between 1% and 4%). But the grouping of countries is problematic, as highlighted in the prolific welfare regime debate (Ferragina and Sleeleib-Kaiser, 2011). For our purpose, when institutions that are important for female employment are considered, the resulting grouping may not capture differences that are relevant for male employment, and vice-versa. For example, the availability of childcare services and leave policies may play an important role for female participation in the age group here considered (influencing the observed intergenerational correlation between mothers and daughters), without effects on male employment (hence, no consequences for the observed correlation between fathers and sons). In contrast, the role of informal job search methods or well-developed VET systems may play a significant role for male employment, but not for women, employed to a larger extent in the public sector. Hence, we decided to adopt a simple solution, based on the identification of "youth transition regimes" propounded by Pohl and Walther (2007). Their analysis focused on disadvantaged youth and the problems they experienced in school-to-work transitions in countries characterised by different socioeconomic, institutional, and cultural structures. In the light of detailed case studies (13 countries, plus Germany), they singled out five youth transition regimes in Europe: *universalistic* (DK and FI), *employment-centred* (AT and DE), *liberal* (UK), *sub-protective* (EL, ES, IT, and PT), and *post-communist countries* (BG, PO, RO, SK, and SI).[4]

The EU-SILC dataset allows us to consider a much larger number of countries (EU-27, plus Norway and Switzerland). We decided to follow the country grouping proposed by Pohl and Walther (2007), adding the additional countries according to some socioeconomic affinity with the original grouping. Our dataset included also all new Member States (i.e. 11 CEE countries), characterised by a common historical background but various strategies

[3] We could not include individuals younger than 25 because all variables related to the family background were collected only for individuals aged between 25 and 60 at the time of the interview.

[4] We use the Eurostat country codes: Austria (AT), Belgium (BE), Bulgaria (BG), Croatia (HR), Cyprus (CY), Czechia (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (EL), Hungary (HU), Ireland (IE), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Netherlands (NL), Poland (PL), Portugal (PT), Norway (NO), Romania (RO), Spain (ES), Slovenia (SI), Slovakia (SK), Sweden (SE), Switzerland (CH), and United Kingdom (UK).

of privatisation and liberalisation, leading to notable differences in their socioeconomic context.[5] We tried to capture this heterogeneity of CEE countries by considering two distinct groups, according to the youth unemployment rate in 2011 (the year of EU-SILC intergenerational data). These are the six groups of countries considered in our analysis: *Nordic* (**DK**, **FI**, NO, and SE), *Continental* (**AT**, BE, CH, FR, **DE**, and NL), *English-speaking* (CY, IE, and **UK**),[6] *Mediterranean* (**EL, ES, IT,** and **PT**), CEE_{low} (CZ, **PL**, **RO**, **SI**, and **SK**), and CEE_{high} (**BG**, EE, HR, HU, LT, and LV). Bold text is used to denote the countries included in the "youth transition regimes" identified by Pohl and Walther (2007).

Our grouping is in line with the share of young adults whose mother was workless during adolescence in our sample. Indeed, the latter is close to, or below 20% in Nordic and eastern countries, between 30% and 40% in Continental and English-speaking countries, and between 50% and 60% in Mediterranean countries. The only exceptions are IE (whose share is much higher than in UK and CY: 53% vs. 30-37%), HR (whose share is much higher than in the other CEE_{high} countries: 35% vs. 6-20%), and PT (whose share is much lower than in the other Mediterranean countries: 30% vs. 45-60%). We carried out a sensitivity analysis by excluding these countries from their groups.

Worklessness. We analysed the intergenerational correlation of worklessness between parents and their adult children, instead of the intergenerational correlation in employment, because we considered it a more relevant outcome to be addressed by social policies. We did not distinguish between unemployment and inactivity, neither for parents nor for children, for different reasons.

First, the simple distinction between employment and non-employment is a reasonable proxy to distinguish between mothers and fathers with poor and with good labour market histories when the information about parents' main activity status is based on the recall-based nature of the childhood experience (Hérault and Kalb, 2016). Indeed, despite referring to parental employment status at a specific point in time, the reported information is likely to capture sustained rather than transitory employment conditions (Macmillan *et al.*, 2018, p. 341), leading to very small percentages of reported unemployed mothers and inactive fathers.

Second, since the empirical analysis considers a large number of countries characterised by distinct labour market institutions, the differentiation between unemployment and inactivity for adult children could be misleading. In particular, discouragement effects or entitlement rules for welfare benefits may bias individuals' responses. Furthermore, the incidence of discouraged workers (individuals available to work but not looking for a job), usually classified as inactive, could be very different in different countries, and their behaviour is generally closer to that of unemployed rather than inactive individuals (Centeno and Fernandes, 2004).

Third, the sample of both workless fathers and inactive young men in all country groups was too small to identify separate correlations between workless fathers and inactive and

[5] In the transition from centrally planned to market economies, notable differences emerged in the socioeconomic context across CEE countries (Szelewa and Polakowski, 2008; Fodor and Glass, 2018). These countries are the only ones in the world that have undergone a significant decline in women's labour market participation (formerly among the highest in the world) since 1990. Notwithstanding the current diversified socioeconomic context, women in the CEE countries all "share the state socialist legacy of women's emancipation, and extensive welfare state and full employment" (Fodor and Glass, 2018, p. 9).

[6] We excluded Malta (MT) from the analysis because the share of young adults with a workless mother is above 80%, much higher than in any other country.

unemployed sons and daughters; the same applies for the correlations between workless mothers and inactive/unemployed sons. Since we were interested in comparing the role of mothers' and fathers' employment status for daughters and sons, we were forced to pool unemployed and inactive young adults.

4.2. Empirical specification

We modelled the individual choice with respect to the employment status as a probit model. We ran separate analyses for men and women because parental employment status experienced during adolescence, as well as other individual and institutional characteristics, may impact differently on sons' and daughters' labour market outcomes. We estimated various specifications to measure the gross and the net effect of parental worklessness on children's labour market outcomes.

Notice that the cross-sectional structure of our database does prevent us from correcting for potential endogeneity biases resulting from a reverse causality between labour market statuses and some individual characteristics. We can address the endogeneity of children's education (see below), but we cannot control for unobserved characteristics that may affect both parental employment during adolescence, and children's labour outcomes. Hence, as is commonly the case in both intergenerational and international comparative studies, our analysis aims at describing these relations, not at providing clear-cut causality. However, "there is significant value in trying to better understand how such intergenerational associations vary across countries, before attempting to understand why" (Macmillan *et al.*, 2018, p. 337). Hence, the words "effect" or "influence" are used here with a descriptive meaning.

In the first specification (Model 1), we estimated the gross intergenerational correlation in worklessness. We controlled for parents' employment status (workless) and parents' employment status interacted with the GDP growth rate at the time when the young adult was 14. The interaction term should capture how the business cycle at the time of parental employment impacts on the intergenerational correlation.[7] We also controlled for individual age (at the time of the interview), and some other family background variables (maternal and paternal occupation, the presence of only one parent during adolescence, and the mother's birth cohort). Differences in macroeconomic conditions within country groups in 2011 are captured by including country fixed effects.

In the second specification (Model 2), we estimated the net effect of parental worklessness after controlling for individual education. A comparison between Model 1 and Model 2 shows the extent to which parental influence is mediated by individual educational choices.

In the third specification (Model 3), we checked whether the influence of parental worklessness changed after controlling for other confounding factors like citizenship (individuals from non-EU countries), cohabitation with parents, partnership status (being in a couple), partner's education level, and parenthood status (having at least one child).

In the last specification (Model 4), we allowed for the endogeneity of young adults' education. Indeed, individual educational attainments are likely to be determined by the same observed and unobserved individual attributes (e.g. effort, self-motivation,

[7] We could not introduce this interaction term for CEE countries, because data on GDP growth rates for these countries are available only from the mid-1990s.

or ability) that also affect young adults' labour market outcomes. Given that the intergenerational correlation in education is well-documented in the empirical literature, we exploited the information about parental education (at the time when their children were about 14) to achieve identification. Empirical results not presented in this paper (but available from the authors upon request) confirmed that parents' education does not directly affect their children's worklessness, but influences their education level.[8] Hence, we estimated an instrumental variable probit, where we approximated the level of individual education by the number of years spent in education from the age of six, and the age at which the highest qualification was attained.[9] To be noted, however, is that a Wu-Hausman test did not reject the hypothesis of exogeneity, except for men in CEE_{low} countries. In any case, the validity of instruments was confirmed by the Amemiya-Lee-Newey over-identification test.

4.3. Descriptive statistics

Table 1 shows some descriptive statistics of our sample of analysis by country group. More than 80% of young adults lived with both parents during their adolescence in all country groups. However, the share of individuals raised in single-parent families is not negligible, especially in Nordic, Continental, and CEE_{low} countries. Hence, in the empirical analysis, we controlled for the presence of only one parent during young adults' adolescence. To be noted is that, among two-parent households, the dual-earner model predominates in Nordic and CEE countries, while the male-breadwinner model prevails in Mediterranean countries.

The shares of workless young adults differ across gender and country group, and they all vary considerably according to parental employment status during adolescence. Nordic and Continental countries exhibit the lowest shares of workless young women and men, while the highest shares are recorded in Mediterranean and CEE_{high} countries. Among two-parent families, in each country group these shares increase on moving from dual-earner to workless households. The same occurs for young adults who grew up with a lone mother. The share of workless young women and young men is lower if the mother was employed than if she was not. It is interesting to note that the share of workless young adults grown up with a lone working mother is quite similar and sometimes even lower (especially for women) than the corresponding share of young adults grown up in two-parent male-breadwinner households. This suggests that children of lone parents are not systematically disadvantaged compared with children of two-parent families in terms of their labour market integration as young adults, but that their relative disadvantage (or advantage) depends crucially on whether or not their parents were employed. The share of lone-father households during adolescence is too low to allow any meaningful comparison.

[8] If we controlled for parental education among covariates in the baseline model (where we did not control for individual education), we found that parental education has a significant effect on young adults' worklessness. However, if we controlled for individual education (as in the second specification), parental education was no longer significant, with only one exception.

[9] To check the consistency of our results, we estimated also previous specifications with the number of years of schooling instead of dummy variables for education. Empirical results about the effects of parental worklessness on children's worklessness remained unchanged.

Table 1. Descriptive statistics of young adults (aged 25-34), by their family of origin, country group, and gender

	Nordic	English-speaking	Continental	Mediterranean	CEE (low youth unemployment)	CEE (high youth unemployment)	Total
No. of observations	3,033	3,495	10,578	10,970	10,624	10,041	48,741
Share of young adults who grew up in:							
two-parent households	81.47	86.15	83.28	91.81	89.03	83.17	86.52
one or no parent households	18.53	13.85	16.72	8.19	10.97	16.83	13.48
Composition of two-parent households, according to parents' employment status when the individual was about 14:							
both parents working	83.78	59.59	63.31	46.33	84.48	84.19	69.11
only the father working	11.25	36.79	34.65	51.66	13.47	13.51	28.52
only the mother working	2.81	1.08	1.07	0.67	1.35	1.21	1.17
both parents workless	2.16	2.53	0.97	1.33	0.7	1.09	1.2
Share of workless young women:							
in the whole sample	18.11	25.79	23.20	34.88	29.93	34.30	29.52
among two-parent households:							
both parents working	15.91	22.40	19.45	29.48	27.61	31.38	26.03
only the father working	28.93	29.10	29.64	39.05	41.59	48.89	36.69
only the mother working	27.27	44.44	25.00	53.13	42.42	32.00	36.44
both parents workless	34.62	48.89	42.86	52.38	50.00	76.74	51.92
among lone-mother households: with:							
working mother	23.20	28.97	23.87	33.09	31.78	35.91	29.98
workless mother	35.48	42.37	32.93	42.50	53.70	40.00	39.71
Share of workless young men:							
in the whole sample	9.33	14.85	8.91	23.68	11.04	22.14	16.11
among two-parent households: with:							
both parents working	8.56	11.53	7.62	21.18	10.22	19.70	13.86
only the father working	9.70	18.09	10.56	25.01	14.31	34.17	20.25
only the mother working	22.58	21.43	17.07	44.44	20.34	33.33	25.91
both parents workless	20.83	44.44	23.53	46.77	31.25	48.94	38.50
among lone-mother households: with:							
working mother	11.60	13.68	12.58	22.22	15.28	25.59	18.18
workless mother	20.83	30.77	17.65	31.40	37.50	40.82	27.54

Notes: Nordic countries: DK, FI, NO, and SE; English-speaking countries: CY, IE, and UK; Continental countries: AT, BE, CH, DE, FR, and NL; Mediterranean countries: EL, ES, IT, and PT; CEE countries (low youth unemployment): CZ, PL, RO, SI, and SK; CEE countries (high youth unemployment): BG, EE, HU, HR, LT, and LV.
Source: authors' calculation based on EU-SILC 2011 cross-sectional data.

5. Results

The gross and net average marginal effects of the mother's and the father's worklessness on daughters' and sons' outcomes are presented in Tables 2 and 3, Models 1 to 4. The full sets of results are shown in the Appendix (Tables A1 and A2). We will first discuss the effects of mothers and fathers on their daughters, and then the effects of fathers and mothers on their sons. We will provide some interpretations of the cross-country differences in light of the hypotheses advanced in Section 2 on the various channels through which parents' employment status during adolescence might affect their adult children's labour market outcomes. Whatever the country group, and for both women and men, controlling for the endogeneity of education (Model 4) has negligible consequences on the estimated effects. Thus, we will comment jointly on the results of Models 3 and 4.

Mother-daughter effects. In all country groups (but the Nordic countries), mothers' worklessness is significantly and positively correlated with their daughters' worklessness (Table 2, panel A). The size of the gross effect ranges from 4 percentage points (p.p.) (about 17%) in English-speaking countries to 17 p.p. (57%) in CEE_{high} countries.[10] Part of this effect is mediated by individual education, which reduces the average marginal effect of maternal employment by 1-2 p.p. in Continental and Mediterranean countries and by about 3-5 p.p. in CEE countries. However, the influence of maternal worklessness remains significant and sizeable, ranging from 4 p.p. (15%) in English-speaking countries to 9 p.p. (30-35%) in both groups of CEE countries. In relative terms, both gross and net effects are larger in Continental and CEE countries (25 and 30%, respectively), and somewhat smaller in English-speaking and Mediterranean countries (18 and 15%, respectively).

These results document that the influence of maternal employment status on daughters' labour market outcomes is widespread, only partially mediated by education and other individual characteristics. These findings suggest that the transmission of social norms on gender roles is stronger via the family (i.e. mother-daughter relationship) than via the labour market conditions (i.e. prevailing pattern of female participation). Indeed, the worklessness legacy between mothers and daughters is larger in countries where the prevailing family model is the "adult worker model" or the "one-and-a-half earners" model (CEE and Continental countries), and smaller in countries where the prevailing model is the "male breadwinner" (e.g. Mediterranean countries), partially contradicting Hypothesis 2. It is reasonable to expect that some institutions do play a role in breaking this intergenerational transmission (as suggested by the not significant effect in Nordic countries), but the dataset used here does not permit controlling for these institutional variables. We can only check the role of specific countries in the sensitivity analysis.

Father-daughter effects. The picture changes when we consider the effect of paternal employment status on daughters' labour market outcomes (Table 2, panel B). While the gross effect is again significant in all country groups but in Nordic countries, the net effect after controlling for education and other individual characteristics is significant only in Mediterranean countries (12 p.p.). In almost all country groups, education plays a central

[10] If p is the average probability of being workless, and m is the marginal effect of maternal employment, the percentage effect (x) corresponds to: $x=m/(p^{*}(1-m))$.

role in reducing and even uprooting the intergenerational transmission of worklessness between fathers and daughters. Indeed, when controlling for individual education, in English-speaking, Continental, and CEE_{high} countries, the estimated marginal effect of paternal employment decreases by about 40%, and becomes not significant. Only in Mediterranean countries, education and other individual characteristics play a minor role in reducing the effect of paternal employment: having had a workless father increases daughters' probability of being workless by about 50% in Model 1 and by 40% in Model 4.

The much less widespread (net) effects of fathers' worklessness (with respect to mothers') on their daughters' probability of being workless has to be interpreted taking into account the degree of gender segregation (by occupation and sector). Indeed, the potential role of fathers' employment status on their daughters' labour market outcomes may be constrained by the overall high degree of gender segregation recorded in the majority of European countries.[11] The higher gender segregation, the lower the expected effect of fathers through social networks and the development of soft skills. As well-known, a large share of young women in Europe are employed in the public sector where entry does not occur through social networks; in addition, the soft skills transmitted by fathers play a minor role for typical female jobs. Not surprisingly, Nordic, Continental, and CEE countries (characterised by a degree of segregation above EU average) do not record any effect of fathers on their daughters' labour market outcomes, while Mediterranean countries (characterised by a degree of segregation below the EU average) record non-negligible effects. In this country group, fathers' social network, as well as the transmission of work attitudes and social skills, may play a role in women's labour market outcomes. And this role may have been particularly important in critical labour market conditions, as was the case in 2011, when fiscal consolidation took off. Indeed, austerity policies in Mediterranean countries reduced employment opportunities in the public sector (Karamessini and Rubery, 2013), forcing young women to search for jobs in the private sector. Thus, fathers' networks might have become more important for women in those countries.

To sum up, mothers' employment status during adolescence is important for their daughters' labour market outcomes in all country groups but in Nordic countries, also after controlling for education and other individual characteristics. On the contrary, the effects of fathers' worklessness operate almost entirely through their daughters' educational achievements, except in Mediterranean countries (where the correlation between fathers and daughters is much larger than that between mothers and daughters). In these countries, a lower degree of gender segregation, and reduced employment opportunities in the public sector due to austerity might have increased the importance of fathers' social networks, as well as the transmission of fathers' soft skills.

[11] See the annual reports produced by the European Commission on gender equality, which include an index on gender segregation in occupations and in sectors for all 28 EU Member States (http://ec.europa.eu/justice/gender-equality/).

Table 2. Predicted probabilities and average marginal effects of parental worklessness during adolescence for women (aged 25-34), by country group

	Pred. prob.	Marginal effects				
		Model 1	Model 2	Model 3	Model 4	No. of obs.
			Panel A: workless mother			
Nordic	0.197***	0.061	0.050	0.036	0.034	1,389
English-speaking	0.275***	0.044*	0.049**	0.042*	0.040*	1,906
Continental	0.241***	0.096***	0.076***	0.056***	0.057***	5,361
Mediterranean	0.351***	0.074***	0.062***	0.058***	0.059***	5,305
CEE (low youth unemployment)	0.304***	0.137***	0.104***	0.109***	0.094***	5,244
CEE (high youth unemployment)	0.347***	0.166***	0.109***	0.094***	0.094***	4,779
			Panel B: workless father			
Nordic	0.197***	0.033	0.023	0.010	0.015	1,389
English-speaking	0.275***	0.105**	0.069	0.047	0.048	1,906
Continental	0.241***	0.062*	0.040	0.038	0.041	5,361
Mediterranean	0.351***	0.152***	0.137***	0.126***	0.124**	5,305
CEE (low youth unemployment)	0.304***	0.094**	0.078**	0.000	0.041	5,244
CEE (high youth unemployment)	0.347***	0.080***	0.037	0.034	0.034	4,779
			Control variables			
Age, country dummies, and parental background		X	X	X	X	
Individual education (exogenous)			X	X		
Other individual characteristics				X	X	
Individual education (endogenous)					X	

Notes: *** p < 0.01, ** p < 0.05, * p < 0.1. Control variables: parental background characteristics include the presence of parents, parents' employment status (worklessness), parents' employment status interacted with the GDP growth rate at the time parental worklessness was experienced, and the mother's birth cohort. Other individual characteristics include citizenship, cohabitation with parents, partnership status, partner's education level, and parenthood status. See Section 4 for more details about control variables. Country groups: see Table 1.
Source: authors' estimations based on EU-SILC 2011 cross-sectional data.

Table 3. Predicted probabilities and average marginal effects of parental worklessness during adolescence for men (aged 25-34), by country group

	Pred. prob.	Marginal effects				No. of obs.
		Model 1	Model 2	Model 3	Model 4	
		Panel A: Workless mother				
Nordic	0.100***	0.011	0.004	–0.008	0.000	1,403
English-speaking	0.158***	0.053**	0.048**	0.032	0.037*	1,460
Continental	0.097***	0.028**	0.019*	0.013	0.012	4,722
Mediterranean	0.237***	0.028**	0.022	0.027**	0.028**	5,131
CEE (low youth unemployment)	0.117***	0.046***	0.026*	0.034**	0.030*	5,095
CEE (high youth unemployment)	0.230***	0.102***	0.070***	0.085***	0.083***	5,007
		Panel B: Workless father				
Nordic	0.100***	0.071	0.062	0.064	0.060	1,403
English-speaking	0.158***	0.155***	0.115**	0.096*	0.102*	1,460
Continental	0.097***	0.051	0.035	0.029	0.021	4,722
Mediterranean	0.237***	0.269***	0.257***	0.247***	0.242***	5,131
CEE (low youth unemployment)	0.117***	0.096**	0.073**	0.071*	0.074**	5,095
CEE (high youth unemployment)	0.230***	0.094**	0.064	0.063	0.062	5,007
		Control variables				
Age, country dummies, and parental background		X	X	X	X	
Individual education (exogenous)			X	X		
Other individual characteristics				X	X	
Individual education (endogenous)					X	

Notes: *** p < 0.01, ** p < 0.05, * p < 0.1. Control variables: see Notes, Table 2. Country groups: see Notes, Table 1.
Source: authors' estimations based on EU-SILC 2011 cross-sectional data.

Father/son and mother/son effects. Paternal influence for sons is somewhat similar to what we have seen for daughters, but much larger in relative terms (Table 3, panel B). The gross correlation between fathers and sons (Model 1) is positive and significant in four out of six country groups, ranging from 9 p.p. in CEE_{high} countries (+45%) to 27 p.p. (+150%) in Mediterranean countries. After controlling for education and other individual characteristics (Model 4), paternal influence remains significant in Mediterranean and CEE_{low} countries (24 p.p. and 7 p.p. respectively, corresponding to +130% and +70%), and only marginally significant in English-speaking countries (10 p.p., +70%). Hence, paternal employment plays a role for their sons: this is less widespread than that of maternal employment for their daughters, but, where the correlation exists, it is much larger.

If we do not control for individual characteristics, also having had a workless mother during adolescence affects sons' risk of being workless in all country groups but in Nordic countries (Table 3, panel A, Model 1). The effect varies from 3 p.p. in Continental and Mediterranean countries (which corresponds to +12% and +30%, respectively) to 10 p.p. in CEE_{high} countries (+50%). However, when we control for education and other individual characteristics, the net effect remains significant, and comparable in magnitude to the gross one, only in Mediterranean and CEE_{high} countries (+12% and 40%, respectively). It remains only marginally in English-speaking and CEE_{low} countries (3-4 p.p., which corresponds to about +25%).

These results are coherent with Hypothesis 1*,* that parental employment does not influence sons' labour market outcomes in countries with well-developed VET systems, and where individual counselling and participation in activation-support policies is high. In such contexts, young men's chances of entering and remaining in paid employment are mainly related to individual factors, especially the level of education (Appendix, Table A2). By contrast, the correlation between parents' and sons' worklessness is still significant, even after controlling for a large set of individual characteristics, in countries characterised by sub-protective youth transition regimes and weak labour market institutions, or by competitive labour markets. These results suggest that the worklessness legacy between fathers and sons (over and above individual educational choices) may be due primarily to either the social network channel or the transmission of soft skills. It is reasonable to argue that, in Mediterranean countries (characterised by *sub-protective* youth transition regimes), fathers' labour market networks play a crucial role for their sons in the job-search process, whereas the role of mothers' network is much less important. In CEE countries, the role of mothers' employment status must be interpreted taking into account that the information about parents' employment refers to the 1990s, i.e. the transition period from centrally planned to market economies. Before the transition, adult women were normally engaged in full-time work in these countries (Fodor and Glass, 2018). Thus, being workless over the transition period could signal particular difficulties for these families, with negative consequences for their children, in terms of both social networks and development of soft skills. In any case, the role of fathers in Mediterranean countries, and the role of mothers in CEE countries for their sons warrant further attention in future research.

Finally, it is interesting to consider the relative importance of parents (mothers and fathers) for daughters and sons within each country group. For daughters, both gross and net effects of mothers' worklessness are larger than those of fathers in Continental and CEE countries, whereas they are smaller in Mediterranean countries. For sons, fathers have generally larger effects than mothers, except in CEE_{high} countries where mothers play an important role for their sons. In any case, mothers do play a role for their sons also in CEE_{low}, English-speaking, and Mediterranean countries.

Sensitivity analysis. We performed a sensitivity analysis by excluding three countries where the share of young adults with a workless mother was quite different from the other countries in their corresponding group. In particular, we dropped IE from the English-speaking group (which therefore includes only CY and UK), PT from the Mediterranean group (including only EL, ES, and IT), and HR from the CEE_{high} group (including only HU, BG, EE, LT, and LV).

Estimated marginal effects change significantly only for the English-speaking country group (Table 4).[12] When we exclude IE, neither mothers' nor fathers' worklessness appears to be correlated with their children's probability of being workless. However, while the effects of mothers become negligible, the estimated effect of fathers for their sons remains quite large (7

[12] The full set of results is available from the authors upon request.

p.p.), although not significant. This could be due to the small sample size, but we cannot verify this hypothesis. In any case, it is worth recalling that, in countries characterised by competitive labour markets, two opposing effects are at work: on the one hand, soft skills are expected to play an important role, increasing parental influence; on the other hand, social networks should play a limited role, reducing parental influence.

Table 4. Predicted probabilities and average marginal effects of parental worklessness during adolescence for young adults (aged 25-34), by country group

	Pred. prob.	Marginal effects				No. of obs.
		Model 1	Model 2	Model 3	Model 4	
		Panel A: young women				
		Workless mother				
English-speaking	0.240***	0.028	0.030	0.019	0.017	1,415
Mediterranean	0.373***	0.066***	0.054***	0.048***	0.048***	4,674
CEE (high youth unemployment)	0.347***	0.165***	0.101***	0.089***	0.088***	4,114
		Workless father				
English-speaking	0.240***	0,082	0,072	0,024	0,026	1,415
Mediterranean	0.373***	0.126**	0.110**	0.099**	0.097*	4,674
CEE (high youth unemployment)	0.347***	0.050	0.015	0.009	0.007	4,114
		Panel B: young men				
		Workless mother				
English-speaking	0.125***	0.038	0.034	0.015	0.021	1,176
Mediterranean	0.249***	0.037**	0.030**	0.033**	0.036**	4,515
CEE (high youth unemployment)	0.217***	0.132***	0.092***	0.114***	0.117***	4,285
		Workless father				
English-speaking	0.125***	0.151**	0.126**	0.080	0.067	1,176
Mediterranean	0.249***	0.279***	0.266***	0.258***	0.271***	4,515
CEE (high youth unemployment)	0.217***	0.122**	0.097**	0.090*	0.091*	4,285
		Control variables				
Age, country dummies, and parental background		X	X	X	X	
Individual education (exogenous)			X	X		
Other individual characteristics				X	X	
Individual education (endogenous)					X	

Notes: *** p < 0.01, ** p < 0.05, * p < 0.1. Control variables: see Notes, Table 2. Country groups: English-speaking countries: CY and UK; Mediterranean countries: EL, ES, and IT; CEE countries (high youth unemployment): BG, EE, HU, LT, and LV.
Source: authors' estimations based on EU-SILC 2011 cross-sectional data.

In short, the only relevant result of our sensitivity analysis is that the weak role of mothers for both their sons and daughters that emerged from Tables 2 and 3 was mainly driven by IE (where the effect of mothers must therefore be significant). For fathers, the exclusion of IE reduces the estimated marginal effect only slightly, suggesting that fathers do play some role also in UK and/or CY, but it makes it difficult to obtain precise estimates.

6. Conclusions

It is widely acknowledged that inequalities have increased in Europe, with young generations bearing the brunt. In addition, poverty and social exclusion tend to reproduce themselves. The children of parents holding marginal positions in the labour market are at risk of finding themselves in the same marginal position, as young adults. In short, the disadvantages suffered by parents (during children's adolescence) may reproduce themselves in early adulthood. Our general hypothesis is that parents' employment status during adolescence can affect their children's labour market outcomes in early adulthood through several channels, which differ by gender (of both parents and children) and by country groups characterised by distinct institutional settings (including the strength and efficiency of VET and PES).

We have examined how the intergenerational transmission of worklessness varies according to the gender of parents, and the gender of their children, as well as across different groups of European countries. To this end, we have used a sample of men and women aged 25-34 from the EU-SILC cross-sectional data (2011), and information about the working condition of their parents (during their children's adolescence), from the *ad hoc* module on the intergenerational transmission of disadvantages.

Young adults' risk of being workless is significantly correlated with both their fathers' and their mothers' employment status during adolescence in all country groups, but in Nordic countries. Fathers' effect is generally mediated by education and other individual characteristics, whereas mothers play a role also after controlling for individual characteristics (with only few exceptions). For daughters, both gross and net effects of mothers' worklessness are larger than those of fathers in Continental and CEE countries, whereas they are smaller in Mediterranean countries. For sons, fathers have generally larger effects than mothers, except in some CEE countries where mothers play a remarkable role for their sons. In transition countries, adult women were normally engaged in full-time work under communism; hence, having had a workless mother over the transition period could signal particular difficulties for these families, with negative consequences for their children, in terms of both social networks and development of soft skills.

Two specific results are worth noting. First, after controlling for education and other individual characteristics, having had a workless mother during adolescence increases daughters' probability of being workless in all country groups (plus 15% to 30%), but in Nordic and English-speaking (CY and UK) countries. This outcome is quite worrisome: it signals that, in many countries, achieving high education levels is not enough for young women to break the worklessness legacy of their mothers. Since the effect is lower in Mediterranean countries and larger in Continental and CEE countries, these results partially contradict our hypothesis that mothers' influence on their daughters' labour market outcomes should be stronger in countries characterised by traditional gender roles and a familistic welfare system, and weaker in countries characterised by cultural values

and a welfare system centred on the so-called "adult worker model". This could be due to the strength or weakness of institutions that favour the employment of working parents. Indeed, in traditional contexts, women are likely to face more constraints both within the household (less cooperation from their partners, less bargaining power) and in society at large (more discrimination, less flexible work-arrangements, scarce childcare services, etc.). This would prevent women's preferences for paid work from being reflected in their actual choices, i.e. daughters of working mothers may not participate in the labour market even if they would like to do so because institutional arrangements constrain their choices. This is a complex but important issue to explore in future research.

Second, in Mediterranean countries, the effect of fathers is particularly large for both their daughters and sons. In these countries, fathers' social networks may play an important role, together with the transmission of soft skills and attitudes towards work, because of weak labour market institutions, a lower degree of gender segregation, and reduced employment opportunities in the public sector due to austerity. In contrast, fathers' employment has no residual influence on sons' labour market outcomes in Continental and English-speaking countries, i.e. in countries with more competitive labour markets, with well-developed VET systems, and where individual counselling and participation in activation-support policies is high. In such contexts, young men's chances of entering and remaining in paid employment are mainly related to individual factors, especially education attainment (which is influenced by the family background). These results confirm the weaknesses of labour market institutions (especially VET and PES) in Mediterranean countries, but they also highlight the social risks associated with relying on the family support for overcoming the difficulties young adults face in the labour market.

Our findings highlight that the analysis of the legacy of family differences in terms of the intergenerational transmission of disadvantages is important in order to better understand existing inequalities in labour market outcomes among young adults in Europe, with notable differences by gender and across country groups. This result has crucial implications from a policy perspective, especially in countries where the evolution of welfare systems moved from the support of people in need towards individual responsibility. Existing inequalities in labour market outcomes among young adults in Europe are affected by the intergenerational transmission of labour market disadvantages, with important differences according to the gender of both parents and children, and across country groups. Inequalities in labour market outcomes among young people call for a substantial strengthening of key institutions: well-developed VET and relatively efficient PES (including individual counselling and activation-support policies). In particular, our results highlight the urgent need for well-designed policy initiatives (i.e. fitted to the national/local institutional and economic specificities) able to improve labour market efficiency and to reduce inequalities among young adults linked to paternal (and maternal) employment in Mediterranean (and CEE) countries.

A limitation of the present study is that our analysis is focused on country groups. This is chiefly because we were interested in comparing the role of mothers and fathers for their adult children's labour market outcomes in different socioeconomic contexts, and the sample size did not permit an analysis at country level. Hence, the attempt to identify cross-gender intergenerational correlations in worklessness is both a strength and a limitation of this study.

References

APGAR L., MCMANUS P. A. (2018), *Cultural persistence and labor force participation among partnered second-generation women in the United States*, "Social Forces", 98, 1, pp. 211-44.

BERLOFFA G., MATTEAZZI E., VILLA P. (2019), *The worklessness legacy. What difference do mothers make for youth transitions?*, in J. O'Reilly *et al.* (eds.), *Youth labor in transition: Inequalities, mobility and policies in Europe*, Oxford University Press, New York, pp. 294-333.

BLACK S. E., DEVEREUX P. J. (2010), *Recent developments in intergenerational mobility*, in O. Ashenfelter, D. Card (eds.), *Handbook of Labor Economics*, 4 (B), Elsevier, Amsterdam, pp. 1487-541.

BOWLES S., GINTIS H. (2002), *The inheritance of inequality*, "Journal of Economic Perspectives", 16, 3, pp. 3-30.

CENTENO M., FERNANDES P. A. (2004), *Labour market heterogeneity: Distinguishing between unemployment and inactivity*, "Banco de Portugal Economic Bulletin", March, pp. 61-8.

CORAK M., PIRAINO P. (2010), *Intergenerational earnings mobility and the inheritance of employers*, "IZA Discussion Paper", No. 4876, IZA Institute of Labor Economics, Bonn.

EKHAUGEN T. (2009), *Extracting the causal component from the intergenerational correlation in unemployment*, "Journal of Population Economics", 22, 1, pp. 97-113.

ENDENDIJK J. J., GROENEVELD M. J., VAN BERKEL S. R., HALLERS-HAALBOOM E. T., MESMAN J., BAKERMANS-KRANENBURG M. J. (2013), *Gender stereotypes in the family context: Mothers, fathers, and siblings*, "Sex Roles", 68, 9-10, pp. 577-90.

FARRÉ L., VELLA F. (2013), *The intergenerational transmission of gender role attitudes and its implications for female labor force participation*, "Economica", 80, 318, pp. 219-47.

FERNÁNDEZ R. (2007), *Women, work and culture*, "Journal of the European Economic Association", 5, 2-3, pp. 305-32.

FERNÁNDEZ R., FOGLI A., OLIVETTI C. (2004), *Mothers and sons: Preference formation and female labor force dynamics*, "The Quarterly Journal of Economics", 119, 4, pp. 1249-99.

FERRAGINA E., SEELEIB-KAISER M. (2011), *Thematic review: Welfare regime debate: past, present, futures?*, "Policy and Politics", 39, 4, pp. 583-611.

FODOR E., GLASS C. (2018), *Labor market context, economic development, and family policy arrangements: Explaining the gender gap in employment in Central and Eastern Europe*, "Social Forces", 96, 3, pp. 1275-302.

GRANOVETTER M. (1995), *Getting a job: A study of contacts and careers*, The University of Chicago Press, Chicago-London.

GREGG P., JONSSON J. O., MACMILLAN L., MOOD C. (2017), *The role of education for intergenerational income mobility: A comparison of the United States, Great Britain, and Sweden*, "Social Forces", 96, 1, pp. 121-52.

GREGG P., MACMILLAN L., NASIM B. (2012), *The impact of fathers job loss during the recession of the 1980s on their children's educational attainment and labour market outcomes*, "Fiscal Studies", 33, 2, pp. 237-64.

HECKMAN J., STIXRUD J., URZUA S. (2006), *The effects of cognitive and noncognitive abilities on labor market outcomes and social behaviour*, "Journal of Labor Economics", 24, 3, pp. 411-82.

HÉRAULT N., KALB G. (2016), *Intergenerational correlation of labor market outcomes*, "Review of Economics of the Household", 14, 1, pp. 231-49.

HUDSON J., KÜHNER S. (2009), *Towards productive welfare? A comparative analysis of 23 OECD countries*, "Journal of European Social Policy", 19, 1, pp. 34-46.

IOANNIDES Y. M., LOURY L. D. (2004), *Job information networks, neighborhood effects and inequality*, "Journal of Economic Literature", 42, 4, pp. 1056-93.

JERRIM J., MACMILLAN L. (2015), *Income inequality, intergenerational mobility, and the Great Gatsby Curve: Is education the key?*, "Social Forces", 94, 2, pp. 505-33.

KARAMESSINI M., RUBERY J. (2013), *Women and austerity: The economic crisis and the future for gender equality*, Routledge, London-New York.

KAUPPINEN T., ANGELIN A., LORENTZEN T., BÄCKMAN O., SALONEN T., MOISIO P., DAHL E. (2014), *Social background and life-course risks as determinants of social assistance receipt among young adults in Sweden, Norway and Finland*, "Journal of European Social Policy", 24, 3, pp. 273-88.

KECK W., SARACENO C. (2013), *The impact of different social-policy frameworks on social inequalities among women in the European Union: The labour-market participation of mothers*, "Social Politics: International Studies in Gender, State & Society", 20, 3, pp. 297-328.

MACMILLAN L. (2013), *The role of non-cognitive and cognitive skills, behavioural and educational outcomes in accounting for the intergenerational transmission of worklessness*, "DoQSS Working Paper", No. 13-10, Institute of Education, University of London.

MACMILLAN L. (2014), *Intergenerational worklessness in the UK and the role of local labour markets*, "Oxford Economic Papers", 66, 3, pp. 871-89.

MACMILLAN L., GREGG P., JERRIM J., SHURE N. (2018), *Children in jobless households across Europe: Evidence on the association with medium-and long-term outcomes*, "Journal of Poverty and Social Justice", 26, 3, pp. 335-58.

MASCHERINI M. (2019), *Origins and future of the concept of NEETs in the European policy agenda*, in J. O'Reilly *et al.* (eds.), *Youth labor in transition: inequalities, mobility and policies in Europe*, Oxford University Press, New York, pp. 503-28.

MÄDER M., RIPHAHN R., SCHWIENTEK C., MÜLLER S. (2015), *Intergenerational transmission of unemployment: Evidence from German sons*, "Jahrbücher für Nationalökonomie und Statistik", 235, 4-5, pp. 355-75.

MCGINN K. L., RUIZ CASTRO M., LINGO E. L. (2019), *Learning from mum: Cross-national evidence linking maternal employment and adult children's outcomes*, "Work, Employment and Society", 33, 3, pp. 374-400.

MONTGOMERY J. D. (1991), *Social networks and labor-market outcomes: Toward an economic analysis*, "The American Economic Review", 81, 5, pp. 1408-18.

O'NEILL D., SWEETMAN O. (1998), *Intergenerational mobility in Britain: Evidence from unemployment patterns*, "Oxford Bulletin of Economics and Statistics", 60, 4, pp. 431-47.

O'REILLY J., LESCHKE J., ORTLIEB R., SEELEIB-KAISER M., VILLA P. (eds.) 2019), *Youth labor in transition. Inequalities, mobilities and policies in Europe*, Oxford University Press, New York.

PINTELON O., CANTILLON B., VAN DEN BOSCH K., WHELAN C. T. (2013), *The social stratification of social risks: The relevance of class for social investment strategies*, "Journal of European social policy", 23, 1, pp. 52-67.

POHL A., WALTHER A. (2007), *Activating the disadvantaged. Variations in addressing youth transitions across Europe*, "International Journal of Lifelong Education", 26, 5, pp. 533-53.

RAITANO M., VONA F. (2015), *Measuring the link between intergenerational occupational mobility and earnings: Evidence from eight countries*, "Journal of Economic Inequality", 13, 1, pp. 83-102.

SIIM B., BORCHORST A. (2017), *Gendering European welfare states and citizenship: revisioning inequalities*, in P. Kennett, N. Lendvai-Bainton (eds.), *Handbook of European Social Policy*, Elgar, Cheltenham, pp. 60-74.

SIRNIÖ O., MARTIKAINEN P., KAUPPINEN T. M. (2013), *Intergenerational determinants of income level in Finland*, "Social Forces", 92, 2, pp. 463-90.

STEVENS G., BOYD M. (1980), *The importance of mother: Labor force participation and intergenerational mobility of women*, "Social forces", 59, 1, pp. 186-99.

SZELEWA D., POLAKOWSKI M. P. (2008), *Who cares? Changing patterns of childcare in Central and Eastern Europe*, "Journal of European Social Policy", 26, 1, pp. 48-65.

TENENBAUM H. R., LEAPER C. (2002), *Are parents' gender schemas related to their children's gender-related cognitions? A meta-analysis*, "Developmental Psychology", 38, 4, pp. 615-30.

ZWYSEN W. (2015), *The effects of father's worklessness on young adults in the UK*, "Journal of European Labor Studies", 4, 2, pp. 1-15.

Appendix

Table A1. Average marginal effects for women's probability of being workless (age 25-34), by country group

	Nordic	English-speaking	Continental	Mediterranean	CEE (low youth unemployment)	CEE (high youth unemployment)
Workless father	0.015	0.048	0.041	0.124**	0.041	0.034
Workless mother	0.034	0.040*	0.057***	0.059***	0.094***	0.094***
One-parent family	0.036	0.021	0.023	0.026	0.006	0.004
Workless lone mother	–0.011	0.028	–0.046	–0.013	0.031	–0.116**
Years of schooling	–0.022	–0.026	–0.023**	–0.020*	–0.027**	–0.034***
Parenthood	0.142***	0.267***	0.247***	0.145***	0.260***	0.198***
Citizenship	0.353***	0.055	0.206***	0.142***		
Living with parents	0.196**	0.107**	0.039	0.138***	0.046***	0.087***
Living in a couple	0.060	0.070**	0.020	0.089***	0.061**	0.074**
Medium educated partner	–0.067*	–0.077**	–0.051**	–0.055*	–0.059**	–0.041
Highly educated partner	–0.034	–0.079	–0.020	–0.064	–0.063	–0.017
No. of observations	1,386	1,906	5,353	5,304	5,244	4,779

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Predicted probabilities of worklessness are reported in Table 2. The dummy variable for non-EU citizenship could not be included in the estimation for CEE countries because there were too many missing values. Other control variables: see Notes, Table 2. Country groups: see Notes, Table 1.
Source: authors' calculation based on EU-SILC 2011 cross-sectional data.

Table A2. Average marginal effects for men's probability of being workless (age 25-34), by country group

	Nordic	English-speaking	Continental	Mediterranean	CEE (low youth unemployment)	CEE (high youth unemployment)
Workless father	0.063	0.102*	0.028	0.242***	0.074**	0.062
Workless mother	–0.008	0.037*	0.014	0.028**	0.030*	0.083***
One-parent family	0.002	0.060	0.024*	–0.021	0.037**	0.021
Workless lone mother	0.067	0.088	0.012	0.073	0.134*	0.013
Years of schooling	–0.017	–0.010	–0.012*	–0.016**	–0.014	–0.034***
Parenthood	–0.008	0.071**	–0.016	0.026	–0.003	–0.005
Citizenship	0.174**	0.111**	0.094***	0.058**		
Living with parents	0.068	0.075**	0.039***	0.120***	0.046***	0.037**
Living in a couple	–0.042	0.007	–0.030	–0.010	–0.013	–0.034
Medium educated partner	–0.056**	–0.097***	–0.056***	–0.077***	–0.055***	–0.069**
Highly educated partner	–0.040	–0.162***	–0.060***	–0.109***	–0.064**	–0.109***
No. of observations	1,402	1,460	4,719	5,129	5,095	5,007

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Predicted probabilities of worklessness are reported in Table 3. The dummy variable for non-EU citizenship could not be included in the estimation for CEE countries because there were too many missing values. Other control variables: see Notes, Table 2. Country groups: see Notes, Table 1.
Source: authors' calculation based on EU-SILC 2011 cross-sectional data.