

Occupational sorting and the transmission of self-employment between generations

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Abstract

Existing research has focused on factors explaining self-employment decisions, and the intergenerational transmission of self-employment has been posited as one explanatory factor. However, findings differ across countries, and the channels for such transmission remain unclear. Using data from the European Union Statistics on Income and Living Conditions, we analyze whether working in the same occupation as parents, conditional on parents' self-employment, is related to being self-employed. Results show that working in the same occupation as parents is statistically and significantly related to being self-employed, which may indicate the existence of intergenerational transmission of self-employment. Furthermore, this relationship is especially significant between fathers and sons.

Keywords: Intergenerational transmission; self-employment; occupation; EU-SILC data.

JEL Codes: D65; J62; E24.

1. Introduction

In this paper, we build on Giménez-Nadal et al. (2021, 2022), and analyze whether working in the same occupation as parents, conditional on both children and parents being self-employed, represents a potential channel to explaining self-employment behavior, in nine European countries. The analysis of the underlying factors is important, since self-employment has been found to be a driver of innovation and growth (Jian et al., 2021). Many channels to explain self-employment behavior have been explored, and prior research has shown that intergenerational transmission of self-employment exists, but results are mixed and vary significantly across countries and methods (Lindquist et al., 2015). Furthermore, the reasons behind these transmissions remain unclear (Vladasel et al., 2020). Potential channels include human capital (Dunn and Holtz-Eakin, 2000; Colombier and Masolet, 2008), culture (Laspita et al., 2012), genetics (Nicolaou and Shane, 2010), and business inheritance (Bennedsen et al., 2007). Another factor that may determine self-employment is occupational sorting, although that has rarely been studied beyond business inheritance.

Building on Giménez-Nadal et al. (2021, 2022), this paper explores the intergenerational transmission of self-employment, with a focus on occupational sorting. In doing so, we use the European Union Statistics on Income and Living Conditions (EU-SILC) data for nine countries, and we focus on whether the current occupation of adults and the occupation of their parents when those adults were 14 drive the results. We show that working in the same occupation as parents, conditional on self-employment, represents a strong and statistically significant channel for the transmission of self-employment, especially among males. We contribute to the literature by positing occupational sorting as a possible channel for the transmission of self-employment.

2. Conceptual framework

Self-employment is a complex phenomenon, and some authors have concluded that there exists an intergenerational transmission of self-employment, from parents to their offspring (Giménez-Nadal et al., 2022). Nevertheless, the channels for such transmission remain unclear, and some authors have argued that occupational following in self-employment may be a driver for such transmission (Colombier and Masolet, 2008). For instance, business inheritance is a

special case of occupational following, whereby workers inherit the business of their parent and thus end up being self-employed, in the same occupation as the father (Aldrich and Kim, 2007).

In addition to business inheritance, occupational sorting is a potential channel for the transmission of self-employment even when a business is not inherited. For instance, self-employed individuals in certain industries may develop specific managerial skills (Colombier and Masclet, 2008), or build fruitful networks (Brüderl and Preisendörfer, 1998), that could help their children to become self-employed and establish a new business in the same industry. Alternatively, individuals may simply aim to follow their parent as a role model in self-employment (Andersson and Hammarstedt, 2011). In that context, our objective is to explore whether occupational sorting is a potential channel for the intergenerational transmission of self-employment in a general multi-country context.

3. Data

We use data from the EU-SILC special module on Intergenerational Transmission for the year 2011, and for the following countries: Austria, Belgium, France, Greece, Luxembourg, the Netherlands, Spain, Sweden, and the UK.¹ The special module collects information about the parents of the core sample respondents, when those respondents were 14 years old. The employment status of individuals and parents is self-reported, and differentiates among employees, self-employed workers, and other non-working categories. We follow Giménez-Nadal et al. (2022) and retain working individuals who completed the special module, aged between 25 and 59 years old, for whom there is information about both parents.² Sample restrictions leave us with information for 57,741 individuals.

The EU-SILC data allows us to define several socio-demographic characteristics. This includes gender, age, parents' age (when respondents were 14), education recoded in two dummies (secondary education, and University education), household income (measured in Euros per year), marital status, number of children, and household financial situation when

¹ Countries from Eastern Europe are eliminated as they display different self-employment behaviors (Naudé, 2010). This module has not been repeated since 2011.

² Results for single-parent individuals are robust and available upon request.

respondents were 14, taking values from 1 (“very bad”) to 6 (“very good”). Summary statistics are available upon request. We do not use information about parents’ education as this is likely to be endogenous. To explore the correlation between parents’ and respondents’ occupation, we use the occupational classification included in the EU-SILC: 1) Managers; 2) Professionals; 3) Technicians and associate professionals; 4) Clerical support workers; 5) Service and sales workers; 6) Agriculture, forestry, and fishery; 7) Craft and related trades workers; 8) Plant, machine operators, assemblers; and 9) Elementary occupations. Figure 1 shows the percentage of employed and self-employed workers in each occupational group, and shows that employees and self-employed workers sort differently across occupation groups.

4. Strategy and results

The fact that self-employed workers are concentrated in certain occupations leads us to ask whether the results are driven by intergenerational transmission, or by self-employed workers being restricted to certain occupations. To analyze this issue, we follow the intergenerational elasticity approach (Solon, 2002). For each respondent i in household j , M and F refer to the mother and the father of that individual, respectively, and we estimate the following equation using OLS:

$$S_{ij} = \beta_{0k} + \beta_{1k}X_{ij} + \sum_{k=M,F}(\beta_{2k}S_{kj} + \beta_{3k}O_{kj} + \beta_{4k}S_{kj}O_{kj} + \beta_{5k}X_{kj}) + \varepsilon_{ij}, \quad (1)$$

where S_{ij} takes value 1 if individual i of household j is self-employed; S_{kj} represents the self-employed dummies of parents; O_{kj} takes value 1 if the respondent works in the same occupation as parent k ; and X_{ij} and X_{kj} represent the socio-demographics of respondents and parents.³ Finally, ε_{ij} represents the error term.

Parameters β_{4k} determine whether working in the same occupation as parent k , conditional on the parent being self-employed, is correlated with an *additional* intergenerational correlation of self-employment, beyond the intergenerational correlation captured by coefficients β_{2k} . Equation (1) is estimated separately for males and females, all the estimates include sample

³ Variance Inflation Factors reveal no multicollinearity.

weights, occupation, and country fixed effects, and standard errors are clustered at the country level.

Estimates are shown in Table 1. (Additional coefficients are available upon request.) Results reveal a positive and statistically significant intergenerational correlation of self-employment. Furthermore, the coefficient of the interaction term is estimated to be positive and highly significant. If the father (mother) was self-employed, and worked in the same occupation as the respondent, the probability of the respondent being self-employed increases by 24.7% (12.6%) among male respondents, and 12.1% (17.8%) among female respondents, in addition to the baseline intergenerational correlation of 9.2% (5.4%) among males, and 2.8% (4.4%) among females. Thus, the results suggest that working in the same occupation as the parents, if the parents were self-employed, is a strong channel of intergenerational transmission of self-employment from parents to their offspring. Furthermore, this channel seems stronger between fathers and sons.

5. Conclusions

This paper empirically analyzes the intergenerational transmission of self-employment in Europe, using data from the EU-SILC 2011, and focusing on occupational sorting as a channel for such transmission. The results point to a positive and significant intergenerational correlation of self-employment, which is stronger when respondents work in the same occupation as that of their parents during the respondent's childhood. These effects are stronger between fathers and sons, which indicates gender differences for this transmission.⁴

Recent efforts have been made by institutions to promote self-employment. Results suggest that intergenerational transmission of self-employment may be determined by long-term factors when workers were young, such as working in the same occupation as the parents. Policy makers promoting self-employment should consider these results in order to encourage this labor

⁴ The analysis has certain limitations. For instance, no causal results can be estimated, we do not have information on life-cycle employment records, and we do not have information on business inheritance. Furthermore, estimated R-squared are relatively low, indicating that the models explain a low level of variance, but in line with existing research (Gimenez-Nadal et al., 2022).

option. Further research should analyze different channels across countries, such as entrepreneurial culture, social norms, business inheritance, and managerial skills.

Statements

The authors declare no potential conflicts of interest. The data that support the findings of this study are available on request.

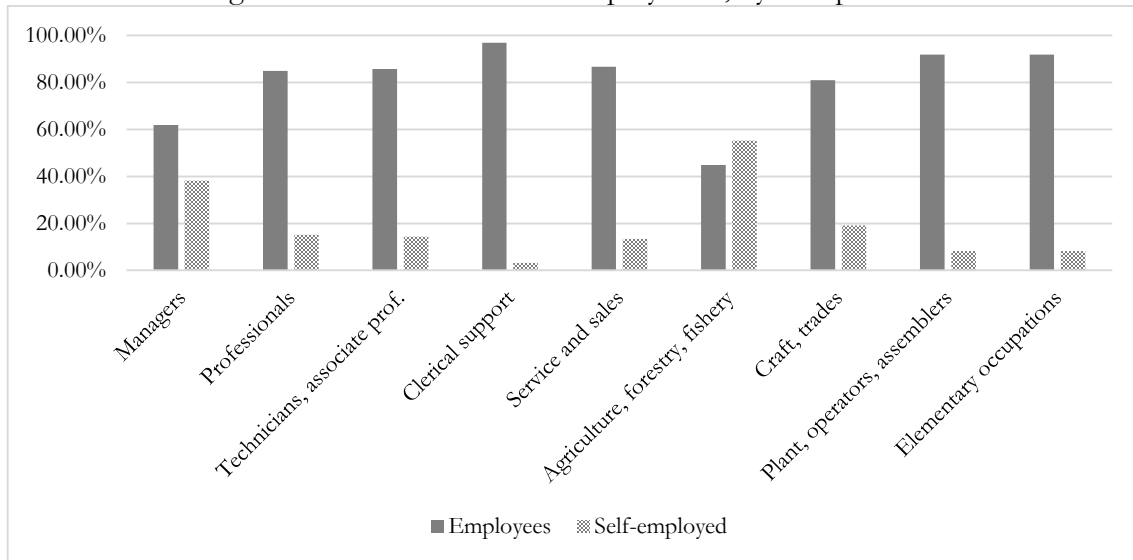
This work was supported by the Government of Aragón [Project S32_20R, funded by Program FSE Aragón 2014–2020]; the Spanish Ministry of Science and Innovation [Project PID2019-108348RA-I00, funded by MCIN/AEI/10.13039/501100011033]; and the Cátedra Emprender [Project C006/2021_2].

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Figure 1. Distribution of self-employment, by occupation



Note: The sample (EU-SILC 2011) is restricted to employed individuals.

Table 1. Main results

	Men (1)	Women (2)
Father variables		
Self-employed	0.092*** (0.006)	0.028*** (0.008)
Same occupation	-0.016*** (0.004)	0.009 (0.015)
Self-employed * same occ.	0.247*** (0.037)	0.121*** (0.022)
Mother variables		
Self-employed	0.054*** (0.009)	0.044*** (0.007)
Same occupation	-0.004 (0.004)	-0.017*** (0.005)
Self-employed * same occ.	0.126** (0.044)	0.178*** (0.037)
Constant	-0.364 (0.258)	-0.795** (0.258)
All controls	Yes	Yes
R-squared	0.124	0.086
No. Observations	28,788	28,953

Note: Standard errors clustered by country in parentheses. The sample (EU-SILC 2011) is restricted to employed individuals. The dependent variable is the self-employment status of respondents. *** Significant at the 99% level; ** significant at the 95% level; * significant at the 90% level.