Occupational prestige and parental influence on sons and daughters

Inmaculada García-Mainar[a] Víctor M. Montuenga[a,*]

[a] University of Zaragoza, Facultad de Economía y Empresa, Gran Vía 2, 50005, Zaragoza, Spain

Abstract

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Keywords: gender inequality; intergenerational social mobility; occupational prestige; parental influence

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***Corresponding author:** Victor Montuenga, vimontue@unizar.es, Tel: +34976761778

E-mail addresses and ORCID numbers

igarcia@unizar.es 0000-0003-2503-2829 (I. Garcia-Mainar)

vimontue@unizar.es 0000-0003-2893-4051 (V. Montuenga)

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Introduction

There is increasing interest in the social sciences in the study of intergenerational social mobility, which refers to the study of the lack of persistence in socio-economic outcomes across generations within the same family (see Erikson and Goldthorpe, 2002; Blanden, 2013; Torche, 2015). The present work aims to provide evidence of the intergenerational transmission of socio-economic status in Spain, using a measure of occupational prestige. Whereas there exists an extensive literature on intergenerational mobility, studying the cases of the UK, the US, and Nordic countries, evidence for other European countries is quite scarce. In this respect, the case of Spain has been less frequently studied.

The dearth of adequate data has hampered the estimation of robust values for intergenerational elasticity of socio-economic status in Spain. Thus, intergenerational mobility in earnings is estimated from cross-sectional or short-sample databases, which only provide information on annual earnings, while socio-economic status is better approximated by measures of permanent income. Furthermore, parents' information is rarely provided for the children's generation when they have left home, and in these rare cases, information about parents' earnings is lacking; rather, it is inferred from data on occupational and/or educational attainment (Cervini-Pla, 2013, 2015). Intergenerational elasticity is then estimated by two-sample two-stage least squares (TS2SLS). Other studies have used some few categories of educational and/or occupational attainment to measure intergenerational elasticity (Caparros, 2016; De Pablos and Gil, 2016). Our work offers a complementary study of intergenerational mobility, using occupational prestige as a measure of socio-economic status, with the aim of providing additional evidence and addressing certain limitations faced by prior work in Spain. Some of the advantages of our approach are that occupational prestige is a more stable and more accurate measure of permanent socio-economic status than annual earnings, that co-residence bias is not present in the estimation, and that an ample set of occupational categories (over 200) is considered.

A range of international studies have used measures of occupational prestige to estimate the intergenerational elasticity of socio-economic status (Ermish et al, 2006; Francesconi and Nicoletti, 2006). The fact that occupational prestige reflects the occupation's "contribution to society" and gathers diverse occupational characteristics that are valued by individuals (wages, educational attainment, or skills) suggests that it may be a good proxy of socio-economic status, providing a complementary and supplementary view of social mobility, compared to simple monetary indicators. Additionally, it is argued that prestige is a more stable indicator of socio-economic status than annual earnings, and is more easily retrieved from interviewed individuals in surveys asking retrospective questions about parents' characteristics (Ermish et al., 2006). This approach is especially appealing for studying the Spanish case, given the lack of large-scale longitudinal data on

earnings. In contrast to prior studies that use a reduced number of occupations or social classes (fewer than ten) representing qualitative variables, the use of occupational prestige in our study allows us to consider this as a continuous quantitative variable, facilitating the estimation of intergenerational elasticity based on typical regression equations. The only priors study following a similar approach is that by Carabaña (1999), with data from 1991. Since that year, many changes have occurred, and it has become essential to analyse the evolution of intergenerational mobility in Spain with much more recent data.

From an international perspective, the case of Spain is interesting, since it can stand for the case of Mediterranean/Southern countries in Europe. The proposed three-regime welfare states classification of Esping-Andersen (1990) - liberal/Anglo-Saxon, conservative/Continental, and social democratic/Nordic - has progressively incorporated new subgroups. For example, Trifiletti (1999) and Arts and Gellisen (2002) consider that the Mediterranen/Southern rim combines traits from both the conservative and the liberal models, but clearly differs from them. Thus, in these countries, there is little state intervention in the welfare sphere (as in the liberal countries), but this is counterbalanced by some benefit levels being very generous (e.g., old-age pensions), and health care being institutionalized as a right of citizenship. For its part, the subsidiary role of the state, typical of the Continental countries, only covers, in the Mediterranean countries, those social risks that the family cannot protect itself against. Regarding social mobility, Mediterranean countries tend to be less meritocratic, and family ties are especially important in diverse spheres of life, as for example, in the labour market, where many jobs are filled through social referrals. Empirical studies show that the Mediterranean/Southern countries exhibit higher intergenerational elasticities of income than Nordic and Continental European countries, in line with those of Liberal/Anglo-Saxon countries (see Esping-Andersen and Wagner, 2012; Cervini-Pla, 2015).

Against this background, this work aims to provide insights into the social mobility of Spanish workers by computing intergenerational elasticities in terms of occupational prestige. Specifically, this is accomplished by comparing the occupational prestige of an individual, at the moment of the interview, to that of his/her parents when the individual was sixteen. We focus on differences in intergenerational mobility by gender and by cohort. International studies have routinely shown that women are more socially mobile than men, since their intergenerational elasticity is lower than that of men. A second concern is to test whether social mobility is greater among more recent generations, which would indicate that the influence of parents' social position is losing importance in determining the socio-economic status and occupational prestige of sons and daughters. Individual and job characteristics, including occupational information, are obtained from the Quality of Working Life Survey (*Encuesta de Calidad de Vida en el Trabajo*, ECVT hereafter), a

national database, while occupational prestige data come from a SIOPS-type Spain-focused scale PRESCA2, elaborated by Carabaña and Gómez-Bueno (1996).[1]

Transition matrices and descriptive evidence are used to show how the occupational prestige of sons and daughters is related to that of their parents, and regression analysis is employed to estimate intergenerational occupational elasticities. The age of individuals and the birth cohort are taken into account in assessing mobility over time. Since the proportion of working mothers in the sample is low, their participation status, rather than their occupational prestige, is used to account for the mothers' influence on children's outcomes. Results confirm that mobility in Spain is in the medium range, from an international perspective, and is higher for daughters than for sons. An important contribution of our study is that this result is robust to different specifications, considering the influence of mothers, the age of respondents, and the birth cohort, so that the overall pattern remains. The parent's effect is weakening across generations, even though it remains higher for sons. With respect to studies using other measures of socio-economic status in Spain, the point estimates are somewhat lower, suggesting that TS2SLS may be upwardly-biased. Specifically, our estimates show that a 10% change in father's occupational prestige is associated with a one-third per-cent change in their offspring's occupational prestige in the same direction.

The structure of the paper is as follows. The following section discusses the interpretation of social mobility and the interest of its study in Spain. Section 3 reviews prior research. In Section 4, the concept of occupational prestige is defined, the databases are briefly described, and a descriptive analysis is carried out. Social mobility is examined in Section 5 through the estimation of intergenerational prestige elasticities. A series of additional exercises are carried out in Section 6 to check the robustness of the results, and Section 7 presents our conclusions.

2. Social mobility

2.1 Occupational prestige

In a society where the relative position of an individual in the social hierarchy that is directly and fully inherited from that of the parents is considered unfair, an increase in intergenerational mobility is desirable (Bjorklund and Jantti, 2009). A debatable question is how mobility is defined. Whereas a strict definition of social mobility requires upward or downward movements through a system of social hierarchy or stratification, thereby representing a change in social class, a weaker concept needs refer only to a change in some indicator of socio-economic status (earnings, income, occupational prestige) but not necessarily a change in social class. Studying mobility through changes in the hierarchy of social classes is usually addressed through contingency tables showing

[1] The main advantage of PRESCA2 over SIOPS is that the former provides a cardinal measure of occupational prestige, whereas the latter is merely ordinal. SIOPS: The Standard International Occupation Prestige Scale (Treiman, 1977).

movements from origin-to-destination class positions (Erikson and Goldthorpe, 1992, 2002) with recent contributions suggesting the study of stratification changes among micro-classes/occupations (see, for example, Weeden and Grusky, 2005; Johnson et al., 2009; and Lungu et al., 2013). Occupations are seen as an important conduit for social reproduction, and allow for the establishment of a hierarchy that is more open and universalistic than the property-based class system (Peng, 2001; Johnson et al., 2009).

For economists, although earlier developments of socioeconomic transmission were based on income (Becker and Tomes, 1979, 1986), a variety of indices of socio-economic status have been used to compute correlations or regression coefficients across individuals or over periods of time, including occupational categories (see, among others, Ermish et al., 2006; Hellerstein and Morrill, 2011; Long and Ferrie, 2013). In order to capture changes across as many occupations as possible, an indicator of the social position that an occupation represents, such as occupational prestige, is frequently used. Occupational prestige presents certain advantages with respect to monetary indicators of socio-economic status: it is more stable and less affected by transitory shocks than wages; it is less susceptible to measurement errors; and, importantly, since it gathers into a simple indicator a bundle of job characteristics, such as wages, educational attainment, and skills, it represents the underlying societal values of an occupation (see, Francesconi and Nicoletti, 2006; Ermish et al., 2006; Blanden, 2013, 2015).

2.2 The case of Spain

Certain features justify Spain as a case worth of study. First, categorised as a Mediterranean country, where welfare state benefits are complemented with extensive family networks to cover social risks, prior studies have shown that Spain presents higher mobility than liberal countries (the UK, the US) and other Mediterranean countries such as Italy (see Esping-Andersen and Wagner, 2012; Cervini-Pla, 2015). Second, the importance of family ties can be seen in later emancipation and the accession to employment through social referrals (Cervini-Pla, 2015; Davia and Legazpe, 2017), with both circumstances being important determinants of occupational allocation in Spain. Third, the labour market is strongly segmented, with the rate of temporary contracts averaging 30% during the last 30 years. The high unemployment rate (over 25% during the Great Recession) has favoured the expansion of self-employment and of part-time and other flexible contracts, that has widened the differences in job conditions between insiders and outsiders. Finally, since the 1960s, public education has expanded. A strong financial effort has been made to broaden secondary education and develop the higher education system. The share of employees (aged 25-64) with higher-level studies has risen from less than 10% in 1980 to near 35% today, with greater increases in the case of women (De Pablos and Gil, 2016). Simultaneously, education reforms have introduced later

tracking at school: the 1970 (General) Education Law extended compulsory education from 12 to 14 years old; and LOGSE (*Ley Orgánica de Ordenación General del Sistema Educativo*, passed in 1990) from 14 to 16 years old, both leading to the separation of education in later stages.

3. Prior research

Observed mobility patterns differ whether socio-economic status or social class is used (see Blanden, 2013, for a detailed discussion on this matter). In this article, we focus on social mobility measured through changes in socio-economic status. Despite that social mobility appears to increase over time, a significant correlation still exists between indicators of socio-economic status of parents and that of their children, so that the family background is still of great importance in the individual's work-life achievement (Erikson and Goldthorpe, 1992; Bowles and Gintis, 2002; Blanden, 2013).

The seminal studies by Becker and Tomes (1979, 1986), Atkinson (1981), and Atkinson et al. (1983) spurred a great deal of research that has been surveyed in Solon (1999; 2002), Bowles and Gintis (2002), Eriksson Goldthorpe (1992, 2002) and, much more recently, in Black and Devereux (2011), Bjorklund and Jantti (2009), Blanden (2013), Jantti and Jenkins (2015), and Torche (2015). Most of the literature has focused on measuring the extent of mobility and on the mechanisms through which children' outcomes reproduce parents' outcomes. Considerations of social reproduction through the inheritance of genetic traits or psychological factors, the family transmission by means of formal education and skills, and social-level transmission affected by type of school, neighbourhood, or networking, are now investigated with the emergence of larger datasets. In this framework, the issues of sibling correlation, assortative mating, and marriage patterns, as well as the intra-household division of labour are matters of interest in recent studies (Blanden, 2015, Cappellari, 2016).

The study of mobility considering gender and the birth cohort has been less frequently analysed. International studies agree that intergenerational transmission appears to be clearer from fathers to sons and from mothers to daughters than from cross-gender combinations, since the parents of the same gender may act as a role model for the children, or may constitute the gender aspiration. Transmission is stronger from fathers to sons than from fathers to daughters, which leads to the notion that women are more mobile than men. This is a common result, even when using different indicators of socio-economic status (income, education, occupation) and across countries (Couch and Dunn, 1997; Dearden et al., 1997; Österberg, 2000; Schwenkenberg, 2014). Some of the literature exploring gender differences in social reproduction investigates the transmission of family income to circumvent the difficulty in the lack of data of non-working mothers. Chadwick and Solon (2002) for the US and Hirvonen (2008) for Sweden show lower intergenerational elasticity of

parent-daughter pairs, compared to parent-son pairs, confirming again the greater social mobility of women. However, these studies estimate intergenerational elasticity as being somewhat higher than do studies using individual earnings, since the influence of assortative mating leads to marriage homogamy and makes society more immobile (Ermish et al., 2006; Hirvonen, 2008).

A number of articles study social reproduction using occupations. Carmichael (2000) for the UK, Di Prieto and Urwin (2003) for Italy, and Nguyen et al. (2005) for the US, estimate the intergenerational elasticity between occupations, including additional variables such as age, education, industry, and family-related variables. Using ordered probit for a few (four to six) large groups of occupations, these three studies all reach similar conclusions, that can be summarised as follows: i) a significant link exists between parental occupation and the achievements of offspring; ii) there is a stronger link between fathers and offspring than between mothers and offspring; iii) there is a stronger link between father and son than between father and daughter; and iv) there is a stronger link between mother and daughter than between father and daughter. Nevertheless, daughters are more likely to enter their father's occupation than any other occupation, and this probability has increased substantially over time in the US (Hellerstein and Morrill, 2011).

The relatively scant evidence for the case of Spain does not differ substantially from this general pattern. Intergenerational persistence has basically been addressed in Spain through the estimation of intergenerational earnings elasticity (Sánchez-Hugalde, 2004; Pascual, 2009; Cervini-Pla, 2013, 2015). Average estimates in these studies lie in the range 0.35-0.45, which puts the Spanish case, along with others such as France and Japan, in the mid-range of an international ranking of the more mobile countries (Nordic European and Oceanic countries, Germany, and Canada) and the less mobile (the US, the UK, and developing countries such as South Africa and Brazil).[2] Spanish studies vary across data sources and the samples and years used, and the control of the various biases that arise in estimating intergenerational elasticity. However, results are quite similar, with women being slightly more mobile than men, and mobility being higher for younger generations. Sanchez-Hugalde (2004) estimates intergenerational earnings elasticity with data from the Spanish Family Expenditure Survey for years 1980 and 1990, using annual income to proxy permanent income and instrumenting parents' income with occupation and years of education. The overall intergenerational elasticity is 0.60 for the 1980 sample and 0.40 for the 1990. The reduction over time is only observed among men, decreasing from 0.64 to 0.32, with elasticity among women slightly increasing, from 0.62 to 0.67. Pascual (2009) uses disposable yearly income from the 2001 wave of the European Community Household Panel as a measure of permanent income for sons and daughters, and all the waves (1994-2001) to construct several-year averaged earnings as proxy for parents' permanent income. OLS and IV estimates are in the range 0.32-0.41 between fathers and

[2] For international rankings, see Blanden (2013) or Corak (2013).

sons and around 0.30 between mothers and daughters; cross–gender estimated elasticities are not significant. In the two cases just mentioned, co-residence bias appears and nothing is said about participation bias, even though this is likely to arise.

Cervini-Pla (2013, 2015) uses the 2005 Survey of Living Conditions (the Spanish component of the European Union Statistics on Income and Living Conditions, EU-SILC) to collect information from the offspring and their parents' characteristics, and the Spanish Family Expenditure Survey of 1980 to impute parents' permanent earnings from educational and occupational categories using the TS2SLS estimator. In the sample of children, this author selects individuals around their 40s in order to proxy permanent income with annual earnings. Cervini-Pla (2013) divides the sample between those in the range of 30-40 years old and those in the 40-50 range to study the evolution across cohorts. Furthermore, this study controls for employment selection using a Heckman type participation equation to estimate an elasticity of 0.43 between fathers and sons (0.50 between mothers and daughters) for those in the range 40-50 years old, declining to 0.38 (0.37) for those between 30-40 years old. Cervini-Pla (2015) controls for assortative mating, using family income to proxy daughters' earnings, and obtains estimated elasticities for individuals 30-50 years old in the same range (0.42 for sons and 0.39 for daughters).

Using a different approach, based on surname correlations, Güell et al. (2015) find an intergenerational elasticity of about 0.60 in one large Spanish region, Catalonia. (For a similar result in other Spanish regions, also using surname correlations, see Collado et al., 2008). Other studies measuring intergenerational transmission consider occupation or educational attainment, finding that educational mobility has increased over time, especially among women (Carabaña, 1999; Caparros, 2016; De Pablos and Gil, 2016). The study by Carabaña (1999) is the only one using a measure of occupational prestige, the PRESCA2, with a sample of more than 90,000 individuals from the 1991 Spanish Sociodemographic Survey (SSS) and computing the intergenerational elasticity of prestige for individuals when they are in their first job, across different cohorts. The global estimated value is 0.28, and the average for individuals under age 45 is 0.24 as against 0.34 for individuals over that age. When variables of education are included in the regression, elasticities rise to values around 0.48 in the over-45 group and 0.38 in the under-45 group. Salido (2001) studies social mobility in Spain, also using the 1991 SSS. She uses prestige measures from Treiman (1977) and Wegener (1988) to compute transition matrices, finding that, although fluidity is higher among women, mobility patterns are somewhat different between men and women, since women are more occupationally segregated (for a more recent assessment of this matter, see García-Mainar et al., 2018).

As noted earlier, our study contributes to the literature by estimating intergenerational elasticities using occupational prestige as a measure of socio-economic status for a recent period,

2007-2010. It should be remembered that, given the data availability in Spain, occupational prestige presents certain advantages over other habitually used measures, such as income. These are discussed in the following sections.

4. Measures, data, and descriptive analysis

4.1 Measures of occupational prestige

Occupational status is a generic term covering prestige, socioeconomic status and class measures. The present analysis retains occupational prestige as the most important dimension in social interaction; in social stratification, occupational prestige has a broader theoretical meaning than other socio-economic indices, since it encompasses many determinants other than earnings and education (Warren et al., 1998). To the extent that an occupation embodies a bundle of job characteristics that are jointly considered by individuals, prestige reflects an occupation's contribution 'to society', and measures its desirability, thereby capturing the social standing given to those holding a specific occupation (Hauser and Warren, 1997).

Occupational prestige is widely used to measure an individual's permanent socio-economic status. Various arguments support this choice. First, as already noted by Goldberger (1989: 513), restricting analysis to monetary measures may "understate the influence of family background on inequality". Since occupational prestige is a synthetic index of different job characteristics, including earnings or income, it provides both complementary and supplementary views of the monetary role of these variables. Second, occupational prestige is relatively stable over time, less subject to year-by-year transitory shocks and, in consequence, is a less noisy measure of long-term economic status than income or earnings (Nickell, 1982; Francesconi and Nicoletti, 2006). Third, the way in which information on parents' occupations is collected in the ECVT, with retrospective questions asked of children about their parents, is more reliable, despite recall error, than the measures of permanent income required when using monetary measures alone (Torche, 2015, Caparros, 2016). Additionally, our data avoid the co-residence bias coming from parents and their offspring living together.

There is a variety of proposals to measure occupational prestige. The Standard International Occupation Prestige Scale (SIOPS), elaborated first by Treimann (1977), is based on national populations' subjective valuations of occupation, in several countries, and is expressed as a continuous variable. This, and other measures, assumes that prestige can be seen as a metric of a structural order of occupations, where occupations with high prestige in general are also occupations with strict skill requirements, high earnings, and other valued characteristics (Treiman 1977).

4.2 Data sources

A SIOPS-type prestige scale elaborated specifically for the Spanish case, PRESCA2, by Carabaña and Gomez-Bueno (1996) is utilized in this paper. This is constructed along similar lines to the typical SIOPS scale, with one important difference. Whereas the SIOPS is built from occupational categories with ordinal values ranking from 0 to 100, in such a way that differences in social positions are informative of the ordering of prestige, in the case of PRESCA2, valuations of prestige can be used as differences - but also as ratios, thus quantifying the significance of those differences. Specifically, surveyed individuals are asked to value a range of occupational categories, taking *salesperson* as reference with a given value of 100. Each individual is then asked to rate an occupational category according to how he/she believes that job is valued by society. If one thinks that a particular occupation is considered to be twice as prestigious as the *salesperson* category, one may rate that occupation at 200, or 50 if one believes that society considers that occupation is only half as prestigious as the reference category. If an occupation is believed by the individual to be socially considered a little better than *salesperson*, one may rate it 105 or 110, or if it is a little worse, 90 or 95 (for more on the PRESCA2 scale, see Carabaña and Gómez-Bueno, 1996). Theoretically, the scale could begin at zero and would have no upper bound. In fact, the lowest value of PRESCA2 is 23.58, corresponding to *shoe shiners and street workers*, and the highest is 266.23, for *legislative officials and government administrators*.

Regarding individual information, the ECVT, produced by the Spanish Ministry of Labour and Immigration, is an on-going programme that focuses on employment relationships and on the evaluations and attitudes of employees towards work. The survey addresses workers over age 16, living in households, as being representative of the total working population, and covers a number of issues relating to working conditions, which allow us to control for a battery of individual and job attributes. The sample is constructed by pooling the last four consecutive waves, from 2007 to 2010.[3] For our purposes, the main advantage of the ECVT is that it provides information about the current occupational category of the surveyed individuals, and that of their parents when the individual was sixteen years old, thus avoiding the co-residence bias. The portion of non-working mothers when the son or daughter was sixteen is above 70%, with this being a particular concern for the estimations. The occupational prestige of mothers is not used for estimations directly, but a dummy variable is included for considering whether the mother was working or not. After removing those individuals for whom there was no information on their father's occupation when

[3] Using a longer sample is possible, but not advisable. Micro information is available only since 2001. The questionnaire was different before and after 2004. The survey was not carried out in 2005 and, in 2006, information was not present for some of our variables of interest. All this leads us to collect information only for the period 2007-2010.

they were sixteen, the full sample contains 16,892 sons and 11,993 daughters, being representative of the total of Spanish workers.[4]

ECVT and PRESCA2 distinguish occupational categories according to the 1994 Spanish Occupations National Classification (CNO-1994), which follows the ISCO-88 (International Standard Classification of Occupations) guidelines. The three-digit classification is the maximum level of disaggregation provided in the ECVT, producing 216 occupations. By attaching the PRESCA scale to the corresponding occupation, both offspring's and parents' occupational prestige is obtained, which allows us to compute intergenerational elasticities for a large set of occupations. Apart from industry, there is no other information for parents, nor for spouses or siblings within the household.

4.3 Descriptive analysis

Descriptive statistics for sons and daughters, where information is also presented in prestige quintiles, are shown in Table 1. The mean of occupational prestige is nearly the same for sons and daughters, whereas the mean age is one year older in the case of sons (42.7 vs. 41.5). The quintile distribution for age shows that, for men, the highest value is observed in the top quintile, whereas it is in the bottom quintile for women. The percentage of daughters with mothers who were working when the daughters were 16 years old is 30.9%, more than 7 percentage points above that of the case of sons.

Table 1. Prestige of fathers and sons and daughters, by quintile prestige of sons and daughters.

	Sons				Daughters			
	Prestige	Age	Father prestige	Mothers work (%)	Prestige	Age	Father prestige	Mothers work (%)
Mean	109.02	42.69	100.20	23.76	109.10	41.49	104.33	30.89
Quintile								
1st	67.17	41.58	88.60	23.30	65.35	43.73	90.06	31.15
2nd	86.42	42.96	93.17	24.59	87.11	39.50	97.03	35.48
3rd	98.77	42.55	96.76	23.19	99.38	41.25	100.67	31.77
4rd	115.01	43.00	102.98	23.06	119.61	41.06	110.92	27.27
Top	169.14	43.27	117.19	24.53	166.98	41.20	120.86	30.40

The kernel density distributions of occupational prestige for the father-son and father-daughter pairs are shown in Figure 1. Distributions are somewhat bimodal, much more clearly so in the case of daughters. Whereas the spike on the right is more or less coincident for fathers, sons and daughters, just below 100, the spike on the left is "more on the left" in the case of daughters, and much more acute for these than for sons. This suggests that women are more concentrated in low-

[4] The sample proportion of 41% women resembles the population percentage of working women. The lack of information on father's occupation may be due to different causes: non-working fathers (unemployed, non-active, retired); non-response; or non-existence (absent, dead, etc…).

prestige occupations. Comparing fathers with their offspring, the figures show a mean displacement to the right for the latter, reflecting an increase in average prestige for the daughters and, much more evidently, for sons with respect to their fathers. The low-prestige occupations that characterise the father's distribution have attenuated in the sons' distribution, but not in that of the daughters'. This is also shown in Table 1. Looking at the respective columns, the distribution of daughter's father prestige is displaced to the right, compared to that of son's father prestige (quintile average values of father's prestige are always higher in the case of daughters than in sons). This, coupled with the fact that the proportion of working mothers is higher in the case of daughters than in the sons (see last column in each block), suggests that the likelihood of daughters participating in the labour market is more influenced by the parents' situation than in the case of sons.

4.4 Transition matrices

A first approximation to social mobility is obtained from transition matrices, which are better able to capture non-linearities in intergenerational transmission. Table 2 reports quintile transition matrices showing the observed probability of moving to and from any point in the occupational prestige distribution. The figure in each cell is the relative conditional frequency that the prestige for the son (daughter) will take a value lying in a particular quintile, given that the corresponding value for the father lies in that quintile. The degree of persistence in each quintile and the degree of mobility across different quintiles can then be inferred. Looking at the leading diagonal, it can be seen that the largest proportion of sons and daughters who remain in the same quintile as their fathers is in the top quintile, with the value observed for the bottom quintile in the case of daughters also being remarkable. This pattern of a non-linear relationship is habitually found in studies of intergenerational mobility (see, for example, Bjorklund and Jantti, 2009). It is well known that similarities in socio-economic status between parents and their offspring are stronger at the extremes of the distribution, so that the elasticities are capturing an average value of persistence (Hirvonen, 2008; Davia and Legazpe, 2017). Bearing in mind that some part of the greatest persistence observed in the tails of the distribution is due to statistical issues (see Hirvonen, 2008), mobility appears to be higher for daughters, since proportions are closer to 0.20 than are those of sons. A series of mobility indicators tends to confirm this (see the last panel in Table 2). The only exception is Bartholomew's adjusted index, which reveals that mobility among daughters is higher, but shorter in extent, than among sons.[5]

[5] The ranking indices are (1) a simple summation of the elements of the leading diagonal; (2) the summation of the elements below the leading diagonal; (3) the summation of the elements above the leading diagonal; (4) the summation of the elements above and below the leading diagonal; (5) the Shorrocks index, computed, for a given matrix A, as $(n - traceA)/(n - 1)$; (6) a weighted mobility index due to Bartholomew that, if a_{ij} is the proportion of daughters or sons in

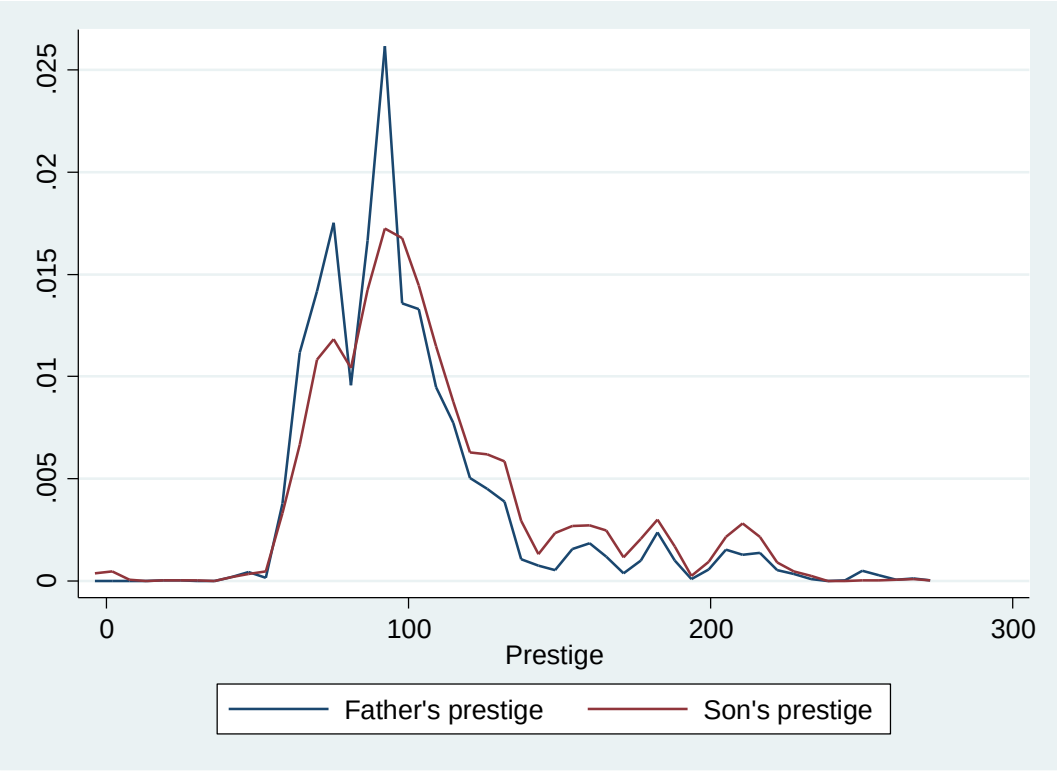

Fig. 1a Kernel density of father and son prestige

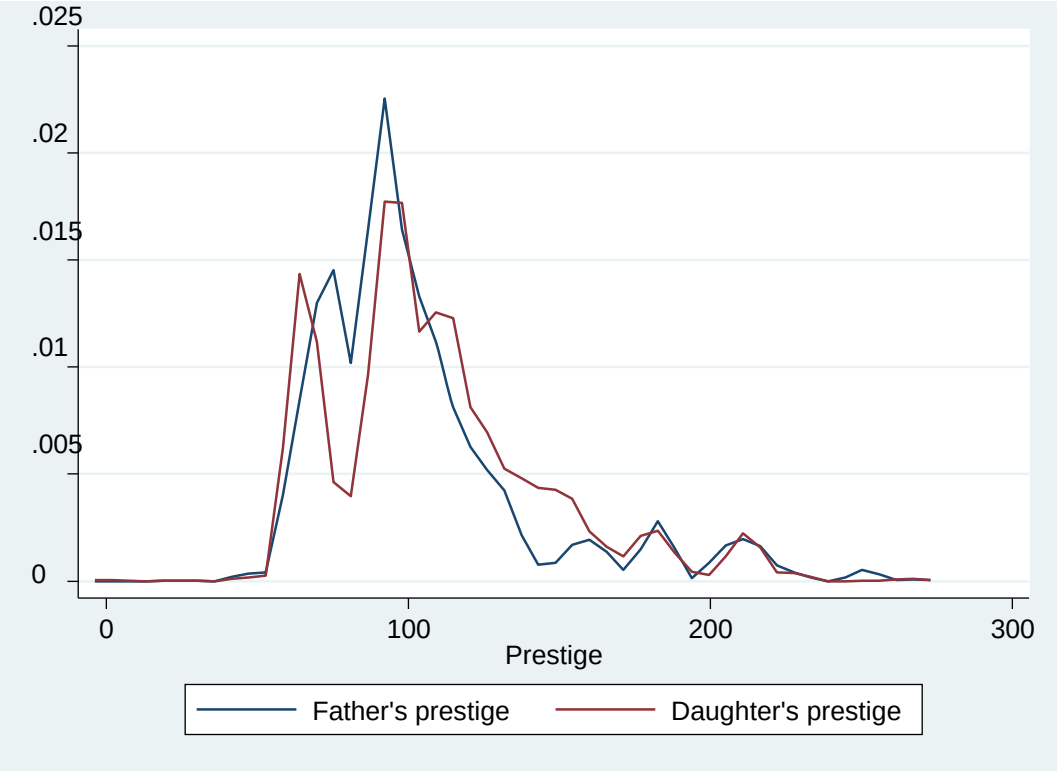

Fig. 1b Kernel density of father and daughter prestige

quantile *j* whose parents were in quantile *i*, is defined by $\Sigma_i\Sigma_j a_{ij}\,|i\text{-}j|$ and (7) an adjusted version computed by $\Sigma_i\Sigma_j a_{ij}\,(i\text{-}j)^2$. In all cases, except (1), the larger the index size, the higher the mobility. See Dearden et al. (1997), Hirvonen (2008) and De Pablos and Gil (2016) for description and discussion of the mobility indices.

Table 2. Quintile transition matrices for prestige of fathers and sons and for fathers and daughters, and some mobility indices.

	Father's quintile				
Son's quintile	1st	2nd	3rd	4rd	Top
1st	0.284	0.259	0.203	0.126	0.129
2nd	0.252	0.294	0.222	0.152	0.081
3rd	0.158	0.182	0.223	0.258	0.180
4rd	0.222	0.148	0.167	0.265	0.199
Top	0.085	0.118	0.187	0.199	0.412

	Father's quintile				
Daughter's quintile	1st	2nd	3rd	4rd	Top
1st	0.322	0.277	0.163	0.158	0.082
2nd	0.337	0.157	0.204	0.132	0.171
3rd	0.181	0.194	0.222	0.284	0.120
4rd	0.086	0.201	0.220	0.234	0.260
Top	0.075	0.172	0.192	0.194	0.368

	Immobility	Upward mobility	Downward mobility	Total mobility	Shorrocks	Bartholomew's index	Bartholomew's index adjusted
Sons	1.478	1.718	1.809	3.527	0.881	1.257	2.835
Daughters	1.303	1.852	1.851	3.703	0.925	1.265	2.738

Notes: Immobility: a simple summation of the elements of the leading diagonal. Upward mobility: the summation of the elements below the leading diagonal. Downward mobility: the summation of the elements above the leading diagonal. Total mobility: the summation of the elements above and below the leading diagonal. The Shorrocks index, computed, for a given matrix *A*, as $(n - traceA)/(n - 1)$. Bartholomew's index: a weighted mobility index, if a_{ij} is the proportion of daughters or sons in quantile j whose parents were in quantile i, is defined by $\Sigma_i\Sigma_j a_{ij} |i-j|$, and a Bartholomew's index adjusted version computed by $\Sigma_i\Sigma_j a_{ij} (i-j)^2$.

5. Model estimation results

The following Equation (1) is estimated

$$OP_i^o = \alpha + \beta OP_i^f + e_i \qquad (1)$$

where OP_i^o is the occupational prestige of the offspring (son or daughter), and OP_i^f is the occupational prestige of the father. Both are expressed in logs, to deal with the right-skewed distribution of occupational prestige. This is the baseline specification for estimating the intergenerational elasticity, β. When using income or earnings, the coefficient analogous to β in Equation (1) is derived from a utility-maximization program, so that β is indicative of causality running from parents' income to children's income (Becker and Tomes, 1979, 1986). Goldberger (1989) reshapes the model to assign β only a mechanical role, β thereby reflecting how father's and offspring's incomes (or other indicator of socio-economic status) are correlated. Usually, β is intended to range from 0 (complete mobility) to 1 (complete immobility). Ermish et al. (2006) derive a model to show that occupational prestige and permanent income are both related, supporting the fact of measuring intergenerational elasticity through prestige to approach persistence in the transmission of socio-economic status.

The first column in Table 3 shows the estimates of Equation (1) for sons (upper panel) and for daughters (bottom panel). Estimated elasticities are 0.35 and 0.32, respectively, a little smaller than

those found in the Spanish economy when using earnings, and in the medium range of the international perspective (see Cervini-Pla, 2015 and Caparros, 2016). The different values estimated from Equation (1) for sons and daughters indicates a higher degree of social mobility of women. [6]

Table 3. Ordinary least squares (OLS) estimates on the relationship between son's/daughter's prestige and father's prestige.

Sons						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.353***	0.008	0.354***	0.008	0.358***	0.008
Ln father's prestige x mother works			-0.001	0.001	0.001	0.001
Age					0.011***	0.001
Age2/100					-0.010***	0.002
Constant	3.034***	0.036	3.032***	0.036	2.746***	0.047
Adjusted R^2	0.107		0.107		0.115	
Observations	16,805					
Daughters						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.324***	0.009	0.327***	0.009	0.323***	0.009
Ln father's prestige x mother works			-0.003**	0.001	-0.003**	0.001
Age					0.011***	0.002
Age2/100					-0.014***	0.002
Constant	3.145***	0.041	3.144***	0.041	2.976***	0.055
Adjusted R^2	0.099		0.100		0.105	
Observations	11,985					

Notes: ***p<0.01; **p<0.5%.

Diverse covariates are progressively incorporated to control for different sources of bias in Equation (2).

$$OP_i^o = \alpha_1 + \beta_1 OP_i^f + \beta_2 OP_i^f * WM_i + \alpha_2 Age_i + \alpha_3 Age_i^2/100 + \varepsilon_i \quad (2)$$

WM is the working status of the mother when the individual was 16, and *Age* denotes the age of the respondent at the time of the survey. The inclusion of certain control variables is controversial. Following the bulk of the literature, education variables are not included to capture direct effects (see Esping-Andersen and Wagner, 2012). Regarding *WM*, since the mother's labor participation is less than 70% in the sample, the direct effect of the mother's occupational prestige on the offspring's occupational prestige can only be observed for roughly 30% of individuals. Despite that, in order to assess some possible effect, a dummy variable of value 1 if the mother was working when the respondent was 16 and 0 otherwise, is interacted with the log of the father's occupational prestige and added to the basic specification. The second column in Table 3 shows that the point-estimate of intergenerational elasticity hardly changes when this variable is included; and that the coefficient of the newly-added variable is statistically significant, and negatively signed, only in the

[6] An initial exercise was to estimate a pooled sample with a dummy for gender (1=son, 0=daughter), finding that this variable was positive and statistically significant, and revealing a distinct intergenerational association across genders (estimated coefficient 0.016 and standard deviation 0.004).

case of daughters. This is interpreted as a slight increase in the social mobility of daughters whose mothers were working when they were 16, with respect to daughters whose mothers were not working. This result coincides with that of Dearden et al. (1997) with earnings for the UK. By contrast, Carabaña (1999) and Di Prieto and Urwin (2003) found no influence of occupational attainment of mothers, either on their sons or their daughters.

Second, a common bias arises from the fact that individuals in the sample are surveyed at different moments of their life-cycle. Those older individuals are more likely to have attained a higher level of occupational prestige than those in the earlier stages of their career. A polynomial of age in quadratic form is included, with estimated values being reported in the third column of Table 3.[7] The coefficients for occupational prestige and for this interacted with the mother's working status remain (almost) unchanged. The coefficients for age suggest a convex representation of age's influence: the offspring's occupational prestige rises with age, but at a diminishing rate. This can also be interpreted as occupational prestige being higher for younger generations. This is so because α_1 indicates the change in prestige across generations. Our estimates are around 3, much lower than the 5-point rise found by Carabaña (1999) for earlier cohorts. When adding the polynomial in age, this change varies with age (Change = $\alpha_1+\alpha_2 Age_i+\alpha_3 Age_i^2/100$). Furthermore, given that the age coefficients are estimated differently for sons and daughters, the profile also behaves differently. Thus, sample sons attain the highest level of occupational prestige at age 55, while daughters do so much earlier, at age 39.[8] The maximum change in occupational prestige is attained at these ages; for younger and older ages of respondents, the increase in prestige due exclusively to the passage of time is smaller. Specifically, sons born between 1952 and 1955 observe an increase in occupational prestige with respect to their fathers that is greater than at any other year. Analogously, daughters born between 1968 and 1971 have enjoyed a greater rise in prestige with respect to their fathers. It is clear that daughters' increase in prestige has been much more recent, probably linked to the most recent increase in participation of women in the labour market, as a consequence of the generalisation of higher education since the 1960s. After those dates, the changes in prestige from one generation to the next have been lower.

These results lead us to investigate, not only the change in status across generations, but also the influence of the father's occupational prestige across generations. The overall sample of sons and daughters is split in three different generations: those younger than age 41, those between 41 and 54, and those older than age 54. Estimates of the intergenerational elasticity for each of the subsamples

[7] There is no information in the survey on father's age. However, the life-cycle bias for fathers is expected to be reduced, since fathers' reported occupational prestige corresponds to that when the respondent was 16. Then, variation in fathers' age is not expected to be as large as it would be if individuals reported the occupational prestige of their fathers at the moment of the survey.

[8] The age that maximizes prestige is attained from the expression $\alpha_2 + 2\ \alpha_3\ Age_i/100=0$.

Table 4. Ordinary least squares (OLS) estimates on the relationship between son's/daughter's prestige and father's prestige (by birth cohort)

Sons	<40 years				41-54 years				>54 years			
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.338***	0.012	0.337***	0.012	0.357***	0.013	0.357***	0.013	0.417***	0.020	0.417***	0.020
Ln father's prestige x mother works			0.001	0.002			-0.003	0.002			0.002	0.003
Constant	3.081***	0.053	3.085***	0.053	3.031***	0.058	3.029***	0.058	2.766***	0.090	2.764***	0.090
Adjusted R^2	0.104		0.104		0.105		0.105		0.137		0.137	
Observations	7,340				6,710				2,755			
Daughters	<40 years				41-54 years				>54 years			
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.287***	0.013	0.287***	0.013	0.356***	0.015	0.357***	0.015	0.357***	0.024	0.355***	0.024
Ln father's prestige x mother works			-0.001	0.002			-0.005***	0.002			-0.007*	0.004
Constant	3.337***	0.059	3.334***	0.059	3.007***	0.068	3.009***	0.067	2.950***	0.111	2.967***	0.111
Adjusted R^2	0.082		0.082		0.110		0.111		0.123		0.125	
Observations	5,703				4,735				1,547			

Notes: ***p<0.01; **p<0.5%; *p<0.1%.

obtained for estimating Equations (1), and (2), without the age polynomial, are reported in Table 4. Again, the estimated elasticities are greater for sons than for daughters in the oldest and the youngest samples, and roughly similar in the medium-aged sample, confirming once more the greater social mobility of women. The intercept is greater, for both sons and daughters, in the youngest generations. Similarly, elasticities are lower in the more recent generations, confirming that the transmission of the father's socio-economic status to the offspring is declining over time. By contrast, the influence on daughters of the fact that their mothers were working becomes statistically insignificant in the most recent generation.

6. Discussion

A number of sensitivity analyses have been tried, using different specifications, to test the robustness of results: first, prestige is introduced in levels; second, age ranges are used, rather than an actual value; third, the polynomial of age is interacted with the father's occupational prestige, and, fourth, in those households where both parents report their occupations, the highest-prestige occupation is chosen as regressor in the estimation. The same general pattern of results remains, despite the variety of specifications. The use of other prestige scales (Treiman, 1977, Wegener, 1988) produces very similar results (correlations between those scales and PRESCA2 are at 87% and 86%, respectively).[9] An additional exercise is carried out to control for the moment of the business cycle. Between 2007 and 2010, the business cycle turned up, and to investigate the possible influence of this on the results, the same specifications as in Table 3 are estimated separately for each year of the sample, with the resulting coefficients of the main variables being not markedly different (see Tables A1-A4 in the Appendix). Furthermore, a clear pattern is not observed, since estimated elasticities are higher in 2007 and 2010, but lower in 2008 and 2009. It appears that the moment of the interview does not matter much in the estimation. This is not unexpected, given that only information from those who are working is available, and that the information referring to parents is given for the time their children were 16 years old. At this point, it should be noted that in this period, Spain transited from its lowest level in unemployment rates, below 8% in 2007, to more than 20% in 2010. Almost 2 million jobs were lost during this period, with some occupations being exceptionally affected, such as those related to construction. If the massive destruction in employment was concentrated in jobs associated with lower levels of occupational prestige, as was likely to happen, the proportion of workers employed in occupations with higher prestige probably increased during the period of analysis. This could have induced an overestimation of the intergenerational elasticity and a magnification of upward social mobility,

[9] Although some more recent scales have been proposed, none is as disaggregated by occupations as PRESCA2. Carabaña and Gomez-Bueno (1996) have shown little or no influence of the gender of the raters, so that gender bias in prestige is at a minimum.

whenever parents' prestige of those individuals who remain in the sample was similar to those individuals who dropped out of the sample.[10] This cannot be addressed in our analysis, since the cross-sectional nature of our data base precludes following the same individuals during the period of study. Similarly, one possible caveat of the study is that participation rates of women in Spain are clearly lower than those of men. Since only information on the employed is available, participation bias cannot be controlled for.

Finally, two alternative ways of studying the offspring's outcomes, with respect to those of the parents have been considered. First, the influence of the controls in determining the probability of sons and daughters attaining an occupational prestige above that of their fathers is investigated. Using a probit model, an equation akin to (2) is estimated, where the dependent variable now is dichotomic, with value 1 if the offspring's prestige is higher than the father's prestige, and 0 otherwise. Results in Table 5 show that the higher the occupational prestige of the father, the lower the probability that the offspring's prestige will surpass that of the father. The coefficient is more negative in the case of daughters, revealing the greater difficulties daughters have in achieving greater prestige than their fathers. Regarding the rest of the coefficients, the behaviour mimics that observed in Table 3. Thus, the working status of mothers is only statistically significant in the case of daughters, and the influence of age is increasing but concave.

Table 5. Probit estimation of more prestige than the father

Sons						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	-1.987***	0.040	-1.987***	0.041	-1.985***	0.041
Ln father's prestige x mother works			0.000	0.005	0.007	0.005
Age					0.043***	0.007
Age2/100					-0.043***	0.008
Constant	9.129***	0.184	9.129***	0.184	8.098***	0.226
Pseudo R^2	0.124		0.124		0.127	
Observations			16,892			
Daughters						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	-2.124***	0.047	-2.116***	0.048	-2.135***	0.048
Ln father's prestige x mother works			-0.016***	0.006	-0.016***	0.006
Age					0.035***	0.008
Age2/100					-0.047***	0.010
Constant	9.834***	0.218	9.824***	0.217	9.320***	0.272
Pseudo R^2	0.149		0.150		0.152	
Observations			11,993			

Notes: ***p<0.01; **p<0.5%.

[10] In contrast, if individuals who remain in the sample have parents with higher occupational prestige than those individuals who drop out of the sample because of the persistence that is being studied, then the estimated elasticity may not be so overestimated.

Another possibility is to regress the difference between offspring's and father's prestige on the same set of regressors as in the previous cases. Again, the coefficient estimated for father's prestige remains unchanged after progressively adding more regressors, and is found to be more negative (higher absolute value) for daughters (see Table A5 in the Appendix). This confirms, again, that the higher the father's prestige, the more difficult it is for the offspring's prestige to go further. A notable difference with respect to the two previous cases is that the working status of the mother has no significant impact, either for sons or for daughters.

7. Conclusions

This article combines different approaches to provide insights into the intergenerational social mobility of Spanish workers, comparing the occupational prestige of an individual at present to that of the parents when the individual was sixteen. The advantage of occupational prestige relies on providing a complementary view to monetary indicators, and it is relatively more stable over time than annual earnings, and less subject to measurement errors. More specifically, our study focuses on whether differences between men (sons) and women (daughters) exist regarding mobility, and how they may have evolved across birth cohorts. Individual and job characteristics, including occupational information, are obtained from the Quality of Working Life Survey, a national database, and the occupational prestige data come from a Spanish-focused scale, PRESCA2, elaborated by Carabaña and Gómez-Bueno (1996).

A first approximation to mobility is obtained from transition matrices, which are better in capturing non-linearities in intergenerational transmission. Results show that persistence is greater in the corners, but much more in the top quintile than in the bottom quintile. Mobility appears to be higher for daughters than for sons. The information is completed with a number of mobility indices, confirming a slightly higher mobility of daughters in Spain relative to sons, especially in the middle quintiles.

Prior studies of intergenerational earnings elasticity have found a degree of persistence in Spain in the range 0.35-0.45 -greater than in Nordic countries, but smaller than in the UK or the US. Our estimates show that a 10% change in fathers' occupational prestige is associated with one third percent change in their offspring's occupational prestige in the same direction, somewhat lower than in prior Spanish studies using earnings. Estimated intergenerational occupational elasticities are 0.35 for sons and 0.32 for daughters, confirming the higher social mobility of women. Considering whether the mother was working or not when the respondent was 16 is found to be significant only in the case of daughters, without affecting the value of the intergenerational elasticity. The influence of the age profile is different for sons and daughters. Whereas sons attain the highest level of occupational prestige at 55, daughters do so much sooner, at age 39, revealing

that the rise in average prestige across generations has taken place more recently among women than among men. By birth cohort, younger generations present lower persistence than older generations, suggesting that the parents' effect is weakening over time.

The development of TICs, the spread of globalisation, the generalisation of tertiary education, and the increase in female labour participation may all underlie the reduction in the capacity of parents to transmit occupational status to their children. Our results seem to suggest, therefore, that the genetic inheritance, stereotypes in socialisation, and parent's networking and nepotism may now be of somewhat less importance than in the past. In particular, prior evidence from other studies shows that countries where public education favours egalitarianism, and welfare states that are more redistributive, usually show greater social mobility, since problems of credit constraints in the transmission of socio-economic status to children, and the importance of genetic factors or neighbourhood are reduced (Ichino et al., 2011; Esping-Andersen and Wagner, 2012). This seems to have been the case of Spain. The spread of tertiary education in recent decades may have favoured the increase in social mobility. However, this increase could have been even higher if certain circumstances had not occurred. First, credentials inflation may have led to over-qualification, such that more education is no guarantee for attaining more recognised occupations. Even more, this credential inflation may have indeed scarred low-educated workers and impeded them in attaining better occupations. Second, the increase of segmentation in the labour market has given fewer opportunities to younger workers to achieve better positions on the occupational ladder.[11] All in all, our results suggest that a modernisation theory may be behind what has happened in Spain in recent decades, challenging the reproductive view of mobility à la Bowles and Gintis (Carabaña, 1999).

Results show that daughters have been favoured with greater reductions in intergenerational persistence than sons. However, it should be borne in mind that our results correspond to individuals participating in the labour market. Whereas participation rates of middle-aged men are near 90%, the rates for women are clearly lower, and only in those holding tertiary education do participation rates of women approach those of men. Thus, the higher mobility observed for daughters may be affected by the fact that only those who expect more from their labour market career decide to participate. An outstanding result derived from the study is that parental influence on daughters may be channelled into other aspects, such as participation or occupational choice. Specifically, the fact that distribution of daughter's father's prestige is, in general, to the left of son's father's prestige; that the probability of a working daughter having a working mother is 30%, compared to 23% for working sons; and that the joint influence of having a working mother and the

[11] These factors would have favoured the ability of parents to transmit socio-economic status to their children and reduce mobility (see Davia and Legazpe, 2017 for a more detailed discussion of the matter).

father's prestige is statistically significant only in the case of daughters, all suggest that the likelihood of daughters participating in the labour market is more influenced by the parents' situation than is the case for sons. Such an influence is less clear in mobility, since women's intergenerational elasticity is slightly affected by parents' outcomes.

A potential concern in the use of occupational prestige as an indicator of socio-economic status is the possibility of devaluation of women's work (Garcia-Mainar et al., 2018). Other limitations of our database are that there is only information for parents regarding occupation and industry; that less than 30% of mothers were working when the respondent was sixteen; and that there is no information regarding spouses or siblings within the household, which prevents us from considering the role of assortative mating or sibling correlations.

Appendix

Table A1. OLS estimates on the relationship between son's/daughter's prestige and father's prestige. 2007

Sons						
	Coef.	St. Err	Coef.	St. Err	Coef.	St. Err
Ln father's prestige	0.356***	0.016	0.356***	0.016	0.362***	0.016
Ln father's prestige x mother works			0.001	0.002	0.003	0.002
Age					0.009***	0.003
Age2/100					-0.008***	0.003
Constant	3.009**	0.071	3.010***	0.071	2.747***	0.092
Adjusted R^2	0.113		0.113		0.113	
Observations			4,034			
Daughters						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.353***	0.018	0.354***	0.018	0.349***	0.018
Ln father's prestige x mother works			-0.003	0.003	-0.003	0.003
Age					0.012***	0.004
Age2/100					-0.016***	0.004
Constant	3.017***	0.084	3.015***	0.084	2.843***	0.110
Adjusted R^2	0.116		0.116		0.123	
Observations			2,797			

Table A2. OLS estimates on the relationship between son's/daughter's prestige and father's prestige. 2008

Sons						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.328***	0.016	0.329***	0.016	0.333***	0.016
Ln father's prestige x mother works			-0.002	0.002	0.001	0.002
Age					0.013***	0.003
Age2/100					-0.013***	0.003
Constant	3.151***	0.072	3.147***	0.072	2.816***	0.092
Adjusted R^2	0.087		0.087		0.096	
Observations			4,465			
Daughters						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.274***	0.018	0.275***	0.018	0.273***	0.018
Ln father's prestige x mother works			-0.004	0.003	-0.003	0.003
Age					0.009***	0.003
Age2/100					-0.012***	0.004
Constant	3.391***	0.081	3.389***	0.081	3.242***	0.108
Adjusted R^2	0.074		0.075		0.078	
Observations			3,014			

Table A3. OLS estimates on the relationship between son's/daughter's prestige and father's prestige. 2009

Sons						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.344***	0.016	0.345***	0.016	0.349***	0.016
Ln father's prestige x mother works			-0.001	0.002	-0.001	0.002
Age					0.007**	0.003
Age2/100					-0.005	0.004
Constant	3.080***	0.072	3.077***	0.072	2.856***	0.099
Adjusted R^2	0.102		0.102		0.110	
Observations			4,207			
Daughters						

	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.333***	0.018	0.336***	0.018	0.334***	0.018
Ln father's prestige x mother works			-0.005**	0.003	-0.005**	0.003
Age					0.012***	0.004
Age2/100					-0.016***	0.004
Constant	3.111***	0.084	3.106***	0.084	2.904	0.114
Adjusted R^2	0.099		0.100		0.106	
Observations			3,037			

Table A4. OLS estimates on the relationship between son's/daughter's prestige and father's prestige. 2010

Sons						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.382***	0.016	0.383***	0.016	0.386***	0.016
Ln father's prestige x mother works			-0.001	0.002	0.001	0.002
Age					0.012***	0.003
Age2/100					-0.012***	0.004
Constant	2.909***	0.071	2.908***	0.071	2.613***	0.097
Adjusted R^2	0.128		0.127		0.132	
Observations			4,099			
Daughters						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	0.340***	0.018	0.340***	0.018	0.336***	0.018
Ln father's prestige x mother works			0.001	0.002	0.001	0.002
Age					0.010***	0.004
Age2/100					-0.013***	0.004
Constant	3.072***	0.081	3.073**	0.081	2.926***	0.111
Adjusted R^2	0.107		0.107		0.111	
Observations			3,137			

Notes: ***p<0.01; **p<0.5%.

Table A5. OLS estimates of the difference in prestige level between son/daughter and father on father's prestige

Sons						
	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Ln father's prestige	-73.288***	0.985	-73.223***	0.988	-72.697***	0.987
Ln father's prestige x mother works			-0.112	0.149	0.159	0.150
Age					1.276***	0.184
Age2/100					-1.173***	0.212
Constant	342.990***	44.987	342.813***	4.505	308.445***	5.932
Adjusted R^2	0.247		0.247		0.253	
Observations			16,892			
Daughters						
	Coef.	St. Err	Coef.	St. Err	Coef.	St. Err
Ln father's prestige	-80.752***	1.059	-80.650***	1.062	-81.029***	1.059
Ln father's prestige x mother works			-0.234	0.154	-0.222	0.155
Age					1.509***	0.214
Age2/100					-1.948***	0.252
Constant	375.898***	4.880	375.761***	4.881	350.601***	6.524
Adjusted R^2	0.326		0.326		0.331	
Observations			11,993			

Notes: ***p<0.01; **p<0.5%.

References

Arts, W., & Gelissen, J. (2002). Three worlds of welfare capitalism or more? A state-of-the-art report. *Journal of European Social Policy*, 12, 137-158.

Atkinson, A. (1981). On intergenerational income mobility in Britain. *Journal of Post-Keynesian Economics*, 3, 194–218.

Atkinson, A.B., Maynard, A.K. & Trinder, C.G. (1983). *Parents and Children: Incomes in Two Generations*. London: Heinemann Educational Books.

Becker, G.S. & Tomes, N. (1979). An equilibrium theory of the distribution of income and intergenerational mobility. *Journal of Political Economy*, 87(6), 1153–1189.

Becker, G.S. & Tomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics*, 4(3 Part II), S1–S39.

Bjorklund, A. & Jantti, M. (2009). Intergenerational income mobility and the role of family background. In W. Salverda, B. Nolan & T. Smeeding (Eds.), *Handbook of Economic Inequality* (pp. 491-521). Oxford: Oxford University Press.

Black, S. & Devereux, P. (2011). Recent developments in intergenerational mobility. In D. Card, & O. Ashenfelter (Eds.), *Handbook of Labor Economics (*vol. 4, part B, pp. 1487–1541). Amsterdam: North Holland.

Blanden, J. (2013). Cross-country rankings in intergenerational mobility: a comparison of approaches from Economics and Sociology. *Journal of Economic Surveys*, 27(1), 38-73.

Blanden, J. (2015). Intergenerational income persistence. *IZA World of Labor*, 176 doi: 10.15185/izawol.176

Bowles, S. & Gintis, H. (2002). The inheritance of economic status: education, class and genetics. In M. Feldman & Baltes, P. (Eds.), *International Encyclopedia of the Social and Behavioral Sciences: Genetics, Behavior and Society*, (vol. 6, pp. 4132–4141). New York: Oxford University Press and Elsevier.

Caparrós, A. (2016). The impact of education on intergenerational occupational mobility in Spain. *Journal of Vocational Behavior*, 92, 94-104.

Cappellari, L. (2016). Income inequality and social origins. *IZA World of Labor*, 261 doi: 10.15185/izawol.261

Carabaña, J. (1999). *Dos estudios sobre movilidad intergeneracional*. Madrid: Fundación Argentaria-Visor.

Carabaña, J. & Gómez-Bueno, C. (1996). *Escalas de Prestigio Profesional*. Madrid: Cuadernos Metodológicos CIS, n 19.

Carmichael, F. (2000). Intergenerational mobility and occupational status in Britain. *Applied Economics Letters*, 7, 391–396.

Cervini-Plá, M. (2013). Exploring the sources of earnings transmission in Spain. *Hacienda Pública Española*, 204(1), 45-66.

Cervini-Plá, M. (2015). Intergenerational earnings and income mobility in Spain. *Review of Income and Wealth*, 61, 812–828.

Chadwick, L. & Solon, G. (2002). Intergenerational income mobility among daughters. *American Economic Review*, 92 (1), 335–344.

Collado, M.D., Ortuño-Ortín, I. & Romeu, A. (2008). Surnames and social status in Spain. *Investigaciones Económicas*, 33, 259-287.

Corak, M. (2013). Inequality from generation to generation: The United States in comparison. In R.S. Rycorft (Ed.), *The Economics of Inequality, Poverty, and Discrimination in the 21st Century* (pp.107–123). Santa Barbara, CA: ABC-CLIO.

Couch, K. & Dunn, T. (1997). Intergenerational correlations in labor market status: a comparison of the United States and Germany. *Journal of Human Resources*, 32(1), 210-232.

Davia, M.A. & Legazpe, N. (2017). Understanding intergenerational transmission of deprivation in Spain: Education and marital sorting. *Research in Social Stratification and Mobility*, 52, 1-14.

De Pablos, L. & Gil, M. (2016). Intergenerational educational and occupational mobility in Spain: does gender matter? *British Journal of Sociology of Education*, 37(6), 721-742.

Dearden, L. S., Machin, S. & Reed, H. (1997). Intergenerational mobility in Britain. *Economic Journal*, 107(440), 47–66.

Di Pietro, G. & Urwin, P. (2003). Intergenerational mobility and occupational status in Italy. *Applied Economics Letters*, 10(12), 793-797.

Erikson, R. & Goldthorpe, J. (1992). *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Oxford University Press.

Erikson, R. & Goldthorpe, J. (2002). Intergenerational inequality: a sociological perspective. *Journal of Economic Perspectives*, 16(3), 31–44.

Ermisch, J., Francesconi, M. & Siedler, T. (2006). Intergenerational mobility and marital sorting. *The Economic Journal*, 116(513),659–679.

Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. New York: Polity Press.

Esping-Andersen, G. & Wagner, S. (2012). Asymmetries in the opportunity structure. Intergenerational mobility trends in Europe. *Research in Social Stratification and Mobility*, 30(4), 473-487.

Francesconi, M. & Nicoletti, C. (2006). Intergenerational mobility and sample selection in short panels. *Journal of Applied Econometrics*. 21(8). 1265-1293.

García-Mainar. I., García-Martín G & Montuenga V (2015). Occupational prestige and gender-occupational segregation. *Work, Employment and Society*. 32(2), 348-367.

Goldberger, A.S. (1989). Economic and mechanical models of intergenerational transmission. *American Economic Review*, 79(3), 504–13.

Güell, M., Rodríguez-Mora, J.V. & Telmer, C. (2015). The informational content of surnames, the evolution of intergenerational mobility, and assortative mating. *Review of Economic Studies*, 82(2), 693–735.

Hauser R & Warren J (1997) Socioeconomic indexes for occupations: a review update and critique. *Sociological Methodology* 27: 177–298.

Hellerstein, J. & Morrill, H. (2011). Dads and daughters. The changing impact of fathers on women's occupational choices. *The Journal of Human Resources*, 46(2), 333-372.

Hirvonen, L. H. (2008). Intergenerational earnings mobility among daughters and sons: Evidence from Sweden and a comparison with the United States. *American Journal of Economics and Sociology*, 67(5), 777–826.

Ichino, A., Karabarbounis, L. & Moretti, E. (2011). The political economy of intergenerational income mobility. *Economic Inquiry*, 49, 47–69.

Jäntti, M. & Jenkins S.P. (2015). Income mobility. In: A.B. Atkinson & F. Bourguignon (Eds.), *Handbook of income distribution* (vol 2, pp. 807–935) Amsterdam: Elsevier.

Johnsson, J. O., Grusky, D., Di Carlo, M., Pollack, R. & Brinton M.C. (2009). Microclass mobility: social reproduction in four countries. *American Journal of Sociology*, 114(4), 977–1036.

Long, J. & Ferrie, J. (2013). Intergenerational occupational mobility in Great Britain and the United States since 1850. *American Economic Review*, 103(4), 1109–1137.

Lungu, E., Zamfir, A. & Mucanu, C. (2013). A network analysis of the Romanian higher education graduates' intra-generational mobility. *International Review of Social Research*, 3(3), 39-51.

Nguyen, A., Hailen, G. & Taylor, J. (2005). Ethnic and gender differences in intergenerational mobility: a study of 26-year-olds in the USA. *Scottish Journal of Political Economy*, 52(4), 544-564.

Nickell, S. (1982). The determinants of the occupational success in Britain. *Review of Economic Studies*, 49, 45–53.

Österberg, T. (2000). Intergenerational income mobility in Sweden: what do tax-data show? *Review of Income and Wealth*. 46(4). 421–436.

Pascual, M. (2009). Intergenerational income mobility: the transmission of socio-economic status in Spain. *Journal of Policy Modeling*, 31(6), 835-846.

Peng, Y. (2001). Intergenerational mobility of class and occupation in modern England: Analysis of a four-way mobility table. *Research in Social Stratification and Mobility*, 18, 277-312.

Salido, O. (2001). *La movilidad ocupacional de las mujeres en España. Por una sociología de la movilidad femenina*. [Women occupational mobility in Spain. A sociology of female mobility]. Madrid, Centro de Investigaciones Sociológicas, CIS-Siglo XXI.

Sanchez-Hugalde, A. (2004). Movilidad intergeneracional de ingresos y educativa en España (1980-90). DT 2004/1, IEB, Barcelona, Spain.

Schwenkenberg, J. (2014). Occupations and the evolution of gender differences in intergenerational socioeconomic mobility. *Economics Letters*, 124, 348–352.

Solon, G. (1999). Intergenerational mobility in the labor market. In O. Ashenfalter & D.Card (Eds.). *Handbook of Labor Economics*, (vol. 3A, pp. 1761–1800). Amsterdam: North Holland.

Solon, G. (2002). Cross-country differences in intergenerational earnings mobility. *The Journal of Economic Perspectives*, 16(3), 59–66.

Torche, F. (2015). Analyses of intergenerational mobility: an interdisciplinary review. *Annals of the American Academy of Political and Social Science*, 657, 37-62.

Treiman, D. J. (1977). *Occupational Prestige in Comparative Perspective*. New York: Academic Publishers.

Trifiletti, R. (1999). Southern European welfare regimes and the worsening position of women. *Journal of European Social Policy, 9,* 49-64.

Warren JR, Sheridan JT and Hauser RM (1998) Choosing a measure of occupational standing: how useful are composite measures in analyses of gender equality in occupational attainment? *Sociological Methods and Research* 27(1): 3-76.

Weeden, K.A. & Grusky, D.B. (2005). The case for a new class map. *American Journal of Sociology*, 111(4), 141–212.

Wegener B (1988). *Kritik des Prestiges*. Opladen, Westdeutscher Verlag.