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Her class and his class: Does social class matter for fertility?

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Abstract

This work explores the association between fertility behaviour and occupational social classes, over and above educational and income resources. We use European Union Statistics on Income and Living Conditions (EU-SILC) data, pooling the longitudinal component for fourteen countries between 2005 and 2017. We compare the effect of the female partner's social class with that of the male partner on the likelihood of having a child, distinguishing between the effect on the first and the second child. We find consistent evidence that, *vis-à-vis* income and education, occupational social class does play an additional role in fertility behaviour. However, it does so differently depending on the sex of the partner and the different parities considered. Our findings indicate that when her partner is employed, the occupational social class she belongs to becomes a more significant factor and plays a pivotal role in influencing fertility behaviour.

Keywords

Fertility, occupational social classes, European Socio-economic Groups (ESeG) classification, EU-SILC survey, education

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Introduction

Most European countries have experienced consistently low fertility rates for the past three decades, falling significantly below the replacement level. European Union countries' average fertility rate is just above 1.5 children per woman (2021 Eurostat data). There have been many studies addressing the determinants of couples' fertility behaviour. A wide range of explanations have been studied – ideational, economic and institutional – tackling both macro- and micro-level determinants of low fertility (see for a review, Balbo et al., 2013; Poston et al., 2018). Within this broad literature, we are particularly interested in those studies that have explored the role of couples' socio-economic status in reproductive behaviour. These studies have predominantly focused on how an individual's education, earnings and income affect both the transition to the first child and higher parities births.

With this paper, we would like to contribute to this stream of the literature by focusing on a less often explored dimension of couples' socio-economic status, namely occupational social class. More precisely, we address the association between occupational social classes – as defined from a neo-Weberian perspective – and thus focus on the different employment relations that individuals' occupations entail (Erikson and Goldthorpe, 1992) and couples' fertility behaviour.

Occupational social class persists as a crucial structural feature of contemporary societies, shaping people's life chances and experiences (Scott, 2002), but its role in shaping individual reproductive choices has been rarely analysed in the literature on fertility (for some relevant exceptions, see Baizan, 2020, 2021; Bollen et al., 2001; Cantalini, 2020; Dribe and Smith, 2021; Kreyenfeld et al., 2023; Skirbekk, 2008). There are different micro-level social mechanisms potentially connecting class and fertility, net of other socio-economic dimensions: social closure and opportunity hoarding, the formation of distinct cultural practices and social beliefs, and the specific characteristics of employment relations.

The goal of the present paper is to establish the sociological phenomenon (*à-la* Merton, 1987): we intend to show that occupational social class is systematically associated with European couples' reproductive behaviour, over and above two other important dimensions of social stratification: educational level and income.

Therefore, we explore the existence and extent of this association using the pooled longitudinal data of 14 European countries from the European Union Statistics on Income and Living Conditions (EU-SILC from now on) survey from 2005 to 2017. We do so by comparing the effect of the female partner's social class with that of the male partner on the likelihood of having a child, distinguishing between the effect on the first and the second child. This latter differentiation is a matter of great concern since the lack of progression from the first to the second child is, together with childlessness, the most important driver of low fertility in Europe (e.g. Kreyenfeld et al., 2023; Zeman et al., 2018).

Social class similarities and reproductive behaviour

In the sociological debate, occupational social classes are defined in terms of the type of relationships in which individuals find themselves within the labour market[1]. The first basic distinction is between employers, employees and the self-employed (Erikson and Goldthorpe, 1992; Goldthorpe, 2000; Goldthorpe and McKnight, 2006). On these grounds, we can identify four main modes of regulation of the work relationship, which are relevant to the study of fertility behaviour:

1. Service relationship, that is a 'contractual exchange of a relatively long-term and diffuse kind in which compensation involves […] important prospective elements, such as salary increments, expectations of continuity of employment or at least employability and promotion and career opportunity' (Erikson and Goldthorpe, 2002: 32; Lahtinen et al., 2020). Individuals who have a service relationship within the labour market enjoy delegated authority. They possess specialised skills and knowledge, with limited possibilities for supervising and monitoring their

performance. Thus, their occupational position requires a commitment to the organisation and is characterised by high time and task organisation flexibility. Typical occupations included in this class are professional and managerial ones.

2. Labour contracts, typical of the working-class, involve a 'simple and spot contract for the purchase of a quantity of labour based on piece or time rates' (Erikson and Goldthorpe, 2002: 32). Workers' performance is easily measured. They do not have delegated authority and have minimal flexibility in executing their work tasks. Examples of occupations included in this class are those of blue-collar or routine non-manual workers.
3. Mixed forms, typical of the intermediate classes, are characterised by elements of both previous forms (Erikson and Goldthorpe, 2002). Typical occupations in this class are technicians, associate professional employees and clerical support employees.
4. Self-employed. They are independent workers, but they do not have the tasks and labour market relations that are typical of large employers or the service class; high levels of insecurity and volatility often characterise their positions, and they have *de facto* limited control over their working time organisation (Conen and Schippers, 2019; Tölke and Diewald, 2003). Small shop owners, for whom management and supervision of staff is not a significant component of their tasks, are typically included in this class.

Members of the same social class often share similar educational paths and income levels, characteristics which have been extensively studied as fertility determinants (see Balbo et al., 2013). However, members of the same social class are also characterised by a certain degree of homogeneity in terms of (i) their exposure to macro, social and economic events and trends – such as economic recessions, technological change, the offshoring of economic sectors and activities etc.; (ii) their implication in market regulations and the design of social protection systems; (iii) the economic security, control over the organisation of work, and individual's time command (and thus the possibility of reconciling family and job activities) which are attached to their occupation; (iv) cultural practices and lifestyles, values and political beliefs (Goldthorpe, 2000; Goldthorpe and McKnight, 2006).

Similarities within occupational social classes – in terms of economic security, control over work organisation and values and lifestyles – are the main reason why different positions within the labour market may affect an individual's fertility behaviour, over and above education and income.

First, social class is connected to different levels of employability and degrees of economic security, different prospective careers and exposure to unemployment risks. The service relationship provides employees with long-term contracts characterised by career and wage progression. Vice versa, labour contracts offer limited possibilities for long-term continuity without binding employer and employee. They have a high degree of labour commodification to ensure employer's freedom of hiring and firing (Breen, 2005; Christoph et al., 2020; Goldthorpe, 2000). Numerous studies have documented that the members of the working-class have a much higher risk than service class ones of becoming unemployed; at the same time, the self-employed are those most at risk of market fluctuations and income loss (Elias and McKnight, 2003; Gallie et al., 1998). These different social class-specific degrees of employability, connected with their associated sense of (in)stability, have a crucial role in driving individuals' fertility choices (Vignoli et al., 2020).

Secondly, social class is related to the individual's command over the working schedule. Thus, for instance, one may expect that the service relationship does not entail the same level of rigidity in the organisation of an individual's working time as that found in low-skilled or routine non-manual occupations (Erikson and Goldthorpe, 1992). The flexibility level of the work schedule is central in reconciling time for family and work, an essential determinant of fertility decisions. However, it is not the only factor, because independent workers often have unpredictable schedules, and many are likely to spend more hours at work than in wage-sector occupations (Goldin and Katz, 2011). Therefore, it should not be surprising that self-employed workers were found to face considerably greater difficulties in balancing work and lifetime demands than employees (Fairchild, 2009).

Finally, social class is also systematically associated with norms, values, cultural practices and lifestyles, which drive fertility behaviours differently. First, these translate into the expectations about future adult children's support when parents become older (Svallfors, 2006): for instance, it has been found that working-class parents have higher reciprocity expectations towards their children than service-class parents (Albertini and Radl, 2012; Rendall and Bahchieva, 1998). This finding can be related to fertility behaviours, considering that old age security motives matter for the decision to have children, even in societies with a fully developed welfare state (Boldrin et al., 2015). Finally, through social mechanisms such as social closure and the identification and creation of social boundaries, occupational social classes create subcultures and shared values at the root of fertility decisions (Lamont and Molnár, 2002; Svallfors, 2006).

Previous literature has provided conspicuous evidence showing that economic security, control over working time and organisation, and values and lifestyles are associated with fertility decisions. Therefore, we expect that systematic differences between occupational social classes along these dimensions can lead to differences in reproductive behaviour, net of the effects of income and education. At the same time, two points are worth noting. First, while it is possible to assess the role of social class on fertility net of income and education, without the proper variables it won't be likely to disentangle the association between these class-related features and reproductive behaviour. The results reported below, therefore, can be the results of some or all of these mechanisms working simultaneously. Secondly, class-related differences along dimensions such as economic security, control over working time, and cultural values and lifestyles can lead to contrasting expectations. As an example, the association between class and control over working time may suggest that service-class individuals are more likely to have a child; at the same time, career opportunities associated with the service relation imply higher opportunity costs of parthood for women belonging to this class and, thus, lower fertility. Also, old-insurance motivations for fertility and higher reciprocity expectations among lower classes may lead to the expectation of observing a positive association between a labour contract occupation and fertility.

Although few studies have focused on the relationship between occupational social class and fertility, those investigating the topic have documented that a (changing) association does exist. Adopting a long-term perspective on several centuries, Skirbekk (2008) discovered that while higher classes are linked initially to greater fertility, this relationship changes to neutral or negative in the final years under observation. In line with this latter finding, two recent studies by Baizan (2020; 2021) suggested a significant relationship between social class and second birth order, as well as variations in this relationship across several European countries. More specifically, in the first article Baizan found a positive gradient in the effect of social classes in Spain, with higher-ordered groups showing higher probabilities of having a second child. In the second article, he examined the variations among four European countries with different welfare systems and still found that social class has a favourable impact on fertility, however with some country differences. Kreyenfeld and colleagues (2023) studied this association for Germany over the last thirty years using German Socio-Economic Panel data. They have found that men and women in service classes experience higher probabilities of having a second child compared to members of all other classes. Dribe and Smith (2021) studied the association between social class and fertility in Sweden between 1922 and 2015. According to their findings, social class is associated with fertility independently from income, and the association is different in terms of parities and sex. For the first and second birth order, they found that the association turned positive for both sexes after 1990. They stated that this inversion could be related to significant changes in Swedish labour markets and most likely mirrors broader changes in work-family compatibility.

Does his or her status matter?

In stratification research, there has been a prevailing established convention where a household's social class is typically determined by either the husband's social class or by the highest social class within the couple (referred to as the dominance criterion) (Erikson, 1984; Goldthorpe, 1983). Most studies, then,

consider differences in household behaviour based on this classification. However, this might be a problematic assumption for fertility behaviour. In as much as fertility plans and actual childbearing are joint decisions made by the couple, where both men's and women's employment status matter, women's social class should play a role and the role of her and his social class does not necessarily coincide. For instance, it is reasonable to hypothesise that women's labour market status and social class should matter greatly for fertility among egalitarian couples. Additionally, the distribution of power within a couple is largely influenced by each member's class position.

Some studies have focused on how fertility behaviour is affected by both partners' employment status or work arrangements. Relevant here is that, over time, low fertility countries have seen a decline in household gender specialisation. This is especially the case before couples have their first child, where the work status of both partners appears to have progressively increased in importance in entering parenthood, and women's work seems as relevant as that of their partners in shaping household childbearing decisions (Comolli, 2021).

Even in Italy, a country with very low fertility and a meagre women employment rate for nearly three decades now, the importance of dual-earner couples is growing as a means of having children (Vignoli et al., 2012), and high levels of persistent unemployment among women lower reported fertility intentions (Busetta et al., 2019). But it is still *his* level of joblessness, more than *hers*, which plays a decisive role in inhibiting women's fertility intentions. In Finland, instead, partners' dual employment still encourages first births, but women's work status and income are at least as important as those of their partners (Jalovaara and Miettinen, 2013). An equal distribution of employment intensity between partners also favours the transition to parenthood in Belgium (Marynissen et al., 2020). By contrast, British women's employment negatively affects the transition to parenthood, independently of men's employment (Inanc, 2015). Among couples in the Netherlands, Begall and Mills (2013) find no association between the unemployment of either partner and the transition to first birth. Kaufman and Bernhardt (2012) suggest that Swedish men are more likely to intend to have a first child if their partners hold a job in a workplace perceived as family-friendly, allowing for flexible working hours and part-time work. These recent empirical studies are supported by two meta-analyses, which conclude that the nexus between women's paid work and fertility risk is overestimated if both partners' characteristics are not taken into consideration (Matysiak and Vignoli, 2008 on Europe and the United States; Alderotti et al., 2021 on Europe).

Empirical couple-level studies have demonstrated that systematic variation in women's and men's birth progressions is also contingent on the education of their respective partners, in line with Oppenheimer's resource-pooling theory for high-income countries (Oppenheimer, 1988). This theory implies higher fertility among highly educated homogamous couples compared with couples with only one highly educated partner (Nitsche et al., 2018). Hence, also this literature has stressed the importance of considering the socio-economic status of each partner, instead of a synthetised measure at a household level. Presently, there is a consensus that analysing based on just one member introduces bias into the analysis, and incorporating both parents is deemed the most effective empirical approach (Ballarino et al., 2021; Lippényi et al., 2019). To account for this, in our analysis we follow the 'individuals in families' approach (Bennett et al., 2009; Plutzer and Zipp, 2001), and so we distinguished female and male partner's occupational social class so to 'plot both partners in social space' (Atkinson, 2009: 903).

Data and methods

EU-SILC data

In our analyses, we use the data from the EU-SILC survey. EU-SILC collects comparable and harmonised microdata on income and living conditions and includes many socio-economic and demographic characteristics. These include an individual's employment status, occupation type and education level. We use data from the longitudinal component of the EU-SILC, which is a rotational panel where

households and their members are observed for a maximum of four consecutive years[2]. Our analyses consider data from 14 countries (the Czech Republic, Denmark, Finland, France, Greece, Italy, the Netherlands, Norway, Slovenia, Spain, Sweden, Poland, Portugal and the United Kingdom) collected from 2005 to 2017. Our unit of analysis is the couple, co-residing and either married or in a consensual union, whose female partner is aged between 18 and 44. To enter the sample, the couple must participate in the EU-SILC for at least two consecutive years. We end up with an analytical sample of 126,108 couple-year observations.

Dependent variables

EU-SILC does not provide detailed information about the childbirth history of individuals. However, the longitudinal dataset includes information on whether a newly born child has arrived in the household since the previous wave[3]. Hence, it is possible to identify whether an individual or a couple has had a child in the period between two consecutive interviews. In fact, the survey has been extensively utilised to study the determinants of childbearing (Klesment et al., 2014; Nitsche et al., 2018; Vignoli et al., 2012). We employ here two dependent variables for fertility behaviour[4]: the birth of the first child; the birth of the second child. We do not analyse higher parity births because these occur very rarely in our dataset. We defined different analytical subsamples, respectively: couples with no other child already present in the household at baseline ($N = 19{,}079$) when estimating the likelihood of the birth of the first child; couples with one child present in the household ($N = 33{,}749$) when estimating the likelihood of the birth of the second child.

Independent variables

Our main independent variable is occupational social class. We code, separately, the social class of female and male respondents of a couple with the European Socio-economic Groups (ESeG) scheme. This classification differentiates nine groups based on similar cultural, social and economic characteristics and is closely connected to the widely used Erikson-Goldthorpe-Portocarrero classification (Erikson and Goldthorpe, 1992; Meron et al., 2014; Rose and Harrison, 2014). More specifically, we identify four different social classes, distinguishing between those who have a service relationship, a labour contract, a mix of labour and service relationships, or are self-employed (Goldthorpe, 2000; Rose and Harrison, 2007). This analytical choice allows us to 'balance explanatory comprehensiveness and parsimony' (Connelly et al., 2016: 5) and to focus on those class-specific characteristics that, we hypothesise, may drive fertility behaviours above and beyond income and education. Hence, we employ the following schema:

1. service relationship (*Ser*), including professionals and managers (ESEG I-II);
2. self-employment (*Self*), including small entrepreneurs (ESEG IV);
3. intermediate class (*Mixed form*), including technicians, associate professionals, clerks and skilled service employees (ESEG III, V);
4. labour contract (*Lab*), including industrial and less skilled employees (ESEG VI-VII).

To these four occupational social classes, we add two categories:

1. unemployed (*Unemp*);
2. inactive (*Inact*).

Even though these two last categories are not social classes, they are necessary for our study to avoid missing values and, consequently, non-random selection bias in the analytic sample.

We include the following controls in our models: the age of the female partner (18–24, 25–29, 30–34, 35–29 and 40–44); the country of residence; year of the interview; an interaction term between the country of residence and the year of the interview to capture country-specific period effects; female and male partner's educational level (up to lower secondary, upper secondary and tertiary); income, measured in terms of year and country-specific quartiles of the distribution of household equivalent disposable income[5].

To account for the lag between the time of conception and birth, all independent variables are lagged to correspond to the couple's situation before the potential conception of the child (see the 'nine-month method of imputation' section in the online appendix for details).

Methods

Analyses are conducted using random-effects (RE) complementary log-log models (Allison, 2012). This model is considered particularly suitable for the study of fertility since it is asymmetrical and its link function $ln(-ln(1-\mu))$ allows to account for the rarity of the positive outcome (Begall and Mills, 2013). To estimate both the gross and net effect of social class, conditional on education and income level, the analysis proceeds in three steps.

In the first step (*M1*) we estimate the model where the explanatory variables include the social classes of both female and male partner at time *T** (where *T** is *T-1* or *T-2*, depending on the method of imputation, see online appendix), controlling for female's age (X_{it}), country fixed effects (γ_c), year fixed effects (δ_t) and their interaction; α_i is a random term representing individual-specific effects and ε_{it} represents the independent error term. In the second step (*M2*) we add the female and male partner's education at time *T**. In the last step (*M3*) we introduce the equivalised household income quartile at time *T**. With this strategy, we can single out the role of social class in fertility behaviour. We thus estimate the following three models:

$$Y_{it} = \beta_1 X_{it} + \beta_2 social\_class_{it*} + \gamma_c + \delta_t + \gamma_c * \delta_t + \alpha_i + \varepsilon_{it} \quad (M1)$$

$$Y_{it} = \beta_1 X_{it} + \beta_2 social\_class_{it*} + \beta_3 education_{it*} + \gamma_c + \delta_t + \gamma_c * \delta_t + \alpha_i + \varepsilon_{it} \quad (M2)$$

$$Y_{it} = \beta_1 X_{it} + \beta_2 social\_class_{it*} + \beta_3 education_{it*} + \beta_4 income_{it*} + \gamma_c + \delta_t + \gamma_c * \delta_t + \alpha_i + \varepsilon_{it} \quad (M3)$$

Each of these three steps is performed on each of our two dependent variables, that is, first child and second child. Table A1 in the online appendix reports the descriptive statistics for each of the (sub) samples analysed.

Results

A descriptive birth index by social class combination

To analyse the fertility behaviour by social class, we build a simple 'birth index' using the formula $\frac{Birth_i}{Birth_{TOT}} - \frac{N_i}{N_{TOT}}$ where the subscription *i* indicates each possible combination of female and male partner's social class and N_i is the total number of couples in a specific class *i*. This index provides the proportion of births observed in the panel by each combination of social classes, corrected for the different sizes of each combination of social classes in the sample. Therefore, a positive (negative) difference implies that a combination contributed more (less) to the total number of observed births relative to its size. Figure 1 shows the occurrence of childbirth events across different combinations of female and male partner's social class.

The first descriptive evidence emerging from the EU-SILC data is that, in the period under observation, the occurrence of childbirth tends to be more common among couples of higher social classes than in other social strata. Values of the 'birth index' are the highest for couples whose female partner belongs to

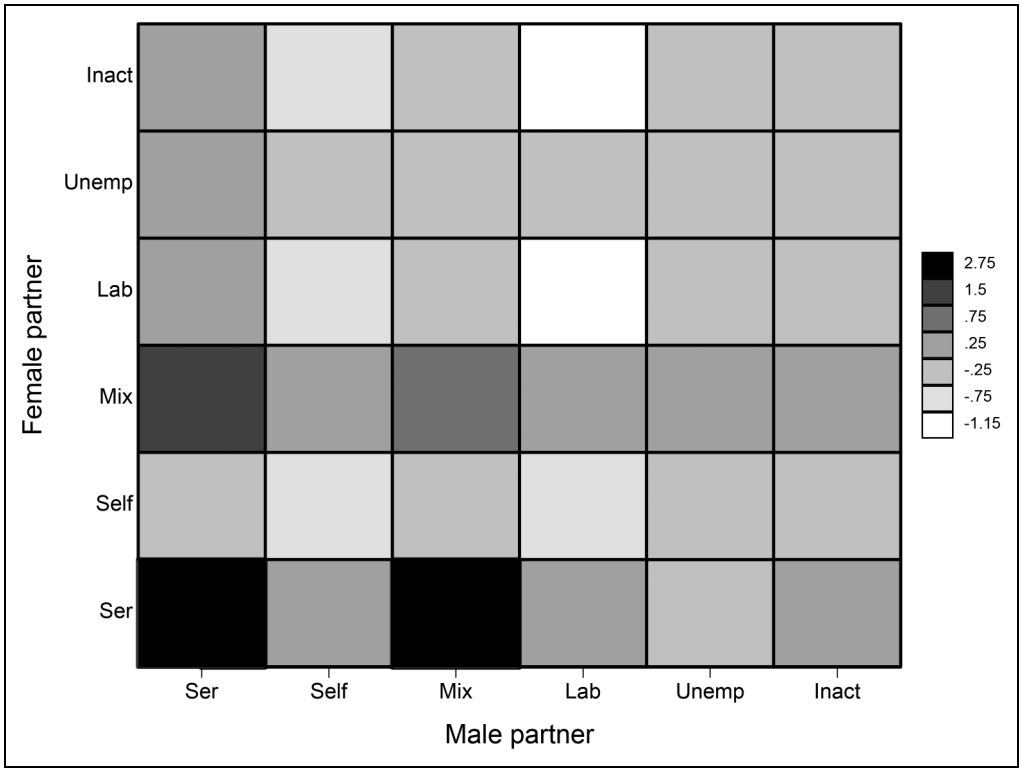

Figure 1. Birth index by combination of female\male partner's social classes.

the service class and a male partner who is in the same or the mixed form class. The values of the birth index are slightly lower for couples where women belong to the intermediate class, while men belong to either the service or the intermediate class. Overall, individuals belonging to service relationship and mixed relationship form, in their combinations, have the highest values on the 'birth index'. The combinations with the lowest number of births (relative to the combination size) are observed for couples with the woman either having a labour contract or being inactive and her male partner having a labour contract.

The gross effect of female and male partner's social class

In the first model specification (*M1*) we estimated the two models of having the first child and having the second child, while controlling for the female and male partner's social class and the female's age, as well as country and time fixed effects and their interaction. Table 1 shows the main results, while the full results are reported in Tables A2, A3 and A4 of the online appendix.

Overall, it emerges that those couples whose female partner belongs to the highest social class (service relationship) are characterised by the highest likelihood of experiencing childbirth. This is the case when referring to both the probability of having the first and the second child. The largest differences in the likelihood of having a new birth are observed between couples whose female partners are in the service class and those who are either in self-employment or in an occupation characterised by a labour contract, as well as unemployed or inactive. In general, these results suggest that there exists a social class gradient based on the employment relationship type of female partners: those employed with a contract with higher prospective elements are more likely to experience a new birth. When considering the occupational position of male partners, the picture emerging from data reported in Table 1 is

Table 1. Association between female\male partner's social class and first child\second child. β random-effects log-log model coefficients. M1.

	First child		Second child	
Variables	Female partner	Male partner	Female partner	Male partner
Social class (Ref: Service relationship)				
Self-employment	−0.38***	−0.13	−0.37***	−0.01
	(0.13)	(0.10)	(0.10)	(0.06)
Mixed form	−0.11*	−0.05	−0.18***	−0.09**
	(0.06)	(0.06)	(0.05)	(0.05)
Labour contract	−0.22***	−0.02	−0.31***	−0.21***
	(0.07)	(0.06)	(0.05)	(0.04)
Unemployment	−0.39***	−0.39***	−0.36***	−0.25***
	(0.09)	(0.11)	(0.07)	(0.08)
Inactive	−0.94***	−0.57***	−0.14***	−0.47***
	(0.10)	(0.14)	(0.05)	(0.13)
Observations	19,079		33,749	
Couples	12,371		21,538	

Standard errors in parentheses.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. All models control for the female partner's age, year, country, and year*country.

different: the premium associated with a service relationship *vis-à-vis* other occupations is lower, whereas a marked negative effect is associated with the male partner being inactive or unemployed. These findings seem to point to the fact that, among European couples, the labour market participation of men – more than their specific occupation – is an essential condition in deciding to have children. Conversely, when it comes to female partners, the differences between forms of employment seem to be quite relevant in shaping fertility decisions.

The net effect of social class

To single out the net direct social class effect we estimate two additional models, controlling first for the education of both partners (*M2*) and then adding the equivalised household income quartile as a covariate (*M3*). As with *M1*, all models are estimated separately for the three outcomes: any birth (Figure A2 in the online appendix), first child (Figure 2) and second child (Figure 3). For the first and the second birth order, below we present and comment on the average marginal effects (see Tables A5, A6 and A7 for predicted probabilities in the online appendix), since the results of nested non-linear models are not easily comparable (Mood, 2010).

When we add the education levels of both partners and equivalised household income to our models, the effect size of the female's social class tends to decrease. However, the general pattern remains substantially the same: couples whose female partners are in service class are significantly more likely than all other couples to experience a new birth. Furthermore, the magnitude of the coefficients in the model with controls for education (*M2*) and for education plus income (*M3*) does not substantially differ from that of the model without these controls (*M1*); the only possible exception is for females employed with labour contracts. Similarly to results from *M1* (Table 1), the picture that emerges from models including income and education suggests a quite different pattern of female and male partners' social class effects. The class position of male partners seems to matter far less in shaping the probability of having a new child, and social class related differences tend to be far less marked except when the male partner is inactive, or unemployed for the event of the first birth.

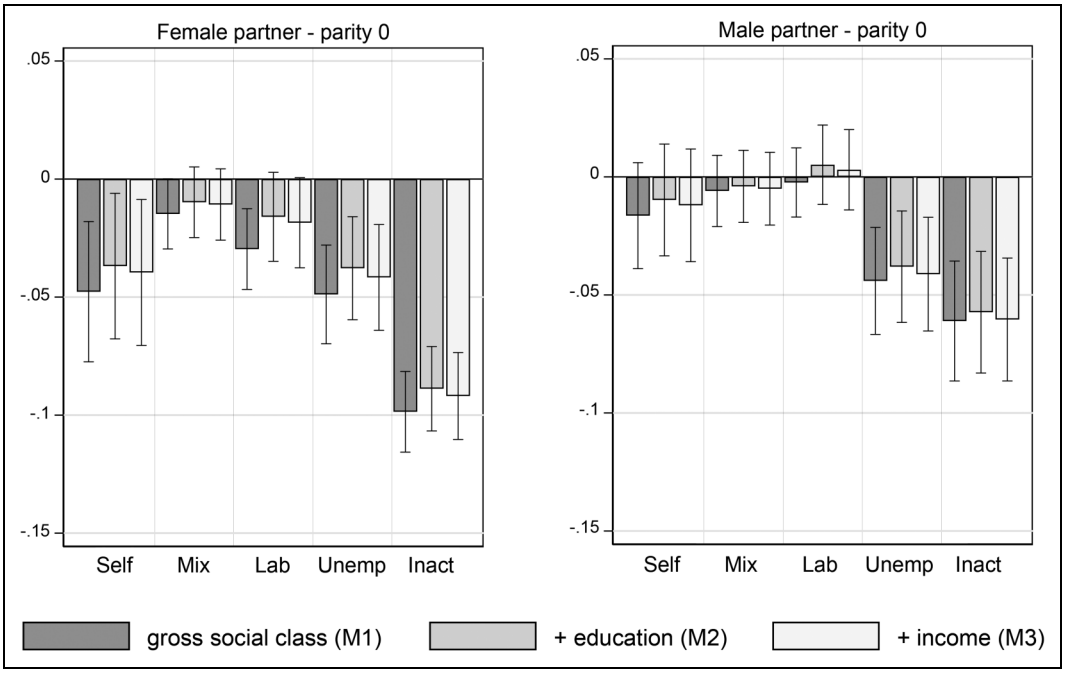

Figure 2. Association between female\male partner's social class and the event of having the first child. Average marginal effects and 95% CIs: random-effects log-log model coefficients. Reference category: service class. M1–M3.

When focusing on the transition to the first child (Figure 2) and considering the full regression model (*M3*), we observe that there are three working statuses that, in comparison to service-class women, are associated with a much lower likelihood of making the transition: women in self-employment, unemployed or inactive. In other words, it is the exclusion of the female partner from the paid labour market and from employment contracts that made couples less likely to have a first child in the observed period. Inactivity is particularly detrimental to the probability of having a firstborn child. As far as the male partners are concerned, it is the exclusion from the labour market – that is, unemployment or inactivity status – that is associated with a lower likelihood of having a first child.

Results differ significantly when we consider the transition to the second child as an outcome (Figure 3), confirming the importance of examining different parity transitions separately. In particular, together with couples whose female partners are in self-employment, those who are in a labour contract also have a lower likelihood of making the transition to the second child. Women's unemployment is still negatively associated with childbirth, but inactivity is not. This is likely because in this group (of couples who already have a child) we find many women who have become inactive after having a first child and who stay in this condition while making the transition to the second child. In the case of male partners, we find that male unemployment is also detrimental to the couple's probability of having a second child. However, unlike what is observed for the transition to the first child, the transition to the second one is also negatively associated with having a labour contract (however at 10% significance level). Furthermore, unlike with female partners, inactivity among male partners is negatively associated both with childbirth and the transition to the second child.

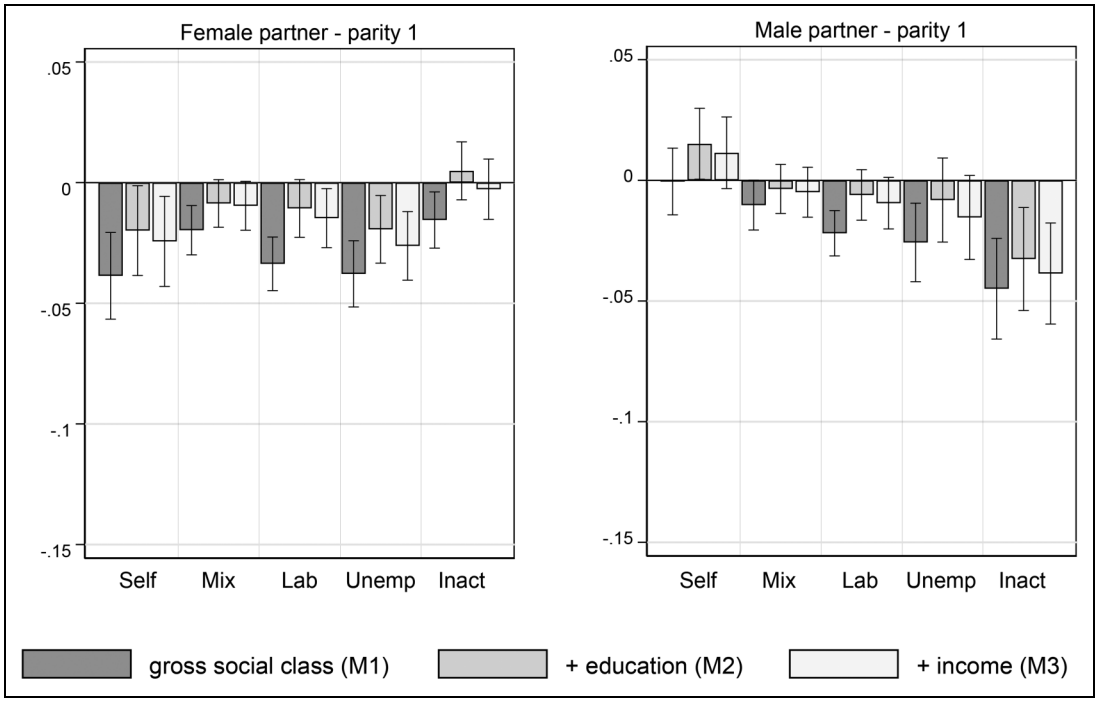

Figure 3. Association between female\male partner's social class and the event of having the second child. Average marginal effects and 95% CIs: random-effects log-log model coefficients. Reference category: service class. M1–M3.

Discussion

Individual and household resources, and their position in the social stratification system, do matter when choices about having children are being made. Previous studies have mostly focused on three characteristics affecting couples' fertility behaviour: the employment status of the partners, their educational level and income. However, with few exceptions (e.g. Baizan, 2020; 2021), analyses of transition to the first child and higher parities have overlooked one key variable for the study of social stratification: occupational social class.

We argue that this is an important limitation of fertility behaviour studies: there is more to social class than just its association with income and education. Occupational classes exhibit variations in terms of the inherent prospects within job roles, exposure to unemployment risks and authority over work schedules. These differences are so pronounced that measures based on occupation, describing diverse forms of inequality (Rose and Pevalin, 2003), provide a more comprehensive account of an individual's lifelong opportunities (Goldthorpe and McKnight, 2006). Furthermore, the formation of class-specific cultural norms and values, alongside processes like social closure and the monopolisation of opportunities, contributes significantly to substantial disparities among social classes.

Given that social class delineates a societal position tied to distinct long-term opportunities (Scott, 2002), we suggest that these disparities play a crucial role in decisions regarding childbearing, considering its associated costs and commitments. We have thus analysed the relationship between social class and fertility dynamics. The main contribution of this paper is, therefore, the consistent evidence that *vis-à-vis* income and education, social class does play an additional role in fertility behaviour. Moreover, class does so differently depending on the female and male partner's social class, and differently for different parities.

We have documented that the EU-SILC couples whose partners are in a service relationship have the highest likelihood of having a new child in the 12 years under consideration. Couples whose partners are unemployed or self-employed, on the other hand, are the least likely to have had a child between 2005 and 2017. Self-employment, and to a lesser extent being a part of the mixed form or labour contract class, are also associated with a disadvantage in terms of the possibility of transitioning to parenthood. This aligns with studies documenting the worsening conditions of self-employed individuals and families in Europe (Albertini et al., 2020).

Our results also indicate that, when considering the role of social class and fertility, it is paramount to distinguish between the female and male partner's social class. Indeed, female's social class is an essential driver of fertility behaviour, with female workers in the service class more likely to experience a new birth regardless of parity (which is in line with previous studies, e.g. Begall and Mills, 2013). Couples where women are self-employed or unemployed are less likely to experience the transition to the first child, and this also applies to couples with female partners with a labour contract when considering the transition to the second child. In contrast, the occupational class of male partners does not seem relevant for having the first child; it is only when they are excluded from the paid labour market – either because of unemployment or inactivity – that there is a negative association. The only exceptions to this pattern are couples with male partners with a labour contract: these are significantly less likely to experience the birth of a second child *vis-à-vis* male partners in the service class.

It is worth noting, however, that the study has some important limitations. Interviewees enter the EU-SILC panel component of the survey at very different ages: the older an individual enters the survey, the lower the possibility of observing an (additional) transition to a higher child parity. In addition, this process is likely to play a different role between different classes and educational groups, with the bias being more substantial for less educated and lower class individuals. This potential source of bias, leading to an overestimation of the fertility of more educated and upper classes, is partially but not entirely controlled by including age and educational level as controlling variables. A second relevant limitation has to do with the operationalisation of occupational social classes: distinguishing four big classes, plus two employment statuses, has the considerable advantage of being very parsimonious while both maximising between-class differences and still having enough cases for the various possible intra-couple class-combinations. On the other hand, resorting to such typology means that intra-class heterogeneity is significant, and extensive differences within these four groups – for instance in terms of command over working time organisation, or significance of the prospective career elements proper of the specific occupation – are large. A micro-classes approach would certainly lead not only to more accurate estimates of class effects, but also to a better understanding of the micro-level social mechanisms behind the documented class effects.

To conclude, we can argue that across Europe, at least in the first two decades of the 21st century, social class does matter for fertility behaviour. The pattern, though, is more complex than what would otherwise be suggested by the traditional social class literature (Goldthorpe, 2000; Rose and Pevalin, 2003)

In contrast to the approach usually taken, where the male partner's social class tends to characterise the social class of the household, it appears that the female partner's position in one of the four broad classes identified (service, labour, mixed, self-employment) matters more, for fertility behaviour, than the one of their male partners. Nonetheless, it is a pre-condition that the male partner is working, since the likelihood of having a child is much smaller if he does not

Conditional on the male partner working, however, the social class and the job position of the female partner matter a great deal. This feature is possibly driven by the time command attached to the social class the woman sustains, a situation enabling better opportunities to re-conciliate family and work activities. Higher fertility seems, therefore, a privilege for those who are better off in terms of their social classes.

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Supplemental material

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Notes

1. Throughout the article we the terms 'social class', 'occupational social class' and 'class' interchangeably, meaning a limited number of groups into which the working population is subdivided on the basis of the individual occupation. To this typical categorisation we add two 'occupational statuses' that are not in fact two 'classes', namely: unemployed and inactive. Nevertheless, the use of the label 'class' is here preferred to that of 'occupation' or 'occupational status' because our operationalisation is semantically and operationally closer to that typical of the European Socio-economic Groups (ESeG) classification system – which we use here to operationalise the concept of social class – and, secondly, because using 'occupation' may lead to some confusion with the less-aggregated occupational classes (as proposed by Weeden and Grusky, 2005), usually referred to as 'micro-classes' or 'occupational groups'.
2. We used the script provided by the GESIS website (retrieved from https://www.gesis.org/gml/european-microdata/eu-silc/) to set up a cumulative longitudinal dataset out of all individual releases for each separate file (Borst, 2018). Data for the EU-SILC longitudinal component is not available for Germany. France and Norway implement panels longer than four years.
3. Thus, our definition of parity refers to the parity of the couple and equals the number of children living with the couple. We cannot exclude that the couple or either partner may have had children earlier in life who are not living in the household anymore, implying the possibility of left-censoring. To minimise the risk of underestimating the true parity, we observe women only up to age 44.
4. For the sake of completeness, we estimated all the models also on the likelihood of any child born, without distinguishing by parity but controlling for the number of children ever born. Since EU-SILC does not provide full birth histories, this variable indicates the number of co-residing children of the couple. Results are presented in the online appendix (see Tables A2, A5, A8, A9, A10 and Figure A2).
5. The OECD modified equivalence scale is utilised to account for economies of scale in consumption. It is also worth noting that household disposable income, and not individual's income from work, is here used because the former concept is a more accurate proxy of the amount of economic resources that are available to household members (Canberra Group, 2011).

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