



# Resources and aspirations during the Great Recession: the impact on the transition to motherhood

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**Abstract:** Many studies show that labor market uncertainties are important predictors of the postponement of parenthood. While most existing studies investigate the consequences of the deterioration of employment conditions in absolute terms, in this paper I test the hypothesis that relative changes in occupational conditions affect childbearing choices. In particular, I follow the Easterlin Hypothesis of resources and aspirations to investigate how intergenerational mobility among American women during the Great Recession affected their chances of becoming mothers. Using respondents' labor market trajectories from the PSID 2003-2017 data, I show that when women hold an occupational position as prestigious as that held by their parents when they were growing up, they are more likely to enter motherhood than when they hold a downward-mobile job. I further show that this mechanism is stronger when aggregate labor market conditions deteriorate, assumedly during the crisis.

**Keywords:** fertility, Great Recession, aspirations, Easterlin, socioeconomic status



## 1. Introduction

Insecure financial and employment circumstances are often viewed as materially (or normatively) incompatible with the entry into parenthood (Blossfeld and Mills 2003; Kohler and Kohler 2002; Kreyenfeld et al. 2012; Kreyenfeld and Andersson 2014; Vignoli 2013). Couples often postpone marriage and parenthood until they have established a relatively solid position in the labor market (Vignoli et al. 2012). A rewarding and secure job, or a stable present and future income, are often seen as necessary conditions for forming a family. Especially in periods of rising uncertainty, however, it is more difficult for couples to assess which income or labor market position is solid enough in absolute terms, so we may argue that individuals assess their own socioeconomic position more in relative terms. Couples in the decision-making process regarding becoming parents might refer to the experience of people in their network, family and friends, before establishing their own family (Fasang and Raab 2014).

The influence of family background on the fertility behavior of children has long been of interest to sociologists and demographers (Axinn et al. 1994; Duncan et al. 1965; Murphy 1999; Murphy and Wang 2001). During the 1970s in particular, the American economist Richard A. Easterlin (1976, 1987) formulated the theory that individuals make childbearing decisions based on a relative measure of their socioeconomic status: the amount of their disposable resources relative to the socioeconomic aspirations they formed in their family of origin, based on their parents' social status. When the intergenerational relative socioeconomic status is in favor of the younger generation, or at least stable, they have children relatively soon; otherwise, they postpone childbearing until their aspirations are fulfilled.

Given the socioeconomic position of the parents, relative status is affected by changes in the disposable resources. The past decade in the US, like in most advanced economies, has been characterized by strong economic and labor market uncertainty that has deeply affected individuals' financial and employment security. The evidence on the consequences of the Great Recession in the US shows that the number of young married men (25-29 years old) living with their family of origin increased by about 5% between 2007 and 2011 (Cherlin et al. 2013; Danziger 2013), and that 24% of young adults aged 18-29 had moved back to their parental home (Livingston and D'Vera 2010). These findings suggest how difficult it has been for young individuals and couples to live independently of their family of origin, from whom they seek assistance and receive financial and practical help. During recessions, younger generations face fewer and less-rewarding career opportunities compared to their parents, so it

becomes more arduous for adult children to reach the status of their parents and thus fulfill their own aspirations. These adverse conditions are often cited as a reason why young adults postpone their exit from their family of origin as well as their own family formation (Meron and Widmer 2002). If this holds, we would expect the Great Recession to reduce childbearing also *via* this mechanism of reduced resources over aspirations. The crisis has negatively affected not only young adults and their entry into the labor market, but also the occupational trajectories of individuals later in the life course. During periods of rising employment uncertainty, even experienced workers are more likely to find themselves unemployed or forced to move to downward-mobile jobs. For these reasons, it is important to look at a longer occupational trajectory and not only to the very young workers.

The first aim of this study is to assess whether the postponement of childbearing in the recent decade of rising uncertainty is associated with the declining occupational opportunities for American women relative to the greater opportunities of their parents. To my knowledge, this is the first study to investigate the relative socioeconomic status mechanism during a very recent period. Simultaneously, given the period studied (2003-2017), this paper informs the literature on the consequences of the Great Recession on fertility behavior, focusing on an overlooked mechanism: the conflict between resources and aspirations.

Relatedly, the second contribution of the study is to show how contextual conditions moderate the association between aspirations and resources, and parenthood. Besides the evaluation of one's own socioeconomic position based on aspirations formed in the family of origin, in fact, individuals are affected intragenerationally by the present context they live in. The economics and psychological literature show for instance that aggregate unemployment has spillover effects on health and well-being going beyond the unemployed (Clark et al. 2010; De Lange et al. 2014; Oesch and Lipps 2012). We can thus hypothesize that the impact of one's own socioeconomic and occupational status on childbearing also varies depending on the local context. Previous literature suggests that the worsening of contextual labor market opportunities might have either a *multiplicative* or an *attenuating* effect (De Lange et al. 2014; Oesch and Lipps 2012) on the relation between individual-level relative occupational trajectories and first births. The paper additionally investigates this interplay.

## 2. Theoretical background and empirical research

### 2.1. Theoretical background

#### 2.1.1. *The intergenerational mechanism: the Easterlin Hypothesis*

The theoretical framework is based on the relative economic status theory developed by Richard Easterlin (1961, 1976) to explain fluctuations in birth rates. The Easterlin Hypothesis, in turn, speaks to the broader stream of research on social mobility and its implications for childbearing behavior (Boudon 1974; Breen and Goldthorpe 1997; Goldthorpe 1996). In the present study, I am interested in a crucial assumption that these theoretical models make, namely that individuals make strategic decisions by grounding them in their socioeconomic aspirations, which are formed in their family of origin.

In particular, Easterlin's argument is that individuals who have reached the socioeconomic position of their family of origin are more likely to believe they can afford parenthood, and hence are predicted to have higher fertility compared to downward-mobile individuals. The latter, in fact, comparing their social status to that of their family of origin, are less likely to feel they are in an adequate position to have children. In the original formulation of the theory, Easterlin (1961, 1976) argues that relative cohort size, through its impact on young adults' labor market opportunities and disposable income relative to their socioeconomic aspirations formed in their family of origin, affects fertility. In subsequent formulations of the theory (Easterlin 1976, 1987), the author emphasizes the role of socioeconomic status and how one's own status is identified relative to the level of parental influence during the formative teen years. Individuals make strategic decisions based on the evaluation of their own disposable socioeconomic resources relative to their aspirations or, at least, to their idea of an acceptable standard of living. The latter is based on the resources and socioeconomic conditions under which an individual has grown up, namely those of the family of origin. According to Easterlin, the decision to have children does not depend on individuals' absolute socioeconomic status but on their relative status compared to that of their parents; the more satisfactory the comparison is, the more likely they are to have children.

As mentioned, Easterlin's argument fits into the wider body of literature on the nexus between social mobility and fertility. The relative socioeconomic status hypothesis is one of the mechanisms through which mobility potentially affects childbearing (for a review see Kasarda and Billy 1985). However, mobility-fertility theories focus explicitly on the process

of moving up or down the social ladder net of the socialization or acculturation processes represented by the (additive or multiplicative, depending on the model) effect of origin and destination statuses (Kasarda and Billy 1985; Sobel 1985; Stevens 1981). On the contrary, within the Easterlin framework, the effects of social origin and mobility are inherently indistinguishable as both immobile and upward-mobile individuals reach their aspirations and no theoretical difference between those who reach exactly and those who exceed their parents' social position is hypothesized. This theoretical difference is reflected in the empirical modelling of the process which also does not isolate mobility with respect to origin and destination, as the methodological section will clarify.

### *2.1.2. The intragenerational mechanism: the adaptation hypothesis*

The economics and social psychology literature show that unemployment rates have spillover effects on the well-being of both those who experience joblessness and those who do not (Clark et al. 2010). Those who have a job suffer from a rising unemployment rate because it signals an increasing risk of becoming unemployed themselves in the future. The anticipation of future job loss might be even more stressful than experiencing unemployment itself (Witte 1999). Furthermore, when the labor market is highly unstable employees tend to experience increasing workload and feel the pressure to commit to their job, in the fear of losing it, rather than embarking on family commitments (Clark et al. 2010). For the unemployed, high unemployment rates signal the higher risk of remaining jobless for a long time, making the experience of non-working even more stressful. On the other hand, previous studies show that being unemployed when this condition is very common buffers the stigma of joblessness and reduces the feeling of distress that is typical when one is out of the job market (Clark 2003). Similarly, labor market scholars argue that prolonged periods of unemployment, by attenuating the social norm of working and the stigma associated with not working, might generate an adaptation mechanism (Blanchard and Summers 1986; Lindbeck et al. 1999; Oesch and Lipps 2012). Yu and Sun (2018) show that the effect of aggregate unemployment on childbearing decisions differs by women's social origin in the US. More disadvantaged women tend to delay childbirth in response to rising unemployment while more highly educated or women with highly educated parents do not.

In the present study, the focus is on the mismatch between the resources linked to the current job and aspirations, rather than on joblessness; therefore, the theoretical mechanism

tested here is whether one evaluates her unsatisfying occupational position less negatively if the labor market context she lives in is more troublesome. If the risk of joblessness increases, the outlook on having a lower relative socioeconomic status becomes more positive in light of the comparison with the unemployed, and the negative effects of downward mobility on the chances of having children diminishes. In this case, contextual factors would have an *attenuating* effect on the relative socioeconomic status impact on the transition to first birth. However, on the contrary, a diffused and prolonged stall of labor market conditions might add up to the individual-level dissatisfaction, inducing the person to further postpone childbearing due to an even more pessimistic view of the future. In particular, the effect would be stronger for the downward mobile as they are more at risk of losing the job or moving further down compared to the non-downward mobile women. In this case, contextual factors would have a *multiplicative* negative effect, meaning that rising unemployment rates in the local area of residence multiply the negative effect of one's own declining occupational prestige on the chances of forming a family.

## 2.2. Empirical research

The empirical evidence following the publication of Easterlin's study on the relationship between economic resources and aspirations on the one hand and fertility on the other is mixed. Cross-country analyses investigating the impact of relative cohort size and fertility rate find support for the Easterlin Hypothesis in Anglo-Saxon countries, but little or no support in Continental and Southern European countries (Pampel 1993, 1995). Both macro- and micro-level applications of the Easterlin Hypothesis have been extremely loose in their interpretation of the relative income measure, coming to very different conclusions. According to Macunovich (1998), 15 micro-studies in the US support Easterlin's thesis, while seven do not. Among the latter, however, five rely on self-assessed objective and subjective measures of relative economic status, which do not mirror Easterlin's original explanatory variable. The other two studies obtained mixed results (Thornton 1980; Olneck and Wolf 1978), but neither of them found relative economic resources to be correlated with higher fertility. Among supportive micro-analyses, measures of relative economic status also vary greatly. Most use the measure of relative economic status as defined by Easterlin (husband's income relative to the parental income or relative occupational status), while others use husband's income relative to some measures of 'predicted' income based on characteristics

like age, age at marriage, education, place of birth, and occupation.

In recent decades, empirical research regarding the Easterlin hypotheses has been modest, in light of the fact that early studies received controversial support. Bernardi (2007) investigates the effect of social mobility on the transition to first birth for Italian men. Results show that the higher the socioeconomic level of the family (father's occupational prestige) in which an individual grew up – in other words, the luckier he was during childhood – the higher his minimum income aspirations will be upon entering adulthood and consequently the more difficult it will be to realize these aspirations. The probability of fatherhood actually increases around 10% if the individual is non-downward-mobile with respect to his parents. Moreover, both Bernardi (2007) (for Italy) and Aassve et al. (2006) (for the UK) find that the higher the parental socioeconomic status the slower the offspring's entrance into the labor market (the longer they wait to accept their first occupation), net of education (Aassve et al. 2006); and consequently, the lower their likelihood of setting up a family (Bernardi 2007).

Empirical evidence in the field of sociology and demography is quite limited regarding the interplay of micro- and macro-level labor market conditions in shaping the transition to motherhood. Kravdal (2002) shows that, in Norway during the 1990s, men's local unemployment rates were more strongly related to first births than was individuals' own unemployment. De Lange and colleagues (2014) study the interaction of macro- and microeconomic uncertainty on family formation in the Netherlands, testing the normative and material principle of being economically able to support a family (Oppenheimer 1988; Kreyenfeld et al. 2012). They did not find that macro- and micro-level insecurities reinforce each other in the transition to the first union or child. A very recent study by Yu and Sun (2018) shows that in the US, local unemployment rate affects the risk of childbearing differently from own unemployment, depending of men and women's social origin. Disadvantaged women delay childbearing in response to aggregate unemployment but not own unemployment, while women with a higher social background behaved in the opposite way. Yu and Sun (2018) argue that women with a lower social background suffer more during periods of high unemployment because they risk more than the more advantaged women. However, once unemployed, their prospects of improvement are much smaller compared to the high social origin women who instead risk more when unemployed themselves.



### 3. Data, variables and model

The dataset used in this analysis is the US Panel Study of Income Dynamics (PSID), a biennial longitudinal survey that started in 1968. Any individual born to, adopted by, or married to a member of the original core sample becomes part of the PSID study and, as children move out of the parental home and establish their independent units, they are interviewed as new families. Following children as they become adults is a unique survey design that facilitates intergenerational studies (McGonagle et al. 2012). Demographic, educational, and labor market information is available for all family members. The PSID further traces in detail the occupational trajectories of individuals. Retrospective information is recorded on respondents' first full time occupation and the last four jobs preceding the interview, regarding the type of occupation, and the start and end date of each job. In this way, the effect on childbearing risk of both the *kind* of occupation and the *time* and *duration* of each job can be estimated. Moreover, for each individual the survey reports the state of residence at the time of the interview, so that individual-level information can be linked to local macroeconomic conditions.

The analysis focuses on American women, interviewed in the last eight waves of the PSID panel (2003-2017). The sample is composed of 3043 women, partnered or unpartnered, of whom 1413 had their first child during the observed period. The risk of first birth is modeled using event history analysis through a Cox proportional hazards model with time-dependent covariates. Women are observed from age 17 until they have their first child, or they are censored at the earliest point among when they turn 46, they first out-migrate or exit the survey<sup>1</sup>. The failure event is set to 12 months before the birth of the first child to capture the moment around the time when the decision is made to have a child. I assume the decision to become a mother is discussed, and that sometimes a number of attempts are necessary before becoming pregnant. The explanatory variables are thus measured the year before the birth occurred. However, women do not enter the study at the same age. Depending on the age they were at the time of the first recorded job, some are observed since they became at risk at age 17 - for them we dispose of the complete job history - but others enter the study later, after having been at risk for some time. These spells that come under observation after

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<sup>1</sup> The origin is set to age 17 instead of 15 for two reasons. First, teen pregnancies are rare in the sample and measurement errors are large; second, the focus of the analysis is on intentional births and their nexus to occupational mobility, while teen pregnancies are usually unintended and not linked to employment itself. However, robustness checks are conducted using a time origin of age 15 and results are unaffected.

exposure are left-truncated. Contrary to the unconditional logistic regression, the Cox model, conditioning the hazard on the length of exposure to risk and specifying a delayed entry of each woman at the time at which her first occupation is recorded, controls for left-truncation (Allison 1984, 2010; Guo 1993).

The main explanatory variable is *relative status*: a continuous measure of intergenerational relative socioeconomic status varying for each occupational episode women experience. Relative status is the ratio between the Socioeconomic Index (SEI) linked to each woman's occupational episode and the average index of her parents' occupation when she was growing up. Including mother's status is recommended, especially in younger cohorts (Beller 2009). An average is preferred over the higher of the two parents' SEI, since recent studies support the notion that parental resources are accumulated in the family and that the dominance model, compared to the average, is a suboptimal measure of social background when children's occupation is the outcome (Thaning and Hallsten 2018). The three-digit occupation code (2002 Census) of each job is linked to its SEI (Hauser and Warren 1997). The index varies from 7.55 in Production Occupations to 80.5 for Managers in Legal Issues (Tab. A.1). Mothers' and fathers' occupations when women were growing up are also linked to their SEI and then averaged<sup>2</sup>. Figure 1 illustrates how relative status can theoretically vary over women's occupational trajectories. Relative status varies for each job episode: it likely increases with tenure, but if a woman is forced to move to a lower SEI job, a shift from being above her aspirations to suddenly being below them is plausible. The variable is continuous (mean: 1.15, range: 0.22-6.68) so that, as in Easterlin's original formulation, the second generation's aspirations are not set exactly equal to parental SEI but rather as a function of it. This operationalization of the independent variable, relative status, would imply that only working women are included in the analytic sample. To include episodes of unemployment or inactivity<sup>3</sup> each spell of joblessness is imputed with the SEI of the previous job when available and a dummy for joblessness is included in the models. Only women who are out of the labor force for the entire period of observations are dropped from the sample (around 20% of observations). The distribution of women's and parental SEI (Fig. A.1) shows a general tendency of increasing occupational status across the two generations.

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<sup>2</sup> Mothers' and fathers' occupations are also coded in the 2002 Census occupational code to make them comparable to the respondents' occupational codes.

<sup>3</sup> It is not possible to separate unemployed and inactive women in the data. Unemployment spells other than those coinciding with the interview are based on the occupational trajectories. However, there is no information on whether women are unemployed or out of the labor force between the interviews.

Contextual factors are operationalized through the monthly unemployment rates of the state of residence at the time of the interview. Unemployment captures the aggregate labor-market effects of the crisis. Since the unemployment data cover a long time period (January 1985 - November 2017) and 50 US states, women in the sample are exposed to different degrees of severity of the recession across time and location. This variance in unemployment rates can be exploited in the analysis to grasp the effect of being exposed to this different scale of labor market uncertainty, beyond individual occupational status<sup>4</sup>.

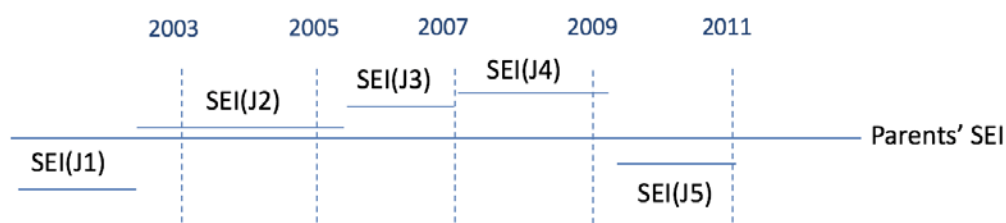
The control variables are race, birth cohort, number of siblings, years of completed education, and a dummy for being married (summary statistics in Tab. A.2). In addition, I control for parental SEI to test whether the socioeconomic position of the family of origin explains (partly or entirely) the effect of a higher relative status on first birth. Furthermore, I conduct additional analyses by quartiles of parental SEI to highlight any specific nonlinearity in the link between aspirations and resources on the one hand and childbearing on the other. The effect could be driven, in fact, on the one hand, by highly achieving women who come from a high socioeconomic family background and reach their very high aspirations or, on the other hand, by women at the very bottom of the distribution for whom it is easier to reach and maintain the socioeconomic status of their family of origin.

Notably, despite the inclusion of parental SEI as a control and as a moderator of the association between relative socioeconomic status and the transition to motherhood, in the models here the effects of aspirations and current resources remain largely indistinguishable, as the theoretical formulation by Easterlin (1961, 1976) contemplates. While studies of mobility-fertility require the isolation of the combined (in an additive or multiplicative form depending on the model) effects of origin and destination from the effect of mobility, bringing up several identification issues (Sobel 1981), the latter are not a concern in the present study since the intention here is not to isolate mobility but rather to highlight whether reaching at least one's own parents' status is positively associated to entering motherhood.

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<sup>4</sup> Unemployment ranges from 2.1 in Virginia in October and November 2000 to 14.6 in Michigan in June 2009.

**Figure 1: Hypothetical relative socioeconomic status variation over occupational trajectory.**

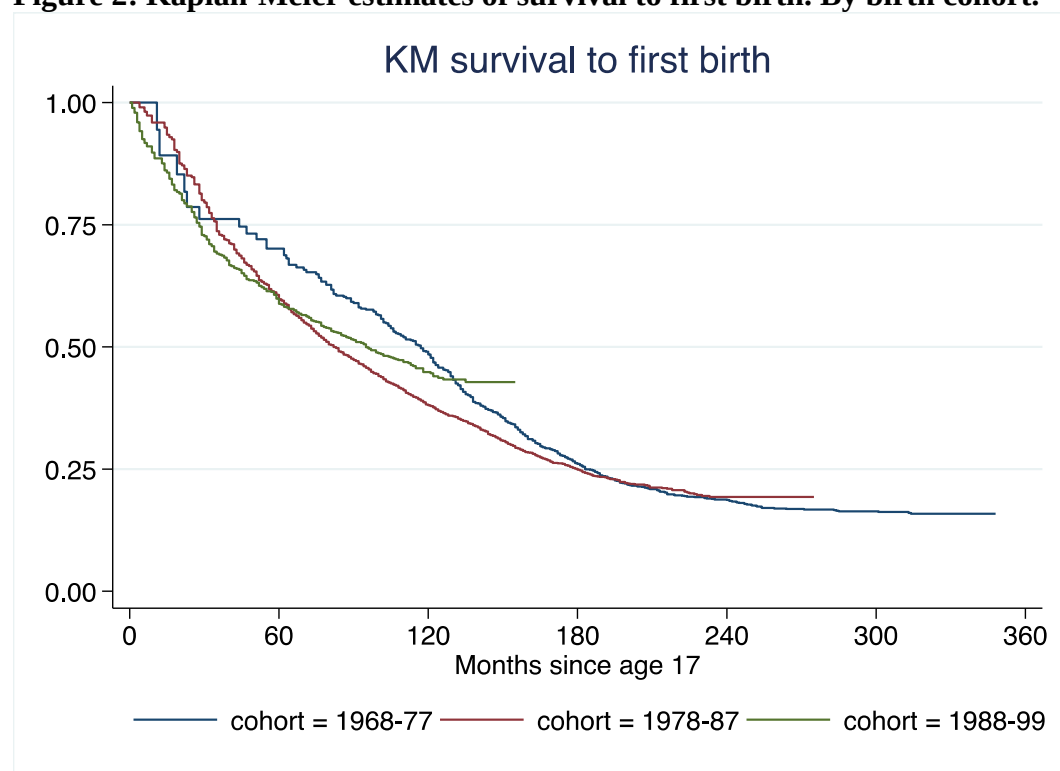


Source: Elaboration of the author.

## 4. Results

Figure 2 illustrates the Kaplan-Meier estimates of the survival functions to first births (conception) for women born in three different cohorts (1968-77; 1978-87; 1988-99). Women in the oldest cohort postponed first birth more strongly in their 20s (during the 1990s) compared to the younger cohorts that entered their 20s in the early 2000s. The youngest cohort, observed only until their late 20s, started delaying childbearing after the age of 25 but the postponement seems very persistent and by the age of 27 around 40% of them are still childless.

**Figure 2: Kaplan-Meier estimates of survival to first birth. By birth cohort.**



Source: Elaboration of the author based on PSID (2003-2017) data.

Table 1 reports results from the Cox proportional hazards model of first birth showing the odds ratios of the transition to motherhood as explained by individual-level relative status and aggregate-level state unemployment rates. The odds ratios for the variable of interest, relative status, are positive in all models, suggesting that the higher the occupational status of women relative to that of their parents the higher the risk of first birth, net of all demographic controls, their educational level and the socioeconomic status of their family of origin. These results seem to support the Easterlin's hypothesis of resources and aspirations. The greater the socioeconomic status of women's jobs relative to their parents' status when they were growing up, the faster is their entry into motherhood. A graphical tool for a more intuitive interpretation of results is provided by the predicted hazard curves<sup>5</sup> which plot the Cox model estimated hazard function at specific values of the covariates<sup>6</sup>. Figure 3 illustrates the profiles of two hypothetical women's occupational mobility scenarios: a downward mobile (a relative status of 0.2) and an upward mobile (a relative status of 5.6). The results are plotted for working White married women; all other controls are set at the mean. The figure confirms that the hazard of first birth is higher for women in upwardly mobile jobs relatively to their parents than for those in downward mobile job, and that the difference is especially large before the age of 30.

In addition, Table 1 shows that for jobless women who did not work earlier (No work coefficient, Models 1-5) their risk of birth is much lower, while if they are not currently working but have worked before in a job with a high relative status (interaction coefficient, Models 1-5) they display an even higher risk of having a first child compared to women who are currently working. This is very interesting and might be related to the specificity of the American context where there is little or no public support to childbearing and the cost of parenthood falls entirely on parents. Upward mobile women, who might have the financial resources to do it, might take the opportunity of a career break to have a child.

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<sup>5</sup> The use of predicted survival curve as a post-estimation tool to graphically illustrate models' estimate is very common in epidemiology and medical studies but has been used also in sociology, demography, and economics (see for instance Guzzo and Furstenberg 2007; Rondinelli, Aassve and Billari 2010).

<sup>6</sup> Unfortunately, the Stata command *stcurve* does not produce confidence intervals and the command *survci*, which plots cumulative survival functions with bootstrapped confidence intervals does not support multiple-records data (Cefalu 2011). For these reasons, Fig. 3-4 do not report confidence intervals of the hazard curves.

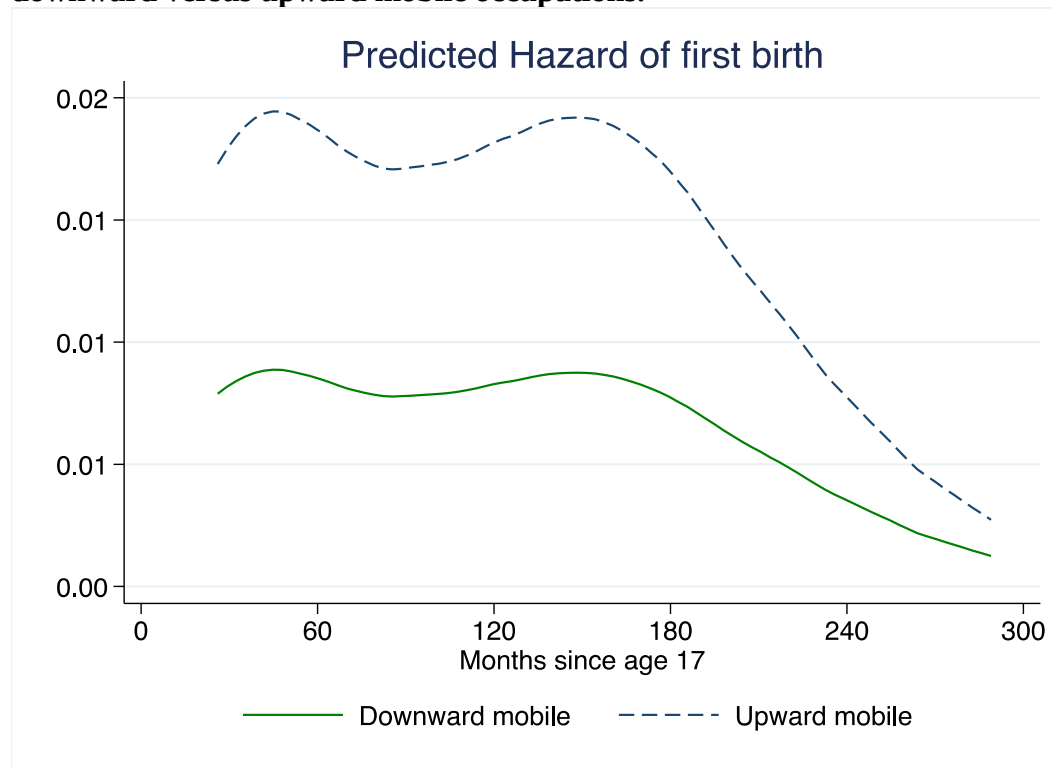
**Table 1: Cox model for the hazard for first birth.**

|                                                   | Model<br>(1)             | Model<br>(2)             | Model<br>(3)             | Model<br>(4)             | Model<br>(5)             | Model<br>(6)             | Model<br>(7)             |
|---------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Relative status                                   | 1.16***<br>(1.05 - 1.28) | 1.22***<br>(1.07 - 1.39) | 1.16**<br>(1.01 - 1.33)  | 1.17**<br>(1.02 - 1.34)  | 1.22***<br>(1.07 - 1.39) | 1.21***<br>(1.06 - 1.39) | 1.16**<br>(1.01 - 1.33)  |
| Not working                                       | 0.54***<br>(0.39 - 0.73) | 0.51***<br>(0.37 - 0.70) | 0.30***<br>(0.18 - 0.50) | 0.30***<br>(0.18 - 0.51) | 0.51***<br>(0.37 - 0.70) | 0.50***<br>(0.36 - 0.69) | 0.29***<br>(0.17 - 0.49) |
| Relative status*Not working                       |                          |                          | 1.85***<br>(1.24 - 2.78) | 1.82***<br>(1.21 - 2.73) |                          |                          | 2.05***<br>(1.35 - 3.10) |
| Unemployment rate (cent.)                         |                          |                          |                          | 1.03**<br>(1.00 - 1.06)  | 1.03**<br>(1.00 - 1.06)  | 1.00<br>(0.94 - 1.06)    | 0.99<br>(0.93 - 1.05)    |
| Relative status*Unemployment rate                 |                          |                          |                          |                          |                          | 1.02<br>(0.98 - 1.07)    | 1.04<br>(0.99 - 1.09)    |
| Unemployment rate*Not working                     |                          |                          |                          |                          |                          |                          | 1.16<br>(0.90 - 1.49)    |
| Relative status*Unemployment rate<br>*Not working |                          |                          |                          |                          |                          |                          | 0.82*<br>(0.67 - 1.00)   |
| Parents' SEI                                      |                          | 1.00<br>(1.00 - 1.01)    | 1.00<br>(1.00 - 1.01)    | 1.00<br>(1.00 - 1.01)    | 1.00<br>(1.00 - 1.01)    | 1.00<br>(1.00 - 1.01)    | 1.00<br>(1.00 - 1.01)    |
| Years of education                                |                          | 0.90***<br>(0.87 - 0.93) | 0.90***<br>(0.88 - 0.93) | 0.90***<br>(0.88 - 0.93) | 0.90***<br>(0.87 - 0.93) | 0.90***<br>(0.87 - 0.93) | 0.90***<br>(0.87 - 0.93) |
| Married                                           |                          | 1.98***<br>(1.74 - 2.27) | 2.00***<br>(1.75 - 2.28) | 2.00***<br>(1.75 - 2.29) | 1.99***<br>(1.74 - 2.27) | 1.99***<br>(1.74 - 2.28) | 2.01***<br>(1.75 - 2.29) |
| Cohort 1978-87                                    |                          | 1.05<br>(0.91 - 1.21)    | 1.04<br>(0.90 - 1.20)    | 1.01<br>(0.88 - 1.17)    | 1.02<br>(0.89 - 1.18)    | 1.02<br>(0.89 - 1.18)    | 1.01<br>(0.87 - 1.16)    |
| Cohort 1988-99                                    |                          | 0.85<br>(0.70 - 1.04)    | 0.84*<br>(0.69 - 1.03)   | 0.80**<br>(0.65 - 0.99)  | 0.82*<br>(0.66 - 1.00)   | 0.82*<br>(0.66 - 1.01)   | 0.80**<br>(0.65 - 0.98)  |
| One sibling                                       |                          | 1.14<br>(0.88 - 1.47)    | 1.13<br>(0.87 - 1.47)    | 1.13<br>(0.87 - 1.47)    | 1.14<br>(0.88 - 1.47)    | 1.13<br>(0.88 - 1.47)    | 1.13<br>(0.87 - 1.46)    |
| Two siblings                                      |                          | 1.25*<br>(0.97 - 1.62)   | 1.25*<br>(0.97 - 1.62)   | 1.25*<br>(0.97 - 1.62)   | 1.25*<br>(0.97 - 1.62)   | 1.25*<br>(0.97 - 1.62)   | 1.25*<br>(0.96 - 1.62)   |
| Three siblings                                    |                          | 1.23<br>(0.94 - 1.62)    | 1.23<br>(0.93 - 1.61)    | 1.22<br>(0.93 - 1.60)    | 1.22<br>(0.93 - 1.61)    | 1.22<br>(0.93 - 1.61)    | 1.21<br>(0.92 - 1.59)    |
| Four or more siblings                             |                          | 1.24<br>(0.94 - 1.64)    | 1.24<br>(0.94 - 1.64)    | 1.25<br>(0.94 - 1.64)    | 1.25<br>(0.95 - 1.65)    | 1.24<br>(0.94 - 1.64)    | 1.25<br>(0.95 - 1.65)    |
| African American                                  |                          | 1.06<br>(0.91 - 1.23)    | 1.06<br>(0.91 - 1.23)    | 1.05<br>(0.90 - 1.22)    | 1.05<br>(0.90 - 1.22)    | 1.05<br>(0.90 - 1.22)    | 1.05<br>(0.90 - 1.22)    |
| Other ethnicity                                   |                          | 0.91<br>(0.72 - 1.15)    | 0.92<br>(0.72 - 1.16)    | 0.90<br>(0.71 - 1.15)    | 0.90<br>(0.71 - 1.14)    | 0.89<br>(0.70 - 1.13)    | 0.89<br>(0.71 - 1.13)    |
| Subjects                                          | 2793                     | 2709                     | 2709                     | 2709                     | 2709                     | 2709                     | 2709                     |
| N                                                 | 190456                   | 184672                   | 184672                   | 184672                   | 184672                   | 184672                   | 184672                   |

Source: Elaboration of the author based on PSID (2003-2017) data. Note: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

As far as the controls are concerned, being married is associated with a twice as much greater risk of childbearing compared to the never married or divorced, separated or widowed, while higher education seems to lead to a postponement of first birth. Younger cohorts enter motherhood significantly later than women born before 1988 do. Net of the other covariates, having two siblings is associated with a faster transition to first birth while ethnicity is not significantly associated to the hazard or motherhood. Compared to White non-Hispanic women, African American women have slightly higher odds of first birth, while women of other ethnicities display lower odds, as is typically reported in official statistics (Mathews et al. 2016) but the estimates are not statistically significant. Parental SEI does not affect the risk of first birth beyond its effects through women's relative occupational status, although including the variable in the model increases the odds ratios of the relative status. Higher aspirations are more difficult to reach and maintain, and not controlling for this would underestimate the effect that exceeding these aspirations, by obtaining a satisfying job, has on the transition to motherhood.

**Figure 3: Predicted hazard of first birth at specific covariate values. Women working in downward versus upward mobile occupations.**



Source: Elaboration of the author based on PSID (2003-2017) data.

State unemployment rate per se is weakly associated with the transition to motherhood and the inclusion of the aggregate labor market indicator does not alter the positive association between relative status and the risk of birth for working women. To provide a more intuitive interpretation of the interaction between relative status and local aggregate labor market conditions (Model 6, Tab. 1), Fig. 4 plots together four profiles of women that more synthetically describe how the effect of relative occupational status on the transition to motherhood changes at different levels of aggregate unemployment. The profiles combine the same two hypothetical women's occupational mobility scenarios presented in Fig. 3 (a relative status of 0.2 for the downward and 5.6 for the upward-mobile women) with two unemployment rate scenarios (average unemployment levels, 6% in the sample, and high unemployment, 10.8%). The solid lines in Fig. 4 indicate occupational episodes taking place at average unemployment levels, while the dashed lines indicate occupational episodes taking place when unemployment rate is high. Blue lines represent intergenerational downward-mobile jobs and the green lines the upward-mobile jobs. As for Fig. 3, the results are plotted for working White married women; all other controls are set at the mean. Figure 4 illustrates that the difference in the hazard of first birth between women in upward and downward mobile jobs is smaller at average than high levels of unemployment rates. A quite large

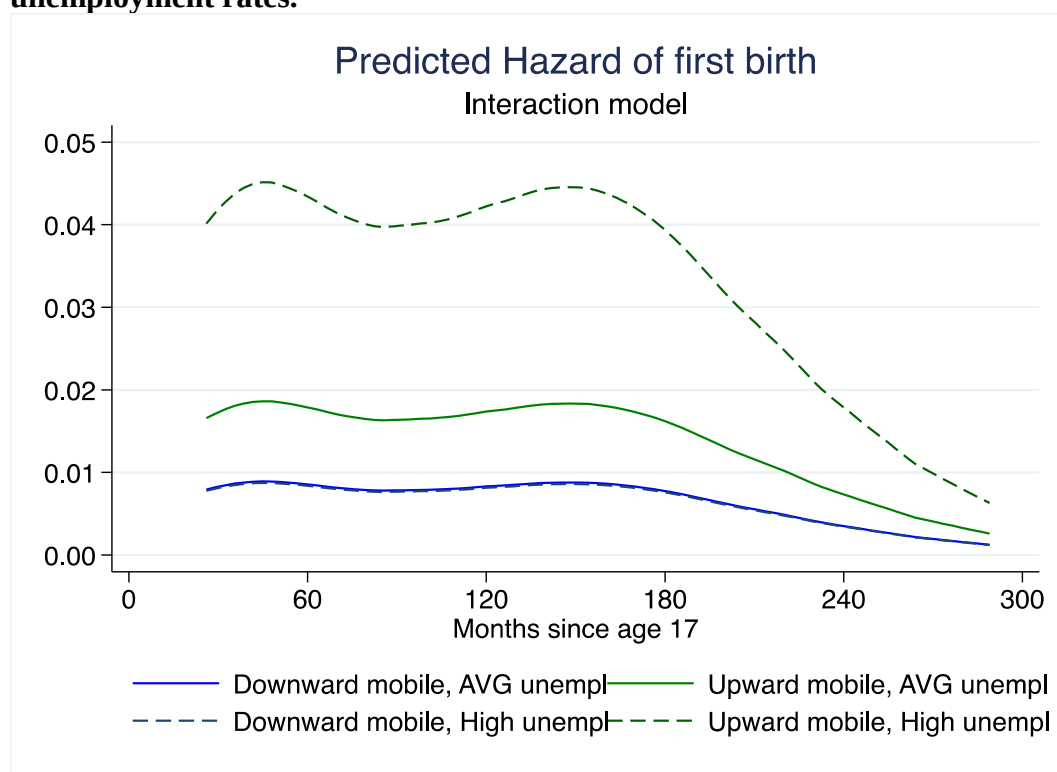
difference emerges at high levels of local unemployment. Among working White married women, the risk of motherhood is the lowest for women with jobs that are lower than their aspirations, irrespectively of local labor market conditions, and the highest for women with jobs exceeding their aspirations when unemployment rates are high. This result is puzzling as one would have expected a negative or null effect of local unemployment on the hazard of first birth even for upward mobile women. This result remains even when we add a state fixed effect controlling for local characteristics other than unemployment so it cannot be attributed to state characteristics that favor parenthood in states with high unemployment. However, Figure 5 shows that this unexpected finding is only visible in the pre-Great Recession period. After 2008, upward mobile women still display a higher hazard of first birth compared to downward mobile women irrespectively of the local labor market conditions, however, they tend to delay childbearing when state unemployment rates rise. This result suggests that at least during the most recent decade, aggregate labor market uncertainty had a multiplicative negative effect on the risk of childbirth on top of individual level occupational insecurity.

Finally, it is interesting to note that for women who are jobless but had a high relative status job before, whom we saw on average entering motherhood at a faster rate compared to all the others (Models 3-4, Tab.1), when local unemployment rate increases, their risk of birth instead drops substantially (interaction term in Model 7, Tab. 1).

Identical results are obtained after a few robustness checks. First, setting aspirations exactly equal to the socioeconomic status of parents instead of as a function of it, using a categorical variable for relative occupational status instead of linear, does not alter results (Models 1-2, Tab. A.3). Second, controlling for first occupation relative status yields identical estimates (Models 3-4, Tab. A.3). Third, using a dummy for the post Great Recession years (Pre vs Post 2008) instead of local unemployment rates, or adding a state fixed effect to control for any other geographical characteristic of the state of residence other than the unemployment rate, also gives identical results or even a stronger positive association between high relative status and the risk of first birth (Models 5-8, Tab. A.3). Finally, running separate models by parental socioeconomic status (Fig. A.2) shows that the advantage of women who reach their occupational aspirations compared to those who do not exists for every social origin group of women. More in details, the difference in the risk of first birth between upward and downward mobile women is larger and more persistent over the reproductive life course for high social origin women and smaller and concentrated in the very early years for women with low and mid-low socioeconomic status parents.

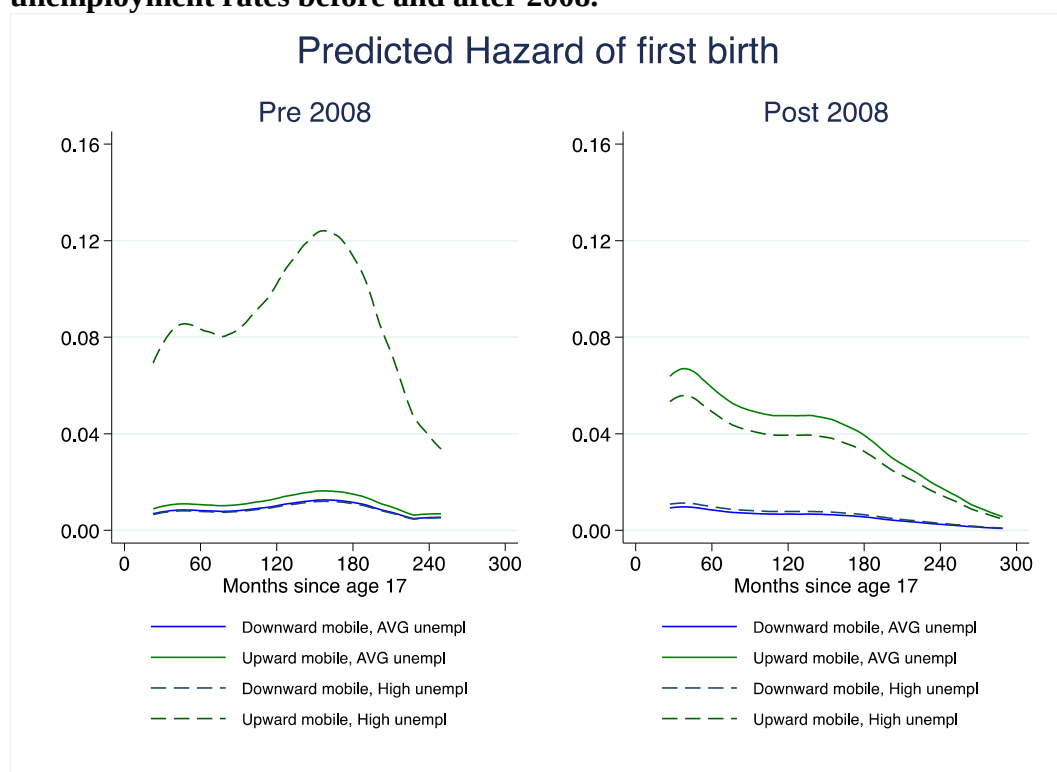


**Figure 4: Predicted hazard of first birth at specific covariate values. Women working in downward versus upward mobile occupations, living in states with average or high unemployment rates.**



Source: Elaboration of the author based on PSID (2003-2017) data.

**Figure 5: Predicted hazard of first birth at specific covariate values. Women working in downward versus upward mobile occupations, living in states with average or high unemployment rates before and after 2008.**



Source: Elaboration of the author based on PSID (2003-2017) data.

## 5. Discussion

This paper investigates the effect of conflict between occupational status and aspirations on the transition to first birth among American women during the recent decade plagued by the Great Recession. Richard Easterlin (1976, 1987) argued that childbearing decisions are driven not by the individual's absolute socioeconomic status but by the ratio between that and aspirations. The latter are formed during adolescence, and are based on the socioeconomic status of their parents. Due to the recession, in the last decade the numerator of this ratio, the socioeconomic status based on occupational achievements, was affected by growing labor market uncertainty. Beyond the possibility of becoming unemployed, during periods of higher employment insecurity individuals are more likely to accept jobs for which they are overqualified and thus might be more likely to find themselves socioeconomically downward-mobile with respect to their aspirations.

The first aim of this study was to test the Easterlin Hypothesis of relative socioeconomic status in relation to entry into motherhood during a period of high labor market uncertainty. The second aim was to investigate the hypothesis of an interplay between aggregate conditions of the economy and, in the present case, the change in individual-level relative occupational status. On the one hand, the Great Recession might have generated additional reasons to be pessimistic about the future, magnifying the feeling of uncertainty, and thus adding up to the (presumably) negative impact of individual-level relative job dissatisfaction on family formation. On the other hand, it is possible that when everyone's opportunities decline in parallel, one's own relative socioeconomic position may matter less, reducing the burden of one's own job dissatisfaction. If a person is the only one who is worse off in a world of great opportunities, the stigma associated with a decline in socioeconomic status might be greater and might matter more in making decisions such as that of having a child. In contrast, if one sees that many others are facing the same imbalance between resources and aspirations, she might be less concerned.

Using the eight most recent waves of US Panel Study of Income Dynamics (PSID 2003-2017) and a Cox proportional model I estimate the effect of relative socioeconomic status on the hazard of having the first child among American women. Results robustly support the Easterlin Hypothesis. Women with jobs that rank equal to or higher than their aspirations based on parents socioeconomic status when they were adolescent, display a higher risk of first birth compared to women in jobs with a lower relative status with respect to that of their parents. This advantage of women in high relative status jobs is especially

large at the beginning of their careers, before their mid-30s. These findings are robust to the inclusion of demographic controls, education, marital status, parental socioeconomic status and local labor market conditions.

Regarding the second hypothesis tested in this study, namely whether in terms of risk of first birth women adapt to a lower relative socioeconomic status when local labor market conditions deteriorate, the interaction with state unemployment rate suggests that downward mobile women do not respond differently when the labor market becomes more uncertain. Upward mobile white married women, instead, are found to enter motherhood faster when local unemployment is higher compared to its long-term average before 2008. After the onset of the Great Recession, upward mobile women exposed to higher local unemployment rates are instead predicted to delay first birth, compared to women who live in states with average unemployment. Therefore, for neither downward or upward mobile American women I find support for an adaptation to aggregate labor market uncertainty. On the contrary, these findings suggest that the deterioration of the labor market that characterized the last decade had if anything a multiplicative negative effect on the risk of motherhood.

A final interesting remark concerns jobless women. At average labor market conditions, non-working women who had a high relative status job before the career interruption present the highest risk of entering motherhood. This can be interpreted as an opportunity cost effect: for high achieving, presumably high income, American women, a career break represent a window of opportunity to have a child. This might be a context-specific effect though, being the US among the countries with the lowest support to families. In other contexts, with greater public support to parenthood, a stronger attachment to labor market is determinant for the entry into motherhood (Hoem 2000; Scott and Stanfors 2011). Interestingly, these women are also those who are more sensitive to the aggregate labor market conditions and who more strongly postpone childbearing when local unemployment rates increase and the risk of remaining jobless increases. This result seems to differ from Yu and Sun (2018) who find that advantaged women delay childbearing in response to own unemployment but not to aggregate unemployment. However, high achieving women here are not high social origin women necessarily since the results are net of parental social status and their own educational level. High achieving women in the current study are women who reach an equal or better job than their aspirations and therefore are more sensitive to labor market fluctuations compared to women who live the privilege of a high social origin and might have a safety net that protects them from aggregate labor market risk.

This study suffers from a few limitations. First, the lack of information on the women's partners is problematic insofar as the decision to have a baby tends to be a couple's decision, and the labor market position and occupational status of the partner would presumably influence this choice. Moreover, despite the focus on women's occupational status being a novelty in the investigation of the conflict between resources and aspiration, the original formulation of the Easterlin Hypothesis regarded men's socioeconomic status (as the traditional male-breadwinner model was prevalent in the 1960s). While analyzing occupational and childbearing choices nowadays cannot avoid including women in the picture, in most cases men's employment status is at the very least as crucial as women's status. Unfortunately, the occupational trajectories of partners are not included with the same degree of detail in the PSID so it was not possible to include them in this study. However, future studies addressing similar research questions with different data would need to take into consideration both partners' occupational positions simultaneously. The second limitation concerns the impossibility to distinguish within women's career breaks between episodes of unemployment and episodes of voluntary exit from the labor force. The two cases of non-working are very differently related to family decisions and should be distinguished. However, as the main argument here concerns working women, we do not see this as a very strong limitation in this particular case. Finally, this study could only identify associational and not causal evidence of the relationship between relative status and transition to first birth. Unobserved characteristics not included among the covariates might intervene in the process studied.

Despite these limitations, this study contributes to the literature in several ways. First, results confirm the importance of both inter- and intragenerational perspectives, in relation to the link between labor market trajectories and childbearing. To make decisions regarding motherhood, women refer both to their family of origin and to the larger contemporary context they live in. Second, this paper shows that Easterlin's theory of relative socioeconomic status still holds in contemporary US and among women. The better the comparison between disposable resources and aspirations formed during adolescence in the family of origin, the higher the hazard of American women having a first child. Third, no signs of adaptation to worsening employment opportunities emerge among American women in the aftermath the Great Recession. On the one hand, women in jobs that do not match their aspirations are insensitive to aggregate labor market conditions. On the other hand, women who do reach a job that matches their aspirations, postpone childbearing when local labor market conditions deteriorate. Finally, this paper contributes to the literature on the impact of

business cycles on childbearing behavior, by investigating the overlooked mechanism of the conflict between resources and aspirations.

### **Acknowledgments**

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## Appendix

**Table A.1: Occupation Titles and Codes (CENSUS 2002).**

| Quartile | SEI   | Occupation title general                                           | Occupation title specific                                  | 3-digit Census 2002 Occupations code |
|----------|-------|--------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------|
| 1        | <25.9 | Service occupations (Unskilled manual)                             | Food Preparation and Serving Occupations                   | 400 - 416                            |
|          |       |                                                                    | Building and Grounds Cleaning and Maintenance Occupations  | 420 - 425                            |
|          |       |                                                                    | Personal Care and Service Occupations                      | 430 - 465                            |
|          |       |                                                                    | Farming, Fishing, and Forestry Occupations                 | 600 - 613                            |
|          |       |                                                                    | Construction Trades                                        | 620 - 676                            |
| 2        | 26-35 | Precision production craft and repair occupations (Skilled manual) | Extraction Workers                                         | 680 - 694                            |
|          |       |                                                                    | Installation, Maintenance, and Repair Workers              | 700 - 762                            |
|          |       |                                                                    | Production Occupations                                     | 770 - 896                            |
|          |       |                                                                    | Community and Social Services Occupations                  | 200 - 206                            |
|          |       |                                                                    | Legal Occupations                                          | 210 - 215                            |
| 3        | 35-47 | Sales, technical and administrative support (Unskilled service)    | Education, Training, and Library Occupations               | 220 - 255                            |
|          |       |                                                                    | Arts, Design, Entertainment, Sports, and Media Occupations | 260 - 296                            |
|          |       |                                                                    | Healthcare Practitioners and Technical Occupations         | 300 - 354                            |
|          |       |                                                                    | Healthcare Support Occupations                             | 360 - 365                            |
|          |       |                                                                    | Protective Service Occupations                             | 370 - 395                            |
|          |       |                                                                    | Sales Occupations                                          | 470 - 496                            |
|          |       |                                                                    | Office and Administrative Support Occupations              | 500 - 593                            |
|          |       |                                                                    | Management Occupations                                     | 1 - 43                               |
|          |       |                                                                    | Business Operations Specialists                            | 50 - 73                              |
|          |       |                                                                    | Financial Specialists                                      | 80 - 95                              |
| 4        | >48   | Managerial and specialty occupations (Skilled service)             | Computer and Mathematical Occupations                      | 100 - 124                            |
|          |       |                                                                    | Architecture and Engineering Occupations                   | 130 - 156                            |
|          |       |                                                                    | Life, Physical, and Social Science Occupations             | 160 - 196                            |

Source: Census of Population and Housing: Alphabetical Index of Industries and Occupations, issued by the U.S. Department of Commerce and Census Bureau.

**Table A.2: Summary Statistics.**

| Variable                     | Obs    | Mean    | Std.Dev. | Min             | Max             |
|------------------------------|--------|---------|----------|-----------------|-----------------|
| Date                         | 414198 | 545.34  | 83.94    | 301 (Jan 1985)  | 695 (Nov 2017)  |
| Birth year                   | 414198 | 1980.64 | 6.80     | 1968            | 1999            |
| Cohort                       | 414198 | 0.84    | 0.70     | 0               | 2               |
| First birth                  | 169029 | 592.88  | 59.39    | 344 (June 1988) | 693 (Sept 2017) |
| First conception             | 169029 | 580.88  | 59.39    | 332 (June 1987) | 681 (Sept 2016) |
| Siblings                     | 413860 | 1.92    | 1.22     | 0               | 4               |
| Race                         | 411924 | 1.39    | 0.62     | 1               | 3               |
| Married                      | 414198 | 0.48    | 0.49     | 0               | 1               |
| Years of education           | 389743 | 14.62   | 2.08     | 1               | 17              |
| House ownership              | 414198 | 0.38    | 0.49     | 0               | 1               |
| State unemployment rate      | 414198 | 6.02    | 2.04     | 2.1             | 14.6            |
| No work                      | 414198 | 0.53    | 0.50     | 0               | 1               |
| Women's SEI                  | 195948 | 40.08   | 14.09    | 7.55            | 80.5            |
| Women's SEI first occupation | 323186 | 35.24   | 14.41    | 7.15            | 80.5            |
| Parents' SEI                 | 373410 | 39.28   | 13.79    | 7.55            | 80.5            |
| Parents' quartiles SEI       | 378868 | 2.58    | 1.13     | 1               | 4               |
| Relative SEI                 | 188893 | 1.15    | 0.54     | 0.22            | 6.68            |
| Relative SEI categorical     | 188893 | 1.55    | 0.50     | 1               | 2               |

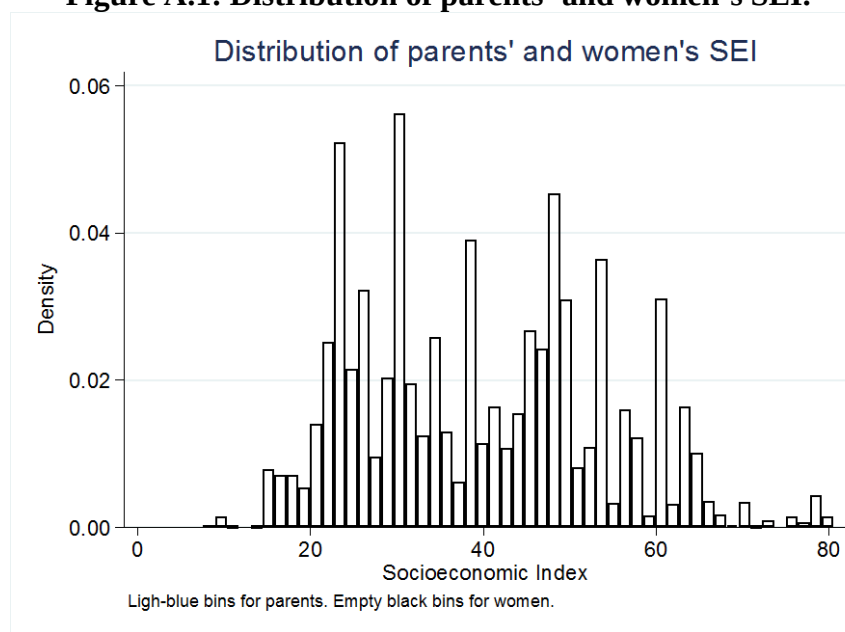
Source: Elaboration of the author based on PSID (2003-2017) survey.

**Table A.3: Cox model for the hazard for first birth. Robustness checks.**

|                                    | Model<br>(1)             | Model<br>(2)             | Model<br>(3)             | Model<br>(4)             | Model<br>(5)             | Model<br>(6)             | Model<br>(7)             | Model<br>(8)             |
|------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Non-downward-mobile job            | 1.12*<br>(1.00 - 1.25)   | 1.11<br>(0.97 - 1.27)    |                          |                          |                          |                          |                          |                          |
| Relative status                    |                          |                          | 1.16***<br>(1.05 - 1.29) | 1.21***<br>(1.05 - 1.38) | 1.22***<br>(1.07 - 1.39) | 1.09<br>(0.92 - 1.29)    | 1.25***<br>(1.09 - 1.42) | 1.24***<br>(1.09 - 1.42) |
| Not working                        |                          |                          | 0.50***<br>(0.36 - 0.69) | 0.51***<br>(0.36 - 0.70) | 0.51***<br>(0.37 - 0.70) | 0.49***<br>(0.35 - 0.68) | 0.51***<br>(0.37 - 0.71) | 0.51***<br>(0.37 - 0.70) |
| First job relative status          |                          |                          | 1.00<br>(1.00 - 1.00)    | 1.00<br>(1.00 - 1.00)    |                          |                          |                          |                          |
| Unemployment rate (cent.)          |                          |                          |                          |                          |                          |                          | 1.04**<br>(1.01 - 1.07)  | 1.01<br>(0.95 - 1.08)    |
| Relative status* Unemployment rate |                          |                          |                          |                          |                          |                          |                          | 1.02<br>(0.98 - 1.07)    |
| Post 2008                          |                          |                          |                          |                          | 1.02<br>(0.87 - 1.21)    | 0.79<br>(0.59 - 1.06)    |                          |                          |
| Relative status*Post 2008          |                          |                          |                          |                          |                          | 1.24**<br>(1.02 - 1.52)  |                          |                          |
| Parents' SEI                       |                          | 1.00<br>(0.99 - 1.00)    |                          | 1.00<br>(1.00 - 1.01)    | 1.00<br>(1.00 - 1.01)    | 1.00<br>(1.00 - 1.01)    | 1.00<br>(1.00 - 1.01)    | 1.00<br>(1.00 - 1.01)    |
| Years of education                 | 0.91***<br>(0.89 - 0.94) | 0.92***<br>(0.89 - 0.95) | 0.91***<br>(0.88 - 0.93) | 0.90***<br>(0.87 - 0.93) | 0.90***<br>(0.87 - 0.93) | 0.90***<br>(0.87 - 0.93) | 0.90***<br>(0.87 - 0.93) | 0.90***<br>(0.87 - 0.93) |
| Married                            | 1.99***<br>(1.74 - 2.28) | 1.99***<br>(1.74 - 2.28) | 2.00***<br>(1.75 - 2.30) | 2.00***<br>(1.75 - 2.29) | 1.99***<br>(1.74 - 2.27) | 1.99***<br>(1.74 - 2.27) | 1.92***<br>(1.68 - 2.20) | 1.93***<br>(1.68 - 2.21) |
| Cohort 1978-87                     | 1.02<br>(0.88 - 1.17)    | 1.02<br>(0.88 - 1.17)    | 1.05<br>(0.91 - 1.21)    | 1.05<br>(0.91 - 1.21)    | 1.04<br>(0.88 - 1.23)    | 1.04<br>(0.87 - 1.23)    | 1.01<br>(0.87 - 1.17)    | 1.01<br>(0.87 - 1.17)    |
| Cohort 1988-99                     | 0.81**<br>(0.66 - 0.99)  | 0.81**<br>(0.66 - 0.99)  | 0.83*<br>(0.67 - 1.02)   | 0.83*<br>(0.68 - 1.02)   | 0.83<br>(0.62 - 1.11)    | 0.84<br>(0.63 - 1.11)    | 0.80**<br>(0.65 - 0.99)  | 0.80**<br>(0.65 - 0.99)  |
| One sibling                        | 1.13<br>(0.87 - 1.47)    | 1.13<br>(0.87 - 1.47)    | 1.18<br>(0.90 - 1.54)    | 1.18<br>(0.91 - 1.54)    | 1.14<br>(0.88 - 1.47)    | 1.13<br>(0.87 - 1.46)    | 1.11<br>(0.86 - 1.45)    | 1.11<br>(0.86 - 1.44)    |
| Two siblings                       | 1.26*<br>(0.97 - 1.63)   | 1.26*<br>(0.97 - 1.63)   | 1.27*<br>(0.98 - 1.66)   | 1.28*<br>(0.98 - 1.66)   | 1.25*<br>(0.97 - 1.62)   | 1.24<br>(0.96 - 1.61)    | 1.25*<br>(0.96 - 1.63)   | 1.25*<br>(0.96 - 1.62)   |
| Three siblings                     | 1.23<br>(0.94 - 1.62)    | 1.23<br>(0.94 - 1.62)    | 1.26<br>(0.96 - 1.67)    | 1.26<br>(0.95 - 1.67)    | 1.23<br>(0.94 - 1.62)    | 1.22<br>(0.93 - 1.61)    | 1.19<br>(0.90 - 1.57)    | 1.18<br>(0.90 - 1.56)    |
| Four or more siblings              | 1.27*<br>(0.96 - 1.67)   | 1.27*<br>(0.96 - 1.67)   | 1.26<br>(0.95 - 1.67)    | 1.26<br>(0.95 - 1.67)    | 1.24<br>(0.94 - 1.64)    | 1.23<br>(0.93 - 1.62)    | 1.21<br>(0.92 - 1.61)    | 1.21<br>(0.91 - 1.60)    |
| African American                   | 1.06<br>(0.91 - 1.23)    | 1.06<br>(0.91 - 1.23)    | 1.07<br>(0.92 - 1.24)    | 1.08<br>(0.93 - 1.26)    | 1.06<br>(0.91 - 1.23)    | 1.06<br>(0.91 - 1.23)    | 0.95<br>(0.79 - 1.13)    | 0.95<br>(0.79 - 1.13)    |
| Other ethnicity                    | 0.93<br>(0.74 - 1.18)    | 0.93<br>(0.73 - 1.18)    | 0.92<br>(0.72 - 1.17)    | 0.92<br>(0.73 - 1.18)    | 0.91<br>(0.72 - 1.15)    | 0.91<br>(0.72 - 1.16)    | 0.91<br>(0.71 - 1.17)    | 0.91<br>(0.71 - 1.16)    |
| State Fixed Effect                 | No                       | No                       | No                       | No                       | No                       | No                       | Yes                      | Yes                      |
| Subjects                           | 2709                     | 2709                     | 2610                     | 2610                     | 2709                     | 2709                     | 2709                     | 2709                     |
| N                                  | 184672                   | 184672                   | 177008                   | 177008                   | 184672                   | 184672                   | 184672                   | 184672                   |

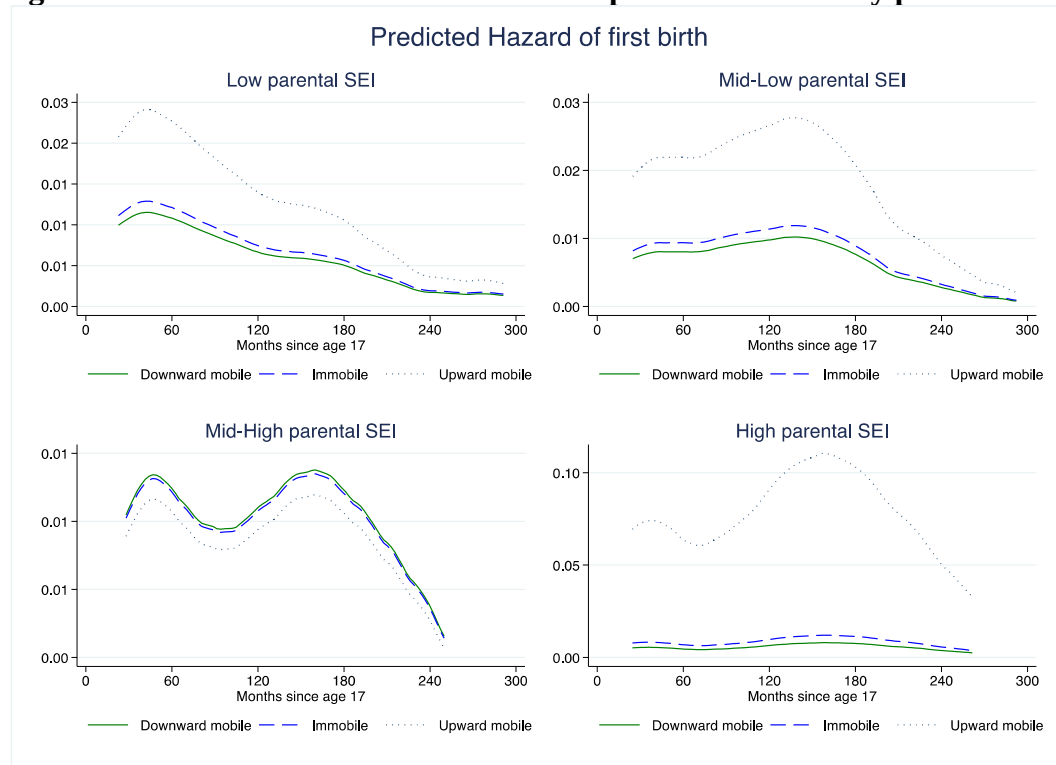
Source: Elaboration of the author based on PSID (2003-2017) survey. Note: \*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1.

**Figure A.1: Distribution of parents' and women's SEI.**



Source: Elaboration of the author based on PSID (2003-2017) data.

**Figure A.2: Survival curves to first birth at specific covariates by parental SEI.**



Source: Elaboration of the author based on PSID (2003-2017) data.



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