The Parenthood Gap: Firms, Flexibility, and Earnings Inequality After Kids

Rebecca Jack, Daniel Tannenbaum, and Brenden Timpe *

January 31, 2026

Abstract

Gender earnings inequality increases substantially after parenthood. This paper links administrative data on U.S. workers' labor-market histories and fertility to study career dynamics around parenthood, documenting worker advancement within firms and across firms of differing pay. We show that a key source of the gender earnings gap is mothers transitioning to lower-paying firms after parenthood: mothers are "opting down" rather than opting out of the labor force. Mothers gain amenities along some margins—increased remote work, increased part-time employment, and reduced commuting time—but they are also more likely to lose health insurance. To understand these patterns, we develop a model of hours rigidities in firms, which, along with costly firm switching, generates predictions about worker sorting across firm types, and amplifies the gender earnings gap. We provide new measures of flexible work amenities at the firm-level and offer evidence for these rigidities. The model delivers predictions that fit our empirical results and contrast with a standard compensating differentials framework.

*Department of Economics, University of Nebraska-Lincoln. Jack: bjack2@huskers.unl.edu. Tannenbaum: dtannenbaum@unl.edu. Timpe: btimpe@unl.edu. The authors thank Niklas Engbom, Yifan Gong, Brad Hershbein, Beth Truesdale, Jane Waldfogel, Melanie Wasserman, and seminar participants at the Nebraska Labor Summit, Census RDC Research Conference, Minneapolis Federal Reserve, APPAM, the National Tax Association, the Southern Economics Association, NYU Stern, the Society of Labor Economists, the BSE Summer Forum, the Bozeman Applied Economics Conference, the EIEF, and Princeton University for excellent comments and suggestions. We also thank Justin Ho and Morgan Gaspar for excellent research assistance and Seth Kingery for his help in disclosing results. This project was supported by grants from the Russell Sage Foundation (Grant 2310-45067), the Upjohn Institute for Employment Research (Award No. 21-58160-14), and the University of Nebraska Layman Fund. Any views expressed are those of the authors and not those of the U.S. Census Bureau. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2593. (CBDRB-FY23-P2593-R10523, CBDRB-FY24-P2593-R11239, CBDRB-FY25-P2593-R11831, CBDRB-FY25-P2593-R12027) This research uses data from the Census Bureau's Longitudinal Employer Household Dynamics Program, which was partially supported by the following National Science Foundation Grants SES-9978093, SES-0339191 and ITR-0427889; National Institute on Aging Grant AG018854; and grants from the Alfred P. Sloan Foundation.

1 Introduction

Despite historic convergence in the second half of the 20th century, gender inequality remains a persistent feature of labor markets. Recent research has documented a systematic pattern across countries and institutional settings that the earnings of men and women diverge sharply at parenthood. The economic forces underlying gender inequality over the lifecycle, and in particular, the career dynamics of men and women around parenthood, are less well understood.

One compelling theory, advanced by Goldin (2014, 2021), is that gender inequality persists because of the prevalence of "greedy jobs" that offer high wages but require long hours. The high hours commitment of greedy jobs collides with the time demands of child rearing, the burden of which falls disproportionately on women. The hypothesis is that if firms were to offer flexibility, and allow workers to choose their hours or schedules without a wage penalty, the gender gap would diminish. But data limitations have made it challenging to measure the flexibility of jobs, to characterize the wage- and hours- components of jobs jointly at the firm-level, and to show how these job attributes interact with workers' career progressions around parenthood.

In this paper, we provide new evidence that firms—and specifically, the distribution of wages and amenities offered by firms—are an important determinant of gender inequality among parents. Our paper provides novel evidence that amenities are rigid within the firm and that jobs at high-wage firms require long hours. These structural features of the labor market interact with the time demands of parenthood to create a pattern of firm downgrading among mothers, which has long-run impacts on mothers' career trajectories in the United States.

We motivate our analysis with a simple lifecycle model where workers increase earnings by gaining firm-specific human capital and by transitioning to higher-wage employers, but they also face hours requirements of childcare. Gender differences enter the model as a norm in which women exogenously spend more time on childcare than men. Firms are heterogeneous both in their wage premium and in that some offer workers the ability to adjust hours freely (flexible firms), while others require a fixed amount of high hours (inflexible firms). A key feature of the model is that hours are *rigid* at inflexible firms: to adjust hours, these workers must switch firms and lose accumulated firm-specific human capital.[1] Furthermore, if the firms requiring high hours are those offering a high wage premium—motivated by the greedy

[1]The underlying economic source of firm-level rigidities may include fairness concerns, coordination costs within firms, or technologies that require high hours among teams (Akerlof and Yellen, 1988; Breza et al., 2018). This assumption is also motivated by evidence that workers cannot choose hours optimally (Lachowska et al., 2023; Jarosch et al., 2025) and supported by new empirical evidence presented in this paper.

jobs hypothesis—the model predicts that women will systematically move to lower-paying firms to gain flexibility after the birth of a child. By including firm-specific human capital, we introduce a job ladder within firms. The addition of human capital and rigidities departs from the compensating differentials framework in which all wage differentials reflect workers' preferences for amenities (Goldin, 2014; Sorkin, 2018), and generates nuanced predictions, including excess sorting of women into flexible firms even pre-parenthood.

In our empirical analysis, we first establish that job amenities are rigid within the firm. We use the near-universe of job vacancy postings in the United States to directly measure workplace flexibility at the job-level, including whether the worker is able to choose their own hours or schedule, and whether they are able to work remotely. We also measure flexible work *disamenities*, including having to work irregular hours, being on call, or having to work night or weekend shifts. We show that these amenities and disamenities are highly rigid within the firm. In particular, we show that the vast majority of variation in access to these benefits, within occupations, is explained by the firm rather than metro area. Similarly, we show that jobs in multi-establishment firms are far more likely to offer jobs with the same flexibility amenities or disamenities across locations, compared to jobs in the same metro area but in different firms.

In ongoing work using large-scale administrative earnings data from the Longitudinal Employer-Household Dynamics program (LEHD) linked to the American Community Survey (ACS), we are performing an exercise similar to one described above, to explore whether hours and remote work are rigid within firms. In addition, we are using this data to explore the correlation between a firm's earnings premium, estimated following Abowd et al. (1999), and the hours worked by its employees. Since earnings premia may represent both wage- and hours-effects of firms, we are using our LEHD-ACS sample to decompose earnings premia into these two components. These results, pending disclosure, will offer evidence on the Goldin (2014) hypothesis that higher wage premium firms are also firms that require high hours, and will directly connect to our modeling assumption on flexible- and inflexible firm types.

After establishing that rigidity in job amenities is an important feature of the U.S. labor market, and that flexibility is uniquely scarce among the highest-paying firms, we examine the implications for the earnings gap between American mothers and fathers. We leverage our LEHD sample linked to high-quality measures of workers' fertility histories that cover the near-universe of U.S. parents. We also link our LEHD-ACS sample to fertility histories, because the ACS has measures of hours worked, remote work, commuting time, and other salient benefits. We use this data to provide evidence consistent with our model's prediction that amenities rigidity, coupled with prevailing gender differences in childcare, leads to

starkly different career paths for U.S. mothers and fathers.

Our empirical analysis establishes new facts about the emergence of the parental earnings gap. First, a substantial share of the decline in mothers' relative earnings can be accounted for by transitions to lower-paying firms that begin in the first years of parenthood and continue through their child's early adolescent years. Consistent with our model's predictions, the gender gap precedes parenthood—before childbirth, women work at firms that pay a 7-log-point lower premium than men and occupy positions about 11 log points lower on the job ladder within the firm—and the differences are remarkably stable, with women and men moving in parallel to higher-paying employers and higher-paying roles within the firm until childbirth. After parenthood, fathers continue transitioning to higher-paying firms and to higher-paying positions within firms, but mothers steadily move to lower-paying firms, and experience a sharp decline in relative within-firm position immediately after parenthood, before slowly continuing up with within-firm career ladder. These transitions result in a gender gap of 12 log points in firm-specific pay and a gap of 26 log points in within-firm pay 11 years after the birth of a first child. This firm downgrading is driven by transitions to lower-paying firms rather than selection out of the labor force.

Second, we show that firm downgrading is larger for mothers who worked at the highest-paying and most hours-intensive firms prior to childbirth. This result aligns with our model's prediction that the inability to adjust hours at inflexible firms will lead to excess job exits. Mothers at every point in the pre-childbirth distribution of firm pay have lower—and typically negative—growth in firm earnings premia after childbirth, compared to men. The gap widens most substantially at the top, as mothers in the highest ventiles of firm quality before parenthood move to firms that pay 9 log points less after birth. This decline is larger than the pre-childbirth gender gap in firm-specific earnings premia. The uniformly larger decline in firm pay holds even for the most highly-attached subgroup of mothers who have no interruption in their earnings history after childbirth. But the pattern of firm downgrading is especially stark for those who take time away from employment after childbirth. Mothers who take a year or more out of the labor force experience a decline in firm pay of 10 log points at the median and 41 log points at the highest ventile of pre-birth firms. We also show that mothers' job changes are disproportionately associated with changes in industry, suggesting women not only surrender firm-specific human capital but are also more likely to take on potentially costly career changes to accommodate the demands of family.

Third, we show empirically that mothers who move to lower-paying firms gain amenities consistent with flexible work schedules, but also lose benefits—namely, health insurance. Because our administrative earnings data provides little information on firm amenities, we rely on our linked LEHD-ACS sample and explore whether transitions across the distribution

of firm earnings premia are correlated with access to more flexibility at work. Mothers who move to lower-paying firms disproportionately move to jobs that offer part-time hours, shorter commutes, lower occupational returns to hours worked, and more opportunities for remote work, compared to fathers, but are also more likely to lose health insurance coverage—especially from employer-sponsored plans. This health insurance effect is *net* of switching to insurance plans of spouses, meaning that women who downgrade firms are, on average, less likely to have health insurance at all.

In a final exercise, we quantify the contribution of gender differences in sorting across firms to the overall parental earnings gap. After adjusting for differences in age at birth, the gender gap between working mothers and fathers is approximately 13 log points in the year prior to birth, jumps to 32 log points in the year of birth, and grows slightly over time to about 36 log points 11 years later. The share of this gap that can be explained by differences in firm wage policy grow from 23 percent in the year of birth to 34 percent after a decade. Measures of the firm-specific earnings premium, industry, and firm size alone have more explanatory power than demographic characteristics, providing new evidence that firms are a key element in the persistence of the gender earnings gap in the United States.

This paper contributes to the literature on the earnings consequences of parenthood and the literature on firm-specific pay. Research has shown that the gender earnings gap widens after parenthood (Waldfogel, 1998; Bertrand et al., 2010; Chung et al., 2017; Juhn and McCue, 2017; Kleven et al., 2019b; Kleven, 2022), but less is known about the source of this gap, including how firms contribute to this pattern. Several papers demonstrate that gender differences in sorting across employers with different earnings premia can account for a large share of the overall gender earnings gap (Card et al., 2016; Goldin et al., 2017; Bruns, 2019; Barth et al., 2021; Bronson and Thoursie, 2021; Casarico and Lattanzio, 2022; Di Addario et al., 2023), but these papers do not provide evidence on why the sorting occurs, and do not focus on gender sorting patterns around parenthood. Morchio and Moser (2024) studies gender sorting into firms of differing pay and amenities, using data from Brazil and a macro search framework, finding that firm heterogeneity in amenities are an important driver of gender earnings differences. Our paper contributes to this literature, using large-scale linked data in the United States, to provide direct evidence for rigidities in workplace flexibility in firms, and to offer an economic framework for interpreting the impact of these rigidities on parental career progressions within and across firms. Our paper shows how rigidities interact with an increased demand for flexible work after parenthood to amplify lifecycle earnings inequality.

Our work relates to the literature showing that mothers have stronger demand for flexible hours (Glass and Camarigg, 1992; Goldin, 2014; Cortes and Pan, 2019; Wasserman, 2023).

Prior research has primarily studied flexibility at the occupation-level. We contribute by studying workplace flexibility at the firm-level, using nationally comprehensive measures based on restricted large-scale survey data linked to the firm. We use a supplementary sample using the near-universe of job vacancy postings that offer some of the finest-grained measures of workplace flexibility to date and support the theory of rigidities at the firm-level.[2] Our model illustrates that a compensating differentials framework, which has been used in the parenthood context (Hotz et al., 2018; Coudin et al., 2018; Masso et al., 2022; Casarico and Lattanzio, 2023) is unable to account for key empirical facts, such as the pre-parenthood sorting of women into flexible firms. We extend the compensating differentials model to include rigidities in firms and human capital, which create costly transitions across firms that amplify the gender earnings gap.

An extensive literature in economics has documented the rigidity of wages—e.g., evidence that wages are compressed within the firm (Breza et al., 2018; Cullen and Pakzad-Hurson, 2023; Hazell et al., 2025) and over the business cycle (Bewley, 1999; Grigsby et al., 2021)—but there is less evidence on the rigidity of non-pecuniary amenities.[3] Several papers document hours constraints (Altonji and Paxson, 1992; Labanca and Pozzoli, 2022; Jarosch et al., 2025) and on the firm-side that there is imperfect substitutability between hours and workers (Carry, 2024). Other work uses employer-employee data to show firm-specific hours and amenity effects (Lachowska et al., 2023; Humlum et al., 2025). We contribute by providing granular measures of workplace flexibility and providing new evidence for the rigidity of these amenities within firms. Our model shows how this rigidity interacts with gender norms to amplify gender earnings inequality after parenthood. While existing research on wage rigidities has noted its role in spatial inequality (Hazell et al., 2025), ours is the first to connect firm-level rigidities to lifecycle inequality.

The remainder of the paper proceeds as follows. Section 2 presents the economic framework and develops specific empirical predictions. Section 3 describes the data and firm quality measurement. Section 4 relates our firm earnings quality measure with hours and wages and documents rigidities in workplace flexibility measures. Section 5 presents new facts about transitions within and across firms of different pay and amenities around parenthood. Section 6 concludes.

[2]Recent work has used job vacancy data to extract benefits, such as 401(k) plans (Cole and Taska, 2023) and remote work (Hansen et al., 2023), but to our knowledge has not measured flexible work.

[3]A related literature studies uniform price setting in firms (Nakamura and Steinsson, 2008; DellaVigna and Gentzkow, 2019)

2 Model

We develop a two-period model of labor supply, before and after parenthood. The model highlights how amenities rigidities—the inability to adjust hours within a firm—along with costly firm switching, distorts working decisions and amplifies the gender earnings gap.

Firms. Firms are characterized by a pair (ψ, a), where $\psi \in [\underline{\psi}, \bar{\psi}]$ is a firm-specific wage premium and $a \in \{0, 1\}$ indicates whether the firm offers a workplace flexibility amenity. Workers at firms with $a = 1$ can choose hours flexibly, $h \in [0, 1]$, while workers at firms with $a = 0$ must work a fixed amount of high hours, $h = \bar{h}$.

The amenity is assumed to be *rigid within firms*: workers at an inflexible firm cannot adjust hours without switching employers. In particular, workers cannot bargain and accept a wage reduction in exchange for being able to adjust hours. We assume the distribution of firm pay premia among inflexible firms first-order stochastically dominates the distribution among flexible firms:

$$F(\psi|a = 0) \leq F(\psi|a = 1) \quad \text{for all } \psi \in [\underline{\psi}, \bar{\psi}] \tag{1}$$

This implies that inflexible firms offer higher pay premia on average, $E[\psi|a = 0] > E[\psi|a = 1]$, and is motivated by the idea that productivity increases with team production or information sharing, which is facilitated by employees working long hours, and is reflected in higher wages. We provide direct evidence for this assumption in Section 4.1.

Workers. There is a continuum of workers indexed by gender $i \in \{m, f\}$. The model has two periods. In period 1, workers enter the labor market without children. Between period 1 and 2, all workers become parents.

Workers have preferences over consumption and leisure. Utility for individual i in each period t is given by:

$$U_{it} = \log(y_{it}) + \alpha \log(\ell_{it}) \tag{2}$$

where y_{it} is earnings, which equals consumption (i.e., there is no savings), ℓ_{it} is leisure, and $\alpha > 0$ measures the preference weight of leisure relative to consumption. There is no discounting of future consumption.

Before having children, workers allocate time between work and leisure, and the budget constraint for time is: $h_{i1} + \ell_{i1} = 1$. After parenthood, workers must also allocate time ξ_i to childcare: $h_{i2} + \ell_{i2} + \xi_i = 1$. Childcare requires a fixed amount of time that cannot be purchased in the market. We assume a gender norm in childcare, where women provide

more childcare than men: $\xi_f = \overline{\xi} > \xi_m = \underline{\xi}$. This empirical regularity is documented in time-use data (Bianchi et al., 2012; Jack et al., 2025) and is the only gender difference assumed in model primitives. While our paper is agnostic on the underlying sources of this gender norm, potential explanations include differential bargaining power within the household (Jayachandran and Voena, 2026); societal views about gender identity (Bertrand et al., 2015); cultural norms tied to geography or religion (Kleven et al., 2025); or parental role model effects (Kleven et al., 2024).

A key feature of the model is that workers accumulate *firm-specific human capital*. In period 1, all workers have zero firm-specific human capital. In period 2, if a worker remains at the same firm, their productivity increases by a constant factor $exp(\gamma_e) > 1$. For simplicity, $exp(\gamma_e)$ does not depend on prior hours worked or firm type. If a worker switches to a new firm in period 2, they lose this productivity gain. Firm-specific human capital represents the productivity gained from relationships with colleagues and clients, knowledge of internal systems, and reputation within the organization—all of which are lost upon switching employers. The implication of introducing firm-specific human capital is that firm switching is costly for workers, and they will take this into account when making decisions even before parenthood.

We make an additional assumption on preferences: that the childcare requirement of parenthood creates a larger utility cost from working at an inflexible firm for women relative to men. This occurs because (i) less available non-childcare time raises the marginal utility of both leisure and consumption, (ii) the hours requirement at inflexible firms brings workers farther from their optimally chosen hours, increasing the marginal value of leisure. The assumption on preferences requires the net effect for women to be larger than for men.[4]

Wages. In period 1, worker i's wages at firm j are $w_{ij} = \psi_j$, and in period 2, their wages are $w_{ij} = \psi_j \cdot \exp(\gamma_e 1\{\text{stay at period-1 firm}\})$. Hence, wages only depend on the firm-specific premium and whether the worker has prior experience at the firm.

Earnings are $y_{ijt} = w_{ijt} \cdot h_{it}$. Taking logs,

$$\log y_{ijt} = \log \psi_j + \gamma_e e_{ijt} + \log h_{ijt} \tag{3}$$

We describe the link between this earnings equation and the AKM estimation equation below in Section 4.1.

[4]Formally, this assumption requires: $\frac{h_f^*}{\bar{h}} \cdot \left(\frac{1-h_f^*-\overline{\xi}}{1-\bar{h}-\overline{\xi}}\right)^{\alpha} > \frac{h_m^*}{\bar{h}} \cdot \left(\frac{1-h_m^*-\underline{\xi}}{1-\bar{h}-\underline{\xi}}\right)^{\alpha}$.

Job matching and worker decisions. In period 1, workers draw two job offers at random: one from an inflexible firm ($a = 0$) with pay premium from $F(\psi|a = 0)$, and one from a flexible firm ($a = 1$) with pay premium from $F(\psi|a = 1)$. The worker's only decision is which firm to work for and, if the worker chooses a flexible firm, how many hours to work.

In period 2, workers receive two new offers from the same distributions, and have recall of prior offers.[5] The new offers are assumed independent of the earlier offers. In period 2, workers again decide which firm to work for and, if they choose a flexible firm, how many hours to work. The worker's decision whether to remain at their current firm or transition to one of the other offers contains a trade off between switching to a potentially higher-paying firm or one with the flexible hours amenity, against the cost of switching firms. The tradeoff is more acute because in period 2 workers have to spend time on child rearing, and the hours requirement at inflexible firms is farther from their optimum.

2.1 Empirical content of the model

We solve the model through backwards induction in Appendix D. The model generates several empirical predictions that we study using our newly linked datasets.

Proposition 1: Even before parenthood, women are less likely to work for inflexible firms compared to men.

Proof: See Appendix D.

The intuition behind this result is the that women anticipate the future time requirements of child-rearing, and because firm-switching is costly, they prefer flexible firms even before parenthood. This result is remarkable because it implies there is a gender gap in wages even before parenthood, when there are no gender differences in preferences, human capital, childcare, or the distribution of employment offers.

Proposition 2: Women who work at inflexible firms prior to parenthood, on average, experience declines in their firm pay premium ψ. Moreover, the gender gap in firm premium increases after parenthood.

Proof: See Appendix D.

This result is driven by the assumption that the childcare burden on women creates a greater utility cost of the hours requirement at an inflexible firm. This leads to costly

[5]The recall assumption enters the worker's option value of entering period 2 at a specific firm type. Adding an assumption of no recall does not affect the core mechanism but adds additional complexity to the period 1 decision.

firm downgrading for women. The gender gap in firm pay premium increases due to this downgrading.

Proposition 3: (i) Among women, those employed at higher ψ firms prior to parenthood experience larger losses (or smaller gains) in ψ after parenthood. (ii) Conditional on initial firm quality ψ, women experience larger losses (or smaller gains) compared to men, with parenthood.

Proof: See Appendix D.

The intuition for part (i) of this proposition is that women with higher ψ are more likely to be working at inflexible firms due to the first-order stochastic dominance assumption. After parenthood, these women are more likely to switch to flexible firms, which destroys human capital and reduces their firm premium. Women at flexible firms with higher ψ experience smaller gains because they are less likely to receive better flexible offers in period 2. For part (ii), conditional on initial firm quality, women experience larger losses (or smaller gains) in firm premium, because women are more likely to switch and lose their firm-specific human capital compared to men. These predictions distinguish our amenities rigidity mechanism from alternative stories in which all women downgrade proportionally or face similar absolute declines regardless of initial firm quality or gender.

Beyond these propositions, the model provides insight into gender differences in lifecycle earnings. Prior to parenthood, the gender earnings gap is driven by two forces. First, women sort into flexible firms to a greater extent than men, and second, hours are optimally chosen at flexible firms, and these chosen hours are lower than the mandated high hours requirement at inflexible firms, $\overline{h}$. After parenthood, the gender earnings gap is likely to increase, because of: (1) increased sorting of women to flexible firms, due to the gender norm of childcare and the assumption that flexible firms have lower premia on average, (2) women reduce hours more than men at flexible firms, where workers can choose hours, and (3) differential switching to flexible firms for women leads to losses in human capital.

Lastly, our model shows that women who switch firms gain flexibility. Empirically, we investigate this prediction by studying firm switchers vs. non-switchers in terms of proxies for flexibility: part-time work, remote work, and shorter commutes.

2.2 Amenities rigidity and inefficiencies

Amenities rigidities create inefficiencies through three channels. First, women employed at inflexible firms pre-parenthood lose firm-specific human capital, because they must switch firms to gain flexibility. Second, amenities rigidities distort pre-parenthood employment decisions, leading to excess sorting of women into flexible firms. Third, the rigidities prevent

women from bargaining over hours when receiving *new* offers from inflexible firms in period 2. These inefficiencies imply that some women would accept a wage penalty to obtain flexibility at inflexible firms, but amenities rigidities prevents this arrangement.

Note that if all firms offered flexibility, it would compress but not eliminate the gender earnings gap: the gender-specific norm in childcare would still lead to gender earnings inequality through differential hours worked. Gender earnings differences would be compressed, however, because sorting by gender across firm types would be identical. Similarly, if we maintained the assumption of rigidities in flexible hours but assume firm switching is costless, there would be no deadweight loss. It is the *interaction* of gender norms, rigidities, and costly firm switching that generates deadweight loss, and amplifies the gender earnings gap.

This economic mechanism contrasts with a standard compensating differentials framework, in which all wage differences reflect workers' willingness to pay for amenities and allocations are efficient (Rosen, 1974; Goldin, 2014; Sorkin, 2018). Here, amenities rigidity creates deadweight loss. The dynamic framework here also contrasts with prior work on compensating differentials, with predictions for worker sorting across firms before and after parenthood, and for the lifecycle gender earnings and amenities gaps.

We do not model firm production explicitly, but an important question is why firms do not voluntarily offer flexibility in exchange for a wage penalty. Firms may avoid offering flexibility due to concerns about fairness and morale: if one worker receives flexibility, other workers (such as non-parents) may demand similar arrangements, generating productivity losses that exceed any individual worker's compensating differential. Similarly, firms may be constrained by technology, coordination requirements, or organizational culture that makes flexible arrangements costly to implement even when they would benefit individual worker-firm pairs. Beyond these frictions, whether there are gains from trade depends on the inflexible firm's production function and the trade-off between: (i) productivity losses from allowing an experienced worker to reduce hours, versus (ii) productivity losses from having a worker with firm-specific experience leave the firm and replacing them with someone without such experience.

3 Data and Measurement

We describe our main analysis samples here and provide additional detail in Appendix A.

Our analysis of labor market outcomes around parenthood requires precise measurement of the timing of fertility. Our main source of data is the Census Household Composition Key (CHCK), which is constructed from Social Security Administration and federal address

records and connects the near-universe of children born from 1997-2022 to their parents. The CHCK provides a high-quality measure of child-bearing that closely tracks Vital Statistics data and links over 90 percent of children to at least one parent (Genadek et al., 2022). One limitation of the CHCK is that we cannot observe children born prior to 1997. To ensure we are capturing first births, we link our sample of parents to the 2000 full-count Decennial Census and drop parents who have a child in the household born prior to 1997.

We link this sample of parents at the individual level to their labor-market outcomes using the 1997-2019 Longitudinal Employer-Household Dynamics (LEHD) files, which are based on administrative unemployment insurance records and provide longitudinal information on employment and earnings. Critically, the LEHD includes a firm identifier, allowing us to follow workers across firms and observe their employers' industry. The LEHD provides very broad coverage of the U.S. labor force, covering 95 percent of employment (Graham et al., 2022). We collapse the LEHD data to the worker-year level and define the primary employer of worker i in year t as the firm in which they have the highest earnings in that year. The limitations of the LEHD are that our sample covers 25 states, and it provides no information on occupation, hours worked, or benefits such as health insurance. To study workplace amenities, we link parents in our sample to the ACS, described in detail below.

We make five sample restrictions motivated by our interest in studying how career trajectories change after the birth of children. First, we restrict our sample to parents aged 23-45 at first birth. This restriction drops parents who have children as teenagers and those with minimal work histories, and reflects our focus on parents with some labor market attachment prior to having children.[6] Second, to ensure we can follow parents' employment for at least a decade, we restrict the sample to parents whose first child is born between 2001 and 2010. Third, we use a linkage to the Social Security Numident file to require that the first child is born in one of our LEHD states. This restriction drops parents who may be misclassified as non-employed because they work at a firm located outside our 25-state sample. Fourth, we restrict our sample to workers with a degree of labor market attachment prior to parenthood, which we define as earning at least $3,500 (in 2012 dollars) in each of the four years prior to childbirth.[7] We make this restriction because our focus is on characterizing career paths conditional on working, and we wish to drop those who are still in school or are otherwise only loosely attached to the labor market. Finally, because we are interested in studying how

[6]During our sample period, 71 percent of American mothers have their first child between ages 23-45 (Ruggles et al., 2024).

[7]The threshold of $3,500 is chosen to eliminate workers with negligible links to their primary employer, following Card et al. (2013) and Sorkin (2018). This figure is approximately equivalent to the earnings from working 10 hours per week and 48 weeks per year at the federal minimum wage in effect during the midpoint of our sample period.

careers change after childbirth, we limit our main analysis sample to individuals who have at least 1 year with $3,500 of earnings in the 11 years after parenthood. This final restriction ensures we track career outcomes of a relatively consistent sample over time, although we show below that it has negligible impacts on the composition of our sample.

We report summary statistics for our final sample, which includes 2.2 million mothers and 2.5 million fathers, in Appendix Table A3. Relative to all first-time parents, the restrictions on age at birth and pre-childbirth employment results in a sample that is slightly older, has more education, and is less likely to be Black or Hispanic. Restricting to parents who work at least once after childbirth drops those who permanently exit the labor market. Table A3 shows that this restriction has a nearly indistinguishable impact on our sample. We discuss and empirically study the potential role of selection below, and we show that selection is not driving our main empirical findings.

3.1 Job amenities

We measure job amenities using two data sources, LEHD-ACS and job vacancy data, which we describe now.

3.1.1 LEHD-ACS sample

Because the LEHD provides limited information on workplace amenities, we require an alternative data source to characterize the nature of the work performed by parents and the way it evolves after the arrival of children. We use nationally representative survey data from the American Community Survey (ACS) from 2003-2019, which we link at the individual level to our LEHD-CHCK sample. We limit our sample to parents with a first child born 2008-2014 while they were age 23-45.[8] We observe repeated cross-sections of cohorts defined by the date of first childbirth, both before and after they become parents. This linkage allows us to build upon prior research that has used the ACS alone to study labor-market outcomes only after parenthood.

Since our focus is on the gender earnings gap conditional on employment, and to facilitate comparisons with our LEHD analysis, we restrict the ACS sample to working parents and to individuals we can link to an LEHD firm. Using the ACS, we study part-time work, fully remote work, and commuting time as measures of hours flexibility, and health insurance coverage as an important non-pecuniary benefit for new parents.[9] In addition, to capture

[8]This restriction is necessitated by the years available in the ACS, which does not yield large samples prior to 2005. The use of parents of children born 2008-2014 provides a balanced panel from 3 years prior to first birth until the child's 5th birthday.

[9]Our sample is restricted to years prior to the Covid-19 pandemic, and our remote measure captures only

an additional measure of workplace flexibility, we follow Goldin (2014) and Cortes and Pan (2019) by constructing an occupation-specific proxy for the wage returns to working long hours. Using a sample of full-time workers in the ACS, we regress log earnings on an interaction between usual hours worked and occupation categories. We interpret higher values of the occupation-specific coefficient on hours worked as evidence of convexity in the wage-hours profile, i.e., that workers in the occupation are rewarded for long hours. We link this measure to our ACS sample at the occupation level.

Lastly, we use the ACS-LEHD linkage to characterize workers by whether they move to higher- or lower-paying firms after parenthood.[10] This allows us to provide new descriptive evidence on the extent to which parents trade off lower-paying firms for greater non-pecuniary amenities.

3.1.2 Job vacancies

Revelio collects job vacancy postings across major online platforms and company websites and de-duplicates them. The analysis below is based on a sample of 10 million job postings, which are then restricted to those in the United States (about 3.8 million). The Revelio data includes each posting's job title, firm name, and location, in addition to the raw text of the descriptions. To extract job-level amenities, we search for relevant keywords from the job ads (see Table 3 below for the mapping of keywords to amenities). This approach could be improved upon using machine learning or by manually coding a training dataset. Flexible work is particularly challenging to extract because sometimes "flexible schedules" are mentioned in the context of requiring workers to be flexible to firms' hours needs, which is the opposite meaning of being flexible to workers work-life schedules. For this reason, I extract additional variables such as "on call," "long hours," "irregular hours," etc.

Extracting amenities from job ads requires an assumption that firms are accurately describing the positions they wish to fill and their associated job benefits. A few papers have used job vacancy data to extract benefits, such as 401(k) plans (Cole and Taska, 2023) and remote work (Hansen et al., 2023). Many discrete choice experiments (Mas and Pallais, 2017) provide menus of wages and job benefits using a similar framing as a job posting description.

fully remote work, rather than hybrid working arrangements. Hence, we likely undercount remote work. Our measure of health insurance coverage includes any coverage and employer-sponsored coverage. In cases where individuals have employer-sponsored coverage, we do not observe which parent's employer provided the insurance. We therefore interpret our results as net of any changes to coverage from a spouse, parent, or other family member.

[10]Specifically, we calculate the average wage premium among the firms at which individual i worked in years $r \in [1, 5]$ relative to the birth of their first child. We compare this to the wage premium of their highest-paying firm in year $r = -2$. We then assign parents to one of two groups depending on whether they moved to lower-paying firms or higher-paying (or equal) firms as parents.

Several validation exercises from these papers may be useful. One exercise we could do is compare firm-level health insurance offering against firm-level posting information about health insurance. We can collapse the vacancy data to occupation-level and compare to O*NET flexibility measures used in Goldin (2014). We can collapse the vacancy data om health insurance indicators to occupation (or industry) and compare to ACS. We can collapse to the firm level and compare measures of health insurance coverage to Form 5500 data.

3.2 Measuring firm quality

Our effort to characterize parents' career paths requires measuring firm quality. Our main strategy adopts an estimate of the firm-specific earnings premium, following the literature examining firm effects and their implications for earnings inequality. We use the full LEHD sample from 1997 to 2019. Following Card et al. (2013) and Sorkin (2018), we restrict this sample to all individuals age 18-61 in years with a non-negligible amount of annual earnings ($3,500 in 2012 dollars).[11] To reduce the computational burden, we follow Bonhomme et al. (2023) and collapse our data to the job-spell level after residualizing the data by regressing log earnings on year dummies and a cubic in age, separately by state.

We estimate ψ_j using the following regression framework:

$$y_{ijt} = \alpha_i + \psi_{j(i,t)} + \epsilon_{ijt} \tag{4}$$

where y_{ijt} is the residual of log earnings for individual i at firm j in period t and α_i are individual fixed effects. The $\psi_{j(i,t)}$ represent the firm's contribution to differences in earnings.[12]

One noteworthy concern about these estimates of wage premia is that they may be measured with substantial error for firms that experience relatively few transitions, overestimating firms' contribution to earnings differences (Andrews et al., 2008; Kline et al., 2020). However, the bias due to limited mobility falls substantially as the length of the panel grows (Bonhomme et al., 2023), and we estimate firm effects using a 23-year panel, far longer than typical in this literature. Furthermore, while limited mobility leads to biased estimates of the

[11] We further restrict the sample to firms with at least 15 non-singleton person-years per LEHD year, where singleton person-years are defined as observations in which the individual is not observed in any subsequent year. We construct annualized earnings using the pattern of quarterly employment in the LEHD to inflate quarterly earnings to the amount an individual would have earned in a full year at the firm (Sorkin, 2017, 2018).

[12] Following the literature, we normalize our estimates of $\psi_{j(i,t)}$ so they are 0 on average for firms in the hotel and restaurant industry (e.g., Card et al., 2016). This choice is innocuous given our focus on the gender gap in firm effects. Our estimates of $\psi_{j(i,t)}$ are not sensitive to restricting the sample to only men, only women, or only non-parents, nor are they sensitive to estimating equation 4 at the person-year level, or state by state.

share of the *variance* in earnings that can be explained by firms, our focus on the evolution of *mean* firm effects suggests it will primarily add noise, not bias, to our estimates.

4 U.S. firms, wages, and amenity rigidity

4.1 Earnings vs. wage effects of firms

Despite the richness of the linked employer-employee data in the U.S., one limitation is it lacks hours. Because of this limitation, our estimated firm effects $\widehat{\psi}_j$ combine the firm's wage premium with the composition of firm-specific human capital and hours among workers at that firm.[13] This total effect is the economically meaningful object for our analysis. We cannot observe the firm wage premium ψ_j separate from the hours and tenure composition at the firm. What we observe is $\widehat{\psi}_j$, which reflects what workers actually earn at that firm given the firm's policies and workforce composition. From the worker's perspective, this total effect is what matters: moving to a flexible firm reduces earnings through both their own hours reduction and the lower firm-level earnings environment. The key economic cost in our model is that workers lose firm-specific human capital when forced to switch firms, and the total firm effect provides a reduced-form measure of this cost.[14]

Through the lens of the model, when individuals switch from firms that do not offer flexible hours to firms that do offer flexible hours, both average wages and earnings fall. This suggests several empirical predictions about the distribution of wages and earnings *across* firms, including: (1) Hours are higher, on average, at higher-paying firms. (2) There is less hours dispersion at higher-paying firms. (3) When workers switch from lower-paying to higher-paying firms, both wages and hours increase.

We use the LEHD-ACS sample, which contains both wages and hours, to evaluate these predictions. Following Card et al. (2018), we construct a sample of workers who switch between firms, requiring that they work 2 consecutive years at the original firm and 2 consecutive years at the successive firm, with no spell of non-employment between. We divide the sample into groups corresponding to the quartile of AKM earnings premium in the original and receiving firm, and then plot changes in AKM earnings premium, LEHD log earnings, ACS log earnings, and ACS log hours. This exercise allows us to decompose changes in AKM

[13]The estimated firm effect $\widehat{\psi}_j$ is identified from workers who switch firms and captures:

$$\widehat{\psi}_j = \log \psi_j + E[\gamma_e e_{ijt}|j] + E[\log h_{ijt}|j] \tag{5}$$

This composition effect is well-known in the AKM literature (Card et al., 2013).

[14]Our approach follows Card et al. (2016) and other recent work using firm effects to study gender wage gaps. These papers similarly focus on total firm effects as the policy-relevant object.

earnings premia into changes in hours worked and changes in hourly wages. We will update this section with results up Census Bureau disclosure.

4.2 Flexible work rigidities at the firm level

We now develop empirical evidence behind the core assumption that underlies the model—amenities rigidity—that we argue is the source of firm downgrading after parenthood. This section is based on job vacancies ads from Revelio, and we will update this section with results using the LEHD-ACS sample.

We define an establishment as a firm-metro area. We first show that, holding fixed an occupation, firms account for more variation in flexible work amenities than metro areas. Next, we show that jobs in multi-establishment firms are likely to offer the same amenity across locations, compared to jobs in the same metro area but in different firms.

Variance Decomposition

For this exercise, we make several restrictions to the job ads sample. First, we restrict the sample to job ads with a non-missing 4-digit Standard Occupational Classification (SOC) code, company name, and metro area. Second, we restrict to job ads in firms that have multiple locations. Third, we require each occupation-metro area to have at least two firms. Fourth, for each occupation, we require at least 30 job postings and non-zero variance in the amenity, and at least two firms and two metro areas.

Using this sample, we estimate the following regression separately for each amenity-occupation pair:

$$y_{jrf} = \gamma_r + \gamma_f + \epsilon_{jrf} \tag{6}$$

where y_{jrf} is an indicator that job j in metro area r and firm f offers the amenity. We estimate this regression with both sets of fixed effects, and then re-estimate the regression dropping either the firm fixed effects or the metro area fixed effects. This exercise follows that of Nakamura and Steinsson (2008) and Hazell et al. (2025), which study national price and wage setting by firms, respectively.

The reduction in the adjusted-R^2 from dropping firm fixed effects measures the marginal contribution of firm-level factors in accounting for amenities variation. For each occupation-amenity pair, we calculate the difference in adjusted-R^2 when dropping firm f.e., and again when dropping metro area f.e. We then average these differences across occupations, for each

amenity, without weights.

Figure 6a presents these average changes in adjusted-R^2, by amenity. The main result is that firm fixed effects account for a large share of variation in amenities—between approximately 25 and 45 percent—while metro area fixed effects account for less than 2 percent. Not surprisingly, amenities that are conventionally set as a company-wide policy, such as health insurance or paid parental leave, have the largest amount of variation explained by firms. Nevertheless, other flexible work amenities—such as remote work or flexible hours—or flexible work disamenities, such as weekend or night shifts, being on call, or working irregular hours, have a surprisingly high share of variance accounted for by the firm: 25 to 40 percent.

In ongoing work, we consider this evidence further by reproducing the analysis using the linked LEHD-ACS. In the LEHD-ACS, the key proxies for flexible work that we observe that are not observed in job ads are hours worked and remote work. The LEHD-ACS sample has the disadvantage of lacking granular measures of flexible work, but has several advantages: first, it is representative of U.S. employment, whereas job ads capture U.S. vacancies (i.e., the new hire margin); and second, the amenities are based on surveys of individual workers and are not subject to the critique that firms may use common language across job ads that may lead to overestimation of the overlap in amenities across jobs within firms.

Benefits overlap within and between firms

We next consider the extent that two job ads in the same occupation provide the same benefits, within and between firms. Within each firm-occupation group, we randomly order jobs and create sequential pairs from different establishments (i.e., from different metro areas). Similarly, within each metro-occupation group, we randomly order jobs and create sequential pairs across different firms (requiring the pair to also have different parent companies). We ask how likely are these within- and between-firm matched pairs to share an amenity? This exercise follows the approach of DellaVigna and Gentzkow (2019), who study retail price rigidity in stores within and across chains.

For this exercise, we make several sample restrictions. First, we restrict to firms with at least two establishments and metro areas with at least two firms. Second, for firms with more than 200 establishments, we randomly sample 200 establishments and retain all jobs within those establishments for all amenities we study. This cap at 200 is intended to limit the influence of large firms. Third, if a firm-occupation or metro-occupation group has an odd number of jobs, the unpaired job is excluded.

Since many of the benefits are mentioned rarely in job ads, in constructing averages we exclude matched pairs if neither of the two jobs mentions the amenity; we do this to not inflate our estimates of amenities overlap when neither job ad mentions the amenity.

To construct averages for each amenity, we first average across occupations within each establishment pair, and then average across all establishment pairs.

We plot the within- and between- shares separately by amenity in Figure 6b. The main takeaway is that for a given occupation, jobs have far more overlap in amenities within firms across establishments, than across firms in the same metro area. For example, within firms, if one job mentions health insurance, there is a 30 percent likelihood that the matched job in the firm also mentions the health insurance amenity, while there is only a 7 percent likelihood the matched job between firms also mentions the health insurance amenity. The within shares are similarly high for paid parental leave. Other measures that proxy for flexible work amenities (or disamenities) also have far more overlap within firms than between firms.

Taken together, these results support our model's core assumption that amenities are rigid within firms and workers need to switch firms to adjust compensation packages.

4.3 Distribution of hours worked and earnings premia

Having established that amenities at jobs in the United States are rigid within the firm, we turn to the question of how hours requirements are distributed across employers defined by earnings premia. This analysis is motivated by our model's insight that if high-earning jobs are concentrated at firms that require long hours—at firms with "greedy jobs"—then amenity rigidity has an additional effect of inducing movements down the firm wage distribution among parents who bear the higher burden of childcare.

We return to our linked ACS-LEHD sample and limit it to firms in which at least 10 ACS respondents can be linked at the quarter-firm level to the LEHD. We use this sample to plot the distribution of hours worked within the firm by ventile of firm AKM effect. We also report the relationship between earnings premium and other amenities, including access to health insurance, remote work, and commuting time. We will update this section with results up Census Bureau disclosure.

5 Career progressions around parenthood

We begin our analysis by using our linked employer-employee data to study the career progressions of women and men in the years surrounding parenthood. We focus on two outcomes. First, to document movement *within* firms, we construct a measure of each parent's position in their employer's earnings distribution by calculating the difference between their log earnings and that of their average co-worker. Second, to study movement *across* firms, we use the firm earnings premium of their primary employer. We then document parents'

career trajectories by estimating the following event-study specification:

$$y_{ijt} = \sum_{r=-5}^{11} \eta_r Mom_i \cdot D_r + \sum_{r=-5}^{11} \beta_r D_r + X_{it}\delta + \epsilon_{ijt} \tag{7}$$

In specification 7, y_{ijt} is one of our measures of the worker i's position in year t in the distribution within or across firms j. The indicators D_r track the year relative to first birth r. The vector of controls, X_{it}, includes only a quadratic in age at first birth, since women tend to have their first child approximately 1.4 years earlier than men (as seen in Table A3) and we wish to hold fixed the point in mothers' and fathers' careers in which the first child arrives.[15] Departing from the specification of Kleven et al. (2019a), we intentionally do not adjust for contemporaneous age because our aim is to document parents' career trajectories over the lifecycle rather than netting out age profiles.[16] Our estimates of η_r and β_r can be interpreted straightforwardly as regression-adjusted means by year relative to first birth.

Our estimates for both outcomes are plotted together in Figure 1 to depict the evolution of parents' careers both within and across firms. Each point in the figure represents a parent-year average, where years are defined relative to the birth of a first child, and we indicate the year next to each point. Each point's position on the vertical axis corresponds to mothers' or fathers' earnings relative to the average among their co-workers, capturing workers' position on the job ladder within the firm. The position on the horizontal axis represents the average earnings premium among parents' employers, to capture sorting across firms.

The results show that the parental earnings gap predates parenthood itself: Five years prior to parenthood, men work at firms paying 7.7 log points more and are 11.1 log points higher on the job ladder, compared to women. But in the years leading up to parenthood, men and women advance in their careers in parallel, both transitioning to higher-paying firms and moving up the ladder within the firm. By the year prior to first birth, the gender gap has narrowed only slightly, with a 7.5-log-point gap across firms and a 9.9-log-point gap within the firm.

The arrival of the first child marks a sharp divergence in parents' career paths. Fathers continue to make career gains, moving up both within and across firms without apparent interruption. Mothers, on the other hand, experience an immediate and large drop in year 0 in their earnings position within the firm, and it takes seven years for them to return to their

[15] We subtract the sample mean age at first birth before estimating $\hat{\eta}_r$ and $\hat{\beta}_r$ so they can be interpreted as regression-adjusted means by event year r.

[16] We report estimates from the specification used in Kleven et al. (2019a), which estimates parental outcomes net of lifecycle effects, in Figure A4.

peak pre-parenthood position. Meanwhile, in those seven years, men increase their ranking within the firm by over 10 log points.

Our key finding is that mothers transition to lower-paying firms after parenthood, a trend that begins immediately after childbirth and continues through the end of our sample period, 11 years later. By year 11, women have moved to firms paying approximately 4 log points less than their firms in the year of parenthood, representing about 50 percent of the baseline (year 0) gender difference—a large effect. Over the same period, men move to higher-paying firms, increasing their average firm premia by another 2 log points. By year 11, there is a 12.1-log-point gender gap in the firm earnings premium and a 26.4-log-point gender gap within firms. These findings show that parenthood is a sharp inflection point in women's career progressions within and across firms.

We emphasize that the yearly averages shown in Figure 1 are conditional on employment, meaning that the trends reflect both transitions to new jobs and selection into and out of the labor force. In Figure A1, we perform a simple decomposition of these two effects.[17] The transition effect shows the change in firm earnings premium from two years prior to childbirth ($r = -2$) and the current year, among those who remain in the labor force. The selection effect captures the share of the change due to differential exit from the labor force. While selection temporarily raises the overall average firm earnings premium for mothers, its influence disappears by year 2 as mothers re-enter the labor force at lower-paying firms. Mothers' overall trend toward lower-paying firms is driven by transitions to lower-paying firms rather than by differential exit from the labor force.

5.1 Firm downgrading across the distribution of pre-parenthood employers

Transitions to lower-paying firms are a key component in mothers' career trajectories after parenthood. It is not clear, however, whether this downgrading varies across the distribution of firms. Women at high-paying firms may have increased access to networks or skills that help them maintain roles at higher-paying firms (Caldwell and Harmon, 2019; Jarosch et al., 2021), or may have even postponed childbirth until establishing security in their careers (Wasserman, 2023). On the other hand, women who are previously employed at high-paying

[17] Specifically, let $\Delta y_r = \bar{y}_r - \bar{y}_{-2}$ denote the average change in firm wage premium between each relative year r and 2 years prior to first birth, $r = -2$. This change in firm wage premium can be decomposed as $\Delta y_r = \frac{1}{N_r}\sum_i E_{ir}(y_{ir} - y_{i,-2}) + \sum_i y_{i,-2}(\frac{E_{ir}}{N_r} - \frac{E_{i,-2}}{N_{-2}})$, where E_{ir} is an indicator for working in year r and N_r is the sum of E_{ir} across individuals i in relative year r. Our sample construction ensures everyone is working in year $r = -2$. The first term captures the "transition effect," the average change in firm wage premium among parents who are employed in year r and year -2. The second term captures a residual that is increasing in the extent of positive selection into the labor force in relative year r.

firms may be more likely to downgrade, moving away from inflexible or demanding jobs at these high-paying firms towards more family-friendly positions (Goldin, 2014).

Figure 2a shows the largest downgrading occurs for mothers who were previously employed at the highest-paying firms. We average each individual's firm effects separately over the pre-parenthood years (years relative to first birth $r \in [-5, -1]$) and post-parenthood years ($r \in [1, 11]$) and plot the average change in earnings premium, after relative to before childbirth, by ventile of firm premium prior to childbirth.

We highlight two main takeaways from this figure. First, across the entire pre-parenthood distribution, mothers experience a larger decrease (or a smaller increase) in their firm earnings premium compared to fathers. While the downward slope for both mothers and fathers suggests some regression to the mean, the lack of a crossing point suggests that mothers are falling behind fathers—even holding pre-childbirth firm quality fixed—at every point in the distribution. Second, the gender gap in career progression across firms is largest for those previously working at the highest-paying firms. For parents working at the bottom of the firm distribution before children, fathers make modest gains relative to mothers—about 3 log points at the 25th percentile. However, fathers employed at top-quartile firms pre-parenthood experience limited downgrading, of about 2 log points, while mothers employed at similar firms downgrade by 7 or more log points.

We also show that attachment to the labor force is an important moderator of firm downgrading for mothers. Because the United States has no universal paid leave policy, there is a lot of variation in the amount of time women take off from work after childbirth, and some women may temporarily exit the labor force after the birth of their child. In our sample of working mothers, 1.8 million (83 percent) have no interruption in their earnings history, 221,000 mothers (10 percent) have between 1 and 3 quarters without earnings after the birth of their first child, and 156,000 (7 percent) have at least one year of non-employment.[18]

Figure 2b plots firm downgrading across the distribution for fathers and for the three groups of mothers defined above.[19] Mothers who take zero quarters of leave transition to lower-paying firms, on average falling an extra 2-5 log points compared to fathers. But strikingly, longer periods of leave are associated with larger decreases in firm-specific pay: women taking 1-3 quarters of leave experience a drop of about 4 log points at the median in firm quality, while women taking 4+ quarters of leave experience a drop of about 10 log

[18]We note that these groups are likely capturing different lengths of separation from the labor force rather than job-protected maternity leave. Our data do not allow us to observe the length or incidence of job-protected or paid parental leave, since we do not observe hours and cannot disentangle earnings from paid leave benefits in the LEHD.

[19]Since taking extended parental leave remains relatively uncommon for men in the U.S., we do not construct the analogous figure for men.

points at the median. In addition to these level differences, the *gradient* in firm downgrading varies substantially with the length of absence from the labor force. Among women in the highest ventile of firms before parenthood, the decline in employer wage premium is 15 log points for those with 1-3 quarters of leave but more than 40 log points for those with four or more quarters of leave. These results suggest that career interruptions play an important role in the parenthood gap, especially for workers at the highest-paying firms.

Figure 3 provides additional context by reporting the post-parenthood changes in 2-digit industry by gender.[20] Health care and education are the two most common industries prior to childbirth and a frequent destination for mothers after childbirth. In contrast, mothers move in large numbers out of finance and insurance; retail trade; professional, scientific, and technical; accommodation and food service; and information. On the other hand, fathers' movements are much more limited, with substantial declines in retail trade, substantial increases in education and public administration, and relatively small shifts elsewhere.

These industry changes are noteworthy for two reasons. First, while working fathers are more likely than working mothers to change employers (see Figure A2), Figure 3 suggests their job changes are less likely to cross industries. To the extent that industry-specific human capital is an important driver of current and future earnings, this result suggests that firm transitions for fathers are more likely to represent advancement up the job ladder rather than costly career shifts (Neal, 1995). Second, an inspection of the pattern across industries reveals that mothers are much more likely to move in the direction of *lower-paying* industries such as education and health care, reinforcing the finding from Figure 1 that women move toward less lucrative employers after childbirth.[21] Finally, Figure A3 shows that these cross-industry changes are driven by women who take an extended absence from employment.

Overall, these results show that longer leave durations are strongly associated with transitions to lower-paying firms, and this pattern is more pronounced for women previously employed at high-paying firms. These results are consistent with women losing ties to high-paying firms leading to the loss of firm-specific and industry-specific human capital, and may also reflect working conditions at high-paying firms being incompatible with the demands of family.

[20] For parsimony, the figure presents industry changes for the 9 two-digit industries that are most common among women in our sample prior to childbirth.

[21] Card et al. (2024) estimate industry-level wage premia using firm-level premia as a building block. They find substantial variation in the premium across industries. The highest-premium industries include finance and insurance, information, and professional, scientific, and technical. The lowest-paying industries include accommodation and food services, retail trade, education, and health care.

5.2 Are women transitioning to firms with greater amenities?

Our results provide new evidence that mothers move to lower-paying firms after the birth of a child. An open question is whether the loss in pecuniary returns are offset by greater family-friendly job amenities. Because our linked LEHD-CHCK data provide little information on working conditions, we turn next to our linkage to the ACS, which has individual-level survey responses related to job attributes.

We divide our sample into two groups: those who remain at the same firm or upgrade to a higher-paying firm in the post-parenthood period (averaged over the 5 years immediately following childbirth) relative to the pre-parenthood period (measured 2 years prior to birth), and those who downgrade firms. The goal of splitting the sample in this way is to characterize the extent to which firm downgrading for parents is associated with increased access to family friendly amenities.

We estimate the following regression, which captures differences between mothers and fathers in the years before and after parenthood, allowing for separate trends for mothers who transition to higher-paying firms and mothers who transition to lower-paying firms:

$$y_{it} = \gamma_t + \sum_{r \neq -2} \eta_r^U Mom_i \cdot Up_i \cdot D_r + \sum_{r \neq -2} \eta_r^D Mom_i \cdot Down_i \cdot D_r + \sum_r \beta_r D_r + X_{it}\delta + \epsilon_{it}, \tag{8}$$

where Up_i is an indicator for person i working at higher-paying (or the same) firms after the birth of their first child; similarly, $Down_i = 1 - Up_i$ is an indicator for person i moving to lower-paying firms. Year relative to first birth is indexed by r.

We interpret the coefficients η_r^U and η_r^D as descriptive evidence of the evolution of job amenity y_{it} for mothers who move up or down the firm distribution, respectively, after childbirth. To improve precision in our smaller samples, and because we observe similar trends in pre-childbirth outcomes in our earlier LEHD analysis, we estimate these trends relative to overall trends for fathers around their first children's birth. In other words, they represent changes in the *gap* between mothers and fathers. To the extent that firm downgrading among mothers is driven by demand for work that is more flexible or otherwise amenable to family considerations, we would expect to find differences between η_r^U and η_r^D.

Our results are shown in Figure 4. Panel (a) shows that while both groups of mothers fall behind fathers in the share working full-time, the drop is 10-12 percentage points for mothers who move to higher-paying firms compared with 18-20 percentage points—nearly twice as large—for mothers who move to lower-paying firms. Panel (b) shows that all mothers shift toward jobs with shorter commutes compared to fathers, suggesting an increased demand

for working close to home. Women who join a lower-paying firm, though, have a larger decline in commute time, decreasing by 6 minutes over the time period, relative to a baseline ($r = -2$) average commute for working women of about 25 minutes. Panel (c) is also consistent with demand for flexibility, with mothers who downgrade firms more likely to move to remote work, although the gap in this outcome attenuates around the time of the child's kindergarten entry. It is worth noting that our data captures only *fully* remote work, rather than hybrid arrangements, and in a time period when remote work was quite rare. The magnitude of these effects is therefore quite large given the baseline share of about 1.2 percent working remotely.

Panel (d) considers our measure of occupational flexibility, the returns to working long and inflexible hours, constructed following Goldin (2014) and Cortes and Pan (2019). The results in panel (d) show that women who transition to lower-paying firms are also moving to occupations with lower returns to hours worked. This finding suggests that women are shifting to roles within the firm that are more substitutable, echoing the finding from Figure 1 of a flattened earnings profile within firms after parenthood.

In addition to workplace flexibility, parents' choice of job may be linked to demand for health insurance, which is especially important in the early years of a child's life (Wherry et al., 2018). We have two ACS-based measures of health insurance: an indicator for health insurance from any source, and an indicator of employer-sponsored coverage, which includes coverage through an individual's own employer or through the employer of a spouse or other family member.

Panels (e) and (f) of Figure 4 estimate changes in the mother-father gap in health insurance coverage. Before childbirth, working women are slightly more likely to have health coverage than working men: 2 years prior to the first birth, 93 percent of mothers and 92 percent of fathers have health insurance. The gap in employer-sponsored coverage is even smaller, with 87.8 percent of men and 88.4 percent of women utilizing an employer plan. Women gain coverage relative to men in the year prior to birth—a pattern likely driven by Medicaid coverage (Currie, 2004)—but this effect persists only for those who move to higher-paying firms. Among those who downgrade firms, coverage actually *falls* relative to men, with a gap in favor of fathers of 1-2 percentage points.

Panel (f) shows an even starker difference: both groups of women fall behind men in the share with an employer-sponsored plan. But this negative trend is far larger for women who move to lower-paying firms. We emphasize that the decrease in private insurance coverage we observe for mothers is *net* of any shifts onto the insurance plans of spouses. These estimates are therefore consistent with an overall downgrading of health coverage for all women, and an increase in non-coverage for mothers who move to lower-paying firms.

Taken together, these results suggest that women move to jobs that offer greater flexibility after parenthood, a pattern that is even more pronounced among women who transition to lower paying firms. This pattern of results is consistent with mothers seeking more family-friendly working conditions and transitioning to lower-paying firms that offer them. Nevertheless, the decline in health insurance among mothers—and the even larger decline in employer-sponsored coverage—provides suggestive evidence that there is a disparity between the amenities demanded by parents and those offered by employers.

5.3 How much of the total gender earnings gap can be accounted for by firm downgrading?

We conduct a final exercise to understand how much of the total gender earnings gap can be accounted for by firm downgrading. We document the gender earnings gap around parenthood using our LEHD-CHCK sample and an event study regression, where the dependent variable is log earnings and we control only for age at birth. We plot these event study estimates as the gray shaded region of Figure 5. To understand what proportion of this earnings gap can be accounted for by differences in firm pay premia, we overlay the gender gap in the average firm premia by gender, taken from Figure 1, as the darker shaded region of Figure 5.

Figure 5 shows that gender differences in firm premia are pronounced throughout the lifecycle, although its role in the overall gender gap varies substantially over time. The gray shaded region shows that prior to childbirth, the gender earnings gap among working women and men averages about 15 log points. The darker shaded region shows that 5 years prior to birth, women work at firms that pay about 8 log points less than men, a gap that comprises about 45 percent of the total gap in log earnings.

While firms' role in the gender earnings gap temporarily declines when a child is born, employers become increasingly consequential over the remainder of the mother's career. In the year of childbirth, the gender earnings gap expands to 32 log points and then remains steady over time. Firms explain only 23 percent of the total gap in the year of first birth—an unsurprisingly lower share compared to previous years, since much of the initial gender earnings gap is accounted for hours differences between men and women, rather than firm effects. But between-firm differences account for a steadily larger share over time, increasing from 23 percent to 34 percent, as women transition to lower-paying firms for over the decade following the birth of their first child.[22]

[22]We present an alternative exercise in Figure A4, where we estimate an event study regression with demographic controls only (indicators for education and race categories), and then re-estimate the regression

6 Conclusion

This paper leverages newly linked administrative and survey datasets to study the career dynamics around parenthood. We provide four new facts on the gender earnings gap: first, women begin transitioning to lower-paying firms after parenthood; second, the largest drops in firm premia are experienced by women working at the highest-paying firms, and particularly by women taking extended time away from work; third, many non-pecuniary benefits, consistent with flexible work, increase for women transitioning to lower-paying firms, with the key exception of employer-based health insurance; and fourth, transitions to lower-paying firms account for up to one-third of the overall gender gap after parenthood.

We interpret these findings through the lens of a model showing that amenities rigidities in firms—particularly with flexible or part-time hours—is a critical factor that amplifies gender gaps through firm switching, which destroys valuable firm-specific human capital, followed by hours reductions. A central contribution of the paper is to directly measure hours- and scheduling-related amenities using job vacancy data, and then to show empirical evidence that these amenities are rigid within firms.

Taken together, our findings provide new evidence that amenities rigidity in firms amplifies the parental earnings gap. Consistent with the theory that today's generation is intent on pursuing both career and family (Goldin, 2021), a relatively small share of women in our sample leave the workforce after the birth of a first child. Our results suggest a mismatch between the pay and non-pay amenities demanded by parents and those offered by U.S. employers, especially at the highest-paying firms (Lachowska et al., 2023). Such a mismatch may help explain the failure of policies such as paid leave, which offer flexible conditions only in the short term, to close the gender gap among parents in the United States (Bailey et al., 2025). Furthermore, the transitions to firms that offer lower pay and less health insurance coverage may have additional consequences for family health (Wherry et al., 2018; Miller et al., 2021). The potential for a disparity between the pay and amenity packages offered by firms and those demanded by working parents is an important avenue for future work, with implications for the gender earnings gap and overall family well-being.

with firm controls only (the estimates of $\psi_{j(i,t)}$, 2-digit industry code, and log firm size). The main finding is that firms account for a greater share of the parental earnings gap than demographic characteristics.

References

Abowd, J. M., Kramarz, F., and Margolis, D. N. (1999). High Wage Workers and High Wage Firms. *Econometrica*, 67(2):251–333.

Akerlof, G. A. and Yellen, J. L. (1988). Fairness and Unemployment. *American Economic Review*, 78(2):44–49.

Altonji, J. G. and Paxson, C. H. (1992). Labor Supply, Hours Constraints, and Job Mobility. *Journal of Human Resources*, 27(2):256–278.

Andrews, M., Gill, L., Schank, T., and Upward, R. (2008). High Wage Workers and Low Wage Firms: Negative Assortative Matching or Limited Mobility Bias? *Journal of the Royal Statistical Society Series A: Statistics in Society*, 171(3):673–697.

Bailey, M., Byker, T., Patel, E., and Ramnath, S. (2025). The Long-Run Effects of California's Paid Family Leave Act on Women's Careers and Childbearing: New Evidence from a Regression Discontinuity Design and U.S. Tax Data. *American Economic Journal: Economic Policy*.

Barth, E., Kerr, S. P., and Olivetti, C. (2021). The Dynamics of Gender Earnings Differentials: Evidence from Establishment Data. *European Economic Review*, 134:103713.

Bertrand, M., Goldin, C., and Katz, L. F. (2010). Dynamics of the Gender Gap for Young Professionals in the Financial and Corporate Sectors. *American Economic Journal: Applied Economics*, 2(3):228–255.

Bertrand, M., Kamenica, E., and Pan, J. (2015). Gender Identity and Relative Income within Households. *Quarterly Journal of Economics*, 130(2):571–614.

Bewley, T. F. (1999). *Why Wages Don't Fall During a Recession*. Why wages don't fall during a recession. Harvard University Press, Cambridge, MA, US. Pages: viii, 527.

Bianchi, S. M., Sayer, L. C., Milkie, M. A., and Robinson, J. P. (2012). Housework: Who Did, Does or Will Do It, and How Much Does It Matter? *Social Forces*, 91(1):55–63.

Bonhomme, S., Holzheu, K., Lamadon, T., Manresa, E., Mogstad, M., and Setzler, B. (2023). How Much Should We Trust Estimates of Firm Effects and Worker Sorting? *Journal of Labor Economics*, 41(2):291–322.

Breza, E., Kaur, S., and Shamdasani, Y. (2018). The Morale Effects of Pay Inequality. *Quarterly Journal of Economics*, 133(2):611–663.

Bronson, M. A. and Thoursie, P. S. (2021). The Wage Growth and Within-Firm Mobility of Men and Women: New Evidence and Theory. Unpublished manuscript.

Bruns, B. (2019). Changes in Workplace Heterogeneity and How They Widen the Gender Wage Gap. *American Economic Journal: Applied Economics*, 11(2):74–113.

Caldwell, S. and Harmon, N. (2019). Outside Options, Bargaining, and Wages: Evidence from Coworker Networks. Working paper.

Card, D., Cardoso, A. R., Heining, J., and Kline, P. (2018). Firms and Labor Market Inequality: Evidence and Some Theory. *Journal of Labor Economics*, 36(S1):S13–S70.

Card, D., Cardoso, A. R., and Kline, P. (2016). Bargaining, Sorting, and the Gender Wage Gap: Quantifying the Impact of Firms on the Relative Pay of Women. *Quarterly Journal of Economics*, 131(2):633–686.

Card, D., Heining, J., and Kline, P. (2013). Workplace Heterogeneity and the Rise of West German Wage Inequality. *Quarterly Journal of Economics*, 128(3):967–1015. Publisher: Oxford University Press.

Card, D., Rothstein, J., and Yi, M. (2024). Industry Wage Differentials: A Firm-Based Approach. *Journal of Labor Economics*, 42(S1):S11–S59.

Carry, P. (2024). The Effects of the Legal Minimum Working Time on Workers, Firms, and the Labor Market.

Casarico, A. and Lattanzio, S. (2022). What Firms Do: Gender Inequality in Linked Employer-Employee Data. *Journal of Labor Economics*.

Casarico, A. and Lattanzio, S. (2023). Behind the Child Penalty: Understanding What Contributes to the Labour Market Costs of Motherhood. *Journal of Population Economics*, 36(3):1489–1511.

Chung, Y., Downs, B., Sandler, D. H., and Sienkiewicz, R. (2017). The Parental Gender Earnings Gap in the United States. Census Bureau Center for Economic Studies Working Paper 17-68.

Cole, A. and Taska, B. (2023). Worker Valuation of Retirement Benefits.

Cortes, P. and Pan, J. (2019). When Time Binds: Substitutes for Household Production, Returns to Working Long Hours, and the Skilled Gender Wage Gap. *Journal of Labor Economics*, 37(2):351–398.

Coudin, E., Maillard, S., and Tô, M. (2018). Family, Firms and the Gender Wage Gap in France.

Cullen, Z. B. and Pakzad-Hurson, B. (2023). Equilibrium Effects of Pay Transparency. *Econometrica*, 91(3):765–802.

Currie, J. (2004). The Take Up of Social Benefits. NBER Working Paper 10488.

DellaVigna, S. and Gentzkow, M. (2019). Uniform Pricing in U.S. Retail Chains. *Quarterly Journal of Economics*, 134(4):2011–2084.

Di Addario, S., Kline, P., Saggio, R., and Søvsten, M. (2023). It Ain't Where You're From, It's Where You're At: Hiring Origins, Firm Heterogeneity, and Wages. *Journal of Econometrics*, 233(2):340–374.

Genadek, K. R., Sanders, J., and Stevenson, A. J. (2022). Measuring Fertility using Administrative Data from the U.S. Census Bureau. *Demographic Research*, 47(2):37–58.

Glass, J. and Camarigg, V. (1992). Gender, Parenthood, and Job-Family Compatibility. *American Journal of Sociology*, 98(1):131–151.

Goldin, C. (2014). A Grand Gender Convergence: Its Last Chapter. *American Economic Review*, 104(4):1091–1119.

Goldin, C., Kerr, S. P., Olivetti, C., and Barth, E. (2017). The Expanding Gender Earnings Gap: Evidence from the LEHD-2000 Census. *American Economic Review*, 107(5):110–114.

Goldin, C. D. (2021). *Career and Family: Women's Century-Long Journey Toward Equity*. Princeton University Press, Princeton, New Jersey.

Graham, M., McEntarfer, E., McKinney, K., Tibbets, S., and Tucker, L. (2022). LEHD Snapshot Documentation. Working Papers 22-51, Center for Economic Studies, U.S. Census Bureau.

Grigsby, J., Hurst, E., and Yildirmaz, A. (2021). Aggregate Nominal Wage Adjustments: New Evidence from Administrative Payroll Data. *American Economic Review*, 111(2):428–471.

Hansen, S., Lambert, P. J., Bloom, N., Davis, S. J., Sadun, R., and Taska, B. (2023). Remote Work Across Jobs, Companies, and Space. NBER Working Paper 31007.

Hazell, J., Patterson, C., Sarsons, H., and Taska, B. (2025). National Wage Setting. NBER Working Paper 30623.

Hotz, V. J., Johansson, P., and Karimi, A. (2018). Parenthood, Family Friendly Workplaces, and the Gender Gaps in Early Work Careers. NBER Working Paper 24173.

Humlum, A., Rasmussen, M., and Rose, E. K. (2025). Firm Premia and Match Effects in Pay vs. Amenities.

Jack, R., Tannenbaum, D., and Timpe, B. (2025). The Landscape of Parental Leave-Taking in the United States.

Jarosch, G., Oberfield, E., and Rossi-Hansberg, E. (2021). Learning From Coworkers. *Econometrica*, 89(2):647–676.

Jarosch, G., Pilossoph, L., and Swaminathan, A. (2025). Should Friday be the New Saturday? Hours Worked and Hours Wanted. NBER Working Paper 33577.

Jayachandran, S. and Voena, A. (2026). Women's Power in the Household. *Journal of Economic Literature*.

Juhn, C. and McCue, K. (2017). Specialization Then and Now: Marriage, Children, and the Gender Earnings Gap across Cohorts. *Journal of Economic Perspectives*, 31(1):183–204.

Kleven, H. (2022). The Geography of Child Penalties and Gender Norms: Evidence from the United States. NBER Working Paper 30176.

Kleven, H., Landais, C., and Leite-Mariante, G. (2025). The Child Penalty Atlas. *Review of Economic Studies*, 92(5):3174–3207.

Kleven, H., Landais, C., Posch, J., Steinhauer, A., and Zweimüller, J. (2019a). Child Penalties Across Countries: Evidence and Explanations. *AEA Papers and Proceedings*, 109:122–126.

Kleven, H., Landais, C., and Søgaard, J. E. (2019b). Children and Gender Inequality: Evidence from Denmark. *American Economic Journal: Applied Economics*, 11(4):181–209.

Kleven, H., Olivero, G., and Patacchini, E. (2024). Child Penalties and Parental Role Models: Classroom Exposure Effects.

Kline, P., Saggio, R., and Sølvsten, M. (2020). Leave-Out Estimation of Variance Components. *Econometrica*, 88(5):1859–1898.

Labanca, C. and Pozzoli, D. (2022). Constraints on Hours within the Firm. *Journal of Labor Economics*, 40(2):473–503.

Lachowska, M., Mas, A., Saggio, R., and Woodbury, S. (2023). Work Hours Mismatch. NBER Working Paper 31205.

Lemieux, T. (2006). The Mincer Equation Thirty Years after Schooling, Experience, and Earnings. In *Jacob Mincer, a Pioneer of Modern Labor Economics*. Springer Verlag.

Mas, A. and Pallais, A. (2017). Valuing Alternative Work Arrangements. *American Economic Review*, 107(12):3722–3759.

Masso, J., Meriküll, J., and Vahter, P. (2022). The Role of Firms in the Gender Wage Gap. *Journal of Comparative Economics*, 50(2):454–473.

Miller, S., Johnson, N., and Wherry, L. R. (2021). Medicaid and Mortality: New Evidence From Linked Survey and Administrative Data. *Quarterly Journal of Economics*, 136(3):1783–1829.

Mincer, J. (1974). *Schooling, Experience, and Earnings*. Columbia University Press, New York.

Morchio, I. and Moser, C. (2024). The Gender Pay Gap: Micro Sources and Macro Consequences.

Nakamura, E. and Steinsson, J. (2008). Five Facts about Prices: A Reevaluation of Menu Cost Models. *Quarterly Journal of Economics*, 123(4):1415–1464.

Neal, D. (1995). Industry-Specific Human Capital: Evidence from Displaced Workers. *Journal of Labor Economics*, 13(4):653–677.

Rosen, S. (1974). Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition. *Journal of Political Economy*, 82(1):34–55. Publisher: The University of Chicago Press.

Ruggles, S., Flood, S., Sobek, M., Backman, D., Chen, A., Cooper, G., Richards, S., Rodgers, R., and Schouweiler, M. (2024). IPUMS USA: Version 15.0 [dataset].

Sorkin, I. (2017). The Role of Firms in Gender Earnings Inequality: Evidence from the United States. *American Economic Review: Papers and Proceedings*, 107(5):384–387.

Sorkin, I. (2018). Ranking Firms Using Revealed Preference. *Quarterly Journal of Economics*, 133(3):1331–1393.

Taylor, E., Stuart, B., and Bailey, M. (2016). Summary of Procedure to Match NUMIDENT Place of Birth County to GNIS Places. CES Technical Notes Series, Center for Economic Studies, U.S. Census Bureau.

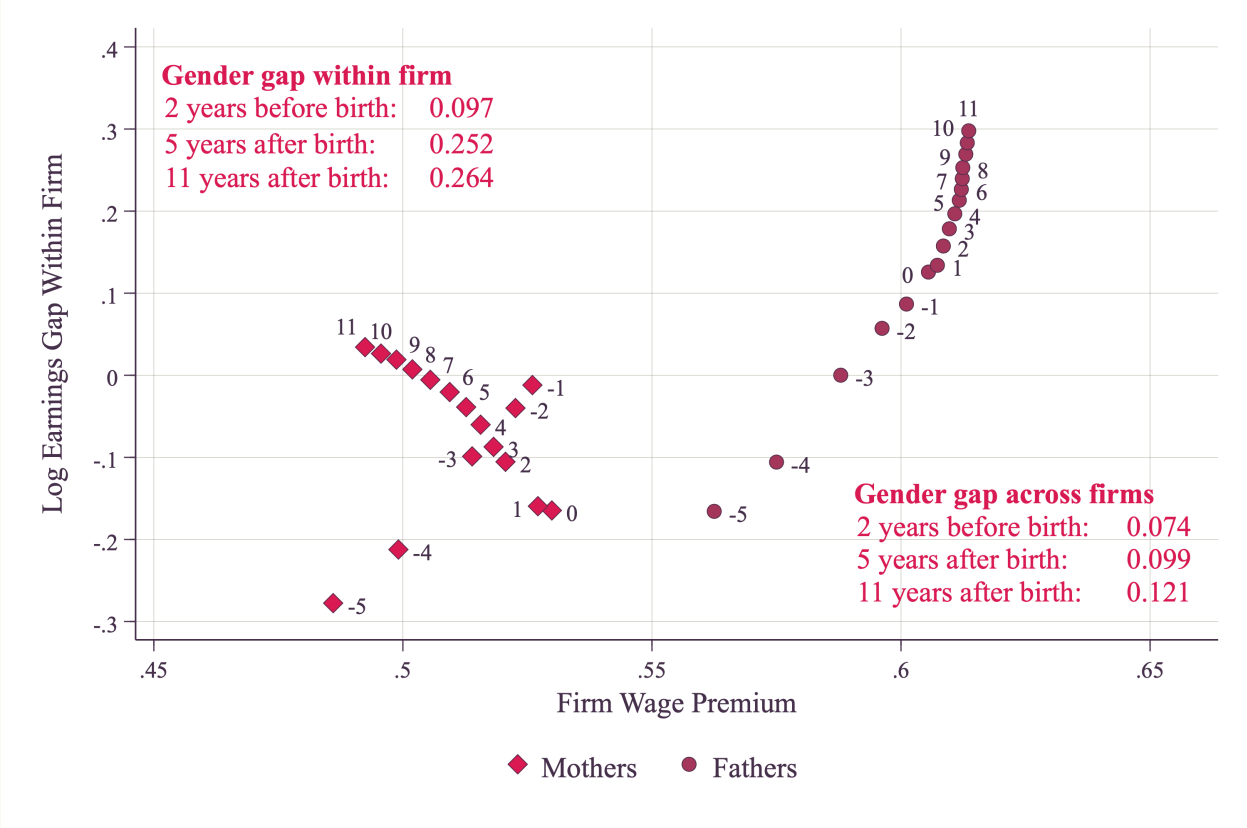
Waldfogel, J. (1998). The Family Gap for Young Women in the United States and Britain: Can Maternity Leave Make a Difference? *Journal of Labor Economics*, 16(3):505–545.

Wasserman, M. (2023). Hours Constraints, Occupational Choice, and Gender: Evidence from Medical Residents. *Review of Economic Studies*, 90(3):1535–1568.

Wherry, L. R., Miller, S., Kaestner, R., and Meyer, B. D. (2018). Childhood Medicaid Coverage and Later-Life Health Care Utilization. *Review of Economics and Statistics*, 100(2):287–302.

7 Figures

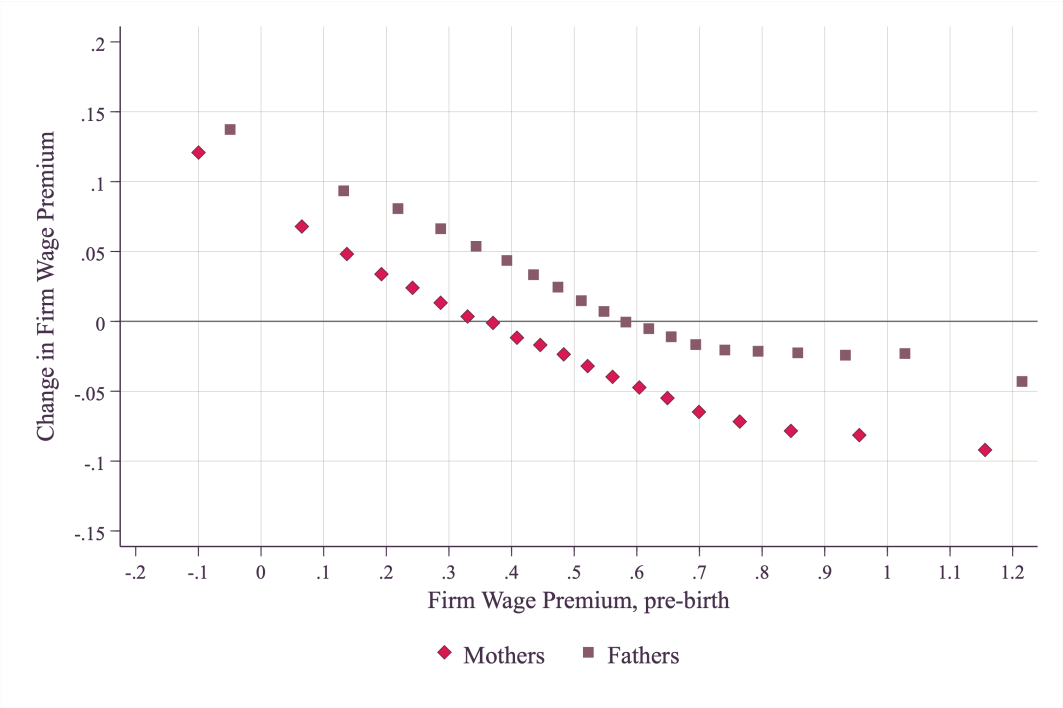
Figure 1: Changes in parents' employment within and between firms



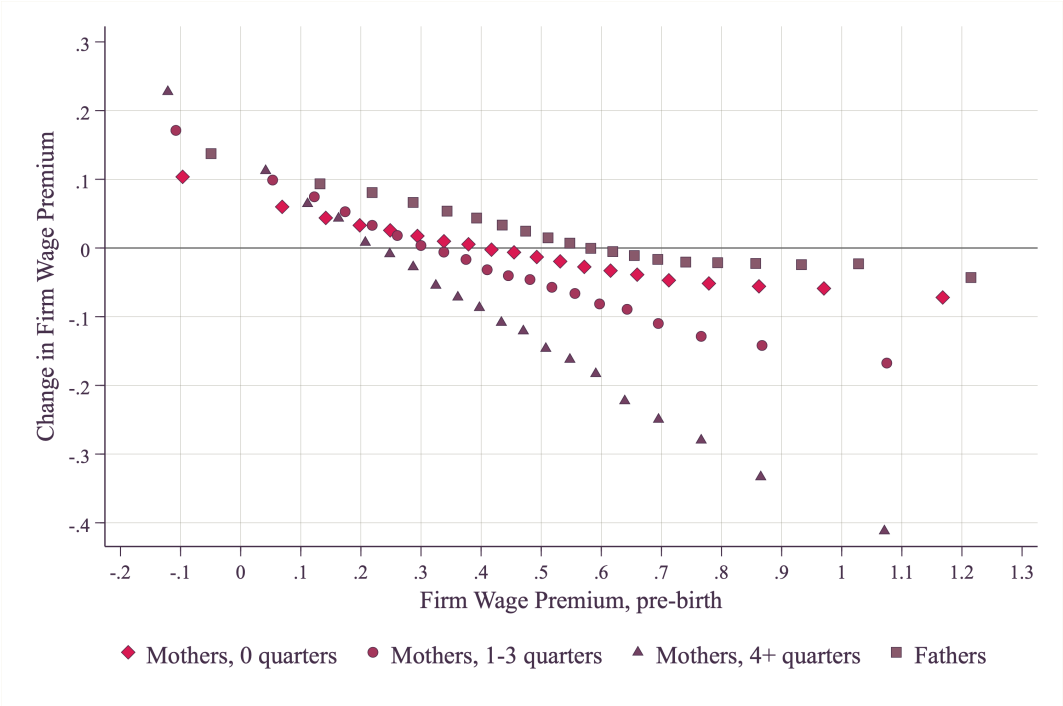
Notes: The figure above plots, on the x-axis, the average firm quality ($\psi_{(}j(i,t)$)) for mothers and fathers in each year relative to having their first child, with years indicated next to the markers. The figure also plots, on the y-axis, the log difference between parents' earnings and the average earnings among their coworkers, in each year relative to having their first child. Means are regression-adjusted for differences in age at first birth. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831)

Figure 2: Changes in firm quality across the distribution

(a) Changes in firm quality for mothers and fathers, before and after birth of first child



(b) Changes in firm quality for mothers, by duration out of labor force



Notes: The figure plots the average change in firm quality ($\bar{\psi}_{j(i),t\geq b} - \bar{\psi}_{j(i),t<b}$) by firm quality prior to childbirth for our sample of mothers and fathers in the 2010 Census linked to the LEHD. Average pre-childbirth firm quality $\bar{\psi}_{j(i),t<b}$ is averaged over the 5 years prior to birth, and average post-childbirth firm quality $\bar{\psi}_{j(i),t\geq b}$ is averaged over the 11 years after birth. For Figure 2b, Each set of markers plots the figure for populations of mothers defined by the number of calendar quarters of leave taken from the workforce after childbirth. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831)

Figure 3: Change in industry composition among working parents, before and after childbirth

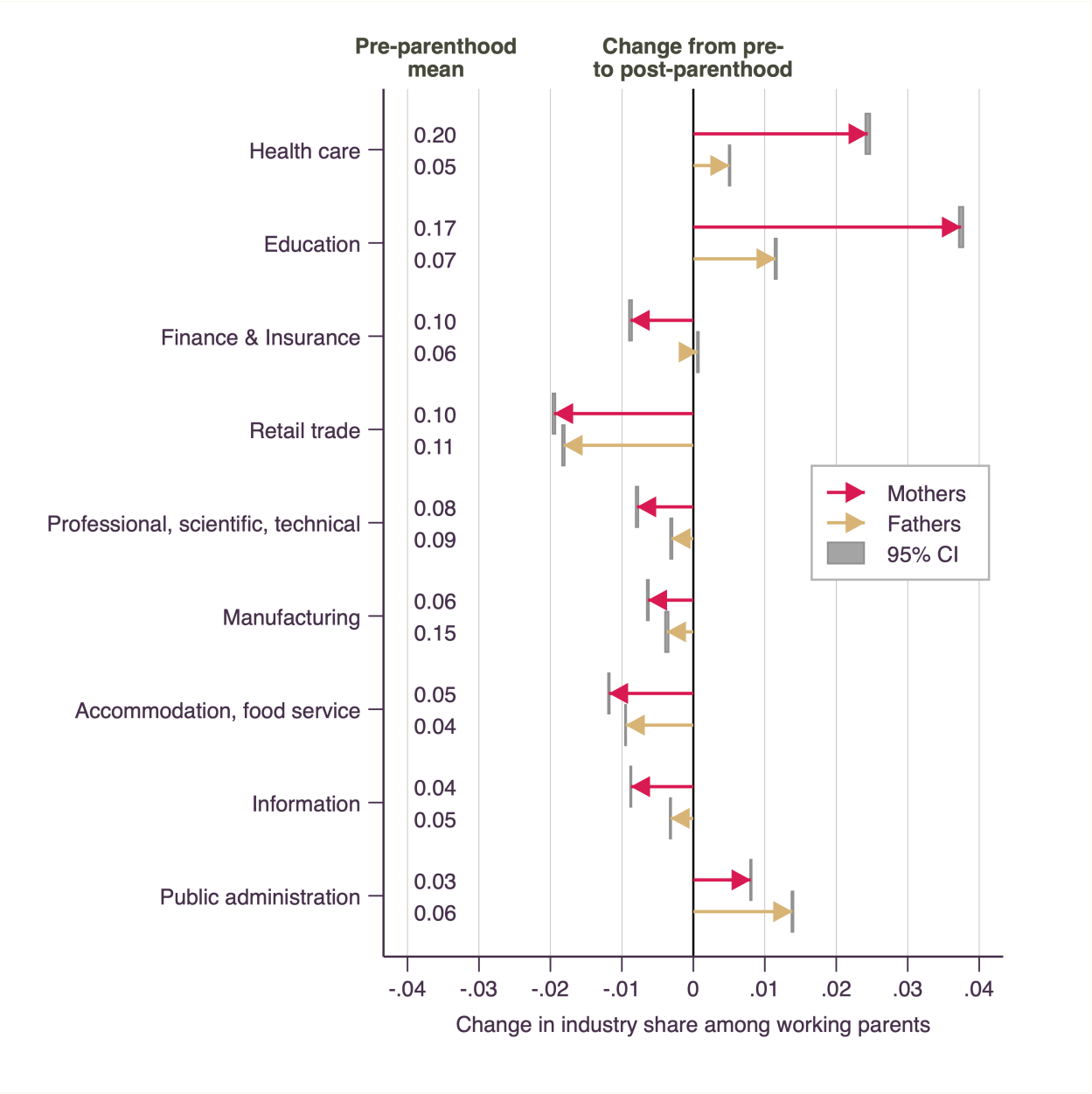
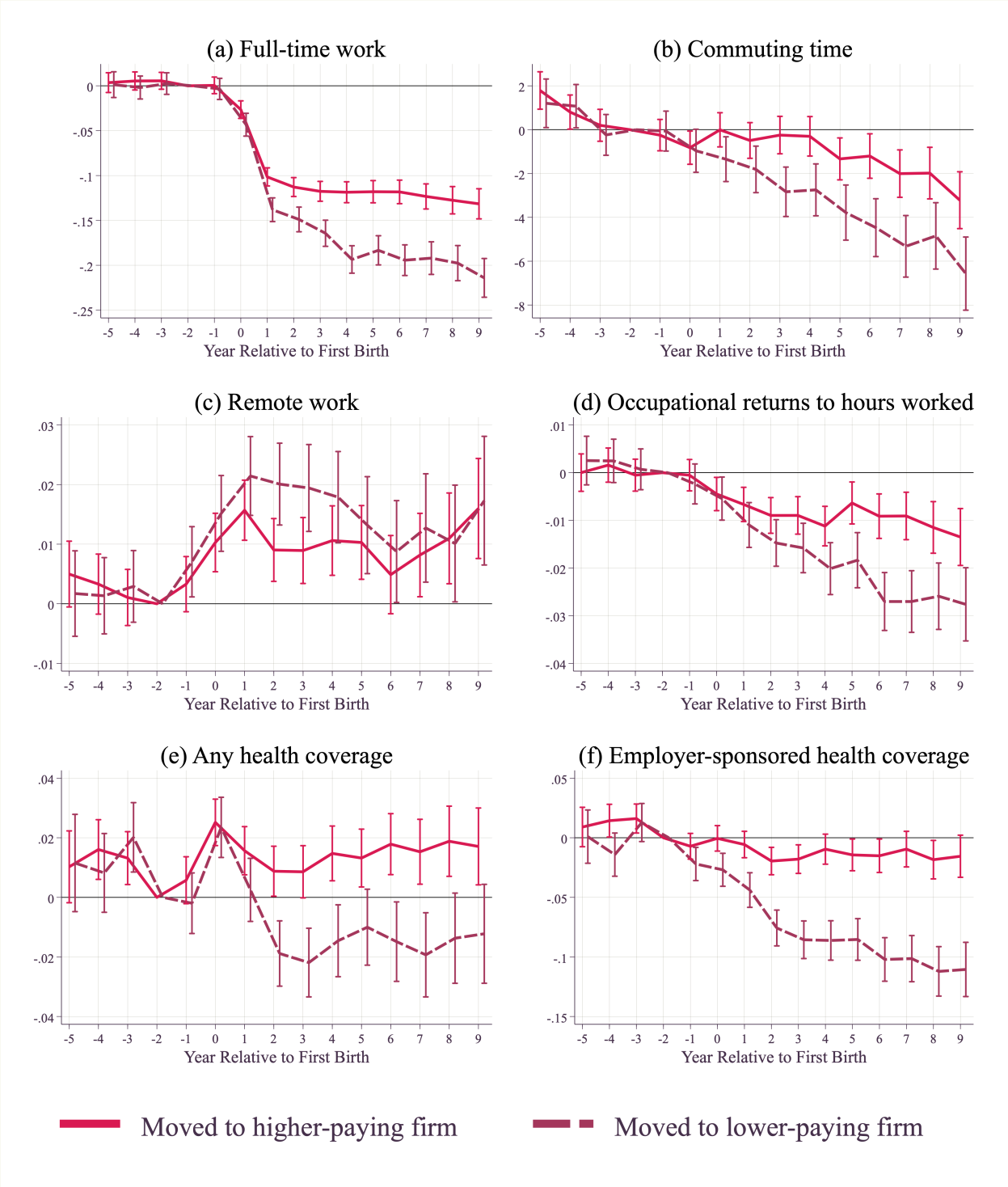


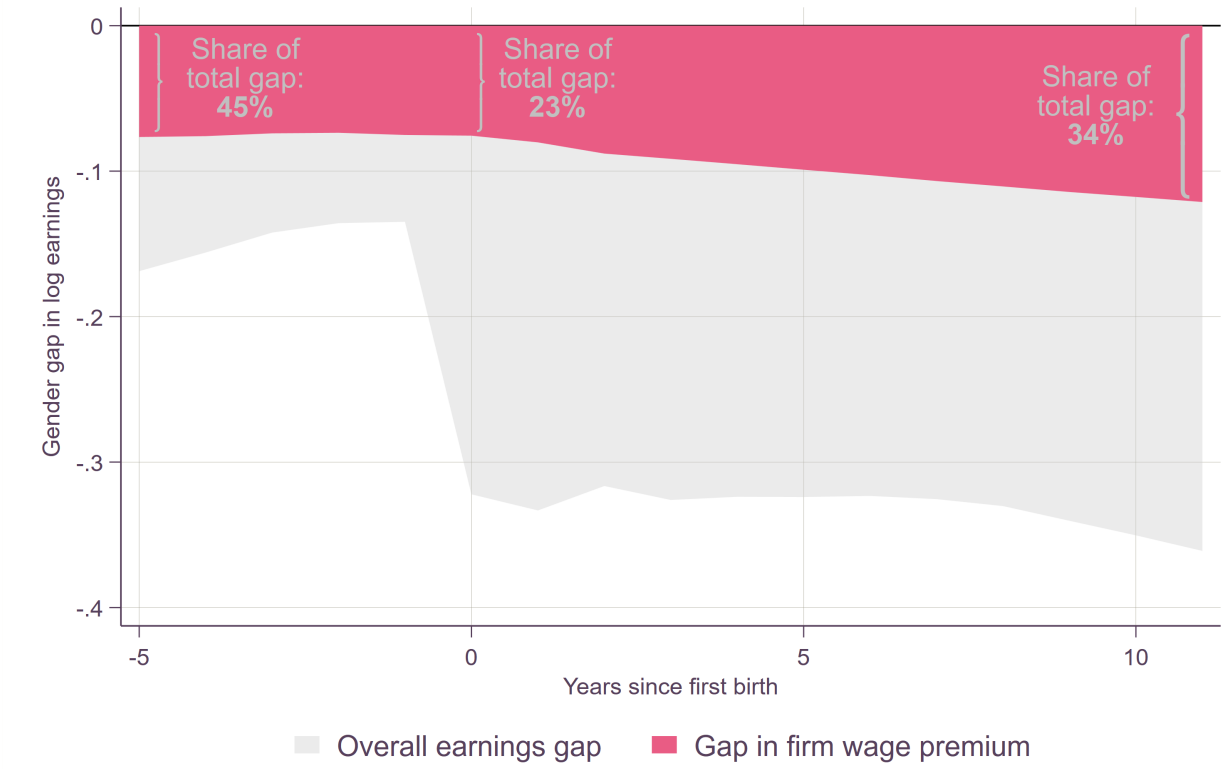
Figure plots the change in share of working parents in each two-digit NAICS industry prior to childbirth (length and direction of arrow). Pre-parenthood shares for both mothers and fathers are listed on the left of the plot, corresponding with each arrow. Industry categories are arranged in order of pre-childbirth share of working mothers; industries with lowest pre-childbirth shares are omitted. Gray bars show width of 95% confidence interval. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831)

Figure 4: Mother-father gap in job characteristics, by type of job transition after childbirth



Notes: The figure above plots event-study estimates of the gap in each outcome for mothers relative to fathers, separately by mothers who moved to higher-paying and lower-paying firms after childbirth. Sample includes parents in the 2003-2019 American Community Survey linked to fertility from the Census Household Composition Key files, and who we can link to a firm in the LEHD that is large enough to estimate a wage premium. Sample is limited to parents who were age 23-45 at first birth, and whose first child was born 2008-2014. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831)

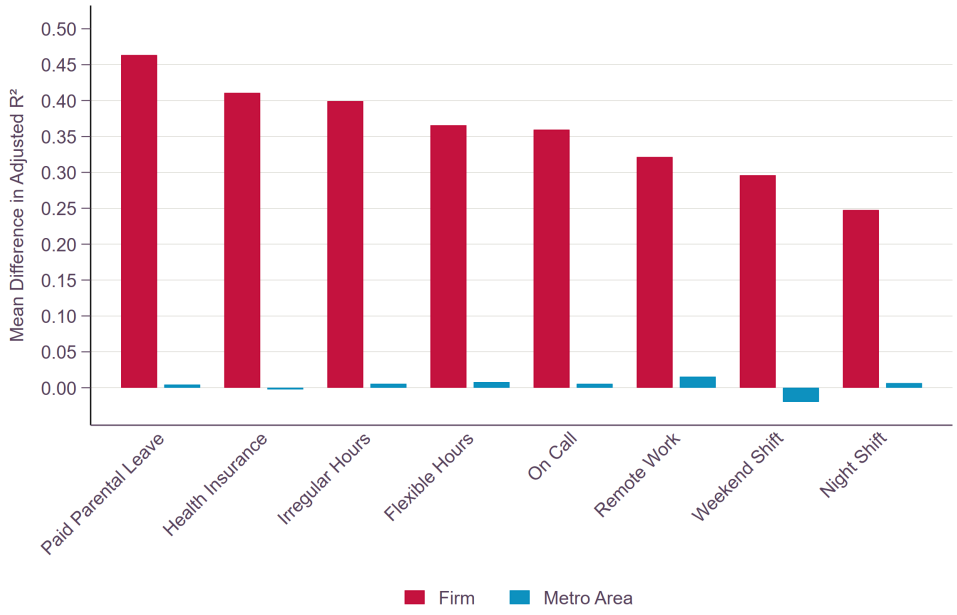
Figure 5: Evolution of the gender earnings gap after parenthood



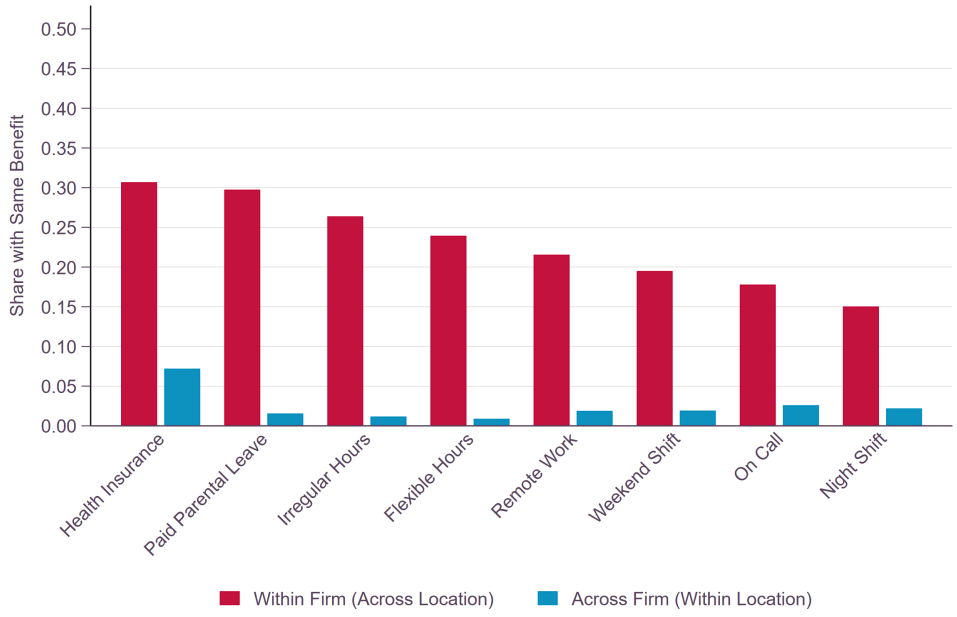
Notes: The figure above plots the regression-adjusted gender earnings gap in log earnings and firm earnings premium by year relative to birth of first child. Log earnings and estimated firm earnings premia are regression-adjusted for gender differences in age at first birth. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831)

Figure 6: Evidence that Flexible Work Amenities Are Rigid in Firms

(a) Variation Explained by the Firm vs. Metro Area



(b) Benefits Overlap Within and Between Firms



Notes: Panel (a) is based on estimating equation 6 using the full sample of Revelio job ads data. The unit of analysis is the job ad. For each amenity and occupation, we regress an indicator for the job ad having the amenity on metro area and firm fixed effects. We then re-estimate the regression, dropping either the firm f.e. or the metro area f.e., and compute the change in adjusted-R^2. We average the changes in adjusted-R^2 across occupations and present them in panel (a). Panel (b) uses our sample of matched job pairs. We match job ads by occupation to another job in the same firm in a different establishment, and to another job in a different firm in the same metro area. We report the share of ads where if one job in the pair has the amenity, the other one has the amenity too.

Online Appendix

A Data and Measurement

This section provides additional detail on our data sources and sample criteria. Our analysis requires three key elements: (1) the timing of an individual's first birth, (2) an individual's earnings and firm history over time, and (3) measures of job amenities. To measure each of these pieces, we build linkages across several datasets, including the 2000 decennial Census, the Census Household Composition Key files, the Longitudinal Employer Household Dynamics file, and the American Community Survey. We describe each data source, our linkages, and related measurement below.

A.1 Measuring first births

We measure the year of first birth for the near-universe of parents in the United States using the Census Household Composition Key (CHCK) files. These data are constructed using administrative data from the Social Security Administration and federal address records, and they link parents to children born 1997-2022.[23] We use the CHCK to measure the date of the first child's birth for mothers and fathers. Because the CHCK provides no information on children born prior to 1997, this procedure risks mischaracterizing birth parity for some children, and therefore the date of the first child's birth for some parents. To minimize misclassification error, we link parents in the CHCK to their fertility histories constructed from household rosters in the full-count 2000 Census. We drop parents who do not have a unique record in the 2000 Census, or who have a child in the Census born prior to 1997. Finally, we link the children and parents from our sample to the Social Security Numident file, which provides the most precise available measure of the timing and location of birth (Taylor et al., 2016).

We link fertility records from the CHCK to the Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) files from 1997-2019. The linkage is performed at the individual level. These data, which are based on unemployment insurance records, provide quarterly information on UI-covered employment and earnings at each covered employer. We collapse the data to the annual level, assigning the highest-paying employer for each person-year as the primary firm. Our LEHD sample provides coverage for 25 states; for people employed in other states, we observe an indicator that they are employed outside our LEHD sample, but we cannot see their earnings nor the state in which they are employed. Other than this limitation, the LEHD provide very broad coverage of the U.S. labor force. The Census Bureau reports that the LEHD covers 95 percent of U.S. employment (Graham et al., 2022).[24]

[23]The CHCK's error rate due to non-residence is arguably lower than Census household rosters because it requires only that children and their parents co-reside at some point in the child's lifetime, rather than at the time the Census is collected. However, the CHCK is more limited in some dimensions because it requires that children be assigned a Protected Identification Key (PIK) by the Census Bureau, and it limits covered children to those born in 1997 or later. Analysis of the CHCK by suggests that the dataset successfully links more than 90% of children with PIKs to their mothers, and for most cohorts, more than 75% are linked to both parents (Genadek et al., 2022).

[24]The 25 states in our sample are AZ, CA, CO, CT, DE, ID, MA, MD, ME, ND, NJ, NM, NV, NY, OH,

We make several restrictions motivated by our interest in studying the long-run career trajectories of parents. First, to focus on a population that has plausibly established a career prior to parenthood, we limit our sample to parents who were age 23-45 when their first child was born.[25] Second, to ensure we can follow parents for an extended period after childbirth, our main sample is limited to parents whose first child was born between 2001-2010. Third, we limit our sample to the parents of children born in one of our 25 LEHD states. Fourth, because we are interested in studying parents with established careers prior to childbirth, we restrict the sample to mothers and fathers who earned at least $3,500 (2012 dollars) in each of the four years prior to the year of childbirth. Finally, because we are interested in following the post-childbirth career trajectory, we drop parents who are never observed working after childbirth. The final restriction mechanically eliminates parents who drop out of the labor force permanently after childbirth, but it is necessary due to our interest in studying the career trajectories of working parents because it ensures that we follow a relatively consistent population of mothers and fathers both before and after childbirth. Furthermore, we show below that it has little effect on the composition of our sample and that our main results are not driven by selection.

Appendix Table A3 reports summary statistics for our main sample of working mothers and fathers and a comparison to the full population of U.S. mothers. For context, column 1 reports the race, ethnicity, educational attainment, and age at birth for all mothers in the public-use 2001-2011 American Community Survey, limited to mothers who report having a child in the previous year and have no children older than 1 in the household. These mothers are 26.2 years old on average. About 62 percent are white non-Hispanic, 12 percent Black non-Hispanic, and 17 percent Hispanic. Fewer than 9 out of 10 have finished high school and only about one-third have a four-year college degree. Columns 2 and 3 show the impact of our sample restrictions designed to focus on career-oriented mothers. First, in column 2, we limit the ACS sample to mothers who live in one of our 25 LEHD states and gave birth between age 23-45. With these restrictions alone, average age at birth rises mechanically to 29.5, while educational attainment rises substantially and the share Black falls. In column 3, we limit the sample further to mothers who worked in the previous year and have at least 4 years of potential labor market experience—the best approximation possible of our restriction in the LEHD to mothers with four years of continuous employment pre-childbirth. In this subsample, mothers are 30 on average at first birth, 68 percent are white non-Hispanic, and very high shares have high school or college degrees.

With the estimates in column 3 as a benchmark, we next report estimates for our LEHD-CHCK sample. Columns 4 and 5 report demographic characteristics of a sample of parents who meet our age and pre-childbirth labor-force attachment criteria. Given our focus on a career-oriented sample of parents, the average age at birth is naturally older than the broader population: 30.5 for mothers and 31.9 for fathers. However, their demographic

OK, OR, PA, SD, TN, TX, UT, VA, WA, and WI. These states comprise 62% of the U.S. workforce (Ruggles et al., 2024).

[25]Because the CHCK provides no information on children born prior to 1997, we may mischaracterize birth parity for some children. To minimize misclassification error, we link parents in the CHCK to their fertility histories constructed from household rosters in the full-count 2000 Census. We drop parents who do not have a unique record in the 2000 Census, or who have a child in the Census born prior to 1997.

and educational characteristics are broadly similar to those from the public-use ACS. This provides assurance that our LEHD-CHCK sample is representative of the population of U.S. women who pursue a career prior to childbirth. Finally, columns 6 and 7 report summary statistics for our main analysis sample, which satisfies the additional criteria of working at least one year after childbirth. A comparison to columns 5 and 6 show that this restriction has very little impact, as the vast majority of parents with careers prior to childbirth also work at some point after childbirth.

Table A4 reports additional summary statistics for our LEHD-CHCK and ACS samples. Two years prior to their first child's birth, mothers in our sample have 2.8 years of tenure on the job and earn about $40,000 (in 2019 dollars). Fathers have slightly longer tenures and earn about 20 percent more, or $49,000.

Panel B of Appendix Table A4 reports summary statistics from our linkage to the ACS. Marital status is very similar for mothers and fathers in our sample. Relative to mothers, fathers have slightly higher job tenure and enjoy higher earnings, even before childbirth. Their commutes are 2 minutes longer and they are substantially more likely to work full-time than mothers. Finally, health insurance coverage is comparable by gender, with slightly higher shares of mothers having any coverage (92.7 versus 91.5 percent) but negligible differences in the share with employer-sponsored plans.

B Alternative method of quantifying the firm's contribution to the parenthood gap

This section presents an alternative method of quantifying the role of the firm in mothers' earnins losses after childbirth. We first present evidence on the gender earnings gap around parenthood, using our LELHD-CHCK sample and an event study design similar to Kleven et al. (2019a) and based on the regression

$$y_{ibt} = \gamma_t + \sum_{r \neq -2} \beta_r \mathbb{1}\{t - b = r\} + X_{ibt}\delta + \epsilon_{ibt}, \tag{9}$$

where β_r captures changes in outcome y_{ibt} in year t for a parent i whose first child was born in year b. Except where noted, X_{ibt} includes dummies for the age of the parent in years, so that the estimates from this specification are interpreted as changes in career outcomes net of the lifecycle pattern of earnings. We report estimates of β_r from 5 years prior to 11 years after the first child's birth, and we omit the event time dummy $r = -2$ so that our event time estimates are interpreted relative to the outcome two years prior to childbirth.[26]

Figure A4a presents estimates of equation 9 with earnings as the dependent variable. Using our linked employer-employee data, we confirm what Kleven (2022) finds using repeated cross-sections of the ACS: relative to 2 years prior to childbirth, mothers' earnings fall by

[26]To facilitate comparisons with Kleven et al. (2019a) and Kleven (2022), we rescale our estimates by average predicted earnings net of the influence of β_r. Specifically, after estimating equation 9, we predict earnings $\hat{y}_{it}$ using the estimated coefficients except for β_r, which we restrict to be 0 for all r. We then report $\hat{\theta}_r = \hat{\beta}_r / \hat{E}[\hat{y}_{it}|r]$. The reported estimates can therefore be interpreted as percentage changes in earnings relative to 2 years prior to childbirth.

nearly 30 percent in the year of their first children's birth.[27] The effect grows over time, reaching 40 percent around the child's third birthday and persisting for at least 11 years.

Much of the decrease in mothers' earnings can be accounted for by non-participation, as can be seen in the dashed line in Figure A4a, which presents estimates of the same regression for the subsample of person-years with positive earnings. Among this sample, the earnings gap is cut by about half. Our focus in this paper is on this gender earnings gap conditional on employment (the "conditional earnings gap," henceforth), which is approximately 20-30 percent of pre-child earnings.

Of this conditional earnings gap, we aim to understand what proportion can be accounted for by characteristics of the firms at which mothers work. As a benchmark, we re-estimate equation 9 with additional controls commonly thought to play a significant role in accounting for differences in earnings (Mincer, 1974; Lemieux, 2006): indicators for education categories (high school dropout, high school graduate, some college education, college graduate), indicators for race categories (white, Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Pacific Islander, and two or more race groups), and an indicator for Hispanic ethnicity.

Figure A4b shows that these demographic controls can explain a relatively sizable share of the conditional earnings gap. The solid line in Figure A4b quantifies the share of the overall earnings gap that is accounted for by these demographic controls in every year relative to the first childbirth. Specifically, we calculate the share of the conditional earnings gap (i.e., $\hat{\beta}_r$ from equation 9 with the sample of working mothers, as shown by the dashed line in Figure A4a) that is left after including the controls. We find that demographics can account for 10-15 percent of the decrease in earnings relative to 2 years prior to birth.

The solid line in Figure A4b quantifies the share of the overall earnings gap that is accounted for by these demographic controls in every year relative to the first childbirth. Specifically, we calculate the share of the conditional earnings gap (i.e., $\hat{\beta}_r$ from equation 9 with the sample of working mothers, as shown by the dashed line in Figure A4a) that is left after including the controls. We find that demographics can account for 10-15 percent of the decrease in earnings relative to 2 years prior to birth.

We next show that relative to demographics, characteristics of the firm play a larger role in explaining the decline in mothers' earnings after childbirth. First, we remove the demographic controls and instead include controls for characteristics of the firm that employed mothers two years *before* childbirth: the firm-specific earnings premium for the primary firm in year $r = -2$ (i.e., $\hat{\psi}_{j(i,b-2)}$ from equation 4), indicators for two-digit industry, and the log of the number of employees at the firm. We find that these controls account for 6 percentage points or about 20 percent of the conditional earnings gap — more than the demographics — and that this effect persists through 11 years post-childbirth (dashed line). If we instead control for the same characteristics, but measured for the person's *current* employer, the gap

[27] Kleven (2022) focuses on the difference between the changes in mothers' labor-market outcome and fathers' labor-market outcomes, calculating a 33-36% post-childbirth gender gap in earnings using public-use data from the ACS, Current Population Survey, Panel Study of Income Dynamics, and National Longitudinal Study of Youth. His sample is slightly older and covers an earlier time frame, but his estimated effects on mothers' earnings are nevertheless strikingly similar to ours. He finds a decrease in mothers' earnings of about 25% in the year of birth and 40% a decade later—only slightly smaller than our estimates of 28% and 47%, respectively.

is reduced by 8 percentage points or 20-25 percent (dotted line). The key takeaway from this exercise is that firms account for a significant share of the parental earnings gap—more than demographic characteristics.

C Job Postings Data

Table A1: Amenity Keyword Extraction from Job Postings

Amenity (or Disamenity)	**Keyword Phrases**
Health Insurance	"health insurance", "medical insurance", "health coverage", "medical coverage", "health benefits"
Paid Parental Leave	"paid parental", "paid maternity", "paid paternity", "paid family leave"
Flexible Hours	"flexible work schedule", "flexible working hours", "flexible work arrangement", "flex time", "flextime" *Excluded if:* "must have flexible", "must be flexible", "requires flexible", "ability to work flexible"
Remote Work	"remote work option", "work from home option", "remote-friendly", "fully remote", "hybrid remote", "100% remote", "completely remote", "remote opportunity" *Excluded if:* "not remote", "no remote"
Irregular Hours	"irregular hours", "variable hours", "inconsistent hours", "unpredictable schedule", "varying schedule", "long hours", "extended hours", "overtime required", "evenings and weekends"
On Call	"on call", "on-call", "oncall", "on call rotation", "on call schedule"
Night Shift	"night shift", "overnight shift", "graveyard shift", "third shift", "nights required"
Weekend Shift	"weekend shift", "weekends required", "weekend availability", "must work weekends", "weekend hours"

Notes: This table documents the keyword phrases used to extract amenities from job posting descriptions in the Revelio Labs dataset shown in Figure 6b. All searches are case-insensitive. Some amenities include exclusion criteria (shown in italics) to avoid false positives where similar phrases refer to job requirements rather than employer-provided amenities.

Table A2: Amenity Prevalence Across Samples

Amenity	**Proportion (%)**		
	Overall Sample	Variance Decomp.	Matched Pairs
Health Insurance	13.7	12.2	12.2
Paid Parental Leave	2.1	2.3	2.3
Flexible Hours	1.1	1.2	1.2
Remote Work	1.6	1.6	1.6
Irregular Hours	1.7	1.7	1.7
On Call	2.9	2.9	2.9
Night Shift	2.8	2.5	2.5
Weekend Shift	2.8	2.4	2.4
Sample size (N)	2,836,075	2,461,478	2,462,035

Notes: This table presents the proportion of job postings mentioning each amenity across three samples. The Overall Sample includes all Revelio job postings with non-missing company, occupation, and metro area information. The Variance Decomposition sample restricts to firms with at least two locations and occupation-metro areas with at least two firms (used in Figure 6a). The Matched Pairs sample restricts to firms with at least two establishments, with a cap of 200 randomly-sampled establishments per firm (used in Figure 6b).

Appendix Figures and Tables

Table A3: Demographic characteristics

	Public-use ACS			LEHD-CHCK		Analysis sample	
	(1) All mothers	(2) Mothers, age 23-45	(3) Working mothers	(4) Mothers, age 23-45	(5) Fathers, age 23-45	(6) Working mothers	(7) Working fathers
Age at first birth	26.2	29.5	30.0	30.5	31.9	30.5	31.9
	(6.00)	(4.62)	(4.53)	(4.67)	(5.17)	(4.68)	(5.17)
Hispanic	0.171	0.168	0.144	0.132	0.149	0.136	0.150
	(0.38)	(0.37)	(0.35)	(0.34)	(0.36)	(0.34)	(0.36)
White non-Hispanic	0.624	0.639	0.681	0.724	0.701	0.714	0.700
	(0.48)	(0.48)	(0.47)	(0.45)	(0.46)	(0.45)	(0.46)
Black non-Hispanic	0.118	0.072	0.072	0.066	0.065	0.070	0.065
	(0.32)	(0.26)	(0.26)	(0.25)	(0.25)	(0.26)	(0.25)
High school graduate	0.857	0.932	0.955	0.934	0.905	0.934	0.905
	(0.35)	(0.25)	(0.21)	(0.25)	(0.29)	(0.25)	(0.29)
College graduate	0.329	0.484	0.495	0.435	0.363	0.435	0.363
	(0.47)	(0.50)	(0.50)	(0.50)	(0.48)	(0.50)	(0.48)
Observations	120,473	52,481	39,213	2,588,000	2,402,000	2,166,000	2,523,000

Notes: Columns 1-3 display means and standard deviations from a sample of women in the public-use 2001-2011 ACS who gave birth in the previous year and whose oldest child in the household is no more than 1. Column 2 additionally restricts to mothers age 23-45 in one of our 25 LEHD states, and column 3 restricts to mothers who worked in the previous year and have at least 4 years of potential experience. Columns 4-5 report means and standard deviations, measured 2 years prior to first birth, from an LEHD-CHCK sample of all mothers and fathers whose first child was born in one of our LEHD states between 2001-2010 at age 23-45, and who had 4 years of work history prior to parenthood. Columns 6-7 report means and standard deviations for our main analysis sample of working parents, who additionally meet the criteria of working in at least one year after childbirth. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831, CBDRB-FY25-P2593-R12027)

Table A4: Summary statistics

	LEHD-CHCK		Analysis sample	
	(1) Mothers, age 23-45	(2) Fathers, age 23-45	(3) Working mothers	(4) Working fathers
Panel A: LEHD outcomes				
Job tenure (years)	2.84	2.96	2.86	2.96
	(1.47)	(1.49)	(1.47)	(1.49)
Log of total earnings	10.6	10.8	10.6	10.8
	(0.673)	(0.712)	(0.668)	(0.708)
Observations	2,402,000	2,588,000	2,166,000	2,523,000
Panel B: ACS outcomes				
Married	0.550	0.555	0.544	0.554
	(0.498)	(0.497)	(0.498)	(0.497)
Commuting time	25.4	27.3	25.4	27.2
	(19.7)	(23.1)	(19.6)	(22.9)
Usual hours worked per week	40.5	43.9	40.6	43.8
	(8.7)	(9.4)	(8.7)	(9.4)
Full-time worker	0.876	0.942	0.880	0.943
	(0.330)	(0.233)	(0.325)	(0.232)
Remote worker	0.010	0.013	0.010	0.013
	(0.098)	(0.113)	(0.099)	(0.112)
Any health insurance	0.924	0.914	0.927	0.915
	(0.265)	(0.280)	(0.260)	(0.278)
Employer-sponsored health insurance	0.877	0.876	0.884	0.878
	(0.329)	(0.330)	(0.320)	(0.327)
Observations	250,000	278,000	220,000	254,000

Notes: Columns 1-2 of panel A display means and standard deviations, measured 2 years prior to first birth, from our LEHD-CHCK sample of all mothers and fathers whose first child was born in one of our LEHD states between 2001-2010 at age 23-45, and who had 4 years of work history prior to parenthood. Columns 3-4 report means and standard deviations for our main analysis sample of working parents, who additionally meet the criteria of working in at least one year after childbirth. Panel B reports outcomes from the subset of parent-years that appear in the 2003-2019 ACS. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831, CBDRB-FY25-P2593-R12027)

Figure A1: Decomposition of changes in the firm wage premium after parenthood

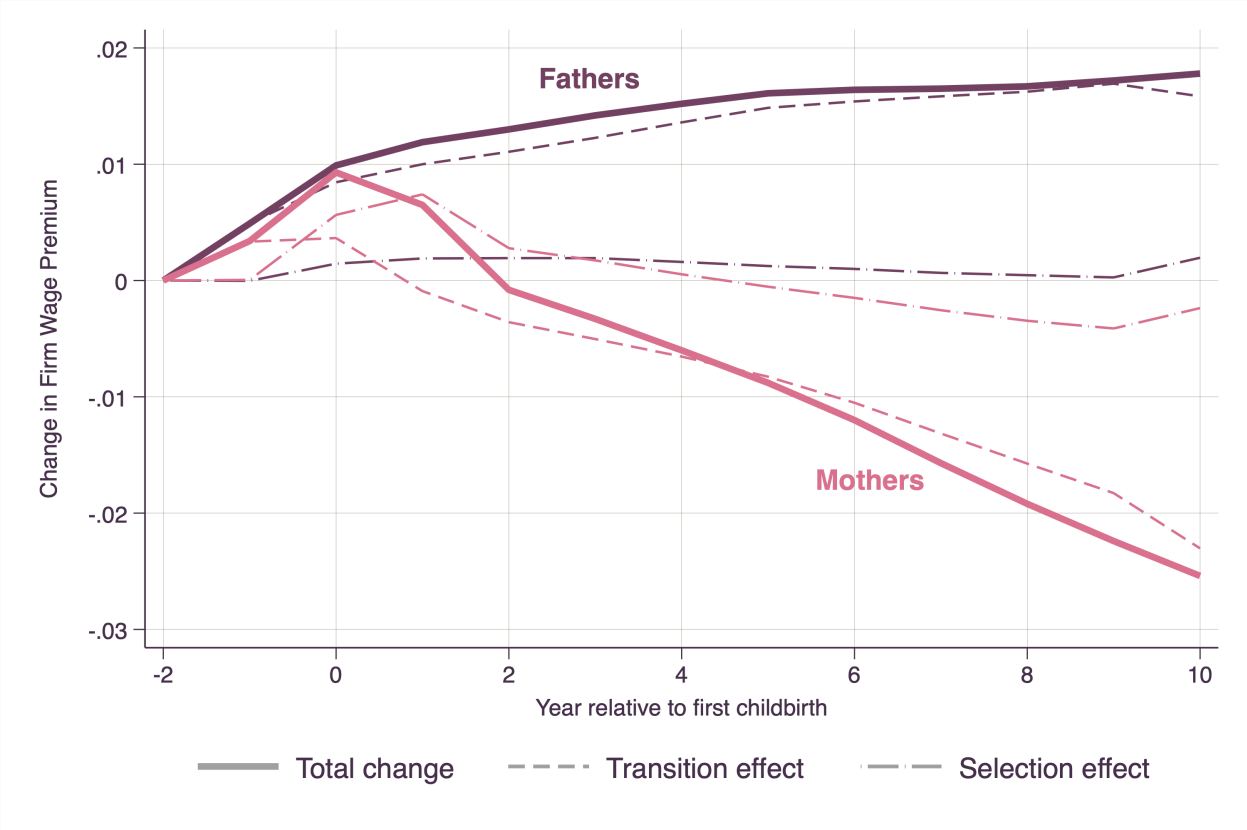
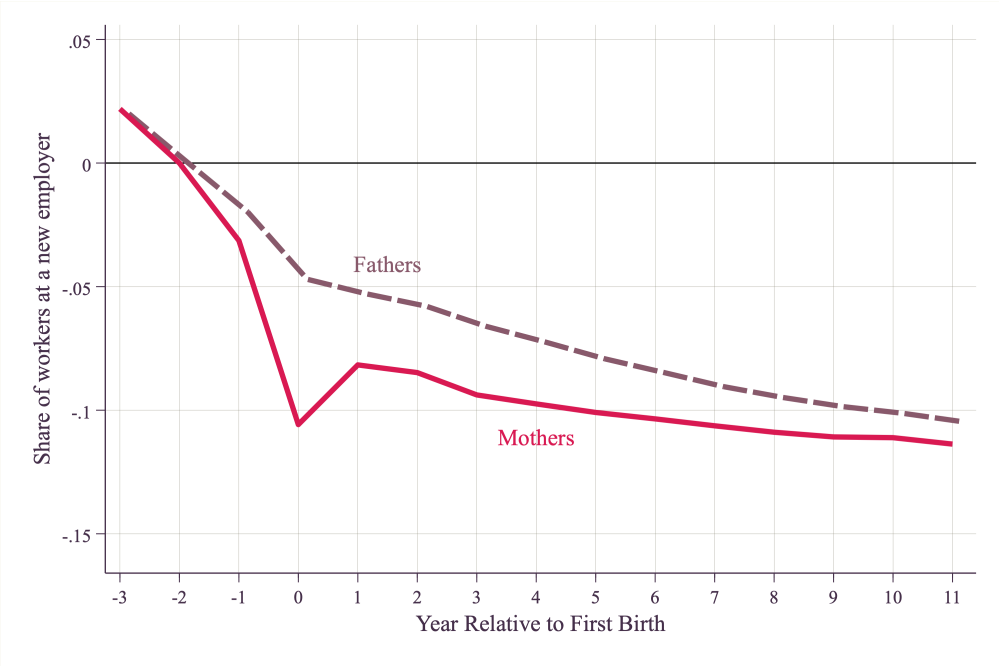


Figure plots changes in estimated firm wage premium, $\hat{\psi}_{j(i,t)}$ from equation 4, by year relative to the birth of the first child for our sample of women and men in the 1999-2014 LEHD. Transition effect is defined as the average change in $\hat{\psi}_{j(i,t)}$ among parents who work in both time t and the year prior to first birth. Selection effect is the residual that can be attributed to the effect of parents dropping out of the labor force. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831)

Figure A2: Employer transitions before and after parenthood

(a) Share of working mothers and fathers at a new job



(b) Employer transitions by length of mothers' labor-force interruptions around childbirth



Notes: The figures above plot changes in transition rate among mothers and fathers, by year relative to first birth. Sample is limited to mothers and fathers with a first birth between ages 23-45 who are currently working. Individuals are classified as working at a new employer in calendar year t if their highest-paying firm in t was not their highest-paying firm in year $t-1$ and did not employ them at all in year $t-2$. In year relative to first birth $r=-2$, 26% of mothers and 25% of fathers transitioned to new jobs. In panel B, mothers are classified by the length of interruption in labor-force participation after the first child's birth, as measured using the number of quarters with 0 earnings. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831)

Figure A3: Industry composition among working mothers, by length of labor-force interruption around childbirth

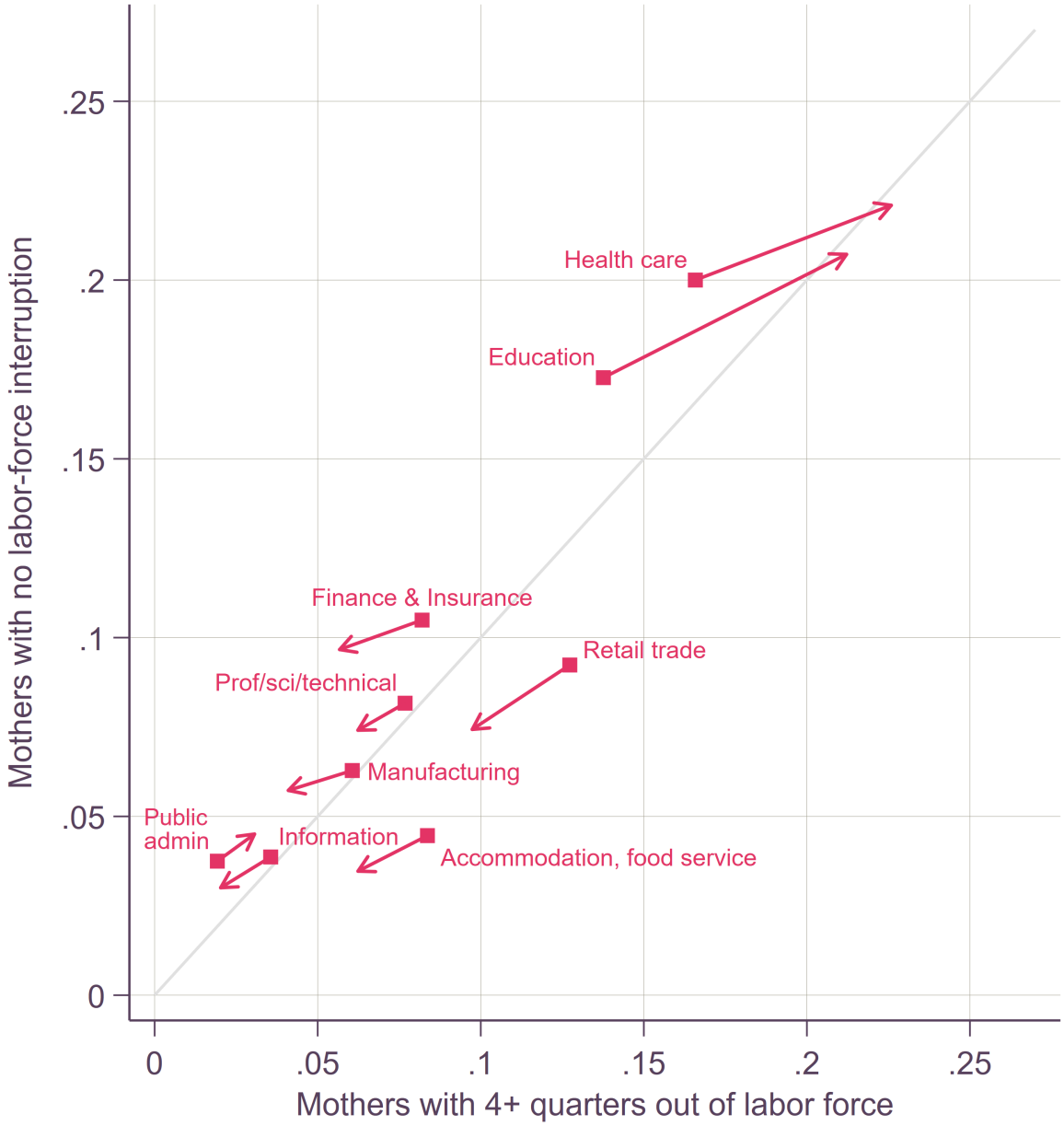


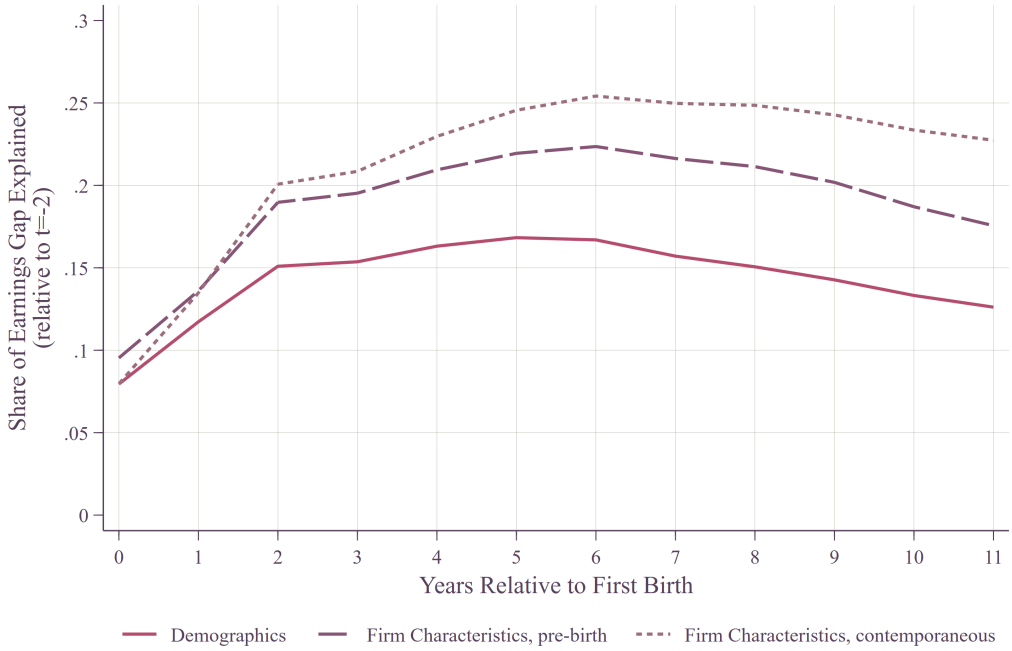
Figure plots share of working mothers in each two-digit NAICS industry prior to childbirth (markers), along with change in share of mothers in each industry after childbirth (length and direction of arrow). Estimates reported for mothers with 4 or more quarters of non-employment after first childbirth (horizontal axis) and no quarters of non-employment after first childbirth (vertical axis). Industries with lowest pre-childbirth shares are omitted. Confidence intervals are omitted due for clarity; t-statistics on post-childbirth change range from 13 to 145. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY25-P2593-R11831)

Figure A4: Changes in mothers' earnings around birth of first child

(a) Percentage changes in mothers' earnings



(b) Share of earnings gap explained by demographic, firm characteristics



Notes: Figure A4a reports event-study estimates from a regression of real earnings on indicators for time relative to first birth, year indicators, and age indicators. Estimated coefficents are rescaled by predicted earnings net of the influence of event-time coefficients. Figure A4b reports event-study estimates as a share of the total estimated impact on mothers conditional on working. Data drawn from 1999-2014 LEHD linked to fertility histories from the 2010 Census and date and place of birth from the Social Security Numident. Results were approved for release by the U.S. Census Bureau. (CBDRB-FY23-P2593-R10523)

D Model Appendix

We solve the model by backward induction. For ease of notation, we suppress t subscripts. We use tildes to indicate choices made in the prior period, primes to indicate the future period, and all other variables refer to the current period.

D.1 Period 2 Problem

At the start of period 2, an individual has access to both period-1 job offers (denoted with tildes: $\tilde{\psi}^0, \tilde{\psi}^1$) as well as two new job offers: $\psi^0 \sim F(\psi|a=0)$ from an inflexible firm and $\psi^1 \sim F(\psi|a=1)$ from a flexible firm.

The worker chooses among the available options to maximize utility:

$$V = \log(y) + \alpha \log(\ell) \tag{10}$$

subject to:

$$y = \psi \cdot \exp(\gamma_e 1\{\text{stay at period-1 firm}\}) \cdot h \tag{11}$$

$$h + \ell + \xi_i = 1 \tag{12}$$

$$h = \bar{h} \quad \text{if at inflexible firm} \tag{13}$$

$$h \in [0,1] \quad \text{if at flexible firm} \tag{14}$$

Firm-specific human capital is gained from employment at the firm: workers who stay at their period-1 firm receive wage premium $\exp(\gamma_e)$, which does not depend on prior hours worked. Workers who switch to a different firm receive no premium.

Recall the gender norm assumption: women bear a greater childcare burden than men ($\xi_f = \overline{\xi} > \xi_m = \underline{\xi}$). Both men and women can feasibly work at inflexible firms after parenthood:

$$\bar{h} + \overline{\xi} < 1 \quad \text{and} \quad \bar{h} + \underline{\xi} < 1 \tag{15}$$

We also assume that the inflexible firm hours requirement exceeds what workers would optimally choose at flexible firms, both before and after having children:

$$\bar{h} > \frac{1}{1+\alpha} \tag{16}$$

This condition ensures that the inflexibility constraint binds.

Workers Entering Period 2 Having Chosen Inflexible Firm in Period 1

A worker of gender $i \in \{m, f\}$ who worked at an inflexible firm with wage $\tilde{\psi}^0$ in period 1 (and received flexible offer $\tilde{\psi}^1$) observe new period-2 offers (ψ^0, ψ^1) and have the following options:

$$V^{\text{stay inflex}} = \log(\tilde{\psi}^0 \exp(\gamma_e)\bar{h}) + \alpha \log(1 - \bar{h} - \xi_i) \tag{17}$$

$$V^{\text{switch to flex}} = \log(\max\{\tilde{\psi}^1, \psi^1\} h_i^*) + \alpha \log(1 - h_i^* - \xi_i) \tag{18}$$

$$V^{\text{switch to new inflex}} = \log(\psi^0 \bar{h}) + \alpha \log(1 - \bar{h} - \xi_i) \tag{19}$$

where $h_i^* = \frac{1-\xi_i}{1+\alpha}$ is optimal hours at flexible firms in period 2.

Individuals choose the option with maximum utility. Note that if workers switch to a flexible firm, they choose the better of the two available flexible offers: the period-1 offer $\tilde{\psi}^1$ or the new offer ψ^1.

Define:

$$\psi^1_{\max} \equiv \max\{\tilde{\psi}^1, \psi^1\} \tag{20}$$

Workers stay at the period-1 inflexible firm if:

$$\tilde{\psi}^0 \exp(\gamma_e) \geq \psi^1_{\max} \cdot \frac{h_i^*}{\bar{h}} \cdot \left(\frac{1 - h_i^* - \xi_i}{1 - \bar{h} - \xi_i} \right)^{\alpha} \tag{21}$$

$$\tilde{\psi}^0 \exp(\gamma_e) \geq \psi^0 \tag{22}$$

The first equation shows that the worker's likelihood of staying at the inflexible firm is: (1) decreasing in the quality of the outside offer, (2) increasing in the productivity gains of firm-specific human capital, (3) decreasing in the losses of leisure from remaining at an inflexible firm. The factor $h_i^*/\bar{h} < 1$ captures the earnings loss from working fewer hours at flexible firms, while the term $(\frac{1-h_i^*-\xi_i}{1-\bar{h}-\xi_i})^{\alpha} > 1$ reflects the utility gain from additional leisure at flexible firms. Since, by assumption, workers optimally choose $h_i^* < \bar{h}$ at flexible firms, the overall adjustment $\frac{h_i^*}{\bar{h}}(\frac{1-h_i^*-\xi_i}{1-\bar{h}-\xi_i})^{\alpha} > 1$. Intuitively, this means that, assuming no human capital gains ($\gamma_e = 0$) and identical offers ($\tilde{\psi}^0 = \psi^1_{\max}$), workers will prefer the flexible offer because of the leisure benefits of choosing optimal hours.

The second equation shows that for the worker to stay at the inflexible firm, the new inflexible offer must not be as good as their current firm's wage premium plus the human capital gains.

Workers switch to the new inflexible firm if:

$$\psi^0 > \tilde{\psi}^0 \exp(\gamma_e) \tag{23}$$

$$\psi^0 \geq \psi^1_{\max} \cdot \frac{h_i^*}{\bar{h}} \cdot \left(\frac{1 - h_i^* - \xi_i}{1 - \bar{h} - \xi_i} \right)^{\alpha} \tag{24}$$

Note if a worker switches from inflexible to a new inflexible firm, the firm-specific premium must be higher.

Workers switch to a flexible firm (choosing $\psi^1_{\max}$) if:

$$\psi^1_{\max} \cdot \frac{h_i^*}{\bar{h}} \cdot \left(\frac{1-h_i^*-\xi_i}{1-\bar{h}-\xi_i}\right)^{\alpha} > \tilde{\psi}^0 \exp(\gamma_e) \tag{25}$$

$$\psi^1_{\max} \cdot \frac{h_i^*}{\bar{h}} \cdot \left(\frac{1-h_i^*-\xi_i}{1-\bar{h}-\xi_i}\right)^{\alpha} \geq \psi^0 \tag{26}$$

The first inequality ensures switching to flexible dominates staying at inflexible. The second inequality ensures switching to flexible dominates switching to the new inflexible offer.

Define the **adjustment factor** for gender i:

$$A_i \equiv \frac{h_i^*}{\bar{h}} \cdot \left(\frac{1-h_i^*-\xi_i}{1-\bar{h}-\xi_i}\right)^{\alpha} \tag{27}$$

The adjustment factor A_i captures the relative attractiveness of flexible versus inflexible firms for workers of gender i.

Assumption: Preferences and childcare parameters satisfy $A_f > A_m$, or equivalently:

$$\frac{h_f^*}{\bar{h}} \cdot \left(\frac{1-h_f^*-\overline{\xi}}{1-\bar{h}-\overline{\xi}}\right)^{\alpha} > \frac{h_m^*}{\bar{h}} \cdot \left(\frac{1-h_m^*-\underline{\xi}}{1-\bar{h}-\underline{\xi}}\right)^{\alpha} \tag{28}$$

This assumption means that women face higher utility costs of inflexibility than men. The greater childcare burden $\overline{\xi} > \underline{\xi}$ creates two effects: (1) women have less available leisure after childcare ($1-\bar{h}-\overline{\xi} < 1-\bar{h}-\underline{\xi}$), raising the marginal utility of the leisure they lose at inflexible firms; (2) women optimally choose lower hours at flexible firms ($h_f^* < h_m^*$), meaning the gap between their preferred hours and the inflexible requirement $\bar{h}$ is larger. There is a countervailing force through the income effect (lower earnings raise the marginal value of consumption), but we assume the leisure effects dominate.

Workers Entering Period 2 Having Chosen Flexible Firm in Period 1

Workers at a flexible firm with wage $\tilde{\psi}^1$ in period 1 (and received inflexible offer $\tilde{\psi}^0$) observe new period-2 offers (ψ^0, ψ^1) and have the following options:

$$V^{\text{stay flex}} = \log(\tilde{\psi}^1 \exp(\gamma_e) h_i^*) + \alpha \log(1-h_i^*-\xi_i) \tag{29}$$

$$V^{\text{switch to inflex}} = \log(\max\{\tilde{\psi}^0, \psi^0\}\bar{h}) + \alpha \log(1-\bar{h}-\xi_i) \tag{30}$$

$$V^{\text{switch to new flex}} = \log(\psi^1 h_i^*) + \alpha \log(1-h_i^*-\xi_i) \tag{31}$$

Individuals choose the option with maximum utility. If they switch to an inflexible firm, they choose the better of the two available inflexible offers: the period-1 offer $\tilde{\psi}^0$ or the new offer ψ^0.

Define:

$$\psi^0_{\max} \equiv \max\{\tilde{\psi}^0, \psi^0\} \tag{32}$$

Individuals stay at the period-1 flexible firm if:

$$\tilde{\psi}^1 \exp(\gamma_e) \geq \psi^0_{\max} \cdot \frac{\bar{h}}{h_i^*} \cdot \left(\frac{1 - \bar{h} - \xi_i}{1 - h_i^* - \xi_i} \right)^{\alpha} \tag{33}$$

$$\tilde{\psi}^1 \exp(\gamma_e) \geq \psi^1 \tag{34}$$

Individuals switch to an inflexible firm (choosing $\psi^0_{\max}$) if:

$$\psi^0_{\max} \cdot \frac{\bar{h}}{h_i^*} \cdot \left(\frac{1 - \bar{h} - \xi_i}{1 - h_i^* - \xi_i} \right)^{\alpha} > \tilde{\psi}^1 \exp(\gamma_e) \tag{35}$$

$$\psi^0_{\max} \geq \psi^1 \cdot \frac{h_i^*}{\bar{h}} \cdot \left(\frac{1 - h_i^* - \xi_i}{1 - \bar{h} - \xi_i} \right)^{\alpha} \tag{36}$$

Individuals switch to the new flexible firm if:

$$\psi^1 > \tilde{\psi}^1 \exp(\gamma_e) \tag{37}$$

$$\psi^1 \geq \psi^0_{\max} \cdot \frac{\bar{h}}{h_i^*} \cdot \left(\frac{1 - \bar{h} - \xi_i}{1 - h_i^* - \xi_i} \right)^{\alpha} \tag{38}$$

D.2 Period 1 Problem

In period 1, workers have no children yet ($\xi = 0$). They receive two job offers: $\psi^0 \sim F(\psi | a = 0)$ from an inflexible firm and $\psi^1 \sim F(\psi | a = 1)$ from a flexible firm, and choose between them to maximize expected lifetime utility. We assume ψ^0 and ψ^1 are independent across periods.

Hours Choice in Period 1

At inflexible firms, hours are fixed: $h = \bar{h}$.

At flexible firms, since firm-specific capital is gained from employment (not from hours worked), the hours choice is static:

$$h = \arg\max_h \{\log(\psi^1 h) + \alpha \log(1 - h)\} = \frac{1}{1 + \alpha} \equiv h_0 \tag{39}$$

Both men and women work h_0 at flexible firms in period 1.

Continuation Values

The continuation value from choosing firm j in period 1 depends on both period-1 offers (which are carried forward) and the worker's anticipated period-2 decisions over period-2 offers (ψ'^0, ψ'^1) (where primes now indicate period-2 random variables before realization).

For individuals choosing firm 0 (with offers ψ^0, ψ^1):

$$\phi^0_m(\psi^0, \psi^1) = E_{\psi'^0, \psi'^1}[\max\{V^{\text{stay inflex}}, V^{\text{switch to flex}}, V^{\text{switch to new inflex}}\}] \tag{40}$$

where $V^{\text{switch to flex}}$ uses $\max\{\psi^1, \psi'^1\}$.

For individuals choosing firm 1 (with offers ψ^0, ψ^1):

$$\phi_m^1(\psi^1, \psi^0) = E_{\psi'^0, \psi'^1}[\max\{V^{\text{stay flex}}, V^{\text{switch to inflex}}, V^{\text{switch to new flex}}\}] \tag{41}$$

where $V^{\text{switch to inflex}}$ uses $\max\{\psi^0, \psi'^0\}$.

Period 1 Choice

Individuals choose firm 0 if:

$$\log(\psi^0\bar{h}) + \alpha\log(1-\bar{h}) + \phi_i^0(\psi^0, \psi^1) > \log(\psi^1 h_0) + \alpha\log(1-h_0) + \phi_i^1(\psi^1, \psi^0) \tag{42}$$

This defines a threshold function $T_i(\psi^1)$ such that individuals with $\psi^0 = T_i(\psi^1)$ are indifferent between the two firms:

$$\log(T_i(\psi^1)\bar{h}) + \alpha\log(1-\bar{h}) + \phi_i^0(T_i(\psi^1), \psi^1) = \log(\psi^1 h_0) + \alpha\log(1-h_0) + \phi_i^1(\psi^1, T_i(\psi^1)) \tag{43}$$

Rearranging:

$$T_i(\psi^1) = \underbrace{\psi^1}_{\text{outside option}} \cdot \underbrace{\frac{h_0}{\bar{h}}\left(\frac{1-h_0}{1-\bar{h}}\right)^{\alpha}}_{\text{leisure benefit}} \cdot \underbrace{\exp[\phi_i^1(\psi^1, T_i(\psi^1)) - \phi_i^0(T_i(\psi^1), \psi^1)]}_{\text{option value}} \tag{44}$$

Intuitively, the threshold for accepting an inflexible offer, ψ^0, in period 1 is increasing in: (1) the outside option ψ^1, (2) the leisure benefit of accepting a flexible offer, and (3) the option value of carrying forward a flexible offer vs. an inflexible offer. Note that the assumption of recall of prior offers matters for the option value term. With recall, the option value of accepting a flexible offer in period 1 depends only on the relative benefit of having more human capital (and higher wages) either at the flexible firm or at the inflexible firm in the next period. Since the human capital gains (γ_e) are constant and are assumed identical across firm type, the only consideration is that it is more valuable to have the human capital at a firm that the person is *likely to prefer* in the next period, once they face the time costs of childcare. This consideration means the option value term (of choosing the flexible firm over the inflexible firm) in period 1 is positive.

Individuals choose firm 0 if $\psi^0 > T_i(\psi^1)$.

D.3 Empirical predictions

This subsection summarizes the core empirical predictions of the model.

Proposition 1: Before parenthood, women have a higher threshold for choosing inflexible firms than men: $T_f(\psi^1) > T_m(\psi^1)$ for all $\psi^1 > 0$ and $\gamma_e > 0$. Therefore, before parenthood, women sort into inflexible firms at lower rates compared to men.

Proof: Note that from the threshold decompositions, $T_f(\psi^1) > T_m(\psi^1)$ if and only if women's option value difference exceeds men's. Thus, we prove this proposition by first

showing that without firm-specific human capital ($\gamma_e = 0$), the thresholds are identical $T_f(\psi^1) = T_m(\psi^1)$. Then we show that $T_f(\psi^1)$ is increasing in γ_e faster than $T_m(\psi^1)$.

$$\phi_f^1(\psi^1, T_f(\psi^1)) - \phi_f^0(T_f(\psi^1), \psi^1) > \phi_m^1(\psi^1, T_m(\psi^1)) - \phi_m^0(T_m(\psi^1), \psi^1) \tag{45}$$

Assume $\gamma_e = 0$. Workers receive no capital from staying at their period-1 firm. Both men and women face symmetric choice sets at either firm type. The only difference is through the adjustment factors A_i.

For workers at inflexible firms in period 1, the period-2 choice is:

$$\max\{\psi^0, \psi^1 \cdot A_i, \tilde{\psi}^1 \cdot A_i, \psi'^0, \psi'^1 \cdot A_i\} \tag{46}$$

Since ψ'^0 and ψ'^1 are independent of ψ^0 and ψ^1, this simplifies to:

$$\max\{\psi^0, \max\{\psi^1, \psi'^1\} \cdot A_i, \psi'^0\} \tag{47}$$

For workers at flexible firms in period 1, the period-2 choice is:

$$\max\left\{\frac{\psi^0}{A_i}, \psi^1, \frac{\tilde{\psi}^0}{A_i}, \frac{\psi'^0}{A_i}, \psi'^1\right\} \tag{48}$$

which simplifies to:

$$\max\left\{\frac{\max\{\psi^0, \psi'^0\}}{A_i}, \max\{\psi^1, \psi'^1\}, \frac{\tilde{\psi}^0}{A_i}\right\} \tag{49}$$

Since the offers have the same distributions regardless of period-1 choice, and since A_i affects both continuation values symmetrically, the indifference condition implies:

$$\phi_i^1(0) - \phi_i^0(0) = \log\left(\frac{T_i\bar{h}}{\psi^1 h_0}\right) + \alpha[\log(1-\bar{h}) - \log(1-h_0)] \tag{50}$$

This is independent of i, so $T_f(\psi^1; 0) = T_m(\psi^1; 0)$.

Now consider $\gamma_e > 0$. The key insight is that $A_f > A_m$ means women are more likely to switch from inflexible to flexible firms in period 2, which reduces the value of accumulating human capital at inflexible firms.

Consider a worker at an inflexible firm in period 1. They stay in period 2 if:

$$\tilde{\psi}^0 \exp(\gamma_e) \geq \max\{\tilde{\psi}^1 \cdot A_i, \psi'^0, \psi'^1 \cdot A_i\} \tag{51}$$

Since $A_f > A_m$, flexible offers are relatively more attractive to women. This means:

- Women are less likely to stay at the inflexible firm: $P(\text{stay}|\tilde{\psi}^0, f) < P(\text{stay}|\tilde{\psi}^0, m)$
- Women realize the human capital gains γ_e less frequently
- This reduces the option value of choosing inflexible in period 1 for women

Formally, the continuation value from inflexible includes the probability-weighted return to human capital:

$$\phi_i^0 = E\left[P(\text{stay at inflex}|\tilde{\psi}^0, A_i) \cdot \gamma_e\right] + \text{other terms} \tag{52}$$

Since $P(\text{stay at inflex}|\tilde{\psi}^0, A_f) < P(\text{stay at inflex}|\tilde{\psi}^0, A_m)$, we have that ϕ_f^0 increases less with γ_e than ϕ_m^0 does.

Similarly, consider a worker at a flexible firm in period 1. They stay in period 2 if:

$$\tilde{\psi}^1 \exp(\gamma_e) \geq \max\left\{\frac{\tilde{\psi}^0}{A_i}, \frac{\psi'^0}{A_i}, \psi'^1\right\} \tag{53}$$

Since $A_f > A_m$, inflexible offers are relatively less attractive to women (they must be divided by a larger A_f). This means:

- Women are more likely to stay at the flexible firm: $P(\text{stay}|\tilde{\psi}^1, f) > P(\text{stay}|\tilde{\psi}^1, m)$
- Women realize the human capital gains γ_e more frequently
- This increases the option value of choosing flexible in period 1 for women

The continuation value from flexible includes:

$$\phi_i^1 = E\left[P(\text{stay at flex}|\tilde{\psi}^1, A_i) \cdot \gamma_e\right] + \text{other terms} \tag{54}$$

Since $P(\text{stay at flex}|\tilde{\psi}^1, A_f) > P(\text{stay at flex}|\tilde{\psi}^1, A_m)$, we have that ϕ_f^1 increases more with γ_e than ϕ_m^1 does.

Combining both effects:

$$\frac{\partial(\phi_f^1 - \phi_f^0)}{\partial \gamma_e} > \frac{\partial(\phi_m^1 - \phi_m^0)}{\partial \gamma_e} \tag{55}$$

Since the thresholds are identical at $\gamma_e = 0$ and women's option value difference increases faster with γ_e, for $\gamma_e > 0$: $\phi_f^1 - \phi_f^0 > \phi_m^1 - \phi_m^0$, implying $T_f(\psi^1) > T_m(\psi^1)$.

Proposition 2: Women who work at inflexible firms prior to parenthood, on average, experience declines in their firm pay premium ψ. In addition, the gender gap in firm premium increases after parenthood.

Proof: Consider women at inflexible firms. These women earn wage $\tilde{\psi}^0$ (having received flexible offer $\tilde{\psi}^1$) in period 1. In period 2, they choose:

$$\max\{\tilde{\psi}^0 \exp(\gamma_e), \tilde{\psi}^1 \cdot A_f, \psi^0, \psi^1 \cdot A_f\} \tag{56}$$

Women switch to flexible firms when the flexible options dominate. Since $A_f > 1$, flexible offers are more attractive than their raw wage premiums suggest. The expected change in

firm premium is:

$$\begin{aligned} E[\Delta \log \psi | \tilde{\psi}^0, f] = & P(\text{stay} | \tilde{\psi}^0, f) \cdot 0 \\ & + P(\text{switch to new inflex} | \tilde{\psi}^0, f) \cdot E[\log \psi^0 - \log \tilde{\psi}^0 | \psi^0 > \tilde{\psi}^0 e^{\gamma_e}] \\ & + P(\text{switch to flex} | \tilde{\psi}^0, f) \cdot E[\log \psi^{\text{flex}} - \log \tilde{\psi}^0 | \text{switch to flex}] \end{aligned} \tag{57}$$

where $\psi^{\text{flex}} = \max\{\tilde{\psi}^1, \psi^1\}$ conditional on switching to flexible.

We show that $E[\Delta \log \psi | \tilde{\psi}^0, f] < 0$ on average. By selection into inflexible firms ($\tilde{\psi}^0 > T_f(\tilde{\psi}^1)$) and FOSD ($E[\log \psi^0] > E[\log \psi^1]$), women at inflexible firms have $\tilde{\psi}^0$ exceeding the average flexible offer. When women switch to flexible (which happens with positive probability due to $A_f > 1$), they experience:

$$\log \psi^{\text{flex}} - \log \tilde{\psi}^0 < 0 \text{ on average} \tag{58}$$

This negative term, weighted by the probability of switching to flexible, drives the overall expected change negative.

Consider next women at flexible firms. Women at flexible firms stay if $\tilde{\psi}^1 \exp(\gamma_e) \geq \max\{\frac{\tilde{\psi}^0}{A_f}, \frac{\psi'^0}{A_f}, \psi'^1\}$ and switch otherwise. Since $A_f > 1$, inflexible offers must significantly exceed the flexible wage to induce switching. Women rarely switch to inflexible firms, and when they do, it's for substantial wage gains. When they switch to new flexible firms:

$$E[\Delta \log \psi | \text{flex}, f] = \int_{\tilde{\psi}^1 e^{\gamma_e}}^{\infty} \log \left(\frac{\psi^1}{\tilde{\psi}^1} \right) dF(\psi^1 | a = 1) > 0 \tag{59}$$

Therefore, women who work at flexible firms in period 1 experience increases in firm pay premium.

We now show that the gender gap in firm pay premium increases after parenthood.

Consider men at flexible firms. Men also experience positive changes when switching to better flexible offers. However, since $A_m < A_f$, inflexible offers are relatively more attractive to men (divided by smaller A_m). Men switch to inflexible firms with positive probability, potentially experiencing large wage gains due to FOSD. Therefore:

$$E[\Delta \log \psi^m | \text{flex}] \geq E[\Delta \log \psi^f | \text{flex}] > 0 \tag{60}$$

The inequality is weak because men have access to the same flexible options as women plus relatively more attractive inflexible options.

Next consider men at inflexible firms. Men's expected change is:

$$\begin{aligned} E[\Delta \log \psi | \tilde{\psi}^0, m] = & P(\text{stay} | \tilde{\psi}^0, m) \cdot 0 \\ & + P(\text{new inflex} | \tilde{\psi}^0, m) \cdot E[\log \psi^0 - \log \tilde{\psi}^0 | \text{new inflex}] \\ & + P(\text{flex} | \tilde{\psi}^0, m) \cdot E[\log \psi^{\text{flex}} - \log \tilde{\psi}^0 | \text{flex}] \end{aligned} \tag{61}$$

Since $A_m < A_f$, flexible offers are less attractive to men relative to staying at inflexible firms:

$$P(\text{stay} | \tilde{\psi}^0, m) > P(\text{stay} | \tilde{\psi}^0, f) \tag{62}$$

Men are more likely to experience zero change (staying), and when they do switch to flexible, it's for better offers (higher threshold). Therefore:

$$E[\Delta \log \psi | \tilde{\psi}^0, m] > E[\Delta \log \psi | \tilde{\psi}^0, f] \tag{63}$$

where the right-hand side is negative.

Define $\text{Gap}_t = E[\log \psi_t^m] - E[\log \psi_t^f]$. Since men's change exceeds (or equals) women's change for both starting firm types:

$$\text{Gap}_2 - \text{Gap}_1 = E[\Delta \log \psi^m] - E[\Delta \log \psi^f] > 0 \tag{64}$$

The inequality is strict because: (i) women at inflexible firms experience larger declines than men (due to higher switching rates to flexible), and (ii) men at flexible firms experience weakly higher gains than women (due to access to inflexible options).

Proposition 3: (i) Among women, those employed at higher ψ firms prior to parenthood experience larger losses (or smaller gains) in ψ after parenthood. (ii) Conditional on initial firm quality ψ, women experience larger losses (or smaller gains) than men after parenthood.

Proof: Part (i). Consider women at inflexible firms. These women earned $\tilde{\psi}^0$ in period 1. Their expected change depends on their switching behavior:

For women at higher-$\tilde{\psi}^0$ inflexible firms:

- They are more likely to stay: $P(\text{stay}|\tilde{\psi}^0) = P(\tilde{\psi}^0 e^{\gamma_e} \geq \max\{\tilde{\psi}^1 A_f, \psi^0, \psi^1 A_f\})$ increases in $\tilde{\psi}^0$
- However, by selection, they also received lower flexible offers $\tilde{\psi}^1$ on average (since they chose inflexible)
- When they do switch to flexible (which still happens with positive probability), the gap $\log \tilde{\psi}^0 - \log \psi^{\text{flex}}$ is larger

The loss for women switching from inflexible to flexible is:

$$\text{Loss}(\tilde{\psi}^0) = \log \tilde{\psi}^0 - E[\max\{\log \tilde{\psi}^1, \log \psi^1\} | \text{switch to flex}] \tag{65}$$

This is increasing in $\tilde{\psi}^0$ for the population that switches. Women at higher-$\tilde{\psi}^0$ firms experience larger losses conditional on switching. While they switch less frequently, the weighted average loss:

$$E[\Delta \log \psi | \tilde{\psi}^0] = -P(\text{switch to flex}|\tilde{\psi}^0) \cdot \text{Loss}(\tilde{\psi}^0) + \text{other terms} \tag{66}$$

becomes more negative (or less positive) as $\tilde{\psi}^0$ increases, because the increase in $\text{Loss}(\tilde{\psi}^0)$ dominates the decrease in switching probability.

Now consider women at flexible firms. These women earned $\tilde{\psi}^1$ in period 1. Their expected gain is:

$$E[\Delta \log \psi | \tilde{\psi}^1, f] = P(\text{switch}|\tilde{\psi}^1) \cdot E[\log \psi^{\text{new}} - \log \tilde{\psi}^1 | \text{switch}] \tag{67}$$

This is decreasing in $\tilde{\psi}^1$ because: (1) The probability of switching, $P(\psi^{\text{new}} > \tilde{\psi}^1 e^{\gamma_e})$, decreases in $\tilde{\psi}^1$, where ψ^{new} can be from either flexible or (adjusted) inflexible offers; and (2) Conditional on switching, the expected gain $E[\log \psi^{\text{new}} - \log \tilde{\psi}^1 | \text{switch}]$ decreases in $\tilde{\psi}^1$. Therefore, women at higher-wage flexible firms experience smaller gains (or equivalently, larger losses relative to potential gains).

Part (ii). Consider workers who earned $\tilde{\psi}^0$ at an inflexible firm in period 1.

Women's expected change:

$$\begin{aligned} E[\Delta \log \psi | \tilde{\psi}^0, f] = & P(\text{stay} | \tilde{\psi}^0, f) \cdot 0 \\ & + P(\text{new inflex} | \tilde{\psi}^0, f) \cdot E[\log \psi^0 - \log \tilde{\psi}^0 | \text{new inflex}] \\ & + P(\text{flex} | \tilde{\psi}^0, f) \cdot E[\log \psi^{\text{flex}} - \log \tilde{\psi}^0 | \text{flex}] \end{aligned} \tag{68}$$

Men's expected change:

$$\begin{aligned} E[\Delta \log \psi | \tilde{\psi}^0, m] = & P(\text{stay} | \tilde{\psi}^0, m) \cdot 0 \\ & + P(\text{new inflex} | \tilde{\psi}^0, m) \cdot E[\log \psi^0 - \log \tilde{\psi}^0 | \text{new inflex}] \\ & + P(\text{flex} | \tilde{\psi}^0, m) \cdot E[\log \psi^{\text{flex}} - \log \tilde{\psi}^0 | \text{flex}] \end{aligned} \tag{69}$$

Since $A_f > A_m$:

- $P(\text{stay} | \tilde{\psi}^0, f) < P(\text{stay} | \tilde{\psi}^0, m)$: Women are less likely to stay (flexible offers are relatively more attractive)
- $P(\text{flex} | \tilde{\psi}^0, f) > P(\text{flex} | \tilde{\psi}^0, m)$: Women are more likely to switch to flexible
- The flex term $E[\log \psi^{\text{flex}} - \log \tilde{\psi}^0 | \text{flex}] < 0$ by selection and FOSD

Therefore:

$$E[\Delta \log \psi | \tilde{\psi}^0, m] > E[\Delta \log \psi | \tilde{\psi}^0, f] \tag{70}$$

Now consider workers who earned $\tilde{\psi}^1$ at a flexible firm in period 1.

Women switch to new firms if they dominate $\tilde{\psi}^1 e^{\gamma_e}$:

$$E[\Delta \log \psi | \tilde{\psi}^1, f] = P(\text{switch} | \tilde{\psi}^1, f) \cdot E[\log \psi^{\text{new}} - \log \tilde{\psi}^1 | \text{switch}, f] \tag{71}$$

Men have access to the same flexible options as women but also have access to relatively more attractive inflexible offers (since inflexible offers are divided by the smaller A_m). Therefore, men switch with at least the same probability and potentially to better offers:

$$E[\Delta \log \psi | \tilde{\psi}^1, m] \geq E[\Delta \log \psi | \tilde{\psi}^1, f] \tag{72}$$

with strict inequality when men switch to inflexible firms with positive probability.

Therefore, conditional on pre-parenthood firm quality ψ, women experience larger losses (or smaller gains) in ψ compared to men, after parenthood.