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# The Gendered Effects of Career Concerns on Fertility

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**Abstract**

A growing literature reveals that the adverse effect of children on career advancement falls disproportionately on women. This raises the possibility that women respond to career concerns by delaying family formation more than men. Using a panel dataset on lawyers, we find females are less likely to have their first-child before the promotion decision. This fertility gap is not explained away by gender-based sorting or gender differences in marriage-timing and spousal occupation. Two channels drive our results: women bear child-rearing costs and gender-specific promotion thresholds. This implies the focus on the gender wage gap understates gender inequality in the labor market.

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# 1 Introduction

A well-known and controversial statistic is that women earn 80 cents on average for each dollar that men make.[1] A large body of research explores various determinants of the gender wage gap; gender differences in human capital investment and productivity (Polacheck, 1981; Altonji and Blank, 1999; Mulligan and Rubinstein, 2008; Gallen, 2015), bargaining skills (Reuben, Wiswall, and Zafar, 2015; Card, Cardoso, and Kline, 2016), and gender norms (Bertrand, Kamenica, and Pan, 2015) are known contributors.[2] Recent economic research, however, has begun to coalesce around a principal explanation for this result. A growing body of evidence shows that career interruptions tied to child-birth account for a large fraction of the gender disparity both in the cross-section and over time (Wood, Corcoran, and Courant, 1993; Bertrand, Goldin, and Katz, 2010; Kleven, Landais, and Søgaard, 2015; Adda, Dustmann, and Stevens, 2016).[3] These findings are consistent with a theoretical literature that suggests the female-male gap in earnings may reflect optimal responses to a gender-specific comparative advantage in child-rearing rather than an employer's taste for discrimination (e.g., Lazear and Rosen, 1990). However, far less attention is given to the possibility that, in equilibrium, gendered effects of children on career advancement have important implications for fertility and family formation. This paper explores the extent to which women respond to gendered career concerns[4] by reducing family size more or less in comparison with men.

It is theoretically ambiguous as to whether career concerns should have a differential impact on fertility decisions by gender. On the one hand, a pervasive narrative in the literature is that firms should endogenously invest less in the career development of workers who are more likely to experience work disruptions. In this framework, firms are more likely to assign desirable tasks to men rather than women because gender predicts child-related career interruptions (Milgrom and Oster, 1987; Barron, Black, and Loewenstein, 1993; Lehmann, 2013).[5] In response, women may be more likely to delay or reduce fertility in comparison with men since the adverse effects of children on career advancement are disproportionately borne by women. On the other hand, numerous factors, including technological advances in household production, increasing accessibility to child care, and own-income and spousal-income effects, push in the opposite direction. To the extent that women can adjust along various margins, these forces may render the demand for children to be highly inelastic with respect to career concerns irrespective of gender. The primary goal of this paper

[1] According to the Institute for Women's Policy Research (2016), the gender wage gap is 79 cents on the dollar in 2014.

[2] See Blau and Kahn (2016) for a survey of current explanations.

[3] For example, Bertrand, Goldin, and Katz (2010) find no wage gap between women MBAs with no career interruptions and male MBAs after controlling for pre-MBA traits and MBA-training. Similarly, Adda, Dustmann, and Stevens (2016) find that the wage profile for German women without children follows a similar, though more muted, growth pattern to German men, while wages for women with children start to diverge at age 27 and never recover.

[4] We use "career concerns" to mean workers' concerns about the effects of current performance on future compensation.

[5] Lehmann (2013) examines discrimination in task-assignment based on race, but the model is easily applied to gender discrimination.

is to empirically assess whether career concerns influence family formation differently by gender.

There are two important challenges to identification that warrant discussion. First and foremost, career concerns are not randomly assigned. It is plausible that workers sort both across occupations (e.g., lawyers versus teachers) and across fields within an occupation (e.g., corporate law versus family law) based on preference for work-family balance. In particular, if women who prefer smaller families sort into high-intensity occupations, then different fertility choices between men and women may reflect gender preferences rather than gender-specific shadow prices for children. Because the "price effect" is our empirical object of interest, the potential for gender-based sorting into occupations presents a first-order concern. Second, there are concerns related to data availability. A rich literature examines various aspects of female fertility choices, but many of these studies use household surveys.[6] As our focus is how fertility choices between men and women differ, household surveys are not conducive to our study since there is no variation in fertility choices across gender within a household. Additionally, we require micro-level data on employment and wage histories that are linked to fertility histories in order to estimate the effect of career concerns on the timing of birth. The stringent data requirements may be one reason that most empirical studies on timing of birth have looked to international data sources.[7] Unlike these studies, which examine the life-cycle model of fertility, however, this paper seeks to examine the fertility decision over the career trajectory.

Several advantages of our study mitigate these concerns. To begin, our data set is especially conducive to the study of our research question. The After the JD (AJD) survey is a panel data set that follows a nationally representative sample of lawyers throughout the first 12 years of their careers. Our focus on lawyers is appealing due to the fact that the career trajectory for young attorneys is well-known and typically standard across firms. For example, associate attorneys in large private firms are on a "partner-track" that is analogous to "tenure-track" positions in academia.[8] This facilitates analysis of fertility timing across the "partner clock" when career concerns are conceivably high or low.[9] Finally, the data set is exceptionally rich. The survey asks respondents to weigh the importance of various factors in their decision to select into their chosen career. The questions cover a wide range of reasons, from "medium-to-long-term earning potential" to "the potential to balance work and personal life" to "the opportunity to do socially responsible work". We use these survey questions to conduct factor analysis, which assumes that latent preferences affect the

[6]For example, Moffitt (1984), Francesconi (2002), Autor, Dorn, and Hanson (2015), and Schaller (2016).

[7]For example, Cigno and Ermisch (1989) use British data. Heckman and Walker (1990) use Swedish data. Del Bono, Weber, and Winter-Ebmer (2012) use Austrian data. Adda, Dustmann, and Stevens (2016) use German data.

[8]There are two levels of partners in private law firms: equity partners or senior partners and non-equity partners or junior partners. In our analysis, we use the term "partner" to mean an equity partner.

[9]One potential drawback of focusing on lawyers is the concern that law is a highly-selected occupation, making our analysis not generalizable to other occupations. The partnership model at private law firms, however, is also prevalent in other industries like accounting, finance, and consulting, and the contract structure ("up or out") is similar to academia. Furthermore, Census 2000 data on fertility outcomes reveal that female lawyers are equally likely to be parents relative to other high-skilled occupations – suggesting we may be able to generalize our findings to other high-skilled occupations.

lawyer's responses on the survey and uses the variation in observed survey responses to find the common, underlying factors. Crucially, this allows us to control for heterogeneous latent preferences, such as career ambition or fertility preferences, when we examine how career concerns affect fertility decisions.

We find that female lawyers are less likely than males to start their family formation before the partnership decision and more likely to start after the decision. Moreover, this gender difference in fertility timing nearly doubles among lawyers who face greater career concerns at work.[10] We identify these lawyers by predicting their mid-career billed hours using intrinsic characteristics and classifying them as "high-intensity lawyers" if their predicted work-intensity is in the top quartile. The idea is that high-intensity lawyers face greater career concerns because they have a greater chance of making partner, relative to their predicted low-intensity peers. Constructed factor scores mitigate concerns about gender-based selection into occupations. Additionally, we do not find a gender difference in completed fertility, suggesting that family-size preferences are not driving our results.

Our conceptual framework highlights two key mechanisms for our results. The first is that women face a greater career cost of having children. We find that several factors can mitigate this trade-off between career and children for women, such as increased spousal income and more family-friendly work conditions. We also find gender norms at play, reinforcing the gender imbalance in child-raising responsibilities. This is consistent with Bertrand, Kamenica, and Pan (2015), who find that the gender identity norm that "a man should earn more than his wife" impacts the division of home production. The second mechanism occurs through the firm's promotion thresholds. Specifically, the firm has higher promotion thresholds for mothers because they are more likely to have child-related career interruptions. We test this mechanism by comparing the gender difference in ability of equity partners who were parents at the time of promotion. We find that mothers are significantly more likely to have participated in general law review, held a judicial clerkship, and worked on more cases early in their career than their male counterparts. Moreover, women are less likely to be promoted than men, even conditional on ability proxies, billed hours, and caseload.

As a robustness check, we investigate two alternative mechanisms that can explain our results in the absence of career concerns. First, we consider the empirical fact that female lawyers are less likely to be married than male lawyers. In this case, we may observe women starting their family formation later in their careers because they are more likely to enter marriage later in their careers, relative to men. But our results still hold when we focus on lawyers who were ever-married at the start of their careers. A second potential explanation is the gender difference in spousal occupation. This relates to the intensity of the spousal occupation. That is, male lawyers are more likely to marry women with less-intensive careers while

[10] We also examine gender differences in the intensive margin (number of children), but do not find large effect sizes and so focus on the extensive margin.

female lawyers are more likely to marry men with intensive careers. This alternative explanation is similar to Becker's theory on time allocation in the household which predicts that males, as primary-earners, will specialize in the market while their spouses will specialize at home (Becker, 1965). But when we focus on primary-earners - the ones in the household who theoretically should specialize in the market - we still see that high-intensity female lawyers time their first child to the partnership decision.

We begin the remainder of this paper with a literature review. In Section 3, we describe the conceptual framework wherein career concerns lead to a gender gap in fertility. Section 4 describes the data. Section 5 describes the empirical methodology and specifically how we deal with the potential for gender-based selection. Section 6 discusses results, and Section 7 considers alternative explanations. We turn to an exploration of the mechanisms through which career concerns operate in Sections 8 and 9. Section 10 concludes.

## 2 Literature Review

Ever since Becker's seminal 1960 paper that modeled the fertility decision as an economic one, researchers have been interested in the price and income effects of having children. Gronau (1973) examines the effect of children on the housewife's value of time. He finds that the "opportunity cost of children" varies with the child's age and the mother's education. Studies reveal that children increase the value of time for working women as well. Del Bono, Weber, and Winter-Ebmer (2008) find that women have fewer children after losing their jobs due to firm closures. This effect is driven by white-collar workers, who have higher expected returns to firm-specific training relative to blue-collar workers. Because they are at crucial stages of their careers, these women face a higher opportunity cost of having children. Relatedly, Schaller (2012) finds that improved labor market conditions for women decrease fertility. Lundborg, Plug, and Rasmussen (2016) use an instrumental variables strategy based on in vitro fertilization and find that children have a negative effect on female hourly earnings. Heckman and Walker (1990) examine fertility-timing decisions, or the distribution of births across the life-cycle, and find that increased female wages delay times to all conceptions.

The fertility decision has become an important factor in the inequality literature, where researchers have found that a gender wage gap persists despite shrinking gender differences in pre-market factors, such as human capital attainment and training. An extensive literature finds that career interruptions tied to child-birth account for a large part of the gender wage gap. This finding is true whether we look at the entire population or within specific occupations. For example, children are the main reason female MBAs have less accumulated experience, greater career discontinuity, and shorter work hours (Bertrand, Goldin, and Katz, 2010). Similarly for lawyers, women's greater child-care responsibilities explain 23 percent of the wage

gap (Wood, Corcoran, and Courant, 1993). Female physicians in the U.S. earn 13-20 percent less than male physicians if they have children (Sasser, 2005). The relationship between the gender wage gap and children is also robust whether we use data from the U.S. (Wood, Corcoran, and Courant, 1993; Sasser, 2005; Bertrand, Goldin, and Katz, 2010), Austria (Del Bono, Weber, and Winter-Ebmer, 2012), Denmark (Gallen, 2015; Kleven, Landais, and Søgaard, 2015), Germany (Adda, Dustmann, and Stevens, 2016), or Sweden (Angelov, Johansson, and Lindahl, 2016). Juhn and McCue (2017) provide a nice overview of the gender wage gap as it relates to marriage and parental status.

One important question is how fertility and labor-supply decisions interact. This question has only recently been addressed with increasing availability of better data. Adda, Dustmann, and Stevens (2016) develop a structural model of dynamic labor supply, fertility, and occupational decisions to decompose the career costs of children. The authors use detailed German data and estimate that three-quarters of the cost stem from lost earnings due to reduced labor supply while the rest is due to depreciation or loss of investment in skills. That children are associated with adverse career consequences is not new. Thomas (2014) finds that a mandated leave policy decreases promotion prospects for women. Similarly for economists in academia, a gender-neutral tenure clock stopping policy reduces female tenure rates but increases male tenure rates (Antecol, Bedard, and Stearns, 2016). However, these findings raise the question whether women make family-formation decisions in anticipation of career penalties associated with child-birth.

Although researchers have studied the female fertility decision in relation to human-capital investments and occupational decisions (Polacheck, 1981; Buckles, 2008; Herr and Wolfram, 2012; Wasserman, 2015), none have looked explicitly at the effect of career concerns. Further, the current literature focuses on age at first-birth. A more appropriate measure is a woman's career timing, or the point in her career when children are first present (Herr, 2012). This is an important question as a woman's prime childbearing years overlap with her early-career years, when the return to career investment is high. Our paper seeks to answer this question by exploiting the unique contract structure at private law firms. Although our empirical analysis focuses on lawyers, the conceptual framework is generalizable to other high-skilled occupations in which workers face career concerns. As such, our findings are relevant for policy; the recent public debate underscores the importance of better understanding the conflicting demands of work and family.[11]

[11] For example, Sandberg (2013) and Slaughter (2015) both wrote popular books on the struggles of juggling motherhood and a career. As another example, Apple and Facebook announced that they would add egg-freezing as a new workplace benefit for female employees (Mead, 2014; Parsons, 2014).

# 3 Conceptual Framework

What are the predicted effects of career concerns on fertility timing, and how do they differ by gender? To answer this question, we start with the firm's decision of whether to invest in the worker's human capital.[12] Because the firm's investment decision (promotion decision) is profitable only if the worker is high-ability, the firm will seek to promote only high-ability workers.[13] In a world with perfect information, this is an easy problem to solve. The firm observes the workers' ability levels and knows which ones to promote. If the firm cannot observe the worker's ability level, however, the promotion decision becomes difficult. A key feature of these career concern models is that firms observe a signal of the worker's ability and update their beliefs accordingly. The worker is concerned about his current performance on future compensation. The firm is concerned about moral hazard, where low-ability workers masquerade as high-ability workers.[14]

An additional fact complicates this scenario. As raising children takes time and effort, parents have less to spend at work, thereby making less money for the firm.[15] A gender difference in the child-rearing cost results in mothers making less money for the firm than fathers, and this result occurs even if men and women are equal in terms of their ability and value of children. As investment is costly, the firm acts to minimize its losses from providing firm-specific training to (promoting) women and parents (Barron, Black, and Loewenstein, 1993). It sets the highest promotion threshold for mothers, then for fathers, and the lowest threshold for childless workers.[16]

How do workers respond to this statistical discrimination? Lang and Manove (2011) provide some answers. They find that in the face of statistical discrimination on race, blacks over-invest in education relative to whites in an attempt to send a stronger signal. This example can easily be applied to our case of statistical discrimination on the basis of parental status and gender. Like race, gender is not manipulable. But parental status is. Therefore, workers have an incentive to delay their fertility so that they are not subject to the higher promotion threshold for parents. Moreover, this perverse incentive is stronger for women than for men.

Delaying one's fertility is a non-trivial decision, but the cost of doing so is mitigated by the increased chance of being promoted. In our example case of lawyers, the incentive to make partner is huge as it comes

[12] Remember, career concerns refer to the worker's uncertainty about his promotion prospects.

[13] This assumption is necessary to make the question interesting. If it were profitable to invest in everyone, then the firm would promote everyone. Likewise, if it were unprofitable to promote everyone, then the firm would invest in no one.

[14] There are different types of contracts (explicit or implicit) that solve this problem (Fama, 1980; Radner, 1981; Rubinstein, 1981; Holmstrom, 1999). However, the focus of this paper is on the fertility decision and not the worker's effort-level. Therefore, we simply assume a linear contract where firms and workers share the profit and firms bear the full cost of investment (promotion). This will lead to a separating equilibrium, where high-types will exert more effort to distinguish themselves from the low-types (Spence, 1973, 2002; Akerlof, 1976; Landers, Rebitzer, and Taylor, 1996).

[15] Assume that ability and effort are directly related.

[16] Another method of discrimination is to assign less-productive tasks to women and parents. We do not examine this mechanism in this paper but in a current research project.

not only with a large pay-raise but also with the ability to purchase an equity stake in the organization. For example, the average equity partner at a law firm earned $971,000 in 2014 (MLA, 2014). The median salary for a first-year associate, by comparison, was $160,000 (NALP, 2014a). An important note is that the increased promotion probability due to delay is large enough to warrant such action only for those at the margin. In other words, a worker whose effort-level is so far below the promotion threshold has no benefit from delaying fertility because the lowering of the threshold does not exceed his current deficit.

In summary, we make the following empirical predictions about fertility:

EP1. Fewer females than males will have children before the promotion decision.

EP2. The gender difference in fertility timing (EP1) will be larger among workers with high effort-levels relative to the gender difference among those with low effort-levels.

# 4 Data and Summary Statistics

## 4.1 After the JD dataset

The After the JD study was borne out of a strong interest from practicing attorneys, law schools, and academics to understand the career choices of lawyers. As such, the American Bar Association (ABA) commissioned a longitudinal survey that would focus on the first 12 years of a lawyer's career. Survey respondents answered detailed questions on current job characteristics, employment history, educational background, and family background. The sampling frame is a 2-stage sampling process that was stratified by region and size of the new lawyer population. The target population is any individual living in the U.S. who graduated from a U.S. law school between July 1, 1998 and June 30, 2000 and entered the bar for the first time in 2000. Thus, the AJD study is intended to be nationally representative of all lawyers first admitted to the bar in 2000.[17]

There were three waves of data collection. Wave 1 was administered between May 2002 and May 2003 and aimed to capture the early careers of lawyers, about 2-3 years after they began practicing law. Wave 2 was administered between July 2007 and May 2008, about 7-8 years into their careers. This time marks a crucial period in the careers of young lawyers as it is when they are begining to face important career decisions such as the partnership decision. Wave 3 was administered between May 2012 and January 2013, roughly 12-13 years into a lawyer's career. As such, we expect it to contain a clear picture of the lawyer's career trajectory as well as a nearly-complete fertility history.[18] One nice feature of this dataset is that it follows survey respondents even if they stop practicing law.

[17]For more detail on the sampling process, please see Appendix A.1.

[18]The average lawyer in our data is 42 years old in Wave 3. The median lawyer is 40 years old.

We use time-invariant, baseline characteristics from the Wave 1 survey to minimize memory bias and employment history and fertility history from the Wave 3 survey as it will provide the most complete and consistent histories. Income information (both respondent's and spouse's) is reported only for the current job at the time of the survey. Therefore, we predict the respondent's income trajectory and spousal income trajectory using the three data-points from each survey wave. For respondents who reported spousal income in only one wave or did not report income for an employed spouse, we use Census and ACS data to impute the spouse's income trajectory. Details on the imputation methodology can be found in Appendix A.2.

Because our analysis uses data from all three waves, we account for sample attrition. The sample size from Wave 1 to Wave 3 drops from 4,538 to 2,984, a 34 percent decline. We predict an individual's likelihood of attrition as a function of gender, birth year, race and ethnicity, marital status, BA graduation year, U.S. News' law school ranking in 2003, law school graduation date, undergraduate GPA, law school GPA, respondent's employment status, respondent's firm type, respondent's salary, and household income.[19] All variables are from the Wave 1 survey, and we account for item non-response by including dummy variables. The new weight is equal to the inverse of (1 − predicted probability of attrition) times the sampling weight. We are unable to calculate new weights for 28 individuals who do not show up in both Wave 1 and Wave 3. Our final analysis-sample size is 2,087 after dropping 869 people who have missing or inconsistent information. This includes 783 people who have missing or inconsistent job start- and end-dates and are missing birth year, gender, and law school graduation date, and 86 people who did not list their children's ages. We need children's ages to determine when an individual had his or her first child.

One potential concern for our analysis, given the focus on fertility transitions, is that women are more likely to not respond to the AJD survey in Wave 3 because of fertility-related reasons (e.g., they had children while trying to make partner and were too busy to fill out the survey). In this case, the AJD survey will provide a biased sample with respect to fertility outcomes. However, we do not find any statistically significant differences in sample attrition by gender, race and ethnicity, employment status, firm type (e.g., whether working in private law firm or government), or salary and household income.[20] We include female interactions for these variables and still do not see any statistically significant differences. Older cohorts are more likely to attrit, and these effects are concentrated in different age groups for men versus women. For men, the effects are concentrated in three birth years – 1952, 1954, and 1956 – while women who were born between 1966 and 1968 are more likely to not respond to the Wave 3 survey. That older women are more likely to leave the AJD sample relative to older men may be cause for concern, especially if these women are not responding because of fertility-related reasons. To check this issue, we compare our final analysis

[19] See Appendix A.3 for a complete list of firm types.
[20] Regression results are in the Online Appendix.

sample, which accounts for sample attrition with our constructed weights, to the American Community Survey (ACS). We restrict the ACS sample to all non-institutionalized lawyers between ages 38 and 42, inclusive, in years 2012-2014 to make the two sample populations as similar as possible. We do not find any statistically significant differences between the two samples in terms of the share of female lawyers (around 45 percent), the share of parents (70 percent), and the number of children (around 2.1).

## 4.2 Summary statistics

Male lawyers and female lawyers in our analysis sample are pretty similar on observable traits (Table 1). Females tend to be more diverse racially, but there are no gender differences in birth year or law school graduation year. The median birth year is 1972, placing the median lawyer at the start of the survey at 30 years old.[21] The average lawyer in our sample graduated from law school in 2000, which is consistent with the survey's target sampling population. There is also no significant gender difference in the type of law school attended. Nearly half of our sample attended a law school ranked between 21 and 100 on U.S. News' 2003 rankings, with almost 9 percent attending a Top 10 school. Females are more likely to hold a foreign law degree, and though this difference is statistically significant, foreign degrees make up less than 1 percent of all degrees. There is also no significant gender difference along different ability proxies, such as participation in general law review, judicial clerkships, and law school GPA. Females have higher undergraduate GPAs than males, suggesting that there is positive selection into law school.

When we look at family formation and career decisions, however, a gender difference emerges. Most of our sample are ever-married at the start of the survey (65 percent), but male lawyers are more likely than female lawyers to be ever-married and this gender difference is weakly significant.[22] By the end of our survey, however - about 10 to 12 years into these lawyers' careers - the vast majority of our sample is now married and the gender difference of 4 percentage-points becomes statistically significant at the 5-percent level. Very few lawyers have children before they graduate from law school: about 9 percent. However, male lawyers are again more likely to be parents in the year of law school graduation, and this difference is statistically significant. Ten years after their JD, 61 percent of lawyers in our sample are parents but female lawyers are still more likely to be childless relative to their male peers (0.65 versus 0.57).

Weekly hours worked is high for both men and women in their early careers - well above the full-time threshold of 40 hours. Although weekly hours is a useful metric of a person's work ethic, for our purposes a more relevant measure of a person's productivity is billed hours and caseload. Billable hours are used in

[21] The average lawyer was born in 1970.

[22] "Ever-married" is mainly composed of those currently married or in a domestic partnership (90 percent). About 7 percent are divorced or separated and around 3 percent are widowed or in another arrangement.

private law firms to determine bonuses, promotions, and salary increases.[23] This is an important measure because the partner clock we are exploiting is predominantly a feature of private law firms. To provide some context for the numbers, the average firm required associates to bill at least 1,884 hours a year in 2014 (NALP, 2014a). Meeting this requirement is not easy, as revealed by Table 1. The average mid-career lawyer billed 1,538 annual hours, about 346 annual hours or 6.6 weekly hours short of the requirement. Men billed an average of 200 more annual hours than women, which amounts to 3.8 additional hours a week. Although this gender difference is statistically significant, it is economically small. Moreover, men and women are similar in terms of initial caseload; both work on 8 cases. One interesting fact is that the career trajectories of female and male lawyers are similar: the average number of positions for a lawyer is three for both males and females. Both also stay at a position for four years, on average.

Table 2 shows how labor supply and fertility decisions evolve over time. Early in their careers, full-time work among lawyers is extremely high for both males and females. Over time, however, a gender gap emerges as female lawyers increasingly decide to work part-time. In terms of firm-types, the majority of JDs first enter private law firms (63 percent). Attrition out of private law firms increases for both males and females over time, but is slightly stronger for women. The gender difference of 5.1 percentage-points in year 1 is not statistically significant. Ten years after law school, however, the gender difference increases slightly to 6.7 percentage-points and becomes statistically significant at the 5 percent level. In terms of the law profession, nearly 90 percent of our analysis sample are practicing lawyers in Wave 1, and the gender difference is negligible at 0.87 percentage-points. By Wave 3, the last wave of our survey, this percentage decreases to 80 percent and the gender difference of about 4 percentage-points becomes statistically significant. Although some lawyers do leave the profession, the percentage doing so is small - likely because of the large, occupation-specific, human-capital investment required.

We now turn to a dynamic picture of fertility decisions that illustrates the essence of our paper. Figure 1 plots the percentage-point difference between the share of parents among male lawyers and the share of parents among female lawyers. The male-female difference grows over the lawyer's career, peaks in year 6 at 12.5 percentage-points, then decreases and levels out starting in year 9. A closer look at the data reveals that the shrinking of the gender parent gap starting in year 7 is because female lawyers are "catching-up" to their male peers (see Table 2). This is an interesting point because there is no age difference between men and women in our sample. Both were born around the same year and graduated from law school in the same year, on average.

When we consider the timing of partnership decisions, this phenomenon makes more sense. A 2012

[23] About 88 percent of lawyers who reported annual billed hours worked in a private law firm. Ten percent were solo practitioners, and the remaining 1.8 percent worked in a non-traditional law setting such as government or in industry.

survey by ALM Legal Intelligence found that 41 percent of new partners worked for 7-9 years before being promoted.[24] Our data are consistent with the survey's findings: the equity partner share begins to increase significantly in year 7 and the largest increase occurs in year 9.[25] We posit that career concerns arising from the partnership decision are influencing female decisions on when to start their family more so than male decisions. The remainder of this paper will explore this coincidental timing between partnership decisions and the decreasing gender parent gap and seek to move towards a causal interpretation.

# 5 Empirical Methodology

## 5.1 Dealing with selection

Before describing the empirical specification, we first address the main identification concerns. Our goal is to estimate the gender difference in fertility outcome for the marginal worker (as defined by effort-level). There are two major issues with this approach. First and foremost, there may be gender-based sorting into occupations due to fertility preferences. If it exists, any observed gender difference in fertility may reflect gender differences in preferences rather than the gender-specific shadow prices of children. Second, observed effort-levels may be endogenous if lawyers are adjusting their levels based on signals they receive from the firm about their promotion prospects. We will discuss both of these issues in turn.

### 5.1.1 Differential selection into law careers by gender

A major concern for our identification strategy is that women who choose to become lawyers may be characteristically different from male lawyers in terms of their fertility preferences. For example, women who want a family may be less likely to pursue a law degree in anticipation of the demanding career lifestyle ahead of them as lawyers. Similarly, female lawyers may choose different types of sectors or areas of law based on future fertility. This theory is in line with economic research that has found that women make human-capital investment decisions and occupational choices based on their future fertility and in anticipation of the pecuniary penalties associated with career interruptions (Polacheck, 1981; Francesconi, 2002; Wasserman, 2015; Adda, Dustmann, and Stevens, 2016). More importantly, it leads to an important identification issue when estimating the effect of career concerns on fertility: fertility and career decisions are not independent of each other.

[24] The wait-times in decreasing order of prevalence are: 7-9 years (41%), 4-6 years (35%), 1-3 years (13%), 10 years or more (9%), less than one year or new to the firm (3%).

[25] Equity partner share is defined as the number of equity partners in private law firms with at least 30 lawyers. We filter on firms larger than 30 to clean out small firms that are similar to solo practitioners. The average size of a private law firm in our data is 270, so this restriction does not hugely affect our analysis.

It is difficult to examine the influence of individual fertility preferences in career decisions. We attempt one test by comparing fertility outcomes between lawyers and other similar, high-skilled occupations.[26] Using 2000 Census data, Table 3 reports age at first child and parental share for individuals aged 44 years old in these occupations.[27] Female lawyers are less likely to be parents than the average 44 year old woman (63 percent versus 67 percent), while male lawyers are around 18 percentage-points more likely to be parents. When we focus on occupations that are similar to law in terms of required training and contract structure, however, the numbers are more similar. In fact, female lawyers are 2.4 percentage-points less likely to be a parent at age 44 relative to the other six occupations in the table, but this difference is not statistically significant. Male lawyers, on the other hand, are 4.1 percentage-points more likely to be parents, and this estimate is statistically significant at the 5-percent level. Although it is not definitive proof of no selection into law careers based on fertility preferences, this table suggests that female lawyers may not be differentially selected relative to other high-skilled occupations.

A concern that may still exist, however, is the potential for selection into the intensity of one's law career. Among lawyers, for example, the distribution of weekly hours worked in early-career is different between men and women (Figure 2). There appears to be a mean shift between the male distribution and the female distribution, with female lawyers more likely to work fewer hours. Specifically, there is greater mass between 20 and 40 hours in the female distribution relative to the male distribution, implying that females are more likely to work part-time, and the right-tail of the male distribution stretches out beyond 100 hours a week while the right-tail of the female distribution ends around 80 hours a week. The observed gender difference in hours-worked is especially interesting given that male lawyers and female lawyers are pretty homogenous in our analysis sample. Summary statistics in Table 1 reveal that men are similar to women in terms of age, law school ranking, and ability (as measured by law school GPA, participation in general law review, and judicial clerkships). Therefore, a more crucial concern may be gender differences in unobservable traits rather than differences in observable traits. In particular, we are concerned about latent career ambition or fertility preferences that determine the lawyer's choice of law firm, but would not be captured by observable variables in our data.

This selection problem can be framed as a latent variables model, where the lawyer's decision rule (to enter a prestigious and highly competitive law firm, for example) is determined by a latent variable that is unobserved by the econometrician. For example, the indicator variable $D_i$ is generated by a latent variable

[26] Our goal in selecting occupations was to include occupations that also required significant training, like physicians, pharmacists, and postsecondary teachers/economists, and also have a similar promotion structure, like accountants, chief executives, and postsecondary teachers.

[27] Unfortunately, the 2000 Census does not ask whether or not the respondent is or ever was a parent. Therefore, we infer this information from the reported number of children living in the household, which may be an underestimate if children have left the household. As a result, we focus on 44-year olds in an attempt to capture the age at which most fertility has been completed but the children are still young enough to be living in the same households as their parents.

$D_i^*$:

$$D_i^* = \beta_D \cdot Z_i - U_{Di} \quad (1)$$

$$D_i = \begin{cases} 1 & \text{if } D_i^* \geq 0 \\ 0 & \text{otherwise} \end{cases} \quad (2)$$

where $Z_i$ is a vector of observed random variables and $U_{Di}$ is an unobserved random variable. $D_i^*$ is the net utility to the lawyer from choosing to enter a prestigious law firm, and is the decision rule for $D_i$.

Now, let $Y_i$ be the measured fertility outcome variable such that:

$$Y_i = D_i \cdot Y_{1i} + (1 - D_i) \cdot Y_{0i} \quad (3)$$

where $D_i = 1$ denotes lawyer's decision to enter a prestigious law firm, and $D_i = 0$ denotes the decision to not. $Y_{1i}$ and $Y_{0i}$, therefore, are the fertility outcomes for lawyers at prestigious law firms and lawyers not at prestigious law firms, respectively. We want to estimate the effect of career concerns (i.e., working at a prestigious law firm) on fertility outcomes:

$$\underbrace{\mathbb{E}(Y_i|D_i = 1) - \mathbb{E}(Y_i|D_i = 0)}_{\text{observed difference in average fertility}} = \underbrace{\mathbb{E}(Y_{1i}|D_i = 1) - \mathbb{E}(Y_{0i}|D_i = 1)}_{\text{average treatment effect on treated}} + \underbrace{\mathbb{E}(Y_{0i}|D_i = 1) - \mathbb{E}(Y_{0i}|D_i = 0)}_{\text{selection bias}} \quad (4)$$

The second term, $\mathbb{E}(Y_{1i}|D_i = 1) - \mathbb{E}(Y_{0i}|D_i = 1)$, captures the average causal effect of career concerns on those at prestigious law firms. This term captures the average difference between the fertility outcome of lawyers at these firms, $\mathbb{E}(Y_{1i}|D_i = 1)$, and what would have happened to them *had they chosen a different career path*, $\mathbb{E}(Y_{0i}|D_i = 1)$. The observed difference in average fertility also captures a term called "selection bias". This term is driven by unobserved differences in the decision rule that led lawyers to enter or not enter a prestigious law firm ($U_{Di}$). If they are not equal ($U_{1i} \neq U_{0i}$), the selection bias term is not equal to 0, resulting in a biased estimate for the treatment effect.

There are several empirical methods to deal with this selection problem (Heckman and Navarro-Lozano, 2004; Aakvik, Heckman, and Vytlacil, 2005). We decide to leverage the richness of our data and conduct a factor analysis. We employ a two-step process where we compute individual "scores" based on extracted factors in the first step and use these factor scores in an OLS regression to obtain treatment effect estimates in the second step.

The theoretical motivation behind a factor structure model is identical to the latent variable model. The factor structure model, however, imposes a particular structure on the unobservables of the latent decision

rule:

$$U_{Di} = -\varphi_i + \epsilon_{Di} \tag{5}$$

$$U_{1i} = -\alpha_1 \cdot \varphi_i + \epsilon_{1i} \tag{6}$$

$$U_{0i} = -\alpha_0 \cdot \varphi_i + \epsilon_{0i} \tag{7}$$

where $U_{1i} = Y_{1i} - X_i\beta_1$, $U_{0i} = Y_{0i} - X_i\beta_0$, $X_i$ is a set of observable random variables, and $\varphi_i$ is the factor or the latent variable driving the decision rule. With a normality assumption regarding $\varphi, \epsilon_D, \epsilon_1, \epsilon_0$ and i.i.d. data, we are able to recover the average treatment effect if we observe $\varphi$. To relate this to our case of lawyers, the factor $\varphi$ can be seen as career ambition or fertility preferences, which lead a lawyer to enter a prestigious law firm or not. These traits are typically unobserved by the econometrician, but luckily we have several proxies for them in our data:

$$q_k = \gamma_k \cdot \varphi + \upsilon_k \tag{8}$$

where $q_k$ is the $k^{th}$ proxy measure, $\gamma_k > 0$ is the scale coefficient, and $\upsilon_k$ is measurement error. Equation (8) is referred to as a measurement equation. The $k$ measurement equations together are referred to as a measurement system. Under the assumed error structure in equations (5)-(7), we are able to identify all the parameters in the measurement system, in particular the factor loadings. We point the reader to the many papers that discuss the conditions under which the factor model is identified, rather than reproducing them here (for example, Carneiro, Hansen, and Heckman, 2003; Aakvik, Heckman, and Vytlacil, 2005; Heckman, Stixrud, and Urzua, 2006; Heckman, Pinto, and Savelyev, 2013).

Using the identified factor loadings, we then construct a factor score for each individual, which is a linear combination of the factor loadings and the proxies:

$$F_j = A_j \cdot q, \quad j = 1, \cdots, f \tag{9}$$

where $F_j$ is the score for the $j^{th}$ factor, $A_j$ is a factor score matrix, and $q$ is a vector of the $k$ proxy variables. The computation of $A_j$ depends on the method used for the prediction of the factor score. An issue is that there is an infinite set of factor scores that are consistent with the same factor loadings. To see this, consider that we have $k + f$ unknowns and $k$ equations. It is possible, therefore, that an individual with a high ranking on ambition according to one set of factor scores, may also receive a low ranking on the same common factor according to another set of factor scores. The researcher has no way of determining which

ranking is "true" from the results of the factor analysis. This issue is known as factor score indeterminacy. Grice (2001) provides a nice overview.

Indeterminacy becomes an even more important concern when the factor scores are subsequently used in an OLS regression to obtain treatment effect estimates. Factor scores contain a degree of uncertainty that is not accounted for in the second-stage OLS regression and causes the regression coefficient estimate to be biased (Skrondal and Laake, 2001; Croon, 2002; Bolck, Croon, and Hagenaars, 2004; Lu and Thomas, 2008; Devlieger, Mayer, and Rosseel, 2016). Devlieger, Mayer, and Rosseel (2016) show that in a model with latent independent variables and an observed dependent variable, the Regression method of computing factor scores yields an unbiased estimate. See Appendix B for the proof. Thus, we use Regression factor scores as explanatory variables in our main regression model. Next, we discuss the survey questions used as proxy variables.

The Wave 1 survey asks several questions about the determinants of the lawyer's initial career choices and motivating factors to attend law school. Figure 3 presents one example question on the lawyer's decision to start his or her career in a particular sector.[28] The crux of our methodology is that these survey questions capture the latent variables that drive a lawyer's career choices. The possible answer choices cover a wide range of reasons, from earning potential to social responsibility to work-life balance. More importantly, they were asked in the initial survey thereby mitigating reverse causality concerns. We find seven factors that drive lawyers' career decisions.[29] They are, in order of importance: social responsibility, earning potential, prestige, career development, firm's ranking, mission match, and financial security.

We conduct several robustness checks. First, we examine whether factors differ by gender. They remain largely the same with the exception that women care most about the office environment and "fit" and men care most about earning potential.[30] To capture this gender heterogeneity in preferences, we compute two factor scores: "ambition", taking into account male preferences, and "family", taking into account female preferences. Results are in Appendix Table A1. Next, we examine whether conditioning on other observable characteristics affects the calculation of factor scores. This is equivalent to including other explanatory variables in equation (8). Specifically we control for gender, race and ethnicity, marital status, number of children, undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, number of job offers and bar exam attempts, license status, and amount of debt. All measures are from the Wave 1 survey. Results are in Appendix Table A2. Last, we include the survey questions directly rather than using factor scores. Results are in Appendix Table A3. For all of these robustness checks, our fertility timing results do not change significantly.

[28] See Appendix A.4 for the other survey questions.
[29] See Appendix B for empirical methodology, tests, and detailed results.
[30] See Appendix B.

Last, we conduct a validity test to check that factor analysis adequately addresses the selection issue. Table 4 examines whether there is gender selection in initial entry into a private law firm. Female lawyers are 5 percentage points less likely than their male peers to enter a private law firm right after law school, and this difference is weakly statistically significant. The addition of demographic controls takes away the significance, but the magnitude remains similar (around -0.04). The addition of ability proxies, spousal employment, and income reduces the estimate slightly to -0.035. Columns (5)-(8) include the respondent's answers to the survey questions that we use for the factor analysis. When we include all three sets of questions, the gender difference in initial entry into private law firms disappears. These results provide some assurance that our factor scores are capturing unobservable heterogeneity that lead to a gender difference in these lawyers' career decisions.

#### 5.1.2 Endogeneity of observed effort-levels

Our second empirical prediction (EP2) is that the gender difference in fertility will be more pronounced among lawyers who have high effort-levels. Our proxy for work intensity is the lawyer's mid-career billed hours.[31] For lawyers who are not in a private law firm, we set their billed hours to 0.[32] The identification concern is that, because there is a long partner clock, the lawyer's effort-levels may endogenously adjust over time as the lawyer receives signals from the firm about his or her chances of making partner. The strategy of using observed billed hours in mid-career, therefore, is of concern. As a solution, we predict which lawyers will be "high-intensity" using intrinsic characteristics.

We use an extensive set of controls including demographic information (race and ethnicity, birth year, law school graduation date, geographic region at time of initial survey, parental educational attainment, initial marital status, and initial number of children), ability proxies (GPAs from law school and college, law school tier, participation in exclusive activities such as general law review and judicial clerkships, and the number of initial job offers and bar exam attempts), and initial firm-type.[33] The regression model is as follows:

$$\text{Work-intensity}_i^g = \beta_0^g + X'\beta_1^g + \varepsilon_i^g \tag{10}$$

where work-intensity is mid-career billed hours for lawyer $i$ of gender $g$ and $X$ is the set of baseline characteristics described above. We classify a lawyer as "high-intensity" if the lawyer's predicted work-intensity is in the top quartile and as "low-intensity" otherwise. Our predicted measure of intensity captures the por-

[31] Billed hours were not asked in the Wave 1 survey.

[32] Billed hours is used only at private law firms.

[33] We conduct a robustness check by including desire for work-family balance as a control. To the extent that, at the start of these lawyer's careers, their fertility preferences are going to determine their future career decisions, this inclusion is important. Our results remain very similar. They can be found in Appendix Figure A1.

tion of the lawyer's work ethic that is solely associated with baseline, observable traits. Because we predict intensity-levels for every lawyer in our sample, we have counterfactual measures of work-intensity even for lawyers not working at private law firms.[34] By keeping lawyers who later transition out of private law firms and who choose to stop practicing law altogether, we adopt a conservative approach.

We check the strength of our predicted intensity measure by examining its predictive power in the lawyer's probability of becoming equity partner. A 1 standard-deviation increase in predicted intensity is associated with an 11 percentage-point increase in the probability of becoming equity partner. This estimate reduces to 8 percentage-points with the inclusion of demographic controls, ability proxies, and job characteristics (initial firm's size, initial hours worked, and area of law) but remains highly statistically significant. Results are in Table A4.

## 5.2 Empirical specification

### 5.2.1 Gender difference in early parenthood and late parenthood

Our first empirical approach uses cross-sectional data and binary outcome variables to examine whether there is a gender difference in early parenthood and late parenthood. We use equity partner decisions to capture the approximate year that partnership decisions are made and use this threshold to differentiate between early parenthood and late parenthood. To find this threshold, we plot the distribution of equity partners by their promotion year in Figure 4. The most common post-JD year that equity partners were promoted is year 8. Our data are consistent with external surveys that ask about the length of the partner clock (ALM Legal Intelligence, 2012). Using year 8 as a threshold, we define "early parenthood" as having one's first child within seven years of law school graduation, and "late parenthood" as having one's first child at least nine years after law school.[35]

To estimate the gender fertility gap, we run the following regression model separately for early parenthood and late parenthood:

$$Y_i = \beta_0 + \beta_1 \cdot F_i + \beta_2 \cdot \mathbb{1}\{\texttt{High-Intensity}\} + \beta_3 \cdot \Big(F_i \times \mathbb{1}\{\texttt{High-Intensity}\}\Big) + X'\gamma + \varepsilon_i \qquad (11)$$

[34] The factors that are strong predictors of work-intensity differ for men versus women. For women, age matters (younger women are more likely to be high-intensity), as does marital status (divorced/separated women are more likely to be high-intensity) and law school GPA. Further, location seems to matter for women; those in Chicago, San Francisco, St. Louis, Indiana, and Oregon are more likely to be high-intensity, relative to New York. For men, the number of job offers received is a strong predictor of work-intensity. Age, marital status, and law school grades do not matter. Full regression results for the intensity prediction measure are in the Online Appendix.

[35] Alternatively, we defined a threshold by parent-share. We regressed a year indicator variable and a quartic time trend against the change in share of parents and chose the year that maximized the $R^2$ of the regression. The growth rate in parent share peaks in year 6, so pregnancies before year 6 are classified as "early" and pregnancies after year 6 are classified as "late" (Table A5). Fertility results using this alternative threshold are in Table A6; the patterns still hold.

where $Y_i$ is a binary fertility outcome for lawyer $i$, $F_i$ is a dummy variable indicating whether the individual $i$ is female, and $X$ contains a set of individual-level, baseline characteristics including race and ethnicity, age, law school graduation date, geographic location at time of initial survey, initial marital status, standardized undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, number of initial job offers, number of bar exam attempts, spousal employment status at time of initial survey, early-career household income, respondent's early-career salary, initial firm's size, early-career weekly hours worked, area of law, and factor scores.

The parameter of interest is $\beta_1$, which gives us the female-male difference in probability of early parenthood (or late parenthood) for those predicted to be low-intensity workers. To obtain the gender difference for predicted high-intensity lawyers, we flip the indicator variable, $\mathbb{1}\{\texttt{High-Intensity}\}$, so that the reference group becomes high-intensity males and look at the analogous $\beta_1$.

### 5.2.2 Gender difference in rate of exiting childless state

Next, we use panel data to explore how fertility decisions evolve over the lawyer's career. In particular, we estimate the annual likelihood of becoming a parent conditional on being childless in the year before.[36] The regression model is as follows:

$$\begin{aligned} Y_{it} =& \alpha_i + X'\gamma + \sum_{t=1}^{12} \tau_t^M \cdot \mathbb{1}\{T=t\} + \sum_{t=1}^{12} \tau_t^F \cdot \Big(F_i \times \mathbb{1}\{T=t\}\Big) \\ &+ \sum_{t=1}^{12} \mu_t \cdot \Big(\mathbb{1}\{\texttt{High-Intensity} \times \mathbb{1}\{T=t\}\}\Big) \\ &+ \sum_{t=1}^{12} \delta_t \cdot \Big(F_i \times \mathbb{1}\{\texttt{High-Intensity}\} \times \mathbb{1}\{T=t\}\Big) + \varepsilon_{it} \end{aligned} \tag{12}$$

where $t$ indexes years since the JD, $Y_{it}$ is equal to 1 if lawyer $i$ had his or her first child $t$ years after the JD, $\alpha_i$ is an individual fixed-effect, and $X$ is a vector of the respondent's firm-type (private law firm or not), firm-size, respondent's lagged predicted income, and spouse's lagged predicted income. The variables in $X$ are all time-varying. The reference category here is low-intensity males in year 0, the year they graduated from law school. The parameter of interest is $\tau_t^F$, which tells us each year's contribution to the low-intensity female's hazard relative to low-intensity males' in year 0. To get the analogous $\tau_t^F$ for high-intensity lawyers, we flip the indicator function, $\mathbb{1}\{\texttt{High-Intensity}\}$, so that the reference category becomes high-intensity male lawyers in year 0.

One important note is that the individual fixed-effect takes care of any *time-invariant* gender differences

[36] To be clear, the analysis sample is at the level of an individual-year and, for each individual, stops in the year that the lawyer had his or her first child.

in fertility preferences or in career ambitions. To the extent that these may change over the course of the lawyer's career, the fixed effect will not capture that variation. Therefore, we also include time-varying job characteristics and (lagged) income. These will capture any unobservable changes in family-size preference or in career ambitions that manifest in firm type, firm size, and earnings.

# 6 Results

## 6.1 Gender difference in timing of first-child

In this section, we test our empirical predictions. EP1 states that females are less likely than males to have their first-child before the partnership decision. Our results are presented in Panel A of Table 5. On average, female lawyers are 11 percentage-points less likely than male lawyers to have their first child within seven years after law school (Column 1). As we add in baseline controls, this gender gap shrinks but does not disappear, even after we include the factor scores. Because of the way we define early parenthood, these results are consistent with EP1. We also examine whether there is a gender difference in late parenthood, defined as having one's first child at least nine years after law school. If women are delaying their family formation until after the promotion decision, we may expect there to be a positive female-male difference in first-time births later in these lawyer's careers - assuming that demand for having children is relatively inelastic. Indeed, for late parenthood, the gender gap is about 10 percentage-points (Panel B of Table 5). The addition of demographic characteristics shrinks the gap to about 6 percentage-points, but it is persistent even after controlling for factor scores. In sum, we find that female lawyers are nearly 8 percentage-points less likely than male lawyers to have their first child before the partnership decision, and are around 6 percentage-points more likely to wait until after the partnership decision.

In Table 6, we examine how this gender gap differs by predicted intensity level. Our second empirical prediction is that the gender gap in timing will be more negative among high-intensity lawyers relative to low-intensity lawyers. According to the baseline likelihoods, a majority of lawyers start their family formation later in their careers (the likelihood of late parenthood ranges from 0.34 to 0.54). However, women are more likely to wait until later in their career and men are more likely to start within the first 7 years of their career. Further, high-intensity men are the least likely group to experience late parenthood (34 percent) and the most likely to experience early parenthood (61 percent), while the opposite is true for high-intensity women.

Panel A examines gender differences in early parenthood, and Panel B examines differences in late parenthood (from equation (11)). Females who we predict to be high-intensity are 15 percentage-points less

likely than males predicted to be high-intensity to have their first child before the partnership decision. The gender gap in early parenthood for low-intensity lawyers is much smaller, at -5 percentage-points.[37] Similarly for late parenthood, the gender difference is large and positive for high-intensity lawyers (0.12) and much smaller and not statistically significant for low-intensity lawyers (0.04). The interpretation of these results is consistent with EP1 and EP2: females are more likely than males to wait until after the partnership decision, but the incentive to delay fertility is much stronger for high-intensity females, who have a greater chance of making partner, relative to low-intensity females.

Next, we present graphical evidence of how the gender fertility gap evolves over the lawyer's career. Figure 5 plots the year-specific estimates of the gender difference and their corresponding 95% confidence intervals from equation (12). Although female lawyers are always less likely than their male peers in year 0 to have a child, these estimates are statistically insignificant for the first few years. Interestingly, the gender differences for high-intensity and low-intensity lawyers are also similar for the first two years. Starting in year 5, the gender difference for high-intensity lawyers starts to widen, increases to -19 percentage-points in year 6, before shrinking to -2.7 percentage-points in year 9. The gender gap in years 5 through 8 are statistically significant and becomes insignificant in year 9, when the gap shrinks. Moreover, the sign-change and closing of the gap starting in year 7 corresponds with when partnership decisions are beginning to be made (see Figure 1). The drop in year 10 says that women are much less likely than men in year 0 to become parents after year 9, conditional on not having becoming parents. This makes sense when we consider that in year 10, the median female lawyer is 38 years old, when female fecundity is already in decline (American College of Obstetricians and Gynecologists, 2014). In other words, if a female lawyer has not become a parent by year 9, the likelihood of her becoming a parent in the future is diminished due to biological reasons. The following is not true for men, whose fecundity does not begin to decline until age 45 (Harris et. al, 2011).

When we look at low-intensity lawyers - the ones that we predict do not have as strong an incentive to trade-off children for effort - we see much more muted effects. The female-male difference is negative, as predicted by EP1, but pretty stable throughout their careers (-0.02 to -0.05). Most importantly, they do not seem to react to career concerns faced by their high-intensity peers around year 8. The gender difference for low-intensity lawyers does shrink in year 7, and the explanation for this is biology. The median lawyer is aged 35 in year 7, which is when fecundity begins to decline rapidly for women.

[37] The difference between these two estimates is very close to being statistically significant, with a $t$-statistic of 1.63.

## 6.2 Gender difference in "completed fertility"

We also examine whether there is a gender difference in completed fertility.[38] This serves as a robustness check for whether our fertility timing results are due to gender differences in preferences for timing of first-child. Even though we construct factor scores to capture these latent preferences, to the extent that our factor scores are not perfect proxies, this exercise provides an additional robustness check. We estimate the following regression model:

$$Y_i = \beta_0 + \beta_1 \cdot F_i + \beta_2 \cdot \mathbb{1}\{\texttt{High-Intensity}\} + \beta_3 \cdot \Big(F_i \times \mathbb{1}\{\texttt{High-Intensity}\}\Big) + X'\gamma + \varepsilon_i \tag{13}$$

where $Y_i$ is the fertility outcome (parent likelihood) for lawyer $i$, $F_i$ is a dummy variable indicating whether the individual is female, and $X$ contains a set of individual-level, baseline characteristics including race and ethnicity, age, law school graduation date, geographic location at time of initial survey, initial marital status, standardized undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, number of initial job offers, number of bar exam attempts, spousal employment status at time of initial survey, early-career household income, respondent's early-career salary, initial firm's size, early-career weekly hours worked, area of law, and factor scores.

The parameter of interest is $\beta_1$, which gives us the female-male difference in probability of being a parent for those who are predicted to be low-intensity. To obtain the gender difference for predicted high-intensity lawyers, we flip the indicator variable, $\mathbb{1}\{\texttt{High-Intensity}\}$, so that the reference group becomes high-intensity males and look at the analogous $\beta_1$.

There is no gender difference in the probability of being a parent if we control for baseline characteristics; the female-male difference is -0.03 and is not statistically significant (Table 7).[39] When we focus on high-intensity lawyers, the gender difference widens to -0.067 but is still not statistically significant.[40] We confirm that we observe the (near) complete fertility decision of these lawyers by examining their responses to the Wave 3 survey question, "Do you want more children?". Around 75 percent of our sample - both males and females - reported "no".[41] This is unsurprising as lawyers in our sample are 40-42 years old at the end of the survey. Among high-intensity lawyers, females are 3 percentage-points more likely to report wanting

[38] Although completed fertility is normally calculated at age 50, we borrow the term for this analysis as women are 40-42 years old and towards the end of their prime child-rearing years.

[39] We also examine whether there is a gender difference in the number of children. Women are more likely to have fewer children, but the magnitude is really small, at -0.18. When we cut by intensity-level, we see that this gender difference is driven by low-intensity lawyers.

[40] Much of the large gap in baseline parent likelihoods among high-intensity lawyers (0.80 versus 0.64) is contributable to the fact that these high-intensity men have unemployed spouses, which is not true for the high-intensity women.

[41] This statistic is only among the 1,730 lawyers who reported either wanting more children or not wanting more children. There are 338 respondents who reported being uncertain about future children, and 19 respondents who did not answer the question. There is no gender difference in uncertainty about wanting more children.

more children, but this difference is not statistically significant. Among low-intensity lawyers, females are 3 percentage-points less likely to report wanting more children, but again, this estimate is not statistically significant. Although not definitive proof of similar family-size preferences between men and women, our results are consistent with the argument that preferences for parenthood are not entirely driving our fertility timing results.

### 6.3 Difference between "law" and "non-law" females

An additional method of estimating the effect of career concerns is to compare the fertility decisions of female lawyers at private law firms to female lawyers not at private law firms. The partner clock we exploit is a feature only of private law firms, so we would not expect to see female lawyers in other sectors time their first-child to the partner clock if career concerns were the mechanism. Our main hazard results in Figure 5 provide an indirect test of this; the pattern for low-intensity lawyers, who presumably face less career concerns, is very different from the pattern for high-intensity lawyers, who presumably face greater career concerns. In this section, we present an additional, more direct test by focusing on females. We emphasize that we are keeping *all* women who first started at a private law firm, even if they leave private law later in their careers.

We estimate the same model as equation (12), except our sample is restricted to females and the high-intensity indicator is replaced with an indicator for whether the lawyer's first job was at a private law firm, $\mathbb{1}\{\texttt{Law}\}$:

$$Y_{it} = \alpha_i + X'\gamma + \sum_{t=1}^{12} \tau_t \cdot \mathbb{1}\{T = t\} + \sum_{t=1}^{12} \tau_t^L \cdot \Big(\mathbb{1}\{\texttt{Law}\} \times \mathbb{1}\{T = t\}\Big) + \varepsilon_{it} \tag{14}$$

The reference category is "non-law" females (defined as those whose first job was not at a private law firm) in year 0. The parameter of interest is $\tau_t^L$, which tells us each year's contribution to the "law" female's hazard relative to "non-law" female's in year 0.

If career concerns are driving our fertility-timing results, we would expect to see "law" females significantly more likely to become parents after the partnership decision (around year 8). The estimates and corresponding 95% confidence intervals are graphed in Figure 6. The results are as expected: there is no significant difference between these two groups of females until year 9, when females who started at private law firms are now 11 percentage-points more likely to become parents. There is also a statistically significant difference in year 6, but the estimate is about about half of the year 9 estimate (0.066). One potential explanation for this is female exit from high-stress firms (large private law firms) in year 5 (see Figure A2). It is important to mention that though the probability of female exit from high-stress firms is high in year

5, the *gender difference* in exit from high-stress firms is not statistically significant. Therefore, a gender difference in exit likelihoods is not driving our fertility-timing results.

### 6.4 Alternative work-intensity measures

In this section, we conduct robustness checks by using alternative work-intensity measures to the predicted intensity measure, which predicts the lawyer's mid-career billed hours. We consider three different measures that also differentiate between those who face greater career concerns: (1) whether or not the lawyer's first job was at a private law firm, (2) whether or not the lawyer's first job title was "Associate", and (3) whether or not the lawyer's mid-career billed hours exceeded 1,561 (the nine-month threshold for a typical 2,000 annual requirement). These measures can also be seen as capturing the "effort-level" of lawyers.

We estimate the rate of exiting the childless state using the same regression model as equation (12) and graph the results in Figure 7. The patterns are largely similar, with a larger female-male difference among those who face greater career concerns (in private law firms, working as associates, billing large hours) relative to their peers.[42] More importantly, the gender difference shrinks or disappears in year 9. Consistent with our results using the predicted intensity measure, the gender differences in years 4 through 8 are statistically significant. Additionally, the gender difference in the hazard rates for lawyers who do not face strong career concerns is much smaller, more stable, and is not statistically significant after year 4.

In summary, our main analysis finds that women are more likely to wait to delay child-bearing until after the partnership decision, and this result is more pronounced among marginal women – those who are more likely to make partner. We use different measures to define these marginal lawyers, such as predicted intensity level and job titles, and find consistent results. Although we do not find any statistically significant gender differences in parent probability or in family size for high-intensity lawyers, the relatively large gender difference in parent probability, seems to indicate that the fertility decision for high-intensity lawyers is mainly along the extensive margin. This is also consistent with the view that the gender difference in fertility outcomes is driven mainly by selection into high-intensity careers. This is possible, but looking at a more aggregate classification such as whether the lawyer's first job was at a private law firm (which is true for over 60 percent of all lawyers), we see that all of these women are more likely to delay their fertility specifically until the year after the partnership decision, relative to women who did not start at a partner-track job. Of course, one may also argue that law itself is a highly selected occupation. It is near impossible to completely control for unobservable selection based on fertility preferences. But we conduct multiple tests to deal with the selection issue as best as we can, and hope that they ultimately support our

[42] The hazards when we delineate on private law firms and on associates are very similar. This is not surprising as 90 percent of law graduates who enter private law firms start as "Associate".

argument that career concerns affect women's fertility decisions differently than men's.

# 7 Alternative Explanations

## 7.1 Gender difference in timing of marriage

In this section, we explore alternative explanations to our theory that career concerns lead to a gender gap in fertility. One explanation is a gender difference in marriage timing. From Table 1, we know that female lawyers in our sample are less likely to be married than their male peers early in their careers. If females are more likely to marry later in life, then they will start their family formation later than their male peers. (This is assuming that very little births are out-of-wedlock.) Further, it is possible that among females, high-intensity females marry later in the life than low-intensity females because they are focusing on their careers right out of law school. In this case, we would expect there to be a gender difference in timing of first-child, and this gender difference to be larger among high-intensity lawyers relative to low-intensity lawyers. This may be one explanation for why we see females having their first child 9 years out of law school; it is mainly because they have not met someone yet.

To test this alternative explanation, we subset our analysis sample to those ever-married at the start of the survey. To the extent that our results are being driven by gender differences in marital decisions, this concern should now be eliminated. The top graph in Figure 8 plots the same parameter estimates from equation (12) for this initially ever-married sample.[43] We see similar patterns in fertility timing as before: the magnitudes of the female-male difference among high-intensity lawyers remain large and negative, reaching -28 percentage-points six years after law school, before shrinking to -18 percentage-points in year 7 and disappearing in year 9. Similar to our main results, the gender-differences in years 5 through 7 are statistically significant. The gender difference among low-intensity lawyers, on the other hand, is never statistically significant. The magnitude also remains pretty consistent, ranging from -0.03 to -0.06.

A related concern is the age difference between husband and wife. In the population, husbands tend to be younger than their wives, but in our sample male lawyers and female lawyers are the same age on average.[44] As a hypothetical example, say a 35-year-old male lawyer in our sample is married to a 33-year-old woman, while a 35-year-old female lawyer in our sample is married to a 37-year-old man. This indicates that the family formation of the 35-year-old female lawyer is more complete than that of her male peer. This would work against our favor; in the absence of career concerns, we would expect the female lawyer to start her family formation *before* the male lawyer, but this is not the case.

[43] Full regression results are in the Online Appendix.

[44] According to the 1990 and 2000 Census data, the mean husband-wife age difference in law households is 2.25 years. The median husband-wife age difference in law households is 1 year.

### 7.2 Gender difference in spousal occupation

A second potential explanation is the gender difference in spousal occupations. That is, male lawyers are more likely to marry women with less-intensive careers while female lawyers are more likely to marry men with intensive careers. Therefore, the gender difference in fertility-timing stems not from career concerns or the pressure to perform at work, but rather because male lawyers have spouses who are able to help around the house while female lawyers are married to spouses who are also in intensive occupations. This mechanism is similar to Becker's theory on time allocation in the household, which predicts that males, as primary-earners, will specialize in the market while their spouses will specialize at home.

To test for this, we restrict our analysis sample to lawyers who are primary-earners and estimate equation (12). We now expect both females and males in our sample to have a comparative advantage in the market and their secondary-earning spouses to specialize at home. If the allocation of time in the household were driving the results, then we would not expect to see gender difference in fertility timing.

Our graphical results are presented in the bottom graph in Figure 8.[45] We still see that high-intensity females time their first-child to the partnership decision more so than their male counterparts. The estimates are not significant, likely due to the reduced sample size. But the magnitudes are large and the timing pattern is very similar to our main result: the female-male difference goes from -7 percentage-points in year 3 to -20 percentage-points in year 6. It begins to shrink starting in year 7 and turns positive in year 9. For low-intensity lawyers, the female-male difference follows their high-intensity peers for the first four years. But whereas the high-intensity lawyers diverge and become more negative, the gender difference among low-intensity lawyers remains pretty stable before growing steadily after year 8.

## 8 Mechanism 1: Gender difference in child-rearing costs

We now turn to an examination of the mechanisms that drive the gender difference in fertility timing. A main mechanism highlighted by the literature and our conceptual framework is the time cost of raising children. One reason that children have a negative effect on career advancement is that they require attention. They need to be fed, washed, clothed, and watched over. To the extent that these activities require effort on the parent's part, the parent then has less effort to exert at work. Consistent with evidence presented by the literature, we assume that this indirect cost is greater for women than for men. Indeed, our data corroborate this assumption. Figure 9 shows that male lawyers are less likely than female lawyers to adjust their hours after becoming a parent. In fact, men continue working full-time at impressive rates throughout their careers; not once does it dip below 95 percent. Women's full-time rates also do not dip below 90 percent

[45] Full regression results are in the Online Appendix.

- until one year before their first child. The percentage of women working full-time drops from 87 percent to 81 percent in the year immediately following the birth of their first-born. In this section, we examine how the higher price of children faced by women affects the gender difference in fertility-timing.

## 8.1 Spousal income

If women face a greater time cost of children, then we would expect to see heterogeneous effects by cost-size. In particular, we would expect to see smaller female-male fertility differences among those for whom the time cost of children is smaller. One method to test this hypothesis is to use income as a proxy for the time cost. More well-off households can afford child-care or full-time nannies to watch over their children. The use of household income, however, is problematic as it includes the lawyer's salary, which is correlated with the lawyer's career decision. To bypass this concern, we use early-career spousal income. The use of *early-career* income mitigates the concern that spousal income is determined by the lawyer's career choices. Assortative matching presents a concern if partners are matching on intensity-level or career ambitions. In that case, spousal income will be positively correlated with the lawyer's career choices. This correlation may be true in the general population, but it is likely weaker in this more homogenous, highly-educated sample of lawyers. We create quartiles of spousal income conditional on geographic location at time of initial survey. Those in the top income quartile of each geographic location are classified as being in the top spousal-income quartile.

If lawyers with spouses in the top income quartile face a smaller time cost of children, then we expect that the gender difference in fertility timing for these lawyers will be less negative relative to the gender difference for lawyers whose spouses are not in the top quartile. The results, reported in Table 8, are largely in-line with this prediction. The signs for early parenthood and late parenthood are reversed between those with spouses in the top income quartile and those with spouses not in the top income quartile. Specifically, female high-intensity lawyers with top-earning spouses are more likely to have an early parenthood relative to their male counterparts, and are *less* likely to have an a late parenthood relative to their male counterparts. The estimates are not statistically significant, but the signs are informative as they are the opposite of the signs in our main results in Table 6. Additionally, there are little heterogeneous effects by spousal income for low-intensity lawyers, who are not as affected by career concerns. These results suggest that having a spouse in the top income quartile mitigates the adverse effect of career concerns on fertility timing for the marginal lawyers.

A look at the average likelihoods suggests that the positive female-male difference in early parenthood among high-intensity lawyers with top-earning spouses is coming mainly from an increase in female likelihood

rather than a decrease in male likelihood. Specifically, the likelihood of early parenthood is 40 percent for a high-intensity female but increases to 64 percent for a high-intensity female with a top-earning spouse. The analogous likelihoods for males decreased from 61 percent to 55 percent, a much smaller change. A similar pattern is found when examining late parenthood for high-intensity lawyers; the gender difference is driven by a change in female fertility decisions rather than male fertility decisions.

Although we are interpreting these results to be driven by a change in the time cost of having children, it is possible that they may instead be driven by female movement from private law firms into less-intensive occupations. That is, maybe top-earning husbands are making enough money so that their lawyer wives do not have to work. That may be one reason that we see a positive and statistically insignificant gender difference in early parenthood among lawyers with top-earning spouses. To check this, we plot the hazard rates of exit from private law firms for high-intensity lawyers by spousal-income quartile (Figure 10). There is no gender difference. The magnitude for top-income quartile lawyers is larger in years 6 and 7, but all of the estimates are not statistically significant. This graph implies that the heterogeneous effects on early and late parenthood are not driven by female movement across sectors, but may be due to the time cost of having and raising children.

## 8.2 Work and family conditions

There are several ways in which the time cost of having children can be reduced. In the previous section, we examined the effect of income. In this section, we examine the accessibility of child-care and leniency of parental leave legislation. Greater accessibility to child-care, lower child-care costs, and more family-friendly policies all reduce the time cost of having children by reducing the work-child tradeoff the parent faces. In other words, women who live in an area with lots of affordable child-care options do not need to worry about keeping their children occupied during the work-day. To this end, we expect that the gender difference in fertility timing will be less negative for lawyers who live in areas with more family-friendly work conditions.

We use the Institute for Women's Policy Research's *Status of Women* 2015 report to obtain measures of work and family conditions in each state. This report assigns a letter grade for each state based on its paid leave legislation, elder and dependent care, child care, and the gender gap in parents' labor force participation rates. Table A7 lists the letter grades of all the geographic regions in our dataset. We group the letter grades into 5 categories to increase power (B, B-/C+, C/C-, D+/D, and D-/F) and estimate the female-male difference in early parenthood and late parenthood separately for each category using equation (11). The results for high-intensity lawyers is reported in Figure 11.[46]

[46] We show estimates for high-intensity lawyers because they are the ones most affected by career concerns. For completeness, we also estimate the gender difference for the entire sample and low-intensity lawyers. Those results can be found in Figure A4.

The circles represent the female-male difference in the fertility outcome. The size of the circles represents the geographic region's population. The red line is a fitted line of the estimates, weighted by population size. The fitted line indicates that the gender-difference becomes monotonically larger as the work and family conditions in the region gets worse. In regions that earned a B, the gender difference in early parenthood and late parenthood is close to 0. In regions that earned a D- or an F, however, the gender difference in early parenthood is more than -0.3 and about 0.3 for late parenthood. Importantly, if these high-intensity women are not having children or delaying because of preferences, then we would not see these differential effects by legislation. These results also have optimistic implications for policy impacts; better accessibility to affordable child-care and more family-friendly policies at work may help to reduce the greater time cost of children for women.

## 8.3 Gender norms

One question that has not yet been addressed is *why* women face a greater time cost. One explanation may be that women have a stronger preference than men for raising children. Another may be that women have a comparative advantage in non-market activities (Becker, 1960). In this case, it is possible that women adjust their hours to focus on non-market activities even if they also have a comparative advantage in the market. A third explanation that has been posited by the literature looks at gender norms. Bertrand, Kamenica, and Pan (2015) find that gender identity impacts the division of home production. Specifically, the gender-identity norm that "a man should earn more than his wife" leads women to undertake a larger share of home-production activities to appear less threatening to their husbands.

One implication of this theory is that the gender fertility difference should be more pronounced in areas that strongly prescribe to these gender norms. We obtain each Census region's measure of gender norms from Pan (2015), who constructed them using the 1977 to 1988 General Social Survey (GSS). The GSS, one of the most comprehensive sources of attitudinal data in the US, asks several questions related to the appropriate role of women in society. For example, survey respondents are asked whether they agree or disagree with the following statement: "It is much better for everyone involved if the man is the achiever outside the house and the women takes care of the home and family." Pan uses men's responses to these questions to construct a uni-dimensional index of gender-related attitudes held by men. She also constructs separate indices by white-collar and blue-collar occupations. To be more relevant to our sample of lawyers, we use the white-collar male index. The crosswalk of Census region to geographic regions in our data, with the corresponding sexism index, is reported in Table A8. More positive values in the index correspond with more gender-prejudiced attitudes.

We estimate the female-male difference in early parenthood and late parenthood separately for each Census region using equation (11).[47] Our estimates for high-intensity lawyers are presented in Figure 12.[48]. Female lawyers in regions that prescribe more strongly to gender norms are more likely to delay their fertility relative to male lawyers in those regions, while the gender difference is smaller in regions with more open attitudes about gender norms. Although the previous analyses highlight the roles that policy may play in alleviating the higher price of children that women face, these results suggest that policy may have a limited effect as social attitudes and norms are also a factor.

# 9 Mechanism 2: Gender-specific thresholds

Our conceptual framework highlighted two main mechanisms that drive the gender difference in fertility-timing. In Section 8, we explored the first channel, which is that women face a greater career cost of having children. In this section, we consider the empirical evidence on whether firms have different promotion thresholds for mothers and parents.

## 9.1 Promotion thresholds

If it is true that firms have higher promotion thresholds for parents and mothers, then, in equilibrium, we expect that among those promoted: (1) lawyers with children at the time of promotion must be of higher ability than childless lawyers, and (2) female lawyers with children at the time of promotion must be of higher ability than male lawyers with children at the time of promotion.

We test these predictions using the following characteristics as proxies for ability: participation in general law review during law school, obtaining a judicial clerkship after law school, and initial caseload.[49] Most major American law schools publish a law review dealing with all areas of law ("general law review") with the purpose of promoting scholarship in the field of law. Historically, law review articles have been influential in the development of the law, and, thus, membership on the law review staff is highly sought-after by law students. Judicial clerkships are post-graduate opportunities for law students to work closely with a judge

[47] The Mountain region was combined with the Middle Atlantic due to low power; with only 75 observations, we were unable to obtain estimates for the Mountain region. The gender fertility difference estimate is reported under a newly constructed sexism index for the Mountain-Middle Atlantic region, which is weighted by population.

[48] Results for the full sample and low-intensity lawyers are in Figure A5

[49] The observant reader will notice that we do not consider the full set of ability proxies used in previous specifications (for example, law school GPA). From conversations with a partner at a law firm, the quality of the lawyer's work product is the most important factor in the promotion decision - in comparison to the lawyer's class grades. Part of this reason is that law school performance is not always an accurate predictor of success as a practicing lawyer. As a result, we decided to focus on measures that capture an individual's "law ability" rather than his ability to be a good student. As a check, however, we do examine whether there are gender differences among equity partners in law school class rank. We find that female equity partners in the parent-first sample are 7.3 percentage-points more likely to be in the top 10 percent of their class during law school, relative to their male counterparts, but this estimate is not statistically significant. In the partner-first sample, the female-male difference is 63 percentage-points and is significant at the 5 percent level.

and assist in making legal determinants. These are prestigious, competitive opportunities usually reserved for law students at the top of their class. We look at the lawyer's initial caseload to capture a sense of his ability as a practicing lawyer. As law firms care about revenue, a young lawyer's ability to work quickly on cases is desirable. One nice advantage of this measure is that it is more directly related to the practice of law.[50]

To test for gender discrimination, we estimate the gender difference in ability outcomes separately for equity partners who were parents before being promoted to partner ("parents-first") and equity partners who were childless at time of promotion ("partners-first"). Our test for discrimination against parents is similar, except we estimate the difference in ability outcomes between the "parents-first" lawyers and the "partners-first" lawyers. If the firm does not have different promotion thresholds, then we would expect there to be no statistically significant differences or for them to be economically small.

The results suggest evidence of different promotion thresholds for mothers (Panels A and B of Table 9). Among those who had children before they were promoted to partner, women are 25 percentage-points more likely to have participated in general law review, 29 percentage-points more likely to have been in an editorial role, and 46 percentage-points more likely to have held a judicial clerkship. They also worked on one additional case than men did at the start of their careers. All of these estimates are statistically significant. Again, these results control for race and ethnicity, age, law school graduation date, geographic location at time of initial survey, initial marital status, and area of law. More interestingly, we do not see similar patterns when looking at associates who did not have children before they became partners (Panel B of Table 9). Females are less likely than their male peers along all of our outcome measures with the exception of judicial clerkships, but these estimates are not statistically significant. The positive ability selection in the parents-first sample and the lack of a gender difference in the partner-first sample are consistent with what we would expect if firms set different promotion thresholds by gender for associates with children.

These results are interesting in light of the fact that there are no statistically significant gender differences between the parent-first and partner-first sample. Men are more likely to be equity partner than women; of the 297 equity partners in our sample, 193 (65 percent) are male. But equity partners are more likely to have been parents first, regardless of gender (61 percent). Women are 4.5 percentages-points less likely than men be in the parent-first sample (0.58 for women versus 0.62 for men), but this difference is not statistically significant.

[50] We can also look at billed hours. However, observed billed-hours may differ across firms as some firms have a larger client-base than others. Therefore, a direct comparison of observed billed-hours across the industry may be misleading: a top-billing lawyer at a mid-size firm may bill 1,600 annual hours, but a middling lawyer at a large firm may bill 1,800 annual hours. More importantly, from conversations with a partner at a law firm, billed hours is too coarse a measure to determine whether an associate will make a good partner. Although billed hours is a factor in partnership decisions, more weight is put on the quality of the lawyer's work product. Therefore, we focus on ability proxies for our analysis.

The evidence on different promotion thresholds for parents is mixed (Panel C of Table 9). Equity partners who were parents first are 3 percentage-points less likely than their "partners-first" peers to have participated in general law review, and are 6.5 percentage-points less likely to have been an editor. They are also 6 percentage-points more likely to have had a judicial clerkship and work on 0.02 more cases. Again, these results control for race and ethnicity, age, law school graduation date, geographic location at time of initial survey, initial marital status, and area of law. Because of the small sample size, we exclude law area fixed-effects to reduce perfect collinearity issues when estimating differences in judicial clerkships. Why is it that we do not see strong evidence of discrimination against parents? One potential explanation, which we discussed in Section 8, is that the adverse career-costs of children are not gender-neutral. Females are more likely than males to adjust their labor supply after having a child so it may not make sense to discriminate against parents broadly.

It is important to note that the average female and male equity partner in the parent-first sample had their first child *after* law school.[51] This is important because it indicates that the ability proxies we are using are not contaminated by the child's presence. For example, one potential reason that female equity partners in the parent-first sample are of higher ability than their male peers may be that having children is costly in terms of effort and these women, if they had them before or during law school, would need to be of higher ability anyway in order to participate in general law review or to obtain a judicial clerkship. Our results in Panel A, therefore, may simply be reflecting gender differences in the child-cost on our ability measures rather than actual gender differences in underlying ability. However, as 83 percent of lawyers in parent-first sample were not parents during law school, this concern is mitigated.

To be thorough, however, we include a control for child-care responsibility (see Table 10). In Wave 2, lawyers are asked who is primarily responsible for taking care of the child's needs at night. The answer choices are: the respondent; shared equally; my spouse/partner; and someone else. To the extent that having children affects the gender difference in our ability measures, this control should mitigate that concern. The estimates are very similar to the original estimates without the child-care control: female equity-partners in the parent-first sample are of higher ability, on average, than male equity-partners, but there is no gender difference among equity partners in the partner-first sample.[52]

Another method of examining whether there is positive female selection into early parenthood is to consider the average ability of all lawyers who experienced an early parenthood. The idea is that if positive female selection exists, then we would see a positive female-male difference in ability measures among *all* lawyers who had children before year 8 (our proxy year for when partnership decisions are made). The

[51] For women, it is four years after, and for men, it is three years after. The gender difference of 0.8 years is not statistically significant.

[52] We are unable to look at judicial clerkships due to a lack of power.

results are reported in Table 11. There is no significant gender difference in the four ability proxies among the "early parenthood" lawyers. Moreover, the estimates are small and nowhere near the magnitude found in Table 9. This suggests that the observed higher-ability female equity partners in the "parent-first" sample is not due to positive female selection into early parenthood.

## 9.2 Promotion probability

A second method for examining whether firms have different promotion thresholds for mothers is to look at the gender difference in the probability of promotion. If, conditional on ability and productivity measures, there is still a gender difference in the likelihood of becoming equity partner, this suggests that the firm may have different thresholds for female versus male lawyers. We test this hypothesis by examining how the gender difference in promotion probability changes as we add in more controls (Table 12). Initially, females are 10 percentage-points less likely to be equity partner. When we add in demographic controls and ability proxies, such as graduate school ranking, participation in general law review, and judicial clerkships, the gender difference shrinks but remains statistically significant at -8 percentage-points. The largest explanatory variables are whether the lawyer took parental leave and for how long and the number of billed hours. However, even after controlling for observable productivity measures and spousal employment, females are still about 4 percentage-points *less* likely to be promoted relative to men.

Panel B of Table 12 focuses on the "early parenthood" sample. This is all lawyers who had their first-child at most 7 years after their JD. We also see negative and statistically significant gender differences in promotion probabilities, but the significance disappears when we control for parental leave and the gender difference disappears when we control for billed hours and caseload. An interesting comparison is that the gender difference among all lawyers remains negative and statistically significant after including all controls, but it disappears among early-parenthood lawyers. This implies that the negative female-male difference in the overall sample is being driven by lawyers who did not have their first-child before year 8. One potential explanation for this is that firms have higher promotion thresholds for *all women* not just mothers, because of the possibility that a female lawyer may have a child after the promotion decision. However, we do not see any significant gender difference in ability proxies among the partner-first sample in Table 9 so these results should be interpreted with caution.

The results from these two analyses paint an interesting picture. We see that female equity partners are of higher ability (as measured by our proxies) than their male counterparts in the parent-first sample. We argue that this is supportive evidence of different promotion thresholds. One counter-argument is that there may be positive female selection into law and these partner-track jobs. In other words, we may simply be picking

up the fact that women who work in private law firms are better on average than their male counterparts. However, we find that women are less likely to be promoted than men. If women are positively selected into private law firms, we should not see a gender gap in promotions in the absence of discrimination. A story that is consistent with both findings is the existence of different promotion thresholds, generated by the fact that women face greater child-rearing costs.

### 9.3 Adverse child consequences at work

Last, we examine firm attitudes towards lawyers who have children. If firms indeed have different promotion thresholds based on parental status, then it is not surprising for lawyers to experience negative consequences at work. The Wave 2 survey asks whether the respondent experienced any adverse outcomes at work after becoming a parent. Table 13 highlights the results for four negative outcomes: delay in promotion, questioning of commitment to work, loss of challenging assignments, and loss of clients. While 5 percent of male lawyers report experiencing a delay in promotion after having a child, female lawyers are four times more likely to be penalized even after controlling for the lawyer's demographic characteristics, ability proxies and predicted intensity level, job characteristics, and division of child-care responsibilities. Female lawyers are ten times more likely than males to lose challenging assignments and three times more likely to lose clients. The loss of clients and challenging assignments have far-reaching consequences as they may affect future career trajectories and promotions. Interestingly, a relatively large percentage of male lawyers also report being questioned about their commitment to work after becoming a father (13.4 percent), but they do not seem to experience negative effects in terms of job assignments or promotions like their female peers. We also examine the consequences for equity partners, in case our results capture a "disgruntled employee" effect. But the estimates are very similar. The gender difference in promotion delay is smaller among equity partners, which is unsurprising as these lawyers are already promoted, but the loss of clients is larger, which is a bigger issue for equity partners who are expected to bring in new business.

## 10 Conclusion

A growing body of evidence shows that the adverse effect of children on career advancement falls disproportionately on women. We predict that women will respond by delaying family formation more than men. We test this theory using detailed survey data on a nationally representative sample of lawyers. We find considerable evidence that female lawyers are more likely than men to wait until after the partnership decision to have their first child, and these results are more pronounced among women who have the greatest chance of making partner. We mitigate concerns about gender-based selection into occupations by leveraging the

richness of our data and conducting a factor analysis to construct measures of latent preferences that drive selection into different types of jobs. Our findings are not explained by gender differences in marriage timing or in spousal occupation. Moreover, we do not find a gender difference in completed fertility, suggesting that family-size preferences are not driving our results.

We explore two main mechanisms for our results. The first is that women face a greater career cost of having children. Consistent with the literature, we find that this trade-off is influenced by spousal income, family-friendly work conditions, and gender norms (Schaller, 2012; Bertrand, Kamenica, and Pan, 2013; Adda, Dustmann, and Stevens, 2016). A contribution of this paper is the consideration of an additional mechanism that affects female fertility decisions differently from male's: the possibility that firms have higher promotion thresholds for mothers because gender predicts child-related career interruptions. We find evidence in support of this mechanism. Not only are equity partners who were mothers at the time of promotion of higher ability, on average, than their male counterparts, but females are less likely to be promoted even conditional on measures such as billed hours and caseload. Women are also more likely to experience negative consequences at work after having a child, including a questioning of commitment to work and loss of challenging assignments.

One research question that stems from this paper is whether law firms assign less-desirable tasks to women - even before they have children - because gender predicts child-related career interruptions. This empirical question is consistent with the theory that firms endogenously invest less in the career development of workers who are more likely to experience work disruptions (Milgrom and Oster, 1987; Barron, Black and Loewenstein, 1993; Lehmann, 2013). Future work should explore this possible channel of statistical discrimination.

Another potential research topic is to better understand the complex relationship between workplace flexibility and fertility. This is analogous to Goldin's charge (2014) to address the "last chapter" in eliminating the gender pay gap. Significant progress has been made over the past fifty years in closing the gap between men and women in terms of college majors and occupations. Due to shrinking gender differences in labor force participation and hours-worked, the gender wage gap is now essentially a motherhood gap. This paper adds to the literature by focusing on non-pecuniary costs of career advancement. Our findings make clear that the current focus on the gender wage gap understates the level of gender disparity in the labor market.

# References


Aakvik, A., Heckman, J. J., & Vytlacil, E. J. (2005). Estimating treatment effects for discrete outcomes when responses to treatment vary: An application to Norwegian vocational rehabilitation programs. *Journal of Econometrics*, *125*(1), 15–51.

Aaronson, D., Lange, F., & Mazumder, B. (2014). Fertility transitions along the extensive and intensive margins. *American Economic Review*, *104*(11), 3701–3724.

Abbring, J. H., & Heckman, J. J. (2007). Econometric evaluation of social programs, Part III: Distributional treatment effects, dynamic treatment effects, dynamic discrete choice, and general equilibrium policy evaluation. *Handbook of Econometrics*, *6B*, 5145–5303.

Acemoglu, D., & Pischke, J.-S. (1998). Why Do Firms Train? Theory and Evidence. *Quarterly Journal of Economics*, *113*(1), 79–119.

Acemoglu, D., & Pischke, J.-S. (1999). Beyond Becker: Training in Imperfect Labour Markets. *The Economic Journal*, *109*(453), 112–142.

Adda, J., Dustmann, C., & Stevens, K. (2016). The Career Costs of Children. *Journal of Political Economy*.

ALM Legal Intelligence. (October 2012). Moving Up The Ladder: Newly-Promoted Partners In Large Law Firms.

Altonji, J. G., & Blank, R. M. (1999). Race and gender in the labor market. *Handbook of Labor Economics*, *3*, 3143–3259.

Altonji, J. G., & Pierret, C. R. (2001). Employer learning and statistical discrimination. *Quarterly Journal of Economics*, 313-349.

American College of Obstetricians and Gynecologists. (March 2014). Female age-related fertility decline. *Committe Opinion*, *589*.

Angelov, N., Johansson, P., & Lindahl, E. (2016). Parenthood and the gender gap in pay. *Journal of Labor Economics*, *34*(3), 545–579.

Antecol, H., Bedard, K., & Stearns, J. (2016). Equal but Inequitable: Who Benefits from Gender-Neutral Tenure Clock Stopping Policies?

Autor, D. H., Dorn, D., & Hanson, G. H. (2015). The labor market and the marriage market: How adverse employment shocks affect marriage, fertility, and children's living circumstances.

Azmat, G., & Ferrer, R. (2015). Gender gaps in performance: Evidence from young lawyers. *CEP Discussion Paper*, *No 1136*.

Barron, J. M., Black, D. A., & Loewenstein, M. A. (1993). Gender differences in training, capital, and wages. *Journal of Human Resources*, 343–364.

Becker, G. S. (1960). An economic analysis of fertility. In *Demographic and Economic Change in Developed Countries* (pp. 209–240). Columbia University Press.

Becker, G. S. (1965). A Theory of the Allocation of Time. *The Economic Journal*, *75*(299), 493–517.

Bertrand, M., Goldin, C., & Katz, L. F. (2010). Dynamics of the gender gap for young professionals in the financial and corporate sectors. *American Economic Journal: Applied Economics*, *2*, 228-255.

Bertrand, M., Kamenica, E., & Pan, J. (2015). Gender identity and relative income within households. *Quarterly Journal of Economics*, *571*, 614.

Black, D. A., & Smith, J. A. (2006). Estimating the returns to college quality with multiple proxies for quality. *Journal of Labor Economics*, *24*(3), 701–728.

Blau, F., & Kahn, L. (2016). The Gender Wage Gap: Extent, Trends, and Sources. *Journal of Economic Literature*.

Blundell, R., & MaCurdy, T. (1999). Labor supply: A review of alternative approaches. *Handbook of Labor Economics*, *3*, 1559–1695.

Bolck, A., Croon, M., & Hagenaars, J. (2004). Estimating latent structure models with categorical variables: One-step versus three-step estimators. *Political Analysis*, 3–27.

Buckles, K. (2008). Understanding the returns to delayed childbearing for working women. *American Economic Review: Papers & Proceedings*, *98*(2), 403–407.

Card, D., Cardoso, A. R., & 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*.

Carneiro, P., Hansen, K. T., & Heckman, J. J. (2003). Estimating Distributions of Treatment Effects with an Application to the Returns to Schooling and Measurement of the Effects of Uncertainty on College. *Interational Economic Review*, *44*(2).

Cigno, A., & Ermisch, J. (1989). A microeconomic analysis of the timing of births. *European Economic Review*, *33*(4), 737–760.

Croon, M. (2002). Using Predicted Latent Scores in General Latent Structure Models. In G. Marcoulides & I. Moustaki (Eds.), *Latent Variable and Latent Structure Models* (p. 195-223). Mahwah, NJ: Erlbaum Associates.

Del Bono, E., Weber, A., & Winter-Ebmer, R. (2012). Clash of career and family: Fertility decisions after job displacement. *Journal of the European Economic Association*, *10*(4), 659–683.

Devlieger, I., Mayer, A., & Rosseel, Y. (2016). Hypothesis testing using factor score regression: A comparison of four methods. *Educational and Psychological Measurement*, *76*(5), 741–770.

Fama, E. F. (1980). Agency Problems and the Theory of the Firm. *Journal of Political Economy*, 288–307.

Francesconi, M. (2002). A joint dynamic model of fertility and work of married women. *Journal of Labor Economics*, *20*(2), 336–380.

Gallen, Y. (2015). The Gender Productivity Gap.

Gayle, G.-L., & Golan, L. (2012). Estimating a dynamic adverse-selection model: Labour-force experience and the changing gender earnings gap 1968–1997. *The Review of Economic Studies*, *79*(1), 227–267.

Gronau, R. (1973). The effect of children on the housewife's value of time. *Journal of Political Economy*, *81*(2, Part 2), S168–S199.

Harris, I. D., Fronczak, C., Roth, L., & Meacham, R. B. (2011). Fertility and the Aging Male. *Reviews in Urology*, *13*, e184–e190.

Heckman, J., & Navarro-Lozano, S. (2004). Using matching, instrumental variables, and control functions to estimate economic choice models. *Review of Economics and Statistics*, *86*(1), 30–57.

Heckman, J., Pinto, R., & Savelyev, P. (2013). Understanding the mechanisms through which an influential early childhood program boosted adult outcomes. *American Economic Review*, *103*(6), 2052–2086.

Heckman, J. J., Stixrud, J., & Urzua, S. (2006). The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior. *Journal of Labor Economics*, *24*(3), 411–482.

Heckman, J. J., & Walker, J. R. (1990). The relationship between wages and income and the timing and spacing of births: Evidence from Swedish longitudinal data. *Econometrica*, 1411–1441.

Herr, J. L. (2012). Measuring the effect of the timing of first birth. *University of California, Berkeley, mimeo*.

Herr, J. L., & Wolfram, C. D. (2012). Work environment and opt-out rates at motherhood across high-education career paths. *Industrial & Labor Relations Review*, *65*(4), 928–950.

Holmström, B. (1999). Managerial incentive problems: A dynamic perspective. *The Review of Economic Studies*, *66*(1), 169–182.

Institute for Women's Policy Research. (March 2016). The Gender Wage Gap. *Fact Sheet*, *C437*.

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

Kleven, H. J., Landais, C., & Søgaard, J. E. (2015). Parenthood and the gender gap: Evidence from Denmark.

Landers, R. M., Rebitzer, J. B., & Taylor, L. J. (1996). Rat Race Redux: Adverse selection in the determination of work hours in law firms. *American Economic Review*, 329–348.

Lang, K., & Manove, M. (2011). Education and labor market discrimination. *American Economic Review*, *101*(4), 1467–1496.

Lazear, E. P., & Rosen, S. (1990). Male-female wage differentials in job ladders. *Journal of Labor Economics*, S106–S123.

Lehmann, J.-Y. K. (2013). Job assignment and promotion under statistical discrimination: Evidence from

the early careers of lawyers.

Lindo, J. M. (2010). Are children really inferior goods? Evidence from displacement-driven income shocks. *Journal of Human Resources*, *45*(2), 301–327.

Low, C. (2016). Pricing the biological clock: Reproductive capital on the U.S. marriage market.

Lu, I. R., & Thomas, D. R. (2008). Avoiding and correcting bias in score-based latent variable regression with discrete manifest items. *Structural Equation Modeling*, *15*(3), 462–490.

Lundborg, P., Plug, E., & Rasmussen, A. W. (2016). Can Women Have Children and a Career? IV Evidence from IVF Treatments. *American Economic Review*.

Major, Lindsey, and Africa (MLA). (2014). Partner Compensation Survey.

McGinn, K. L., & Milkman, K. L. (2013). Looking up and looking out: Career mobility effects of demographic similarity among professionals. *Organization Science*, *24*(4), 1041–1060.

Mead, R. (October 17, 2014). *Cold Comfort: Tech jobs and Egg freezing.* Retrieved from `http://www.newyorker.com/news/daily-comment/facebook-apple-egg-freezing-benefits`

Milgrom, P., & Oster, S. (1987). Job discrimination, market forces, and the invisibility hypothesis. *Quarterly Journal of Economics*, 453–476.

Moffitt, R. (1984). Profiles of fertility, labour supply and wages of married women: A complete life-cycle model. *The Review of Economic Studies*, *51*(2), 263–278.

Mulligan, C. B., & Rubinstein, Y. (2008). Selection, investment, and women's relative wages over time. *Quarterly Journal of Economics*, 1061–1110.

National Association for Law Placement (NALP). (May 2014). New findings on associate hours worked and law firm leverage. *NALP Bulletin*.

National Association for Law Placement (NALP). (October 2014). 2014 Associate Salary Survey Press Release.

Pan, J. (2015). Gender segregation in occupations: The role of tipping and social interactions. *Journal of Labor Economics*, *33*(2), 365–408.

Parsons, S. (October 20, 2014). *Female Tech CEO: Egg-Freezing 'Benefit' Sends the Wrong Message to Women.* Retrieved from `http://www.businessinsider.com/apple-facebook-egg-freezing-benefit-is-bad-for-women-2014-10`

Polachek, S. W. (1981). Occupational self-selection: A human capital approach to sex differences in occupational structure. *Review of Economics and Statistics*, 60–69.

Reuben, E., Wiswall, M., & Zafar, B. (2015). Preferences and Biases in Educational Choices and Labour Market Expectations: Shrinking the Black Box of Gender. *The Economic Journal*.

Ruggles, S., Genadek, K., Goeken, R., Grover, J., & Sobek, M. (2015). Integrated Public Use Microdata Series: Version 6.0 [Machine-readable database].

Sandberg, S. (2013). *Lean In: Women, Work, and the Will to Lead.* Random House.

Sasser, A. C. (2005). Gender differences in physician pay tradeoffs between career and family. *Journal of human resources*, *40*(2), 477–504.

Schaller, J. (2016). Booms, Busts, and Fertility: Testing the Becker Model Using Gender-Specific Labor Demand. *Journal of Human Resources*, *51*(1), 1–29.

Schultz, T. P. (1985). Changing world prices, women's wages, and the fertility transition: Sweden, 1860-1910. *Journal of Political Economy*, *93*(6), 1126–1154.

Skrondal, A., & Laake, P. (2001). Regression among factor scores. *Psychometrika*, *66*(4), 563–575.

Slaughter, A.-M. (2015). *Unfinished Business: Women Men Work Family.* Oneworld Publications.

Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 355–374.

Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *American Economic Review*, *92*(3), 434–459.

The Philadelphia Lawyer. (Winter 2012). Seven years to make partner, lawyers say in survey.

Thomas, M. (2015). The impact of mandated maternity benefits on the gender differential in promotions: Examining the role of adverse selection.

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. (2015). Hours constraints, occupational choice and fertility: Evidence from medical residents.

Wood, R. G., Corcoran, M. E., & Courant, P. N. (1993). Pay differences among the highly paid: The male-female earnings gap in lawyers' salaries. *Journal of Labor Economics*, 417–441.

Table 1: Summary Statistics

| Characteristic | N | Share of Respondents | | | p-value |
|---|---|---|---|---|---|
| | | Everyone | Males | Females | |
| Female | 2,087 | 45.8% | | | |
| Race and ethnicity | 2,061 | | | | |
| White | | 82.2% | 84.0% | 80.2% | 0.04 |
| Black | | 4.1% | 3.1% | 5.3% | 0.01 |
| Hispanic | | 3.5% | 3.3% | 3.8% | 0.46 |
| Asian | | 5.9% | 5.3% | 6.6% | 0.28 |
| Other | | 4.2% | 4.3% | 4.2% | 0.92 |
| U.S. News' 2003 law school ranking | 2,068 | | | | |
| Ranked 1-10 | | 8.8% | 9.1% | 8.6% | 0.74 |
| Ranked 11-20 | | 9.0% | 8.9% | 9.2% | 0.76 |
| Ranked 21-100 | | 49.3% | 49.8% | 48.8% | 0.70 |
| Tier 3 (101-137) | | 17.7% | 16.6% | 19.0% | 0.31 |
| Tier 4 (138-178) | | 13.0% | 13.4% | 12.6% | 0.64 |
| Foreign degree | | 0.5% | 0.1% | 0.9% | 0.07 |
| Unaccredited school | | 1.6% | 2.1% | 1.0% | 0.06 |
| General law review | 2,002 | | | | |
| Member | | 20.7% | 20.8% | 20.5% | 0.89 |
| Editor | | 12.3% | 11.8% | 13.0% | 0.51 |
| Judicial clerkship | 483 | 14.9% | 13.5% | 16.3% | 0.50 |
| Ever-married status | | | | | |
| In early career | 2,066 | 64.8% | 66.9% | 62.3% | 0.09 |
| In late career | 2,056 | 90.2% | 92.0% | 88.1% | 0.02 |
| Have children | 2,087 | | | | |
| By law school graduation year | | 9.4% | 11.7% | 6.7% | 0.00 |
| 10 years after law degree | | 61.0% | 64.5% | 56.8% | 0.00 |
| Birth year (median) | 2,087 | 1972 | 1972 | 1973 | |
| Law school graduation year | 2,087 | 1999.5 | 1999.5 | 1999.5 | 0.63 |
| | | (0.6) | (0.6) | (0.6) | |
| Undergraduate GPA (standardized) | 1,428 | 0.0 | -0.2 | 0.1 | 0.00 |
| Law school GPA (standardized) | 1,277 | 0.0 | 0.0 | 0.0 | 0.24 |
| Number of positions | 1,801 | 3.1 | 3.0 | 3.1 | 0.76 |
| Position length (years) | 1,801 | 4.1 | 4.2 | 4.0 | 0.24 |
| Initial number of cases | 1,199 | 8.3 | 8.3 | 8.3 | 0.67 |
| Early-career weekly hours | 1,695 | 48.2 | 49.7 | 46.3 | 0.00 |
| Early-career salary | 1,904 | $ 82,910 | $ 88,046 | $ 76,698 | 0.00 |
| Late-career salary | 1,869 | $ 165,773 | $ 198,802 | $ 125,082 | 0.00 |
| Mid-career annual billed hours | 771 | 1,549 | 1,622 | 1,434 | 0.01 |

Source: AJD restricted data.

Notes: N is the number of individuals. "Early career" variables are from the Wave 1 survey (2002-2003), "mid career" variables are from the Wave 2 survey (2007-2008), and "late career" variables are from the Wave 3 survey (2012-2013). Salary is total gross annual salary including bonus, profit sharing/equity distribution, and stock options. Billed hours is reported only for those in private law firms.

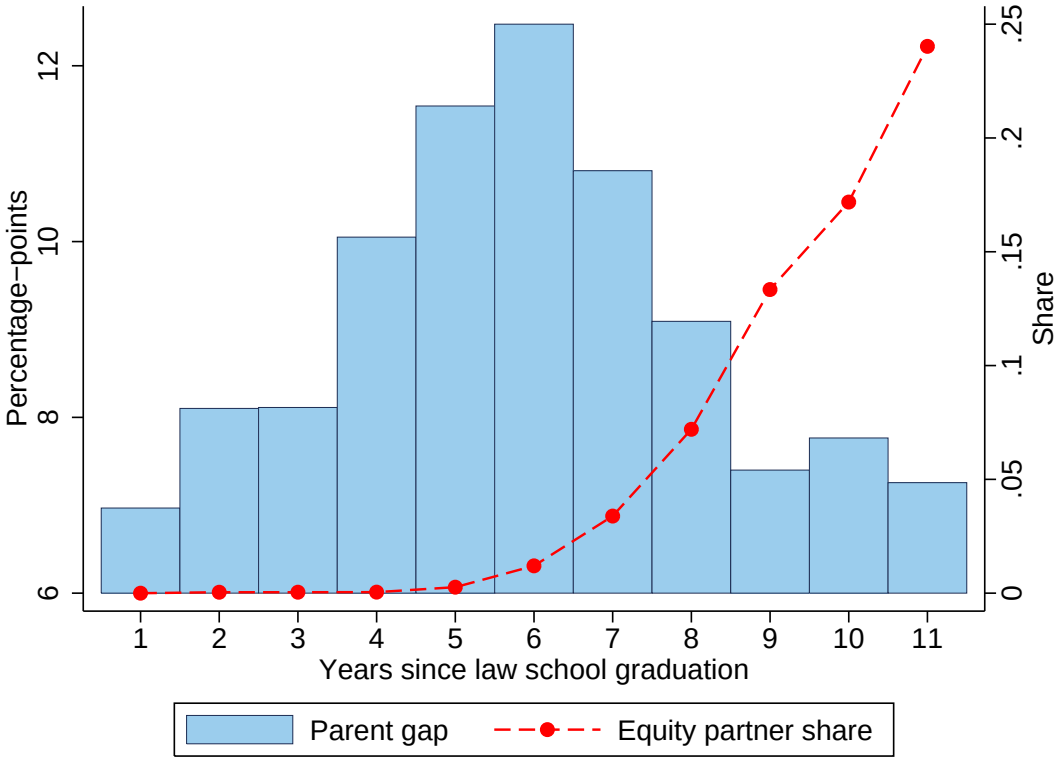
Table 2: Labor Supply and Fertility by Years Since JD

| | Years since law school graduation: | | | | |
|---|---|---|---|---|---|
| | **1** | **3** | **5** | **7** | **10** |
| Share working full-time | | | | | |
| Male | 98.8% | 97.6% | 98.0% | 97.8% | 97.6% |
| Female | 95.8% | 94.5% | 92.0% | 89.4% | 85.4% |
| N | 1,278 | 1,310 | 1,212 | 1,197 | 1,430 |
| Share working in private firm | | | | | |
| Male | 65.5% | 67.9% | 63.1% | 56.4% | 49.9% |
| Female | 60.4% | 62.8% | 56.7% | 48.7% | 43.3% |
| N | 1,477 | 1,619 | 1,597 | 1,597 | 1,651 |
| Share practicing law | | | | | |
| Male | 90.3% | | | 88.0% | 82.1% |
| Female | 89.5% | | | 82.4% | 78.2% |
| N | 2,001 | | | 1,651 | 1,973 |
| Share of equity partners in law firms with 30+ lawyers | | | | | |
| Male | 0.0% | 0.1% | 0.4% | 4.9% | 18.8% |
| Female | 0.0% | 0.0% | 0.0% | 0.9% | 14.4% |
| N | 1,474 | 1,616 | 1,594 | 1,590 | 1,634 |
| Share of parents | | | | | |
| Male | 15.3% | 23.9% | 37.0% | 50.5% | 64.5% |
| Female | 8.4% | 15.8% | 25.5% | 39.7% | 56.8% |
| N | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 |

Source: AJD restricted data.

Notes: N is the number of individuals. Share practicing law are taken from each survey wave with Wave 1 listed under year 1, Wave 2 listed under year 7, and Wave 3 listed under year 10.

Figure 1: Male-Female Difference in Share of Parents Over Time



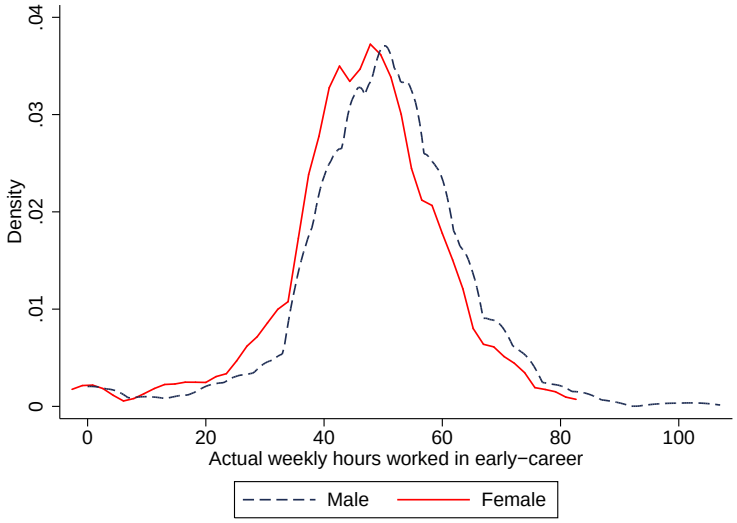

Source: AJD restricted data.
Notes: Equity partner share is the number of equity partners in private law firms with at least 30 lawyers.

Table 3: Fertility Outcomes Among High-Skilled Occupations

| | Age at first child | | Share parent | | N | |
|---|---|---|---|---|---|---|
| **Occupation** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** |
| Economists and market researchers | 30.7 | 29.5 | 60% | 55% | 1,596 | 1,540 |
| Chief executives and legislators/public administration | 30.3 | 29.8 | 76% | 58% | 32,225 | 9,367 |
| Lawyers, and judges, magistrates, and other judicial workers | 31.9 | 32.1 | 77% | 63% | 20,515 | 10,096 |
| Postsecondary Teachers | 32.3 | 30.2 | 64% | 63% | 13,428 | 15,870 |
| Accountants and Auditors | 30.4 | 28.4 | 68% | 67% | 20,965 | 32,970 |
| Pharmacists | 30.7 | 29.6 | 77% | 72% | 3,206 | 2,862 |
| Physicians and Surgeons | 31.8 | 32.2 | 80% | 72% | 17,686 | 6,320 |
| Everyone | 29.3 | 27.7 | 59% | 67% | 2,200,000 | 2,200,000 |

Source: 2000 Census.
Notes: The sample is restricted to 44 year olds. Respondents are classified as parents if there is at least one child living in their household. N is the number of individuals. Everyone includes the universe of occupations.

Figure 2: Distribution of Hours Worked by Gender




Source: AJD restricted data.

Figure 3: Survey Question on the Determinants of Lawyer's Initial Career Choices

**38. Thinking about the principal types of settings in which lawyers work (e.g., government, large law firms, business), how important was each of the following factors in determining the sector in which you began your professional career?** *(Exclude clerkships.) Check one box on each line.*

| | | Not At All Important | | | | | | Extremely Important | NA |
|---|---|---|---|---|---|---|---|---|---|
| **a.** | Medium-to-long-term earning potential | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **b.** | Substantive interest in a specific field of law | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **c.** | Salary to pay off law school debts | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **d.** | Availability of loan repayment assistance or loan forgiveness programs | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **e.** | Opportunity to develop specific skills | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **f.** | Potential to balance work and personal life | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **g.** | Opportunity to do socially responsible work | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **h.** | Prestige of the sector | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **i.** | Opportunities for future career mobility | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **j.** | Other (*Specify:* _____ ) | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |

Source: AJD restricted data.

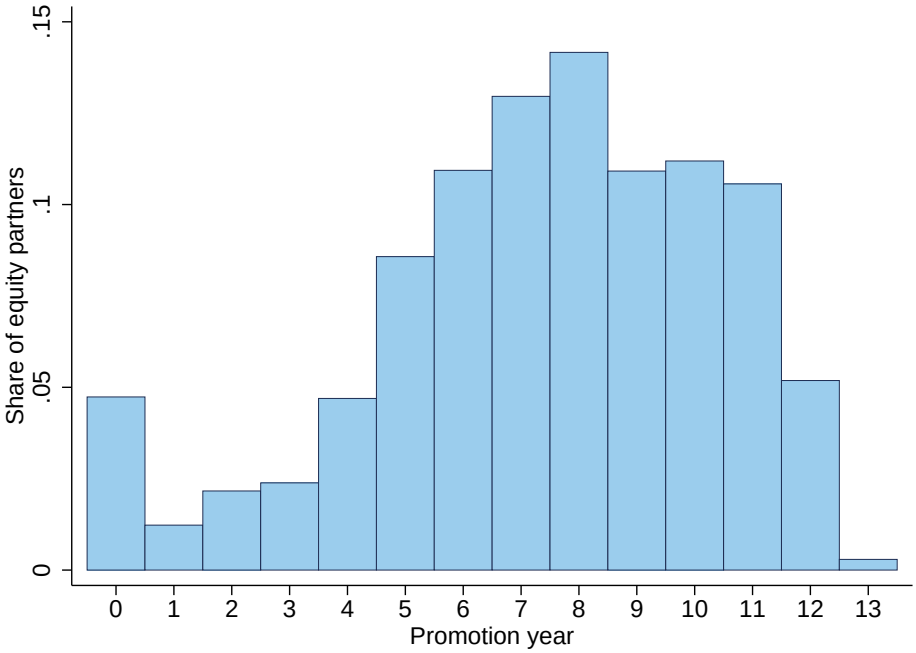
Table 4: Gender Selection into Initial Job

| | **Entry into private law firm** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Female-male difference | -0.0497* | -0.0426 | -0.0347 | -0.0349 | 0.00441 | -0.0214 | -0.0244 | 0.00224 |
| | (0.0299) | (0.0286) | (0.0283) | (0.0284) | (0.0277) | (0.0285) | (0.0277) | (0.0275) |
| Observations | 1,780 | 1,780 | 1,780 | 1,780 | 1,780 | 1,780 | 1,780 | 1,780 |
| Controls for: | | | | | | | | |
| Demographic characteristics | | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Ability proxies | | | Yes | Yes | Yes | Yes | Yes | Yes |
| Income and spousal employment | | | | Yes | Yes | Yes | Yes | Yes |
| Why sector | | | | | Yes | | | Yes |
| Why law | | | | | | Yes | | Yes |
| Why job | | | | | | | Yes | Yes |

Source: AJD restricted data.

Notes: Demographic characteristics account for race and ethnicity, age, law school graduation date, geographic location at time of initial survey, and initial marital status. Ability proxies include standardized undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, and number of bar exam attempts. Spousal employment and income controls include spousal employment status at time of initial survey, and early-career household income. *** p< 0.01, ** p< 0.05, * p< 0.1

Figure 4: Distribution of Equity Partners by Promotion-year




Source: AJD restricted data.
Notes: N = 305.

Table 5: Gender Difference in Early Parenthood and Late Parenthood

| | **Panel A: Early Parenthood** | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Female-male difference | -0.108*** | -0.0772*** | -0.0805*** | -0.0920*** | -0.0803*** | -0.0787*** |
| | (0.0277) | (0.0241) | (0.0239) | (0.0243) | (0.0246) | (0.0247) |
| Observations | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 |
| Controls for: | | | | | | |
| Demographic characteristics | | Yes | Yes | Yes | Yes | Yes |
| Ability proxies | | | Yes | Yes | Yes | Yes |
| Job characteristics | | | | Yes | Yes | Yes |
| Income and spousal employment | | | | | Yes | Yes |
| Factor scores | | | | | | Yes |
| | **Panel B: Late Parenthood** | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Female-male difference | 0.0909*** | 0.0597** | 0.0624*** | 0.0648*** | 0.0572** | 0.0580** |
| | (0.0280) | (0.0240) | (0.0238) | (0.0245) | (0.0248) | (0.0248) |
| Observations | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 |
| Controls for: | | | | | | |
| Demographic characteristics | | Yes | Yes | Yes | Yes | Yes |
| Ability proxies | | | Yes | Yes | Yes | Yes |
| Job characteristics | | | | Yes | Yes | Yes |
| Income and spousal employment | | | | | Yes | Yes |
| Factor scores | | | | | | Yes |

Source: AJD restricted data.

Notes: Probability of early parenthood is 0.51 (males) and 0.40 (females). Probability of late parenthood is 0.44 (males) and 0.53 (females). Early parenthood is defined as having one's first child within the first 7 years after law school. Late parenthood is defined as having one's first child at least 9 years after law school. Demographic characteristics account for race and ethnicity, age, law school graduation date, geographic location at time of initial survey, and initial marital status. Ability proxies include standardized undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, number of initial job offers, and number of bar exam attempts. Job characteristics control for initial firm's size, early-career weekly hours worked, and area of law. Income and spousal employment controls include spousal employment status at time of initial survey, early-career household income, and respondent's early-career salary. Factor scores are: social responsibility, earning potential, prestige, career development, firm's ranking, mission match, and financial security. *** $p< 0.01$, ** $p< 0.05$, * $p< 0.1$

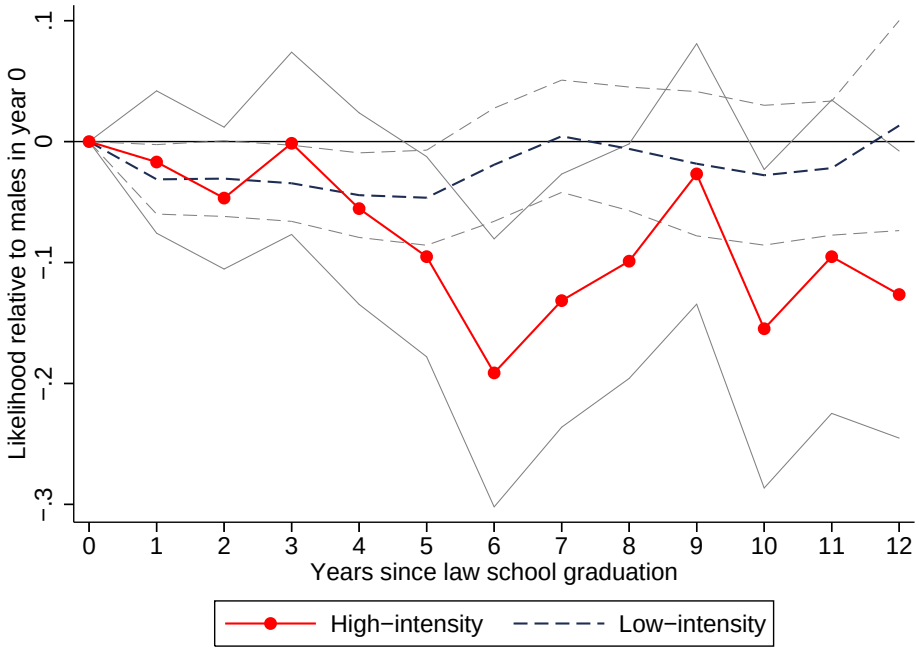
Table 6: Gender Fertility Difference by Intensity Level

| **Panel A: Early Parenthood** | | |
|---|---|---|
| Predicted intensity level | High | Low |
| | (1) | (2) |
| Female-male difference | -0.152*** | -0.0490* |
| | (0.0570) | (0.0275) |
| Avg. male likelihood | 0.61 | 0.45 |
| Avg. female likelihood | 0.40 | 0.40 |
| Observations | 2,087 | |
| Baseline controls | Yes | |

| **Panel B: Late Parenthood** | | |
|---|---|---|
| Predicted intensity level | High | Low |
| | (1) | (2) |
| Female-male difference | 0.120** | 0.0375 |
| | (0.0580) | (0.0274) |
| Avg. male likelihood | 0.34 | 0.49 |
| Avg. female likelihood | 0.54 | 0.53 |
| Observations | 2,087 | |
| Baseline controls | Yes | |

Source: AJD restricted data.
Notes: Early parenthood is defined as having one's first child within the first 7 years after law school. Late parenthood is defined as having one's first child at least 9 years after law school. See notes in Table 5 for description of baseline controls. *** p< 0.01, ** p< 0.05, * p< 0.1

Figure 5: Gender Difference in Hazard of Exiting Childless State




Source: AJD restricted data.
Notes: N = 18,081. This figure depicts each year's contribution to the female's hazard of exiting the childless state relative to male's in year 0, separately for high-intensity and low-intensity lawyers. Lawyers are classified as "high-intensity" if their predicted intensity-level is in the top quartile and as "low-intensity" otherwise. Gray lines are 95% confidence intervals.

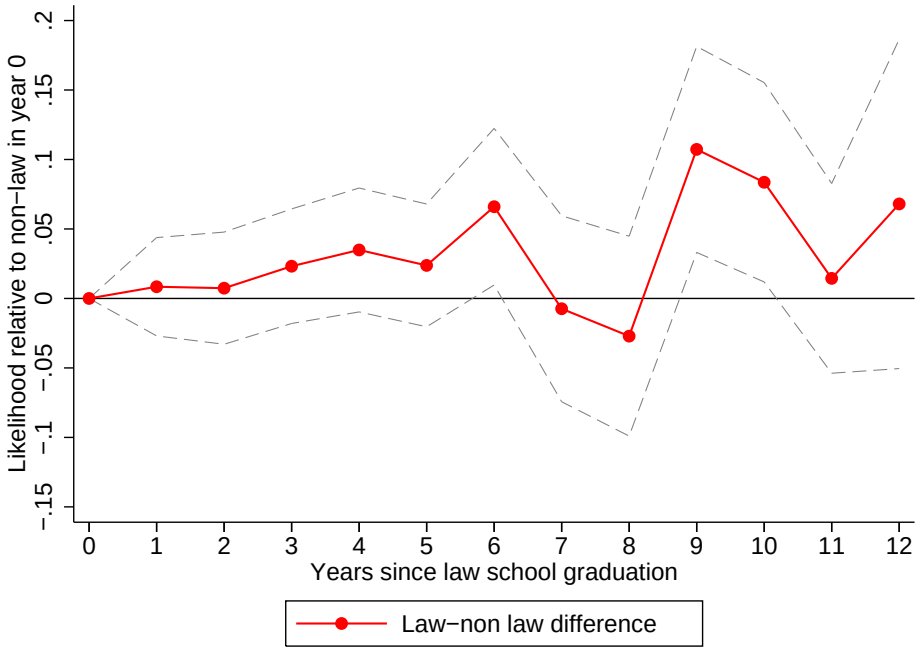
Table 7: Gender Difference in Parent Probability

| | **Pr(Parent)** | | | **Want more children?** | | |
|---|---|---|---|---|---|---|
| Predicted intensity level | | High | Low | | High | Low |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Female-male difference | -0.0253 | -0.0673 | -0.0143 | -0.00810 | 0.0334 | -0.0285 |
| | (0.0248) | (0.0532) | (0.0278) | (0.0271) | (0.0559) | (0.0310) |
| Avg. male likelihood | 0.72 | 0.80 | 0.68 | 0.25 | 0.21 | 0.27 |
| Avg. female likelhood | 0.67 | 0.64 | 0.67 | 0.24 | 0.24 | 0.24 |
| Observations | 2,087 | 2,087 | | 1,730 | 1,730 | |
| Baseline controls | Yes | Yes | | | | |

Source: AJD restricted data.

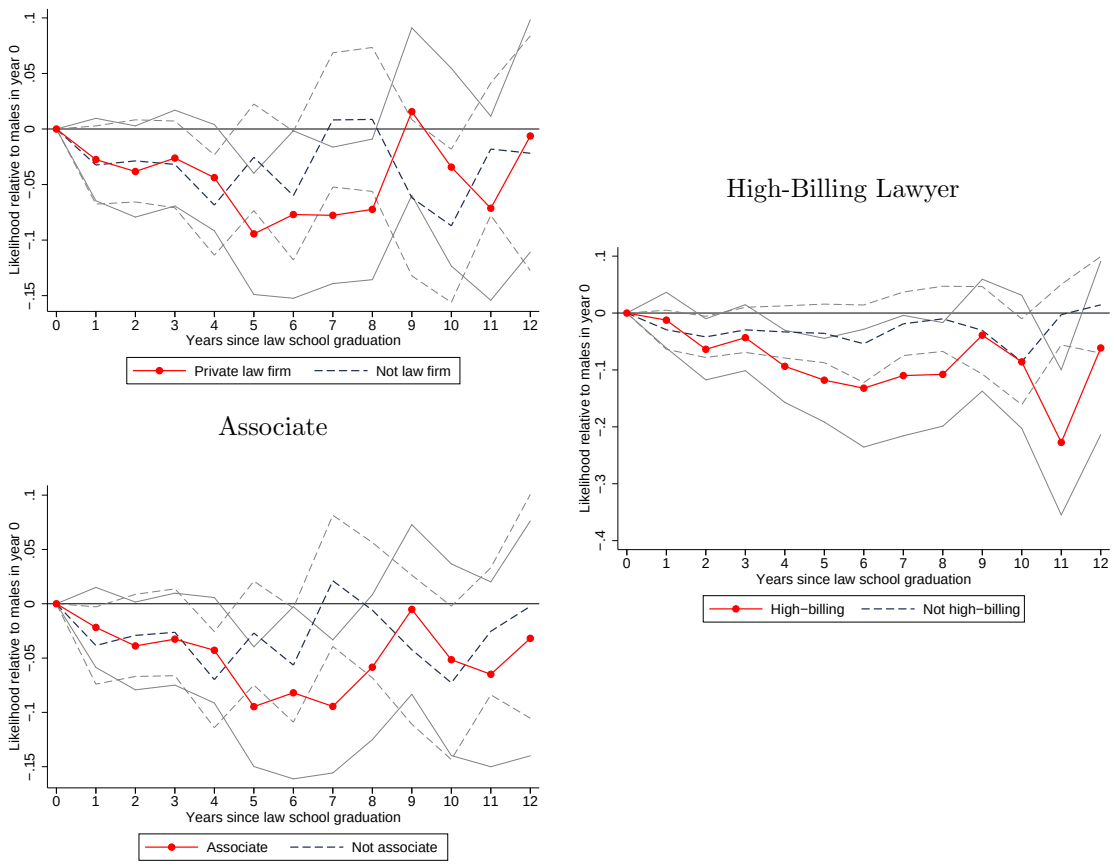
Notes: See notes in Tables 5 for description of baseline controls. Columns (1) and (4) include predicted intensity level as a control. *** p< 0.01, ** p< 0.05, * p< 0.1

Figure 6: Difference in Hazard Rate Between "Law" and "Non-Law" Females



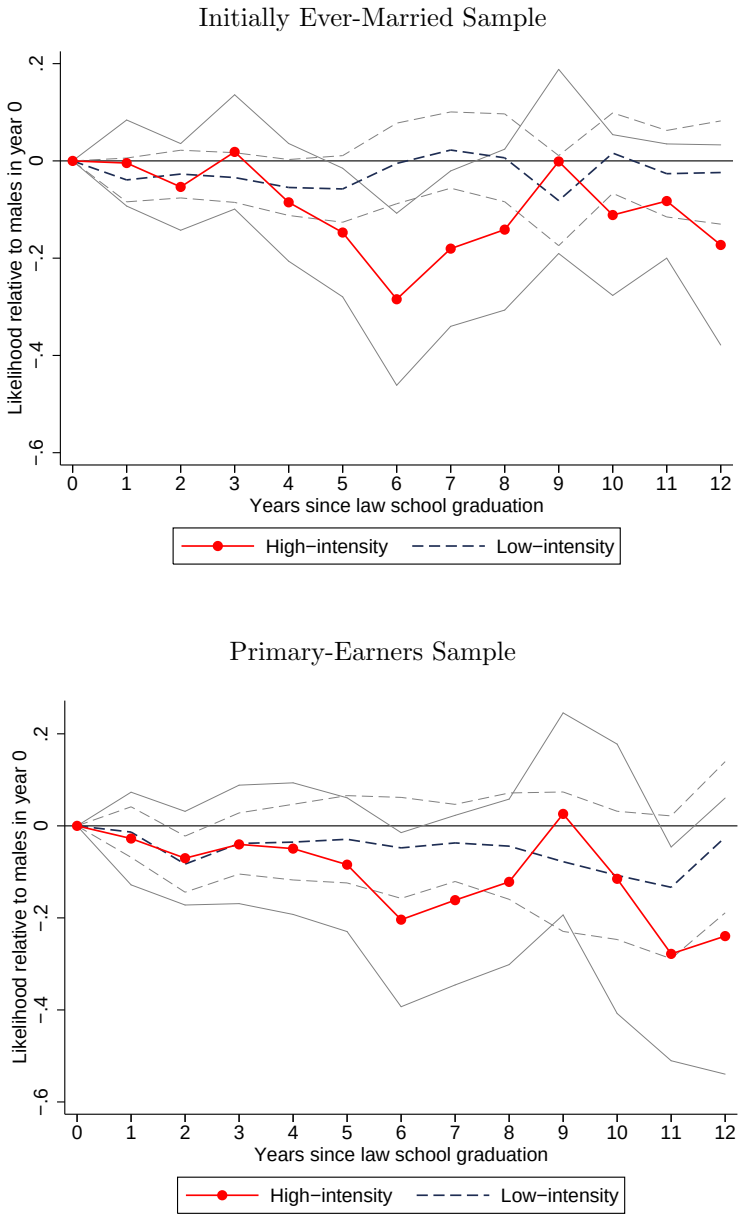

Source: AJD restricted data.
Notes: N = 8,910. This figure depicts each year's contribution to the "law" female's hazard of exiting the childless state relative to "non-law" female's in year 0. "Law" females are those whose first job was at a private law firm. "Non-law" females are those whose first job was not at a private law firm. Gray lines are 95% confidence intervals.

Figure 7: Gender Difference in Hazard Rate by Alternative Work-Intensity Measures



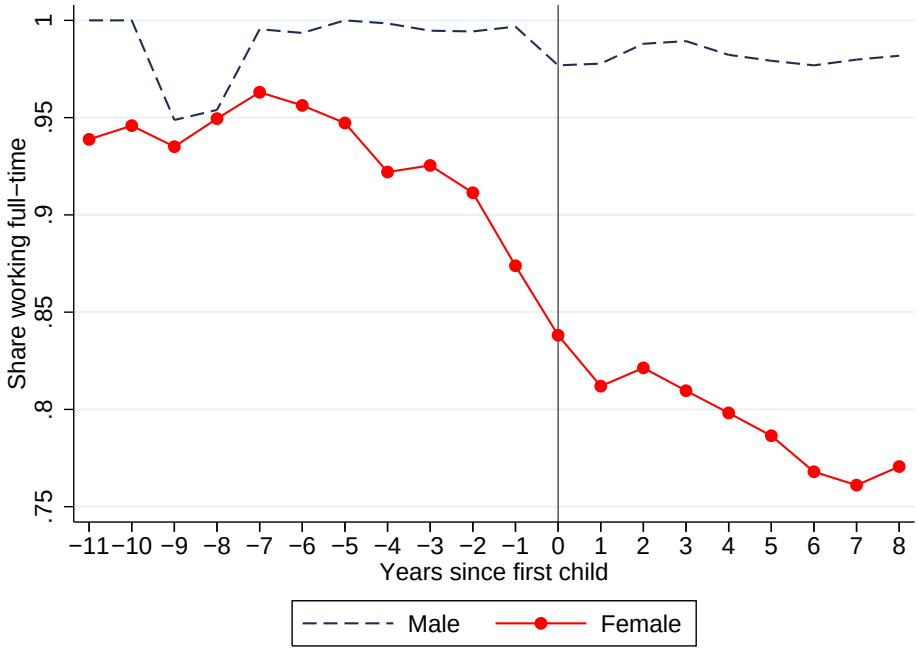

Source: AJD restricted data.
Notes: "Private law firm" and "Associate" classifications are determined using initial job. A lawyer is defined as "high-billing" if his mid-career annual billed hours exceed 1,561 (nine-month billing threshold). Gray lines are 95% confidence intervals.

Figure 8: Gender Difference in Hazard Rate by Sample Subset




Source: AJD restricted data.
Notes: N = 9,297 (intially ever-married sample) and 5,324 (primary-earners sample). These figures depict each year's contribution to the female's hazard of exiting the childless state relative to male's in year 0. "Initially ever-married sample" is those who reported being ever-married in the Wave 1 survey. "Primary-earners sample" is those who earn more than their spouse in the Wave 2 suryve. Lawyers are classified as "high-intensity" if their predicted intensity-level is in the top quartile and as "low-intensity" otherwise. Gray lines are 95% confidence intervals.

Figure 9: Full-Time Status by Birth of First Child




Source: AJD restricted data.

Table 8: Gender Fertility Difference by Spousal Income

**Panel A: Early parenthood**

| Predicted intensity level | High | | Low | |
|---|---|---|---|---|
| Spousal income quartile | Top | Not top | Top | Not top |
| | (1) | (2) | (3) | (4) |
| Female-male difference | 0.126 | -0.317*** | -0.0104 | -0.0445 |
| | (0.149) | (0.0791) | (0.0771) | (0.0464) |
| Avg. male likelihood | 0.55 | 0.79 | 0.56 | 0.63 |
| Avg. female likelihood | 0.64 | 0.40 | 0.57 | 0.57 |
| Observations | 1,296 | | 1,296 | |
| Baseline controls | Yes | | Yes | |

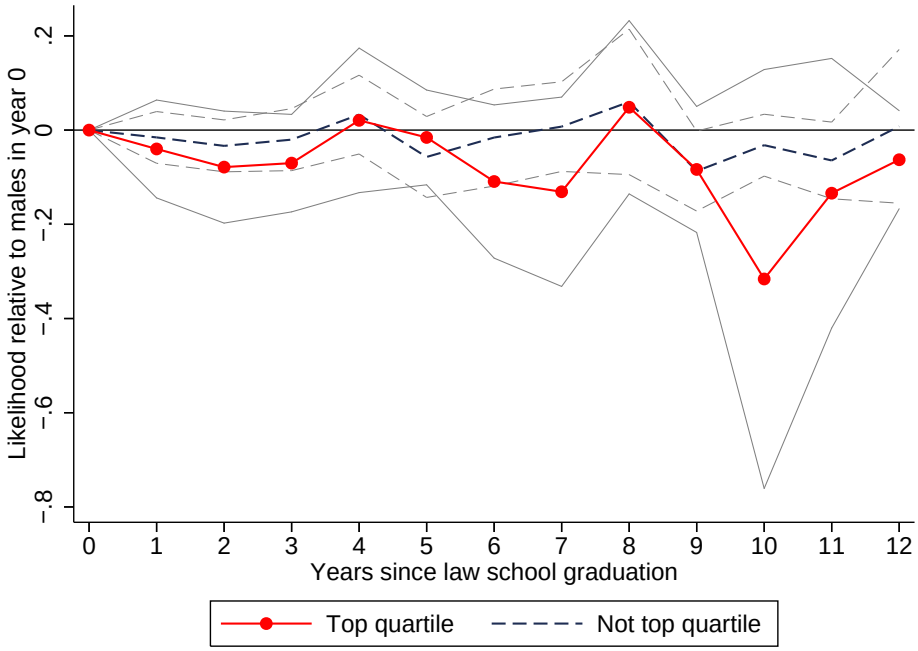
**Panel B: Late parenthood**

| Predicted intensity level | High | | Low | |
|---|---|---|---|---|
| Spousal income quartile | Top | Not top | Top | Not top |
| | (1) | (2) | (3) | (4) |
| Female-male difference | -0.137 | 0.272*** | -0.0674 | 0.0688 |
| | (0.148) | (0.0801) | (0.0724) | (0.0444) |
| Avg. male likelihood | 0.42 | 0.17 | 0.40 | 0.32 |
| Avg. female likelihood | 0.32 | 0.53 | 0.33 | 0.38 |
| Observations | 1,296 | | 1,296 | |
| Baseline controls | Yes | | Yes | |

Source: AJD restricted data.

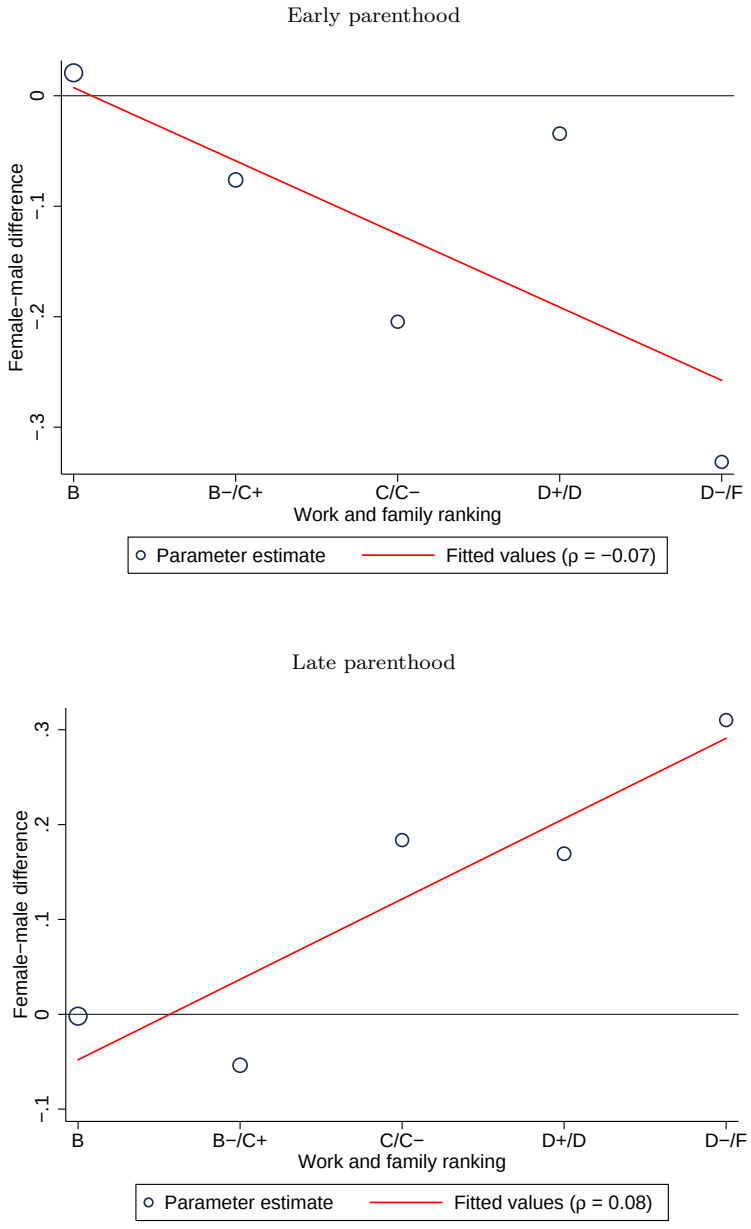
Notes: Early parenthood is defined as having one's first child within the first 7 years after law school. Late parenthood is defined as having one's first child at least 9 years after law school. Spousal-income quartiles are based on early-career income and location. See notes in Table 5 for description of baseline controls. *** p< 0.01, ** p< 0.05, * p< 0.1

Figure 10: Gender Difference in Law Firm Exit by Spousal Income of High-Intensity Lawyers



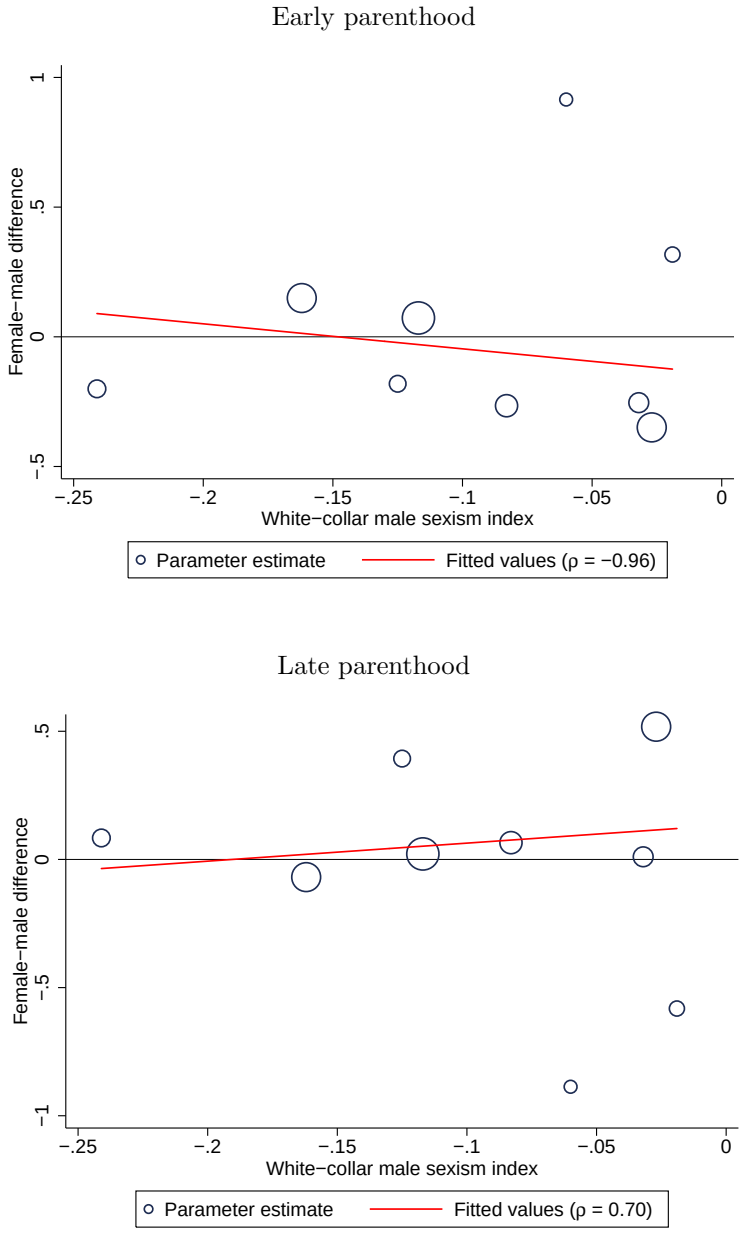

Source: AJD restricted data.
Notes: This figure depicts each year's contribution to the high-intensity female's hazard of exiting the childless state relative to high-intensity male's in year 0. Spousal-income quartiles are based on early-career income and location. Gray lines are 95% confidence intervals.

Figure 11: Gender Fertility Difference by Work & Family Conditions




Source: AJD restricted data, Institute for Women's Policy Research's *Status of Women* 2015 report.
Notes: Work and family conditions are classified by the state's grade and are taken from the Institute for Women's Policy Research's *Status of Women* 2015 report. Grades are assigned using paid leave legislation, elder and dependent care, child care, and the gender gap in parents' labor force participation rates. Size of circles represents the region's population. Fitted values are weighted by population size.

Figure 12: Gender Fertility Difference by Level of Gender Norms




Source: AJD restricted data, Pan (2015).
Notes: Level of gender norms is classified by the Census Region's white-collar male sexism index. This index is constructed from the GSS survey and is taken from Pan (2015). More positive values correspond with more gender-prejudiced attitudes. Size of circles represents the census region's population. Fitted values are weighted by population size.

Table 9: Ability Levels of Equity Partners by Gender and Parental Status

*Panel A: Parent-first sample*

| | **General law review** | | **Judicial** | **Initial** |
|---|---|---|---|---|
| | **Member** | **Editor** | **clerkship** | **caseload** |
| | (1) | (2) | (3) | (4) |
| Female-male difference | 0.250** | 0.290*** | 0.455** | 1.196*** |
| | (0.103) | (0.0912) | (0.205) | (0.433) |
| Avg. male likelihood | 0.22 | 0.12 | 0.20 | 7.91 |
| Observations | 172 | 172 | 39 | 119 |
| Baseline controls | Yes | Yes | Yes | Yes |

*Panel B: Partner-first sample*

| | **General law review** | | **Judicial** | **Initial** |
|---|---|---|---|---|
| | **Member** | **Editor** | **clerkship** | **caseload** |
| | (1) | (2) | (3) | (4) |
| Female-male difference | -0.0546 | -0.0914 | 0.550 | -0.516 |
| | (0.123) | (0.0931) | (1.630) | (0.369) |
| Avg. male likelihood | 0.35 | 0.28 | 0.26 | 8.76 |
| Observations | 109 | 109 | 26 | 76 |
| Baseline controls | Yes | Yes | Yes | Yes |

*Panel C: Everyone*

| | **General law review** | | **Judicial** | **Initial** |
|---|---|---|---|---|
| | **Member** | **Editor** | **clerkship** | **caseload** |
| | (1) | (2) | (3) | (4) |
| Parent-not parent difference | -0.0330 | -0.0650 | 0.0550 | 0.0214 |
| | (0.0700) | (0.0555) | (0.123) | (0.259) |
| Avg. childless lawyer likelihood | 0.28 | 0.22 | 0.20 | 8.61 |
| Observations | 281 | 281 | 65 | 195 |
| Baseline controls | Yes | Yes | Yes | Yes |

Source: AJD restricted data.

Notes: Each column is a separate OLS regression. Sample is subsetted to equity partners in a law firm, and partnership is defined as making equity partner in a private law firm. "Parents-first sample" are lawyers who had children before they became equity partner. "Partners-first sample" are lawyers who had children after they became equity partner. Baseline controls include race and ethnicity, age, law school graduation date, geographic location at time of initial survey, initial marital status, and area of law. Column (3) does not include area of law to increase power. *** p< 0.01, ** p< 0.05, * p< 0.1

Table 10: Ability Levels of Equity Partners by Gender with Child-Care Controls

*Panel A: Parent-first sample*

| | **General law review** | | **Initial** |
|---|---|---|---|
| | **Member** | **Editor** | **caseload** |
| | (1) | (2) | (3) |
| Female-male difference | 0.250** | 0.281*** | 1.242*** |
| | (0.106) | (0.0943) | (0.440) |
| Avg. male likelihood | 0.22 | 0.12 | 7.91 |
| Observations | 172 | 172 | 119 |
| Baseline controls? | Yes | Yes | Yes |
| Control for child-care responsibility | Yes | Yes | Yes |

*Panel B: Partner-first sample*

| | **General law review** | | **Initial** |
|---|---|---|---|
| | **Member** | **Editor** | **caseload** |
| | (1) | (2) | (3) |
| Female-male difference | -0.0443 | -0.0559 | -0.558 |
| | (0.123) | (0.0994) | (0.418) |
| Avg. male likelihood | 0.35 | 0.28 | 8.76 |
| Observations | 109 | 109 | 76 |
| Baseline controls | Yes | Yes | Yes |
| Control for child-care responsibility | Yes | Yes | Yes |

Source: AJD restricted data.
Notes: See notes in Table 9 for description of baseline controls. *** p< 0.01, ** p< 0.05, * p< 0.1

Table 11: Ability Levels of "Early-Parenthood" Lawyers

| | **General law review** | | **Judicial** | **Initial** |
|---|---|---|---|---|
| | **Member** | **Editor** | **clerkship** | **caseload** |
| | (1) | (2) | (3) | (4) |
| Female-male difference | 0.00208 | 0.0477 | 0.0125 | 0.127 |
| | (0.0401) | (0.0326) | (0.0140) | (0.204) |
| Observations | 745 | 778 | 778 | 447 |
| Baseline controls | Yes | Yes | Yes | Yes |

Source: AJD restricted data.
Notes: See notes in Table 9 for description of baseline controls. *** p< 0.01, ** p< 0.05, * p< 0.1

Table 12: Gender Difference in Promotion Probability

| | *Panel A: Everyone* | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Female-male difference | -0.103*** | -0.0905*** | -0.0837*** | -0.0731*** | -0.0700*** | -0.0552*** | -0.0389* | -0.0364* |
| | (0.0234) | (0.0229) | (0.0213) | (0.0210) | (0.0209) | (0.0206) | (0.0199) | (0.0199) |
| Observations | 1,780 | 1,780 | 1,780 | 1,780 | 1,780 | 1,780 | 1,780 | 1,780 |
| | *Panel B: Early parenthood sample* | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Female-male difference | -0.116*** | -0.107*** | -0.0868** | -0.0623* | -0.0662* | -0.0444 | -0.0127 | -0.00780 |
| | (0.0387) | (0.0381) | (0.0363) | (0.0346) | (0.0356) | (0.0374) | (0.0346) | (0.0347) |
| Observations | 806 | 806 | 806 | 806 | 806 | 806 | 806 | 806 |
| Controls for: | | | | | | | | |
| Demographic characteristics | | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Ability proxies | | | Yes | Yes | Yes | Yes | Yes | Yes |
| Job characteristics | | | | Yes | Yes | Yes | Yes | Yes |
| Income and spousal employment | | | | | Yes | Yes | Yes | Yes |
| Parental leave | | | | | | Yes | Yes | Yes |
| Billed hours in mid-career | | | | | | | Yes | Yes |
| Caseload in mid-career | | | | | | | | Yes |

Source: AJD restricted data.

Notes: "Early parenthood sample" consists of lawyers who had their first child within 7 years of the JD. See notes in Table 5 for description of demographic characteristics, ability proxies, job characteristics, and income and spousal employment controls. Parental leave controls include whether or not the lawyer took parental leave for his or her first child and the number of weeks taken. *** p< 0.01, ** p< 0.05, * p< 0.1

Table 13: Gender Difference in Adverse Child Consequences at Work

| | Everyone | | | Equity partners | | |
|---|---|---|---|---|---|---|
| | **Avg male** | **Estimate** | **N** | **Avg male** | **Estimate** | **N** |
| Adverse consequence at work | | | | | | |
| Delay in promotion | 0.047 | 0.198*** | 1,396 | 0.017 | 0.125** | 1,204 |
| | | (0.0277) | | | (0.0539) | |
| Questioning of commitment to work | 0.134 | 0.222*** | 1,388 | 0.057 | 0.272*** | 1,196 |
| | | (0.0334) | | | (0.0739) | |
| Loss of challenging assignments | 0.015 | 0.159*** | 1,404 | 0.010 | 0.155*** | 1,209 |
| | | (0.0212) | | | (0.0514) | |
| Loss of clients | 0.021 | 0.0778*** | 1,395 | 0.019 | 0.157*** | 1,203 |
| | | (0.0203) | | | (0.0559) | |

Source: AJD restricted data.

Notes: Regressions control for race and ethnicity, age, law school graduation date, geographic location at time of initial survey, initial marital status, standardized undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, number of initial job offers, number of bar exam attempts, initial firm's size, early-career weekly hours worked, area of law, mid-career billed hours, spousal employment status at time of initial survey, early-career household income, respondent's early-career salary, and division of child-care responsibilities.
*** p< 0.01, ** p< 0.05, * p< 0.1

# Appendix

# A After the JD study

## A.1 Sampling process

In the first stage of the sampling process, the nation was divided into 18 strata by region and size of the new lawyer population. Within each stratum, one primary sampling unit (PSU) was selected. A PSU can be a metropolitan area, portion of a state outside large metropolitan areas, or the entire state. The PSUs included the four "major" markets, those with more than 2,000 new lawyers (Chicago, Los Angeles, New York, and Washington, D.C.); 5 of the 9 "large" markets, those with between 750-2,000 new lawyers; and nine of the remaining "smaller" markets. In the second stage, researchers sampled individuals from each of the PSUs from databases of individuals addmitted to a bar in 2000. This made up 7,727 individuals. An oversample of 1,465 minority lawyers (Black, Hispanic, and Asian American) yielded a final sample of 9,192 lawyers.

However, 20 percent of the sample could not be located and another 20 percent of those located were identified as lawyers moving from one state bar to another rather than having entered the bar for the first time in 2000. These "movers" were left in the sample as long as they graduated from law school no earlier than 1998. The response rate for Wave 1 was 71 percent, yielding an analysis sample of 4,538 lawyers.

## A.2 Imputation of spousal income trajectory using Census and ACS data

We predict the spousal income trajectory using the three waves of cross-sectional data on spouse's income. However, for respondents who reported spousal income in only one wave or did not report income for an employed spouse, we use Census and ACS data to impute the spouse's income trajectory (288 respondents). This section describes our imputation methodology.

We use the ACS data from years 2001-2014 and 1990 and 2000 Census data. We keep only adults aged between 17 and 64, inclusive. We drop those living in group quarters and unmarried couples. That is, we keep married couples where at least spouse is in the legal profession (OCC2010 code 2100). We also double-check the lawyer's education by dropping those who do not have a graduate degree.

After adjusting the top-coded income responses (we multiply the top-coded value by 1.5), we calculate hourly wages and trim extreme wages (dropping wages that are between \$0-\$1 and greater than 1/35 of the annual maximum weekly wage.

We predict the spousal income using the lawyer's gender, race and ethnicity, and years of experience.

Years of experience is defined as: $\max\{\texttt{Age} - 19 - 5, 0\}$. The reason we have a sparse specification is that the AJD survey has very little information on the spouse; we only know the spouse's employment status and income. We run the following OLS regression model on logged spousal hourly wage:

$$\begin{aligned}\texttt{log(spousal hrly wage)} = \beta_0 &+ \beta_1 \cdot F_i + \beta_2 \cdot R_i + \beta_3 \cdot \left(F_i \times R_i\right) \\ &+ \delta_1 \cdot exp_i + \delta_2 \cdot exp_i^2 + \delta_3 \cdot exp_i^3 + \delta_4 \cdot exp_i^4 \\ &+ \delta_5 \cdot \left(F_i \times exp_i\right) + \delta_6 \cdot \left(F_i \times exp_i^2\right) + \delta_7 \cdot \left(F_i \times exp_i^3\right) + \delta_8 \cdot \left(F_i \times exp_i^4\right) \\ &+ \varepsilon_i\end{aligned} \tag{15}$$

These coefficients are then used to predict spousal income in the AJD data. For respondents who reported spousal income in Wave 1 (2001), we back out what it would have been in the year that the respondent graduated from law school, which was not necessarily in 2001.

## A.3 Comprehensive List of Firm Types

1. Private Law Firm
2. Solo Practice
3. Federal Government
4. State or Local Government
5. Educational Institution
6. Legal Services or Public Defender
7. Public Interest Organization
8. Other Non-Profit
9. Professional Service Firm
10. Other Fortune 1000 Industry/Service
11. Other Business/Industry
12. Labor Union or Trade Association
13. Military
14. Legal Temporary Firm
15. Insurance Company

## A.4 Wave 1 questions on important factors and determinants of respondent's initial career decisions

**40. Comparing specific job offers you received from employers you considered, how important were the following factors in making your choice?** *Check one box on each line.*

I received one offer ➔ **Skip to Question #41 on page 12.**

| | | Not At All Important | | | | | | Extremely Important | NA |
|---|---|---|---|---|---|---|---|---|---|
| **a.** | Salary | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **b.** | Benefits | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **c.** | Office environment/collegiality | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **d.** | Hours expected | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **e.** | Pro bono opportunities | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **f.** | Prospects for advancement | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **g.** | Good match of employer's mission and my own | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **h.** | Location | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **i.** | Size | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **j.** | Prestige | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |
| **k.** | Training/mentorship opportunities | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ | 7 ☐ | ☐ |

**65. How important was each of the following goals in your decision to attend law school?** *Check one box on each line.*

| | | Irrelevant | | | | Very Important |
|---|---|---|---|---|---|---|
| **a.** | Intellectual challenge of law school and the law | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ |
| **b.** | Desire to help individuals as a lawyer | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ |
| **c.** | Desire to develop a satisfying career | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ |
| **d.** | Desire to defer entry into the job market | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ |
| **e.** | Desire for eventual financial security | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ |
| **f.** | Desire to change or improve society | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ |
| **g.** | Becoming influential in a powerful profession | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ |
| **h.** | Desire to build a set of transferable skills | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ |
| **i.** | Other (*Specify:* _____ ) | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ |

# B Factor Analysis

## B.1 Factor Score Regression

This section describes the factor indeterminancy problem that arises when using the two-step process of Factor Score Regression (FSR). In the first step, the scores on the latent variables are predicted using a factor analysis. These scores are referred to as factor scores. In the second step, the factor scores are used in an OLS regression as explanatory variables.

Devlieger, Mayer, and Rossel (2016) show that in a model with a latent independent variable and an observed dependent variable, constructing factor scores using the Regression method in the first-step will yield an unbiased coefficient estimate in the second-step. For the sake of the reader, we reproduce their proof here:

Say the structural equation is:

$$Y = \delta\varphi + \varepsilon \tag{B.1}$$

As $\varphi$ is latent, the following measurement model is used:

$$q = A_q\varphi + \upsilon \tag{B.2}$$

where $q = (Q_1, \cdots, Q_i, \cdots, Q_k)^T$ are vectors of mean-centered proxy variables measuring $\varphi$, $A_q$ is a vector of the factor loadings and $\upsilon$ is a vector of measurement error variables.

In the first step of FSR, we use this measurement system to calculate factor scores for $\varphi$:

$$F_\varphi = \Lambda_\varphi q \tag{B.3}$$

where $F_\varphi = (F_1, \cdots, F_j)$ for $j$ total factors. The factor scores are calculated by multiplying a factor score matrix $\Lambda_\varphi$ with proxy variables $q$. We fix the metric scales of $\varphi$ by fixing one factor loading per latent variable to 1 (also known as unstandardized parameterization). The computation of $\Lambda_\varphi$ depends on the method used for the prediction of the factor score. There is a variety of possible methods; Grice (2001) discusses several options.

In the second step of FSR, a linear regression is performed between the factor scores, resulting in a regression coefficient. In a simple linear regression, the true regression coefficient is defined as follows:

$$\delta = \frac{cov(\varphi, Y)}{var(\varphi)} \tag{B.4}$$

When performing the linear regression with factor scores, the regression coefficient becomes:

$$\beta = \frac{cov(F_\varphi, Y)}{var(F_\varphi)} \tag{B.5}$$

which is not necessarily the same as the true regression coefficient, $\delta$. The relationship between $\delta$ and $\beta$ is depicted as follows:

$$\begin{aligned}
\beta &= \frac{cov(F_\varphi, Y)}{var(F_\varphi)} && \text{(B.6)}\\
&= \frac{cov(\Lambda_\varphi q, Y)}{\Lambda_\varphi \Sigma_q \Lambda'_\varphi} && \text{(B.7)}\\
&= \frac{\Lambda_\varphi cov(q, Y)}{\Lambda_\varphi \Sigma_q \Lambda'_\varphi} && \text{(B.8)}\\
&= \frac{\Lambda_\varphi cov(A_q\varphi + \upsilon, Y)}{\Lambda_\varphi \Sigma_q \Lambda'_\varphi} && \text{(B.9)}\\
&= \frac{\Lambda_\varphi A_q cov(\varphi, Y)}{\Lambda_\varphi \Sigma_q \Lambda'_\varphi} && \text{(B.10)}\\
&= \frac{\Lambda_\varphi A_q cov(\varphi, \delta\varphi + \varepsilon)}{\Lambda_\varphi \Sigma_q \Lambda'_\varphi} && \text{(B.11)}\\
&= \frac{\Lambda_\varphi A_q var(\varphi)}{\Lambda_\varphi \Sigma_q \Lambda'_\varphi}\delta && \text{(B.12)}
\end{aligned}$$

This equation makes clear that the estimated regression coefficient $\beta$ does not necessarily equal $\delta$.

Now we discuss the Regression method of constructing factor scores used to predict $\Lambda_\varphi$. The Regression method gives the following estimate for the factor score matrix:

$$\Lambda_\varphi^R = \Phi A'_q \Sigma_q^{-1} = var(\varphi) A'_q \Sigma_q^{-1} \tag{B.13}$$

This means that $var(F_\varphi)$ can be simplified:

$$\begin{aligned}
var(F_\varphi) &= \Lambda_\varphi^R \Sigma_q \Lambda_\varphi^{R'} && \text{(B.14)}\\
&= \left(var(\varphi) A'_q \Sigma_q^{-1}\right) \Sigma_q \Lambda_\varphi^{R'} && \text{(B.15)}\\
&= var(\varphi) A'_q I \Lambda_\varphi^{R'} && \text{(B.16)}\\
&= \Phi' \Lambda' \Sigma_q^{-1} \Lambda \Phi && \text{(B.17)}\\
&= \Lambda_\varphi^R A_q var(\varphi) && \text{(B.18)}
\end{aligned}$$

Plugging this into the denominator of equation $(B.6)$ yields (the numerator does not change):

$$\beta = \frac{cov(F_\varphi, Y)}{var(F_\varphi)} \tag{B.19}$$

$$= \frac{\Lambda_\varphi A_q var(\varphi)}{\Lambda_\varphi^R A_q var(\varphi)} \delta \tag{B.20}$$

$$= \delta \tag{B.21}$$

## B.2 Exploratory Factor Analysis

This section describes the empirical methodology for our factor analysis. First, we impute missing item responses using gender-specific averages to minimize the number of dropped respondents due to missing reponse. To minimize bias, we impute responses only for those with one or two missing responses in each question set. There are three question sets (Question 38, Question 40, and Question 65), each with 9-11 potential reasons that are to be ranked by the lawyer. (See Appendix A.4 for exact text of the questions.) If the lawyer ranked all but one or two of the potential reasons, then we replace the missing ranking(s) with a gender-specific average ranking. We leave out the "Other" category in our factor analysis as it is too broad to systemically capture a common underlying factor. Question 40, which asks about the important determinants in choosing between multiple job offers, was asked only for those who received more than one job offer. A majority of respondents received multiple job offers (64 percent). But for those with only one offer, we impute their rankings of each potential reason using gender-specific averages. As a robustness check, we use an alternative imputation method where we use individual-specific means. Our main results do not change much.

We run two specifications for the factor analysis. First, we construct scores for everyone in the sample. Second, we construct scores separately for males and females. Our factor analysis finds that there are seven factors that, cumulatively, explain all of the variance in survey responses for all lawyers. The eigenvalues are reported in Table B1. The Kaiser test says that only factors with an eigenvalue of 1.0 or greater are meaningful, which tells us to keep the first five factors. The second test is the scree test (Figure B1). This test uses a graphical method to determine which factors to keep. The criterion is to keep the factors up until the line becomes flat or flatter. According to this visual test, there are seven common factors. We chose to keep the seven factors that explain all of the variance.

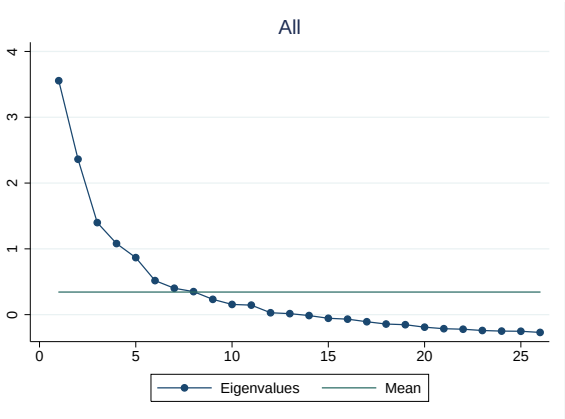
The rotated factor loadings in Table B2 report the correlation between the survey question and the factor. They provide a picture of the most important "factors" in the lawyer's career decisions, as captured by the survey questions and lawyer's responses. Factor analysis is designed to maximize the amount of variation explained by the first factor; each additional factor tries to explain as much leftover variation as possible.

Table B1: Principal factor analysis/correlation for everyone

| Factor # | Eigenvalue | Proportion | Cumulative |
|---|---|---|---|
| 1 | 1.71 | 0.19 | 0.19 |
| 2 | 1.69 | 0.19 | 0.38 |
| 3 | 1.43 | 0.16 | 0.54 |
| 4 | 1.42 | 0.16 | 0.70 |
| 5 | 1.00 | 0.11 | 0.81 |
| 6 | 0.97 | 0.11 | 0.92 |
| 7 | 0.89 | 0.10 | 1.02 |

Source: AJD restricted data.
Note: Only the seven factors with a cumulative proportion reaching 1 are shown. For full results, see the Online Appendix. LR test: independent vs. saturated: chi2(136) = 4062.42 Prob>chi2 = 0.0000

Figure B1: Scree plot




Looking at this table, we define the first factor as social responsibility. The remaining six are classified as: earning potential, prestige, career development, firm's ranking, mission match, and financial security.

Table B2: Rotated factor loadings and unique variances for everyone

| **Survey question** | **Factor1** | **Factor2** | **Factor3** | **Factor4** | **Factor5** | **Factor6** | **Factor7** | **Uniqueness** |
|---|---|---|---|---|---|---|---|---|
| Why sector? | | | | | | | | |
| Medium-to-long-term earning potential | | | | | | | 0.5631 | 0.4761 |
| Substantive interest in a specific field of law | | | | 0.5360 | | | | 0.6488 |
| Salary to pay off law school debts | | | | | | | 0.5205 | 0.6295 |
| Opportunity to develop specific skills | | | | 0.5929 | | | | 0.5300 |
| Potential to balance work and personal life | | | | 0.5213 | | | | 0.5747 |
| Opportunity to do socially responsible work | 0.5063 | | | 0.5257 | | | | 0.3839 |
| Prestige of the sector | | | 0.6920 | | | | | 0.4710 |
| Opportunities for future career mobility | | | 0.5302 | | | | | 0.5599 |
| Why law school? | | | | | | | | |
| Intellectual challenge of law school and the law | | | | | | | | 0.8161 |
| Desire to help individuals as a lawyer | 0.7279 | | | | | | | 0.4430 |
| Desire to develop a satisfying career | | | | | | | | 0.6842 |
| Desire to defer entry into the job market | | | | | | | | 0.8653 |
| Desire for eventual financial security | | | | | | | | 0.6012 |
| Desire to change or improve society | 0.7977 | | | | | | | 0.3491 |
| Becoming influential in a powerful profession | | | | | | | | 0.6721 |
| Desire to build a set of transferable skills | | | | | | | | 0.7716 |
| Why job offer? | | | | | | | | |
| Salary | | 0.7795 | | | | | | 0.3487 |
| Benefits | | 0.7616 | | | | | | 0.3763 |
| Office environment/collegiality | | | | | | | | 0.5728 |
| Hours expected | | | | | | | | 0.5163 |
| Prospects for advancement | | | | | | 0.5142 | | 0.5485 |
| Good match of employer's mission and my own | | | | | | 0.5545 | | 0.5130 |
| Location | | | | | | | | 0.7925 |
| Size | | | | | 0.5536 | | | 0.6219 |
| Prestige | | | 0.4702 | | 0.5083 | | | 0.5005 |
| Training/mentorship opportunities | | | | | | | | 0.6213 |

Source: AJD restricted data.
Notes: Blanks represent loadings where the absolute value is less than 0.4.

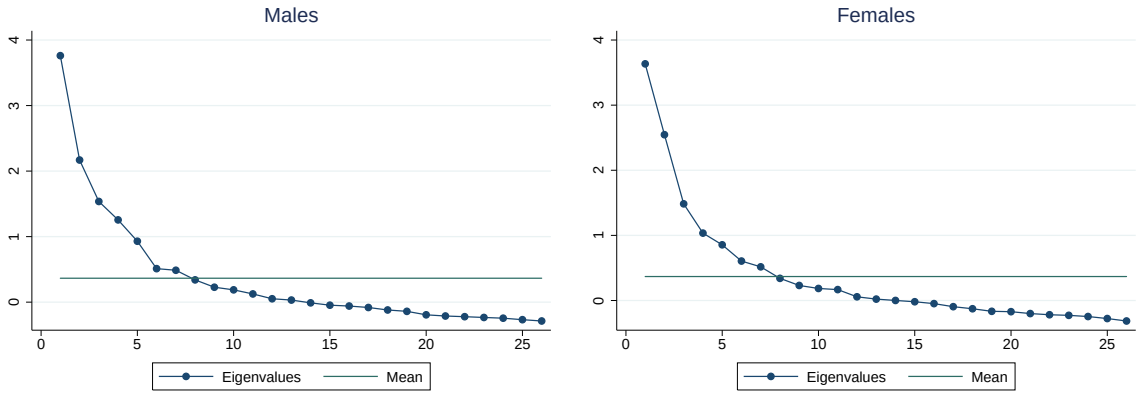
We also conduct our factor analysis separately for males and females to see if there are any gender differences in latent preferences driving career decisions. Our factor analysis again finds seven factors that explain all of the variance in survey responses. The eigenvalues are reported in Table B3. The scree test also confirms that there are seven factors.

Table B3: Principal factor analysis/correlation by gender

| | **Males** | | | **Females** | | |
|---|---|---|---|---|---|---|
| **Factor #** | **Eigenvalue** | **Proportion** | **Cumulative** | **Eigenvalue** | **Proportion** | **Cumulative** |
| 1 | 1.79 | 0.19 | 0.19 | 1.80 | 0.20 | 0.20 |
| 2 | 1.69 | 0.18 | 0.37 | 1.63 | 0.18 | 0.38 |
| 3 | 1.62 | 0.17 | 0.54 | 1.63 | 0.18 | 0.56 |
| 4 | 1.50 | 0.16 | 0.70 | 1.62 | 0.18 | 0.74 |
| 5 | 1.06 | 0.11 | 0.81 | 1.44 | 0.16 | 0.90 |
| 6 | 1.05 | 0.11 | 0.93 | 0.90 | 0.10 | 1.00 |
| 7 | 0.89 | 0.09 | 1.02 | 0.83 | 0.09 | 1.09 |

Source: AJD restricted data.
Note: Only the seven factors with a cumulative proportion reaching 1 are shown. For full results, see the Online Appendix. LR test: independent vs. saturated: chi2(136) = 4062.42 Prob>chi2 = 0.0000

Figure B2: Scree plot




Tables B4 and B5 report the rotated factor loadings for males and females, respectively. Perhaps not surprisingly, the first and most important factor differs by gender. Specifically, males care most about earning potential in making their career decisions while females care most about the office environment and "fit". The factors for men are: earning potential, social responsibility, prestige, career development, financial security, office environment, and career goals. The factors for women are: office environment and "fit", earning potential, social responsibility, prestige, career development, financial security, and stability.

Table B4: Rotated factor loadings and unique variances for males

| **Survey question** | **Factor1** | **Factor2** | **Factor3** | **Factor4** | **Factor5** | **Factor6** | **Factor7** | **Uniqueness** |
|---|---|---|---|---|---|---|---|---|
| Why sector? | | | | | | | | |
| Medium-to-long-term earning potential | | | | | 0.5891 | | | 0.4740 |
| Substantive interest in a specific field of law | | | | 0.5736 | | | | 0.5950 |
| Salary to pay off law school debts | | | | | 0.5356 | | | 0.6387 |
| Opportunity to develop specific skills | | | | 0.6434 | | | | 0.5047 |
| Potential to balance work and personal life | | | | 0.4550 | | 0.4528 | | 0.5465 |
| Opportunity to do socially responsible work | | 0.5490 | | 0.4539 | | | | 0.3692 |
| Prestige of the sector | | | | | | | 0.5580 | 0.4926 |
| Opportunities for future career mobility | | | | | | | 0.4878 | 0.5205 |
| Why law school? | | | | | | | | |
| Intellectual challenge of law school and the law | | | | | | | | 0.7810 |
| Desire to help individuals as a lawyer | | 0.6916 | | | | | | 0.4913 |
| Desire to develop a satisfying career | | | | | | | | 0.7055 |
| Desire to defer entry into the job market | | | | | | | | 0.8482 |
| Desire for eventual financial security | | | | | | | | 0.6264 |
| Desire to change or improve society | | 0.7974 | | | | | | 0.3572 |
| Becoming influential in a powerful profession | | | | | | | | 0.6929 |
| Desire to build a set of transferable skills | | | | | | | | 0.7864 |
| Why job offer? | | | | | | | | |
| Salary | 0.8030 | | | | | | | 0.3152 |
| Benefits | 0.8073 | | | | | | | 0.3071 |
| Office environment/collegiality | | | | | | 0.4604 | | 0.5586 |
| Hours expected | | | | | | 0.6193 | | 0.4843 |
| Prospects for advancement | | | | | | | | 0.5226 |
| Good match of employer's mission and my own | | | | | | | | 0.4994 |
| Location | | | | | | | | 0.7772 |
| Size | | | 0.6223 | | | | | 0.5646 |
| Prestige | | | 0.7093 | | | | | 0.4407 |
| Training/mentorship opportunities | | | 0.5013 | | | | | 0.5686 |

Source: AJD restricted data.
Notes: Blanks represent loadings where the absolute value is less than 0.4.

Table B5: Rotated factor loadings and unique variances for females

| **Survey question** | **Factor1** | **Factor2** | **Factor3** | **Factor4** | **Factor5** | **Factor6** | **Factor7** | **Uniqueness** |
|---|---|---|---|---|---|---|---|---|
| Why sector? | | | | | | | | |
| Medium-to-long-term earning potential | | | | | | 0.5792 | | 0.4704 |
| Substantive interest in a specific field of law | | | | | 0.5153 | | | 0.6672 |
| Salary to pay off law school debts | | | | | | 0.5164 | | 0.5976 |
| Opportunity to develop specific skills | | | | | 0.5728 | | | 0.5345 |
| Potential to balance work and personal life | | | | | 0.5477 | | | 0.5816 |
| Opportunity to do socially responsible work | | | 0.4336 | | 0.5836 | | | 0.3974 |
| Prestige of the sector | | | | 0.7470 | | | | 0.4143 |
| Opportunities for future career mobility | | | | 0.5097 | | | | 0.5662 |
| Why law school? | | | | | | | | |
| Intellectual challenge of law school and the law | | | | | | | | 0.8353 |
| Desire to help individuals as a lawyer | | | 0.7467 | | | | | 0.4160 |
| Desire to develop a satisfying career | | | | | | | | 0.6510 |
| Desire to defer entry into the job market | | | | | | | | 0.8484 |
| Desire for eventual financial security | | | | | | | 0.4986 | 0.5480 |
| Desire to change or improve society | | | 0.7898 | | | | | 0.3483 |
| Becoming influential in a powerful profession | | | | | | | | 0.6356 |
| Desire to build a set of transferable skills | | | | | | | 0.4700 | 0.7204 |
| Why job offer? | | | | | | | | |
| Salary | | 0.7564 | | | | | | 0.3770 |
| Benefits | | 0.7223 | | | | | | 0.4255 |
| Office environment/collegiality | 0.5192 | | | | | | | 0.5852 |
| Hours expected | 0.5224 | | | | | | | 0.5247 |
| Prospects for advancement | 0.5371 | | | | | | | 0.5550 |
| Good match of employer's mission and my own | 0.6168 | | | | | | | 0.5211 |
| Location | | | | | | | | 0.7405 |
| Size | | | | | | | | 0.6411 |
| Prestige | | | | | | | | 0.5281 |
| Training/mentorship opportunities | 0.4987 | | | | | | | 0.6384 |

Source: AJD restricted data.
Notes: Blanks represent loadings where the absolute value is less than 0.4.

Factor analysis assumes that the error terms are governed by a single latent factor, and therefore uses a correlation matrix of observed variables to extract this latent factor. If the observed variables are completely non-collinear, then factor analysis would extract as many as factors as variables from the correlation matrix. That is, each observed variable would be its own factor. A good validity test, therefore, would be one that measures the degree to which the observed variables share a common factor. That is, is the correlation matrix "factorable"?

There are two tests for this. Barlett's test of sphericity calculates the determinate of the matrix, which is then converted to a chi-square statistic and tested for significance. If it is statistically significant, then we can reject the null hypothesis that the observed variables are non-collinear. The determinant of the correlation matrix is 0.001 for both males and females, providing a p-value of 0. Since this is highly statistically significant, we can proceed with factor analysis.

The Kaiser-Meyer-Olkin measure of sampling adequacy test (KMO) tests the validity of the observed variables sharing a common factor. If two variables share a common factor with other variables, their partial correlation, which indicates the unique variance they share, will be small. In particular, the KMO is calculated as follows:

$$KMO = \frac{\sum_i \sum_j r_{ij}^2}{\sum_i \sum_j r_{ij}^2 + (\sum_i \sum_j a_{ij}^2)}$$

Scores between 0.9 and 1.0 are ideal, while scores below 0.6 are "miserable" and factor analysis is not recommended. The table of KMO interpretations is below. Our values of 0.739 for males, 0.745 for females, and 0.754 for everyone is "middling" indicating that the factors extracted will account for a fair amount of variance, but not a substantial amount.

Cronbach's alpha is a rule-of-thumb rather than a statistical test, but it tells us how correlated the set of items being tested are correlated with one latent factor. The rule-of-thumb is that the coefficient should be least 0.50, with it ideally being at 0.70 or higher. The Cronbach's alpha for everyone is 0.777, for males is 0.785, and is 0.767 for females, all above our threshold of 0.70.

Table B6: Robustness checks

| **Robustness tests** | **Male** | **Female** | **Everyone** |
|---:|:---:|:---:|:---:|
| Determinant of correlation matrix | 0.001 | 0.001 | 0.001 |
| Bartlett test of sphericity (p-value) | 0.000 | 0.000 | 0.000 |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | 0.739 | 0.745 | 0.754 |
| Cronbach's alpha | 0.785 | 0.767 | 0.777 |

# Appendix Tables

Table A1: Gender difference in fertility timing with gender-specific factors

| Predicted intensity level | **Early parenthood** | | | **Late parenthood** | | |
|---|---|---|---|---|---|---|
| | | High | Low | | High | Low |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Female-male difference | -0.0846*** | -0.155*** | -0.0557** | 0.0620** | 0.124** | 0.0416 |
| | (0.0249) | (0.0572) | (0.0277) | (0.0251) | (0.0581) | (0.0277) |
| Observations | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 |
| Controls for: | | | | | | |
| Demographic characteristics | Yes | Yes | Yes | Yes | Yes | Yes |
| Ability proxies | Yes | Yes | Yes | Yes | Yes | Yes |
| Job characteristics | Yes | Yes | Yes | Yes | Yes | Yes |
| Income and spousal employment | Yes | Yes | Yes | Yes | Yes | Yes |
| Ambition and Family preference | Yes | Yes | Yes | Yes | Yes | Yes |

Notes: Demographic characteristics include race and ethnicity, age, law school graduation date, geographic location at time of initial survey, and initial marital status. Ability proxies include undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, initial number of job offers, and bar exam attempts. Job characteristics include initial firm's size, initial hours worked, and area of law. *** p< 0.01, ** p< 0.05, * p< 0.1

Table A2: Gender difference in fertility timing with yulized factors

| Predicted intensity level | **Early parenthood** | | | **Late parenthood** | | |
|---|---|---|---|---|---|---|
| | | High | Low | | High | Low |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Female-male difference | -0.0805*** | -0.153*** | -0.0513* | 0.0562** | 0.118** | 0.0360 |
| | (0.0246) | (0.0569) | (0.0276) | (0.0249) | (0.0579) | (0.0276) |
| Observations | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 |
| Controls for: | | | | | | |
| Demographic characteristics | Yes | Yes | Yes | Yes | Yes | Yes |
| Ability proxies | Yes | Yes | Yes | Yes | Yes | Yes |
| Job characteristics | Yes | Yes | Yes | Yes | Yes | Yes |
| Income and spousal employment | Yes | Yes | Yes | Yes | Yes | Yes |
| Yulized factor scores | Yes | Yes | Yes | Yes | Yes | Yes |

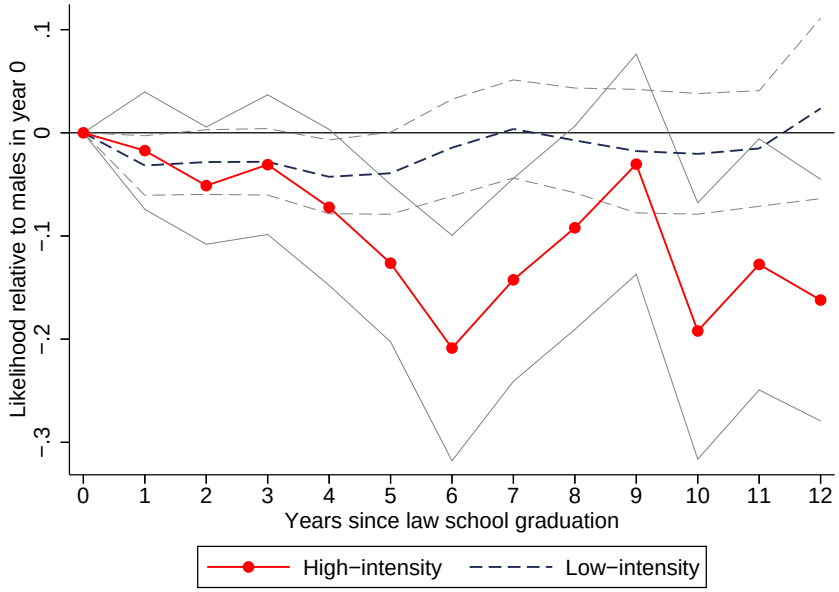
Notes: Demographic characteristics include race and ethnicity, age, law school graduation date, geographic location at time of initial survey, and initial marital status. Ability proxies include undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, initial number of job offers, and bar exam attempts. Job characteristics include initial firm's size, initial hours worked, and area of law. Yulized factors are constructed from residuals of the regression of survey questions against female, race/ethnicity, marital status, number of children, undergraduate and law school GPAs, participation in general law review, judicial clerkships, number of job offers, number of bar exam attempts, licensed status, debt, and intention to practice. *** p< 0.01, ** p< 0.05, * p< 0.1

Table A3: Gender difference in fertility timing with survey questions

| Predicted intensity level | **Early parenthood** | | | **Late parenthood** | | |
|---|---|---|---|---|---|---|
| | | High | Low | | High | Low |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Female-male difference | -0.0894*** | -0.162*** | -0.0623** | 0.0664*** | 0.135** | 0.0481* |
| | (0.0249) | (0.0584) | (0.0269) | (0.0252) | (0.0591) | (0.0267) |
| Observations | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 | 2,087 |
| Controls for: | | | | | | |
| Demographic characteristics | Yes | Yes | Yes | Yes | Yes | Yes |
| Ability proxies | Yes | Yes | Yes | Yes | Yes | Yes |
| Job characteristics | Yes | Yes | Yes | Yes | Yes | Yes |
| Income and spousal employment | Yes | Yes | Yes | Yes | Yes | Yes |
| Why sector | Yes | Yes | Yes | Yes | Yes | Yes |
| Why law | Yes | Yes | Yes | Yes | Yes | Yes |
| Why job | Yes | Yes | Yes | Yes | Yes | Yes |

Notes: Demographic characteristics include race and ethnicity, age, law school graduation date, geographic location at time of initial survey, and initial marital status. Ability proxies include undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, initial number of job offers, and bar exam attempts. Job characteristics include initial firm's size, initial hours worked, and area of law. *** p< 0.01, ** p< 0.05, * p< 0.1

Figure A1: Gender difference in fertility timing by predicted intensity level using work-life balance




Source: AJD restricted data.
Notes: Distributions are plotted for all full-time workers in private law firms with 30+ lawyers and with positive values.

Table A4: Predictive power of predicted intensity measure

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Predicted intensity (standard deviations) | 0.112*** | 0.111*** | 0.101*** | 0.0801*** |
| | (0.0121) | (0.0123) | (0.0120) | (0.0141) |
| Avg. likelihood | | | 0.17 | |
| Observations | 1,780 | 1,780 | 1,780 | 1,780 |
| Controls for: | | | | |
| Demographic characteristics | | Yes | Yes | Yes |
| Ability proxies | | | Yes | Yes |
| Job characteristics | | | | Yes |

Notes: Demographic characteristics include race and ethnicity, age, law school graduation date, geographic location at time of initial survey, and initial marital status. Ability proxies include undergraduate and law school GPAs, U.S. News' 2003 law school ranking, participation in general law review, judicial clerkships, initial number of job offers, and bar exam attempts. Job characteristics include initial firm's size, initial hours worked, and area of law. *** p< 0.01, ** p< 0.05, * p< 0.1

Table A5: Estimating structural break in parent-share growth

| Outcome: Change in share of parents | | | |
|---|---|---|---|
| **Post-JD year index** | **Estimates** | **R2** | **Ajd. R2** |
| 1 | 0.132** | 0.9618 | 0.9482 |
| | (0.0568) | | |
| 2 | 0.0163 | 0.9472 | 0.9283 |
| | (0.0673) | | |
| 3 | -0.0273 | 0.9476 | 0.9289 |
| | (0.0638) | | |
| 4 | -0.0901 | 0.9555 | 0.9396 |
| | (0.0554) | | |
| 5 | -0.0753 | 0.9531 | 0.9364 |
| | (0.0554) | | |
| 6 | 0.130** | 0.9645 | 0.9518 |
| | (0.0495) | | |
| 7 | -0.0559 | 0.9498 | 0.9319 |
| | (0.0625) | | |
| 8 | 0.0159 | 0.9472 | 0.9283 |
| | (0.0673) | | |
| 9 | 0.0792 | 0.9523 | 0.9352 |
| | (0.0635) | | |
| 10 | 0.104* | 0.9567 | 0.9412 |
| | (0.0584) | | |

Source: AJD restricted data.
Notes: N = 20. Regression sample runs from 4 years before JD to 15 years after JD. Estimates are $\beta_1$ from the following regression model: $D_t = \beta_0 + \beta_1 \cdot \mathbb{1}\{T = t\} + \tau + \varepsilon_t$ where $t$ denotes number of years relative to the year of law school graduation, $D_t$ is the change in share of parents from $t-1$ to $t$, and $\tau$ is a quartic time trend. *** p< 0.01, ** p< 0.05, * p< 0.1

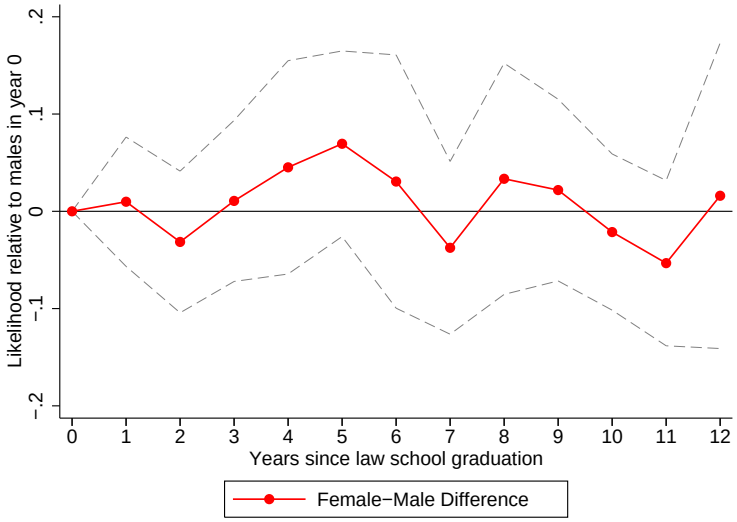
Table A6: Gender difference in parenthood-timing with alternative threshold

| | **Early parenthood** | | | **Late parenthood** | | |
|---|---|---|---|---|---|---|
| Predicted intensity level | | High | Low | | High | Low |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Female-male difference | -0.0671*** | -0.0514 | -0.0627** | 0.0866*** | 0.126** | 0.0670** |
| | (0.0232) | (0.0555) | (0.0260) | (0.0239) | (0.0555) | (0.0267) |
| Avg. male likelihood | 0.35 | 0.34 | 0.27 | 0.55 | 0.51 | 0.66 |
| Avg. female likelihood | 0.25 | 0.25 | 0.21 | 0.67 | 0.70 | 0.71 |
| Observations | 2,087 | 2,087 | | 2,087 | 2,087 | |
| Baseline controls | Yes | Yes | | Yes | Yes | |

Source: AJD restricted data.

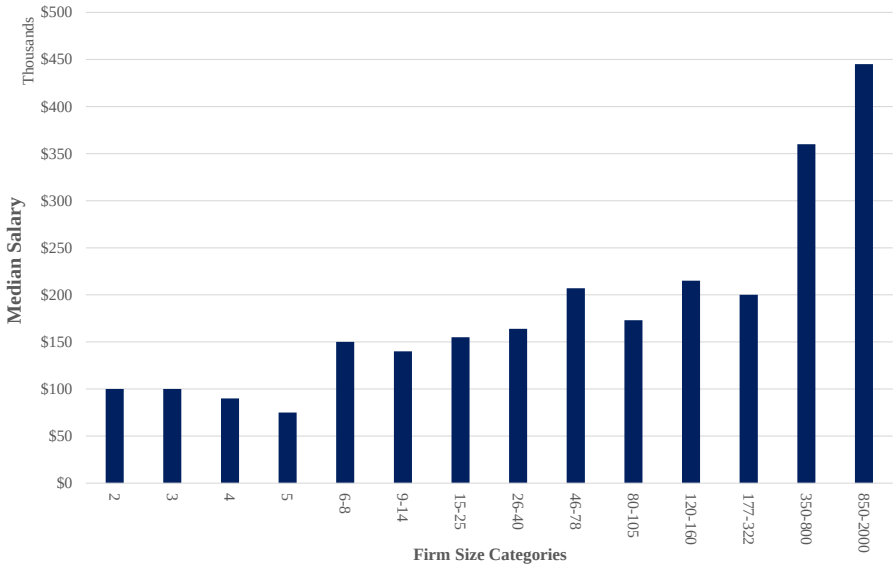
Notes: Early parenthood is defined as having one's first child within the first 5 years after law school. Late parenthood is defined as having one's first child at least 7 years after law school. See notes in Table 5 for description of baseline controls. *** p< 0.01, ** p< 0.05, * p< 0.1

Figure A2: Gender difference in exit likelihood from high-stress firms




Source: AJD restricted data.
Notes: This figure plots the gender difference in hazard of exiting a high-stress firm. High-stress firms are defined as firms with at least 350 lawyers. This threshold was found by comparing the median equity-partner's salary by firm-size (see Table A3 below).

Figure A3: Equity partner's median salary by firm-size



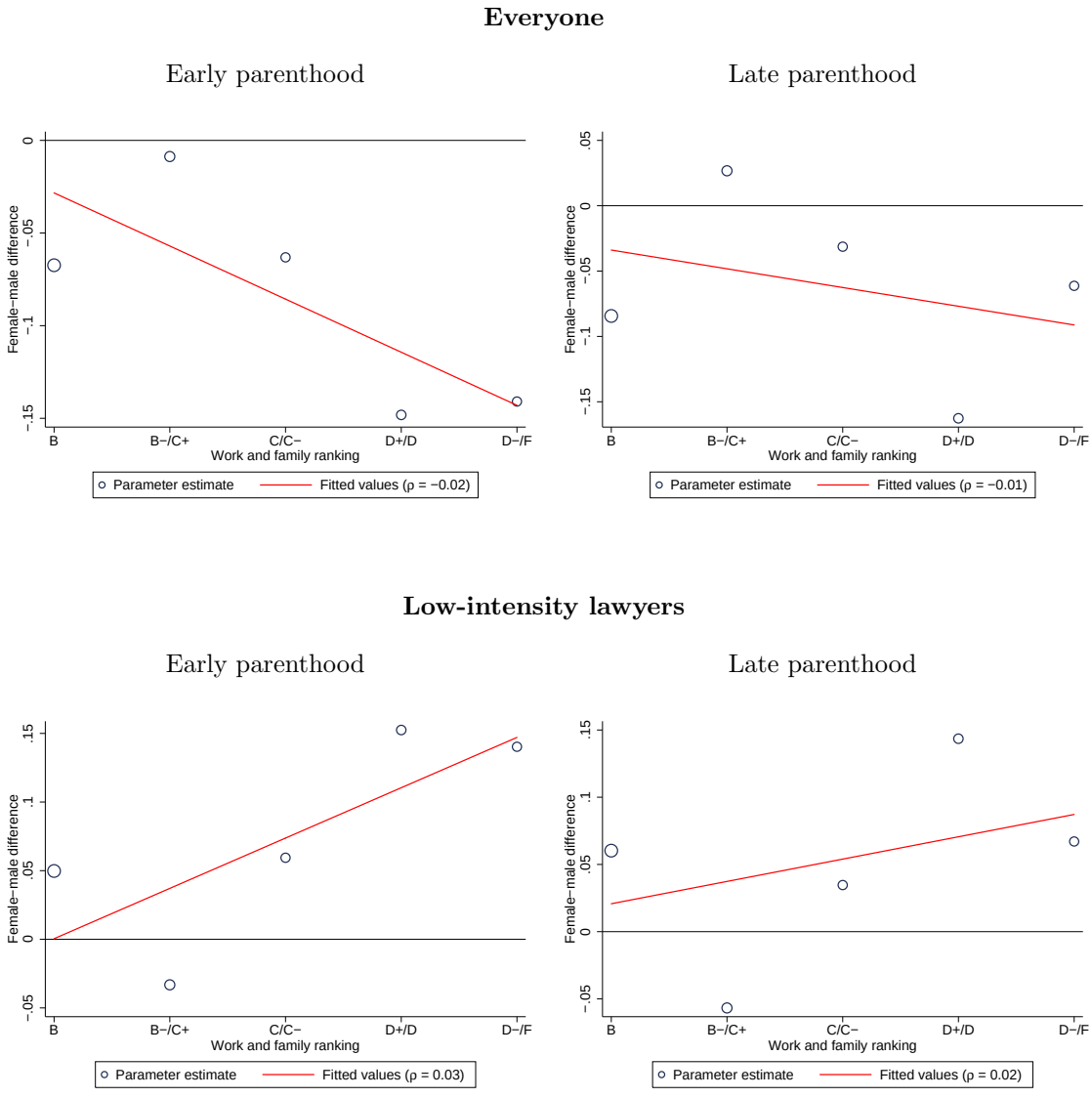

Source: AJD restricted data.
Notes: Firm-size categories were clasffied into 15 quantiles.

Table A7: Geographic regions by work  family conditions

| **Geographic region** | **Grade** |
|---|---|
| New York City, DC, Los Angeles, San Francisco | B |
| New Jersey, Oregon | B- |
| Minneapolis, Oklahoma | C+ |
| Atlanta, Connecticut | C |
| St. Louis, Boston | C- |
| Chicago, Houston | D+ |
| Tennessee | D |
| Florida | D- |
| Indiana, Utah | F |

Source: Institute for Women's Policy Research's *Status of Women* 2015 report.
Notes: State grades for work and family conditions consider paid leave legislation, elder and dependent care, child care, and the gender gap in parents' labor force participation rates.

Figure A4: Gender fertility difference by work and family conditions in geographic region



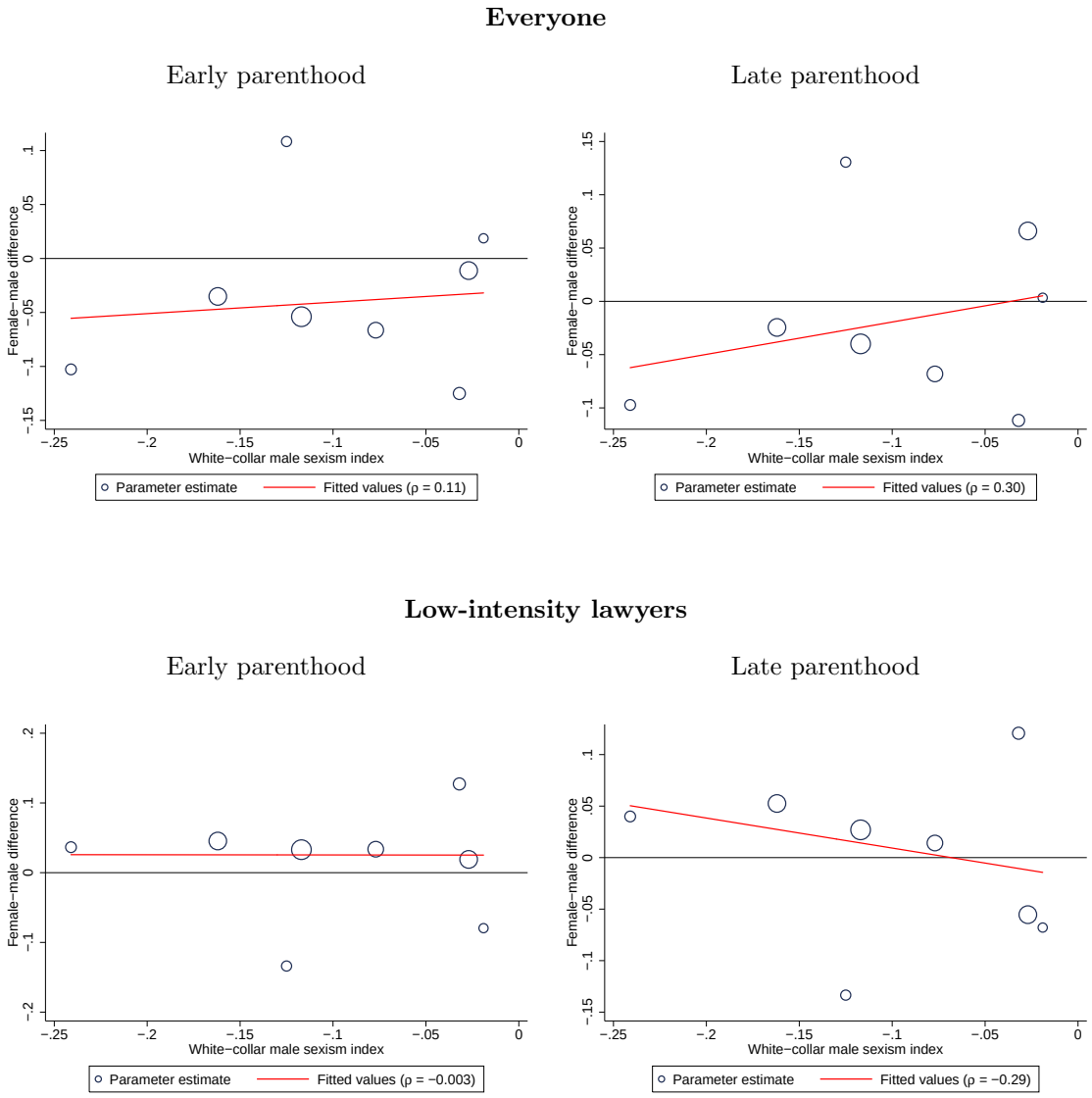

Source: AJD restricted data, Institute for Women's Policy Research's *Status of Women* 2015 report. Notes: State grades for work and family conditions are taken from the Institute for Women's Policy Research's *Status of Women* 2015 report. Work and family conditions consider paid leave legislation, elder and dependent care, child care, and the gender gap in parents' labor force participation rates. Size of circles represent the census region's population. Fitted values are weighted by population size.

Table A8: Census regions by white-collar male sexism index

| **Census region** | **Sexism index** |
|---|---|
| E. South Central (Tennessee) | -0.019 |
| S. Atlantic (DC, Atlanta, Florida) | -0.027 |
| W. South Central (Houston, Oklahoma) | -0.032 |
| Mountain (Utah) | -0.06 |
| Middle Atlantic (New York City, New Jersey) | -0.083 |
| Pacific (Los Angeles, San Francisco, Oregon) | -0.117 |
| W. North Central (Minneapolis) | -0.125 |
| E. North Central (Chicago, Indiana, St. Louis) | -0.162 |
| New England (Boston, Connecticut) | -0.241 |

Source: Pan (2015), Table 5.
Notes: Sexism index is constructed using white-collar male responses from the 1977-1998 GSS data. Positive values depict more sexist attitudes.

Figure A5: Gender fertility difference by level of gender norms in Census region




Source: AJD restricted data, Pan (2015).
Notes: White-collar male sexism index is constructed from the GSS survey and is taken from Pan (2015). Size of circles represent the census region's population. Fitted values are weighted by population size.