To avoid the appearance of sex discrimination that would violate Title VII of the Civil Rights Act, Equal Employment Opportunity Commission (EEOC) guidance coupled with a common misunderstanding of the law have resulted in little or no information about family status being provided in pre-employment interviews. To investigate whether concealing family information actually improves women’s employment prospects, we conducted an original experimental study fielded on more than 3000 subjects. Our study provides the first ever evidence that concealing personal information lowers female applicants’ hiring prospects. Subjects overwhelmingly preferred to hire candidates who provided personal or family information, regardless of content—any explanation improved employment prospects relative to no explanation for an otherwise identical job candidate. Our results are consistent with the behavioral economics theory of ambiguity aversion, which finds that individuals prefer known risks over unknown risks. These findings have broader implications regarding permissible pre-employment questions, as they suggest that restrictions on questions about matters such as criminal history and credit history, both of which are currently targeted by legislatures and by the EEOC for prohibition, may likewise have adverse effects on the classes of workers such restrictions are intended to protect. Finally, our findings suggest that the interactive process model of reasonable accommodation, embodied in the enforcement guidance for the Americans with Disabilities Act, may provide a better model for accommodation of work–family balance.

† Professor of Law and Economics, Vanderbilt Law School, 131 21st Avenue South, Nashville, TN 37203. joni.hersch@vanderbilt.edu. (615) 343-7757.
†† Assistant Professor of Law, Vanderbilt Law School, 131 21st Avenue South, Nashville, TN 37203. jennifer.shinall@vanderbilt.edu. (615) 343-9622. The authors would like to acknowledge the helpful feedback of Christopher Serkin, W. Kip Viscusi, participants in the Vanderbilt Empirical Applied Microeconomics Workshop, participants in the University of Pennsylvania Law, Economics, and Psychology Workshop, participants in the American Law and Economics Association 2016 Annual Meeting, and students in the Vanderbilt Ph.D. program in law and economics. Special thanks to Sarah B. Dalton for outstanding research support.
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INTRODUCTION

Title VII of the Civil Rights Act of 1964 prohibits explicit employment
discrimination on the basis of sex,1 but its efficacy in achieving gender
equality in the workplace remains in doubt.2 Following Title VII’s passage,
women made rapid progress in the workplace,3 yet by the 1990s, progress
began to stall,4 and a seemingly intractable barrier to gender equity has

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2 The role of Title VII in reducing employment discrimination remains contested. For a critical
assessment of the empirical literature examining whether Title VII succeeded in improving labor
market outcomes for those in the protected classes, see generally Joni Hersch & Jennifer Bennett
Shinall, Fifty Years Later: The Legacy of the Civil Rights Act of 1964, 34 J. POL’Y ANALYSIS & MGMT.
424 (2015), which examines the legacy of the Civil Rights Act in terms of its impact on wage,
employment, and segregation outcomes for its five protected classes.
3 Women’s labor force participation grew rapidly in the second half of the 20th century, rising
from 33.9% in 1950 and peaking at 60% in 1999. See BUREAU OF LABOR STATISTICS, U.S. DEP’T
OF LABOR, CHANGES IN MEN’S AND WOMEN’S LABOR FORCE PARTICIPATION RATES (Jan. 10,
D. Blau & Lawrence M. Kahn, The Gender Wage Gap: Extent, Trends, and Explanations 45 (IZA
(documenting “a decline in the unexplained gender wage gap”). See generally Claudia Goldin, The
Quiet Revolution That Transformed Women’s Employment, Education, and Family, 96 AM. ECON. REV.
1 (2006) (documenting the phases of women’s advancement in the labor market); Hersch & Shinall,
supra note 2 (discussing the role of Title VII in women’s improved labor market prospects).
4 See BUREAU OF LABOR STATISTICS, U.S. DEP’T OF LABOR, WOMEN IN THE LABOR
participation among women has declined, to 57.0 percent in 2014 . . . .”). These recent changes in
labor force participation rates have been widely reported and analyzed. See, e.g., Chinhui Juhn &
remained: how to balance work and family. In light of the undeniable reality that men and women do not have equal procreative or childrearing roles, work–family balance is universally perceived as a constraint on employment for women, but not for men. Mechanisms to achieve work–family balance, as a result, must take priority in any realization of workplace equality on the basis of sex. Laws intended to support work–family balance, such as the Pregnancy Discrimination Act and the Family and Medical Leave Act,


6 The current status of childbearing technology limits childbearing to women. Time use studies unambiguously demonstrate that even though fathers have increased their time involvement with childcare, mothers still spend far more time on childcare than fathers—even when both parents are employed full-time. Data on time use, categorized by parental status and sex, are available from the American Time Use Survey. See Press Release, Bureau of Labor Statistics, U.S. Dep't of Labor, Married Parents' Use of Time, 2003–06 (May 8, 2008), http://www.bls.gov/news.release/pdf/atus2.pdf [https://perma.cc/8CF4-TY3W].

7 See generally Joni Hersch, Home Production and Wages: Evidence from the American Time Use Survey, 7 Rev. Econ. Household 159 (2009) (showing a pay penalty for time spent on housework that is larger for women than for men); Joni Hersch & Leslie S. Stratton, Household Specialization and the Male Marriage Wage Premium, 54 INDUS. & LAB. REL. REV. 78 (2000) (showing that married men earn more than otherwise comparable single men); Joni Hersch, Male-Female Differences in Hourly Wages: The Role of Human Capital, Working Conditions, and Housework, 44 INDUS. & LAB. REL. REV. 746 (1991) (demonstrating that home production adversely affects women's earnings but not men's); Joni Hersch, Sex Discrimination in the Labor Market, 2 Found. & Trends Microeconomics 281 (2006) (describing economic models of household decisionmaking that lead women to specialize in home production and men to specialize in market work); Martha S. Hill, The Wage Effects of Marital Status and Children, 14 J. Hum. Resources 579 (1979) (showing that marriage and fatherhood are associated with higher pay for men but not for women); Shelly Lundberg & Elaina Rose, Parenthood and the Earnings of Married Men and Women, 7 Lab. Econ. 689 (2000) (showing that women who exit the workforce for child-related reasons experience a pay penalty).

8 The Pregnancy Discrimination Act of 1978, 42 U.S.C. § 2000e(k) (2012) (expanding the meaning of sex within the statutory text of Title VII in order to prohibit discrimination on the basis of "pregnancy, childbirth, or related medical conditions.

9 The Family and Medical Leave Act (FMLA) of 1993, 29 U.S.C. §§ 2601 (2012), provides up to twelve weeks of unpaid leave for new mothers who are qualified employees working for qualified employers. To qualify as an employee under the FMLA, the employee must have worked for the employer for at least one year and at least 1250 hours. Id. § 2611(2)(A). To qualify as an employer, the
have proven inadequate as a means of equalizing opportunity in the employment relationship. 10  

In the absence of any specific legislative guidance within the text of Title VII regarding how to equalize opportunity, Title VII’s sex discrimination provisions have spawned a series of information restrictions concerning the discussion of work–family matters. These restrictions largely derive from an overly broad reading—and, sometimes, a misreading—of Title VII case law by employers, employees, and even the Equal Employment Opportunity Commission (EEOC), the federal agency entrusted with enforcing the Act. To help employers navigate the issue of marital status inquiries during job interviews, the EEOC provides guidance such as the following: 

Questions about marital status and number and ages of children are frequently used to discriminate against women and may violate Title VII if used to deny or limit employment opportunities.  

It is clearly discriminatory to ask such questions only of women and not men (or vice-versa). Even if asked of both men and women, such questions may be seen as evidence of intent to discriminate against, for example, women with children. 11  

This language warns employers that pre-employment questions about marital status and the number and ages of children risk violation of Title VII. Undoubtedly, this guidance is well-intentioned and instituted in recognition that these factors may be used to discriminate against hiring married women with children. 12 However, law serves not only to establish order and protect  

employer must have at least fifty employees working for at least twenty weeks per year. Id. § 2611(4)(A). The Family and Medical Insurance Leave Act, a bill that would mandate paid maternity leave at the federal level, was introduced in both houses of Congress in 2013 and 2015; each time, however, the bills died in the House Ways and Means Committee and in the Senate Finance Committee. See Family and Medical Insurance Leave Act, H.R. 1439, 114th Cong. (2015), https://www.congress.gov/114/bills/hr1439/BILLS-114hr1439ih.pdf [https://perma.cc/7HJQ-F3ST]; Family and Medical Insurance Leave Act of 2013, H.R. 3712, 113th Cong. (2013), https://www.congress.gov/113/bills/hr3712/BILLS-113hr3712ih.pdf [https://perma.cc/FS7U-UVTD].

10 See, e.g., Charles L. Baum II, The Effect of State Maternity Leave Legislation and the 1993 Family and Medical Leave Act on Employment and Wages, 10 LAB. ECON. 573, 591 (2003) (demonstrating that the FMLA did not increase women’s employment or wages); Christopher J. Ruhm, Policy Watch: The Family and Medical Leave Act, 11 J. ECON. PERSP. 175, 184-85 (1997) (arguing that the FMLA has provided relatively few benefits to employees); Jane Waldfogel, The Impact of the Family and Medical Leave Act, 18 J. POL’Y ANALYSIS & MGMT. 281, 299-300 (1999) (finding that neither women’s employment or wages improved after the FMLA).


12 See, e.g., Jenny Che, 10 Questions Employers Can’t Ask You in a Job Interview, HUFFINGTON POST (Apr. 9, 2015, 4:19 PM), http://www.huffingtonpost.com/2015/04/09/off-limits-questions-job-interviews_n_702659.html [https://perma.cc/TA7D-M374] (“Here are the questions interviewers should never ask but sometimes do anyway: . . . Are you married? . . . Do you have children or plan to?”); Louise Kursmark,
rights, but also to promulgate norms. Current interpretations of Title VII send the message that family life and work life are to remain separate. In contrast, consider many other topics that may naturally arise in the pre-employment setting—athletic pursuits, travel, and hobbies. Discussion of such topics helps employers and applicants understand whether there is a fit with the workplace culture.


See Daniel M. Cable & Timothy A. Judge, Interviewers’ Perceptions of Person–Organization Fit and Organizational Selection Decisions, 82 J. APPLIED PSYCHOL. 546, 555 (1997) (concluding that “interviewers base their [person–organization] fit evaluations on the congruence between their perceptions of applicants’ values and their organizations’ values”); Bradford Cornell & Ivo Welch, Culture, Information, and Screening Discrimination, 104 J. POL. ECON. 542, 562 (1996) (demonstrating that “the hiring decision is influenced not only by the similarity of the applicant’s and the interviewer’s race, sex, or other minority status but also by the similarity of their general background”); Lauren A. Rivera, Hiring as Cultural Matching: The Case of Elite Professional Service Firms, 77 AM. SOC. REV. 999, 1017 (2012) (arguing that hiring is “a process of cultural matching between candidates, evaluators, and firms”); Manuel F. Bagues & María José Pérez Villadóniga, Why Do I Like People Like Me? 3 (Universidad Carlos III de Madrid, Working Paper No. 08-06, 2008) (showing that employers “tend to give a higher valuation to the candidate who excels in the same dimensions as [the employer] does”).
Notably, although employers are prohibited from asking questions about marital status and children in a way that violates Title VII, applicants are in no way prohibited from volunteering such information. Yet, job candidates refrain from doing so. Indeed, it is so widely understood that pre-employment inquiries about family matters are prohibited that applicants may reasonably assume that they too are forbidden from volunteering such personal information and that doing so would undermine their employment prospects. Job applicants' fear of volunteering information about family matters is further compounded by the popular career advice that also discourages such volunteering.  

The processes by which job applicants reach an understanding that family matters are off limits in the workplace derive from two related sources. First, drawing on theories of the expressive value of law, the promulgation of such laws and EEOC guidance informs the public that such questions are discriminatory. A second source derives from the tendency of people to imitate others in deciding whether to obey the law, often without knowledge of the actual legality of the imitated action by the party being imitated. Our situation is conceptually similar in that job applicants and employees are not prohibited from discussing family matters, but the restriction on employers to ask about the topic sends a message that such conversations are off limits, and indeed prohibited, in the employment setting. The practical result of the workplace information restrictions on employers and employees—restrictions that hazily trace their roots to Title VII—is a widespread fear engendered in both employers and employees of discussing family matters in the workplace.

In this Article, we examine the consequences of these workplace information restrictions and argue that a new approach is needed to achieve workplace equity. Specifically, we present findings from an original experimental study designed to identify whether providing information about family matters, as opposed to concealing this information, influences hiring decisions. Our experimental


18 See Bert Huang, Shallow Signals, 126 HARV. L. REV. 2227, 2227 (2013) (“Seeing others act illegally, we gather that a rule is weakly enforced or that its penalty is not serious. But we may be imitating by mistake: what others are doing might not be illegal – for them.”).
design is based on the realistic and statistically valid observation that many women leave the workforce for family reasons, yet wish to reenter the workforce after a period of time. This exit-and-reentry situation provides a plausible framework, given the current legal environment, for examining the role of information about family matters in hiring decisions. Fielded on over 3000 subjects, our study provides evidence—perhaps the first of its kind—that workplace information restrictions may actually serve to stifle, rather than improve, workplace equity. More specifically, our study finds that otherwise identical applicants with a substantial gap in their work history who do not explain the personal family circumstances surrounding their job search are far less likely to be hired than those who do. Furthermore, the content of the reason provided for the job search does not matter; any explanation improves employment prospects relative to no explanation.

Though perhaps counterintuitive, in fact, behavioral economics theory predicts our findings. According to the behavioral tendency known as “ambiguity aversion” or the “Ellsberg Paradox,” named after Daniel Ellsberg, the economist who first posited the theory, individuals prefer known risks over unknown risks, for any given level of risk. Although ambiguity aversion is regarded as a form of economically irrational behavior, it is a widespread

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20 See generally MASON & EKMAN, supra note 5 (discussing strategies for professional women seeking to reenter the workforce after exiting for family reasons); Sylvia Ann Hewlett & Carolyn Buck Luce, Off-ramps and On-ramps: Keeping Talented Women on the Road to Success, 83 HARV. BUS. REV. 43, 46-47 (2005) (discussing the common penalties for women who leave the workforce and later wish to return). News coverage on the prevalence of professional women who exited the workforce for family reasons and seek to reenter is extensive. See, e.g., Jennifer Preston, Back in the Game, N.Y. TIMES, Mar. 18, 2014, at F1. Universities, career counseling firms, and major employers have established programs targeted at professional women seeking to reenter the workforce. See, e.g., New Directions for Attorneys, ELISABETH HAUB SCH. OF L., http://law.pace.edu/newdirections [https://perma.cc/W8XQ-G27U] (giving an example of a university-based program); iRELAUNCH: THE RETURN TO WORK EXPERTS, http://www.irelaunch.com [https://perma.cc/U7WQ-QCRF] (providing an example of a program offered through a career counseling firm); Return to Work, MORGAN STANLEY, http://www.morganstanley.com/people-opportunities/return-to-work.html [https://perma.cc/7ZVN-B8PG] (giving an example of a program offered through a major private employer).


22 Id. at 657 (finding that individuals differentiated between uncertainties based on “the nature of one’s information concerning the relative likelihood of events . . . , a quality depending on the amount, type, reliability and ‘unanimity’ of information, and giving rise to one’s degree of ‘confidence’ in an estimate of relative likelihoods”).
behavioral phenomenon. In the hiring context we examined, we found that subjects preferred to hire the candidate who provided information about family characteristics over the uncertain alternative who offered no such information. The experiment is structured so that the additional information provided is not informative as to the probability that the candidate will be productive; only the ambiguity of the employers’ beliefs is affected.

Although the number of stay-at-home fathers has increased since the 2008 recession, the number still remains quite small compared to the number of stay-at-home mothers. The burdens associated with childcare and home production still largely fall on women, as even today, only one in five fathers with preschool-aged children assume primary caregiving responsibility. The result for employers is that, in contrast to the situation for women, little additional information is provided by discussing men's parental status, so the role of ambiguity with respect to family status is less of an issue when hiring men.

Consequently, we argue that the EEOC guidance discouraging pre-employment questions about family matters has outlived its value—to the extent it ever provided value. Our argument stands in contrast to the positions of several employment discrimination scholars who have recently advocated for increasing blanket family-status protections in the workplace. While their intentions are

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admirable, these scholars, we believe, have failed to consider the practical ramifications of blanket family-status protections in the workplace for mothers seeking a family-friendly career. At the time of passage of the 1964 Civil Rights Act, in the absence of out-of-home childcare, employment of mothers of young children was rare. Now it is entirely the norm. No longer is the question whether a mother will work, but instead what jobs provide a match that allows work–family balance. The practical result of the EEOC guidance—or any policy that discourages an honest discussion of family matters between employees and employers in today’s workplace—is that it suppresses information, which disparately harms women’s employment prospects.

Our employment experiment creates a realistic context to examine the importance of laws that result in the suppression of information with implications that may extend to the role of information exchange in the legal context more generally. To our knowledge, we are the first to examine the influence of ambiguity aversion in the context of employment law. Although our focus in this Article is on the consequences of workplace information restrictions on gender equity in the workplace, the significance of workplace information restrictions is far broader and is relevant not only to women, but to all historically underserved groups protected by employment discrimination laws. For example, two widely advocated proposals to increase workplace equity for disadvantaged groups include restrictions on criminal background checks and credit history checks by employers. Such proposals are simply another


32 See, e.g., N.Y.C. ADMIN. CODE § 8-107 (2016) (“[I]t shall be an unlawful discriminatory practice for an employer, labor organization, employment agency, or agent thereof to request or to use for employment purposes the consumer credit history of an applicant for employment or
form of workplace information restrictions. As a result, the evidence presented in this Article suggests that these restrictions may likewise have adverse consequences on their intended beneficiaries.

In making the argument against such information restrictions in employment, this Article proceeds as follows: Part I highlights the familiar scenario of a worker who regularly confronts the information restrictions that motivate our experimental study—a mother who exited the labor force to care for her children and now wishes to reenter the workplace. This example, not coincidentally, also forms the basis for our experimental study. Part II discusses the evolution of the case law and current EEOC guidance on permissible interview questions—particularly as they relate to reentering stay-at-home mothers—while Part III explains the behavioral economics theory of ambiguity aversion in the context of the ambiguity created by this EEOC guidance. Part IV places our experimental study in the context of prior work on hiring discrimination in economics scholarship and prior experimental work in legal scholarship. Part V details our experimental design, and Parts VI and VII explore our findings and their implications for the current workplace norm against requesting or volunteering information regarding family matters.

I. INFORMATION RESTRICTIONS AT WORK: THE EXAMPLE OF STAY-AT-HOME MOTHERS

Even though workplace information restrictions may impact job applicants and employees of many backgrounds, these restrictions are perhaps most visible and most pervasive as they relate to women in the workplace. Imagine, for example, the case of Amy, an associate at a large law firm.\footnote{This example is loosely based on the story of Amy Beckett, whose struggle to return to work after a career break was documented by Katherine Reynolds Lewis in The Return: A Stay-at-Home Mom Attempts to Go Back to Work After Nearly Two Decades. Can She Revive Her Career?, WASH. POST (Apr. 4, 2010), http://www.washingtonpost.com/wp-dyn/content/article/2010/03/29/AR2010032902620.html [https://perma.cc/4QGL-JYWT].} After the birth of her first child, Amy initially plans to return to work, but later changes her mind due to the short duration of her maternity leave. The next several years bring two additional children and multiple geographic moves to accommodate her husband’s career, and before she knows it, Amy has been out of the labor force for ten years. And yet, Amy is not satisfied to remain a homemaker for the rest of her days; instead, now that her children are school-aged and her husband’s career is more settled in one location, Amy wants to go back to the practice of law.
Like Amy’s decision to stay at home with her children, similar decisions made by other American mothers to exit the workforce may be motivated by a number of factors, including a desire to be present during their children’s formative years, the high cost of childcare, and the lack of federally mandated paid family leave. The choice to become a stay-at-home mother upon the birth or adoption of a child is extremely common—approximately 30% of women with children do not work outside the home—thus, our experimental design reflects a common situation. But stay-at-home mothers do not necessarily view their decision to leave the labor market as permanent; they often view their decision as a career break, rather than a career exit.

For the many mothers like Amy who eventually desire to end their career break—perhaps because their children have gone to school, or perhaps because their financial situation has changed—the road to labor market reentry is uphill and fraught with uncertainty. During their absence, their former industry may have changed, their skills may have become outdated, and their business connections may have dwindled. Yet even the stay-at-home mothers who have avoided these common labor market reentry issues and are ready to jump back into the workforce must confront one unavoidable problem: no matter how impressive their credentials were at the time they left the workforce, their résumés will indicate a gap in their employment history.

As a result, numerous websites and articles are devoted to advising stay-at-home mothers such as Amy on how to effectively reenter the labor market. Instead of being forthcoming with employers, reentering mothers typically are advised to mask employment gaps in their résumés through

34 See 29 U.S.C. § 2611(2)(A) (2012); id. § 2612(c) (providing unpaid family leave).

35 See COHN ET AL., supra note 19, at 5 (reporting that the share of mothers who did not work outside of the home was 29% in 2012); see also Julie L. Hotchkiss, M. Melinda Pitts & Mary Beth Walker, Labor Force Exit Decisions of New Mothers, 9 REV. ECON. HOUSEHOLD 397, 412 (2011) (demonstrating that “declining labor market exit rates among women upon the birth of a child made an about-face in the late 1990s and started to rise”); The Return of the Stay-at-Home-Mother, ECONOMIST 2 (Apr. 19, 2014), http://www.economist.com/news/united-states/21660998-after-falling-years-proportion-mums-who-stay-home-rising-return [https://perma.cc/WDN5-NF24] (reporting the share of mothers who did not work outside the home was 23% in 2000).

36 See, e.g., Hewlett & Luce, supra note 20, at 46–49 (discussing the “penalties” and pitfalls encountered by women who take time out of the labor market to care for children).


strategies such as removing dates from their work history, listing freelance and self-employment projects, and listing volunteer work as employment.\textsuperscript{39} Amy followed this popular advice in her own career search, listing her volunteer experience at her children's school on her résumé. But months of searching and sending out résumés failed to give rise to a full-time job offer, and Amy's only option, if she wanted to take a job, was to accept occasional part-time legal contract work.

Amy's experience, which is based on the true story of Amy Beckett, a lawyer profiled by the Washington Post in 2010,\textsuperscript{40} raises several questions: Are reentering mothers receiving the right career advice? And why should applicants like Amy be reluctant to volunteer that their employment gaps arose from a parenting choice? In part, of course, is concern over stigma associated with failing to conform to the male norm of the dedicated worker who prioritizes work over family. Still, the employment gap is there, and it is real. Failing to acknowledge and explain this gap may only raise questions that it materialized from decisions and behaviors even less associated with labor market success, such as lack of financial or intrinsic motivation for employment,\textsuperscript{41} incarceration, mental illness, or substance abuse.

Of course, in the absence of an applicant volunteering information, employers viewing a résumé like Amy's could instead directly ask about a gap in employment history. But such a question, employers may fear, could be viewed as an implicit question about marital status and children, which is strongly discouraged by the EEOC guidance.\textsuperscript{42} Indeed, as noted in the Introduction, the agency suggests that any such inquiry may be used as "evidence of intent to discriminate" in violation of Title VII.\textsuperscript{43} The conscientious employer will thus refrain from asking anything that might lead to a mention of family matters, and as a result, remain ignorant about the reasons underlying an applicant's résumé gap. And, in the absence of any concrete information, the employer is left to guess whether the gap resulted from simply staying home with children, or from something potentially of concern.


\textsuperscript{40} See Lewis, supra note 33.


\textsuperscript{42} See PRE-EMPLOYMENT INQUIRIES GUIDANCE, supra note 11.

\textsuperscript{43} Id.
As seen in Amy’s case, leaving an employer to guess the reason for an employment gap may not end well for a job applicant, such that even highly qualified candidates may have to scramble to find work upon reentry. In the case of a mother like Amy, the potential for the unintended consequences of information restrictions derived from employment discrimination law is clear. The experimental work detailed in Parts V and VI is intended to evaluate both the magnitude of these consequences and whether they outweigh the benefits provided by such restrictions—in other words, to assess whether the story of Amy is the exception or the rule. Before turning to the experimental work, we first pause to trace the history of these Title VII–based information restrictions, which, despite their inclusion in the EEOC guidance, are not grounded in the plain language of the statute. Understanding the motivations behind these restrictions, and their potential benefits, requires understanding the source.

II. THE ROAD TO IMPERMISSIBILITY FOR FAMILY-STATUS INQUIRIES

Title VII of the 1964 Civil Rights Act prohibits employers from “fail[ing] or refus[ing] to hire or . . . discharg[ing] any individual, or otherwise . . . discriminat[ing] against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual’s race, color, religion, sex, or national origin.”44 The Act does not contain any text about marital status, parental status, or family status. Thus, a plain language reading of the statute might suggest that employers are perfectly within their legal rights to ask questions about family matters during job interviews. In contrast, the EEOC best practices guidance on Title VII advises employers, “Do not ask questions about the applicant’s or employee’s children, plans to start a family, pregnancy, or other caregiving-related issues during interviews or performance reviews.”45 The juxtaposition of the EEOC guidance with the total absence of family-status language in the actual text of Title VII raises two related questions: How did the EEOC decide that family-status inquiries run afoul of Title VII? And how did such a strong norm against such inquiries develop in the U.S. workplace?

The history of the proscription on family-status inquiries by employers begins with an early Supreme Court decision on Title VII, Phillips v. Martin Marietta Corp.46 In this 1971 case, the employer-defendant, Martin Marietta, had a policy against hiring women with preschool-aged children (but not men with

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46 400 U.S. 542 (1971).
preschool-aged children). The plaintiff, Ida Phillips, had preschool-aged children and had applied, but was rejected. Phillips, as a result, brought suit under the theory that by treating women with preschool-aged children differently than men with preschool-aged children, Martin Marietta was discriminating on the basis of sex. The Supreme Court agreed and endorsed a novel theory of liability under Title VII: the sex-plus theory. This theory—which has been subsequently advanced by plaintiffs to contest employers’ differential treatment of the sexes with respect to characteristics as far removed from the statutory text of Title VII as grooming standards and weight—supports liability when an employer treats a certain characteristic more favorably in one sex than the employer treats that same characteristic in the opposite sex. In this way, the sex-plus theory brings employers’ differential treatment based on various characteristics not mentioned in the statutory text within the ambit of Title VII.

Almost two decades after the Phillips decision, the Court decided Price Waterhouse v. Hopkins, a second case that laid the foundation for the EEOC guidance and the strong norm against family-status inquiries by employers in the American workplace. The case pitted a female employee who had been denied partnership against one of the nation’s largest accounting firms. The firm alleged that the employee, Ann Hopkins, had been denied partnership because of her “abrasiveness” with staff members and poor “interpersonal skills.” Hopkins, on the other hand, alleged that she had been denied partnership because of her failure to conform to female stereotypes. Writing for the plurality, Justice Brennan famously wrote,

As for the legal relevance of sex stereotyping, we are beyond the day when an employer could evaluate employees by assuming or insisting that they matched the stereotype associated with their group, for “[i]n forbidding employers to

47 Id. at 543.
48 Id.
49 Id.
50 Id. at 544.
51 See, e.g., Jespersen v. Harrah’s Operating Co., 444 F.3d 1104, 1106 (9th Cir. 2006) (en banc) (recognizing a cause of action under Title VII for sex differentials in grooming standards).
52 Most of the successful weight-discrimination cases under Title VII have been brought in the context of airline weight restrictions on female flight attendants. See, e.g., Frank v. United Airlines, Inc., 216 F.3d 845, 855 (9th Cir. 2000) (finding that an airline’s policy of imposing weight maximums for flight attendants violated Title VII); Gerdom v. Cont’l Airlines, Inc., 692 F.2d 602, 610 (9th Cir. 1982) (holding that an airline’s policy of requiring flight hostesses to comply with strict weight requirements was a violation of Title VII).
53 490 U.S. 228 (1989).
54 Id. at 231-32.
55 Id. at 234-35.
56 Id. at 235-36 (describing the advice Hopkins received from her employer to “walk more femininely, talk more femininely, dress more femininely, wear make-up, have her hair styled, and wear jewelry” (quoting Hopkins v. Price Waterhouse, 618 F. Supp. 1109, 1117 (D.D.C. 1985))).
discriminate against individuals because of their sex, Congress intended to strike at the entire spectrum of disparate treatment of men and women resulting from sex stereotypes." An employer who objects to aggressiveness in women but whose positions require this trait places women in an intolerable and impermissible catch 22: out of a job if they behave aggressively and out of a job if they do not. Title VII lifts women out of this bind.57

The case has henceforth stood for the proposition that discrimination on the basis of a sex stereotype is discrimination on the basis of sex. As such, sex stereotyping claims are cognizable under Title VII.

The Court has never directly addressed the issue of family-status inquiries in the workplace. However, federal circuit courts have been confronted with this issue and understandably have relied on both Phillips and Price Waterhouse in reaching their decisions. For example, in King v. Trans World Airlines, Inc., the Eighth Circuit found that a female plaintiff had successfully established a prima facie case of sex-plus-family-status discrimination based on her allegation that the employer had asked interview questions about “her marital status, the nature of her relationship with another [Trans World Airlines] employee, the number of children she had and whether they were illegitimate, her childcare arrangements, and her future childbearing plans” because of her sex (i.e., the employer had not asked male applicants such questions).58 More recently, the First Circuit addressed a family-status issue in Chadwick v. WellPoint, Inc.59 Here, the court considered a case in which a female employee had been denied a promotion, and the employer explained, “It was nothing you did or didn’t do. It was just that you’re going to school, you have the kids and you just have a lot on your plate right now.”60 The court found that this statement, combined with other similar statements by the employer regarding the plaintiff’s childcare responsibilities, could be characterized as both sex-plus and sex-stereotyping discrimination.61

Not all circuit courts, however, have been as willing to recognize family-status inquiries as a form of sex discrimination. In Bruno v. City of Crown Point, for instance, the Seventh Circuit reversed a lower court’s judgment in favor of a female job applicant who had been asked about family planning and child

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57 Id. at 251 (citing L.A. Dep’t of Water & Power v. Manhart, 435 U.S. 702, 707 n.13 (1978)) (alteration in original) (internal quotations omitted).
58 738 F.2d 255, 256 (8th Cir. 1984); accord Back v. Hastings on Hudson Union Free Sch. Dist., 562 F.3d 107, 115 (2d Cir. 2004) (reversing a grant of summary judgment to an employer who inquired how a female employee was “planning on spacing [her] offspring,” suggested she “not get pregnant until [the supervisor] retire[d],” and advised the employee to “wait until [her son] was in kindergarten to have another child”).
59 561 F.3d 38 (1st Cir. 2009).
60 Id. at 42.
61 Id. at 45-49.
caretaking matters during her interview.\textsuperscript{62} In reaching its decision, the panel majority looked to \textit{Price Waterhouse} and cautioned, “[t]he fact that Pyle asked only Bruno family-oriented questions reveals that those questions were based on sex stereotypes—namely, that females are the primary care providers for children and that the wife’s career is secondary to the husband’s.”\textsuperscript{63} However, the court was careful to note that “[m]erely showing the questions were asked . . . is not sufficient to prove intentional discrimination” under Title VII.\textsuperscript{64}

In light of these Supreme Court and federal circuit court decisions, the EEOC has issued guidance on appropriate interview questions for employers to ask in order to avoid Title VII liability. While the EEOC acknowledges that Title VII “do[es] not prohibit discrimination based solely on parental or other caregiver status,” the agency emphasizes that such considerations by employers may constitute sex-plus discrimination or sex stereotyping, which do violate Title VII.\textsuperscript{65} Accordingly, the EEOC guidance reminds employers that “[r]elying on stereotypes of traditional gender roles and the division of domestic and workplace responsibilities, [such as] . . . assum[ing] that childcare responsibilities will make female employees less dependable than male employees,” violates Title VII.\textsuperscript{66} To underscore this point, the EEOC provides several examples of what it considers to be “unlawful stereotyping” under Title VII.\textsuperscript{67} Two of the examples involve a job interview in which a female candidate is asked how many children she has and “how she would balance work and childcare responsibilities when the need arose.”\textsuperscript{68} Another example involves a supervisor asking a female worker who has just returned from maternity leave how she will “manage to stay on top of her case load while caring for an infant.”\textsuperscript{69} The clear implication of all the EEOC’s examples is that employers should avoid discussing work–life balance with women in the workplace. Good employers, according to the agency, keep their mouths shut.

In theory, the agency’s guidance may sound like good policy. By discouraging employers from verbalizing their concerns about family matters, such a policy arguably helps to shield employers from Title VII liability. The agency’s goal is apparently to make family matters a non-issue in the

\textsuperscript{62} 950 F.2d 355, 357-58 (7th Cir. 1991).
\textsuperscript{63} Id. at 362.
\textsuperscript{64} Id.
\textsuperscript{67} Id.
\textsuperscript{68} See id. at 4-5.
\textsuperscript{69} See id. at 5.
workplace. Yet by discouraging employers from having honest discussions about family matters and work–life balance with employees and job applicants, the EEOC fails to consider the ambiguity that such a policy creates in the minds of employers. In the next Part, we discuss why such ambiguity may be more harmful than helpful to female employees.

III. CONSIDERING THE EFFECTS OF AMBIGUITY AVERSION IN THE WORKPLACE

The dominant theoretical explanation for inferior labor market treatment of historically disadvantaged workers is statistical discrimination. 70 Statistical discrimination arises when employers, who cannot directly observe job applicants’ productivity, assume that applicants have the average characteristics stereotypically associated with their group, whether that group is based on race, sex, ethnicity, or other observable characteristics. For example, theories of statistical discrimination predict that employers will be, on average, less likely to hire women for positions in which commitment to the employer is valuable since women, as a group, tend to exit the workforce for family-related reasons more often than men. 71

70 According to the economic theory of statistical discrimination, employers do not discriminate based on animus toward particular traits (such as race or gender). Rather, in the absence of complete information about a worker’s productivity, employers use these traits as proxies for productivity-related characteristics. In other words, employers resort to stereotypes. See generally IAN AYRES, PERVERSIVE PREJUDICE?: UNCONVENTIONAL EVIDENCE OF RACE AND GENDER DISCRIMINATION (2001) (providing empirical evidence of race and gender discrimination outside of the markets governed by the civil rights legislation of the 1960s); RICHARD A. EPSTEIN, FORBIDDEN GROUNDS: THE CASE AGAINST EMPLOYMENT DISCRIMINATION LAWS (1992) (critiquing the antidiscrimination norm for neglecting the economic and social consequences produced by antidiscrimination laws); Dennis J. Aigner & Glen C. Cain, Statistical Theories of Discrimination in Labor Markets, 30 INDUS. & LAB. REL. REV. 175 (1977) (identifying several shortcomings of models of statistical discrimination in explaining labor market discrimination); Kenneth J. Arrow, Models of Job Discrimination (discussing the costs associated with determining individual employee productivity relative to using race as “a cheap source of information”), in RACIAL DISCRIMINATION IN ECONOMIC LIFE 83 (Anthony H. Pascal ed., 1972); Kenneth J. Arrow, Some Mathematical Models of Race in the Labor Market (proposing that wage differentials and segregation may derive from discriminatory attitudes of white employees in light of costs of information), in RACIAL DISCRIMINATION IN ECONOMIC LIFE 187 (Anthony H. Pascal ed., 1972); Edmund S. Phelps, The Statistical Theory of Racism and Sexism, 62 AM. ECON. REV. 659 (1972) (theorizing that employers rely on characteristics such as skin color and sex as a stand-in for information about the individual applicant, particularly when gaining such information would be costly); see also Richard A. Posner, An Economic Analysis of Sex Discrimination Laws, 56 U. CHI. L. REV. 1311, 1320 (1989) (“Even if employers and their male employees and customers have no discriminatory feelings and are perfectly well informed concerning the average characteristics of women in the various types of job, it may be rational for employers to discriminate against women because of the information costs of distinguishing a particular female employee from the average female employee.”).

71 See GOLDIN, supra note 29, at 214 (“Women were ‘statistically discriminated’ against because as a group they were more unlikely, for instance, to remain in the work force long after marriage, and as a group they may have been pleased with jobs that involved a minimum of training.”).
In the presence of policies that work to restrict information about female applicants, statistical discrimination may play a role in hiring decisions for women. Indeed, statistical discrimination may play a significant role in the presence of any policy that restricts information available to employers. One such policy that has recently received both popular and scholarly attention is legislation seeking to restrict employer knowledge about a job applicant’s criminal history (and in theory, reduce the importance of criminal history in the hiring process). Well-known are the devastating effects that the rapid expansion of the U.S. prison population since the 1980s have had on African-American men; one in three African-American men can now expect to go to prison during his lifetime.\(^72\) Having a criminal record lowers an individual’s employment and earnings prospects.\(^73\) Because African-Americans are seven times more likely than whites to be incarcerated, many scholars have observed that mass incarceration has contributed substantially to economic inequality between the two groups.\(^74\) This observation, in turn, has led to calls from both scholars and social advocates to limit hiring practices that consider criminal history due to the disparate negative impact that such considerations may have on male African-American job applicants. The most popular proposals call for laws that limit the use of criminal background checks by employers\(^75\) and for laws that “ban the box”\(^76\) (a popular term for laws that restrict employers from asking applicants about their criminal history on job applications).

\(^72\) Sara Wakefield & Christopher Uggen, Incarceration and Stratification, 36 ANN. REV. SOC. 387, 389 (2010).
\(^74\) See id. at 959 (concluding that “[t]he effect of a criminal record is . . . 40% larger for blacks than whites” with respect to job interview callbacks); see also Devah Pager, MARKED: RACE, CRIME, AND FINDING WORK IN AN ERA OF MASS INCARCERATION 28-57 (2007) (considering the post-incarceration difficulties encountered by African-American men); Becky Pettit & Bruce Western, Mass Imprisonment and the Life Course: Race and Class Inequality in U.S. Incarceration, 69 AM. SOC. REV. 151, 164-65 (2004) (considering the life cycle and class effects of mass incarceration on African-American men); Bruce Western, The Impact of Incarceration on Wage Mobility and Inequality, 67 AM. SOC. REV. 526, 541-42 (2002) (arguing that mass incarceration contributes to persistent race-based wage gaps).
\(^75\) See, e.g., Johnathan J. Smith, Banning the Box but Keeping the Discrimination?: Disparate Impact and Employers’ Overreliance on Criminal Background Checks, 49 HARV. C.R.-C.L. L. REV. 197, 199 (2014) (arguing that employers’ use of criminal background checks raises concerns under Title VII).
These proposals are undoubtedly well-intentioned and, at first glance, may sound like a good idea. Yet such policies may actually have adverse effects on male African-American job applicants. A 2006 empirical study, for instance, found that employers who performed background checks were more likely to hire African-American males than employers who did not perform such checks. In the absence of credible criminal history information, the study authors theorized that employers statistically discriminated against African-American men. Uninformed employers knew that African-American men were much more likely to have a criminal record than other applicants and, lacking credible information, used race as a proxy for a prior criminal record. Contrary to the arguments made by many advocates and policymakers, the study authors concluded that policies proscribing employer access to information about applicant criminal history harmed African-American men more than it helped them.

In the context of criminal background checks, racial disparities in the probability of a criminal record are stark and well-known, and restricting employer access to an applicant’s criminal history can lead employers to favor hiring non–African-Americans over African-Americans—that is, to statistically discriminate. In the context of hiring women, gender disparities in the demands of family responsibilities are similarly stark and well-known, so the theory of statistical discrimination would predict that restricting access to employer information regarding family matters would lead employers to favor hiring men over women. The theory thus provides an explanation for why employers may favor a male applicant over a female applicant, but says nothing about why employers may favor one female applicant over another female applicant. In this way, our framework explicitly departs from the statistical discrimination context, focusing on how employers make decisions between members of the same group in the absence of full information in order to isolate the role of information exchange in the employment relationship.

Behavioral economists have long been concerned with how individuals make choices in the face of uncertainty, as everyday decisionmakers rarely have

77 See Harry J. Holzer et al., Perceived Criminality, Criminal Background Checks, and the Racial Hiring Practices of Employers, 49 J.L. & ECON. 451, 465 (2006) (“Employers that check are 8.4 percentage points more likely to have hired an African American applicant into the most recently filled position.”).
78 See id. at 460 (“[E]mployers that are averse to hiring ex-offenders and that do not check [backgrounds] are the most likely to engage in statistical discrimination.”).
79 See id. at 473; see also Michael A. Stoll & Shawn D. Bushway, The Effect of Criminal Background Checks on Hiring Ex-Offenders, 7 CRIMINOLOGY & PUB. POL’Y 371, 396 (2008) (finding that because "some employers perform background checks to gain additional information about the ex-offenders whom they may consider hiring . . . [and] protect themselves against possible negligent hiring lawsuits," bans on such checks may have adverse effects on applicants with a criminal history).
the benefit of full information. Within this vast economics literature, of particular relevance here is the line of research that explores how individuals make decisions when one option is ambiguous and the other option is less so. The typical starting point for modern economists working on this topic is a 1961 paper by Daniel Ellsberg, who, through a series of examples, proposed that even when the expected value of two options is identical, individuals prefer the less ambiguous option over the more ambiguous option. Perhaps the most famous of Ellsberg’s examples is the “two-color problem,” a scenario in which an individual bets whether the color of a ball drawn at random from an urn will be red or black. If the individual has a choice of two urns upon which to bet—one urn in which the red/black ball distribution is known to be 50/50, the other urn in which the red/black ball distribution is unknown—Ellsberg’s theory predicts that the individual will prefer to bet on the urn with the known 50/50 distribution. Despite the possibility that the unknown urn, unlike its known counterpart, may be filled entirely with balls of one color, individuals will still choose to bet on the known urn.

This theory, known as the Ellsberg paradox or ambiguity aversion, has been subsequently validated and extended by the experimental economics literature. A substantial literature has tested the Ellsberg scenarios in experimental settings; other authors have extended Ellsberg’s work to consider how individuals respond to more complex scenarios involving issues such as comparing levels of ambiguity aversion for gains versus losses.

80 See, e.g., Daniel Kahneman & Amos Tversky, Prospect Theory: An Analysis of Decision Under Risk, 47 ECONOMETRICA 263, 284-86 (1979) (demonstrating that individuals give too much weight to low-probability outcomes when making decisions under risk).
81 Ellsberg, supra note 21, at 668.
82 Id. at 650-56.
83 Id. at 651.
84 Id.; see also Craig R. Fox & Amos Tversky, Ambiguity Aversion and Comparative Ignorance, 110 Q. J. ECON. 585, 585-86 (1995) (describing the two-color problem as an example demonstrating that “people prefer to bet on known rather than unknown probabilities”); Howard Raiffa, Risk, Ambiguity, and the Savage Axioms: Comment, 75 Q. J. ECON. 690, 694 (1961) (showing that the irrationality of having a preference for the known distribution can be demonstrated by flipping a fair coin to govern the color choice for the unknown urn, as doing so converts the uncertain probability to a hard probability).
85 See, e.g., Selwyn W. Becker & Fred O. Brownson, What Price Ambiguity? Or the Role of Ambiguity in Decision-Making, 72 J. POL. ECON. 62, 73 (1964) (demonstrating that “some subjects, in violation of the Savage axioms, express an aversion to ambiguity, and under payoff conditions will pay to avoid it”); Paul Slovic & Amos Tversky, Who Accepts Savage’s Axiom?, 19 BEHAV. SCI. 368, 368 (1974) (showing “subjects’ initial choices often violated [Savage’s sure-thing principle]”).
86 See Michele Cohen et al., Individual Behavior Under Risk and Under Uncertainty: An Experimental Study, 18 THEORY & DECISION 203, 219 (1985) (concluding that “under uncertainty as under risk, there is no correlation between subject attitude in the domain of gains and in that of losses”); Robin M. Hogarth & Hillel J. Einhorn, Venture Theory: A Model of Decision Weights, 36 MGMT. SCI. 780 (1990) (examining “attitudes toward risk and ambiguity as a function of different levels of probabilities and payoffs”); see also Colin Camerer & Martin Weber, Recent Developments in
Moreover, recent experimental work has found that ambiguity aversion is particularly acute among women. In spite of the volume of work on ambiguity aversion, the implications of this phenomenon have not been considered within the employment context. Prior experimental work has focused on applications to matters such as financial decisionmaking, contracts, and tax policy.

By deterring open discussion of marital status and children, Title VII removes the opportunity to work out reasonable accommodations at the hiring stage, leaving firms in the position of using statistical discrimination. Although Title VII does not require employers to reasonably accommodate workers’ family life, employers have become increasingly willing to make some voluntary accommodations, such as telecommuting, as a way to attract the best workers, boost employee morale, and even increase productivity. For many employers, increasing the flow of information about family logistics could remove a barrier to hiring women that arises from uncertainty about


87 For a survey of recent literature that finds that women display greater ambiguity aversion than men, see Catherine C. Eckel & Philip J. Grossman, Men, Women and Risk Aversion: Experimental Evidence, in HANDBOOK OF EXPERIMENTAL ECONOMICS RESULTS 1061, 1063 (John H. Kagel & Alvin E. Roth eds., 2008).


90 See, e.g., Arthur Snow & Ronald S. Warren, Jr., Ambiguity About Audit Probability, Tax Compliance, and Taxpayer Welfare, 43 ECON. INQUIRY 865, 870 (2005) (demonstrating through experimental evidence that increasing uncertainty regarding tax audit probability increases tax code compliance in “ambiguity averse” individuals, but has the opposite effect in “ambiguity loving” individuals).

91 Title VII, unlike the Americans with Disabilities Act, does not require employers to reasonably accommodate their employees. Compare 42 U.S.C. § 2000e-2(a) (2012) (listing unlawful employer practices with respect to race, color, sex, national origin, and religious discrimination without mention of reasonable accommodation), with 42 U.S.C. § 12112(b)(5)(A) (2012) (defining discrimination as including “not making reasonable accommodations” for a disabled employee). Employers may voluntarily accommodate their employees, however, and likely will if they believe it will improve their bottom line. See, e.g., NAT’L WOMEN’S LAW CTR., THE BUSINESS CASE FOR ACCOMMODATING PREGNANT WORKERS (2012) (submitting that employers who accommodate pregnant employees can expect increased employee commitment and satisfaction, recruitment and retention, productivity, diversity, safety, and absenteeism with “minimal and temporary” associated costs).


93 See Jacob Morgan, Five Things You Need to Know About Telecommuting, FORBES (May 4, 2015, 12:02 AM), http://www.forbes.com/sites/jacobmorgan/2015/05/04/5-things-you-need-to-know-about-telecommuting/827248577887086f79f12a0 [https://perma.cc/E8WQ-ECMM] (reporting results of interviews with companies that see telecommuting as “a business imperative that is required to stay competitive in the modern workforce”).
how they will achieve work–family balance. Yet under policies informed by the EEOC guidance, employers do not get the opportunity to engage in any sort of interactive process and are instead left in a state of ambiguity with respect to the needs of working-mother applicants.

One solution to this dilemma, suggested by both courts and the EEOC guidance itself, is to mandate that employers who want to ask about family matters and obligations do so equally with respect to male and female applicants.\textsuperscript{94} Once again, this solution may seem reasonable at first glance, but the economics literature on gender wage disparities illuminates why such a solution may only exacerbate underlying concerns. There is a widely established and large earnings premium for married men, but not for women,\textsuperscript{95} so asking men and women equally about their marital status would tend to benefit married men in the workplace, while hurting married women. For all these reasons, we predict hiring practices that stifle information about family status may be hurting women much more than they are helping women. The next Part, which sets the foundation for our experimental design, will explain how we test this hypothesis.

IV. EXPERIMENTAL FOUNDATIONS: EXAMINING HIRING PRACTICES AND THE SHORTCOMINGS OF OBSERVATIONAL DATA

Theoretically, researchers might test the effect of policies that suppress family-status information on employer hiring decisions by comparing observational data from firms that have such policies to firms that do not. Yet identifying discrimination in hiring based on observational data is extremely difficult. Firms rarely maintain comprehensive data on applicants who were not hired, as evidenced by their frequent inability to produce applicant flow data during litigation.\textsuperscript{96} Furthermore, firms can only hire from the pool of applicants. A statistical gap in the employment rate of members of protected classes may be due to illegal discrimination in hiring on the part of the employer, but it could also be

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\textsuperscript{94} See supra Part II (discussing the current EEOC guidance).


\textsuperscript{96} Indeed, the unavailability of firm applicant flow data can prove an insurmountable barrier for many plaintiffs trying to prove hiring discrimination. For a discussion of plaintiff proof barriers in the absence of applicant flow data in the context of criminal background check disparate impact cases, see Alexandra Harwin, \textit{Title VII Challenges to Employment Discrimination Against Minority Men with Criminal Records}, 14 BERKELEY J. AFR.-AM. L. & POL’Y 2, 16 (2012) (“While federal courts were lowering the standards for employers, they were elevating the standards of proof required for plaintiffs to establish disparate impact, effectively barring plaintiffs unable to afford expert statisticians from pursuing disparate impact claims.”).
the result of fewer, and potentially less qualified, applicants from the protected classes, which would not necessarily be illegal.97

Consequently, economists have taken the approach of using experimental studies to examine discrimination in hiring. Frequently, these experiments take the form of a résumé audit (also called correspondence) study, in which fictitious résumés are sent as applications to posted job openings. The résumés are randomly sent in response to job openings and are designed to be identical with the exception of indicators to signal the job applicant’s membership in a specific class. In one of the most well-known résumé audit studies, Marianne Bertrand and Sendhil Mullainathan sent applications that differed only in whether the fictitious applicant had a name that was typically African-American or typically white; applicants with typically African-American names had a lower probability of receiving a callback for an interview.98 A large number of similar studies have been conducted to investigate the role of other types of discrimination that may play a role in the hiring process, including discrimination on the basis of sex,99 duration of unemployment,100 age,101 national origin,102 religion,103 weight (using photos associated with résumés),104 and sexual orientation.105

97 It would not be illegal unless the employer engaged in an application practice that had a disparate impact on a protected class, and the practice lacked job-relatedness or business necessity. See Griggs v. Duke Power Co., 401 U.S. 424, 432 (1971) (“Good intent or absence of discriminatory intent does not redeem employment procedures or testing mechanisms that operate as ‘built-in headwinds’ for minority groups and are unrelated to measuring job capability.”).


99 See, e.g., Pascale Petit, The Effects of Age and Family Constraints on Gender Hiring Discrimination: A Field Experiment in the French Financial Sector, 14 Lab. Econ. 371, 382–83 (2007) (finding significant discrimination against women aged twenty-five relative to men aged twenty-five in high-skilled financial sector jobs, but not against women aged thirty-seven relative to men aged thirty-seven).


101 See, e.g., Joanna N. Lahey, Age, Women, and Hiring, 43 J. Hum. Resources 30, 46 (2008) (finding younger applicants 42% more likely to be called back in Massachusetts and 46% more likely to be called back in Florida).

102 See, e.g., Guillaume Pierné, Hiring Discrimination Based on National Origin and Religious Closeness: Results from a Field Experiment in the Paris Area, 2 IZA Lab. Econ., Dec. 2013, at 1, 8-12 (finding significant discrimination against people of North African origin).

103 See id. at 8 (finding significant discrimination against Muslims).

104 See, e.g., Dan-Olof Rooth, Obesity, Attractiveness, and Differential Treatment in Hiring: A Field Experiment, 44 J. Hum. Resources 710, 729 (2009) (finding that applicants with “average” weight and attractiveness are 20% more likely to receive a callback than applicants with “unfavorable” weight and attractiveness).

105 See, e.g., Ali M. Ahmed et al., Are Gay Men and Lesbians Discriminated Against in the Hiring Process?, 79 S. Econ. J. 565, 579 (2013) (finding significant discrimination against gay and lesbian applicants in Sweden, though less discrimination than observed in other countries); Doris Weichselbaumer, Testing for Discrimination Against Lesbians of Different Marital Status: A Field
Résumé audit studies have been criticized on many grounds, including their ethics and their limited external validity. An alternative experimental approach to collecting data on the hiring process, and the one we use here, is a vignette study (also known as a factorial study in the literature). Vignette studies combine survey questions with experimental methods; they are an accepted and frequently used methodology in a number of disciplines, including social psychology, sociology, and law. This approach provides many advantages over résumé audit studies in the context of our research question. First, we are interested in how the restriction against asking for information on family status influences hiring. Because of the popular understanding that questions about marital status and children are illegal, applicants rarely provide information about their family situation on their résumés; as a result, any fictitious résumés we might create would automatically be suspect. Second, a vignette study allows us to construct a plausible situation in which family status may be relevant in hiring. Because most recent college graduates enter the labor market following graduation, targeting only the kinds of entry-level jobs that are typically used in résumé audit studies would not allow sufficient variation in family status.

As a result, our vignette study focuses on reentry of college graduate women who have left the workforce for a sustained period of time. In order to achieve adequate variation in family status, our scenario describes women who would be in their early forties and who have had a ten-year interruption in their work history. Although the employment prospects of returning stay-at-home mothers versus new labor market entrants have not been formally compared

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107 The principal criticisms are that (1) these studies are only useful for examining callbacks for entry-level jobs, and (2) relatedly, these studies are only useful for firms that conduct traditional job searches. See Dan-Olof Rooth, Correspondence Testing Studies, 58 IZA WORLD LAB., May 2014, at 1, 5-6 (discussing external validity concerns in correspondence studies).

through empirical analysis, an abundance of anecdotal evidence suggests that returning mothers’ prospects are far weaker. Given the limited number of available, relevant jobs to which we could submit fictitious, yet realistic résumés, conducting a résumé audit study would require an enormous sample size to detect statistically significant differences in callbacks, once again making the résumé audit approach undesirable.

Likely all of the above concerns with résumé audit studies have led vignette studies to become the more common approach among legal scholars in experimental work. Legal scholarship has frequently relied upon vignette studies to draw inferences regarding individual behavior in the negotiation, formation, assent, and breach of contracts. Legal scholarship has also seen several recent vignette studies testing juror understanding and juror decisionmaking, as well as testing intellectual property law concepts. Nevertheless, such studies have been virtually absent from employment law scholarship. The only vignette study

109 For a résumé audit study demonstrating that older women are less likely than younger women to receive interview requests for entry-level jobs, see Lahey, supra note 101, at 37.


113 See, e.g., Ian Ayres et al., A Randomized Experiment Assessing the Accuracy of Microsoft’s “Bing It On” Challenge, 26 LOY. CONSUMER L. REV. 1, 23-24 (2013) (finding that subjects typically preferred Google search results over Bing results, suggesting potentially actionable misleading advertising in Microsoft’s “Bing It On” campaign); Shyamkrishna Balganesh et al., Judging Similarity, 100 IOWA L. REV. 267, 289 (2014) (finding that evidence on other potential issues in a copyright claim significantly influences the assessment of the two works’ similarity); Christopher Buccafusco et al., Experimental Tests of Intellectual Property Law’ Creativity Thresholds, 92 TEx. L. REV. 1921, 1946-71 (2014) (testing use of a creativity threshold as an incentive in patent law).
that has any relevance to employment law is a 2013 article by Ian Ayres and Richard Luedeman, which examined whether the type of sexual activity among gay men influenced subjects’ likelihood of inviting them to a barbecue event.\footnote{See generally Ian Ayres & Richard Luedeman, \textit{Tops, Bottoms, and Versatiles: What Straight Views of Penetrative Preferences Could Mean for Sexuality Claims Under Price Waterhouse}, 123 YALE L.J. 714 (2013).} Although the vignette itself did not relate to employment, the authors extrapolated the results to consider implications for Title VII sex stereotyping claims brought by lesbian, gay, bisexual, and transgender (LGBT) individuals under \textit{Price Waterhouse}.\footnote{490 U.S. 228 (1989); see also id. at 714 (concluding that contrary to the decisions of some federal courts, some sexuality-related sex stereotyping claims are viable under the \textit{Price Waterhouse} line of cases, since “[t]here are real forms of gender-motivated prejudice against a person’s sexuality that are distinct from prejudice against having actual or desired partners of the same sex”).} As evidenced by the Ayres and Luedeman article—not to mention the vignette studies in other areas of legal scholarship—vignette studies present a unique opportunity to study the effects of employment laws, both in the workplace and in the courtroom, that are otherwise untestable through observational data. For all these reasons, we chose a vignette study for our experiment, which is detailed in the next Part.

\section*{V. Experimental Methodology}

For our vignette study, we designed a realistic scenario based on the situation women face when reentering the labor market after an extended period out of the workforce as a stay-at-home mother. Our scenario asks respondents to choose between two female applicant finalists to hire. Both applicants have a period of successful work experience before leaving the workforce for a ten-year period. The gap in their employment history implies that the applicants were unlikely to be able to resume their careers at the level they held when they exited. But their work history also indicates that an entry-level job would not be suitable for long. Extensive literature on job mismatch shows that overqualified workers are less satisfied with their jobs and more likely to quit, particularly when the job lacks sufficient opportunity for promotion.\footnote{Job matching (and mismatching) is a term widely used by economists to signify the fit (or lack thereof) between the requirements of the job at hand and the education and skills of the applicant hired to do the job. See generally Jim Allen & Rolf van der Velden, \textit{Educational Mismatches Versus Skill Mismatches: Effects on Wages, Job Satisfaction, and On-the-Job Search}, 33 OXFORD ECON. PAPERS 434 (2001) (exploring the effect of education-job mismatches on wages and job satisfaction); see also Greg J. Duncan & Saul D. Hoffman, \textit{The Incidence and Wage Effects of Overeducation}, 1 ECON. EDUC. REV. 75, 84 (1981) (finding that overeducated workers are more highly paid than their adequately educated and undereducated peers); Joni Hersch, \textit{Optimal 'Mismatch' and Promotions}, 33 ECON. INQUIRY 611, 623 (1995) (arguing that it is in a firm’s best interest to have at least some overqualified workers); Boyan Jovanovic, \textit{Job Matching and the Theory of Turnover}, 87 J. POL. ECON. 972, 975-82 (1979) (constructing a model to explain the rate of turnover as a function of worker productivity); Nachum Sicherman, \textit{‘Overeducation’ in the Labor Market}, 9 J. LAB. ECON. 101, 107-05 (1991) (exploring the demographic characteristics of “overeducated” workers); Richard R. Verdugo & Naomi Turner} Consequently, faced with training
and hiring costs, employers may refrain from hiring overqualified workers.\textsuperscript{117} We therefore stressed in our scenario that even though the job was entry-level, advancement was rapid.

Because we examined hiring decisions between a pair of women of similar age and background, we did not expect animus- or taste-based discrimination\textsuperscript{118} to be a relevant factor. As explained in Part III, we also did not anticipate statistical discrimination to be relevant since observers should have drawn similar inferences about the family status of similarly situated women. We allowed for actual productivity differences by providing different information about our candidates so that any differences in the perceived variance of productivity-related characteristics would be based on information provided in the vignette, rather than assumptions about unobserved characteristics.

With these issues in mind, we designed our vignette study to present respondents with different backgrounds and motivations for each of the two female candidates seeking re-employment. After drafting our survey instrument, we extensively pretested it and received approval from our university’s Institutional Review Board. We fielded the final survey instrument on 3022 voluntary workers who opted in to perform tasks via Amazon’s Mechanical Turk (mTurk) service.\textsuperscript{119} Workers eligible for participation had to be at least eighteen years old and had to reside in the United States. We paid $1.50 to each worker who successfully completed the survey, which we advised would take (and, on average, actually took) about fifteen minutes to complete.\textsuperscript{120} In accordance with

\textsuperscript{117} See Hersch, supra note 116, at 619-20 (finding that employers hire overqualified workers because they have lower training costs and are more likely to be promoted, although those overqualified workers who are not promoted are more likely to quit).

\textsuperscript{118} Here, we use the term “taste-based discrimination” in the same manner used by Gary Becker to refer to discrimination against African-Americans in his classic 1957 work The Economics of Discrimination. GARY BECKER, THE ECONOMICS OF DISCRIMINATION 14 (2d ed. 1971).

\textsuperscript{119} Our survey complied on all dimensions with the Guidelines for Academic Requesters using mTurk workers as disseminated by Dynamo. Dynamo is an online community platform, similar to the Reddit platform, created by top academic mTurk users for the purpose of gathering and sharing information among peers. See generally Guidelines for Academic Requesters, DYNAMO WIKI, http://wiki.wereedynamo.org/index.php/Guidelines_for_Academic_Requesters [https://perma.cc/4XJA-9V5Q] (last updated July 23, 2016).

\textsuperscript{120} Readers unfamiliar with mTurk may be surprised that we obtained more than 3000 responses within a single day, with payment for survey completion equivalent to $6.00 an hour. Relatedly, readers may be concerned that only individuals with a low value of time would bother to complete a fifteen-minute survey for a payment of $1.50. To quell such concerns, we compared the demographic characteristics of our respondents to those of the U.S. population. A comparison to census data shows that our respondents were either very similar to, or better educated and more likely to be employed, relative to the U.S. population. For example, our sample was 51.5% female, compared to 50.8% of the U.S. population. The median household income in our sample was $52,900 (which we derived using bracketed income ranges), compared to $53,545 nationally. The share of respondents who report their race as white only in our sample was 86.6%, slightly above the U.S. population share of single race white of 77.4%. The share in our sample reporting single race black/African-American was 7.5%, and
prior mTurk research, we launched our survey on a weekday during East Coast daylight hours.\textsuperscript{121} Our survey provided a total of four scenarios; below, we limit our discussion to the one scenario of relevance to this Article.\textsuperscript{122}

Experimental subjects, who were directed from mTurk to the survey instrument,\textsuperscript{123} were randomly assigned to view one of nine experimental conditions that varied the explanation (or provided no information) for the ten-year employment gap that was common to each of the two finalists. All subjects were given the following information:

Assume you work at a medium-sized financial management firm. Your firm has a vacancy for the position of Research Analyst, and you have been asked to make the hiring decision. Although this is an entry-level position, advancement is often rapid, with high earnings potential.

After reviewing many applications, you narrow the field down to 2 candidates, Lisa Davis and Jessica Wilson.

In many ways, the résumés for Lisa and Jessica show similar educational background and work histories. Each received her college degree 20 years ago, each majored in psychology, and each worked for 10 years after college as a Research Associate in a medium-sized financial management firm. Neither lists any work experience for the past 10 years.

Lisa Davis is a graduate of a well-known, elite university.

Jessica Wilson is a graduate of a local public university.

\textsuperscript{121} See Ilyana Kuziemko et al., \textit{How Elastic Are Preferences for Redistribution? Evidence from Randomized Survey Experiments}, 105 AM. ECON. REV. 1478, 1484 (2015) ("[T]o further discourage foreign workers, we tried to launch our surveys during East Coast daylight hours (and, to reduce heterogeneity, only on workdays."). We launched our survey on Monday, December 7, 2015, at 8:30 a.m. EST and met our target of 3000 valid responses that same day.

\textsuperscript{122} Our survey contained two hiring scenarios asking subjects to choose between two eligible candidates (the present Article reports the results of one of these scenarios). Our survey also contained two scenarios asking subjects to distribute marital assets between divorcing spouses.

\textsuperscript{123} This survey was programmed using the survey software, Qualtrics. This methodology (recruiting workers from mTurk and redirecting them to a Qualtrics survey) is extremely common for scholars conducting vignette study research. See, e.g., Balganesh et al., \textit{supra} note 113, at 279.
In all nine versions of the scenario, each candidate also reports that she realizes finding a job is difficult after a ten-year employment gap and that she is open to working in any industry and at an entry-level job.

We intentionally chose the names for our candidates to be common and neutral with respect to signals of race and social class. We also structured the finalist candidates to differ only in the status of the academic institution that conferred their undergraduate degree, in order to make the candidates similar in background while still allowing the two candidates to differ on an observable characteristic that may relate to productivity. Because our scenario stresses opportunity for rapid advancement, implying that long-term attachment to the employer is valued, we were interested in which signal provided by graduation from an elite institution would dominate—ability or labor force attachment—when all other attributes of the two candidates were the same. After establishing the candidates’ common background, we varied the reasons given for leaving the workforce ten years ago and for deciding to return to the workforce. To focus on the role of ambiguity aversion among decisionmakers, the provided information (described below) does not indicate whether the candidate would be more or less productive as an employee than the candidate who did not provide information.

Our nine combinations are as follows, with the letters A through I indicating which version of the scenarios included that information for at least one of the candidates.

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124 For our candidates, we chose neutral-sounding names that have been common over a long period of time so that survey subjects would be unlikely to associate the names with any particular time period. (Contrast, for instance, Mildred, the sixth most popular name in the 1920s, and Madison, the second most popular name in the 2000s. Top Names of the 1910s, SOC. SEC. ADMIN., https://www.ssa.gov/oact/baby names/decades/names1910s.html [https://perma.cc/8SCQ-NQEL]). Given the information we provided on our candidates’ work history, Lisa and Jessica would have been born in the 1970s. At the time, Lisa was the sixth most common female baby name, and Jessica the eleventh. Top Names of the 1970s, SOC. SEC. ADMIN., https://www.ssa.gov/oact/babynames/decades/names1970s.html [https://perma.cc/ZET4-PPJH]. Furthermore, Lisa and Jessica have retained considerable staying power as female baby names. Over the past one hundred years, the name Lisa is the fifteenth most common name, and Jessica is the eighth most common name. Top Names over the Last 100 Years, SOC. SEC. ADMIN., https://www.ssa.gov/oact/babynames/decades/century.html [https://perma.cc/S7TX-4UCR]. We also chose common surnames. In the 1970s, the surname Davis was the eighth most common surname, and the surname Wilson was the tenth most common surname. OFFICE OF OPERATIONAL POLICY & PROCEDURES, DEPT. HEALTH & HUMAN SERVS., SSA PUB. NO. RSOP-42-004, REPORT OF DISTRIBUTION OF SURNAMES IN THE SOCIAL SECURITY NUMBER FILE, SEPTEMBER 1, 1984, 65, 105 (1985), http://hdl.handle.net/2027/mdp.39015029219030?urlappend=%3Bseq=1 [https://perma.cc/6XS9-VEXG].

125 Our primary objective was to provide some distinction between candidates, though subjects may have made inferences about the candidates’ workforce commitment based on information about where the candidate attended college. See Joni Hersch, Opting Out Among Women with Elite Education, 15 REV. ECON. HOUSEHOLD 469, 480-81 (2013) (demonstrating that among married women with children, labor market activity is lower among graduates of elite institutions than graduates of non–elite institutions).
Scenario A (both candidates married and reason for reentry is children in school): During the interview, each candidate voluntarily explains that, because she and her husband believed they could live comfortably on his earnings alone, she stopped working for pay 10 years ago when the first of her 2 children was born. Now that the children are in school during the day, she wants to go back to work.

Scenario E (both candidates divorced and reason for reentry is financial): During the interview, each candidate voluntarily explains that, because she and her husband believed they could live comfortably on his earnings alone, she stopped working for pay 10 years ago when the first of her 2 children was born. Each candidate is recently divorced from her ex-husband, and, financially, she needs to go back to work.

Scenarios B and D (one candidate married and reason for reentry is children in school, one candidate divorced and reason for reentry is financial): During the interview, Lisa (alternatively, Jessica) voluntarily explains that, because she and her husband believed they could live comfortably on his earnings alone, she stopped working for pay 10 years ago when the first of her 2 children was born. Now that the children are in school during the day, she wants to go back to work. . . . During the interview, Jessica (alternatively, Lisa) voluntarily explains that, because she and her husband believed they could live comfortably on his earnings alone, she stopped working for pay 10 years ago when the first of her 2 children was born. She is recently divorced from her ex-husband, and, financially, she needs to go back to work.

Scenarios C and G (one candidate married and reason for reentry is children in school, one candidate gives no reason for leaving or reentering): During the interview, Lisa (alternatively, Jessica) voluntarily explains that, because she and her husband believed they could live comfortably on his earnings alone, she stopped working for pay 10 years ago when the first of her 2 children was born. Now that the children are in school during the day, she wants to go back to work. . . . During the interview, Jessica (alternatively, Lisa) does not explain her 10-year employment gap.

Scenarios F and H (one candidate divorced and reason for reentry is financial, one candidate gives no reason for leaving or reentering): During the interview, Lisa (alternatively, Jessica) voluntarily explains that, because she and her husband believed they could live comfortably on his earnings alone, she stopped working for pay 10 years ago when the first of her 2 children was born. She is recently divorced from her ex-husband, and, financially, she needs to go back to work. . . . During the interview, Jessica (alternatively, Lisa) does not explain her 10-year employment gap.

Scenario I (neither candidate gives a reason for leaving or reentering): During the interview, neither candidate explains her 10-year employment gap.
Finally, all versions of the scenario concluded as follows:

Each candidate has strong references, and after the interviews, you believe that you could easily work with either candidate.

Which candidate will you hire for the position of Research Analyst?

At this point, we asked subjects to select either Lisa Davis or Jessica Wilson. Here we note that personal information for reentering the workforce, in sharp contrast to academic credentials or prior work experience, does not provide clear signals about expected productivity. For instance, some may view a candidate who reports she is returning to the workforce because her children are in school during the day to be eager to return to work and likely to be highly productive, while others may view this same woman as likely to quit if work–family balance becomes too challenging. Similarly, the divorced candidate may be perceived as financially motivated to be productive, or as less productive because of greater childcare demands falling on a single parent. Thus, relative to an alternative candidate who provides no personal information for reentering the workforce, there is no reason to expect that, on average, the candidate who provides information will be more productive than one who does not. Nonetheless, the additional information may bolster decisionmakers’ confidence in their assessment of the candidate’s likely future productivity. As the results from our experiment show, decisionmakers choose the candidate who provides more personal information over the candidate who does not provide personal information, consistent with the theory of ambiguity aversion.

**VI. EXPERIMENTAL RESULTS**

The employment outcome of interest is whether experimental subjects choose to hire Lisa, the elite university graduate, or Jessica, the local public university graduate. We examine how information revealed in interviews influence hiring decisions in two ways. First, we examine which of the two candidates is selected within a given scenario. Because the choice of one candidate implies that the other candidate is not chosen, the appropriate statistical test is a one-sample test of proportions. Our null hypothesis is that the probability of hiring either candidate is the same and is equal to 0.50. The relevant alternative hypotheses vary by scenario and are indicated in the following Sections. Second, we examine how the probability that a candidate is selected will vary based on the differences in the information provided about that candidate, holding all else equal. For instance, we examine how the probability that Lisa is hired differs when she is divorced versus when she is married, holding constant the information provided about Jessica. Because this test is across scenarios, and because subjects see only one of the nine
scenarios, each scenario comprises an independent sample. For these tests within individuals, the appropriate statistical test is a two-sample test for differences in proportions. The null hypothesis is that the probability a specific candidate is hired is equal across scenarios. Again, because hiring one candidate implies that the other candidate is not chosen, it does not matter which candidate’s probability of being hired we examine.

A. Testing Candidate Selection Within a Single Scenario

Before describing our results, we pause to detail (1) the specifics of each test and (2) our ex ante predictions. First, when both candidates provide the same information (scenarios A, E, and I), we test for whether one candidate is more likely to be hired than the other, but we make no prediction about whether the signal of Lisa’s elite degree will make it more likely that she is hired over Jessica because of her expected greater ability, or less likely to be hired because her elite degree is associated with weaker labor force attachment. Second, when one candidate provides a reason for the gap in her employment history and the other does not (scenarios C, F, G, H), we predict that the candidate who provides a reason is more likely to be hired. This follows from the behavioral economics theory of ambiguity aversion. Finally, when one candidate gives her reason for reentering the workforce as financial and the other gives her reason as children in school (scenarios B and D), we predict that the candidate whose reason is financial is more likely to be hired.

Table 1 reports the results for scenarios A, E, and I. When both candidates provide the same information, we find that Lisa (elite degree) is more likely to be hired than Jessica when both are married and report the reason for reentry is children in school. Similarly, we find that Lisa is more likely to be hired when neither candidate reports any information. The probability that Lisa is more likely to be hired relative to the null that each candidate is equally likely to be hired is statistically significant at the 5% level in a two-sided test, with precisely the same share—56.1%—preferring to hire Lisa in both of these scenarios. In contrast, when both candidates are divorced and report that their reason for reentry is financial, there is no statistically significant difference in the probability that Lisa or Jessica is hired.
Table 1: Probability That a Candidate Is Hired When Both Candidates Provide the Same Reason for Reentry

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Marital Status</th>
<th>Reason for Reentry</th>
<th>Percent Who Would Hire Lisa</th>
<th>P-Value</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Married</td>
<td>Children in school</td>
<td>56.1</td>
<td>0.03</td>
<td>337</td>
</tr>
<tr>
<td>E</td>
<td>Divorced</td>
<td>Financial</td>
<td>51.8</td>
<td>0.51</td>
<td>338</td>
</tr>
<tr>
<td>I</td>
<td>None</td>
<td>None</td>
<td>56.1</td>
<td>0.03</td>
<td>337</td>
</tr>
</tbody>
</table>

Notes: Null hypothesis is that candidates are equally likely to be offered the job. P-value is calculated using a one-sample test of proportions.

Table 2 reports the results for scenarios C, F, G, and H. When one candidate provides a reason for reentry but the other does not, the candidate who provides the reason is far more likely to be hired. As Table 2 shows, when Lisa provides information about marital status and reason for reentry (and Jessica provides no information), Lisa is selected by 86.5% of the subjects when she is married and by 88.9% when she is divorced. Conversely, when Jessica provides information about marital status and reason for reentry (and Lisa provides no information), Jessica is selected by 81.5% of the subjects when she is married and by 80.4% when she is divorced. The slight edge that Lisa has over Jessica in being selected derives from her higher baseline likelihood of being hired, which apparently reflects the employment advantage of her elite undergraduate degree.
Table 2. Probability That a Candidate Is Hired When One Candidate Provides a Reason for Reentry and the Other Candidate Does Not

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Marital Status</th>
<th>Reason for Reentry</th>
<th>Percent Who Would Hire Lisa</th>
<th>P-Value</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Lisa married</td>
<td>Lisa children in school</td>
<td>86.5</td>
<td>0.00</td>
<td>334</td>
</tr>
<tr>
<td>F</td>
<td>Lisa divorced</td>
<td>Lisa financial</td>
<td>88.9</td>
<td>0.00</td>
<td>334</td>
</tr>
<tr>
<td>G</td>
<td>Jessica married</td>
<td>Jessica children in school</td>
<td>18.5</td>
<td>0.00</td>
<td>336</td>
</tr>
<tr>
<td>H</td>
<td>Jessica divorced</td>
<td>Jessica financial</td>
<td>19.6</td>
<td>0.00</td>
<td>332</td>
</tr>
</tbody>
</table>

Notes: Null hypothesis is that candidates are equally likely to be offered the job. P-value is calculated using a one-sample test of proportions.

These findings show that decisionmakers overwhelmingly demonstrate ambiguity aversion when deciding whom to hire. Moreover, as long as candidates provide a reason for their reentry into the workforce, the actual reason itself matters little. Furthermore, as indicated below in Table 2A, women are more likely than men to hire the candidate who provides a reason for reentry. In both scenarios in which Jessica is the candidate providing information, the difference by sex of subject is statistically significant at the 10% level. These results are in accordance with prior work by economists, who have previously demonstrated that women are more ambiguity-averse than are men.

126 See generally Eckel & Grossman, supra note 87 (surveying experimental literature in economics showing that women demonstrate more ambiguity aversion than men).
Table 2A: Probability That a Candidate Is Hired When One Candidate Provides a Reason for Reentry and the Other Candidate Does Not, by Sex of Subject

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Marital Status</th>
<th>Reason for Reentry</th>
<th>Percent Who Would Hire Lisa - Male</th>
<th>Percent Who Would Hire Lisa - Female</th>
<th>P-Value for Test of Differences by Sex of Subject</th>
<th>N (Male/Female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Lisa married</td>
<td>Lisa children in school</td>
<td>83.8</td>
<td>88.7</td>
<td>0.19</td>
<td>148/186</td>
</tr>
<tr>
<td>F</td>
<td>Lisa divorced</td>
<td>Lisa financial</td>
<td>87.0</td>
<td>90.8</td>
<td>0.27</td>
<td>161/173</td>
</tr>
<tr>
<td>G</td>
<td>Jessica married</td>
<td>Jessica children in school</td>
<td>22.6</td>
<td>14.5</td>
<td>0.06</td>
<td>164/172</td>
</tr>
<tr>
<td>H</td>
<td>Jessica divorced</td>
<td>Jessica financial</td>
<td>26.5</td>
<td>14.1</td>
<td>0.00</td>
<td>147/185</td>
</tr>
</tbody>
</table>

Notes: Null hypothesis is that male and female subjects are equally likely to offer the same candidate the job. P-value is calculated using a two-sample test of proportions.

Table 3 reports the results for scenarios B and D. When both candidates provide a reason for reentry but one candidate's reason is financial and the other's is children in school, the candidate seeking work for financial reasons is far more likely to be hired. Table 3 demonstrates that when Jessica reports a divorce-related financial reason for reentry and Lisa's reason for reentry is children in school, 64.4% of subjects hire Jessica. Conversely, when Lisa reports a divorce-related financial reason for reentry and Jessica's reason for reentry is children in school, 73.9% of subjects hire Lisa. Once again, we attribute the slight edge that Lisa has over Jessica to the higher baseline likelihood of being hired that seems to relate to Lisa's elite undergraduate degree.
Table 3: Probability That a Candidate Is Hired When the Reason for Reentry Is Financial Versus When the Reason Is Children in School

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Marital Status</th>
<th>Reason for Reentry</th>
<th>Percent Who Would Hire Lisa</th>
<th>P-Value</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Lisa married, Jessica divorced</td>
<td>Lisa children in school, Jessica financial</td>
<td>35.6</td>
<td>0.00</td>
<td>337</td>
</tr>
<tr>
<td>D</td>
<td>Lisa divorced, Jessica married</td>
<td>Lisa financial, Jessica children in school</td>
<td>73.9</td>
<td>0.00</td>
<td>337</td>
</tr>
</tbody>
</table>

Notes: Null hypothesis is that candidates are equally likely to be offered the job. P-value is calculated using a one-sample test of proportions.

B. Testing Candidate Selection Across Multiple Scenarios

Next, we examine candidate selection across more than one scenario. We consider how the probability that a candidate is hired is affected by differences in her marital status and her reason for reentry when the other candidate's characteristics are held constant. Before describing our results, we pause to detail (1) the specifics of each test and (2) our ex ante predictions. Ex ante, we predict that, all else equal, when a candidate reports any reason for reentry, she is more likely to be hired than when she does not report a reason. We also expect that a candidate is more likely to be hired when she reports her reason for reentry is financial instead of children in school. We report the actual results of our two-sample test for differences in proportions below in Table 4.
Table 4: Probability That Lisa Is Hired When Her Characteristics Differ, Holding Jessica’s Characteristics Constant

| Lisa          | Lisa       | Lisa, No Information | Significant
|---------------|------------|----------------------|----------------
| Married,      | Divorced,  |                      | Differences    |
| Children      | Financial  |                      | Between        |
| in School     |            |                      | Scenarios      |
|               |            |                      |                |
| Jessica       |            |                      |                |
| Married,      |            |                      |                |
| Children in   | 56.1 (A)   | 73.9 (D)             | 18.5 (G)       |
| School        |            |                      | All            |
|               |            |                      |                |
| Jessica       |            |                      |                |
| Divorced,     | 35.6 (B)   | 51.8 (E)             | 19.6 (H)       |
| Financial     |            |                      | All            |
|               |            |                      |                |
| Jessica, No   | 86.5 (C)   | 88.9 (F)             | 56.1 (I)       |
| Information   |            |                      | C - I, F - I   |

Notes: Scenario tested is in parentheses following the estimated probability of hiring Lisa. Statistical significance in differences at the 1% level is calculated using a two-sample test for differences in proportions.

Table 4 demonstrates that giving a reason for reentry, and what that reason is, both have a strong influence on the probability a candidate is hired. When both Lisa and Jessica report that their reason for reentry is children in school, subjects prefer to hire Lisa 56.1% of the time. But if Lisa is instead divorced and reentering because of financial need, while Jessica’s reason remains children in school, the probability Lisa is hired increases by 17.8 percentage points. Providing children in school as her reason for reentry, relative to providing no information, increases the probability that Lisa is hired by 37.6 percentage points (holding constant Jessica reporting children in school as her reason for reentry). Yet providing a financial reason for reentry, relative to providing no information, increases the probability that Lisa is hired by an astonishing 55.4 percentage points.

As we noted earlier in Table 1, when both Lisa and Jessica report they are divorced and have a financial reason for reentry, Lisa and Jessica have exactly the same statistical probability of being hired. Holding constant Jessica reporting a financial reason for reentry, Table 4 demonstrates that the probability Lisa is hired is 16.2 percentage points higher when her reason for reentry is financial, as compared to when her reason for reentry is children in school. Once again, as long as Lisa reports any reason for reentry, there is a large increase in the probability that Lisa is hired. When Lisa reenters because of
children in school, there is a 16.0 percentage point increase, and when Lisa reenters for financial reasons, there is a 32.2 percentage point increase.

Finally, holding constant Jessica not providing any reason for reentry, the results in the last row demonstrate that when only one candidate provides a reason for reentry, she is overwhelmingly more likely to be hired. There is no significant difference in the probability that Lisa is hired when her reason for reentry is children in school versus when her reason for reentry is financial.

CONCLUSION

The results in Part VI unambiguously indicate that providing more information is better for female applicants returning to the workforce. Yet as discussed in Part I,127 the EEOC guidance restricts the flow of such information by discouraging employers from broaching the subject of family. This guidance reflects a widespread, overly cautious reading of the Title VII case law; employers, understandably, would rather be safe than sorry when it comes to liability.128 The practical result of such a reading, however, is a strong employer-side norm that shuts down employer-initiated inquiries about family status. The reality for women who are returning to the workplace after a family-status-related career break is that employers are too afraid to ask the questions they want, and arguably need, to ask about breaks in candidates’ employment histories. Unless these women volunteer their family-status information, potential employers remain in a state of uncertainty, forced to answer their underlying questions about a résumé gap with little to go on other than stereotypes and assumptions—precisely what Title VII is meant to avoid.

Compounding this harm is the strong employee-side norm that has developed against returning female applicants volunteering their family status. The origin of the employee-side norm may have emerged from a desire to conform to the standard model of the dedicated worker who prioritizes work over family, or it may derive from yet another misunderstanding of Title VII’s prohibitions. In any event, the employee-side norm exacerbates the information-restricting effects of the EEOC guidance and employer-side norm by ensuring that many employers remain in a state of ambiguity when trying to interpret a break in female applicants’ employment histories. This state of ambiguity may well lead employers to avoid hiring women not because they would rather hire men, but because they prefer certainty over uncertainty. Men are less likely to have

127 See supra text accompanying note 42.
128 This observation is reminiscent of the precautionary principle in the risk context. See generally Cass R. Sunstein, Beyond the Precautionary Principle, 151 U. PA. L. REV. 1003 (2003) (reviewing the limitations of regulatory approaches to risk that adopt the precautionary principle of better safe than sorry); W. Kip Viscusi, Corporate Risk Analysis: A Reckless Act?, 51 STAN. L. REV. 547 (2000) (documenting the concerns that major corporations have with respect to liability risks).
family-related career gaps on their résumé; as such, there is simply less opportunity for ambiguity in the résumés of male applicants.

Our results necessarily raise two questions. First, how could a well-intentioned employment discrimination law and its surrounding jurisprudence backfire on precisely the group it was meant to protect? Second, is there a way to relieve the information-restricting effects that have developed around Title VII, whether through EEOC guidance or case law, without simultaneously undoing the positive effects Title VII has had on the workplace? We suggest that one potential model for restoring the flow of information is the interactive process model used under the Americans with Disabilities Act (ADA). When an individual has a disability that affects their ability to work, and the individual desires a disability-related reasonable accommodation from an employer, the EEOC guidance recommends that the parties engage in an interactive process:

> After a request for accommodation has been made, the next step is for the parties to begin the interactive process to determine what, if any, accommodation should be provided. This means that the individual requesting the accommodation and the [Disability Program Manager] must communicate with each other about the request, the precise nature of the problem that is generating the request, how a disability is prompting a need for an accommodation, and alternative accommodations that may be effective in meeting an individual’s needs.

The interactive process is not codified in the statutory text of the ADA; it is an innovation of the EEOC guidance, meant to further the underlying purposes of the ADA. Despite its common origins in the EEOC, the ADA guidance is diametrically opposed to the Title VII guidance in its stance on information regulation. While the ADA guidance is meant to encourage the free flow of information, the Title VII guidance is meant to circumscribe it. The results of our study confirm that employment discrimination guidance limiting the flow of information from employee to employer and vice versa is misdirected. Whether the subject of the information is family status, criminal history, or disability accommodation, underserved groups are best served when they can have open and honest conversations with their employers. In the absence of such

129 Currently, there are five times as many stay-at-home mothers as stay-at-home fathers. Compare Livingston, supra note 24, at 1 (finding two million stay-at-home fathers in 2012), with COHN ET AL., supra note 19, at 6 (finding 10.4 million stay-at-home mothers in 2012).


conversations, ambiguity aversion sets in for employers, thus limiting, and even undoing, the positive effects of employment discrimination laws.

In proposing a transformation of the EEOC Title VII guidance from information-stifling to information-promoting, we do not mean to suggest that job applicants should begin listing their complete personal and family histories in résumés, applications, and cover letters. Advocates for employer credit-check bans and ban-the-box laws are concerned that employers will automatically throw out applications that check the wrong box or fail to meet a certain benchmark, without any further consideration.\(^\text{132}\) We, too, worry that a woman who advertises she is pregnant in her cover letter, or who lists the births of her six children on her résumé, will immediately see her application tossed by the employer without any further consideration.\(^\text{133}\) What we advocate for is an increase in honest conversations at the interview stage. Instead of remaining shrouded in taboo and concerns about potential illegality, personal history and family matters should be something to talk about during the interview, something to deepen both the employer’s and the applicant’s understanding of each others’ wants and needs.

Besides reducing the number of applicants who fall victim to employer ambiguity aversion, legal policy that promotes a deeper understanding between employers and applicants, we believe, will have two additional, positive repercussions in the workplace. First, such a policy should improve the quality of job matching between applicants and the positions for which they are hired. An extensive economics literature demonstrates that workers who are less satisfied with their


\(^{133}\) In fact, we believe that this concern is precisely why it is so difficult to draw robust conclusions from résumé audit studies regarding the importance of information flow in the hiring process. Résumé audit studies can only reveal the effects of advertising personal and family information in a résumé, cover letter, or form application. Just because including this information on a résumé, cover letter, or form application may be harmful does not mean that bringing up such information will be harmful in an interview setting. For examples of résumé audit studies, see Bertrand & Mullainathan, supra note 98, at 994-97, which examine the differences in callback rates for résumé featuring white-sounding and African-American-sounding names, Pierné, supra note 102, at 3-8, which studies the impact that including certain national or religious affiliations has on hiring in the French real estate sector, and Rooth, supra note 104, at 716-21, which tests the impact of obesity and attractiveness on hiring outcomes.
jobs are more likely to quit. Similarly, employers and employees whose expectations are not aligned are more likely to part ways. Moreover, workplaces with more satisfied workers are more productive. The costs of employee turnover are high and include expenses related to the exiting employee, as well as expenses related to hiring a replacement employee. For workers, quitting or losing a job also imposes considerable turmoil, producing income instability and increasing employment search costs. Nonetheless, our proposed legal policy can diminish the incidence—and associated costs—of job mismatch. Increasing information flow between applicant and employer can let the employer know if the applicant’s personal issues and family life are compatible with the employer’s expectations before the employer invests too much time in a relationship doomed to fail. Similarly, promoting honest conversations can let the applicant know up front if the job requirements are likely to be compatible with his or her personal and family matters, which should

134 See Joni Hersch, Education Match and Job Match, 73 REV. ECON. & STAT. 140, 141-44 (1991) (finding that overqualified workers in the U.S. are both less satisfied with their jobs and more likely to quit); Alfonso Sousa-Poza & Andrés A. Sousa-Poza, The Effect of Job Satisfaction on Labor Turnover by Gender: An Analysis for Switzerland, 36 J. SOCIO-ECON. 895, 908 (2007) (showing that reported job satisfaction predicts future quits).

135 See generally W. Kip Viscusi, Employment Relationships with Joint Employer and Worker Experimentation, 24 INT’L ECON. REV. 33 (1983) (analyzing how the job matching process involves uncertainties on behalf of the worker and the employer that only get resolved over time, leading to turnover for unsuccessful matches); W. Kip Viscusi, Job Hazards and Worker Quit Rates: An Analysis of Adaptive Worker Behavior, 20 INT’L ECON. REV. 29 (1979) (showing that workers who learn their job is riskier than expected are more likely to quit).

136 See, e.g., Petri Böckerman & Pekka Ilmakunnas, The Job Satisfaction-Productivity Nexus: A Study Using Matched Survey and Register Data, 65 INDUS. & LAB. REL. REV. 244, 249-50 (2012) (demonstrating that within manufacturing plants, an increase in workplace satisfaction is associated with greater value added per hour).


138 See generally Steven J. Davis & Till von Wachter, Recessions and the Costs of Job Loss, 2011 BROOKINGS PAPERS ECON. ACTIVITY 1 (showing that job displacement is associated with substantial lifetime earnings losses, anxiety, and search costs).
lead to a more informed decision about whether to accept a job and, in turn, to increased and more enduring job satisfaction.

Second, and relatedly, we believe that the long-term effects of such a legal policy may improve conditions with respect to workplace flexibility. A 2014 study by economic historian Claudia Goldin found that while a few industries, such as healthcare and technology, widely permitted employee flexibility in working hours and working location, many more traditional industries, including the corporate, legal, and financial sectors, lagged behind.\textsuperscript{139} Giving workers more control over the set of hours worked and the location from which they work, Goldin argues, is the necessary last step in eliminating the persistent pay gap between male and female workers.\textsuperscript{140} But increased flexibility need not benefit women at the expense of men; instead, she argues, such changes would benefit any worker, regardless of sex, who valued the flexibility to accommodate their personal and family lives.\textsuperscript{141}

Stifling honest conversations about personal and family matters, we suspect, does nothing to improve workplace flexibility. In fact, it may sustain and exacerbate the continued intransigence of certain industries to changes in employee working conditions by allowing employers to remain ignorant of what their workers require to accommodate their personal and family lives. Thus, removing personal issues and family matters from the category of unmentionables and instead making them something to talk about can do more than just improve outcomes for individual employers and employees; such a policy shift has the potential to spark systemic reforms in the workplace that are beneficial to all labor market participants, regardless of sex, criminal history, credit history, socioeconomic status, or minority status.

\textsuperscript{139} See Claudia Goldin, A Grand Gender Convergence: Its Last Chapter, 104 AM. ECON. REV. 1091, 1118 (2014) (“The rapidly growing sectors of the economy and newer industries and occupations, such as those in health and information technologies, appear to be moving in the direction of more flexibility and greater linearity of earnings with respect to time worked. The last chapter needs other sectors to follow their lead.”).

\textsuperscript{140} See id. at 1092 (“The solution [to closing the gender gap] does not (necessarily) have to involve government intervention. It does not have to improve women’s bargaining skills and desire to compete. And it does not necessarily have to make men more responsible in the home (although that wouldn’t hurt). But it must involve alterations in the labor market, in particular changing how jobs are structured and remunerated to enhance temporal flexibility.”).

\textsuperscript{141} See id. at 1118 (“What the last chapter must contain for gender equality is not a zero sum game in which women gain and men lose. This matter is not just a woman’s issue. Many workers will benefit from greater flexibility, although those who do not value the amenity will likely lose from its lower price.”).