

# Why Did Gender Wage Convergence Stall in the 1990s?

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## Abstract

An important puzzle in economics is what caused the stagnation in gender wage convergence during the 1990s. Prior to the 1990s, the gender wage gap declined by 1 p.p. per year. In the decades since, the convergence rate is close to zero. Using an event study design that exploits the timing of family-leave policies across states, we show the introduction of leave policies contributed to the stagnation of gender wage convergence. Based on our estimates, if gender wage convergence had continued at the pre-family leave rate, wage parity between white women and men would have been achieved as early as 2017.

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# 1 Introduction

Women entering the workforce en masse is one of the most important developments in the US labor market during the past century (Goldin, 2014). While female labor force participation increased following WWII, the gender wage gap held steady at 40% (Blau and Kahn, 2000). The 1980s, however, marked a time of steady gains for women, with the gender wage gap closing by roughly 10 percentage points (Blau and Kahn, 2006). The 1990s and beyond were marked by a return to a stagnation in gender wage convergence, with the ratio of women's earnings to men's earnings inching up a mere 2 percentage points in the 20 years between 1990 to 2010 (Fortin and Lemieux 2000; Blau and Kahn 2000, 2006, 2017; Maasoumi and Wang 2019).

While the reasons for gender wage convergence during the 1980s are well-understood – namely declining unionization, a reduction in gender discrimination<sup>1</sup>, and reduced gender gaps in: education, labor market experience, and occupational sorting, the pattern of stagnant wage gains for women in the 1990s remains a puzzle (Blau and Kahn 2006, 2017).

In this paper, we argue that the passage of state and federal family-leave policies can explain the puzzle of gender wage stagnation in the 1990s. In 1993, President Clinton signed into law the Family and Medical Leave Act (FMLA), which guaranteed 12 weeks of unpaid job-protected leave to workers.<sup>2</sup> The FMLA is effective at increasing family-leave coverage for employees (Waldfogel, 1999). Despite the fact that the FMLA provides for unpaid family leave, the provision is not without cost to the employer. For 58% of employees on FMLA-related leave, work loads are shifted to another employee, while 6% of employees on FMLA-related leave are replaced by temporary workers (Brown et al., 2020). In jobs where there are returns to experience, the replacement is likely to be less effective.

Although the FMLA is a gender neutral policy, women are more likely to file an FMLA claim, and the duration of leave spells are on average 14 business days longer for women than for men (Waldfogel 1999; Tompson and Werner 1997; Waldfogel 2001; Brown et al. 2020). The increased use of the FMLA by women opens the door for statistical discrimination in which a firm may differentially capitalize the expected cost of the family leave policy into current or future wages. For instance, firms may dampen future wage in-

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<sup>1</sup>Blau and Kahn (2000) refer to the reduction in the gender wage gap deriving from changes in unobserved characteristics as encompassing changes in gender discrimination among other explanations.

<sup>2</sup>To qualify for coverage, employees must have worked for their employer for at least one year and worked 1,250 hours in the past year. Moreover leave-taking was predicated on a family or medical circumstance.

creases for women or may increase their demand, and the wages, for male labor. In fact, there is a growing body of evidence suggests negative causal impacts of leave policies on women's relative progress in the labor market. For example, [Antecol et al. \(2018\)](#) find that gender-neutral, clock-stoppage policies in academia decrease female tenure rates in economics departments. National studies and state specific studies in the US and Europe of family-leave policies document similar facts. For instance, [Thomas \(2016\)](#) shows the FMLA lowered female promotion rates by 8 percentage points despite it increasing the likelihood of employment for women by 5 percentage points. Similarly, [Bailey et al. \(2019\)](#) found that California's paid family leave policy reduced long term wages for mothers, with first time mothers experiencing the sharpest declines. Extensions in paid leave in Sweden likewise increased the gender wage gap ([Ginja et al., 2020](#)).

Both the increased scholarship demonstrating the unintended effects of family leave policies and the descriptive fact that gender wage convergence stagnated around the same time as the passage of the FMLA makes it conceivable that the introduction of the FMLA could explain the puzzle of gender wage stagnation during the 1990s. Pinpointing the introduction of family-leave policies as the cause of gender wage stagnation during the 1990s, however, is challenging because there are numerous changes occurring in the economy during the period as well as many major pieces of federal legislation including the introduction of the Federal Earn Income Tax Credit (EITC) and welfare reform that are proximate to the passage of the FMLA.<sup>3</sup>

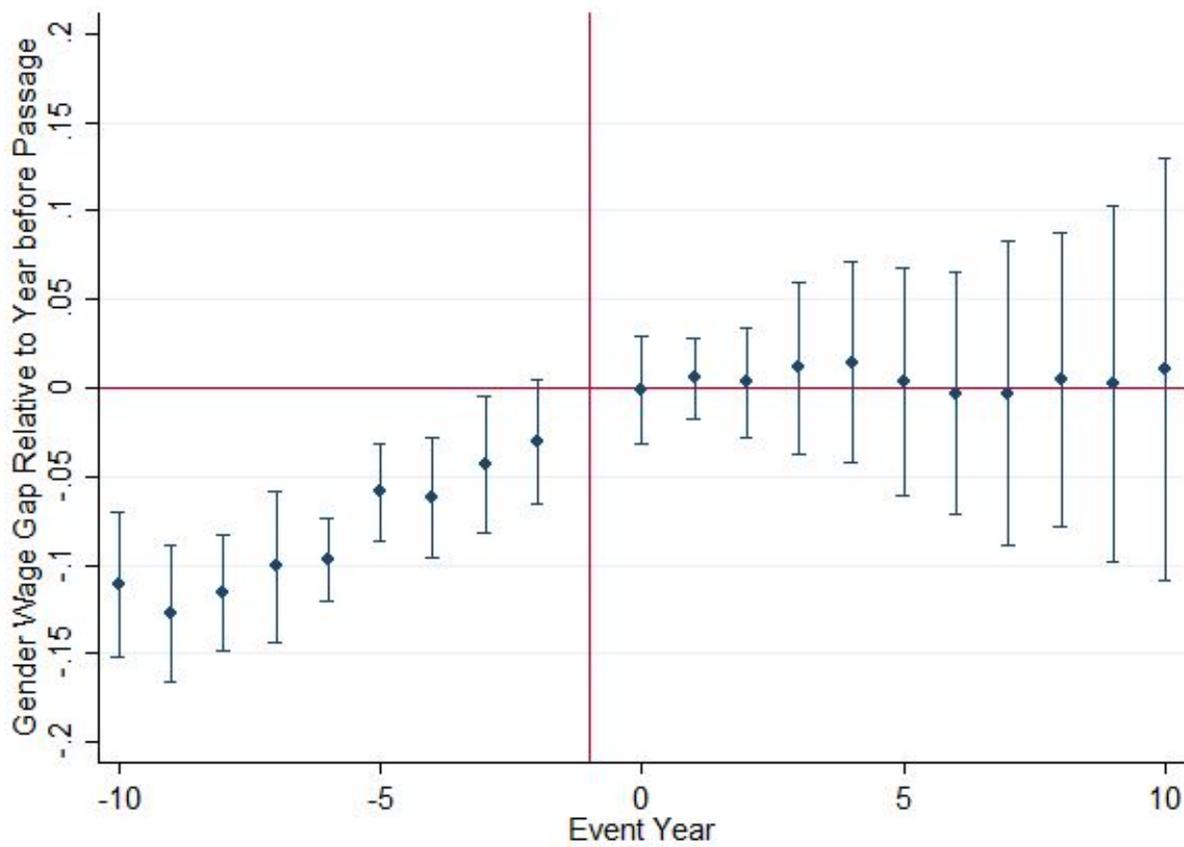
To overcome the potential policy endogeneity deriving from just the federal variation in the introduction of unpaid family leave in the US, we leverage the fact that 12 states and the district of Columbia enacted antecedents to the FMLA during the years 1972-1992 that offered unpaid maternity leave. Using a stacked event study design, we show that the gender wage gap between white women and white men closed at a rate of 1.3 percentage points per year in decade before a state maternity leave policy is passed and then flat lines thereafter, with an annual rate of convergence of 0.03 percentage points per year. Both the pre-leave rate of gender wage convergence and the difference with the post-leave rate of gender wage convergence are statistically significant at that 1% level. Furthermore, the rate of gender wage convergence that we estimate from the state-level and federal family leave mandates are nearly identical in the years prior to the enactment of the leave policies; however, we document an even more stark slow down in gender

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<sup>3</sup>For instance, women's increase in labor force participation also stagnated during the period ([Blau and Kahn, 2013](#)). The occupational distribution experienced stagnation during the 1990s ([Blau et al. 2013a,b](#)) and growth of the service sector, where women may have a comparative advantage over men, also stagnated ([Olivetti and Petrongolo, 2016](#)). [Cha and Weeden \(2014\)](#) show that the gender gap in overwork stalled during the 1990s as well.

wage convergence following the state mandates when compared to the slow down in gender wage convergence following the federal mandate. Consequently, the other federal policies enacted coincident with the FMLA are more likely to reduce the negative impact of the FMLA on the rate of gender wage convergence, rather than being responsible for the stagnation themselves. Based on our findings, we can fully explain the slow-down in gender wage convergence in the 1990s by relying only the impacts of family leave policies.

Figure 1: Event Study: State-Passed Policies on White Female Wage Gap



This figure is an event study plot of the gender wage gap between white women and white men before and after the introduction of state mandated maternity leave. The gender wage gap is reported relative to its value in the time period before the event, i.e.,  $t = -1$ . It uses data from 12 states and Washington, DC, which each enacted an FMLA-type maternity leave policy during the period 1972-1992 before the federal mandate.

Moreover, we show that the observed stagnation in the gender wage gap due to family-leave policies is caused by a reversal in the relative fortunes of men and women. Prior to the passage of family leave, white men’s wages were stagnant and white women’s wages were increasing, following the leave policy, white men’s wages start to rise and white women’s wages stagnate.

We conduct additional analyses and placebo tests on subsamples of the data where we expect family leave policies to have heterogeneous impacts on gender wage convergence or no impact at all as a way of testing the robustness of our main findings and exploring mechanisms. In particular, we subset the data by employment sector (private vs. public), marital status, and parental status. Because wages in the public sector are set using well-defined salary schedules and are subject to more stringent oversight for compliance with anti-discrimination laws (e.g. 1963 Equal Pay Act, and Title VII of Civil Rights Act), we expect to find little to no change in the rate of gender wage convergence in the public sector following the passage of family leave laws ([Barón and Cobb-Clark 2010](#); [Castagnetti and Giorgetti 2019](#)). By contrast, we expect to find stagnation in gender wage convergence in the private sector where there is less monitoring for discrimination and more firm discretion in wage setting. Likewise, since married women and women with children face larger gender wage penalties than their unmarried or childless peers, we expect to find more striking patterns of gender wage convergence followed by stagnation for wives and for women with children than for unmarried women and women without children following the passage of family leave policies ([Blau and Kahn 1992](#); [Waldfogel 1998](#)). Our results bear out both of these predictions, consistent with fact that family leave policies contributed to gender wage stagnation in the segments of the labor market where one would expect them to have more bite.

As a final check on our results, we test for whether the federal expansion of the Earned Income Tax Credit (EITC) in 1993 could explain our results. Since this policy occurred at the same time as the FMLA, it is a possibility that the EITC and not the FMLA is responsible for the stagnation in gender wage convergence. If the federal EITC expansion is causing the stagnation, we would expect to see the largest changes in wages after 1993 occurring for workers with low levels of educational attainment, since they are more likely to qualify for the EITC than workers with high levels of educational attainment. Using educational attainment as a proxy for the probability that a worker qualifies for the EITC, we find no evidence that wages increased more for workers with low levels of educational attainment. We also use data on the implementation of a state-specific EITC policy to estimate an event study on the gender wage gaps before and after the EITC is first implemented in the state. The approach mirrors the use of state-level variation in family-leave policies pre-dating the FMLA. The results from the state variation in EITC adoption show neither a change in the rate of gender wage convergence prior to the adoption of the state EITC nor thereafter. The result solidifies the fact that the EITC is not responsible for the stagnation of the gender wage gap.

Taken together, our results provide suggestive evidence that the stagnation in the gen-

der wage gap in the United States during the 1990s was caused by family-leave policies, resolving an important puzzle in economics. Further, we calculate that in the absence of family-leave policies that gender-wage parity for white women would have occurred in 2017. Our results do not speak to the normative question of whether unpaid family-leave policies represent good or bad public policy. Instead, the purpose of our study is to test whether family-leave policies caused the gender wage stagnation experienced by women in the 1990s. In fact, we show that the state-level antecedents to the federal mandate, many of which occurred during the 1980s, had potentially stronger effects than the later federal mandate. Our results are particularly striking because the United States provides for only 12 weeks of unpaid family leave, based upon the FMLA, which is significantly less generous than similar policies in Western Europe. An important direction for future work is to evaluate whether the gains in flexibility for workers due to family leave policies adequately compensates for the negative impacts on the gender wage gap. Additionally, the trade-off that we highlight suggests an important role for economist to consider what features of family leave policy design can soften the equity-efficiency trade-off arising from family leave policy.

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