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The Effect of Pay Transparency Laws on Wages and Discrimination Complaints.

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Abstract

How can policymakers decrease wage gaps for groups covered by anti-discrimination legislation? In this paper, we show there is no impact of pay transparency laws on wages, while these policies lead to an increase in discrimination complaints. Using Current Population Survey (CPS) data we exploit the variation in US states that passed pay transparency laws between 1977 and 2021. We find no evidence of wage changes or changes in wage gaps for disadvantaged groups. However, using discrimination complaints filed with the Equal Employment Opportunity Commission (EEOC) between 2009 and 2021, we find the number of lawsuits filed due to workplace discrimination increases by 25-40%. Our findings establish that pay transparency legislation alone will not benefit workers, and that strong anti-discrimination laws are an important complement alongside pay transparency to increase equality.

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1 Introduction

Policymakers seek to combat inequality within firms through pay transparency regulations. Over the past decade, policymakers across the U.S. and Europe have implemented such regulations with renewed interest to provide workers with greater information about their co-workers' wages and reduce pay secrecy regimes. However, the effectiveness of such laws is unclear. On the one hand, updated information on the wage distribution leads employees with incorrect beliefs to negotiate over wages (Jäger et al. 2021). On the other hand, employers who violate laws on pay transparency and anti-discrimination may have little fear of reprisal from employees, particularly if workers underestimate their own outside options and litigation is costly (Oyer and Schaefer 2002). Crucially, whether or not such laws reduce inequality depends on employers' compliance in disclosing information on their employees earnings and their willingness to negotiate with employees to close wage gaps.

We evaluate the impact of state-level pay transparency policies on future wages and whether such laws raise the number of discrimination-based lawsuits. Despite the extensive use of pay transparency regulation, there is limited evidence on the factors which make such legislation effective. For instance, the effectiveness of such laws in closing wage gaps depends on probability of reprisal from employees through discrimination complaints. Indeed, policymakers have argued that these laws will promote pay equality by encouraging individuals with protected characteristics such as age, race, sex, and disability to collect evidence of illegal pay discrimination to bolster enforcement of anti-discrimination laws. While employees can file discrimination complaints with the Equal Employment Opportunity Commission (EEOC), even if employers comply with pay transparency laws, they still have little incentive to negotiate over wages if litigation is costly and unlikely to find in favor of the employee.

We provide evidence of the mechanisms which determine the effectiveness of such legislation. Using data from the Current Population Survey from 1977–2021, we evaluate the impact of

the staggered introduction of laws in a difference-in-differences framework to identify the effect of pay transparency legislation on wages. We focus on whether groups with protected characteristics such as sex, race, age, and disability are differentially impacted by such laws to establish the ability of pay transparency laws to increase equality. To further understand the underlying mechanisms behind the effectiveness of pay transparency laws, we test whether the passage of state-level pay transparency laws lead to an increase in the number of discrimination charges filed with the EEOC. By highlighting the importance of firms' incentive to comply with pay transparency and anti-discrimination regulations, our results inform policymakers of the underlying mechanisms which determine the effectiveness of such policies. Specifically, we argue that profit-maximizing employers have little incentive to negotiate with workers to decrease wage gaps, as even after becoming pay transparent, the expected costs of reprisal through payouts resulting from discrimination complaints are low.

We make three important contributions to the literature on pay transparency laws and discrimination in the workplace. First, we provide new evidence on whether pay transparency laws, as implemented by policymakers, impact wages and pay gaps. We show that pay transparency laws had zero impact on wages, for all workers as well as for workers with protected characteristics. Importantly, pre-legislation wages exhibit no differential trends, suggesting the timing of when states pass pay laws is uncorrelated with the dynamics of wages over time, and we allow for departures from the assumption of treatment effects homogeneity (Goodman-Bacon 2021).

Second, we show that despite having zero impacts on wages, pay transparency laws increase workers' awareness of discrimination in the workplace. Three to four years after the introduction of pay transparency laws, discrimination complaints filed with the EEOC increase by 25–40%. Complaints increase significantly across all protected characteristics such as race, sex, disability, and age, suggesting that pay transparency laws unequivocally increase employees awareness of discrimination in the workplace. The significant increase in discrimination complaints post-legislation, together with the lack of an effect on wages, suggest that employers do comply with

pay transparency laws, but are unwilling to negotiate with employees over wages.

Finally, we provide a comprehensive discussion the underlying reasons behind why laws lead to increases in discrimination complaints but no change in wages. We argue that even if employees do learn of the pay of others and employers comply with pay transparency laws, profit-maximizing employers may keep wages low and continue to discriminate if the expected costs of discrimination through litigation are low. Even with transparency laws in place, the likelihood of an employer who discriminates facing a discrimination case is exceptionally rare.[1] While facing a lawsuit is extremely rare, conditional on facing a lawsuit, it is even more uncommon for such cases to rule against the employer: the overwhelming resolution of lawsuits is "no reasonable case", which is roughly 45–60% of all charges across race, disability, sex, and age. In a standard model of Becker (1968), the probability of employers operating in violation of anti-discrimination laws will depend on both the probability of detection as well as any sanction for breaking the law.[2] Given that the probability of detection is so low, we show that pay transparency legislation alone is unlikely to benefit workers, and argue that strong and effective anti-discrimination laws are an important complement to policymakers aiming for pay transparency legislation to increase equality.

Our findings contribute to two distinct strands of literature. First, we emphasize the importance of anti-discrimination laws for the literature on pay transparency laws. Previous literature has found limited overall effects of pay transparency on wages, though there are benefits that accrue to some subgroups of the population. Kim (2015) finds that the gender pay gap shrinks

[1]From 1997–2022, there were 29,084 charges filed annually under EEOC for race, 21,253 for disability, 25,148 for sex, and 18,350 for age for the entire US.

[2]Firms do not necessarily have discriminatory intent when designing pay secrecy policies. Many firms implement pay secrecy policies because they believe it reduces worker dissatisfaction by restricting the ability to compare wages (Colella et al. 2007; Kim 2015). The evidence from the experimental economics literature regarding pay comparisons' effects on worker effort is mixed (Charness et al. 2016). The evidence from laboratory experiments designed to study pay secrecy shows that worker effort is higher under pay secrecy than it is under pay disclosure (Bamberger and Belogolovsky 2010; Nosenzo 2013). Pay secrecy has also been found to promote participants' willingness to help each other in experiments (Bamberger and Belogolovsky 2017). In an experiment designed to test wage inequality between managers and non-managers, Hesse and Rivas (2015) find a significant decline in non-managers' effort choices when the wage gap between managers and non-managers increases, suggesting a possible reason for pay secrecy among managers.

by 5-12% in states that pass pay transparency legislation among women who have college degrees. Burn and Kettler (2019) finds that wages amongst managers increased by a mere 3.5% as a result of the legislation, and they find no evidence of overall changes in the gender pay gap. While Cullen and Pakzad-Hurson (2021) show that pay transparency laws alter the willingness of employers to negotiate over future wages, our findings speak to the importance of employers maximizing profits and continuing to discriminate even with pay transparency laws in place.

Second, we provide evidence of the real-world effects of discrimination in the workplace, measured by the number of discrimination cases, contributing to a diverse literature on discrimination in the workplace. Bertrand and Duflo (2017) compile a review of this literature on workplace discrimination, noting that evidence of the real-world effects of discrimination in the workplace is lacking in the literature. A literature which ranges from correspondence studies which show racial bias in which applicants are called back for interviews based solely on whether their name is associated with the black community in the US (Bertrand and Mullainathan 2004), to audit studies which send human participants to interviews and help uncover how women are less likely to be employed in certain industries (Neumark et al. 1996).

2 Pay Transparency Laws and Institutional Details

The National Labor Rights Act (NLRA) protects the rights of employees to bargain for higher wages, of which discussions of compensation are an integral part. Federal courts and the National Labor Relations Board (the government agency in charge of enforcing the NLRA) have repeatedly ruled that pay secrecy policies are a violation of the rights of workers (Colella et al. 2007; Gely and Bierman 2003), and have only granted limited exemptions in circumstances where the compensation structure is a legitimate business secret (e.g., a proprietary statistical model) (Gely and Bierman 2003). While the NLRA protects the rights of non-supervisory employees, the law does not extend these protections to supervisory employees or contractors. With the expansion

of middle management and supervisor roles lower down the firm hierarchy, this gap in the NLRA has led to many employees falling outside the scope of the law.

As a result of this, in the United States, pay secrecy policies have become common. A 2010 Institute for Women's Policy Research survey found that half of workers are bound by a pay secrecy policy, rising to two thirds of workers in the private sector (Hegewisch et al. 2011). These policies either take the form of explicitly written rules in the employee handbook or as unwritten cultural norms (Gely and Bierman 2003). A typical rule may state that wages are a "confidential matter between the employee and his earnings supervisor...[discussions of earnings] will result in dismissal and/or disciplinary action at the supervisor's discretion" (Gely and Bierman 2003).

Table 1 shows that twenty-one states have passed laws that make pay secrecy illegal to address the gap in coverage of the NLRA. The earliest adopters of these policies were in the 1980s (Michigan and California). There were no pay transparency laws passed in the 1990s, but these policies saw a renewed interest during the Great Recession and in the 2010s. State-level pay transparency laws cover every employee in a state, regardless of supervisory status.[3] They make pay secrecy policies illegal and subject to the same penalties as other fair labor violations. These penalties are often small compared to the benefits perceived by employers (Gely and Bierman 2003; Kim 2015). Therefore, the potential effect of these policies is likely to be small. Where they are likely to be felt is if they result in information that leads to class action lawsuits of discrimination (Kim 2015).

Figure A.1 summarizes the variation exploited in our staggered difference-in-differences framework. As we can see from the figure a handful of states implemented pay transparency laws in the early 1980s, and our results are robust to dropping these early adopters. Following a lull in the late 1980s and early 1990s, pay transparency laws become more evenly spaced both over time and geographically across the US, with the exception of Southern states which are less likely to adopt the policy.

[3]Some employers and workers may be exempt from these policies if they are exempt from all fair labor and

Table 1: Details of Pay Transparency Laws

(1) State	(2) Year	(3) Emp Min	(4) Eq. Relief	(5) Damages	(6) Damage Cap	(7) Fines	(8) Strong
California	1985	1	yes	no	no	no	no
Colorado	2008	1	yes	yes	no	no	yes
Connecticut	2015	1	yes	yes	no	no	yes
Delaware	2017	1	yes	yes	no	no	yes
D.C.	2014	1	no	no	no	yes	no
Hawaii	2019	1	no	no	no	yes	no
Illinois	2003	1	no	no	no	yes	no
Maine	2009	1	yes	no	no	yes	no
Maryland	2020	1	yes	yes	no	yes	yes
Massachusetts	2018	1	yes	yes	no	yes	yes
Michigan	1983	1	no	no	no	no	no
Minnesota	2014	1	no	no	no	no	no
Nebraska	2019	15	no	no	no	no	no
Nevada	2021	15	no	no	no	no	no
New Hampshire	2015	1	no	no	no	no	no
New Jersey	2013	1	yes	no	no	yes	no
New York	2019	1	no	no	no	no	no
Oregon	2017	1	yes	yes	yes	no	no
Vermont	2005	1	yes	yes	no	no	yes
Virginia	2020	1	no	no	no	no	no
Washington	2018	1	yes	yes	yes	no	no

Note: Source is the U.S. Department of Labor. www.dol.gov/agencies/wb/equal-pay-protections. Accessed: January 25, 2022. Column 1 reports the state, column 2 reports the year the state passed a bill banning pay secrecy policies, column 3 reports the minimum number of employees a company must have before the law applies to them, column 4 reports whether the law allows for equitable relief, column 5 reports whether the law allows for damages to be awarded to successful plaintiffs, column 6 reports whether the damages are capped, column 7 reports whether administrative fines can be imposed for breaches of the law, and column 8 summarizes whether we consider the law strong or weak.

3 Data

Using CPS data on wages and worker characteristics obtained from the IPUMS database (Ruggles et al. 2022). for the years 1977 to 2021 inclusive, we construct a sample of working adults aged 25 to 65, with wage outlier restrictions (below $2 or above $15,000) as is standard in the literature (Kim 2015; Burn and Kettler 2019). Our final sample consists of 3,152,343 individuals, of which 378,606 are managers.

CPS data is a set of repeated cross-sections. For any individual, we observe their 'primary occupation' at the time of the survey, defined as the occupation in which they worked the most hours. Respondents are asked about their total income from the previous year. Those out of the labour force (for example the unemployed) report their last occupation, if said last occupation was a manager in the previous year we include them in the sample since we are able to observe all necessary variables. Income is inflation-adjusted to 2012 dollars. Table A.1 highlights how the observable characteristics of individuals in the estimation sample in 2021.

For the second part of our analysis, we turn to the number of discrimination complaints filed with the EEOC in the years 2009 to 2021 inclusive. Again using CPS data we compile a sample of those in the labour force with controls for sex, age, race, union membership, and region by state and year. We observe the total number of complaints filed under the premise of discrimination in a state in a given year, as well as the number of complaints broken down by discrimination based on age, race, sex, and disability. We control for the total number of workers in each state since this would affect the total number of potential plaintiffs as well as controlling for average wages (since workers in states with higher wages may have more resources to sue). Due to data limitations, our sample is limited to a shorter time window since some states only began collecting data on complaints in 2009.

employment laws (e.g., small employers with only a handful of employees or family members).

4 Methodology

Our empirical strategy exploits the passage of pay transparency laws to estimate how wages, and subsequently lawsuits, change comparing treated and counterfactual states. Treated states are defined as those who pass pay transparency legislation. Counterfactual states are those who never passed pay transparency legislation. As such, our baseline empirical strategy limits the influence of "not yet treated" states in the counterfactual group, as described in further detail below. We also examine the robustness of our results to altering this counterfactual group.

4.1 Event Study Specification

To exploit the variation in the differential implementation of the law we employ an event study design which allows the impacts of pay transparency laws to vary over time and follows states 5 years pre/post-legislation:

$$Y_{s,t} = \alpha_t + \alpha_s + \sum_{k=-5}^{5} \delta_k \cdot D^k_{s,t} + \mathbf{X'}_{s,t} + \varepsilon_{s,t}, \tag{1}$$

for state S in year t. $D^k_{s,t}$: is a dummy variable equal to one if the state has k years until a pay secrecy ban is passed. The other terms in the equation control for the differences in wages across states and over time and differences in demographics. We include state fixed effects (α_s) and year fixed effects (α_t). We include a vector of state-level characteristics ($\mathbf{X'}_{s,t}$) which control for differences due to race, potential experience, education, marital status, occupation, and industry across states. See Table A.1 for a list of the controls included. The error term, $\varepsilon_{s,t}$ is associated with state s during year t. The standard errors are clustered at the state level. When estimating this equation, we weight the observations using the Annual Social and Economic Supplement (ASEC) weights provided by (Ruggles et al. 2022).

Our empirical strategy rests on the parallel trends assumption, that in the absence of the the pay transparency law passage, wages in treated and counterfactual states would have evolved the

same over time. As discussed below, our baseline empirical strategy always compares treated states to states who never pass pay transparency laws. As described in Section 2, there is a staggered nature to pay transparency laws, as a greater number of states continues to pass laws over time. As such, the composition of this counterfactual group changes over time.

4.2 Sant'Anna-Callaway Event Study

Another assumption relates to that of treatment effect homogeneity. A wealth of literature in recent years (Sun and Abraham 2021; Callaway and Sant'Anna 2021; Goodman-Bacon 2021) emphasizes that departures from treatment effect homogeneity, in the presence of varied timing in the implementation of a policy, can bias the treatment effect away from its true value. In order to avoid making this assumption, we employ a variation of the generic event study approach which accounts for this potential issue.

For instance, if the treatment effect of the implementation of pay transparency laws is heterogeneous between states, this has the potential to bias the ATT away from its true value (Goodman-Bacon 2021). The issue arises when the estimating regression uses states that have already been treated as a control group for states that are treated later. When this happens, the effect of the treatment on the earlier treated state can be captured and used as a control for the later treated state, this could result in the ATT being artificially higher or lower from its true value. Given the large time differences in the implementation of the laws, this could be a significant problem.

To overcome this potential issue, we employ a Sant'Anna Callaway staggered difference-in-difference event study. This modification of the generic event study calculates separate 2x2 DiD estimate between all counterfactual and treated states and excludes the comparisons between early-treated and late-treated groups which have the potential to bias the regression. The use of the Sant'Anna-Callaway estimator allows us to drop the assumption of treatment effect homogeneity. In addition to this, further robustness checks are employed in section 5.2 that show our results are robust to a host of alternative empirical approaches including the approaches described

in Goodman-Bacon (2021).

5 The Impact of Pay Transparency Laws on Wages

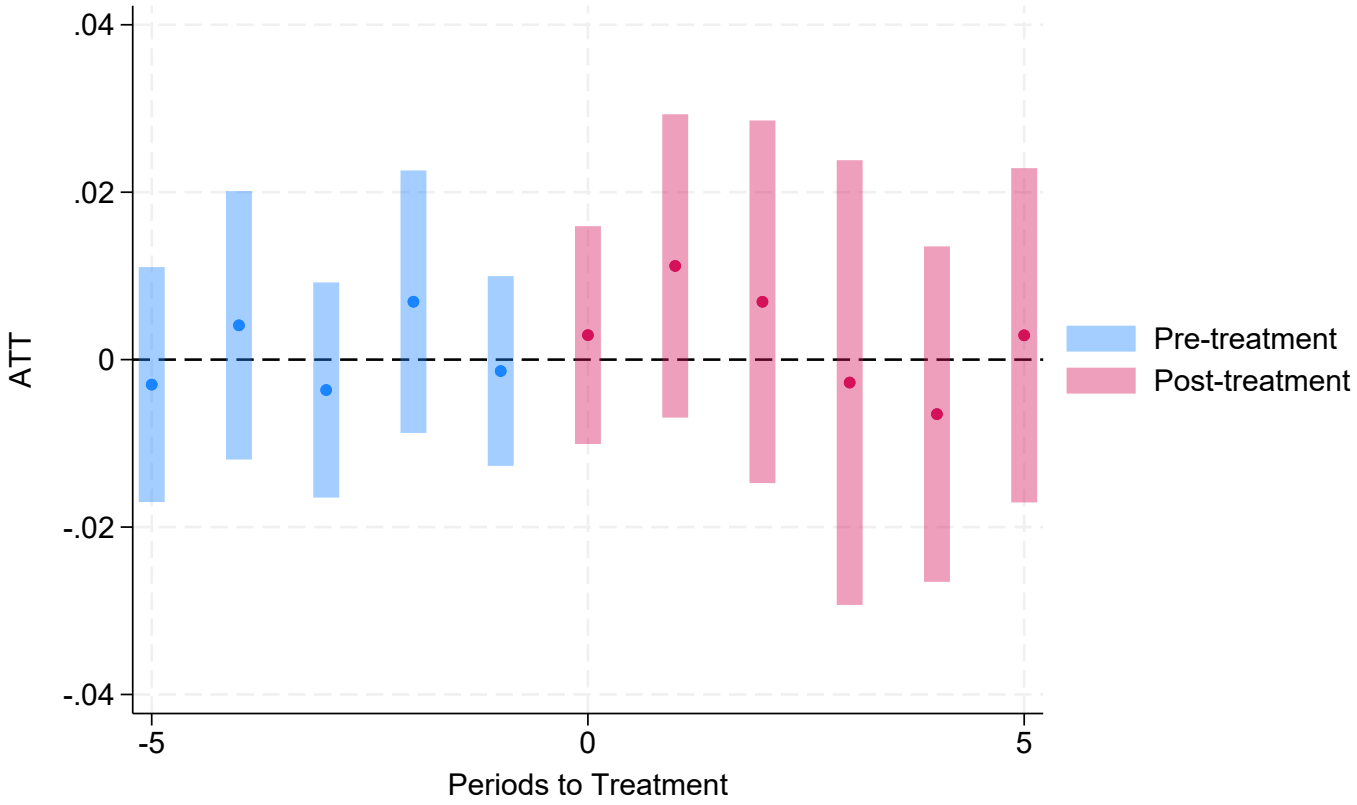
Figure 1 reports the estimates of the staggered event study specification from Callaway and Sant'Anna (2021), revealing zero impact of pay transparency laws on wages. After the passing of pay transparency legislation, estimated coefficients are small in magnitude and not significantly different from zero up to 5 years after legislation was passed. The lack of an effect on wages is consistent with previous studies that show little impact (Devaraj and Patel 2022) or significant effects only for a small subgroup of managers (Kim 2015; Burn and Kettler 2019).

Importantly, Figure 1 also reveals that, conditional on the controls included in equation (1), the estimated wage differences prior to the implementation of the legislation are small in magnitude, precisely estimated, not significantly different from zero, and exhibit a flat trend over time. This suggests that the passage of pay transparency laws is uncorrelated with wage dynamics before the passage of laws, relative to states that never pass pay transparency laws. This suggests the event study specification of Callaway and Sant'Anna (2021) isolates a suitable counterfactual for states that pass pay transparency laws.

5.1 The Impacts of Pay Transparency Laws on Wages Across Different Subgroups

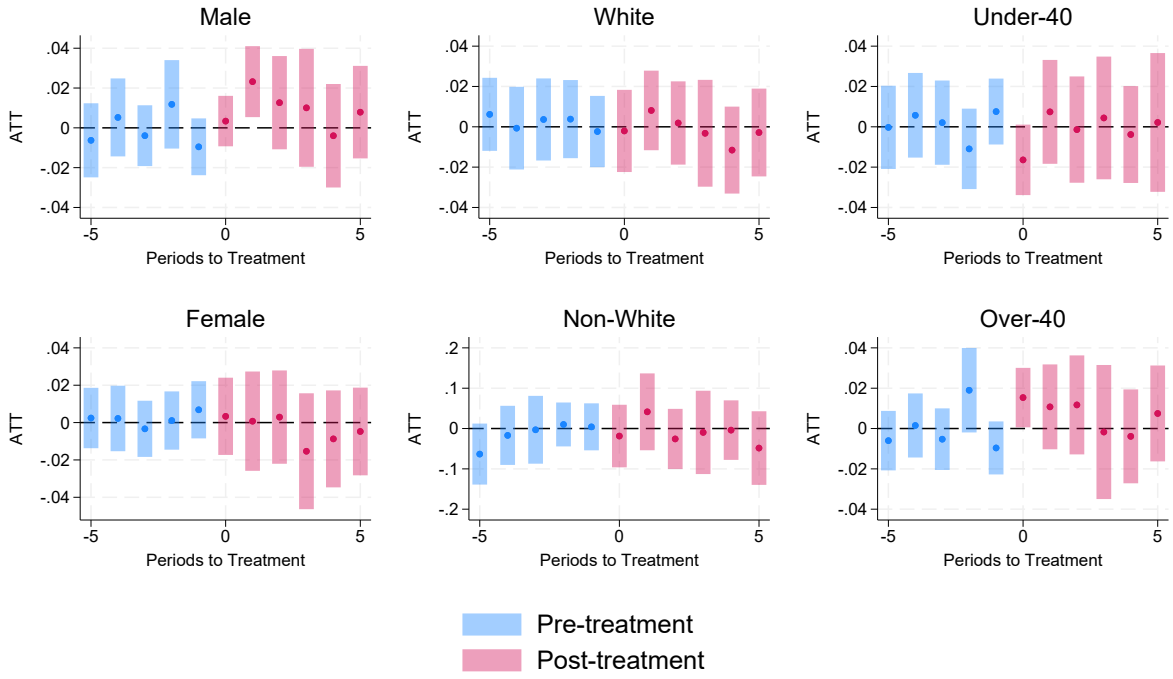
While Figure 1 exhibits no impacts of pay transparency laws on average among all workers, there may be differences in the wage response across different subgroups. Pay transparency laws aim to promote pay equality among more disadvantaged groups with large pre-treatment wage gaps. As such, individuals with protected characteristics may be impacted differently by transparency legislation. To understand whether there exists heterogeneous response by those with characteristics protected under the EEOC, Figure 2 estimates the Sant'Anna-Callaway staggered event

Figure 1: Staggered DD Event Study for Wages



Note: Figure plots the impact of pay transparency laws on wages, estimating the Callaway and Sant'Anna (2021) staggered event study, controlling for differences due to race, potential experience, education, marital status, occupation, and industry. Sample of workers as described in Section 3. Robust standard errors clustered at the state level, with 95% confidence interval plotted.

Figure 2: Staggered DD Event Study for Wages—By Specific Groups



Note: Figure plots the Callaway and Sant'Anna (2021) event study that shows impact of pay transparency laws on wages, controlling for differences due to race, potential experience, education, marital status, occupation, and industry. Each panel presents separate regressions by stated subgroup. Sample of workers as described in Section 3. Robust standard errors clustered at the state level, with 95% confidence interval plotted.

study separately across three dimensions: men vs women, white vs non-white, and young vs old (defined as older/under 40).[4]

Across all subgroups, both those with and without protected characteristics, Figure 2 reveals no significant differences in wages following the passage of pay transparency laws. Indeed, results are identical among women, non-white, and older workers compared to men, white, and younger workers. Consistent with Figure 1, there are no significant changes in wages post-legislation.

[4]Information on disability is not measured in the data.

5.2 Robustness of Baseline Results

Our baseline results reveal no significant changes in wages after the passage of pay transparency laws. We establish the validity of this result across a host of robustness checks. First, to provide further evidence on the potential problems caused by variation in treatment timing, we employ a Goodman-Bacon decomposition which plots each of the canonical 2x2 DiD estimates of the average treatment effect on the treated groups (ATT) alongside their weight within the model. The Goodman-Bacon decomposition distinguishes between 'harmless' variation when comparing treated groups to never-treated groups, and potentially (though not necessarily) biasing variation caused by groups that were both treated but at different times. If the timing groups hold significant weight in the model, this could be a cause for further investigation as there is the potential for treatment effect heterogeneity which could bias the ATT. However, as figure A.2 shows, none of the timing groups hold a significant amount of weight in the model and therefore this is unlikely to be a problem. Furthermore, the Sant'Anna Callaway estimator in the baseline specification is robust to treatment effect heterogeneity by design. Our identification strategy also rests on the assumption of parallel trends; that is: wages in treated states were not rising more than wages in counterfactual states before the implementation of the law, and we would expect this to hold in the hypothetical counterfactual case where no pay transparency laws were passed. The evidence for this assumption is clear across all of the baseline specifications, with no non-zero differences being present in the years preceding the introduction of pay transparency laws.

Second, we show the robustness of our results to alternative choices of counterfactual groups. The existing literature exploits the nature of pay transparency laws, where such laws extend new rights to managers and supervisors, and compare managers to non-managers (Kim 2015; Burn and Kettler 2019; Devaraj and Patel 2022). To assess the robustness of our baseline result to an alternative empirical strategy, we estimate a triple difference specification at the individual-level, where the treated group is individuals employed in managerial positions after the implementation

of the law, and the counterfactual group is made up of the weighted average of three components: individuals in states that never pass a law, individuals in states that have not yet passed a law, and individuals in states that have already passed a law. While our baseline strategy only focuses on never-treated states, here we allow for the counterfactual group to include both not-yet-treated states as well as early-treated states. Table A.2 reveals no significant changes in wages or in subgroups in the triple difference specification comparing managers wages to non-managers. The point estimates of wage changes are insignificant and small across every specification. Further subgroup analysis shows no changes across the dimensions of sex and race. The lack of effect in this specification is strong evidence that there is a zero effect on wages on the gender pay gap.

Finally, we assess the potential importance of early adopters of pay transparency laws, finding that early adopters are not driving the results in Figure 1. A potential concern in our baseline specification is that Michigan passed its law in 1983 and California in 1985, with the next law not being passed until 18 years later in 2003. These two early adopters of the legislation could potentially cause the most issues in regard to the heterogeneity of the treatment effect due to variation in timing. Figure A.3 and Table A.3 show that the results of both event study and the triple difference specifications are robust to dropping these two early adopters.

6 The Impacts of Pay Transparency Laws on Discrimination Complaints Filed with the EEOC

While pay transparency laws aim to decrease within-firm inequality, there is little impact of such policies on wages, among both all workers and specific workers with characteristics protected by the EEOC. Given the lack of an increase in wages, we examine employee response along another dimension: discrimination complaints filed with the EEOC between 2009 and 2021.[5]

[5]For robustness, figure A.3 shows the event study on wages in the previous section restricted to the same time window as the EEOC complaints, once again no significant wage effects are found.

If workers covered by the EEOC, which protects workers from discrimination on the basis of characteristics such as sex, race, age, and disability, learn they are paid lower wages as a result of pay transparency laws, they may resort to filing discrimination complaints if they are unable to successfully negotiate over wages.

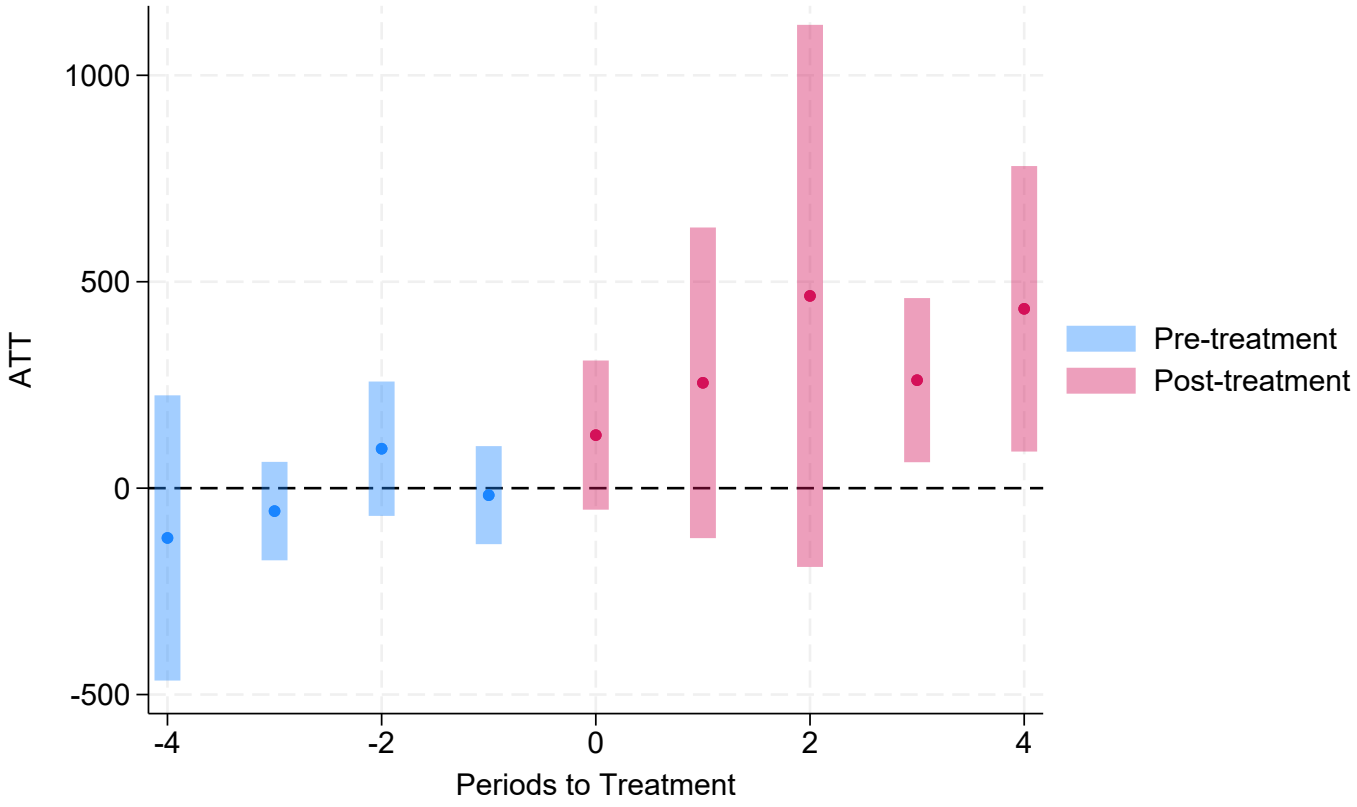
Whether or not transparency laws lead to increases in discrimination complaints informs employer response to such laws. Indeed, wages may be unchanged for a number of reasons. On the one hand, employers may not comply with pay transparency laws, particularly if they believe it may decrease worker satisfaction (Colella et al. 2007; Kim 2015). On the other hand, if employers become pay transparent, and employees learn about wages of their co-workers, this could increase awareness of discrimination in the workplace among workers with protected characteristics. Even if employers implement pay transparency, they may remain unwilling to negotiate over wages, even among groups who face discrimination. If employers are profit maximizing and the expected penalties resulting from discrimination are low, they have little incentive to increase wages.

To distinguish between these two mechanisms, we again use the staggered differences-in-differences methodology from Callaway and Sant'Anna (2021) to estimate the impact of pay transparency laws on discrimination complaints. We control for state and time fixed effects as well as a vector of worker characteristics including the average annual income of workers in a state, the share of workers who are women, the share of workers who are non-white, and the total number of workers in a state. This ensures that when we compare changes in the total number of complaints, we are controlling for the fact that some states have larger pools of potential plaintiffs and the fact that some plaintiffs may have more money with which to pay a lawyer up front. We compare the number of complaints in a state before the law to the number of complaints in a state after the law.

Figure 3 reports the estimated results from the event study specification as in Callaway and Sant'Anna (2021), pointing to the importance of continued discrimination by employers after the

passage of pay transparency laws. In the four years prior to treatment, there exist no significant differences between states who would pass a law and the control states. In contrast, we see a sharp rise in complaints three and four years post-legislation. Such increases are significant at the 5% level, and represent a 25–40% increase in complaints relative to a baseline average of 976. The effects are growing over time, potentially reflecting the fact that it takes time to file a complaint because many individuals exhaust internal channels of dispute resolution before turning to civil proceedings.

Figure 3: Staggered DD Event Study for Total Complaints

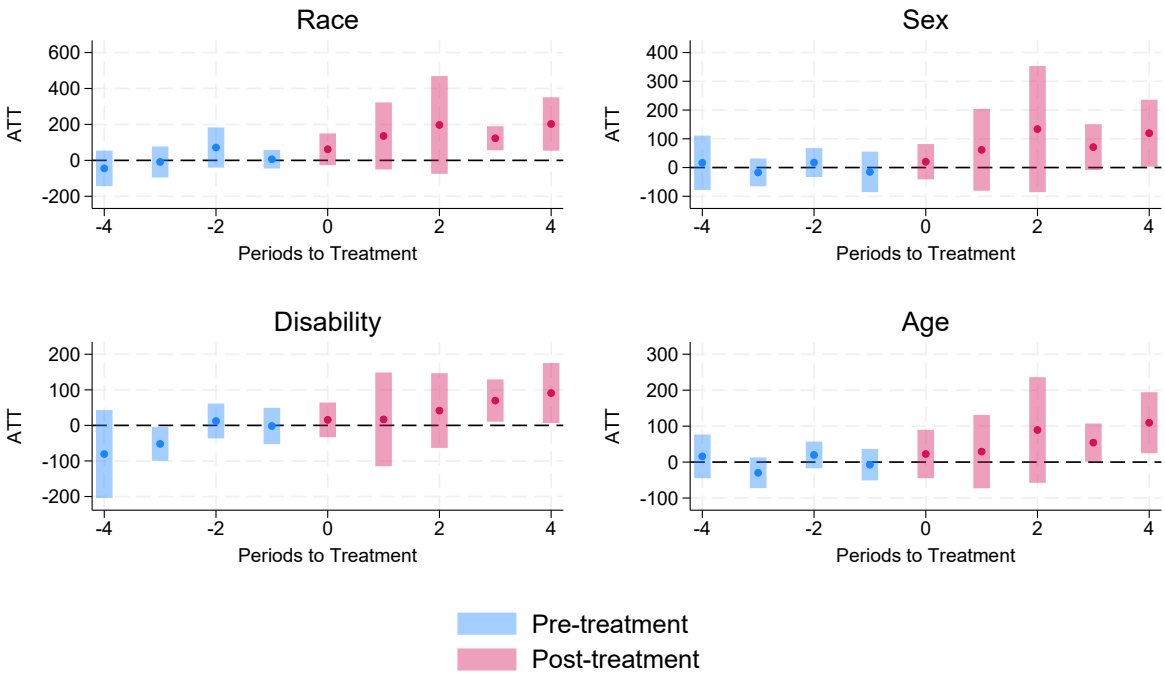


Source: https://www.eeoc.gov/data/enstate levelnd-litigation-statistics-0. Robust standard errors clustered at the state level. Average total number of complaints in time -1: 976.

6.1 The Impacts of Pay Transparency on Discrimination Complaints Across Different Subgroups

Figure 4 examines the changes among specific types of complaints separately for complaints on the basis of race, sex, disability, and age. Across all four types, we find a similar pattern of insignificant rises in years 1 and 2 followed by statically significant rises in years 3 and 4. Among all four types of complaints, we see significant increases 3/4 years post-legislation. Relative to the baseline average of complaints pre-legislation, complaints for race see the largest increases, with relatively similar increases among all groups.

Figure 4: Staggered DD Event Study for Complaints by Type



Source: https://www.eeoc.gov/data/enforcement-and-litigation-statistics-0. Robust standard errors clustered at the state-level. Average number of complaints in time −1: 306, 305, 304, and 223 respectively. Average number of complaints does not sum to reported number in Figure 3 because workers can file complaints in more than one type.

Table A.4 in the appendix shows how the 'strength' of a law (as defined in section 3) affects

the number of complaints in a state. Column 1 shows that states with weaker laws experience a rise of approximately 269 complaints. Conversely, states with strong laws witness an even greater increase, totaling 481 complaints. A similar trend is observed in column 2 for age-related complaints, favoring states with stronger laws. However, for disability, race, and sex-related complaints, no significant differences emerge between states with varying law strengths, suggesting complaints for age-related offenses drive the increase in column (1).[6]

7 Why Does Pay Transparency Increase Discrimination Complaints but not Wages?

The significant increases in complaints filed with the EEOC suggest that employers do comply with pay transparency laws, and that workers with protected characteristics become aware of discrimination in their workplaces. Although pay transparency laws lead to discussions over wages, employers are unwilling to increase wages among groups with protected characteristics, and workers resort to filing discrimination complaints. Despite the threat of litigation, employers are unwilling to increase wages among workers with protected characteristics. We argue that even after pay transparency laws, profit maximizing employers may continue to discriminate because the probability of successful discrimination claims is extremely small.

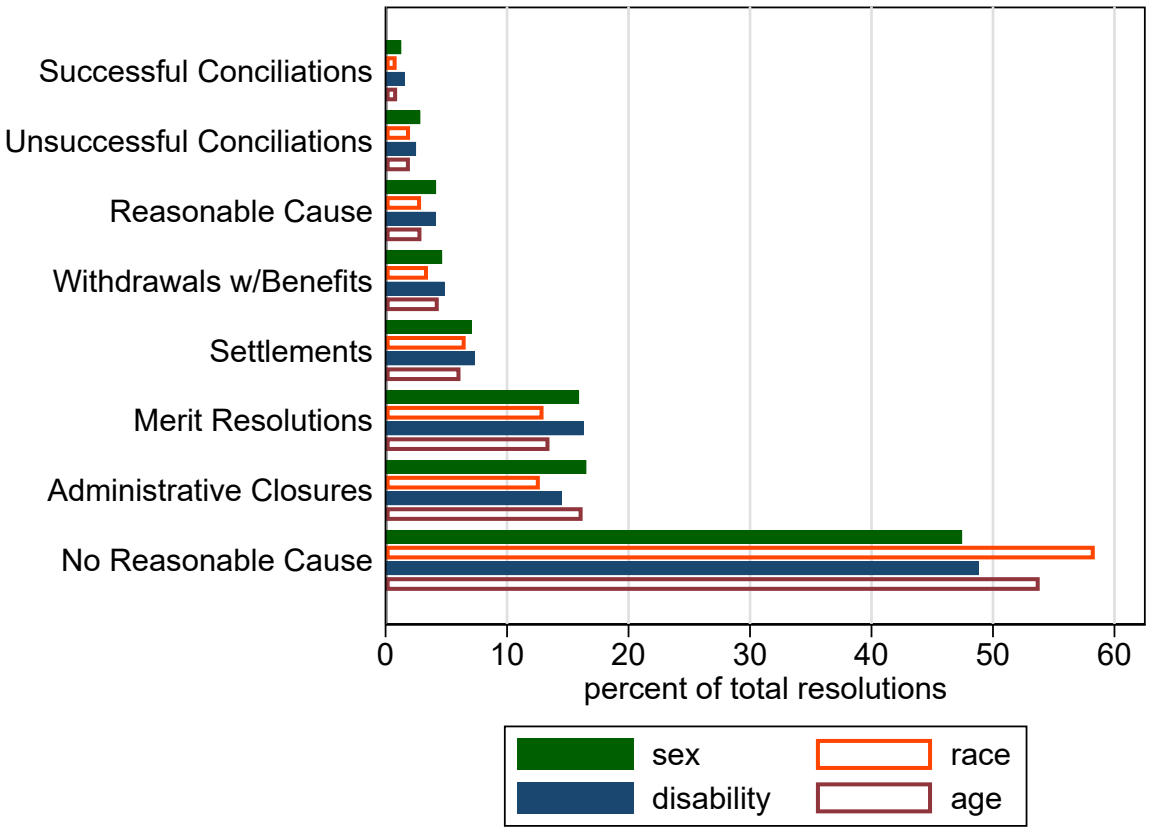
Neumark et al. (2019) suggest that no more than 3% of all firms in the US receive a charge for discrimination on the basis of age in any given year. Similar numbers exist for other discrimination complaints: across the entire US from 1997–2022, there are 29,084, 21,253, 25,148, and 18,350 charges filed annually under EEOC for race, disability, sex, and age complaints respectively.[7] With such small numbers, discriminating employers face little fear of reprisal from

[6]The results suggest that strength matters to some extent for the aggregate pattern, but may not play an equally important role for all types of discrimination complaints. The important insight is that the increase in complaints will grow over time, with significant effects in year 4 onwards.

[7]Authors' calculations from https://www.eeoc.gov/data/enforcement-and-litigation-statistics-0.

employees. While settlements or penalties paid as a result of successful discrimination complaints are costly to employers, increasing wages of their employees is also costly. Indeed, a profit maximizing employer may find it optimal to discriminate if the probability of being caught is very low, as in a standard model of Becker (1968).

Figure 5: Outcomes of Resolutions for Complaints filed with the EEOC, 1997–2022



Note: Figure plots the percent of total resolutions by resolution type, averaged across all resolutions from 1997–2022 for cases filed with the EEOC under sex, race, disability, and age. Data available from the EEOC, https://www.eeoc.gov/data/enforcement-and-litigation-statistics-0.

Even if firms face discrimination charges, Figure 5 shows that nearly 50% of all cases lead to a ruling of "no reasonable cause" from 1997–2022. Costly charges to the employer—charges which result in merit resolutions, settlements, withdrawal with benefits, and reasonable cause—represent just 13–16%, 6–7%, 3–4%, and 2–4% of total resolutions respectively. While the

likelihood of facing a charge is small, the likelihood of a ruling in favor of the employee who filed the discrimination complaint is even smaller. Even though pay transparency laws lead workers to become aware of discrimination in the labor market, employers still find it profit maximizing to underpay workers as the expected cost of successful litigation against them remains small. Put differently, the value of non-compliance with anti-discrimination laws is too high even among pay transparent employers. While employers do comply with pay transparency laws, they remain unwilling to negotiate over wages. If policymakers aim to increase the wages of those who face discrimination in the labor market, strong and effective anti-discrimination laws are necessary to complement pay transparency policies.

8 Conclusion

Policymakers promote pay transparency laws as a tool to increase wages, reduce wage inequality, and reduce wage gaps for women. Firms oppose the laws because they fear they will increase the wages of employees, increase employee turnover, and lead to frivolous discrimination cases. Our findings show that pay transparency legislation alone did not achieve a number of accounts policymakers' goals. While states that pass pay transparency laws experience no significant changes in wages post-legislation, discrimination complaints from workers with protected characteristics such as race, sex, disability, and age increase significantly.

Our evidence suggests that in order to increase equality among workers, policymakers need to not only consider the compliance costs with pay transparency laws, but also the compliance costs with discrimination laws more broadly. As discrimination complaints increase significantly, this suggests that while employers comply with pay transparency laws, they are unwilling to negotiate over wages. We argue that profit maximizing employers face little fear of reprisal even after becoming pay transparent.

We can compare the effects of the laws to the costs they impose on employers directly. If we

assume that the wage gap between male and female managers would shrink after pay transparency to close to parity, we can estimate the potential costs to workers from a lack of pay transparency as well as the compliance cost to firms for enforcing pay transparency. If a woman finds out she was paid less than her male colleagues at a rate similar to the average gender gap for managers, she would earn $21,247 less than her male colleagues. Since the average female manager has been in their job for 9.7 years, she has lost $206,124 over her time at the firm in lower wages. If the state only has administrative fines available, she will receive nothing and the firm will pay a fine of about $1,000 for the first violation with escalating fines for more frequent violations and would have no change increase in managerial wages. Under an equitable relief regime she would be entitled to back pay of $21247 per year to the maximum number of years permitted under the statute of limitations, but still there would be no increase in managerial wages for other female managers at the firm. In states with damages, she will receive her back pay, but also compensatory and punitive damages awarded by the judge or jury. The maximum damage payout for a discrimination complaint is $600,000 for compensatory and punitive damages under the most commonly used laws Bachman (2022).[8] In states that allow the plaintiff to recoup attorney's fees when they win their case, the firm will pay an additional 30% on average for the attorneys.

These results suggest that there is a strong business case for even non-discriminatory employers to invest in education initiatives within their firms to ensure that managers can explain the data which underlies pay and compensation to help employees understand the causes of pay dispersion in the firm. Without increased dialogue from employers, employees on the wrong end of pay dispersion may conclude that in the absence of objective criteria that discriminatory factors may be at play.

[8]Note, however, that for race discrimination no such maximum exists. In some states, no such maximum is applied, so awards potentially may be in the millions for the most egregious of cases. A common theme in discrimination law is for cases to be bundled together as class action lawsuits, so all female managers at a firm may combine into a single complaint with awards multiplied by the total number of potential plaintiffs in the class. At large firms, this will run into the 100s if not 1000s.

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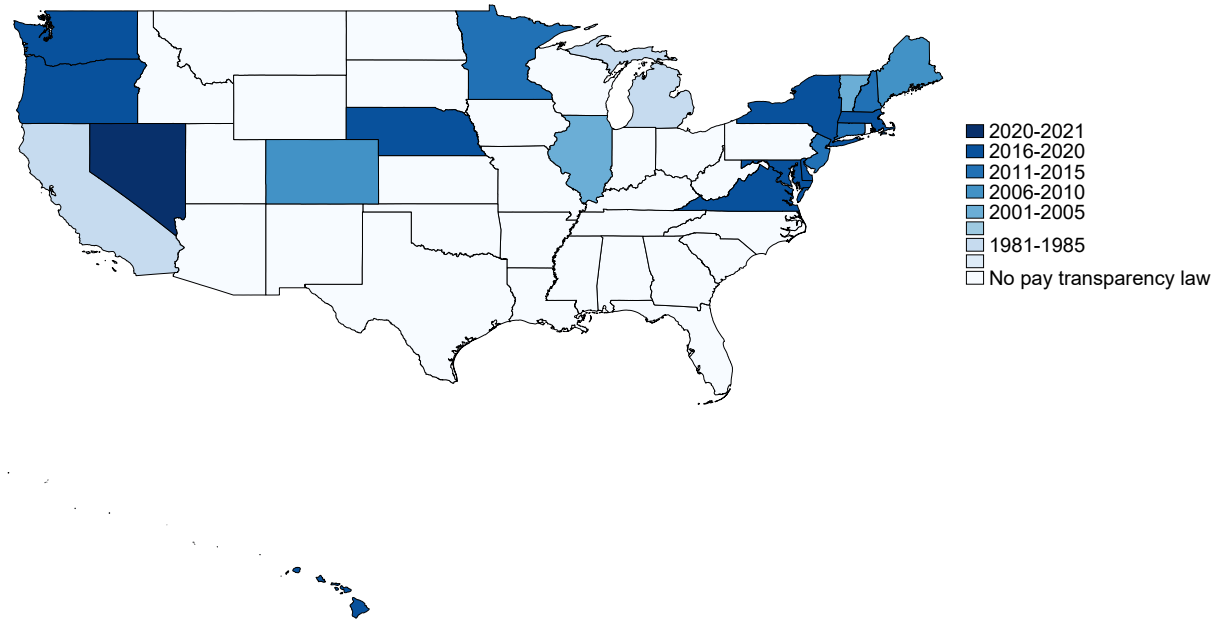
Appendix Figures and Tables

Figure A.1: Summarizing the Timing of Law Changes



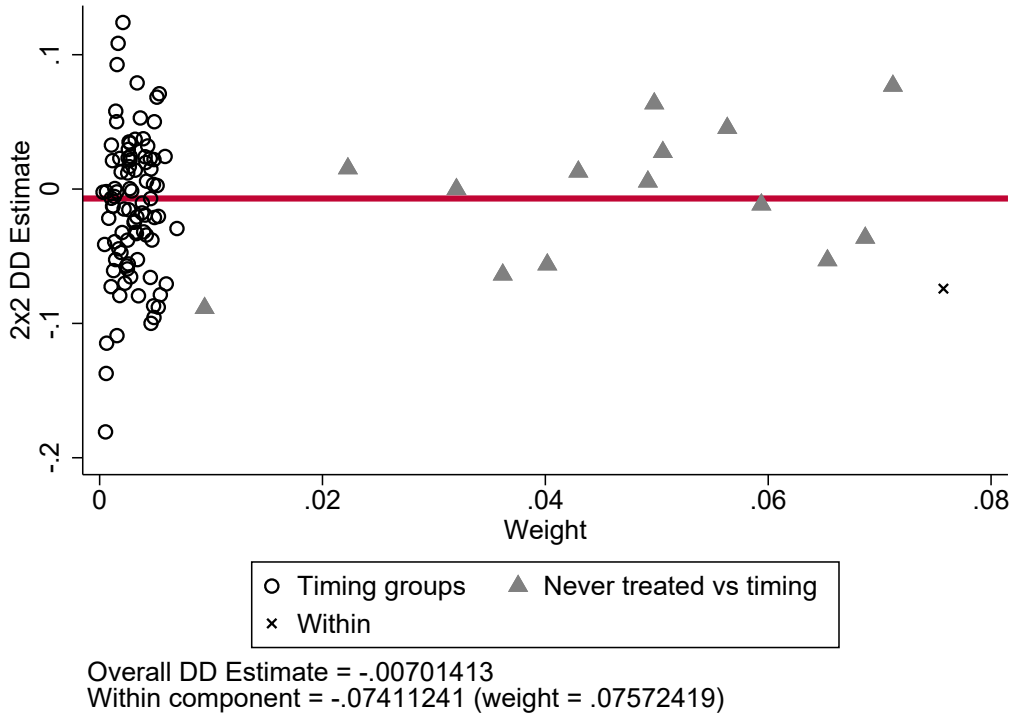
Note: Source is the U.S. Department of Labor. www.dol.gov/agencies/wb/equal-pay-protections. Accessed: January 25, 2022. Alaska (no pay transparency law) omitted due to visual convenience.

Table A.1: Average Worker Characteristics in 2021

	Non-Managers		Managers	
	mean	sd	mean	sd
Pay transparency law	0.435	0.496	0.469	0.499
Hourly wage	28.876	116.202	44.223	132.568
Fulltime	0.620	0.485	0.786	0.410
Female	0.490	0.500	0.412	0.492
Black	0.119	0.323	0.082	0.275
Other	0.113	0.316	0.104	0.305
High school graduate	0.265	0.441	0.163	0.370
Some college	0.265	0.442	0.224	0.417
Bachelor's degree	0.244	0.430	0.363	0.481
Master's degree or Doctorate	0.152	0.359	0.227	0.419
Married	0.604	0.489	0.710	0.454
Separated/widowed/divorced	0.145	0.352	0.123	0.328
Agriculture sector	0.024	0.152	0.048	0.213
Mining sector	0.007	0.085	0.007	0.084
Construction sector	0.074	0.262	0.112	0.315
Manufacturing sector	0.098	0.298	0.111	0.314
Utilities sector	0.078	0.267	0.063	0.243
Wholesale retail sector	0.024	0.153	0.020	0.138
Retail sector	0.138	0.345	0.102	0.303
Finance sector	0.060	0.238	0.124	0.330
Business services sector	0.078	0.269	0.090	0.287
Personal services sector	0.030	0.170	0.015	0.122
Entertainment sector	0.016	0.126	0.021	0.145
Professional services sector	0.312	0.463	0.236	0.425
Observations	56,147		9,061	

Note: Data come from the 1977 to 2021 Current Population Surveys. Wages are inflation-adjusted to 2012 dollars.

Figure A.2: Goodman Bacon Decomposition



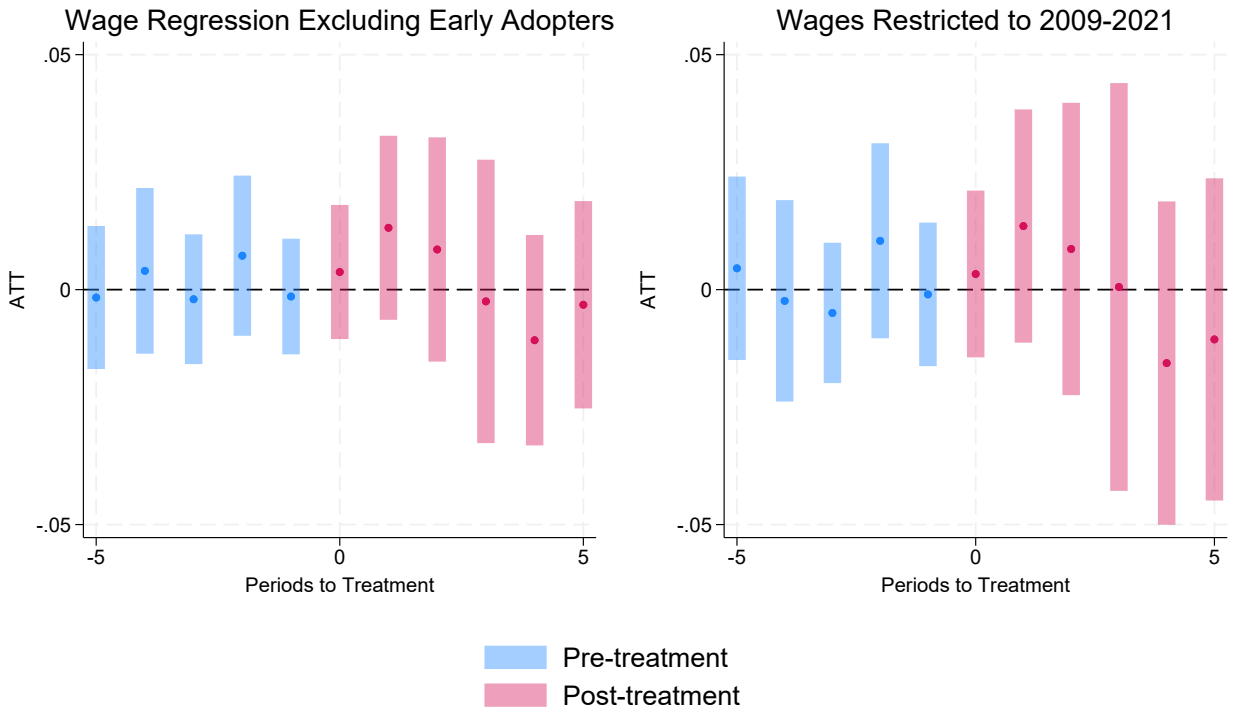
Note: Data come from the 1977 to 2021 Current Population Surveys. Wages are inflation-adjusted to 2012 dollars. We control for differences due to race, potential experience, education, marital status, occupation, and industry. Robust standard errors clustered at the state-level.

Table A.2: Differences-In-Differences Estimates

Panel A. DD	Managers		
	(1)	(2)	(3)
Pay Transparency Law	0.010	0.003	0.004
	(0.012)	(0.012)	(0.011)
State & Year FE	X	X	X
Controls		X	X
Time-trend			X
Observations	315010	292076	292076
Panel B. DDD	Managers vs. Non-Managers		
	(1)	(2)	(3)
Manager	0.275***	0.246***	0.356***
	(0.011)	(0.013)	(0.014)
Manager × Pay Transparency Law	0.022*	0.01	0.008
	(0.013)	(0.008)	(0.009)
State & Year FE	X	X	X
Controls		X	X
Time-trend			X
Observations	2785425	2476436	2476436

Note: Data come from the 1977 to 2021 Current Population Surveys. Wages are inflation-adjusted to 2012 dollars. We control for differences due to race, potential experience, education, marital status, occupation, and industry. Robust standard errors clustered at the state-level.
*p<0.1 **p<0.05 ***p<0.001

Figure A.3: Robustness of Event Study Restuls, Excluding Early Adopters and Restricting to Later Time Periods



Note: Data come from the 1977 to 2021 Current Population Surveys. Wages are inflation-adjusted to 2012 dollars. We control for differences due to race, potential experience, education, marital status, occupation, and industry. Robust standard errors clustered at the state-level.

Table A.3: Differences-In-Differences Estimates Excluding Early Adopters

	(1)	(2)	(3)
Manager x Pay Transparency Law	0.0184	-0.00144	0.00617
	(1.36)	(-0.09)	(0.73)
Manager x Pay Transparency Law x Female	-0.0397*	-0.0112	-0.0192
	(-2.17)	(-0.67)	(-1.23)
State & Year FE	X	X	X
Controls		X	X
Time-trend			X
Observations	2455431	2180177	2180177

Note: Data come from the 1977 to 2021 Current Population Surveys. Wages are inflation-adjusted to 2012 dollars. We control for differences due to race, potential experience, education, marital status, occupation, and industry. Robust standard errors clustered at the state-level.
*p<0.1 **p<0.05 ***p<0.001

Table A.4: Effect of Pay Transparency Law Strength on Complaints

	(1)	(2)	(3)	(4)	(5)
	Total	Age	Disability	Race	Sex
Pay Transparency Law	268.818**	70.156*	9.260	108.970**	74.679**
	(124.005)	(36.213)	(28.897)	(45.418)	(30.456)
Pay Transparency Law × Strong	212.233*	79.485**	12.510	80.709	42.087
	(115.680)	(35.346)	(24.441)	(50.852)	(27.981)
N	662.000	662.000	662.000	662.000	662.000

Source: US Equal Employment Opportunity Commission
Source: https://www.eeoc.gov/data/enforcement-and-litigation-statistics-0. Robust standard errors clustered at the state-level.
*p<0.1 **p<0.05 ***p<0.001