TOO MANY MANAGERS:
THE STRATEGIC USE OF TITLES TO AVOID OVERTIME PAYMENTS

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ABSTRACT

We find widespread evidence of firms avoiding overtime payments through the strategic use of "managerial" titles. Exploiting a federal mandate in the Fair Labor Standards Act (FLSA), we find an almost five-fold increase in managerial title usage just over the regulatory threshold to avoid overtime payment, including suspect managerial listings such as "Directors of First Impression," whose jobs are otherwise equivalent (in this case, to a front desk clerk). Overtime avoidance is more pronounced when firms have stronger bargaining power and employees have weaker rights. Moreover, firms utilize this more when they face financial constraints, as well as when their labor has weaker outside options. Lastly, firms make more use of overtime avoidance tactics in occupations with more volatility in labor demand and when there is more uncertainty in labor scheduling. We find no evidence of long-term employees benefits of these fake titles in terms of future wages or future career progression. In sum, our results are strongly consistent with firms using this flexible tool to their advantage where – and when – the tradeoff is most in their favor to do so. Our prediction dynamics align with litigation realizations and actions taken by the Department of Labor for workplace violations around wage theft precisely to this end. Moreover, the wages avoided are substantial - we estimate that firms avoid roughly 13.5% in compensation costs for each strategic "manager" hired.

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By nearly all measures, labor share – the share of an economy's income accruing to the labor factor of production - has fallen over the past century, being particularly true over the past two decades (Autor et al. (2017), Karabarbounis (2024)). While Ricardo (1817) flagged deciphering labor share as political economy's central charge, many economists since have explored and posited theories for its across- and within-industry, firm and country variation. The literature has largely focused on wage-share, as it is a more tractable metric of labor's compensation and cross-compensation comparison. However, workers receive other benefits from firms. We focus on one of these potentially large benefits in the form of managerial roles.

In theory, managerial roles are thought to encompass increased responsibility and oversight scope.[1] In line with this enhanced responsibility, compared to non-managerial employees, managers often receive higher salaries, other forms of pay (e.g., bonuses), and perquisites. Even the Federal Government recognizes "managers" as a unique and special class. In fact, the federal government has gone further to establish a law to delineate a manager from a regular employee to decide who is entitled to overtime pay.

In this paper, we exploit that law, *The Fair Labor Standards Act §7(g)* (hereafter FLSA), in investigating whether firms appear to strategically assign titles to exploit regulatory thresholds in order to pay less for 'overtime' work. Specifically, we make use of the FLSA provisions that allow firms to be exempt from paying employees overtime wages if the employee is a "manager" and receives a salary above a threshold set by the FLSA.[2] We investigate the extent to which companies hire employees with potentially deceptive managerial job titles (e.g., front desk attendants hired as *Directors of First Impressions*) with otherwise equivalent work parameters as other non-managers in order to avoid having to pay overtime for extra hours worked.[3]

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[1] According to the "Exemption for Executive Employees Under the Fair Labor Standards Act" regulation of the Department of Labor, a manager is someone whose "primary duty must be managing the enterprise, or managing a customarily recognized department or subdivision of the enterprise," "customarily and regularly direct the work of at least two or more other full-time employees," "have the authority ... for the hiring, firing, advancement, promotion or any other change of status of other employees" https://www.dol.gov/sites/dolgov/files/DOL/legacy/files/fs17b_executive.pdf

[2] We discuss the relevant portions of the Fair Labor Standards Act (FLSA) in detail in Section 1.

[3] We provide several examples of such deceptive managerial titles in Appendix A.

An economy-wide dynamic motivating our exploration has been a particularly large increase in "managers" as a percentage of all employees economy-wide in recent decades. For instance, according to data from the Bureau of Labor Statistics (BLS), the number of employees in all occupations, excluding management, between 2010 and 2021 increased from roughly 121 M to 132 M, representing a 9% increase. Over the same time period, the number of managers increased by over 47% - five times the relative increase of other employees - from 6 M to nearly 9 M managers. Thus, the prevalence of "managers" in the workplace has seen a marked spike.

As an example illustrating this trend, consider the Family Dollar Store,[4] which was alleged to have given a disproportionate share of employees non-descript managerial titles such as "Store Managers." While these employees occasionally performed managerial duties, they spent 60 to 90 hours a week performing manual labor tasks such as "stocking shelves, running the cash registers, unloading trucks, and cleaning the parking lots, floors and bathrooms," according to a class-action suit filed in 2008.[5] The plaintiffs also claimed that "store managers spent only five to 10 hours of their time managing anything." In this case, the court ruled that these employees' job titles did not accurately describe their daily routines and awarded 1,424 employees $35 million in unpaid overtime pay due to the fabricated job titles.

However, such lawsuits are not rare. In fact, wage theft-related violations rank among the top corporate violations after workplace safety violations, as seen in Figure 1. Based on enforcement data from the Department of Labor (hereafter DOL), between 2010 and 2021, about 73% of wage theft violations that resulted in fines or back-wages contained overtime-related charges, and back-wages owed for overtime accounted for over 80% of the total back-wages and fines. Perhaps more strikingly, overtime violations exceed environmental and employment discrimination violations (combined) – being almost twice as prevalent. These overtime violation lawsuits are also widely seen across industries, locations, and time (see Appendix B for a sample of such violations).

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[4] https://abelllaw.typepad.com/files/morgan-v.-family-dollar-stores-inc.-no.-07-12398-11th-cir.-december-16-2008.pdf
[5] Ibid.

<Insert Figure 1 here>

Our central finding is that there is a systematic, robust, and sharp increase in firms' use of managerial titles around the federal regulatory threshold that allows them to avoid paying for overtime. In particular, we see a 485% increase in the usage of managerial titles for salaried employees just above the salary threshold set in the FLSA ($455/week) – allowing the firms to avoid paying overtime compensation to these workers. In addition, many of these "managerial" titles seem questionable (such as *Carpet Shampoo Manager* and *Assistant Bingo Manager*).

In contrast, while we, perhaps unsurprisingly, observe the prevalence of managerial positions increasing in average wage levels, we do not observe *any* similar abnormal "jumps" in demand for managers around any other thresholds besides that set forth by the FLSA. Furthermore, five states have augmented laws to the FLSA and use overtime exemption thresholds from these laws (different from the FLSA) that vary over time and across locations. As a result, in these states, FLSA thresholds do not apply. We find no such spikes in managerial titles around the FLSA threshold in these states. Finally, for firms to avoid paying overtime to a managerial employee, the employee's pay must be above the regulatory threshold, and the position must be *salaried*. We thus also explore the prevalence of managerial titles for *hourly* employees of the same firms and same places that do spike their demand for salaried "managers" at the given FLSA threshold. We find that holding the compensation threshold fixed at $455, there are *no* such spikes in the use of managerial titles for hourly employees (whose overtime cannot be avoided through the conferring of the manager title) by these same firms.[6]

Next, as out-of-sample validation of our metric, we explore the relationship between overtime-avoiding positions and two other measures. First, we examine the DOL's Wage and Hour Division enforcement actions. We find that having salaried positions with managerial titles that pay just above the overtime threshold is strongly and positively associated with future DOL enforcement actions. Second, we explore the usage of suspect or "fake"- sounding managerial titles (such as assistant bingo manager or director of first impressions). Again, we find strong evidence of over a 130% increase in

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[6] In Appendix C, we provide the list of the top 25 firms with the highest percentage of overtime-avoiding positions.

the usage of these fake-sounding titles just about the FLSA threshold. Thus, we find validating evidence from two out-of-sample data sources that our analysis captures strategic firm behavior of overtime avoidance just above the FLSA-mandated overtime threshold.

We then move on to explore in more depth the characteristics of firms that appear to utilize managerial titles most intensively just above the threshold (vs. below or hourly), avoiding the need to pay overtime. We find that the probability of firms' strategic use of managerial titles increases when they appear to have more bargaining power and laws governing employee protection are weaker. Specifically, the strategic use of managerial titles is 52.8-91.8% higher in places where state laws are less protective of worker rights.

One might still ask if some industry or firm-level characteristic (observable or unobservable) could be driving the relationships we see regarding the seemingly strategic use of managerial titles. To investigate this in more depth, we focus on a subset of our sample firms that operate establishments in multiple states concurrently. For these firms, we run a finer test, including firm-year fixed effects. This tests whether *within* the same firm-year, we see evidence of more overtime avoidance through the strategic use of titles in places where the firm's bargaining power is greater. The clear advantage of this test is that because it exploits variation within the *same* firm and exact *same* year, it controls for differences across firms that one might worry could be driving any of the relations (along with anything that might drive differences within the same firm over time). This is particularly true for the more homogeneous unit-economic firms we observe (e.g., Family Dollar stores in Milton, VT vs. Tuscaloosa, AL). We find strong evidence that the same firms appear to engage in significantly greater strategic use of titles at eh same time for overtime pay avoidance in states where they have relatively greater bargaining power. Importantly, we find that our results persist strongly and significantly through the present day, in fact being even larger in point estimate in the recent period.

Our analysis extends beyond documenting overtime avoidance to examine its broader implications for both firms and workers. We find that employees with inflated managerial titles do not gain career benefits from these designations. They experience neither higher promotion rates nor larger wage increases when advancing to new positions compared to similar workers without such

titles. Moreover, firms engaging in this practice face a significant cost: 25% higher employee turnover rates. However, our cost-benefit analysis reveals that the financial advantage of avoiding overtime pay (approximately 13.5% of wages saved) substantially outweighs the costs of increased turnover (only 4-5% of wages), explaining why this practice persists despite its drawbacks for workforce stability.

Moving further into the mechanism, we explore the relation between a firm's motivations and its avoidance of overtime. By analyzing the impact of local credit supply shocks resulting from oil and gas shale well discoveries, we uncover evidence suggesting that a firm's financial constraints influence its tendency to seek overtime avoidance strategies. We also find that overtime avoidance is higher when firms face less competition in the labor market for the positions they are hiring, consistent with firms using the overtime exemption rules more intensively when they have more bargaining power vis-à-vis labor supply. Additionally, when the labor pool is better educated, firms tend to offer fewer overtime-avoiding positions, potentially due to increased labor mobility and the legal consciousness of employees.

We then explore firms' overtime avoidance with regard to fundamental dynamics in their labor market demand. We do this by collecting data on firms' schedule uncertainty and their use of part-time labor. Merging this data with firms' use of overtime avoidance, we find that firms with more fundamental volatility in their demand for labor – so those that potentially have a higher value on labor slack - are significantly more likely to be those offering (and utilizing) overtime avoiding positions.

Our study adds to the literature that explores the effects of bright-line thresholds on firm behavior by altering managerial incentives. Many studies use such thresholds in order to establish whether regulatory policies, such as R&D tax subsidies (Dechezleprêtre, Einiö, Martin, Nguyen, and Van Reenen, 2016), regulations around pollution (Chay and Greenstone, 2005), or housing (Avery, and Brevoort, 2015) create the intended incentives for firms. More closely related to our study are the papers that examine changes in firm behavior to avoid dropping below or exceeding such thresholds. Examples include labor laws based on firms' employee count distorting firms' hiring decisions (Garicano, Lelarge, and Van Reenen, 2016), limits specified in Section 179 for bonus depreciation

affecting firm investment behavior (Zwick and Mahon, 2017), 20% rule incentivizing managers in high agency cost/low institutional holding firms to structure acquisition deals in order to avoid shareholder voting (Li, Liu, and Wu, 2018), and disclosure requirements tied to public float leading firms to increase payouts to shareholders and reduce the number of shares held by affiliates (Gao, Wu, and Zimmerman, 2009). In our setting, the FLSA threshold incentivizes firms that try to avoid mandatory overtime payments to alter the job characteristics and possibly leads to an implicit wealth transfer from employees to the firms.

Our study is also related to the literature on overtime, which focuses on the effects of overtime regulations on (a) compensation, (b) employment level, and (c) labor health and well-being. On the first aspect, in one of the earlier studies on the effects of overtime on labor compensation, Trejo (1991) investigates whether increasing overtime costs indeed incentivizes firms to substitute employment for overtime hours and finds that firms adjust base salaries to offset the additional cost of an expanded overtime pay rule. Hamermesh (2014) discusses that imposing a penalty on employers to pay for overtime work discourages employers from demanding long hours of individual employees and argues that policies that increase labor costs (e.g., overtime, the minimum wage, and payroll taxes) can substantially affect both employment levels and work hours. Barkume (2010) studies the effects of FLSA overtime pay regulation firms' labor costs and finds that overtime pay regulation affects the structure of compensation as jobs requiring more overtime work are often lower-wage jobs (see also Bell and Hart 2003, Kuroda and Yamamoto 2012). On the second aspect, the employment level, several studies test whether imposing a penalty on employers for overtime indeed increases the incentive for firms to hire more workers to undertake the tasks that could be done over time. Along these lines, a series of papers provide evidence that overtime-related laws reduce firms' willingness to schedule long workdays (see Costa, 2000; Hamermesh and Trejo, 2000; Hart and Ma, 2010; Askenazy, 2013), whereas Trejo (2003) finds that increasing the statutory overtime premium or expanding FLSA coverage does not increase employment. Finally, on the effect of overtime regulations on worker well-being, Hamermesh et al. (2017) find a positive association between mandatory reductions in overtime hours and labor life satisfaction.

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The paper proceeds as follows: Section I provides institutional background on the Fair Labor Standards Act and its provisions related to firms' obligation (and exemption of obligation) in paying overtime compensation. Section II develops our predictions using a simple stylized model for a firm that contemplates the two alternatives: hire a new employee or have an existing employee work overtime, and how this decision depends on the relative bargaining power of the parties and the cost of hiring and litigation. Section III describes the data used in this study, while Section IV provides empirical analyses of the paper. This includes the main results regarding firms' usage of "managerial" titles, the spike in usage just around the threshold over which they allow firms to avoid paying overtime, and which firms utilize these titles most intensively (and when). Section V concludes.

I.   Institutional Background

The origins of overtime regulations in the United States go back to financial reforms and regulations enacted by President Franklin D. Roosevelt between 1933 and 1939 as a part of the New Deal. Before and during the great depression, employers in the U.S. had more power than their workers. Few employers offered pensions and benefits, and firms could set wages as low as they wished. Anecdotal evidence suggests that workplace safety was not a priority, and unions had only limited legal protection.[7] Working hours were long (up to 16 hours a day), and many employers took advantage of high poverty rates to force their employees to work around the clock.[8] In response to deteriorating working conditions, Franklin Roosevelt wrote: "*Today there is general recognition that there should be a floor to wages and a ceiling to hours...that working conditions should be safe and healthy and that child labor should be eliminated from industry.*" [9]

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[7] The great steel strike of 1919, organized by the Amalgamated Association of Iron, Steel, and Tin Workers and joined by nearly half of all the steelworkers in the US, demanded higher wages, shorter work hours, and better working conditions. Neither the Senate nor the employers responded to any of the employee demands. The strike was a major defeat for workers, leading to a vast decline in union membership and strikes.

[8] For instance, a bill introduced to the senate in 1907 forbade more than sixteen consecutive hours on duty for railway employees. Railway employees expressed mixed support for the bill because it lowered their earnings too much (Aldrich, 1997, p.172).

[9] Letter of greeting on the twenty-fifth anniversary of the Department of Labor, available at https://www.presidency.ucsb.edu/documents/letter-greeting-the-twenty-fifth-anniversary-the-department-labor

The landmark labor law, The Fair Labor Standards Act, enacted in 1938, aimed to establish a national minimum wage and a forty-hour week for industry workers, but not for workers in agriculture, domestic service, and some other service areas. In addition, a set of overtime pay regulations were introduced to discourage companies from overworking their employees and encourage additional hiring to cover for the remaining hours not worked by their existing employees. Although the federal overtime provisions of the FLSA have changed several times since the 1940s, the general principle remained the same: employees must receive overtime pay for hours worked over forty hours in a workweek at a rate not less than time and one-half their regular rates of pay, except for exempt employees.

Today, the FLSA defines an exempt employee as one that passes the following three tests. First is the "salary basis test," which requires the employee to receive a pre-determined and fixed salary on a weekly or less frequent basis, independent of the number of hours or quantity of work performed (i.e., must be salaried as opposed to hourly). Second is the "salary test," which requires the employee's salary to meet the exemption threshold, which is $455/week ($23,660/year) during our sample period. [10] The third is the managerial "duties test," which requires the employee's work to primarily involve executive, administrative, or professional duties as defined by the regulations.

To satisfy the executive duties criteria, a position's primary duty must be to manage the business or a customarily defined department or subdivision. This position must also involve the supervision of two or more employees and provide input in hiring/firing decisions. A position satisfies the administrative duties criteria if it involves office/non-manual work directly related to management or business operations and requires judgment and discretion about significant business decisions. The professional exemption applies to learned professions such as teachers, professors, doctors, dentists, registered nurses, lawyers, and clergy, which require advanced knowledge acquired through a prolonged course of intellectual instruction.[11]

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[10] The threshold was established in 2004 and remained unchanged until 2020 when it was raised to $684 per week.

[11] FLSA also provides more specific exemptions based on job duties within some occupations. Details of the primary and additional exemptions are available from https://www.dol.gov/agencies/whd/fact-sheets/17a-overtime.

While salary, pay frequency, and whether a position is a learned profession are typically externally verifiable, whether a position satisfies the executive or administrative duties criteria depends on the employer's assessment of the position's responsibilities and is difficult to verify externally. Often, the only piece of externally observable information suggestive of a position's duties is the job's title. Thus, employers can strategically choose job titles to imply that a position involves managerial duties, and as such exempt from mandatory overtime payments, although the actual responsibilities of the position do not satisfy the executive or administrative duties tests.

Most states follow the FLSA. However, five states – Alaska, Connecticut, California, New York, and Maine - impose their own thresholds for the salary test. In these states, the threshold is typically tied to the state's minimum wage and thus varies over time. In New York, the thresholds also vary across firms by location and size since 2017. Except for Connecticut, the thresholds in these states were significantly higher than the FLSA threshold during our sample period.

II.   Conceptual Framework of Incumbent Firm Labor Decision: Existing Employee versus Hiring an Incremental Employee

In this section, we provide a simple framework for a firm's choice to hire a new employee or have an existing employee work overtime when dealing with demand fluctuations. The model considers hiring costs, differences in bargaining power between firms and employees, and the potential regulatory enforcement and penalties for wage-theft.[12]

Suppose that an employee can produce output α during regular work hours and that compensation for work performed during regular hours is proportional to that output, $\theta\alpha$, where $\theta<1$. We can think of θ as representing the employee's bargaining power and $(1-\theta)$ the firm's power.

In addition to regular work, the firm has certain tasks that can be performed during "overtime" hours. When employed overtime, the employee produces A. It is not essential how α compares to A;

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and all results will continue to hold if A and α are identical. We use separate notation primarily to distinguish these two types of tasks clearly. While we denote regular hours output as α and overtime output as A, this notation is primarily for analytical clarity and does not require the tasks to be fundamentally different. In practice, tasks performed during regular hours and overtime may be identical (A = α), overlapping, or completely distinct. The employee may perform a mix of both types of tasks during either time period, as time is fungible. Our notation simply allows for, but does not require, potential differences in tasks or productivity between regular and overtime hours.

Due to regulations, overtime compensation (per unit) is a multiple of the compensation for regular work, $\gamma\theta A$ and regulations require $\gamma = \gamma^r$. For example, the FLSA requires $\gamma^r \geq 1.5$. However, we allow the firm to set γ such that $0 < \gamma < \gamma^r$. This would occur, for example, if the firm misclassifies its employee as a manager and does not pay any overtime. While setting $\gamma < \gamma^r$ allows the firm to lower its wage bill, it gives rise to an expected compliance cost of L, which incorporates the probability of being litigated due to misclassification of the employee and damages to be paid if litigation is lost (i.e., $L=0$ if $\gamma = \gamma^r$).

Thus, the total compensation of the employee is $w = \theta\alpha + \gamma\theta A$, and the payoff to the firm is $\alpha + A - (\theta\alpha + \gamma\theta A) - L$. We assume that the employee has a separable utility function that is linear in monetary compensation, $u(w, \alpha, A) = w - g(\alpha) - G(A)$, and has a reservation utility u_0. The employee participation constraint ensures that θ is sufficiently high so that $\theta\alpha - g(\alpha) \geq u_0$.

Instead of having an existing employee cover overtime, the firm can generate the same output A by hiring an additional employee. Although hiring an additional employee means that the firm does not have to offer overtime pay, it has disadvantages. First, hiring an extra employee often entails various additional expenses for the firm, such as candidate screening, training, and fringe benefits (e.g., health insurance). It may also be difficult to supervise and incentivize an employee who only works during irregular hours. Let C represent all such additional costs. Second, it is also possible that an incumbent employee is more productive at overtime tasks due to learning by doing (experience) or economies of scale or scope in the tasks being similar or linked to the employees' existing tasks. We capture this possibility by letting A/β, where $\beta < 1$, represent the work the new hire must perform to

produce output A. That is, if the regular per-unit wage is θ, then the new employee will require an incremental per-unit wage $\theta/\beta > \theta$ in order to produce the (previously overtime) output of A. This results in a total wage expense of $w = \theta\alpha + \theta A/\beta$.

The difference in the firm's profits between the two options (hiring a new worker versus utilizing overtime with the incumbent employee) is:

$$\Delta\pi = [\alpha + A - (\theta\alpha + \theta A/\beta) - C] - [\alpha + A - (\theta\alpha + \gamma\theta A) - L] = \theta A(\gamma - 1/\beta) - (C - L) \quad (1)$$

Consider the case in which employee supply is limited, leading to the expected employee utility strictly exceeding the reservation level:[13]

$$\theta\alpha - g(\alpha) + \gamma\theta A - G(A) > u_0; \quad (2)$$

$$\theta(A/\beta) - G(A/\beta) > u_0. \quad (3)$$

Proposition 1. *Under assumptions (2) and (3), the following results hold:*

i. *The firm strictly prefers to rely on overtime rather than hire a new employee when $(C-L)$ is sufficiently high or new worker productivity β is sufficiently small.*

ii. *When $\beta > 1/\gamma$ (a new employee is productive), the firm strictly prefers to rely on overtime only if θ is sufficiently low (that is, the firm has enough bargaining power).*

iii. *When $\beta \leq 1/\gamma$ the firm prefers to use overtime for any bargaining power θ.*

Proof. The firm strictly prefers to rely on overtime rather than hire a new *employee* if and only if $\Delta\pi < 0$. The left-hand side of this inequality is given by (1). The results follow from observing that (1) is decreasing in $(C-L)$ and increasing in β. Furthermore, it is negative when $\beta \leq 1/\gamma$, and when $\beta > 1/\gamma$, it increases in θ.[14]

This simple model delivers three important predictions that we carry to the data:

(1) A firm will exhibit more overtime avoidance when compensation for overtime payment, γ, increases.

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[13] In Appendix D, we discuss the case where there is an abundant supply of new workers.

[14] Note that this case allows for a situation where the firm prefers to use overtime, and the worker accepts it because it satisfies the participation constraint (2), but the worker wishes that overtime was not included because $\gamma\theta A - G(A) < 0$.

(2) A firm will exhibit less overtime avoidance in places where employees have higher bargaining power, θ.

(3) A firm will exhibit more overtime avoidance when the expected litigation cost, *L*, is low.

III.   Data and Sample Construction

The primary data source for our analyses is the Burning Glass Technologies (now Lightcast) dataset on job postings. This section describes this and other data sources and outlines our sample construction. Further details on sample construction are provided in Appendix E.

III.1.   Data Sources and Sample

We obtain data on job postings from Burning Glass Technologies (BGT)'s online job postings database for the period between January 2010 and December 2018. BGT collects data from over 40,000 online job boards and company websites.[15] The dataset starts in 2007 but lacks postings from 2008 and 2009. Therefore, we begin our sample in 2010. Our analyses focus on full-time positions with valid data on salary, title, employer name, and pay frequency that are posted by corporations and are located in the U.S.[16,17]

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[15] Hershbein and Kahn (2018) provides a detailed discussion of this dataset. BGT data is now housed under now Lightcast, https://lightcast.io, following a merger between Burning Glass and Emsi. There is a growing literature in finance and personnel economics that identifies managers through job titles using (i) resume data like LinkedIn, (ii) job posting data such as Glassdoor and Indeed, and (iii) government occupational data like O*NET. Examples include Cai, Prat, and Yu (2023); Chen, Zhang, and Zhang (2022, 2023); Cho, Choi, and Wang (2023); Gortmaker, Jeffers, and Lee (2023); Hacamo and Kleiner (2022); and Hampole, Truffa, and Wong (2022).

[16] We manually standardize the employer names as the same firm's name is written in alternative ways in the database. We exclude non-business entities using NAICS codes, employer names, and position titles. In particular, we exclude all entities in NAICS codes 92-Public Administration, 813-Religious, Grantmaking, Civic, and similar Organizations, 61-Educational Services, and 62-Social Assistance and Healthcare, and employer names or position titles that include words that are typically used by the government or non-profit institutions but not commonly used by businesses (e.g., "Federal Bureau of," "Department of," "National Guard," "City/State/Town/District of," "Girl/Boy Scouts," "High School," "College," "Church," "Museum," "Institute").

[17] Salary information is included in job postings on a voluntary basis, which means that our analysis is based solely on postings where this information is provided. In the comparative analyses detailed in Appendix G, Table G1, we observe that job postings containing salary details generally have lower educational and experiential prerequisites. This suggests that, on average, these positions are more likely to be representative of jobs near the FLSA threshold. There are no

As BGT data focus on online job postings, these postings tend to be tilted towards more skilled occupations (Hershbein and Kahn, 2018; Choi and Marinescu, 2023). However, when compared with official employment data such as the U.S. Occupational Employment Statistics and the Job Opening and Labor Turnover Survey (JOLTS), BGT data shows good representativeness at both the occupational and industry levels (Cammeraat and Squicciarini, 2021).[18] We further exclude ground, rail, and air transportation industries as most jobs in these industries are governed by federal laws other than the FLSA and non-depository credit intermediaries (i.e., NAICS 5222-5223) as an FLSA exemption applies to positions that require collection and analysis of customers' financial circumstances and determining and offering financial products for a customer.[19]

We exclude positions in states with exemption thresholds different from FLSA (New York, California, Alaska, Maine, and Connecticut) from our main sample and analyses but leverage them in validation tests. Because our interest lies in examining firms' strategic use of job characteristics to avoid mandatory overtime payments, we examine 450,025 job postings that have a weekly salary within $50 of $455 (i.e., between $405 and $505), which is the FLSA salary threshold for mandatory overtime payments during our sample period.

We source states' rankings based on worker protection policies from OXFAM America, a nonprofit organization specializing in reducing injustice and poverty. OXFAM started compiling the rankings in 2018, and we use the 2019 rankings for our analyses. Data on private-sector union membership and coverage come from unionstats.com. This website compiles annual estimates of

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significant disparities between the two subsets in terms of the geographic distribution of positions. However, it's worth noting that the subsample with salary information tends to have fewer positions from NAICS 44-45 sectors (Retail and Wholesale Trade) and more positions from NAICS 56(Administrative and Support and Waste Management) sectors compared to the subset without salary information. In additional tests outlined in Appendix G, Table G2, we find that the salary threshold effect for salaried managerial positions persists even when we exclude these sectors from our analysis.

[18] Azar et al. (2020) find that roughly 30% of employer names in BGT are missing, mainly due to staffing companies not disclosing the entities for which they post jobs; however, this seems representatively distributed given that it does not change the matching to the US Occupational Employment Statistics and JOLTS data documented in Cammeraat and Squicciarini (2021). Likewise, Batra et al. (2023) raise the issue that wage data is often undisclosed (or disclosed in a range). Again, they find this disproportionately in the higher wage levels where our data (and specifically the tight threshold around the FLSA cut-off) are not concentrated.

[19] Full list of exemptions is available at https://webapps.dol.gov/elaws/whd/flsa/screen75.asp. The specific exemption for credit intermediation is available at https://www.dol.gov/sites/dolgov/files/DOL/legacy/files/fs17m_financial.pdf.

union membership from the monthly household Current Population Survey (CPS) using the U.S. Bureau of Labor Statistics' (BLS) methods. Data on the enactment of right-to-work laws by state is sourced from the National Conference of State Legislatures (NCSL)'s website. NCSL compiles this data from the DOL and states' websites. In addition, we obtain data on state-level unemployment and job opening rates from the BLS's Local Area Unemployment Statistics and JOLTS, respectively.

We use the annual estimates of population and educational attainment from the U.S. Census Bureau and state minimum wages from the DOL's website. Data on anti-immigration policies by state comes from the website of the Urban Institute, a nonprofit organization that carries out economic and social policy research to measure policy effects. Finally, in our tests of financial constraints, we use shale well activity data from Gilje (2019).

III.2. Descriptive Statistics

Table 1 provides descriptive statistics for our main sample, which consists of 450,025 job postings that satisfy our data requirements. 12% of the positions in our sample have managerial titles (*Manager=1*), where we define managerial titles as those that include one of the following terms: "Manager," "Supervisor," "Leader," "Coordinator," "Lead," "Head," or "Director."[20] 16% of the observations in our sample are salaried positions (*Salaried=1*). Salaried managerial positions that pay just above the FLSA threshold (*OTAvoided=1*) account for 3.1% of the sample. The average weekly pay in our sample is $463, which is $8 above the FLSA threshold of $455. Education and experience variables are not provided for all job postings; therefore, the observation count is lower for these variables. The average position in our sample requires two years of experience and eight and a half years of education. In terms of worker protection variables, the mean value of *FPI* is 2.2, and

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[20] We do not include "President," "Chairman," "Executive," or "Chief" because these terms are common among top executives rather than entry- or mid-level managers that we focus on. We caveat that there are 54,951 unique titles in our sample, and our classifications may have some inaccuracies. However, we believe such inaccuracies are not material because after manually reviewing the most common 200 titles in our sample (which represent over half of the observations), we have not identified any misclassification of managerial titles as non-managerial or vice-versa.

OXFAM's *WPRank* is 27.0. Over half of the positions in our sample are in states with right-to-work laws in place (*RTW=1*).

<div style="text-align:center"><Insert Table 1 here></div>

IV.   Main Empirical Results

IV.1.   Diagnostic Analysis

We begin our analysis with a simple histogram of salaried managerial positions around the FLSA threshold to observe whether job postings around this cut-off exhibit an abnormal spike that is not present at other salary levels. Figure 2 plots the percentage of salaried managerial positions around the FLSA threshold. The figure shows that the percentage of salaried managerial positions starts below 1% for the salary range of $355-$380 p/w and gradually increases in the subsequent two salary ranges to reach 2.8% for the salary range of $405-$430. The percentage is lower (1.4%) in the bin immediately before the FLSA threshold but exhibits a major, 485% increase at the FLSA threshold, reaching 6.9%. In other words, the probability of observing a salaried managerial position among jobs that pay at or slightly above the FLSA threshold is almost five times greater than that among jobs that pay slightly below the FLSA threshold. The subsequent two bins have a lower percentage of salaried managerial positions, although the percentage remains elevated compared to the bins before the FLSA threshold.

In Appendix Figure H3, we present an alternative version of Figure 2 where each bin contains a fixed number of job position postings (350,000) rather than using fixed-width bins (we note that because salaries tend to cluster at round values, the bins contain 350,000 ± 40,000 observations.) With this alternative approach, we still observe a striking increase of over 440% in both the percentage and the number of salaried managerial positions at the threshold. The bin immediately to the right of the threshold exhibits a decline, although that is minor compared to that in Figure 2. The last bin exhibits another increase in the percentage of salaried employees. We note that this bin contains salaries 25 - 40% higher than the threshold. Moreover, as salaries continue to increase, we observe managerial titles

continuing to be more prevalent – for instance, with salaries north of $700-800 per week having roughly 25% (or 1 in 4 position postings) being managerial positions.

These patterns in both figures are consistent with the first prediction of our model: firms strategically seek to hire employees with a salary just above the FLSA threshold and assign them a managerial title to avoid overtime payments, as this is more cost-effective than hiring regular employees at the FLSA threshold and paying overtime.

<Insert Figure 2 here>

Next, we test whether the spike in salaried managerial positions at the FLSA threshold is statistically significant and whether a similar spike exists for other types of positions or at alternative thresholds. For this test, we run the following linear regression model:

$$SalariedManager_i = \gamma_1 + \gamma_2 Above_i + \gamma_3 WeeklyPay_i + \gamma_4 Min_{Edu_i} + \gamma_5 Min_{Exp_i} + \gamma_6 Max_{Edu_i} +$$
$$\gamma_7 Max_{Exp_i} + \sum FirmFE + \sum YearFE + \varepsilon_i \tag{4}$$

where *SalariedManager$_j$* is an indicator variable equal to one if job posting *i* is a salaried position with a managerial title, and zero otherwise. *Above* is the variable of interest and is an indicator variable that takes the value of one if the position's pay is within $50 above the given weekly pay threshold and zero if it is within $50 below the threshold. Thus, the sample for alternative thresholds, which are not included in our main sample or any part of the rest of our analyses, is restricted to positions that pay within $50 above or below the threshold. [21] Control variables include *WeeklyPay*, the weekly equivalent salary of listing *i*, and lower and upper ranges of the education and experience requirements for the position (*Min_Education, Max_Education, Min_Experience, Max_Experience*). We include *WeeklyPay* since managerial positions would be more likely at higher salary levels regardless of the threshold. We also include education and experience requirements, as these factors may determine the salary level and

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[21] BGT reports both the minimum and maximum salary when a job listing provides a salary range. For our analyses, we use the minimum salary; however, as reported in Appendix G Table G3, our inferences remain unchanged when we use the maximum salary in our calculations instead.

title. Experience and education variables have missing values for a substantial portion of the observations in our sample. Therefore, we generate a missing value indicator for each of these variables and set the value of the missing value indicator (variable itself) to one (zero) when the variable's value is missing.[22] To control for firm- and year-specific effects, we include firm- and year-fixed effects in the models.

We run the model specified in Eq. (4) for the FLSA threshold of $455 and pseudo-thresholds ($405, $505), for which we do not expect a spike in salaried positions with managerial titles. Furthermore, for our analyses at the FLSA threshold, we run the model separately for job postings in FLSA states (i.e., our full sample) and for those in non-FLSA states, for which we do not expect to observe a spike. We note that job postings in pseudo-thresholds and those in non-FLSA states are not included in our sample statistics reported in Table 1 as they are used only as placebos in this analysis. Finally, we also run the same model at the FLSA threshold by replacing the dependent variable with an indicator variable equal to one if job posting *i* is *an hourly or daily paid* position with a managerial title and zero otherwise (*HourlyManager*). As stated earlier, the FLSA threshold only applies to salaried positions. Thus, we do not expect to find any spike in hourly or daily paid managerial positions at the same threshold if our findings are driven by firms' attempts to avoid overtime.

We report the results from the estimation of Eq. (4) in Table 2.[23] We find that salaried positions with a managerial title significantly increase at the FLSA threshold in states that follow FLSA, confirming that the spike we observe in Figure 2 is statistically and economically significant. The coefficient of 0.015 (t=3.68) represents an 80% increase in salaried positions with a managerial title above the threshold relative to below the threshold, where such positions account for 1.9% of the observations. We do not observe a similar spike at alternative threshold levels. Moreover, we find that at the FLSA threshold, our results only hold for positions in states that follow FLSA, and we find no significant increase in salaried positions with a managerial title in non-FLSA states. Hourly or daily

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[22] As detailed in Appendix G (Tables G4–G6), our inferences are not significantly affected by the treatment of missing data and remain robust when employing the complete case method, which involves excluding all observations with missing values for education or experience variables.

[23] For presentation purposes, we multiply the coefficient on *WeeklyPay* by 100 in Table 2.

paid positions with a managerial title do not show any significant increase at the FLSA threshold; instead, they decline. This pattern suggests that firms may partially respond to the threshold by shifting away from hourly managerial positions, converting them into salaried managerial roles that are exempt from overtime pay. Overall, the results strongly suggest that firms designate managerial titles around the FLSA threshold to avoid overtime payments.

<Insert Table 2 here>

To add context to the spike above the FLSA threshold we document, we also provide a back-of-the-envelope calculation for the dollar amount overtime avoided across the U.S. Assuming overtime avoidance primarily occurs in relatively lower-paid positions (as we observe), we focus this calculation on salaried managerial positions earning less than $50,000. Using BLS data, we estimate that there were approximately 2.65 million such employees in the U.S. as of May 2019.[24] Per BLS, the average weekly number of overtime hours in industries for which the estimates are calculated in December 2018 was 3.6. Multiplying this value by 2.65 million workers and 52 weeks, and assuming that about 30.7% of managerial titles above the threshold are aimed at avoiding overtime (=1.5% / 5.01% where 1.5% is the estimated coefficient in Table 2, and 5.01% is the percentage of positions that are salaried and managerial), we estimate that firms avoid paying for over 151 million employee-hours by strategically using managerial titles. That is equal to nearly 73,000 full-time employees. Based on the estimated weighted average overtime wage for these employees, this equates to roughly $4 billion in overtime payments avoided per year. Similar calculations for employees earning less than $30,000 and $25,000 yield estimated annual overtime savings of around $500 million and $250 million, respectively. We note, however, that these latter estimates may be less accurate as the BLS data only provides salary distributions at select percentiles, and for most job classifications, even the 10th

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[24] Specifically, in the 2019 Occupational Employment and Wage Statistics Dataset we focus on occupation titles with the words "manage" or "supervisor" in them. We then use the distribution of wages to identify approximately what percentage of positions in each title earn less than $50,000 and add our estimates up to arrive at 3,864,149 employees. Finally, as per BGT dataset 68.2% of managerial positions that pay above the threshold but less than $50,000 are salaried. Multiplying this percentage with our estimated number of managers, we arrive at 2,635,350 employees who are salaried managers with a salary below $50,000.

percentile exceeds $25,000. Therefore, when the 10th percentile of the salary range is higher than $25,000 ($30,000), we conservatively assume that 2.5% of managers in each job classification earn below $25,000 ($30,000) in our calculations.

From the employee perspective, for an employee who earns exactly the threshold salary ($23,660/year), a loss of 3.6 hours of overtime over a year equals a loss of $3,194 (=3.6 hours x 52 weeks x $11.375 per hour x 1.5 overtime premium) or 13.5% of their total salary. Therefore, our estimates indicate that overtime avoidance has significant implications not only for firms but also for their employees. This 13.5% represents the cost to employees - and equivalently, the benefits to firms - from the avoidance of payment of these overtime wages.

The natural question is then: what disciplines firms from engaging in overtime avoidance? In practice, enforcement of the FLSA imposes relatively minor costs on most firms violating overtime provisions, as penalties beyond back wage repayments are rare and modest. Liquidated damages, which can double the amount owed, were infrequently assessed until recent years, while civil monetary penalties apply only to repeat or willful violators, with many eligible cases incurring no penalties at all. Criminal prosecutions are also rare, with willful violations facing less than a 0.7% chance of conviction (Stansbury, 2021; Bureau of Justice Statistics, 2020). Detection probabilities, often below 2% in high-risk sectors, further reduce the likelihood of enforcement, making noncompliance a rational strategy for firms. Private litigation offers limited recourse, hindered by arbitration agreements, class-action waivers, and workers' reluctance due to fear of retaliation, lack of awareness, or the burdensome nature of lawsuits.

To quantify, in 2019, DOL compliance actions for FLSA violations resulted in $226 million in back wages recovered. Comparing this to the estimated $4 billion in benefits firms derive annually from overtime avoidance reveals that enforcement penalties amount to just 5.7% of the potential gains—a staggering 18-fold disparity between expected benefits and costs. This implies a roughly 18x return on investment for avoiding overtime wages, which helps explain why firms across industries— from Staples and JP Morgan to Facebook, Walmart, Verizon, Avis, and Lowe's (see Appendix B)— continue to engage in this practice, despite the risk of litigation. Moreover, these represent a sample

of firms that actively engage in the practice and are caught (representing a likely modest proper subset of those engaging in the practice given estimated detection probabilities). For a deeper examination of the limitations of FLSA enforcement, we refer readers to Stansbury (2021).

IV.2. Out-of-Sample Validation Tests - *DOL Compliance Actions, Non-FLSA States, & Fake Titles*

Next, we explore our identification in more depth to gather out-of-sample evidence that we are capturing overtime avoidance behavior with the unexpected "spike" in managers and managerial titles we see at the mandated overtime threshold. In particular, we explore three measures - First, the frequency of DOL's Wage and Hour Division Compliance Actions against firms just above the threshold; second, the prevalence of potentially dubious or "fake" managerial titles (e.g., "Director of First Impression") used by firms just above the threshold; and third, whether a similar increase in salaried managerial job titles occurs just above the threshold in states that set their own salary thresholds for overtime exemption, rather than adhering to FLSA.

Turning first to DOL Wage and Hour Division's compliance actions, in Table 3 we test whether overtime avoidance based on job posting data is associated with the likelihood of compliance actions for FLSA violations. To the extent the managerial titles assigned to salaried positions just above the FLSA threshold are aimed at avoiding overtime, we might expect them to also potentially be more likely to result in FLSA violations and compliance actions in the future.

To define overtime avoidance using job posting data, we rely on the FLSA overtime exemption criteria described in Section I and the job description information provided in the BGT dataset. Specifically, we define job postings that marginally avoid overtime payment requirements (*OTAvoided*=1) as salaried positions with managerial titles and a weekly salary equivalent within $50 above the $455 threshold. We classify the remaining positions within $50 above or below the threshold as those that do not avoid the overtime payment requirements (*OTAvoided*=0).

While the DOL reports compliance actions at the establishment level, job postings are reported at a broader geographic unit. Accordingly, we aggregate both the DOL's FLSA compliance actions and BGT's job postings by firm, state, and year, and conduct our validation tests at the firm-state-year level. Specifically, we use three measures for the DOL compliance actions: (i) an indicator variable equal to one if any establishment of the firm in a given state and year is ex-post found to violate FLSA rules; (ii) an indicator variable equal to one if any establishment of the firm in a given state and year is ex-post found to be in willful or repeat violation of FLSA rules, which are more aggressive types of violations, and; (iii) the total number of FLSA violations identified across all establishments of a firm in a given state and year. We define two overtime avoidance metrics: (i) the average value of *OTAvoided* by firm-state-year (*%OTAvoiding*) and (ii) an indicator variable equal to one if *OTAvoided* is equal to one for at least one of the job postings by the firm in a given state and year (*D_OTAvoiding*).

The results of these DOL validation tests are reported in Table 3. The evidence presented in this table suggests that overtime-avoiding positions are strongly associated with the DOL's enforcement activity, and the economic sizes of the effects are large. For example, the marginal effect of *D_OTAvoiding* relative to the baseline of unconditional means of the dependent variable in Columns (4) and (5) are 84% and 130%, respectively.[25] While the findings related to violation counts in columns (3) and (6) are marginally significant/insignificant, this appears to be partly due to outliers with a very high number of violations, as winsorizing this variable, even at the 0.1% and 99.9% levels, improves the statistical significance of the findings.

Perhaps more importantly, the results in Table 3 indicate that basic information in job postings can be a strong indicator of whether a firm may be violating FLSA's overtime rules and a low-cost measure that DOL can monitor to identify enforcement targets. DOL compliance actions are typically

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[25] It is likely that overtime avoidance is driven by some of the factors that influence other forms of workplace misconduct. To investigate this possibility, we explored whether ESG (Environmental, Social, and Governance) scores are correlated with overtime avoidance (Appendix G, Table G7). In this analysis, we surmise that ESG scores proxy for firms' commitment to compliance with regulations and socially desirable business practices. The results show a noteworthy negative association between overtime avoidance and ESG scores, suggesting a potential overlap between attitudes and behaviors related to overtime avoidance and broader compliance and ethical concerns within organizations.

taken in response to complaints that allege violations of FLSA.[26] As such, they likely capture a relatively small portion of the actual violations and take a relatively long period after the start of the violation. In these respects, our indicator of overtime avoidance is timelier and can indicate FLSA violations for a broader set of firms.

<div align="center"><Insert Table 3 here></div>

As a second validation test, we turn to the prevalence of "fake-sounding" managerial titles around the FLSA threshold. As the examples in Appendix B suggest, firms may attempt to avoid overtime payments would likely use boilerplate managerial titles, such as (assistant) manager/ coordinator/supervisor, to ensure that the position seems like a proper managerial position and does not draw attention. Nevertheless, there are many managerial job titles in our sample that are unconventional, to say the least, such as food cart manager, price scanning coordinator, carpet shampoo manager, lead shower door installer, director of first impressions, and grooming manager. These somewhat suspect managerial job titles could partly result from firms' attempts to assign managerial titles to otherwise ordinary employees.

To examine whether such job titles exhibit a spike around the FLSA threshold, we manually examine all managerial titles in our sample and classify the tens of thousands of titles into suspect-sounding or not categories. Using a conservative overlapping sample classification procedure, we end up categorizing 256 titles from 830 job listings as fake-sounding. By definition, fake-sounding job titles are uncommon. Despite the small sample, we find a statistically significant and economically large increase in salaried positions with fake-sounding managerial job titles just above the FLSA threshold. In particular, in Table 4, we replicate our regression in column 2 of Table 2 after replacing the dependent variable with an indicator variable for salaried positions with fake-sounding managerial titles. We find a statistically significant coefficient on *Above*. Considering that the percentage of salaried

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[26] According to DOL, around 80% of FLSA cases in 2010 and 2011 were complaint-driven. Since 2011 the agency has ramped up its efforts to move towards directed (i.e., agency-initiated) investigations rather than complaint-driven ones. As a result, between 2012 and 2019, complaint-driven cases decreased to around 65%. The related GAO report is available at https://www.gao.gov/products/gao-21-13.

jobs with fake-sounding managerial titles just below the FLSA threshold is 0.045%, the coefficient indicates a 139% (t=2.21) increase in salaried positions with fake-sounding managerial titles just above the FLSA threshold relative to those just below the threshold, again consistent with the spike we see in managerial titles just at the FLSA mandated threshold being correlated with overtime avoidance.

<Insert Table 4 here>

As a third validation test of whether the observed spike above the FLSA threshold is influenced by firms' incentives to avoid overtime payments, we extend our analysis to consider state-specific thresholds in the five states (Alaska, Maine, Connecticut, California, and New York) that do not adhere to the FLSA standards. In Alaska, the threshold is set at 80 times the state minimum wage, while in Maine, it is 3000/52 times the minimum wage. In Connecticut, it remained fixed at $475 throughout the sample period. In California, the threshold was 80 times the minimum wage until the end of 2016, after which it varied by firm size. Similarly, in New York, the threshold was 75 times the minimum wage until the end of 2016, when it began to vary by both firm size and location. We exclude job postings from California and New York after January 1, 2016, from this analysis as limitations in identifying exact employer size prevents us from accurately determining the applicable threshold for a given posting, and this exclusion avoids potential anticipatory effects stemming from the announced changes in these states' threshold policies.

Table 5 reports the results from the estimation of Eq. (4) for these five states, where we continue to define *Above* as an indicator variable that takes the value of one if the position's pay is within $50 above the state-specific weekly pay threshold and zero if it is within $50 below the threshold. The results strongly corroborate our findings from Table 2, documenting a positive and statistically and economically significant increase in salaried managerial positions just above the threshold while finding no such increase for hourly managerial positions. This evidence provides further support that firms strategically designate managerial titles around salary thresholds to avoid overtime payments.

IV.3. Firm Power and Overtime Avoidance

In this section, we analyze the second prediction of our model: whether avoidance of mandatory overtime payments is associated with firms' bargaining power relative to employees. We test this prediction by examining whether the likelihood of observing positions that avoid overtime payments is associated with firms' power relative to employees. In particular, we estimate the following logit model:[27] [28]

$$\Pr\{OTAvoided_i = 1\} = \beta_1 + \beta_2 FirmPower_i + \beta_3 WeeklyPay_i + \beta_4 Min_{Edu_i} + \beta_5 Min_{Exp_i} + \beta_6 Max_{Edu_i} +$$
$$\beta_7 Max_{Exp_i} + \sum IndustryFE + \sum YearFE + \varepsilon_i \qquad (5)$$

where *FirmPower*ᵢ is one of the three proxies of firm power relative to employees (*FPI*, *WPRank*, or *RTW*) for the state and year the position *i* is posted. Our first firm/employee relative power proxy is *FPI,* a firm power index that takes a value between zero and four based on four characteristics of the state that the job is located for the year of the job posting. These characteristics are whether the state: has a lower average union membership than the median state in the same year; has a higher average annual unemployment rate than the median state in the same year; has a lower job opening rate as of the end of the year than the median state in the same year; and has right-to-work laws in place. Unions often promote labor rights by acting as a countervailing power that forces firms to bring labor standards to a competitive level (e.g., Kaufmann, 2005; Caskey and Ozel, 2017). Stronger job market conditions can also improve workers' bargaining power by providing them with more opportunities (e.g., Bils, 1985). Finally, right-to-work laws are often viewed as improving firms' bargaining power by

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[27] As reported in Appendix G, Tables G8 through G12, our inferences are robust to using OLS models.

[28] To further ensure robustness, we estimate two alternative models. In the first model, we collapse observations to the firm-state-year level: *%OTAvoided_{f,s,y} = β₁ +β₂ . FirmPower_{f,s,y} +ΣIndustryFE +ΣYearFE + ε_{f,s,y}*. Estimates from this model, reported in Appendix G, Tables G13 – G15, yield similar inferences as those discussed in the paper. In the second model, we set *SalariedManager* as the dependent variable and focus on the interaction between the primary independent variable and *Above* variable. Specifically, we estimate the following linear regression model: *SalariedManager_i = β₁ +β₂ . Above. FirmPower_{f,s,y} + β₃ . Above + β₄ . FirmPower_{f,s,y} + β.Controls + β. Above. Controls + ε_{f,s,y}*. The results reported in Appendix G, Tables G16 – G20 generally align with the findings reported in the paper, with one exception. In particular, the results are directionally consistent but statistically insignificant in the test involving the educational attainment variable.

reducing union power (e.g., Holmes, 1998; Johnson, 2020). Thus, we surmise that firms have greater bargaining power over employees for positions in a state with a high index value relative to those with a low value.

Our second firm/employee relative power proxy is *WPRank*, ranking of each state based on its worker rights protection laws as measured by OXFAM America. Starting in 2018, OXFAM America has been ranking each state in three dimensions: wages, worker rights protection, and the right to organize. The wage dimension assesses a state's minimum wage laws and the standing of minimum wages relative to the living wage. The worker rights dimension considers laws that protect workers' rights, such as fair scheduling, equal pay, paid/sick leaves, and protection from harassment. The right-to-organize dimension focuses on collective bargaining and union membership, mainly in the public sector. We use OXFAM America's 2019 rankings on the workers' rights dimension as a proxy for the extent to which a state has laws to protect employee rights. Higher values for rankings imply weaker employee rights protection and stronger firm power. Figure 3 presents the distribution of rankings across states.

<Insert Figure 3 here>

Our last firm/employee relative power proxy, *RTW*, is an indicator equal to one for states that enacted right-to-work laws and zero otherwise. Right-to-work laws ban union security agreements that require all employees in a bargaining unit to either join the union or pay their dues for representation by the union as a condition of employment. Prior studies find that right-to-work laws negatively impact union organization and union power in workplaces (e.g., Ellwood and Fine, 1987; Moore, 1998) as well as employee wages (Farber, 1984; Garofalo and Malhotra, 1992). These laws are correlated with policies that disproportionately benefit employers over workers, and they are used as a proxy for low employee bargaining power in prior studies (e.g., Holmes, 1998; Johnson, 2020). As such, we use right-to-work laws as an indicator of less labor-friendly sentiment in a state. As of 2022, 27 states have enacted right-to-work laws, of which five (Indiana, Michigan, Kentucky, Wisconsin, and West Virginia) did so during our sample period.

We report our estimates from Eq. (5) along with the marginal effects for the proxies for firm power in Table 6.[29] Each column corresponds to a proxy for firm power, where higher values indicate weaker employer protection and stronger firm power. We cluster standard errors at the firm level.[30]

<Insert Table 6 here>

Table 6 shows that each firm power proxy is statistically significantly and positively associated with the probability of observing overtime avoiding positions. In the last two rows of each column, we report the marginal effect of each firm power proxy relative to the baseline percentage of salaried managerial positions in the full sample (i.e., 3.1%). Since fixed effects complicate the interpretation of the marginal effects, we report marginal effects for the firm power proxies both with and without considering the fixed effects. In Column 1, the marginal effect of *FPI* relative to the baseline is 13.2% when we ignore the fixed effects and 15.5% when we include the fixed effects. This approximately corresponds to an increase of 2,162 job postings marginally avoiding overtime payments. Since *FPI* ranges between zero and four, this estimate suggests that the probability of observing overtime avoiding positions increases by 52.8% to 62.0% when moving from a state with the lowest firm power to a state with the highest power. In Column 2, the marginal effect of *WPRank* relative to baseline is 1.5% without fixed effects and 1.8% with fixed effects, approximately corresponding to an increase of 251 job postings marginally avoiding overtime payments. This translates to an increase of 76.5% to 91.8% when moving from the highest-rank state to the lowest-rank state. Finally, Column 3 shows that in states that enacted *RTW,* the probability of observing overtime-avoiding positions increases by 10.0% to 21.2% relative to the baseline, or approximately 2,958 additional job postings marginally avoiding overtime.

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[29] In supplementary analyses detailed in Appendix G, Tables G21–G24, we examine directly comparable positions from four industries that the DOL's Wage and Hour Division classify among the top low-wage-high violations. Our findings reveal more pronounced effect sizes in these subsamples, reinforcing our measure and robustness of our primary results.

[30] As reported in Appendix G, Tables G25–G28, our inferences are generally robust to clustering standard errors at the level corresponding to the measurement of the independent variable in the tests instead.

In Table 6, the correlation between our main explanatory variable, state-level relative firm power index, and the error term may arise only if an unobserved omitted variable is confounding both the state-level relative firm power index and the overtime avoidance at the same time (simultaneity bias). This scenario is unlikely if we assume that no single firm is economically or politically sufficiently influential in determining the state-level relative firm power index. Under this assumption, the results we document between overtime avoidance and firm power can be interpreted as causal relations. Using a state-level relative firm power index also helps mitigate another form of endogeneity concern – reverse causality – which would arise if we used a firm-level index. This is again due to the plausible assumption that an individual firm cannot influence state-level relative firm power index due to its size, political connections, or through other channels. Having said this, in the following section, we provide a within-firm analysis to investigate whether overtime avoidance of the same firm varies across states with different relative firm power indexes.

IV.4. Within-Firm Variation in Overtime Avoidance

As discussed above, we interpret the evidence presented in Table 6 as causal effects of relative firm power over overtime avoidance behavior because we surmise individual firms typically cannot significantly alter the state-level labor laws, i.e., they take the hiring environment as given and decide on the overtime practices based on the policies of the states they are operating. In this section, we dig into the causal effect of firm power on overtime avoidance using a within-firm specification. More specifically, we investigate whether overtime avoidance of the *same firm* varies across states based on the firm's relative power over employees. Keeping the firm constant helps us mitigate the possibility that a firm-level unobserved variable (such as CEO characteristics or firm investment opportunities) is driving the results due to its correlation with state-level relative firm power metrics.

We examine within-firm variation in overtime-avoiding positions by including firm-year fixed effects in our specifications. This specification allows us to tease out variations in overtime avoidance driven by variations in firms' power in different states. While firms may have policies to standardize

human resources activities across different locations, regional conditions can influence the specifics of the hiring decisions. To the extent regional labor market conditions influence hiring decisions, we predict a higher likelihood of observing overtime-avoiding positions when the position is in a state where firms have a stronger bargaining position than employees.

We report results from conditional logit regressions of *OTAvoided* on proxies for firm power, controls, and firm-year fixed effects in Table 7. Since all models include firm-year fixed effects, the coefficients on proxies for firm power represent differences across states within the same year and same firm.

<p style="text-align:center"><Insert Table 7 here></p>

Our findings in Table 7 indicate that within the same firm and year, the probability of observing overtime-avoiding positions is higher when the position is in a state with stronger firm power. The coefficients of interest are significant in all models and for all three proxies of firm power. Given the large number of fixed effects in these regressions, we do not attempt to interpret the marginal effects.[31] Instead, we report odds ratios for the firm proxy variable at the bottom of each column. Odds ratios generally indicate that one unit increase in each of the firm power proxies is associated with large increases in the odds of observing an overtime-avoiding position. These findings indicate that even among establishments within the same firm-year, there are significant differences in overtime-avoiding positions, and these differences are positively associated with the firm's power relative to its employees in the establishment's location.[32]

IV.5. Effects of Inflated Managerial Titles on Employee Career Trajectories and Turnover

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[31] The marginal effects remain statistically significant at one percent level in the full sample but cannot be estimated in the subsamples.

[32] In Appendix G, Table G29, we employ another identification strategy by leveraging the enactment of right-to-work laws in five states—Indiana, Michigan, Wisconsin, West Virginia, and Kentucky— during our sample period as a positive shock to firm power relative to employees. We restrict the sample to firms operating in at least one of these five states and at least one other state, which serves as a fine, within-firm control group. Additionally, we require that sample firms have job postings both before and after the enactment of these laws in both the treatment and control states. This is essentially a difference-in-differences analysis using job postings by the same firm across different states. The result from this analysis (reported in Table G29) supports our inferences from Tables 6 and 7.

Thus far, we have examined how firms use inflated managerial titles as a strategy to circumvent overtime pay obligations. In this section, we shift focus to the potential long-term consequences for employees' careers, investigating whether these inflated titles provide career benefits such as higher wages or faster promotions. While these titles may not reflect actual managerial responsibilities, they could still serve as valuable signals in the labor market, influencing future job opportunities and upward mobility. By analyzing employee career trajectories, we assess whether title inflation ultimately helps or hinders workers in the long run.

For this analysis, we identify firms with high overtime avoidance—defined as those with at least 30 job postings, 10% or more of which are overtime-avoiding—and use Revelio Labs' resume data to track the career trajectories of employees from these firms, forming our treatment group. As controls, we use all individuals who worked in the same industries as these firms at some point in their careers. The data structure allows us to track unique positions (*position_id*) for each individual (*user_id*) across their career, with positions numbered sequentially to indicate career progression. We carefully clean this data to maintain one observation per individual-position combination. This thus handles cases where positions span multiple years or where individuals hold multiple positions within a year each as single per individual-position observations, in order to capture subsequent career progression and promotion. Revelio classifies positions into seven seniority levels, from Entry Level (1) to Senior Executive Level (7). We focus specifically on Associate Level (3) and Manager Level (4) positions, as these represent the critical transition point where title inflation is most likely to occur and have an impact. Associate-level positions include roles like Senior Tax Accountant, while Manager-level positions encompass titles such as Account Manager. Our sample consists of 36,759 unique individuals in treated firms (those with high title inflation) and 1,051,115 individuals in other firms.

<Insert Table 8 here>

We begin by analyzing promotion probabilities, where we define promotion as a binary variable (*Promote*) that takes a value of one when the seniority of the employee increases from either of the intermediate Associate Level (3) or Manager Levels (4). Panel A of Table 8 examines whether

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employees working in firms that use inflated managerial titles to avoid overtime (*Treated*) have different promotion rates compared to employees in similar firms within the same industry and metro area (column 1); the same industry and year (column 2), or both (column 3). We select these fixed effects to account for potential confounding local and industry factors that might affect career progression independent of managerial titles. Throughout our analysis, we use *Promote* as the dependent variable, but with definitions tailored to each column. For the first three columns, *Promote* equals one when an employee advances in seniority from either Associate or Manager Level positions, and zero when no such advancement occurs. Column 4 uses a more targeted definition, with *Promote* equaling one exclusively for advancements from Manager Level positions. Similarly, column 5 sets *Promote* to one only for advancements from Associate Level positions, with both columns 4 and 5 setting the value to zero in all other instances. We double-cluster the standard errors at the firm and year levels.

Contrary to the signaling value hypothesis, we find no significant differences in career progression between employees in treated and untreated firms: The coefficient estimate of *Treated* in column (3) of Panel A is negative (-0.92%, $t = -1.84$) with the average employee's promotion rate of 5.28% ($t = 56.19$) across all firm-years, suggesting workers with prior inflated managerial titles do not have higher promotion probability compared to their counterparts without such titles within the same metro area and industry (if anything, slightly lower in point estimate, though not significantly so).

In column (4), we examine employees promoted out of Manager roles into more senior positions, while column (5) looks at those promoted from Associate roles into higher-level positions. The results in columns (4) and (5) are similar to those in column (3), with negative and marginally significant coefficient estimates of -0.86% ($t = -1.83$) and -1.20% ($t = -1.94$), respectively, further supporting our main finding that inflated managerial titles do not appear to lead to improved career progression or realizations.

In Panel B of Table 8, we extend our analysis to examine wage increases during promotions, specifically focusing on salary changes when workers transition between positions. The dependent variable in this analysis is *Wage Growth*, the natural logarithm of the wage growth upon promotion. We find no evidence that workers with prior inflated managerial titles receive larger wage increases during

subsequent promotions compared to their counterparts without such titles. The coefficient estimates on *Treated* are all small and insignificant, flipping between positive and negative, compared to average wage growth during promotion in the sample of 7.20% ($t = 18.00$).

In the final analysis of this section, we explore the relationship between inflated managerial titles and employee turnover. This analysis relates directly to our theoretical model's prediction about when firms choose title inflation over hiring additional workers. While our model predicts that firms prefer to rely on overtime avoidance when the costs of compliance (L) and hiring new workers (C) favor such a strategy, it doesn't explicitly account for potential increases in employee turnover that might offset some of these benefits. We examine whether firms using managerial titles to avoid overtime pay experience higher turnover rates, as employees may become dissatisfied with the imbalance between their compensation and workload.

For this analysis, we aggregate individual-level data from Revelio Labs (36,759 treated and 1,051,115 control individuals) into 206,371 firm-year observations. Using the percentage of employees leaving jobs as the dependent variable, the Tobit regression results in Table 9 indicate that treated firms have a 3.81 percentage point higher turnover rate (t = 8.48). Relative to the mean turnover rate of 15.12% - representing a 25% increase - suggesting that title inflation is associated with significantly higher employee turnover.

<Insert Table 9 here>

While there are expected costs of increased turnover, they appear somewhat smaller, and unlikely to outweigh, the benefits of overtime avoidance. In order to estimate, estimates of turnover costs for low-level employees range around 16-20% of annual wages, meaning the observed 25% increase in turnover likelihood translates to an expected cost of only 4-5% of wages per employee.[33] Comparatively, our earlier estimate (Section IV.1) suggests that firms save approximately 13.5% of wages by circumventing overtime pay (roughly 2-3x). Thus, while the higher turnover represents a

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[33] See https://www.americanprogress.org/article/there-are-significant-business-costs-to-replacing-employees and https://www.shrm.org/executive-network/insights/people-strategy/new-look-supply-side-workforce-planning

cost for firms, it may be unlikely, and appears empirically not to deter firms from engaging in overtime avoidance.

IV.6.   Cross-Sectional and Time-Series Variation in Overtime Avoidance

Thus far, we show that overtime avoidance is positively associated with firms' power over employees. In this section, we focus on a set of cross-sectional tests in which we explore structural reasons to help explain these findings. For this analysis, we split our sample based on three features of labor markets: size, wage, and labor-market shaping through anti-immigration policy. The idea behind the first metric, size, is straightforward: in places where the labor pool is larger, firms are more likely to engage in overtime violation because they are more likely to attract someone willing to respond to the firms' job postings. We use commuting zone population, a coarse measure of labor pool size, for this purpose. Our second measure, minimum wage, is a metric that captures the level of competing wage employees can get in the state. Again, holding other factors constant, the lower the minimum wage, the more likely for firms to find a group of people who are likely to go along with firms' overtime practices. The last measure, regarding anti-immigration policy, aims to capture differences in labor market competition created by immigration-related policies.

We obtain annual estimates of county population from the U.S. Census Bureau, commuting zone definitions from the U.S. Department of Agriculture, and annual data on minimum wage by state from the DOL's websites. We use data from the state immigration policy dataset of the Urban Institute to measure anti-immigration policies of a state as the sum of five indicator variables: (i) whether some or all counties in the state have a 287(g) jail agreement with the Department of Homeland Security to allow local law enforcement to arrest and detain individuals for suspected illegal immigration, (ii) whether some or all counties in the state have a policy not to honor some or all ICE detainer requests, (iii) whether the state disallows illegal immigrants to receive a driver's license, (iv) whether the state funds public health insurance for children regardless of their immigration status, and (v) whether the state allows students to access state financial aid regardless of their immigration status. We construct

the indicator variables such that each indicator variable equals one if the state laws are not immigrant-friendly and calculate the total anti-immigration score as the sum of the five indicators. Using population, minimum wage, and anti-immigration policies, we split the sample from the median in each year and replicate our analysis reported in Table 6 for each subsample. Additionally, we split the sample into two from the end of 2016 to test whether our findings vary over the sample period.[34]

<Insert Table 10 here>

We report findings from each of these splits in Table 10 using our full sample. For brevity's sake, we report the findings using only *FPI*; however, unless noted otherwise, our inferences remain unchanged using *WPRank* or *RTW*. We generally find that our results hold across all splits. The first two columns show that our findings vary between areas with relatively high and low populations. The coefficient on FPI is statistically larger in less populated states than in more populated states (with estimated marginal effects being larger as well). Columns 3 and 4 present the splits based on the states' minimum wage. We find a statistically significant relation between *FPI* and *OTAvoided* in both columns with the difference in coefficients being statistically insignificant. Columns 5 and 6 present splits based on the anti-immigration score of states. The relation between *FPI* and *OTAvoided* is statistically significant in both columns, but the coefficient on FPI is statistically larger in states with higher anti-immigration scores. The marginal effect of *FPI* relative to baseline is also much larger in less immigration-friendly states (24.9%) compared to more immigration-friendly states (11.9%). In our final split, reported in Columns 7 and 8, we find that our results remain significant in both the earlier and later years of the sample period. However, the effects appear to be increasing over time: both the coefficient on FPI and its marginal effects being significantly larger in the more recent period.[35]

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[34] In order to assess whether any alterations in sample composition impact our conclusions, we also perform a subsample analysis by limiting the dataset to firm-state pairs with at least one observation both before and after 2016. Our inferences remain the same in this analysis.

[35] As presented in Appendix H, Figures H1, and H2, WHD data reveal a significant increase in back wages owed after 2016, even as the number of violation cases remained stable. This trend likely reflects WHD's strategic focus on larger cases in response to resource constraints (e.g., staff reductions in 2010-2019 from 1,035 to 780 employees due to budget cuts). Similarly, data from U.S. courts show a rise in FLSA-related private litigation post-2016, consistent with the observed stronger relationship between firm power and overtime avoidance during the latter part of our sample period. These

IV.7.   Financial and Labor Market Incentives and Overtime Avoidance

The evidence presented thus far suggests that overtime avoidance exists and is related to the relative bargaining power of a firm over employees. We now turn our attention to firms' incentives to engage in such practices. We examine three forms of incentives. These incentives directly connect to our theoretical model, where financial constraints affect hiring costs (C), while labor market competition and educational attainment influence employee bargaining power (θ). First, financial constraints can be an important determinant of hiring decisions. Disruption in access to financing is associated with contractions in demand for labor (e.g., Popov and Rocholl, 2018; Benmelech, Frydman, and Papanikolaou, 2019; Benmelech, Bergman, and Seru, 2021). Thus, firms become more likely to conduct their operations with fewer workers, potentially resulting in a greater need for overtime. Second, experiencing stiffer competition in hiring for a given position can restrict a firm's ability to avoid listing positions that avoid overtime payment. As a result, overtime avoidance can decline when a firm competes with other firms more strongly for the same position. Third, as the educational attainment of the labor pool increases, firms can be less incentivized to offer positions that avoid overtime payments for at least two reasons. First, since education is strongly associated with labor mobility (e.g., Greenwood, 1969; Machin, Salvanes, and Pelkonen, 2012), firms may need to offer more competitive terms when the educational attainment of the labor pool is high. Second, to the extent education is associated with legal consciousness and knowledge of employee rights (e.g., Blackstone, Uggen, and McLaughlin, 2009; Hirsh and Lyons, 2010), better-educated employees may be more likely to avoid or report/protest wage theft. This may incentivize firms to steer away from overtime-avoiding positions when the labor pool is better educated.

To test the effect of financial constraints on overtime avoidance, we follow Gilje (2019) and use oil and natural gas shale discoveries as a shock to the availability of local credit that is exogenous to the local communities' underlying characteristics. Gilje (2019) shows that following new shale

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patterns may be linked to the faster rise in labor costs after 2016, as indicated by the BLS Employment Cost Index, or to firms' strategic responses to heightened public awareness of salary requirements for overtime payments, driven by the intense debates over the proposed 2016 overtime threshold increase, which ultimately did not take effect.

discoveries, annual deposit growth in local banks triples, and the number of new establishments significantly increases. To test whether the relaxation of financing constraints affects overtime avoidance, we use the following model:

$$\Pr\{OTAvoided_i = 1\} = \phi_1 + \phi_2 ShaleBoom_i + \phi_3 WeeklyPay_i + \phi_4 Min_{Edu_i} + \phi_5 Min_{Exp_i} +$$
$$\phi_6 Max_{Edu_i} + \phi_7 Max_{Exp_i} + \sum Ind.FE + \sum YearFE + \sum FIPSFE + \varepsilon_i \qquad (6)$$

where $ShaleBoom_{f,t}$ equals the natural logarithm of one plus total wells discovered in the region specified by federal information processing code (FIPS) f from 2003 to time t, and $FIPSFE$ are fixed effects for FIPS codes. We define $ShaleBoom$ following Gilje (2019).[36] We report results from the analyses of financial constraints in column 1 of Table 11.

<Insert Table 11 here>

Consistent with the argument that following greater availability of credit after discoveries of new shale wells, financial constraints become less binding for local businesses, and the demand for positions that avoid mandatory overtime payments is reduced, we find a negative and statistically significant coefficient on *ShaleBoom*. The odds ratio for *ShaleBoom* is 0.78, suggesting that a 100% increase in shale count is associated with a decline of around 22% in overtime avoidance relative to baseline. This finding aligns with our model's prediction that as hiring constraints ease (effectively reducing parameter C), firms become less reliant on overtime avoidance strategies.

To test the effect of competition for hiring on overtime avoidance, we examine the relationship between the total demand for similar occupations in the region and overtime avoidance. We measure the demand for similar occupations in the region as the total number of job postings in a given commuting zone-year-standardized occupation code in our sample scaled by the total population (in hundred thousand) of the commuting zone in the same year (*LaborDemand*). We use the following model, which includes commuting zone fixed effects (*CZFE*), and test whether firms

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[36] Our inferences remain identical when we use the alternative definition of shale boom in Gilje (2019) based on an indicator variable of high well counts.

will be less likely to offer positions that avoid mandatory overtime payments when there is a higher demand for the occupation:

$$\Pr\{OTAvoided_i = 1\} = \phi_1 + \phi_2 LaborDemand_i + \phi_3 WeeklyPay_i + \phi_4 Min_{Edu_i} +$$
$$\phi_5 Min_{Exp_i} + \phi_6 Max_{Edu_i} + \phi_7 Max_{Exp_i} + \sum Ind.FE + \sum YearFE + \sum CZFE + \varepsilon_i \qquad (7)$$

We present results from the analyses of the relationship between labor demand and overtime avoidance in the second column of Table 11. We find a statistically significant and negative coefficient on *LaborDemand*. In terms of the odds ratio, one unit increase in *LaborDemand* reduces the likelihood of observing an overtime-avoiding position to 92% of the baseline. Considering that the standard deviation of *LaborDemand* is 3.01, this effect size is economically meaningful. Overall, these findings suggest the weakening of the use of overtime avoidance when firms face stiffer competition for the positions they are planning to hire. This relationship is consistent with our model's prediction that increased competition in labor markets enhances employee bargaining power (θ), making overtime avoidance less viable for firms.

Finally, we examine whether educational attainment of potential employees influences the likelihood of observing overtime-avoiding positions. We measure educational attainment as the percentage of the population over 25 years old with a bachelor's or higher degree in a given commuting zone multiplied by 100 (*EducAttain*).[37] We use the following model to test whether firms will be less likely to offer positions that avoid mandatory overtime payments when educational attainment is higher:[38]

$$\Pr\{OTAvoided_i = 1\} = \phi_1 + \phi_2 EducAttain_i + \phi_3 WeeklyPay_i + \phi_4 Min_{Edu_i} +$$
$$\phi_5 Min_{Exp_i} + \phi_6 Max_{Edu_i} + \phi_7 Max_{Exp_i} + \sum Ind.FE + \sum YearFE + \sum CZFE + \varepsilon_i \quad (8)$$

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[37] All our inferences remain similar with somewhat weaker statistical significance levels (10% or better) when we focus on the percentage of population over 25 years old with a high school diploma or a higher degree instead.

[38] As detailed in Appendix G, Table G30, we re-estimated the models defined in equations (6), (7), and (8) using firm-year fixed effects. Our inferences remain consistent for *ShaleBoom* and *LaborDemand*; however, they become insignificant for *EducAttain*.

We present the estimates from this model in the last column of Table 11. *EducAttain* has a negative and statistically significant relation with overtime avoidance. In terms of the odds ratio, one unit (i.e., one percentage point) increase in *EducAttain* reduces the likelihood of observing an overtime-avoiding position to 96% of the baseline. Thus, our evidence is consistent with the education level of the labor pool reducing firms' incentives to offer overtime-avoiding positions. These results also support our model's prediction that higher employee bargaining power (θ) reduces overtime avoidance, while also being consistent with education potentially increasing expected litigation costs (L) through greater awareness of legal rights.

IV.8.   Labor Demand Dynamics and Overtime Avoidance

In this section, we explore the impact of labor and operational dynamics on overtime avoidance. The availability of slack utilization, and a flexible, cost-effective (i.e., not having to pay time-and-a-half for overtime) option will be more valuable when there is more variability and uncertainty regarding a firm's labor needs. We employ three metrics to quantify variability and uncertainty in labor demand. This analysis connects to our theoretical framework by examining how operational volatility affects the relative costs of hiring new workers (C) versus utilizing overtime with existing employees, particularly when new hire productivity (β) may be lower during periods of uncertain demand.

Firstly, we consider firms characterized by operational volatility, structurally experiencing more unpredictable work schedules. To measure this unpredictability associated with work schedules, we draw on data from the 2017 American Time Survey. Specifically, we focus on the question, "*How far in advance do you know your work schedule (at your main job)*?" We rank industries based on the proportion of their workforce responding to this question with timeframes shorter than two weeks. We refer to this ranking as *ScheduleUncertainty*, where higher values indicate a greater prevalence of employees receiving their work schedules with less than a two-week notice. A positive relationship between *ScheduleUncertainty* and the likelihood of encountering positions that actively avoid overtime would

exist if, as expected, increased operational unpredictability drives demand for cost-effective overtime alternatives.

Secondly, operational volatility can manifest as demand for part-time labor, as adjustment costs along both the extensive (e.g., hiring and firing) and intensive (e.g., changing hours per worker) margins for part-time workers are generally assumed to be lower than those for full-time employees. To gauge the need for part-time labor, we rely on BLS' Labor Force Statistics data. *%PartTime* represents the percentage of employees who report holding part-time positions within their employer's industry in a given year. We predict a positive correlation between *%PartTime* and the likelihood of observing overtime-avoiding positions.

Third, high employee turnover can exacerbate operational volatility and increase the need for having employees work overtime to cover for unforeseen changes in the workforce. We measure employee turnover using industry quitting rates reported in BLS's JOLTS reports. *QuitRate* is defined as the number of voluntary separations by employees (excluding retirements) divided by total employment and multiplied by 100. We predict a positive correlation between *QuitRate* and overtime avoidance.

We use the following model to test our predictions:

$$\Pr\{OTAvoided_i = 1\} = \phi_1 + \phi_2 OpDynamics + \phi_3 WeeklyPay_i + \phi_4 Min_{Edu_i} + \phi_5 Min_{Exp_i} +$$
$$\phi_6 Max_{Edu_i} + \phi_7 Max_{Exp_i} + \sum YearFE + \varepsilon_i \tag{9}$$

where OpDynamics is *ScheduleUncertainty, %PartTime*, or *QuitRate*. Since the variables of interest vary largely at the industry level, we omit industry fixed effects from these models. We report results from these analyses in Table 12.

<Insert Table 12 here>

Consistent with the prediction that overtime avoidance holds greater value for firms facing higher inherent operational volatility, we observe a positive and statistically significant coefficient on

all three proxies *ScheduleUncertainty*, *%PartTime*, and *QuitRate*. Specifically, the odds ratio for *ScheduleUncertainty* stands at 1.23, indicating that a one-rank increase in scheduling uncertainty corresponds to a 23% increase (t=8.10) in the likelihood of encountering a position that actively avoids overtime, relative to the baseline. Likewise, the odds ratio for *% PartTime* is 1.06, implying that a one-percentage-point rise in industry demand for part-time employees results in a 6% increase in the likelihood of observing a position that actively avoids overtime, relative to the baseline. The odds ratio for *QuitRate* is 2.01, which means that overtime-avoiding positions approximately double (t=8.27) for a unit increase in quit rate.

IV.9. Implications for Research on Managerial Roles and Labor Markets

Our findings on strategic title inflation have implications for a growing body of research in finance and personnel economics that rely on job titles to identify managers. Studies using resume data from platforms like LinkedIn, job postings from Glassdoor and Indeed, or government occupational classifications from O*NET may inadvertently include workers with inflated managerial titles who lack actual managerial responsibilities. This misclassification could lead to biased conclusions across several research domains. First, studies examining workplace disparities might misestimate gender or racial inequality if firms disproportionately assign inflated managerial titles to certain demographic groups. If women disproportionately receive overtime-avoiding titles lacking real authority, analyses might overstate progress in workplace equality; conversely, if men more frequently receive such titles, findings may mis-estimate existing gaps in wages and career progression. Second, research on managerial effectiveness could show attenuated results if samples include numerous "managers" without actual supervisory responsibilities. The inclusion of these pseudo-managers likely dilutes estimated effects of managerial influence on worker productivity, team performance, and organizational outcomes. Third, studies on labor market dynamics, particularly those focusing on occupational mobility and career progression, may draw incorrect conclusions if they treat all managerial promotions equally. Our findings on employees with inflated titles experiencing no

increases in career progression or higher wages, along with 25% higher turnover, suggests these roles may represent at least lateral shifts, as opposed to advancements.

To facilitate future research on title inflation, we have created a public dataset detailing the percentage of overtime-avoiding titles by industry, state, and year within the salary bandwidth we examine. This resource will allow researchers to adjust their analyses to account for potential title inflation, particularly in contexts where regulatory thresholds create incentives for strategic classification. Our methodology, which combines salary thresholds with job characteristics and industry-specific patterns, offers a template for identifying likely cases of title inflation in various datasets. By applying these filters, researchers can develop various measures of managerial roles that better reflect actual job responsibilities rather than merely titular designations.

V.   Conclusion

With the backdrop of a declining labor share - particularly in the last two decades - we document a parallel widespread usage by firms of false managerial roles and titles to avoid making overtime payments to labor. In particular, firms are able to exploit the overtime exemption provision of the FLSA allowing them to avoid paying overtime wages if an employee has a "managerial title" and is paid a salary above a bright-line threshold. We document a sharp spike in the distribution of firms' usage of managerial titles (especially suspect titles) just above this threshold. We do not find any similar spikes around alternative thresholds or for positions to which FLSA overtime rules do not apply.

In addition, we find that the probability of the strategic use of managerial titles increases when firms have more bargaining power relative to labor. The likelihood of strategic managerial title use increases for: firms with financial constraints, firms facing less competition in the local labor market, and firms facing a less educated labor pool. Moreover, the probability is also higher among firms with greater labor demand uncertainty, and with higher structural volatility in seasonal labor and overtime needs.

The strategic use of titles persists across industries, geographical locations, the firm size distribution, and through the present day - being even stronger in point estimate in more recent time periods.

The significance of the power dynamics between firms and employees has grown increasingly more salient considering the declining labor share, along with declining ranks of private labor organizations over the past 70 years (BLS, 2022). Furthermore, in recent decades, numerous industries have witnessed the consolidation of large firms, expanding both their size and influence, as evidenced by their growing share of overall profits (Kahle and Stulz, 2017). This has given rise to an evolving, richly dynamic power relationship between labor and capital. Given this, it remains central to closely monitor and keep in-check the equilibrium of power between these entities and the consequential transfers that transpire between firms and labor.

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FIGURE 1: DISTRIBUTION OF CORPORATE VIOLATIONS BY OFFENSE TYPE

This figure presents the distribution of the count of corporate violations with a penalty amount greater than $10,000 by primary offense type for all offenses compiled by Good Jobs First for the years 2004 through 2019. Overtime violations are included under Wage and Hour violations.
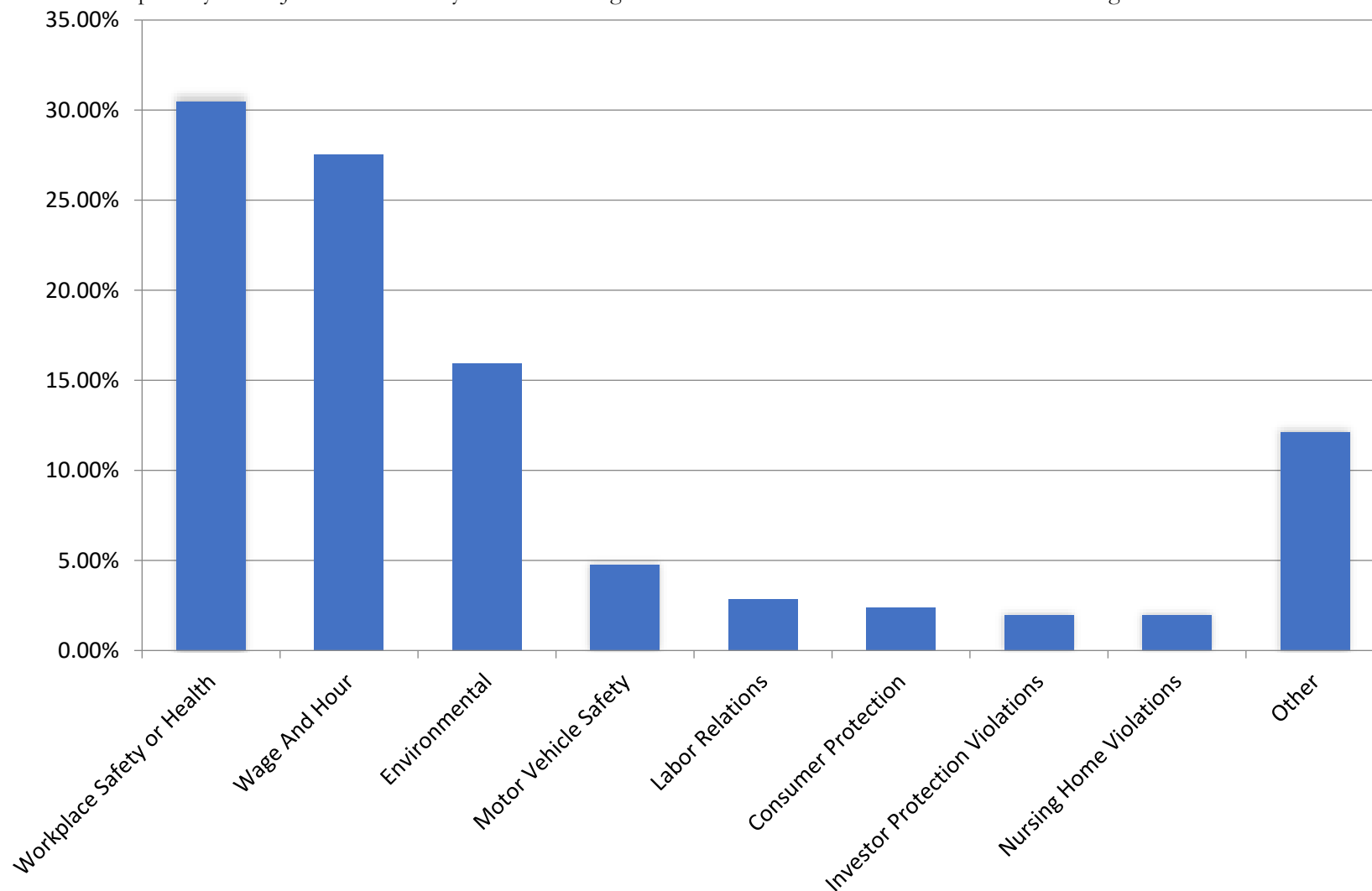
FIGURE 2: DISTRIBUTION OF SALARIED MANAGERIAL POSITIONS AROUND FLSA THRESHOLD

This figure presents the percentage of salaried managerial positions around the FLSA threshold of $455 per week.
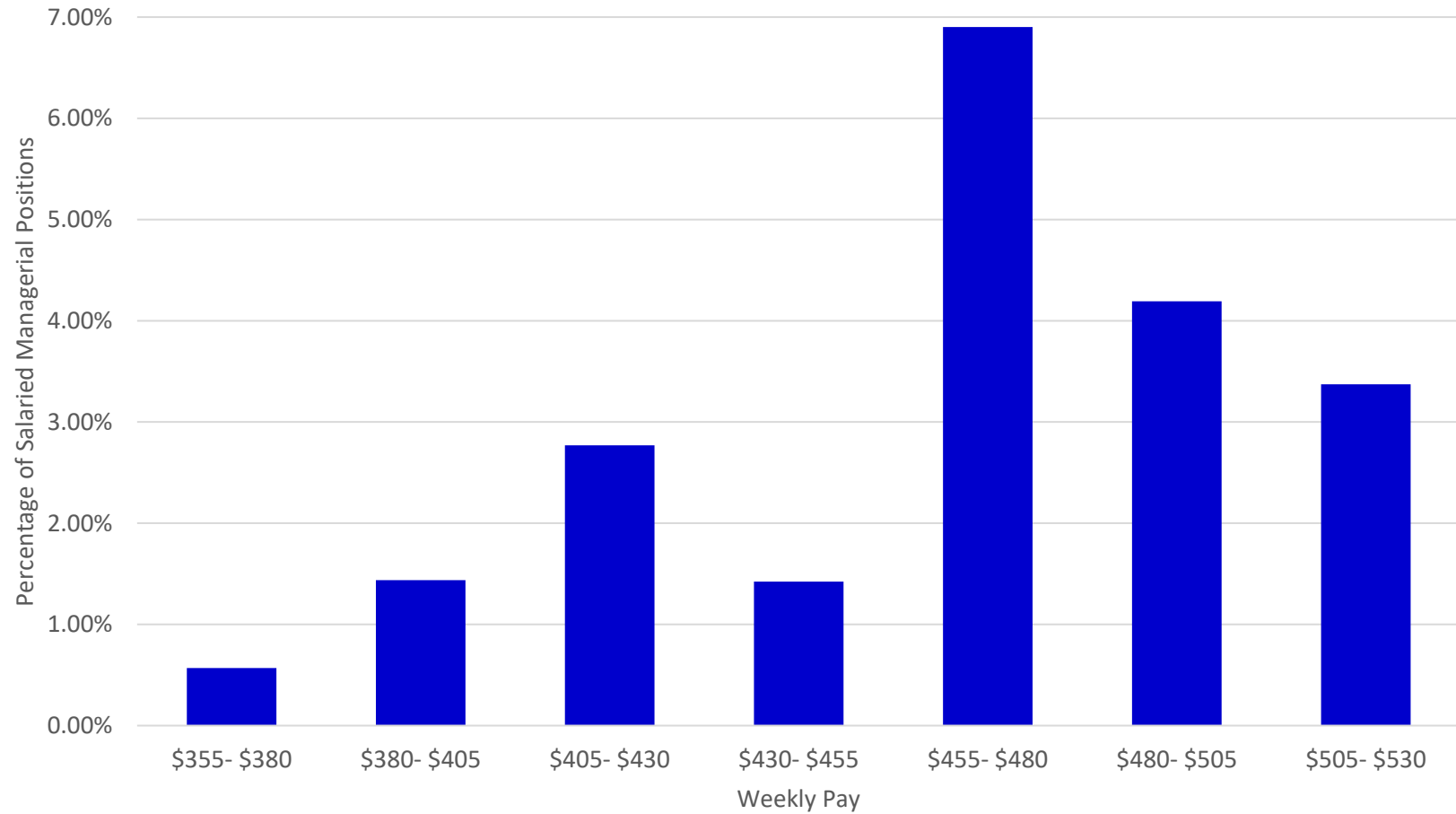
FIGURE 3: OXFAM AMERICA 2019 WORKER PROTECTION RANKINGS BY STATE

34 - 51
20 - 34
10 - 20
1 - 10
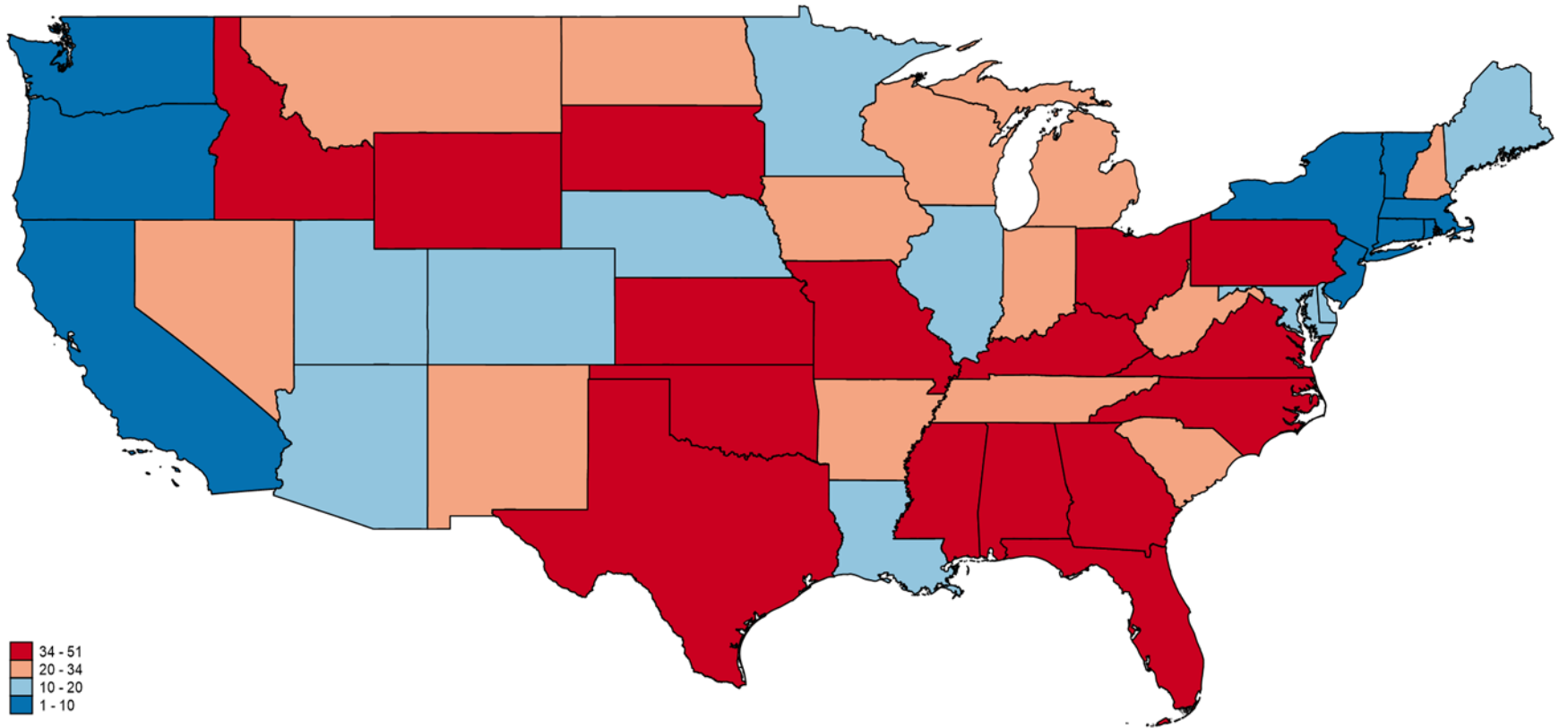
TABLE 1: DESCRIPTIVE STATISTICS

This table provides descriptive statistics for the full sample. A detailed definition of each variable is provided in Appendix F.

	Obs. count	Mean	St.dev	25%	50%	75%
Manager	450,025	0.12	0.33	0.0	0.0	0.0
Salaried	450,025	0.16	0.37	0.0	0.0	0.0
OTAvoided	450,025	0.031	0.172	0.0	0.0	0.0
FPI	450,025	2.2	1.0	2.0	2.0	3.0
WPRank	450,025	27.0	11.6	17.0	31.0	35.0
RTW	450,025	0.6	0.5	0.0	1.0	1.0
WeeklyPay	450,025	$463	$25.7	$440	$480	$480
Min_Experience	155,752	1.9	2.0	1.0	1.0	2.0
Min_Education	335,297	8.5	5.8	0.0	12.0	12.0
Max_Experience	155,752	2.3	2.3	1.0	2.0	3.0
Max_Education	335,297	8.8	6.1	0.0	12.0	12.0

TABLE 2: SALARIED MANAGERIAL POSITIONS AROUND FLSA AND ALTERNATIVE THRESHOLDS

This table presents linear regressions of *SalariedManager* (or *HourlyManager*), an indicator equal to one for salaried (or hourly) managerial positions, on the indicator *Above*, which equals one if the weekly salary for the position exceeds the FLSA threshold of $455 or alternative pseudo-thresholds. The band above and below each threshold is set to $50. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. t-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

Dep.Var.:		SalariedManager			HourlyManager
Salary Threshold:	$405	$455	$455	$505	$455
		FLSA States	Non-FLSA States		FLSA States
Above	0.001	0.015***	0.004	-0.019***	-0.024***
	(0.74)	(3.68)	(0.95)	(-5.27)	(-3.56)
WeeklyPay	0.022***	0.019**	0.021**	0.085***	0.101***
	(4.22)	(2.07)	(1.97)	(6.52)	(6.35)
Min_Experience	-0.000	0.000	0.003	-0.003	0.006**
	(-0.53)	(0.15)	(1.29)	(-1.08)	(2.29)
Min_Education	-0.001	-0.004	-0.006**	-0.002	-0.013***
	(-1.04)	(-0.96)	(-2.12)	(-0.54)	(-3.10)
Max_Experience	0.002**	0.002**	-0.000	0.003***	-0.001
	(2.57)	(2.14)	(-0.01)	(3.02)	(-0.76)
Max_Education	0.003**	0.005	0.008***	0.004	0.013***
	(2.13)	(1.43)	(2.61)	(1.50)	(3.15)
Missing_Experience	-0.007***	-0.012**	-0.008*	-0.011**	-0.028***
	(-3.35)	(-2.42)	(-1.80)	(-2.13)	(-2.63)
Missing_Education	0.015***	0.016***	0.009	0.018***	0.001
	(3.59)	(3.44)	(1.60)	(4.00)	(0.12)
Firm F.E.	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓
Adj. R²	0.257	0.431	0.431	0.506	0.338
Obs. count	566,643	450,025	88,460	536,232	450,025

TABLE 3: THE DOL OVERTIME COMPLIANCE ACTIONS AND OVERTIME AVOIDANCE

This table presents estimates from firm-state-year level regressions of measures of the DOL violations on measures of overtime avoidance. Columns (1) and (4) (Columns (2) and (5)) report estimates from logit regressions where the dependent variable equals one if any establishment of the firm in a given state and year is found to be in (willful or repeat) violation of FLSA rules. Columns (3) and (6) report estimates from OLS regressions where the dependent variable equals the number of FLSA violations found across all firm establishments in a given state and year. In columns (1) through (3), the measure of overtime avoidance is *%OTAvoiding*, the percentage of job postings by the firm in a given state, and year that are salaried positions with a managerial title that pay above the FLSA non-exemption threshold. In columns (4) through (6), it is *D_OTAvoiding*, an indicator variable equal to one if at least one of the job postings by the firm in a given state and year is a salaried position with a managerial title that pays above the FLSA non-exemption threshold. Estimates are reported for the full sample, which includes all job listings that meet data requirements, are located in states where the FLSA overtime non-exemption threshold is binding, and have a salary within $50 of the threshold. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. z and t-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

Dependent Var:	(1) Pr(Violation)	(2) Pr(W/R Violation)	(3) ViolationCount	(4) Pr(Violation)	(5) Pr(W/R Violation)	(6) ViolationCount
%OTAvoiding	0.822***	1.286***	4.238			
	(4.15)	(3.76)	(1.60)			
D_OTAvoiding				0.855***	1.263***	3.641*
				(5.72)	(4.72)	(1.82)
PositionCount	0.010***	0.008***	0.029*	0.009***	0.006*	0.023
	(4.77)	(3.63)	(1.61)	(4.32)	(2.22)	(1.38)
Industry FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
State FE	✓	✓	✓	✓	✓	✓
Obs. count	168,486	168,486	168,486	168,486	168,486	168,486

TABLE 4: SALARIED FAKE-SOUNDING MANAGERIAL POSITIONS AROUND THE FLSA THRESHOLD

This table presents linear regressions of *SalariedFakeManager*, an indicator equal to one for salaried positions with a fake-sounding managerial title and zero otherwise, on the indicator *Above*, which equals one if the weekly salary for the position exceeds the FLSA threshold of $455. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. t-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

Above	0.00062**
	(2.21)
WeeklyPay	-0.00039
	(-0.78)
Min_Experience	0.00005
	(0.56)
Min_Education	0.00000
	(0.02)
Max_Experience	0.00004
	(0.64)
Max_Education	0.00001
	(0.05)
Missing_Experience	0.0004
	(0.91)
Missing_Education	0.0001
	(0.24)
Firm F.E.	✓
Year F.E.	✓
Adj. R²	0.144
Obs. count	450,025

TABLE 5: SALARIED MANAGERIAL POSITIONS AROUND STATE-SPECIFIC SALARY THRESHOLDS

This table presents linear regressions of *SalariedManager* (or *HourlyManager*), an indicator equal to one for salaried (or hourly) managerial positions, on the indicator *Above*, which equals one if the weekly salary for the position is above the state's exemption threshold. In Alaska, the threshold is set at 80 times the state minimum wage, while in Maine, it is calculated as 3000/52 times the minimum wage. In Connecticut, the threshold was $475. In California, the threshold was 80 times the minimum wage until 2016, when it began to vary based on firm size. Similarly, in New York, the threshold was 75 times the minimum wage until 2016, after which it began varying with both firm size and location. We exclude postings from California and New York after January 1, 2016, because we cannot determine the exact location or employer size, making it impossible to know which threshold applies to a given posting and to avoid any anticipatory effects from the changes in thresholds. The band above and below each threshold is set to $50. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. t-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

Dep.Var.:	SalariedManager	HourlyManager
Above	0.012**	-0.022**
	(2.08)	(-2.36)
WeeklyPay	0.030***	0.022**
	(4.34)	(2.36)
Min_Experience	0.000	0.002
	(0.05)	(0.50)
Min_Education	-0.001	-0.009
	(-0.14)	(-1.29)
Max_Experience	0.004	0.001
	(1.22)	(0.27)
Max_Education	0.012***	0.010*
	(2.66)	(1.65)
Missing_Experience	0.018	-0.030
	(0.88)	(-2.26)
Missing_Education	0.113	0.009
	(2.85)	(0.33)
Firm F.E.	✓	✓
Year F.E.	✓	✓
Adj. R²	0.606	0.345
Obs. count	23,690	23,690

TABLE 6: RELATION BETWEEN OVERTIME AVOIDING POSITIONS AND FIRM POWER

This table presents estimates from logistic regressions of *OTAvoided* on proxies for firms' power over employees and control variables. The sample for the analysis includes all job listings that satisfy data requirements, are in states where the FLSA overtime non-exemption threshold ($455 p/w) is binding, and have a salary within $50 of the threshold. *OTAvoided* is an indicator variable that equals one for salaried positions with a managerial title paying above the FLSA non-exemption threshold and zero for all other positions. *FPI* (ranging from 0 to 4), *WPRank* (ranging from 1 to 51), and *RTW* (ranging from 0 to 1) are state-level proxies for firms' power relative to employees. Higher values of each proxy indicate weaker employee protection and stronger firm power. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. z-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

	(1)	(2)	(3)
FPI	0.175***		
	(4.18)		
WPRank		0.020***	
		(7.99)	
RTW			0.240***
			(3.91)
WeeklyPay	0.044***	0.044***	0.044***
	(17.91)	(18.23)	(17.95)
Min_Experience	-0.026	-0.020	-0.021
	(-0.57)	(-0.45)	(-0.46)
Min_Education	-0.165**	-0.161**	-0.161**
	(-2.31)	(-2.38)	(-2.31)
Max_Experience	0.046*	0.042	0.042
	(1.77)	(1.58)	(1.63)
Max_Education	0.196***	0.192***	0.192***
	(2.83)	(2.92)	(2.84)
Missing Exp./Edu. Indicators	✓	✓	✓
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Obs. count	450,025	450,025	450,025
Marg. Eff. vs. Base (w/o FE)	13.2%	1.5%	10.0%
Marg. Eff. vs. Base (w/FE)	15.5%	1.8%	21.2%

TABLE 7: WITHIN FIRM VARIATION IN OVERTIME AVOIDING POSITIONS

This table presents estimates from conditional logistic regressions of *OTAvoided* on proxies for firms' power over employees and control variables. The sample for the analysis includes all job listings that satisfy data requirements, are in states where the FLSA overtime non-exemption threshold ($455 p/w) is binding, and have a salary within $50 of the threshold. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. z-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

	(1)	(2)	(3)
FPI	0.253***		
	(7.11)		
WPRank		0.027***	
		(9.88)	
RTW			0.439***
			(6.96)
WeeklyPay	0.064***	0.064***	0.064***
	(29.05)	(29.33)	(29.05)
Min_Experience	0.047	0.049	0.047
	(0.82)	(0.83)	(0.79)
Min_Education	-0.075	-0.079	-0.075
	(-1.18)	(-1.25)	(-1.17)
Max_Experience	0.056	0.055	0.056
	(1.04)	(0.99)	(1.02)
Max_Education	0.105*	0.109*	0.105*
	(1.70)	(1.78)	(1.69)
Missing Exp./Edu. Indicators	✓	✓	✓
Firm-Year FE	✓	✓	✓
Obs. count	83,646	83,646	83,646
Odds ratio	1.29	1.03	1.55

This table presents regression analyses examining whether employees with inflated managerial titles experience different career outcomes compared to employees without such titles. The sample spans the period 2010–2018 and utilizes resume data from Revelio Labs. *Treated* is an indicator variable that equals one for individuals who are managers working at firms identified as frequently using inflated titles for overtime avoidance and zero for individuals who are managers working at other companies in the treated firm's industry. Panel A reports results for promotion probability. The dependent variable *Promote* is an indicator variable that varies across columns. In the first three columns, it equals one when an employee's seniority increases from either Associate or Manager Level, and zero otherwise. Column 4 focuses specifically on promotions from Manager Level (equals one when such a promotion occurs, zero otherwise), while column 5 focuses on promotions from Associate Level (equals one when such a promotion occurs, zero otherwise). Panel B presents findings on wage growth during promotions, measured as the logarithm of the ratio of an employee's compensation in their new position to their compensation in their previous position. Each specification includes different combinations of fixed effects to control for industry and geographic factors. Standard errors are double clustered at the firm and year level. z-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

Panel A: Promotion Probability and Inflated Managerial Titles

	Promote	*Promote*	*Promote*	*Promote*	*Promote*
Treated	-1.337**	-0.724*	-0.920*	-0.862*	-1.200*
	(-2.31)	(-1.69)	(-1.84)	(-1.82)	(-1.94)
Constant	5.284***	5.275***	5.282***	4.531***	6.339***
	(44.66)	(9.38)	(56.07)	(48.29)	(60.91)
Industry x Year FE	✓		✓	✓	✓
Industry x Metro FE		✓	✓	✓	✓
Obs. count	7,317,674	7,060,439	7,060,267	4,116,372	2,943,656
Adj. R²	0.01	0.01	0.02	0.02	0.02

Panel B: Wage Increase and Inflated Managerial Titles

	Wage Growth	*Wage Growth*	*Wage Growth*	*Wage Growth*	*Wage Growth*
Treated	-0.0102	0.00685	0.00377	0.00196	0.00358
	(-0.47)	(0.31)	(0.17)	(0.08)	(0.14)
Constant	0.0714***	0.0719***	0.0720***	0.0175**	0.143***
	(14.18)	(5.49)	(16.60)	(2.66)	(29.06)
Industry x Year FE	✓		✓	✓	✓
Industry x Metro FE		✓	✓	✓	✓
Obs. count	1,324,028	1,278,900	1,278,900	721,392	557,095
Adj. R²	0.01	0.03	0.03	0.04	0.03

TABLE 9. TURNOVER AND INFLATED MANAGERIAL TITLES

This table presents Tobit analyses examining whether firms with more managers with inflated managerial titles have higher turnover. The sample spans the period 2010–2018 and utilizes resume data from Revelio Labs. *Turnover* is the number of employees moving to a different position scaled by a total number of employees. *Treated Firms* refers to firms with high percentage of overtime avoidance. Standard errors are double clustered at the firm and year level. z-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

	Turnover
Treated Firms	0.0381***
	(8.48)
Constant + Year FE	YES
Left-censored	47,966
Observations	206,371
Pseudo R-squared	0.68

TABLE 10: CROSS-SECTIONAL AND TIME SERIES ANALYSES

This table replicates the analyses in Table 6 for subsamples based on commuting zone population size, minimum wage, anti-immigration laws, and period. For the commuting zone population, minimum wage, and anti-immigration scores, we split the sample from the median in each year. For the period, we split the sample from the end of 2016. For brevity's sake, results are tabulated using only *FPI* as a proxy for firm power. All inferences remain the same using *WPRank* and *RTW*. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. z-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

	Population		Minimum Wage		Anti-Immigration Score		Period	
	>Median	<Median	>Median	<Median	>Median	<Median	<=2016	>2016
FPI	0.108***	0.199***	0.111***	0.147***	0.288***	0.132***	0.109*	0.269***
	(3.54)	(3.51)	(3.78)	(2.62)	(5.08)	(3.55)	(1.80)	(10.32)
WeeklyPay	0.041***	0.046***	0.041***	0.045***	0.047***	0.042***	0.042***	0.044***
	(20.22)	(14.87)	(21.40)	(15.64)	(13.66)	(18.57)	(9.30)	(27.89)
Min_Experience	-0.021	-0.044	-0.047	-0.002	-0.029	-0.020	-0.058	-0.106*
	(-0.59)	(-0.72)	(-1.12)	(-0.04)	(-0.44)	(-0.46)	(-0.94)	(-1.80)
Min_Education	-0.141**	-0.177**	-0.133**	-0.178**	-0.152***	-0.169**	0.042	-0.149***
	(-2.21)	(-2.26)	(-2.25)	(-2.32)	(-2.84)	(-2.14)	(0.36)	(-3.44)
Max_Experience	0.049**	0.070*	0.098***	0.009	0.044	0.049**	-0.002	0.186***
	(2.16)	(1.91)	(3.99)	(0.25)	(0.91)	(2.05)	(-0.06)	(3.70)
Max_Education	0.178***	0.202***	0.171***	0.206***	0.172***	0.205***	0.294***	0.166***
	(2.88)	(2.65)	(3.06)	(2.75)	(3.38)	(2.69)	(2.72)	(4.08)
Missing Exp./Edu. Indicators	✓	✓	✓	✓	✓	✓	✓	✓
Industry F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Obs. count	218,096	225,735	184,136	265,889	114,398	335,627	207,820	242,205
χ² Test (Equal coefficients)	3.42*		0.38		6.38**		6.67***	
Marg. Eff. vs. Base (w/o FE)	9.3%	13.9%	12.2%	6.2%	28.2%	7.6%	10.1%	19.2%
Marg. Eff. vs. Base (w/FE)	10.0%	17.0%	10.1%	12.7%	24.9%	11.9%	9.2%	24.4%

TABLE 11: FINANCIAL AND LABOR MARKET INCENTIVES AND OVERTIME AVOIDANCE

This table presents estimates from logistic regressions of *OTAvoided* on proxies for firm incentives to avoid overtime payments. *ShaleBoom* is an inverse proxy for financial constraints a firm faces and is equal to the natural logarithm of one plus total shale wells discovered in a given FIPS code from 2003 until the year of observation. *LaborDemand* is a proxy for the extent of labor market competition a firm faces for a given position, and it is equal to the total number of job listings in the same commuting zone-soc code-year divided by the commuting zone's population (in hundred thousand). *EducAttain* is the percentage of individuals over age 25 with a bachelor's degree or higher in the commuting zone. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. z-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

	Financial Constraints	Labor Competition	Mobility/Legal Awareness
ShaleBoom	-0.244***		
	(-4.34)		
LaborDemand		-0.082***	
		(-5.70)	
EducAttain			-0.045**
			(-2.05)
WeeklyPay	0.045***	0.044***	0.044***
	(24.87)	(21.98)	(24.10)
Min_Experience	-0.018	-0.021	-0.019
	(-0.45)	(-0.50)	(-0.48)
Min_Education	-0.142**	-0.151**	-0.137**
	(-2.57)	(-2.42)	(-2.46)
Max_Experience	0.057**	0.051**	0.059***
	(2.51)	(2.19)	(2.58)
Max_Education	0.173***	0.185***	0.167***
	(3.23)	(3.06)	(3.10)
Missing Exp./Edu. Indicators	✓	✓	✓
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Commuting Zone F.E.	-	✓	✓
FIPS F.E.	✓	-	-
Obs. count	419,984	422,077	405,763
Odds Ratio	0.78	0.92	0.96

TABLE 12: OPERATIONAL DYNAMICS AND OVERTIME AVOIDANCE

This table presents estimates from logistic regressions of *OTAvoided* on proxies for operational dynamics that can incentivize overtime avoidance. *ScheduleUncertainty* is the ranking of the employer's industry based on the proportion of employees who report learning about their work schedule with less than a two-week notice, per the 2017 American Time Survey. *%PartTime* is the annual percentage of employees in the employer's industry that report having a part-time position. *QuitRate* is the annual quit rate in the employer's industry. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. z-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

	Uncertainty	Part-Time	QuitRate
ScheduleUncertainty	0.206***		
	(8.10)		
%PartTime		0.065***	
		(10.50)	
QuitRate			0.699***
			(8.27)
WeeklyPay	0.041***	0.042***	0.043***
	(13.13)	(13.70)	(15.82)
Min_Experience	-0.043	-0.031	-0.030
	(-1.00)	(-0.70)	(-0.74)
Min_Education	-0.113	-0.105	-0.142
	(-1.06)	(-0.99)	(-1.55)
Max_Experience	0.056*	0.058**	0.042
	(1.89)	(1.97)	(1.54)
Max_Education	0.137	0.132	0.166*
	(1.30)	(1.25)	(1.86)
Missing Exp./Edu. Indicators	✓	✓	✓
Year F.E.	✓	✓	✓
Obs. count	413,098	414,037	414,037
Odds Ratio	1.23	1.06	2.01

Internet Appendix for

"Too Many Managers:
The Strategic Use of Titles to Avoid Overtime Payments"

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Employee	Manager
Receptionist	Front Desk Manager
Front Desk Clerk	Director of First Impressions
Reservation Clerk	Lead Reservationist
Host/Hostess	Guest Experience Leader
Carpet Cleaner	Carpet Shampoo Manager (Trainee)
Asset Protection Specialist	Asset Protection Coordinator
Barber	Grooming Manager
Food Cart/Coffee Attendant	Food Cart/Coffee Cart Manager

Panera franchisee must pay $4.6M to settle overtime suit
(6/2/2020, Restaurant Business Magazine)

The country's largest Panera Bread franchisee, Covelli Enterprises, must pay $4.6 million to settle a class-action case involving overtime pay, according to a deal that received final judicial approval late last week.

The lawsuit dates back to January 2018 when a group of Panera assistant managers in Ohio filed suit against the operator claiming that they were being forced to work without overtime pay after being wrongly classified as exempt from overtime protections.

Under the settlement, Covelli must pay $4.62 million into a settlement fund for members of the protected class, made up of more than 900 assistant managers.

Collective Action Claims Publix Misclassified Certain Employees as 'Managers' to Avoid Paying Overtime (10/31/2019, Classaction.org)

Publix Super Markets, Inc. faces a proposed collective action over its alleged misclassification of certain department managers as overtime-exempt under the Fair Labor Standards Act (FLSA).

The case concerns Publix deli, bakery and meat managers given the title of "Department Manager" who were allegedly classified as overtime-exempt before April 2019. The lawsuit claims that the employees often worked over 40 hours in a week yet were not provided with time-and-a-half overtime pay due to their improper managerial exemption under FLSA standards. Moreover, the defendant also failed to keep accurate records of all hours worked, the case alleges.

According to the complaint, Publix department managers were not given the type of executive responsibilities that typically accompany overtime-exempt jobs, including tasks that require the "exercise of meaningful judgment and discretion." Department managers' duties consisted primarily of manual tasks typically reserved for non-exempt employees, such as preparing and stocking food, servicing customers and cleaning, the lawsuit says.

JPMorgan agrees to $16.7 mln settlement in overtime lawsuit
(11/6/2017, Reuters)

JPMorgan Chase & Co has agreed to pay $16.7 million to resolve a lawsuit accusing it of violating federal law by misclassifying assistant branch managers at its banks across the country and failing to pay them overtime.

The settlement, which was disclosed in a court filing on Friday, resolves two lawsuits filed in Manhattan federal court in 2014 and 2015 that were consolidated last year and certified as a nationwide collective action. The plaintiffs claimed that even though they had no management duties, Chase classified them as exempt from overtime in violation of the Fair Labor Standards Act and New York, Connecticut, and Illinois laws.

Facebook charged with misclassifying workers to avoid overtime pay
(11/1/2017, HRDive)

A new lawsuit accuses Facebook of deliberately misclassifying a segment of workers to avoid paying them overtime, reports Ars Technica. Susie Bigger, formerly a salaried client solutions manager at Facebook's Chicago office, brought the proposed collective-action suit, alleging that the social media company improperly classifies workers as managers to exempt them from overtime pay.

Bojangles' Assistant Managers Sue for Overtime
(7/10/2017, WaiterPay.com)

Two assistant managers who worked at a North Carolina Bojangles' restaurant are suing the famous southern food chain for failing to pay them overtime. The assistant managers argue that they were not actually managers and spent most of their time cleaning, taking orders, serving customers, and preparing, cooking, and packaging food. Although they worked approximately fifty hours per week, Bojangles' always paid the assistant managers the same set salary every week.

N.Y. Judge OKs $7.8M Avis Shift Managers O.T. Deal
(4/28/2016, Law360.com)

Nearly 250 shift managers who sued Avis Budget Car Rental LLC over unpaid overtime wages scored final approval of a $7.8 million settlement to end two long-running Fair Labor Standards Act collective actions, according to a New York federal court order made public Thursday.

The deal closes out a pair of long-running and hard-fought collective actions filed by 249 Avis shift managers and operations managers who alleged they were wrongfully classified as exempt employees under the FLSA and, accordingly, were not paid overtime for the time they worked in excess of 40 hours a week, according to court documents.

Court Approves Office Max Overtime Pay Settlement
(11/23/2015, overtimepaylaws.org)

A group of over 330 current and former assistant managers for OfficeMax Inc. who filed a class action overtime suit against their employer for violations of the Fair Labor Standards Act (FLSA) have entered into a settlement agreement with the company worth over $3.5 million. Under the agreement, each member of the class who opted into the lawsuit would receive an amount from the settlement based on the number of weeks he or she worked during the time period covered by the settlement. Attorneys will be seeking up to one-third of the settlement fund, or around $1.6 million.

The managers claimed that OfficeMax failed to pay overtime wages from its assistant managers because it believed they were exempt from overtime pay under FLSA. According to the plaintiffs, they worked more than 40 hours in a week and performed non-exempt duties. These duties did not differ significantly from those performed by non-exempt employees such as engaging in customer service, stocking shelves, down-stocking the binder wall, operating the cash register, unloading trucks, selling merchandise, setting up displays, counting inventory, and cleaning the store.

Verizon Accused Of Misclassifying Employees To Avoid O.T.
(7/16/2015, Law360.com)

Verizon Communications Inc.'s New York subsidiary was hit with a proposed wage and hour class action in New York federal court Tuesday from an employee who says the company misclassifies its logistics workers as supervisors to avoid paying overtime.

Plaintiff Thomas Dillon said that he's been classified as a supervisor in Verizon New York Inc.'s logistics services division since 1993 even though in all that time he's never overseen anyone but himself. Instead, Dillon alleged, he and others like him were classified as supervisors to make them exempt employees; workers Verizon didn't have to pay for dozens of hours of overtime each week accrued over the course of years or decades.

Lowe's Settles for $9.5M in Class Action Wage Suit
(8/28/2014, Remodeling Magazine)

Nationwide retailer Lowe's struck a $9.5 million deal on Aug. 22 to end a two-year class action lawsuit alleging the company "misclassified" up to 1,750 of its human resource managers in violation of the Fair Labor Standards Act (FLSA).

The original complaint—filed by former employee and plaintiff Lizeth Lytle on Aug. 15, 2012—claimed that Lowe's violated FLSA overtime wage provisions by hiring employees as "human resources managers" but giving them the clerical duties of "low-level" human resources workers without the eligibility for overtime pay. Though her job title was that of a manager, Lytle says she lacked the authority to fire or hire, promote, discipline, or give raises to workers. Additionally, Lytle says that she and other similarly-titled employees were required to work 55 hours of work per week, but received no overtime compensation as a result.

Lytle also alleged Lowe's failed to track the hours of most, if not all of the company's human resource managers, and that the act of paying those employees on a salary basis did not meet the requirements of an FLSA-exempt status.

This isn't the first time in recent history the company has settled for a big sum. In May of this year, the retailer agreed to pay $6.5 million to settle a case alleging the company treated independent contractors like company employees without giving them any of the benefits.

Walmart Fined By Labor Department For Denying Workers Overtime Pay, Agrees To Pay $4.8 Million In Back Wages (5/22/2012, HuffPost)

On Tuesday, the Department of Labor announced that Walmart had agreed to pay $4.83 million in back wages and damages to employees it had illegally denied overtime, following an agency investigation. More than 4,000 workers, all vision center managers or asset protection coordinators, will receive money from the settlement.

While all U.S. workers are legally entitled to overtime when they work more than 40 hours a week, certain salaried managerial employees in "executive, administrative or professional" roles, are exempt from this provision under the Fair Labor Standards Act. Prior to 2007, Walmart considered its vision center managers and asset protection coordinators exempt, a policy the Department of Labor now calls a "misclassification."

Staples settles overtime lawsuits for $42M
(1/29/2010, ChainStoreAge.com)

Staples said Friday that it has agreed to pay $42 million to settle several class-action lawsuits related to overtime pay violations.

The retailer was accused of misclassifying assistant store managers as exempt from overtime compensation.

Staples will also drop its appeal of a verdict against the company last year in New Jersey; the $42 million settlement amount includes those associated with the prior New Jersey verdict. "The global settlement involves no admission of wrongdoing in connection with the allegations, which claimed that assistant store managers were misclassified as exempt from overtime pay," Staples said in a statement.

APPENDIX C: LIST OF TOP 25 FIRMS WITH THE HIGHEST PERCENTAGE OF OVERTIME AVOIDING POSITIONS[*]

NAME	INDUSTRY
BOJANGLES	Food Services and Drinking Places
84LUMBER	Building Material and Garden Equipment/Supply Dealers
ARBY'S	Food Services and Drinking Places
SONIC DRIVE-IN	Food Services and Drinking Places
SPENCER'S	Miscellaneous Store Retailers
SPIRIT HALLOWEEN	General Merchandise Stores
WEIS MARKETS	Food and Beverage Stores
PIZZA HUT	Food Services and Drinking Places
DOMINO'S PIZZA	Food Services and Drinking Places
COMBINED INSURANCE	Insurance Carriers and Related Activities
JIFFY LUBE	Repair and Maintenance
POPEYES	Food Services and Drinking Places
BURGER KING	Food Services and Drinking Places
GNC	Health and Personal Care Stores
H&R BLOCK	Professional, Scientific, and Technical Services
LIFE TIME FITNESS	Amusement, Gambling, and Recreation
DAIRY QUEEN	Food Services and Drinking Places
BOSTON MARKET	Food Services and Drinking Places
MAINSOURCE BANK	Credit Intermediation and Related Activities
SUBWAY SANDWICHES	Food Services and Drinking Places
JIMMY JOHN'S	Food Services and Drinking Places
LITTLE CAESARS	Food Services and Drinking Places
CROSSMARK	Merchant Wholesalers, Nondurable Goods
OFFICEMAX	Miscellaneous Store Retailers
KFC - KENTUCKY FRIED CHICKEN	Food Services and Drinking Places

[*]Includes firms with a minimum of 100 job postings with a weekly equivalent pay of $455 +/-$50 between 2010 and 2018. The sample includes positions in both firm-owned and franchised locations.

In section 2, we discuss a model in which the worker supply was limited, leading to the expected worker utility strictly exceeding the reservation level. In this appendix, we relax that assumption and consider now the case of abundant supply of new employees, allowing us to replace assumption (3) with

$$\theta(A/\beta) - G(A/\beta) = u_0. \tag{10}$$

We going to focus on the more interesting special case of a very costly overtime that violates (2). Specifically, we assume now that

$$\theta\alpha - g(\alpha) + \gamma\theta A - G(A) < u_0. \tag{11}$$

Given (5), the firm that wishes to assign overtime to the incumbent employee will optimally increase compensation by w_0 to satisfy the participation constraint with equality:

$$w_0 + \theta\alpha - g(\alpha) + \gamma\theta A - G(A) = u_0.$$

Now, an increase in θ (reduction in the firm's bargaining power, or perhaps a minimum wage law that increases the required per-unit employee compensation) would increase the cost of hiring a new employee, $\theta(A/\beta)$, causing reservation constraint (10) to no longer bind. However, the cost of assigning overtime to an incumbent employee would remains the same for a sufficiently small increase in θ. This is because when $\theta' - \theta > 0$ is small, the firm can choose $0 \leq w'_0 < w_0$ that satisfies

$$w_0 + \theta\alpha - g(\alpha) + \gamma\theta A - G(A) = w'_0 + \theta\alpha - g(\alpha) + \gamma\theta'A - G(A).$$

This, in this case, a reduction in the firm's bargaining power (or an increase in the minimum) makes overtime relatively more attractive.

Claim 2. *Under assumptions (10) and (11), the firm will strictly prefer to use overtime given marginal reduction in its bargaining power* $(1 - \theta)$.

Proof. The firm strictly prefers to rely on overtime rather than hire a new employee if an only if $\Delta\pi < 0$. The left-hand side of inequality is given by (1). The results follow from observing that (1) is decreasing in $(C-L)$ and increasing in β. Furthermore, it is negative when $\beta \leq 1/\gamma$, and when $\beta > 1/\gamma$, it is increasing in θ.

APPENDIX E: SAMPLE CONSTRUCTION

This table details the sample construction process for the job positions from the Burning Glass Technologies database.

Exclusion criteria	Remaining observations
Job postings between Jan. 2010 and Dec. 2018 with valid employer name, salary, pay frequency, and title data	13,223,372
- Positions in U.S. territories	13,214,583
- Positions at federal/state/local government organizations and armed forces	10,015,398
- Positions at nonprofit organizations	9,566,105
- Positions at elementary/middle/high schools, colleges, universities, and hospitals	7,017,236
- Positions exempt from FLSA (motor carriers, railways, airlines, credit intermediaries)	5,437,135
- Positions with commission, premium, or short-term incentive-based salaries	5,077,147
- Contractor and self-employment positions	4,961,778
- Internships and part-time positions	4,271,773
All private sector job postings satisfying selection criteria	4,271,773
Positions with a salary in the range of $455 +/- $50	450,025

Variable name	Description	Data source (Source variable)
OTAvoided	An indicator variable set to one if the job listing is for a salaried managerial position with pay just above the overtime exemption threshold (between \$455 and \$505 per week), and zero if pay is just below the threshold (between \$405 and \$455 per week).	Burning Glass (Minsalary, PayFreq, and CleanTitle)
FPI	A state-level index of firms' power over employees that takes a value between 0 (Weak firms) and 4 (Powerful firms). The index is a sum of four indicator variables that indicate whether: - the average union membership in the state is below the median state in the same year - the state's annual average unemployment rate is above the median state in the same year - the job opening rate as of the year-end in the state is below the median state in the same year - the state has right-to-work laws in place	Authors' calculations using data from the National Conference of State Legislatures, UnionStats, Bureau of Labor Statistics
WPRank	A state's annual ranking among all 51 states based on the strength of its worker protection laws as of 2019.	OXFAM America (Worker Rights Protection Rankings)
RTW	Indicator variable equal to one if a state has right-to-work laws in place in a given year, and zero otherwise	National Conference of State Legislatures
WeeklyPay	The weekly equivalent of the salary for the position.	Burning Glass (Minsalary)
Min(Max)_Education	The minimum (maximum) number of years of education required for the position as specified in the job listing. If only a minimum or maximum value is provided, that value is used for both. If both values are missing, they are set to zero.	Burning Glass (Minedu/Maxedu)
Min(Max)_Experience	The minimum (maximum) number of years of experience required for the position as specified in the job listing. If only a minimum or maximum value is provided, that value is used for both. If both values are missing, they are set to zero.	Burning Glass (Minexp/Maxexp)
Missing_Education(Experience)	An indicator variable set to one if the job listing lacks information on education (experience) requirements.	
ShaleBoom	The natural logarithm of one plus the total number of shale wells discovered in the FIPS code area from 2003 up to the observation year.	Gilje (2019)
LaborDemand	The total number of in-sample job listings within the same commuting zone, SOC code, and year, divided by the commuting zone population (in 100,000s), using both the full sample and subsamples of listings that meet data requirements.	Authors' calculations using data from Burning Glass and Census
EducAttain	The percentage of individuals over age 25 with a bachelor's degree or higher in the commuting zone.	Authors' calculations using data from Census and U.S. Department of Agriculture

APPENDIX G: ROBUSTNESS TESTS

TABLE G1: COMPARISON OF JOB POSTINGS WITH AND WITHOUT SALARY INFORMATION

The table provides a comparative analysis of descriptive statistics for all job postings in the Burning Glass database, categorized by whether the posting includes salary information. Panel A presents statistics for position characteristics. Panels B and C provide the distribution of postings by sector and state, respectively. Detailed definitions of each variable are reported in Appendix F.

Panel A: Position Characteristics

	With Salary (N=4,271,773)			Without Salary (N=60,201,442)		
	N	Mean	Median	N	Mean	Median
Min_Experience	2,002,016	3.5	3.0	29,691,100	3.8	3.0
Max_Experience	2,002,016	4.1	3.0	29,691,100	4.5	4.0
Min_Education	3,098,950	10.2	12.0	35,046,491	13.1	16.0
Max_Education	3,098,950	10.5	12.0	35,046,491	13.7	16.0

Panel B: Distribution of Positions by Sector

	With Salary		Without Salary	
Sector	Obs. count	%	Obs. count	%
11	9,660	0.3%	89,164	0.2%
21	15,632	0.5%	432,698	0.9%
22	40,061	1.3%	410,681	0.8%
23	122,423	4.0%	938,573	1.9%
31-33	430,182	14.2%	7,890,213	15.8%
42	31,292	1.0%	844,732	1.7%
44-45	357,740	11.8%	9,642,593	19.3%
48-49	35,413	1.2%	310,894	0.6%
51	171,434	5.7%	3,414,898	6.8%
52	357,751	11.8%	6,869,952	13.8%
53	146,402	4.8%	1,672,373	3.4%
54	408,113	13.5%	6,992,727	14.0%
55	12,268	0.4%	145,676	0.3%
56	406,386	13.4%	2,358,688	4.7%
71	51,435	1.7%	564,193	1.1%
72	360,868	11.9%	6,473,515	13.0%
81	72,560	2.4%	856,236	1.7%

Panel C: Distribution of Positions by State

State	With Salary		Without Salary	
	Obs. count	%	Obs. count	%
Alabama	37,497	0.9%	735,149	1.2%
Alaska	10,995	0.3%	132,562	0.2%
Arizona	133,560	3.1%	1,428,268	2.4%
Arkansas	19,971	0.5%	411,551	0.7%
California	568,659	13.3%	7,693,142	12.8%
Colorado	119,523	2.8%	1,508,351	2.5%
Connecticut	41,958	1.0%	826,887	1.4%
Delaware	10,364	0.2%	248,588	0.4%
District of Columbia	40,339	0.9%	551,630	0.9%
Florida	233,483	5.5%	3,037,311	5.1%
Georgia	120,161	2.8%	1,898,511	3.2%
Hawaii	16,657	0.4%	210,160	0.4%
Idaho	31,308	0.7%	251,235	0.4%
Illinois	163,712	3.8%	2,684,700	4.5%
Indiana	87,958	2.1%	1,037,231	1.7%
Iowa	39,918	0.9%	577,254	1.0%
Kansas	48,108	1.1%	547,520	0.9%
Kentucky	48,136	1.1%	673,556	1.1%
Louisiana	38,303	0.9%	661,783	1.1%
Maine	12,535	0.3%	217,198	0.4%
Maryland	79,546	1.9%	1,386,734	2.3%
Massachusetts	109,166	2.6%	1,772,916	2.9%
Michigan	189,444	4.4%	2,092,120	3.5%
Minnesota	91,619	2.1%	1,273,106	2.1%
Mississippi	18,188	0.4%	329,244	0.6%
Missouri	84,693	2.0%	1,036,196	1.7%
Montana	10,694	0.3%	138,725	0.2%
Nebraska	31,278	0.7%	390,855	0.7%
Nevada	52,485	1.2%	617,414	1.0%
New Hampshire	17,850	0.4%	252,814	0.4%
New Jersey	94,256	2.2%	1,918,815	3.2%
New Mexico	23,979	0.6%	275,014	0.5%
New York	205,602	4.8%	3,423,998	5.7%
North Carolina	118,085	2.8%	1,688,011	2.8%
North Dakota	10,355	0.2%	162,497	0.3%
Ohio	160,910	3.8%	2,110,221	3.5%
Oklahoma	48,847	1.1%	566,551	0.9%
Oregon	70,352	1.7%	749,107	1.2%
Pennsylvania	139,096	3.3%	2,205,783	3.7%
Rhode Island	9,346	0.2%	218,353	0.4%
South Carolina	38,670	0.9%	696,132	1.2%
South Dakota	11,043	0.3%	156,454	0.3%
Tennessee	78,817	1.9%	1,033,684	1.7%
Texas	366,891	8.6%	4,819,439	8.0%
Utah	49,037	1.2%	528,832	0.9%
Vermont	6,367	0.2%	97,992	0.2%
Virginia	102,034	2.4%	2,084,727	3.5%
Washington	115,380	2.7%	1,534,925	2.6%
West Virginia	10,529	0.3%	196,274	0.3%
Wisconsin	98,207	2.3%	1,014,335	1.7%
Wyoming	5,862	0.1%	97,586	0.2%

TABLE G2: SALARIED MANAGERIAL POSITIONS AROUND FLSA AND ALTERNATIVE THRESHOLDS-
EXCLUDING 56 AND 44-45

This table presents linear regressions of *SalariedManager* (or *HourlyManager*), an indicator equal to one for salaried (or hourly) managerial positions, on the indicator *Above*, which equals one if the weekly salary for the position exceeds the FLSA threshold of $455 or alternative pseudo-thresholds. Unlike the analysis in Table 2 of the paper, this sample excludes firms in NAICS sector codes 44-45 and 56. The band above and below each threshold is set to $50. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. t-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

Dep.Var.:		*SalariedManager*			*HourlyManager*
Salary Threshold:	$405	$455	$455	$505	$455
		FLSA States	Non-FLSA States		FLSA States
Above	0.002	0.021***	0.006	-0.021***	-0.017**
	(1.07)	(4.22)	(1.02)	(-5.57)	(-2.36)
WeeklyPay	0.023***	0.016*	0.022	0.081***	0.076***
	(3.44)	(1.93)	(1.58)	(8.56)	(6.22)
Min_Experience	-0.000	0.001	0.005	0.000	0.011***
	(-0.21)	(0.40)	(1.41)	(0.13)	(4.97)
Min_Education	-0.003***	-0.002	-0.007*	-0.002	-0.010*
	(-2.92)	(-0.59)	(-1.87)	(-0.65)	(-1.81)
Max_Experience	0.002**	0.002	-0.002	0.002**	-0.001
	(2.16)	(1.29)	(-0.65)	(2.02)	(-0.60)
Max_Education	0.004***	0.004	0.008**	0.004	0.011**
	(3.87)	(0.98)	(2.32)	(1.26)	(2.10)
Missing_Experience	-0.007***	-0.018***	-0.010**	-0.018***	-0.003
	(-3.01)	(-3.78)	(-1.99)	(-3.86)	(-0.40)
Missing_Education	0.012***	0.013**	0.010	0.017***	0.007
	(3.99)	(2.51)	(1.48)	(3.25)	(1.00)
Firm F.E.	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓
Adj. R²	0.256	0.423	0.387	0.497	0.373
Obs. count	347,219	284,127	51,766	349,885	284,127

TABLE G3: SALARIED MANAGERIAL POSITIONS AROUND FLSA AND ALTERNATIVE THRESHOLDS-
USING MAXIMUM OF THE SALARY RANGE IN THE JOB LISTING

This table presents linear regressions of *SalariedManager* (or *HourlyManager*), an indicator equal to one for salaried (or hourly) managerial positions, on the indicator *Above*, which equals one if the weekly salary for the position exceeds the FLSA threshold of $455 or alternative pseudo-thresholds. Unlike the analysis in Table 2 of the paper, the weekly salary for the position is measured as the highest value within the salary range specified in the job listing. The band above and below each threshold is set to $50. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. t-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

Dep.Var.:		SalariedManager			HourlyManager
Salary Threshold:	$405	$455	$455	$505	$455
		FLSA States	Non-FLSA States		FLSA States
Above	0.001	0.008***	0.002	-0.010**	-0.002
	(1.47)	(3.13)	(0.59)	(-2.49)	(-0.19)
WeeklyPay	-0.000	0.001	0.008	0.039***	0.083***
	(-0.03)	(0.12)	(0.96)	(3.02)	(4.23)
Min_Experience	-0.000	0.001	0.002*	0.001	0.003
	(-0.42)	(0.68)	(1.74)	(0.94)	(1.37)
Min_Education	-0.000	0.002	-0.001	0.002	-0.016***
	(-0.19)	(1.00)	(-0.51)	(1.41)	(-3.15)
Max_Experience	0.002**	0.002*	0.001	0.001	-0.001
	(2.21)	(1.65)	(0.72)	(1.47)	(-0.34)
Max_Education	0.001	-0.001	0.001	-0.001	0.017***
	(0.91)	(-0.64)	(0.75)	(-0.83)	(3.44)
Missing_Experience	-0.000	-0.001	0.001	-0.001	-0.068***
	(-0.15)	(-0.59)	(0.54)	(-0.33)	(-3.21)
Missing_Education	0.006***	0.008***	0.001	0.006	0.028**
	(4.71)	(2.87)	(0.39)	(1.42)	(2.54)
Firm F.E.	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓
Adj. R²	0.364	0.306	0.408	0.337	0.404
Obs. count	333,969	331,897	49,035	399,322	331,897

TABLES G4 THROUGH G6
REPLICATION OF MAIN ANALYSES USING COMPLETE CASE METHOD
(EXCLUDING JOB POSTINGS MISSING DATA FOR EXPERIENCE OR EDUCATION)

Tables H4, H5, and H6 replicate the analyses from Tables 2, 6, and 7, respectively, but exclude job postings with missing data on experience or education. Except for this exclusion, the analyses remain consistent with those reported in the main text.

TABLE G4: SALARIED MANAGERIAL POSITIONS AROUND FLSA AND ALTERNATIVE THRESHOLDS

Dep.Var.:	SalariedManager				HourlyManager
Salary Threshold:	$405	$455	$455	$505	$455
		FLSA States	Non-FLSA States		FLSA States
Above	0.000	0.011**	-0.001	-0.030***	-0.019**
	(0.10)	(2.32)	(-0.13)	(-5.12)	(-2.25)
WeeklyPay	0.033**	0.026**	0.051**	0.107***	0.099***
	(2.39)	(2.29)	(2.18)	(6.90)	(6.16)
Min_Experience	0.002**	0.002*	0.007***	0.000	0.007***
	(2.43)	(1.86)	(2.62)	(0.35)	(2.72)
Min_Education	-0.003**	-0.002	-0.007*	-0.003	-0.015***
	(-2.09)	(-1.06)	(-1.95)	(-1.41)	(-3.38)
Max_Experience	0.001**	0.001*	-0.001	0.004***	0.001
	(2.02)	(1.84)	(-0.60)	(2.78)	(0.59)
Max_Education	0.004***	0.005**	0.009***	0.006***	0.016***
	(3.17)	(2.57)	(2.75)	(3.00)	(3.54)
Firm F.E.	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓
Adj. R²	0.416	0.573	0.577	0.589	0.398
Obs. count	108,046	108,610	16,856	134,560	108,610

TABLE G5: RELATION BETWEEN OVERTIME AVOIDING POSITIONS AND FIRM POWER

	(1)	(2)	(3)
FPI	0.153***		
	(5.18)		
WPRank		0.016***	
		(5.94)	
RTW			0.190***
			(3.09)
WeeklyPay	0.040***	0.040***	0.040***
	(19.84)	(19.68)	(20.00)
Min_Experience	-0.018	-0.014	-0.014
	(-0.49)	(-0.40)	(-0.38)
Min_Education	-0.084**	-0.085**	-0.084**
	(-2.07)	(-2.07)	(-2.06)
Max_Experience	0.054**	0.050**	0.051**
	(2.33)	(2.16)	(2.24)
Max_Education	0.137***	0.137***	0.136***
	(3.68)	(3.70)	(3.67)
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Obs. count	125,449	125,449	125,449
Marg. Eff. vs. Base (w/o FE)	12.5%	1.2%	13.9%
Marg. Eff. vs. Base (w/FE)	13.3%	1.4%	16.4%

TABLE G6: WITHIN FIRM VARIATION IN OVERTIME AVOIDING POSITIONS

	Full Sample		
	(1)	(2)	(3)
FPI	0.141***		
	(3.09)		
WPRank		0.017***	
		(4.24)	
RTW			0.300***
			(3.27)
WeeklyPay	0.070***	0.070***	0.070***
	(21.24)	(21.16)	(21.26)
Min_Experience	0.084	0.084	0.083
	(1.03)	(1.01)	(1.00)
Min_Education	-0.081	-0.082	-0.081
	(-1.34)	(-1.36)	(-1.34)
Max_Experience	0.060	0.060	0.061
	(0.78)	(0.77)	(0.79)
Max_Education	0.142**	0.143**	0.143**
	(2.41)	(2.43)	(2.42)
Firm-Year FE	✓	✓	✓
Obs. count	17,026	17,026	17,026
Odds ratio	1.15	1.02	1.35

TABLE G7: ESG RATINGS AND OVERTIME AVOIDANCE

This table presents estimates from job-posting level logistics (firm-level OLS) regressions of *OTAvoided* (*%OTAvoiding$_f$*) on proxies of the firm ESG scores. *%OTAvoiding$_f$*, the percentage of job postings by firm-year that are salaried positions with a managerial title that pay above the FLSA non-exemption threshold. *ESG Composite* (*ESG Workforce*) is the composite (workforce-related) ESG score of the firm obtained from the Refinitiv database. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. z- and t-statistics are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

	OTAvoided	OTAvoided	%OTAvoiding$_f$	%OTAvoiding$_f$
ESG Composite	-3.615***		-0.025*	
	(-4.97)		(-1.79)	
ESG Workforce		-2.348***		-0.003
		(-4.10)		(-0.30)
FPI	0.380***	0.377***		
	(4.13)	(3.87)		
WeeklyPay	0.050***	0.050***		
	(12.96)	(11.27)		
Min_Experience	0.003	0.031		
	(0.04)	(0.33)		
Min_Education	0.043	0.080		
	(0.25)	(0.41)		
Max_Experience	-0.001	-0.010		
	(-0.02)	(-0.11)		
Max_Education	0.028	-0.014		
	(0.18)	(-0.08)		
Missing Exp./Edu. Indicators	✓	✓		
Industry F.E.	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓
Obs. Count	44,600	44,600	2,311	2,311
Odds Ratio	0.27	0.10	-	-

TABLES G8 THROUGH G12: REPLICATION OF TESTS USING OLS REGRESSIONS

Tables G8 through G12 replicate the tests from the paper, originally conducted using logistic regression, by re-estimating them with ordinary least squares (OLS) instead. The samples and variable definitions remain consistent with those in the main text.

TABLE G8: RELATION BETWEEN OVERTIME AVOIDING POSITIONS AND FIRM POWER

	(1)	(2)	(3)
FPI	0.005***		
	(3.42)		
WPRank		0.001***	
		(5.62)	
RTW			0.007***
			(3.60)
WeeklyPay	0.001***	0.001***	0.001***
	(10.18)	(10.18)	(10.16)
Min_Experience	-0.001	-0.000	-0.000
	(-0.30)	(-0.22)	(-0.24)
Min_Education	-0.008	-0.008	-0.008
	(-1.42)	(-1.42)	(-1.42)
Max_Experience	0.002	0.001	0.001
	(1.31)	(1.20)	(1.24)
Max_Education	0.009	0.009	0.009
	(1.62)	(1.62)	(1.62)
Missing Exp./Edu. Indicators	✓	✓	✓
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Adj. R²	0.046	0.047	0.046
Obs. count	450,025	450,025	450,025

TABLE G9: WITHIN FIRM VARIATION IN OVERTIME AVOIDING POSITIONS

	Full Sample			Low Wage-High Violation Industries		
	(1)	(2)	(3)	(4)	(5)	(6)
FPI	0.003***			0.015***		
	(5.23)			(4.28)		
WPRank		0.000***			0.002***	
		(6.82)			(5.84)	
RTW			0.007***			0.026***
			(5.17)			(3.91)
WeeklyPay	0.001***	0.001***	0.001***	0.003***	0.003***	0.003***
	(9.75)	(9.74)	(9.75)	(7.13)	(7.19)	(7.07)
Min_Experience	0.001	0.001	0.001	-0.018*	-0.017	-0.018
	(1.05)	(1.03)	(1.06)	(-1.65)	(-1.59)	(-1.62)
Min_Education	-0.002	-0.002	-0.002	-0.000	-0.000	-0.000
	(-0.97)	(-0.99)	(-0.99)	(-0.01)	(-0.02)	(-0.00)
Max_Experience	0.001	0.001	0.001	0.016*	0.015*	0.016*
	(1.53)	(1.51)	(1.51)	(1.75)	(1.66)	(1.73)
Max_Education	0.003	0.003	0.003	0.002	0.002	0.002
	(1.51)	(1.54)	(1.54)	(0.12)	(0.12)	(0.11)
Missing Exp./Edu. Indicators	✓	✓	✓	✓	✓	✓
Firm-Year FE	✓	✓	✓	✓	✓	✓
Adj. R²	0.539	0.540	0.539	0.686	0.687	0.686
Obs. count	377,196	377,196	377,196	35,673	35,673	35,673

	Population		Minimum Wage		Anti-Immigration Score		Period	
	>Median	<Median	>Median	<Median	>Median	<Median	<=2016	>2016
FPI	0.003***	0.006***	0.002***	0.005**	0.009***	0.003***	0.004	0.007***
	(3.35)	(2.65)	(3.91)	(2.04)	(3.14)	(3.24)	(1.61)	(7.58)
WeeklyPay	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***
	(13.09)	(8.17)	(12.60)	(8.78)	(6.86)	(10.35)	(5.73)	(14.17)
Min_Experience	-0.000	-0.002	-0.002	0.000	-0.002	-0.000	-0.001	-0.007*
	(-0.12)	(-0.74)	(-1.06)	(0.04)	(-0.55)	(-0.13)	(-0.72)	(-1.92)
Min_Education	-0.007	-0.010	-0.006	-0.010	-0.007*	-0.009	0.002	-0.007**
	(-1.53)	(-1.34)	(-1.62)	(-1.37)	(-1.80)	(-1.31)	(0.20)	(-2.41)
Max_Experience	0.002	0.003	0.004***	0.000	0.002	0.002	-0.000	0.010***
	(1.53)	(1.38)	(2.66)	(0.08)	(0.59)	(1.54)	(-0.41)	(3.19)
Max_Education	0.008*	0.011	0.007**	0.011	0.008**	0.010	0.013	0.008***
	(1.82)	(1.48)	(1.97)	(1.53)	(2.01)	(1.50)	(1.25)	(2.64)
Missing Exp./Edu. Indicators	✓	✓	✓	✓	✓	✓	✓	✓
Industry F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Adj. R²	0.033	0.063	0.032	0.057	0.059	0.043	0.065	0.039
Obs. count	218,096	225,735	184,136	265,889	114,398	335,627	207,820	242,205

TABLE G11: FINANCIAL AND LABOR MARKET INCENTIVES AND OVERTIME AVOIDANCE

	Financial Constraints	Labor Competition	Mobility/Legal Awareness
ShaleBoom	-0.018**		
	(-2.25)		
LaborDemand		-0.001***	
		(-3.31)	
EducAttain			-0.001
			(-1.60)
WeeklyPay	0.001***	0.001***	0.001***
	(11.90)	(10.98)	(12.34)
Min_Experience	-0.001	-0.001	-0.001
	(-0.34)	(-0.28)	(-0.37)
Min_Education	-0.008	-0.009	-0.007
	(-1.45)	(-1.41)	(-1.51)
Max_Experience	0.002*	0.002	0.002*
	(1.65)	(1.55)	(1.82)
Max_Education	0.009*	0.010	0.008*
	(1.67)	(1.61)	(1.75)
Missing Exp./Edu. Indicators	✓	✓	✓
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Commuting Zone F.E.	-	✓	✓
FIPS F.E.	✓	-	-
Adj. R²	0.073	0.063	0.054
Obs. count	419,984	422,077	405,763

TABLE G12: OPERATIONAL DYNAMICS AND OVERTIME AVOIDANCE

	Uncertainty	Part-Time	QuitRate
ScheduleUncertainty	0.006***		
	(6.04)		
%PartTime		0.002***	
		(6.62)	
QuitRate			0.018***
			(6.37)
WeeklyPay	0.001***	0.001***	0.001***
	(8.88)	(8.89)	(9.64)
Min_Experience	-0.001	-0.001	-0.001
	(-0.64)	(-0.52)	(-0.48)
Min_Education	-0.007	-0.006	-0.007
	(-0.99)	(-0.96)	(-1.07)
Max_Experience	0.002	0.002	0.002
	(1.23)	(1.29)	(1.17)
Max_Education	0.007	0.007	0.008
	(1.12)	(1.11)	(1.20)
Missing Exp./Edu. Indicators	✓	✓	✓
Year F.E.	✓	✓	✓
Adj. R²	0.038	0.044	0.039
Obs. count	413,098	414,037	414,037

TABLES G13 THROUGH G15: REPLICATION OF ANALYSES USING DATA AGGREGATED AT THE FIRM-STATE-YEAR LEVEL

Tables G13 through G15 replicate the analyses from Tables 6, 7, and 10 of the paper, originally conducted at the job listing level, by re-estimating them at the firm-state-year level. In these replications, the dependent variable is defined as the percentage of job listings within each firm-state-year that avoid overtime payments (*%OTAvoided*). Standard errors are clustered at the state level in all tables.

TABLE G13: RELATION BETWEEN OVERTIME AVOIDING POSITIONS AND FIRM POWER

	(1)	(2)	(3)
FPI	0.006***		
	(4.86)		
WPRank		0.001***	
		(5.22)	
RTW			0.008**
			(2.32)
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Adj. R²	0.019	0.019	0.019
Obs. count	168,486	168,486	168,486

TABLE G14: WITHIN FIRM VARIATION IN OVERTIME AVOIDING POSITIONS

	Full Sample			Low Wage-High Violation Industries		
	(1)	(2)	(3)	(4)	(5)	(6)
FPI	0.004***			0.013***		
	(3.21)			(3.95)		
WPRank		0.000***			0.002***	
		(4.85)			(5.59)	
RTW			0.006**			0.028***
			(2.15)			(3.22)
Firm-Year FE	✓	✓	✓	✓	✓	✓
Adj. R²	0.592	0.592	0.592	0.649	0.651	0.649
Obs. count	70,300	70,300	70,300	8,794	8,794	8,794

TABLE G15: CROSS-SECTIONAL AND TIME SERIES ANALYSES

	Population		Minimum Wage		Anti-Immigration Score		Period	
	>Median	<Median	>Median	<Median	>Median	<Median	<=2016	>2016
FPI	0.003*	0.009***	0.003*	0.006***	0.005	0.006***	0.006***	0.006***
	(2.03)	(6.40)	(1.74)	(3.57)	(1.63)	(5.17)	(3.56)	(4.61)
Industry F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Adj. R^2	0.011	0.031	0.014	0.023	0.023	0.018	0.031	0.015
Obs. count	82,008	83,553	67,042	101,444	38,840	129,646	72,048	96,438

TABLE G16 THROUGH G20: AN ALTERNATIVE RESEARCH DESIGN

Tables G16 through G20 replicate the tests from the paper, which were originally estimated using logit models with *OTAvoided* as the dependent variable, by re-estimating them with ordinary least squares (OLS) where the dependent variable is an indicator equal to one for salaried manager positions and zero otherwise. The primary independent variable of interest is the interaction between *Above* and firm power proxies in Tables G16 through G18 and the interaction with incentive/operational dynamics variables in Tables G19 and G20. *Above* is an indicator variable set to one if the weekly salary for the position exceeds the FLSA threshold of $455, and zero otherwise. Sample selection and variable definitions remain consistent with those in the main text.

TABLE G16: RELATION BETWEEN SALARIED MANAGERIAL POSITIONS AND FIRM POSITIONS

	(1)	(2)	(3)
FPI x Above	0.005**		
	(2.27)		
WPRank x Above		0.001***	
		(4.27)	
RTW x Above			0.009***
			(2.65)
FPI	0.003***		
	(4.64)		
WPRank		0.000***	
		(3.51)	
RTW			0.003*
			(1.91)
WeeklyPay	-0.000	-0.000	-0.000
	(-1.21)	(-1.19)	(-1.24)
Min_Experience	-0.000	0.000	0.000
	(-0.05)	(0.01)	(0.01)
Min_Education	-0.004**	-0.004**	-0.005**
	(-2.33)	(-2.34)	(-2.39)
Max_Experience	0.003***	0.003**	0.003***
	(2.62)	(2.55)	(2.61)
Max_Education	0.005**	0.005**	0.005**
	(2.46)	(2.46)	(2.52)
Controls x Above	✓	✓	✓
Missing Exp./Edu. Indicators	✓	✓	✓
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Adj. R²	0.048	0.049	0.048
Obs. count	450,025	450,025	450,025

TABLE G17: WITHIN FIRM VARIATION IN OVERTIME AVOIDING POSITIONS

	Full Sample			Low Wage-High Violation Industries		
	(1)	(2)	(3)	(4)	(5)	(6)
FPI x Above	0.003***			0.022***		
	(3.35)			(3.61)		
WPRank x Above		0.000***			0.002***	
		(3.48)			(3.18)	
RTW x Above			0.007***			0.035***
			(3.72)			(3.47)
FPI	0.003***			0.006**		
	(4.17)			(2.06)		
WPRank		0.000***			0.001***	
		(5.14)			(3.10)	
RTW			0.005***			0.014**
			(3.45)			(2.20)
WeeklyPay	-0.000**	-0.000**	-0.000**	-0.001**	-0.001**	-0.001**
	(-2.49)	(-2.34)	(-2.54)	(-2.43)	(-2.37)	(-2.49)
Min_Experience	0.002**	0.002**	0.002**	0.005	0.005	0.005
	(2.14)	(2.14)	(2.18)	(0.40)	(0.42)	(0.40)
Min_Education	-0.001	-0.001	-0.001	-0.016**	-0.016**	-0.017**
	(-0.83)	(-0.82)	(-0.86)	(-2.10)	(-2.06)	(-2.11)
Max_Experience	0.002**	0.002**	0.002**	0.013	0.013	0.014
	(2.18)	(2.18)	(2.16)	(1.57)	(1.55)	(1.58)
Max_Education	0.002	0.002	0.002	0.018**	0.017**	0.018**
	(1.24)	(1.22)	(1.27)	(2.44)	(2.39)	(2.45)
Controls x Above	✓	✓	✓	✓	✓	✓
Missing Exp./Edu. Indicators	✓	✓	✓	✓	✓	✓
Firm-Year FE	✓	✓	✓	✓	✓	✓
Adj. R²	0.616	0.617	0.616	0.754	0.754	0.753
Obs. count	364,145	364,145	364,145	34,557	34,557	34,557

TABLE G18: CROSS-SECTIONAL AND TIME SERIES ANALYSES

	Population		Minimum Wage		Anti-Immigration Score		Period	
	>Median	<Median	>Median	<Median	>Median	<Median	<=2016	>2016
FPI x Above	0.003**	0.006*	0.003**	0.005	0.009**	0.003*	0.004	0.006***
	(1.97)	(1.81)	(2.11)	(1.38)	(2.16)	(1.79)	(1.10)	(4.35)
FPI	0.002**	0.004***	0.001	0.004***	0.006***	0.003***	0.002**	0.005***
	(2.33)	(4.40)	(1.37)	(4.30)	(3.81)	(3.85)	(2.08)	(5.44)
WeeklyPay	-0.000	-0.000	0.000	-0.000***	-0.000*	-0.000	0.000	-0.000***
	(-0.52)	(-1.61)	(0.27)	(-2.81)	(-1.83)	(-0.69)	(0.61)	(-3.91)
Min_Experience	0.000	-0.001	-0.001	-0.000	-0.004	0.000	-0.001	-0.002
	(0.14)	(-0.28)	(-0.26)	(-0.03)	(-1.09)	(0.27)	(-0.47)	(-0.54)
Min_Education	-0.004*	-0.005**	-0.005*	-0.004**	-0.000	-0.006**	-0.003	-0.005**
	(-1.83)	(-2.20)	(-1.67)	(-2.17)	(-0.17)	(-2.56)	(-1.32)	(-2.24)
Max_Experience	0.002**	0.003**	0.004*	0.002**	0.007**	0.002**	0.002*	0.008**
	(2.09)	(2.26)	(1.66)	(2.30)	(2.35)	(2.16)	(1.80)	(2.46)
Max_Education	0.004**	0.005**	0.005*	0.004**	0.001	0.006***	0.003	0.006**
	(2.00)	(2.25)	(1.78)	(2.25)	(0.46)	(2.61)	(1.19)	(2.57)
Controls x Above	✓	✓	✓	✓	✓	✓	✓	✓
Missing Exp./Edu. Indicators	✓	✓	✓	✓	✓	✓	✓	✓
Industry F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Adj. R²	0.032	0.070	0.032	0.060	0.061	0.045	0.076	0.037
Obs. Count	218,096	225,735	184,136	265,889	114,398	335,627	207,820	242,205

TABLE G19: FINANCIAL AND LABOR MARKET INCENTIVES AND OVERTIME AVOIDANCE

	Financial Constraints	Labor Competition	Mobility/Legal Awareness
ShaleBoom x Above	-0.028***		
	(-2.59)		
LaborDemand x Above		-0.001***	
		(-3.11)	
EducAttain x Above			-0.001
			(-1.15)
ShaleBoom	0.002		
	(0.80)		
LaborDemand		-0.001***	
		(-2.68)	
EducAttain			-0.001
			(-0.87)
WeeklyPay	-0.000	-0.000	-0.000
	(-1.01)	(-0.90)	(-1.10)
Min_Experience	0.000	-0.000	0.000
	(0.03)	(-0.21)	(0.06)
Min_Education	-0.004**	-0.005**	-0.004**
	(-2.31)	(-2.27)	(-2.14)
Max_Experience	0.003***	0.002***	0.002***
	(2.62)	(2.58)	(2.62)
Max_Education	0.005**	0.005**	0.004**
	(2.48)	(2.37)	(2.29)
Controls x Above	✓	✓	✓
Missing Exp./Edu. Indicators	✓	✓	✓
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Commuting Zone F.E.	-	✓	✓
FIPS F.E.	✓	-	-
Adj. R²	0.083	0.071	0.058
Obs. count	419,916	422,071	405,763

TABLE G20: OPERATIONAL DYNAMICS AND OVERTIME AVOIDANCE

	Uncertainty	Part-Time	QuitRate
ScheduleUncertainty x Above	0.007***		
	(5.09)		
%PartTime x Above		0.003***	
		(5.87)	
QuitRate x Above			0.023***
			(5.64)
ScheduleUncertainty	0.003***		
	(4.74)		
%PartTime		0.001***	
		(5.52)	
QuitRate			0.007***
			(4.80)
WeeklyPay	-0.000	-0.000	-0.000
	(-1.20)	(-1.01)	(-1.13)
Min_Experience	-0.000	-0.000	-0.000
	(-0.21)	(-0.23)	(-0.25)
Min_Education	-0.004*	-0.004*	-0.004*
	(-1.85)	(-1.93)	(-1.73)
Max_Experience	0.003***	0.003***	0.003***
	(2.90)	(2.84)	(2.94)
Max_Education	0.004*	0.004**	0.004*
	(1.87)	(2.00)	(1.71)
Controls x Above	✓	✓	✓
Year F.E.	✓	✓	✓
Adj. R²	0.035	0.044	0.036
Obs. count	413,098	414,037	414,037

TABLE G21 THROUGH G24: COMPARABLE POSITIONS IN LOW-WAGE & HIGH-VIOLATION INDUSTRIES

Tables G21 through G24 report statistics and results of the analyses from the paper using a subsample of directly comparable positions from four industries that the DOL's Wage and Hour Division classify among the top low wage-high violation (https://www.dol.gov/agencies/whd/data/charts/low-wage-high-violation-industries). In particular, we use positions from the following industries: Food Services, Retail, Hotels and Motels, and Janitorial Services. DOL's list also includes construction, agriculture, healthcare/childcare, temporary help, landscaping, amusement, apparel manufacturing, auto repair, guard services, and hair/nail/skin care services. We do not examine these industries separately because most are small industries with few job postings. Two exceptions are healthcare and construction. We exclude hospitals and medical institutions from our sample since we cannot distinguish between for-profit, nonprofit, and public institutions. We omit the examination of construction-related occupations because the majority of roles within this sector typically involve independent contractors and lack a clear manager-worker division based on job titles (e.g., welders, plumbers, carpenters, electricians).

Within the four low wage-high violation industries, we identify occupations that are well represented in our sample and may be more prone to misclassification due to blurrier boundaries between managerial and worker-level duties. These are (i) customer-facing retail store employees, (ii) customer-facing food and drink service employees, (ii) hotel front-desk/reception employees, and (iv) housekeepers and janitors. Arguably, it is easier for a firm to label a receptionist as a front desk coordinator or director of first impressions or a restaurant host as an assistant restaurant manager than to label a specialized position such as CNC operators as managers. While not as comprehensive as the general sample, the low wage-high violation industries sample allows us to focus on comparable positions and improve identification. To identify managerial and worker titles in this sample, we search for key terms associated with managerial and worker titles within the occupation and then comb through the results to eliminate irrelevant titles. Table G21 lists the search terms and most common managerial and worker titles by occupation and Table G22 provides the descriptive statistics for this subsample that contains 42,650 job postings. The variable definitions remain consistent with those in the main text.

TABLE G21: CLASSIFICATION OF JOB TITLES FROM LOW WAGE-HIGH VIOLATION INDUSTRIES

Position Type (Search Terms*)	Managerial titles	Worker titles
Customer-facing Retail Store Employees (Retail, Shop, and Store)	Search Term + (Coordinator, Director, Head, Lead, Leader, Keyholder, Management, Manager, Supervisor)	Search Term + (Agent, Assistant, Associate, Attendant, Clerk, Crew, Employee, Labor, Member, People, Person, Personnel, Professional, Specialist, Sales Consultant, Sales Representative, Storekeeper, Staff, Teammate, Worker); Cashier
Top 3 Most Common Titles:	*Store Manager, Assistant Store Manager; Retail Sales Manager*	*Cashier; Retail Sales Associate; Store Associate*
Customer-facing Food and Drink Services Employees (Restaurant, Café, Bakery, Grill, Kitchen, and NAICS=722)	Search Term + (Captain, Coordinator, Director, Head, Lead, Leader, Management, Manager, Supervisor	Search Term + (Assistant, Associate, Crew member Employee, Host, Hostess, Labor, Teammate, Team member, Staff, Waiter, Waitress, Worker)
Top 3 Most Common Titles:	*Assistant Manager; Restaurant Manager; Shift Manager*	*Host/Hostess; Team Member, Wait Staff*
Janitors/Housekeepers (Housekeep, Janitor, Custodia)	Search Term + (Coordinator, Director, Head, Lead, Leader, Management, Manager, Supervisor, Executive Housekeeper)	Search Term + (Agent, Assistant, Associate, Attendant, Cleaner, Custodian, Employee, Housekeeper, Janitor, Labor, Maid, Member, Personnel, Professional, Specialist, Staff, Worker)
Top 3 Most Common Titles:	*Housekeeping Supervisor; Housekeeping Manager, Custodial Supervisor*	*Housekeeper; Janitor; Custodian*
Hotel Receptionists (Front desk, Reception, Front Office, Guest Services, Hotel, Motel, Lodge, Resort, Inn)	Search Term + (Coordinator, Lead, Head, Manager, Supervisor)	Search Term + (Agent, Associate, Concierge, Night Auditor, Receptionist, Representative)
Top 3 Most Common Titles:	*Front Desk Supervisor; Front Desk Coordinator; Front Office Coordinator*	*Front Desk Agent; Night Auditor; Guest Services Agent*

*We manually go through all search results to eliminate irrelevant titles.

TABLE G22: DESCRIPTIVE STATISTICS

	Obs. count	Mean	St.dev	25%	50%	75%
Manager	42,650	0.38	0.49	0.0	0.0	1.0
Salaried	42,650	0.19	0.39	0.0	0.0	0.0
OTAvoided	42,650	0.108	0.311	0.0	0.0	0.0
FPI	42,650	2.1	1.0	2.0	2.0	3.0
WPRank	42,650	26.1	11.7	14.0	31.0	35.0
RTW	42,650	0.6	0.5	0.0	1.0	1.0
WeeklyPay	42,650	$459	$25.7	$440	$460	$480
Min_Experience	13,397	1.7	1.4	1.0	1.0	2.0
Min_Education	32,524	7.3	6.0	0.0	12.0	12.0
Max_Experience	13,397	1.9	1.7	1.0	2.0	2.0
Max_Education	32,524	7.5	6.3	0.0	12.0	12.0

TABLE G23: RELATION BETWEEN OVERTIME AVOIDING POSITIONS AND FIRM POWER IN LOW WAGE-HIGH VIOLATION INDUSTRIES

	Retail			Food and Drink Serv.			Hotel			Janitors/Housekeepers		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
FPI	0.273***			0.389***			0.294**			0.560***		
	(3.83)			(7.45)			(2.41)			(5.07)		
WPRank		0.027***			0.039***			0.020**			0.048***	
		(4.54)			(7.70)			(2.36)			(5.37)	
RTW			0.468***			0.658***			0.604***			1.273***
			(3.59)			(5.43)			(3.05)			(5.31)
WeeklyPay	0.055***	0.055***	0.055***	0.068***	0.069***	0.067***	0.056***	0.057***	0.057***	0.053***	0.054***	0.054***
	(17.41)	(17.17)	(17.19)	(9.32)	(9.49)	(9.50)	(13.02)	(13.08)	(12.98)	(12.05)	(11.46)	(12.38)
Min_Experience	0.056	0.073	0.062	-0.150	-0.143	-0.135	-0.387**	-0.371**	-0.382**	-0.216	-0.252	-0.180
	(0.43)	(0.57)	(0.47)	(-1.03)	(-0.99)	(-0.92)	(-2.55)	(-2.36)	(-2.54)	(-0.92)	(-0.90)	(-0.89)
Min_Education	-0.309**	-0.313**	-0.306**	0.350*	0.325*	0.338*	-0.348***	-0.378***	-0.361***	-0.685***	-0.741***	-0.622**
	(-2.27)	(-2.31)	(-2.28)	(1.86)	(1.86)	(1.84)	(-2.86)	(-3.08)	(-3.02)	(-2.75)	(-2.91)	(-2.57)
Max_Experience	0.133	0.116	0.126	0.162	0.135	0.136	0.514***	0.490***	0.521***	0.177**	0.152	0.161*
	(1.02)	(0.89)	(0.95)	(1.52)	(1.23)	(1.24)	(3.85)	(3.60)	(3.96)	(2.07)	(1.32)	(1.85)
Max_Education	0.264**	0.265**	0.260**	-0.315*	-0.294*	-0.303*	0.300***	0.329***	0.312***	0.676***	0.729***	0.612***
	(2.20)	(2.26)	(2.22)	(-1.82)	(-1.83)	(-1.79)	(2.78)	(3.04)	(2.95)	(2.79)	(2.92)	(2.59)
Missing Exp./Edu. Indicators	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Industry F.E.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Obs. count	14,218	14,218	14,218	12,354	12,354	12,354	6,967	6,967	6,967	8,202	8,202	8,202
Marg. Eff. vs. Base (w/o FE)	20.4%	2.2%	34.6%	20.6%	1.6%	18.3%	25.2%	2.1%	54.6%	41.7%	3.6%	97.4%
Marg. Eff. vs. Base (w/FE)	18.8%	1.8%	32.3%	16.8%	1.7%	28.6%	25.2%	1.7%	51.6%	48.0%	4.1%	108.8%

TABLE G24: WITHIN FIRM VARIATION IN OVERTIME AVOIDING POSITIONS

	Low Wage-High Violation Industries		
	(1)	(2)	(3)
FPI	0.398***		
	(5.69)		
WPRank		0.038***	
		(6.98)	
RTW			0.670***
			(5.97)
WeeklyPay	0.091***	0.091***	0.091***
	(15.78)	(16.27)	(15.99)
Min_Experience	-0.136	-0.099	-0.127
	(-0.77)	(-0.59)	(-0.68)
Min_Education	0.245	0.233	0.253
	(0.85)	(0.82)	(0.87)
Max_Experience	0.084	0.042	0.076
	(0.59)	(0.30)	(0.50)
Max_Education	-0.232	-0.221	-0.239
	(-0.83)	(-0.80)	(-0.85)
Missing Exp./Edu. Indicators	✓	✓	✓
Firm-Year FE	✓	✓	✓
Obs. count	12,285	12,285	12,285
Odds ratio	1.49	1.04	1.95

TABLE G25 THROUGH G28:
REPLICATION OF TESTS USING ALTERNATIVE STANDARD ERROR CLUSTERS

Tables G25 through G28 replicate the tests from the paper, using alternative levels of clustering for standard errors in place of firm-level clustering. The specific clustering level applied in each table is noted at the bottom of the respective table. Sample selection and variable definitions remain consistent with those in the main text.

TABLE G25: RELATION BETWEEN OVERTIME AVOIDING POSITIONS AND FIRM POWER

	(1)	(2)	(3)
FPI	0.175***		
	(2.88)		
WPRank		0.020***	
		(5.00)	
RTW			0.240*
			(1.89)
WeeklyPay	0.044***	0.044***	0.044***
	(39.26)	(37.69)	(38.57)
Min_Experience	-0.026*	-0.020	-0.021
	(-1.69)	(-1.30)	(-1.31)
Min_Education	-0.165***	-0.161***	-0.161***
	(-7.09)	(-7.34)	(-7.03)
Max_Experience	0.046***	0.042***	0.042***
	(3.18)	(2.80)	(2.87)
Max_Education	0.196***	0.192***	0.192***
	(8.20)	(8.56)	(8.17)
Missing Exp./Edu. Indicators	✓	✓	✓
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Clustering	State	State	State
Obs. count	450,025	450,025	450,025
Marg. Eff. vs. Base (w/o FE)	13.3%	1.5%	10.2%
Marg. Eff. vs. Base (w/FE)	15.6%	1.8%	21.5%

TABLE G26: CROSS-SECTIONAL AND TIME SERIES ANALYSES

	Population		Minimum Wage		Anti-Immigration Score		Period	
	>Median	<Median	>Median	<Median	>Median	<Median	<=2016	>2016
FPI	0.108*	0.199***	0.111**	0.147*	0.288***	0.132**	0.109	0.269***
	(1.71)	(2.91)	(2.32)	(1.88)	(3.28)	(2.20)	(1.31)	(6.07)
WeeklyPay	0.041***	0.046***	0.041***	0.045***	0.047***	0.042***	0.042***	0.044***
	(45.41)	(29.13)	(21.69)	(30.85)	(32.41)	(36.40)	(17.15)	(45.52)
Min_Experience	-0.021	-0.044**	-0.047*	-0.002	-0.029	-0.020	-0.058***	-0.106***
	(-1.08)	(-2.08)	(-1.73)	(-0.11)	(-0.65)	(-1.27)	(-3.07)	(-3.10)
Min_Education	-0.141***	-0.177***	-0.133***	-0.178***	-0.152***	-0.169***	0.042	-0.149***
	(-4.27)	(-6.18)	(-3.12)	(-6.73)	(-5.11)	(-6.23)	(1.33)	(-7.34)
Max_Experience	0.049***	0.070***	0.098***	0.009	0.044	0.049***	-0.002	0.186***
	(3.24)	(3.93)	(4.95)	(0.54)	(1.16)	(3.48)	(-0.11)	(4.68)
Max_Education	0.178***	0.202***	0.171***	0.206***	0.172***	0.205***	0.294***	0.166***
	(5.47)	(6.65)	(4.03)	(7.39)	(5.44)	(7.52)	(8.68)	(8.43)
Missing Exp./Edu. Indicators	✓	✓	✓	✓	✓	✓	✓	✓
Industry F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Year F.E.	✓	✓	✓	✓	✓	✓	✓	✓
Clustering	State	State	State	State	State	State	State	State
Obs. count	218,096	225,735	184,136	265,889	114,398	335,627	207,820	242,205
Marg. Eff. vs. Base (w/o FE)	10.5%	13.6%	8.0%	7.6%	37.9%	6.4%	10.1%	19.2%
Marg. Eff. vs. Base (w/FE)	11.3%	16.7%	6.6%	15.6%	33.4%	9.8%	9.2%	24.4%

TABLE G27: FINANCIAL AND LABOR MARKET INCENTIVES AND OVERTIME AVOIDANCE

	Financial Constraints	Labor Competition	Mobility/Legal Awareness
ShaleBoom	-0.244***		
	(-4.46)		
LaborDemand		-0.082***	
		(-4.85)	
EducAttain			-0.045*
			(-1.73)
WeeklyPay	0.045***	0.044***	0.044***
	(61.21)	(49.21)	(50.07)
Min_Experience	-0.018	-0.021	-0.019
	(-1.30)	(-1.27)	(-1.28)
Min_Education	-0.142***	-0.151***	-0.137***
	(-10.63)	(-9.24)	(-8.33)
Max_Experience	0.057***	0.051***	0.059***
	(4.95)	(4.02)	(4.86)
Max_Education	0.173***	0.185***	0.167***
	(14.44)	(12.27)	(11.10)
Missing Exp./Edu. Indicators	✓	✓	✓
Industry F.E.	✓	✓	✓
Year F.E.	✓	✓	✓
Commuting Zone F.E.	-	✓	✓
FIPS F.E.	✓	-	-
Clustering	FIPS	CZ	CZ
Obs. count	419,984	422,077	405,763
Odds Ratio	0.78	0.92	0.95

TABLE G28: OPERATIONAL DYNAMICS AND OVERTIME AVOIDANCE

	Uncertainty	Part-Time	QuitRate
ScheduleUncertainty	0.206***		
	(3.17)		
%PartTime		0.065***	
		(8.20)	
QuitRate			0.699***
			(5.47)
WeeklyPay	0.041***	0.042***	0.043***
	(8.71)	(9.20)	(10.89)
Min_Experience	-0.043	-0.031	-0.030
	(-0.79)	(-0.55)	(-0.54)
Min_Education	-0.113	-0.105	-0.142
	(-1.00)	(-0.93)	(-1.53)
Max_Experience	0.056*	0.058*	0.042
	(1.79)	(1.83)	(1.45)
Max_Education	0.137	0.132	0.166*
	(1.20)	(1.16)	(1.79)
Missing Exp./Edu. Indicators	✓	✓	✓
Year F.E.	✓	✓	✓
Clustering	Industry	Industry	Industry
Obs. count	413,098	414,037	414,037
Odds Ratio	1.23	1.07	2.01

TABLE G29: ENACTMENT OF RIGHT-TO-WORK LAWS AS A SHOCK TO FIRM POWER

This table presents estimates from logistic regressions of *OTAvoided* on *RTW*, an indicator variable set to one for years following a state's adoption of right-to-work laws, and zero otherwise. The samples consist of firms that posted job listings in a state that enacted right-to-work laws during the sample period and at least one control state with no change in right-to-work status during the sample period. We require firms to have at least one job listing before and one listing after the laws are enacted in the treatment and control state(s). The five states that passed the right-to-work laws during the sample period are Indiana (2012), Michigan (2012), Wisconsin (2015), West Virginia (2016), and Kentucky (2017). Since Michigan (West Virginia) enacted its right-to-work laws on December 11, 2012 (July 1, 2016) we consider 2013 (2017) as the first year of post-enactment period. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. z-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

	Full Sample	*Low Wage-High Violation Industries*
RTW	0.853**	1.271**
	(2.55)	(1.97)
WeeklyPay	0.065***	0.103***
	(9.33)	(7.98)
Min_Experience	0.045	-0.460
	(0.58)	(-1.32)
Min_Education	0.154	0.786**
	(0.68)	(2.00)
Max_Experience	0.098	0.524
	(1.38)	(1.59)
Max_Education	-0.099	-0.707*
	(-0.45)	(-1.92)
Missing Exp./Edu. Indicators	✓	✓
Firm F.E.	✓	✓
State F.E.	✓	✓
Year F.E.	✓	✓
Obs. count	65,424	6,189
Odds Ratio	2.34	3.57

TABLE G30: FINANCIAL AND LABOR MARKET INCENTIVES AND OVERTIME AVOIDANCE –
WITH FIRM-YEAR FIXED EFFECTS

This table replicates Table 11 from the paper after including firm-year fixed effects. It presents estimates from logistic regressions of *OTAvoided* on proxies for firm incentives to avoid overtime payments. *ShaleBoom* is an inverse proxy for financial constraints a firm faces and is equal to the natural logarithm of one plus total shale wells discovered in a given FIPS code from 2003 until the year of observation. *LaborDemand* is a proxy for the extent of labor market competition a firm faces for a given position, and it is equal to the total number of job listings in the same commuting zone-soc code-year divided by the commuting zone's population (in hundred thousand). *EducAttain* is the percentage of individuals over age 25 with a bachelor's degree or higher in the commuting zone. A detailed definition of each variable is reported in Appendix F. Standard errors are clustered by firm. z-stats are reported in parentheses. ***, **, and * indicate statistical significance at a two-sided 1%, 5% and 10% level, respectively.

	Financial Constraints	Labor Competition	Mobility/Legal Awareness
ShaleBoom	-0.003*		
	(-1.68)		
LaborDemand		-0.001***	
		(-6.42)	
EducAttain			0.000
			(0.17)
WeeklyPay	0.001***	0.001***	0.001***
	(10.27)	(9.63)	(10.17)
Min_Experience	0.002	0.002	0.002
	(1.58)	(1.57)	(1.58)
Min_Education	-0.003	-0.003	-0.003
	(-1.32)	(-1.31)	(-1.31)
Max_Experience	0.002**	0.002*	0.002**
	(2.08)	(1.96)	(2.01)
Max_Education	0.004	0.004	0.004
	(1.60)	(1.58)	(1.59)
Missing Exp./Edu. Indicators	✓	✓	✓
Firm-Year F.E.	✓	✓	✓
Commuting Zone F.E.	-	✓	✓
FIPS F.E.	✓	-	-
Adj. R²	0.548	0.548	0.527
Obs. count	350,433	352,172	338,112

FIGURE H1: TOTAL BACK WAGES OWED AND NUMBER OF FLSA OVERTIME VIOLATIONS AS
REPORTED BY DOL's WHD

Data for the figures are sourced from different vintages of data reported at
https://www.dol.gov/agencies/whd/data/charts/fair-labor-standards-act extracted using the Wayback
Machine.

Panel A: Total Back Wages Owed in WHD Overtime Cases
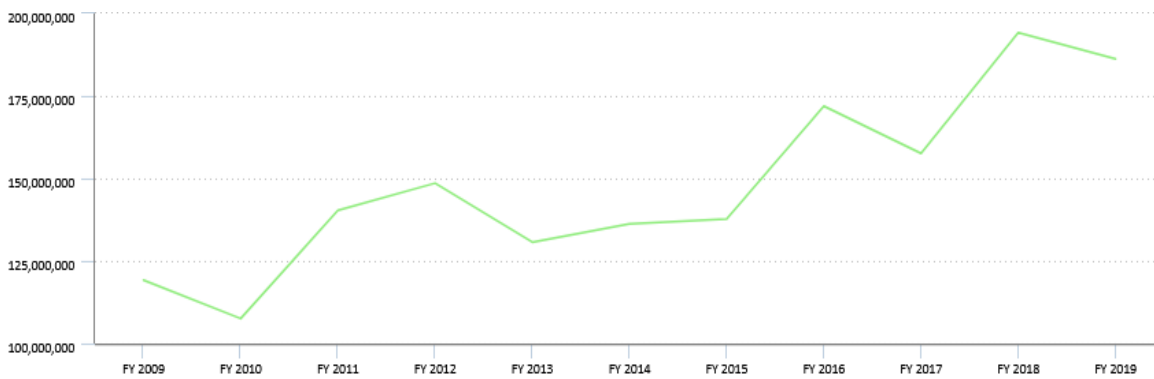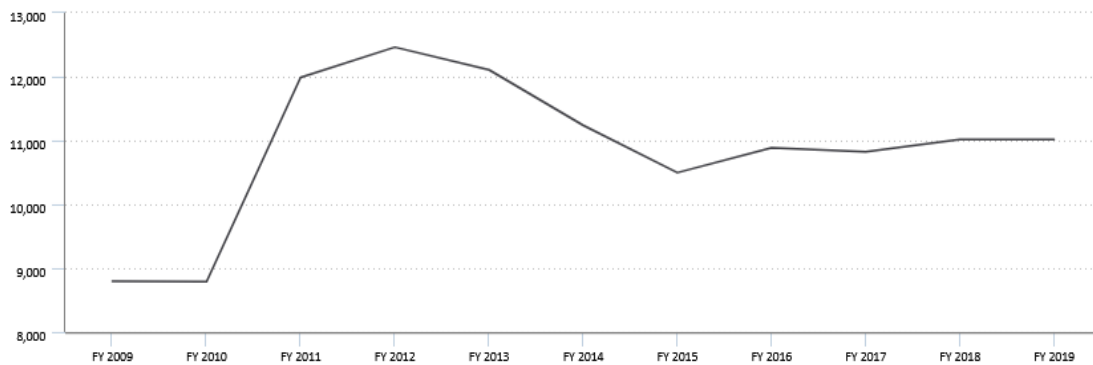

Panel B: Number of Overtime Violations

FIGURE H2: TRENDS IN THE NUMBER OF FLSA-RELATED PRIVATE LITIGATION

Data for the figures are sourced from U.S. Courts caseload statistics data tables
(https://www.uscourts.gov/statistics-reports/caseload-statistics-data-tables).
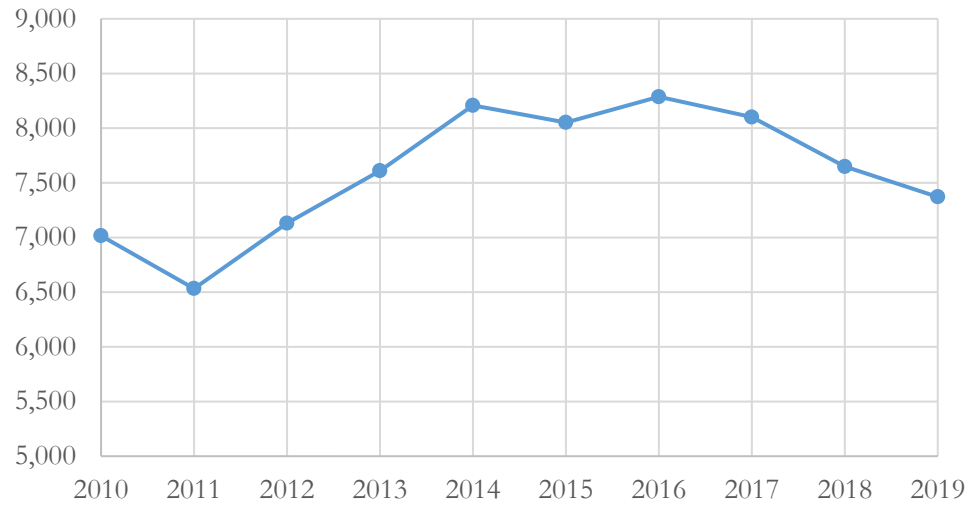
FIGURE H3: PERCENTAGE AND COUNT OF SALARIED MANAGERIAL POSITIONS
(BIN SIZES ARE FIXED TO 350,000 OBSERVATIONS)

This figure presents an alternative version of Figure 2 from the paper where each bin contains a fixed number of job position postings (350,000) rather than using fixed-width bins. We note that because salaries tend to cluster at round values, the bins contain 350,000 ± 40,000 observations.