Who Raises their Voice? New Evidence on Labor Standards Compliance and the Complaints they Generate

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Gonçalo Pessa Costa
Harvard Kennedy School

Daniel Schneider
Harvard Kennedy School
Harvard Sociology

David Weil
Heller School for Social Policy and Management, Brandeis University
Harvard Kennedy School

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Abstract

Labor standards violations undermine job quality. However, evidence on violation prevalence is limited: inspection-based administrative data incompletely covers violations when workers do not complain, and survey data provides limited measures of violations. Our understanding of the connection between violation and subsequent worker complaints is even more constrained. We use a unique survey of workers in the retail and food service industries to directly measure violations and worker complaints. We find high rates of violations affecting 38% of workers, with 31% experiencing serious violations of minimum wage, overtime pay, and uncompensated time. But workers rarely complain: only 26.5% of those experiencing violations complain, primarily to management. Just 1.4% of workers with violations report to state or federal agencies. The complaint / compliance gap reflects worker concerns about retaliation. However, unions reduce this gap substantially: unionization is associated with an eight-fold increase in complaint rates to the government.

Since the late 1970s, job quality has deteriorated across several dimensions, as evidenced by very slow or stagnant wage growth at the bottom of the distribution, retrenchment in employer provided benefits, and increasingly precarious employment relationships (Hoffmann et al., 2020; Howell & Kalleberg, 2019). Institutional changes such as deunionization and the breakdown of traditional employment relations have contributed to a decline in working conditions (Farber et al., 2021a; D. Howell & Kalleberg, 2019; Weil, 2014a). While ensuring workers are covered by adequate labor standards represents a key pathway to improving working conditions, there is evidence of widespread non-compliance with existing protections, further undermining job quality for vulnerable workers (Bernhardt et al., 2013a; Clemens & Strain, 2022a; Ji & Weil, 2015a; Weil, 2014a).

However, our understanding of the dynamics of labor standards violations is limited by two key factors, which also hinder our ability to improve compliance and enforcement. First, we have limited evidence on the breadth of labor standards violations. While the Current Population Survey has been used to study minimum wage violations (Ashenfelter & Smith, 1979; Clemens & Strain, 2022; D. J. Galvin, 2016), it provides limited information on overtime (Ehrenberg & Schumann, 1981; Hamermesh & Trejo, 2000; Trejo, 1991, 2003),[1] and no information about other important labor standards violations, such as unpaid work (e.g. requiring work either before workers clock-in or after they clock-out) or breaktime violations. Attempts to quantify compliance with these broader measures of labor standards, such as Bernhardt et al. (2013), have limited generalizability given their coverage of just a few major US cities and point-in-time estimation.

[1] The challenge of measuring overtime non-compliance is compounded by the erosion of overtime salary thresholds (Shierholz, 2018) and by evidence that firms strategically reclassify workers as exempt "managers" to avoid overtime obligations (Cohen et al., 2023).

Second, given this data gap, both research and enforcement agencies rely heavily on inspection-based administrative databases that arise predominately from worker complaints to obtain information about violation prevalence and severity (Ji & Weil, 2015; Stansbury, 2025; Weil & Pyles, 2005), and to target firms for inspections. However, if workers do not come forward to report violations, pronounced discrepancies may arise between the actual rates of underlying violations and the rates of complaints. Yet, only a limited empirical literature has gone beyond administrative data on formal complaints to understand the relationship between violations and complaints more generally and discern the correlates of complaining.

In this paper, we address these limitations using a new source of data to measure the extent of labor standards violations as well as the relationship between underlying conditions and the likelihood that workers complain. We create this data by surveying large samples of hourly workers at identifiable firms and asking these respondents directly about their experiences in order to reveal whether they encounter labor standards violations at work. We focus on state and federal labor standards regarding wages and hours, which regulate pay and hours worked. We then map out the dynamics that follow from experiences of potential labor standards violations, in particular gauging under what circumstances workers complain about those violations, to whom they complain (internal parties like direct supervisors or external parties like state and federal enforcement agencies), and the consequences and correlates of those actions.

Drawing on these data, we advance the literature in three key respects. First, drawing on a new module to the Shift Project survey (Schneider & Harknett, 2022) which covers labor standards in the low-wage sectors of retail and food/accommodation, we provide new estimates of the

prevalence of Wage and Hour labor standards violations[2] in these sectors. Second, we draw on these data to examine the relationship between violations and complaints, revealing how often workers complain, to whom they complain, and the relationship between the underlying severity / extent of violations and the individual decision to complain. Third, we analyze obstacles to complaints, with novel data on retaliation experiences and fears and we identify important factors that influence workers' complaint behavior. At the same time, we estimate how a collective agent like a labor union, where present, can affect the likelihood of complaints both by solving the public good nature of complaint activity—i.e. that complaining can benefit other workers along with the individual subjected to violations—as well as lowering the costs of actions (in particular by lowering the threat of retaliation).

This work builds on existing studies of wage and hour law compliance, including Ashenfelter & Smith (1979) and Clemens & Strain (2022), who identified systematic minimum wage noncompliance, and Bernhardt et al. (2013) and Ji & Weil (2015), who found prevalent violations of other wage and hour standards. This paper presents the first estimates of a broad range of wage and hour violations in the US food service and retail sectors, overcoming the geographic limitations of Bernhardt et al. (2013) and the reliance on a small sample of firms in Ji & Weil (2015). The shortcomings of complaint-driven enforcement data used in the literature (Ji & Weil, 2015; Stansbury, 2025; Weil & Pyles, 2005) are also examined with new evidence on the connection between firm violations and complaint rates, including whether workers complain to internal (supervisors and managers) or external parties (government agencies). In this respect, the paper builds on the literature examining factors that affect workers' complaint behavior (Alexander

[2] These comprise violations of the Fair Labor Standards Act, which stipulates the federal minimum wage, minimum pay for overtime work, among others, and state-specific Wage and Hour law violations, such as state-specific minimum wages or paid time off regulations.

& Prasad, 2013; Grittner & Johnson, 2021; Yaniv, 1994) by providing novel evidence on different complaint pathways - both internal to the firm and external - and identifying the factors that influence workers' choice of complaint channel.

The findings of this paper are highly relevant for policy and practice. Identifying and measuring the gap between violations and complaints can help evaluate the effectiveness of a complaint-based enforcement strategy for labor standards. Additionally, understanding the factors that drive complaints can help design policy that empowers workers to speak up when their rights are not respected.

1. Background

1.1. Labor Standards Enforcement

> *The Committee recognizes that accomplishment of the purposes of this bill cannot be totally achieved without the fullest cooperation of affected employees.*
>
> –Senate Report No. 91-1292, 91st Congress, 2d. Session (October 6, 1970), p. 10, in regard to the Occupational Safety and Health Act of 1970.

A complex web of federal, state, and local laws regulates employment practices in U.S. workplaces. In most areas of workplace regulation, an agency is assigned the responsibility to enforce those laws (e.g., the US Department of Labor's Wage and Hour Division or Occupational Safety and Health Administration at the federal level; state labor commissioners at the state level, and district attorney offices at the local level). To enforce compliance, labor laws require these agencies to conduct workplace inspections that evaluate compliance with laws governing minimum wage, overtime pay, or the use of personal protective equipment. When violations are found, agencies impose penalties and provide restitution to workers.

Compliance through enforcement arises either directly from inspection activities or through deterrence effects and the consequent voluntary decision to comply (Feld, 2024). Firms

are often assumed to act in accordance with the model of crime initially set out by Becker (1968) where crime (in this case, noncompliance with employment laws) is an increasing function of the return to violations (Kleiner & Weil, 2012). Given the costs of complying, employers choose not to comply with a labor regulation if it is easy to escape detection and/or because assessed penalties in the event of detection are small (Ashenfelter & Smith, 1979; Chang & Ehrlich, 1985; Clemens & Strain, 2022; Grenier, 1982).

Despite the importance of labor law enforcement for bringing employers into compliance, federal and state agencies face significant resource constraints (Stansbury, 2025; Weil, 2018). For example, the US Department of Labor's Wage and Hour Division (WHD) budget has been virtually the same since 2015[3] even as the number of establishments and workers under its jurisdiction has grown significantly. As a result, the WHD had 63 times more investigators per workplace in 1939 than it does today in 2024.[4] State labor enforcement agencies often face even greater resource constraints (Fine et al., 2021; Flanagan, 2020; D. J. Galvin, 2016; Gerstein, 2020). As a result, government agencies are only able to recover a fraction of wage theft losses and must respond to high levels of complaints. A 2024 study estimated that between 2021 and 2023, state and federal agencies recovered about $1.5 billion in lost wages [5] through class action litigation. That represents about 6%[6] of an oft-cited estimate of the total amount of wage theft arising from minimum wage violations alone (Cooper & Kroeger, 2017).

[3] In 2024, the WHD budget was $260M. In 2015, it was $227.5M, which is equivalent to $300.2M in 2024 dollars. USDOL yearly budgets are available at https://beta.dol.gov/budget/archive, last accessed 9/2025.
[4] Estimate by the authors based on the number of federal investigators in 1939 versus 2024 relative to covered establishments.
[5] Of that total, $700 million was recovered by the US Department of Labor Wage and Hour Division; $200 million by state departments of labor; and $641 million via class action settlements (Poydock & Zhang, 2024).
[6] Poydock & Zhang (2024) report $1.5 billion recovered over three years (2021-2023), yielding an average annual recovery of $500 million, 6% of the $8 billion in annual wage theft from minimum wage violations in the 10 most populous states in Cooper & Kroeger (2017).

1.2 Prevalence of Labor Standards Violations

It is difficult to scale the mismatch between enforcement resources and labor standards violations in part because of limitations of existing data. The majority of investigations at the federal and state level resulting in wage and hour violations recorded in administrative data rely on worker complaints (Ji & Weil, 2015; Stansbury, 2025; Weil & Pyles, 2005)[7]. However, this approach confounds two dynamics – that of violation and that of the decision to complain to a government authority. The risk is that if complaints occur less often than violations, then such measures are both underestimates of prevalence and likely biased.

Departing from this approach, there is important prior work that attempts to directly measure potential labor standards violations by surveying workers. One such approach can be found in the Current Population Survey, which includes items that researchers have used to gauge non-compliance with federal, state, and local minimum wage (Clemens & Strain, 2022; Cooper & Kroeger, 2017; Fine et al., 2021; Fry & Lindsay, 1997; D. J. Galvin, 2016). However, this work is limited by potential mismatch between workers' place of residence and place of work and recall bias of workers or household members (Abraham & Houseman, 2022). CPS also does not include any information on other potential Fair Labor Standards Act (FLSA) violations.

Another approach involves detailed measurement of labor standards violations by undertaking intensive worker interviews regarding compensation and working conditions, a tactic

[7] Other labor standards enforcement mechanisms exist that are not complaint-driven. OSHA conducts programmed inspections that are randomized for industries that the agency has classified as high risk due to injury rates (Johnson et al., 2023). Federal policy requires state labor agencies to conduct random unemployment insurance audits covering roughly 1% of employers. Nonetheless, OSHA and state agencies continue to rely on complaints for the majority of inspection targeting. The Wage and Hour Division of the US Department of Labor relied on complaints for two-thirds of investigations up until the Obama administration. The adoption of strategic enforcement at that time led the agency to increase directed investigations (Weil 2018). Over the past decade, the agency conducted about half of its investigations on the basis of complaints. Most state agencies continue to rely predominately on complaints as well.

best exemplified by the ground-breaking work of Bernhardt et al. (2009) in their Unregulated Work Survey (UWS), whose data is also used in (Bernhardt et al., 2013). This approach produces much higher estimates of violation incidence at the extensive and intensive margins, but is necessarily limited in scale given the interviewer and research effort required to field the RDS approach successfully. Indeed, Bernhardt et al.'s (2009) three-city survey work has not been repeated. A fourth approach involves developing detailed ethnographic accounts of workers' experiences that can be mapped onto potential labor standards violations (e.g. Jayaraman et al. (2011) and Tung et al. (2015)). Finally, a number of relatively small-scale and place/industry-specific surveys have also been undertaken often through collaborations of worker advocates and academics (e.g., Gutelius & Pinto (2024) in logistics; Boggess et al. (2017) in construction) that can surface underlying rates of likely violations in a logistically tractable format. We add to this literature by providing the first survey data on a broad range of wage and hour violations in key low-wage sectors across the entire US.

While our focus is on wage and hour violations, the problem of non-compliance extends to other domains of workplace regulation, including occupational safety and health (Johnson, 2020; Johnson et al., 2023), anti-discrimination law (Dahl & Knepper, 2023, 2026), and protections for organizing under the NLRA (Stansbury, 2021). More broadly, surveys of working conditions document widespread exposure to hostile work environments, unpredictable schedules, and limited advancement opportunities among American workers (Gallup, 2025; Maestas et al., 2017; Schneider and Harknett, 2019). In this paper, we focus on wage and hour standards as a prominent and important potential domain of violation.

1.3. The Role of Complaints in Enforcement

From early state workplace legislation in the 20th century to the raft of New Deal legislation like the Fair Labor Standards Act (FLSA) of 1938 to more recent federal legislation like the Family Medical Leave Act (FMLA) or state laws regarding paid leave, workers have been granted the right to initiate investigations by filing complaints. Given that government agencies cannot inspect all workplaces and lack perfect information about the occurrence of violations, worker complaints can play a critical role in helping agencies identify violations and target enforcement (Weil, 1999). Yet there is little reason to believe that workers uniformly exercise rights granted to them under labor policies.

Therefore, complaint-based enforcement may leave unprotected those workers who remain silent despite facing violations. The extent to which that is the case is an empirical question. It requires knowledge of how often workers complain, to whom they complain, and how well such complaints reflect underlying violations. Despite the relevance of these questions to assessing current enforcement practices, knowledge about them is limited.

Prior work by Weil & Pyles (2005) reveals that workers complain at remarkably low rates. Between 2001 and 2004, fewer than 25 workers per 100,000 filed FLSA complaints. Only 17 per 100,000 filed OSHA complaints. These rates show the number of formal complaints that led to official investigations per 100,000 workers. Because of data restrictions (in particular, the Department of Labor no longer publicly identifies the number of FLSA investigations arising from complaints versus agency-directed sources that was available to Weil and Pyles), there is no public data or recent literature updating these rates. However, we can approximate them using the total number of investigations undertaken by agencies relative to the number of workers employed. In

the 2024 fiscal year, there were 10 FLSA and 20 OSHA investigations per 100,000 workers.[8] The complaint rate to the U.S. Equal Employment Opportunity Commission (EEOC), which handles workplace discrimination, is higher. It stands at 52 per 100,000 workers in 2024.[9] Although these estimates are imperfect and vary by agency, all are very low. If no worker files more than one complaint, these estimates suggest that only 0.08% of the U.S. workforce files complaints to public agencies, which, appears to be orders of magnitude less than the rates of violations estimated in the literature reviewed above. Suppose all workers who face a violation file a complaint with public agencies. The complaint rates discussed above would imply an implausibly low rate of labor standards violations. This suggests that only a fraction of workers who experience violations file complaints with public agencies. Prior literature has not quantified this fraction across different violation types and complaint channels, as it has rarely measured both violation and complaint behavior from the same worker.

To our knowledge, the only study compiling such data is Bernhardt et al. (2009). This study has the most similar data to ours, as they surveyed workers about both workplace violations and complaint behavior, although they only covered three cities (Los Angeles, Chicago, and New York City). They found that 20% of workers in their sample "either made a complaint in the last year or attempted to form a union." However, they do not present numbers for complaint rates separate

[8] The rates of FLSA and OSHA inspections we present are likely to differ from the complaint rate construct in Weil & Pyles' (2005) study, as inspections are triggered by reasons other than complaints. Beyond complaints, FLSA investigations may result from a proactive decision to investigate, for example, industries with high violation rates, while OSHA inspections may result from reports of injuries or fatalities, referrals from other public agencies, and other reasons. All of these suggest that inspection rates overestimate complaint rates.

[9] These 2024 rates were calculated by the authors based on fiscal year 2024 data. The Wage and Hour (WH) rate is based on 17,300 concluded compliance actions, the OSHA rate is based on 34,696 total federal inspections, and the EEOC rate is based on 88,531 complaints. These rates were deflated by the 171.9 million people who worked at some point during 2023. Sources: WHD data from https://www.dol.gov/agencies/whd/data/charts/all-acts, OSHA data from https://www.osha.gov/data/commonstats, EEOC data from https://www.eeoc.gov/data/enforcement-and-litigation-statistics-0, and workforce data from https://www.bls.gov/news.release/work.htm consulted on 10/12/2025.

from attempts to form a union. They also found that 20% of their sample experienced a serious violation but did not complain, and provide statistics about fear of retaliation among these workers. Likely because these authors' primary interest was on retaliation, they do not provide tabulations about violation and complaint behavior, nor estimates of complaint rates among workers who faced violations or complaint rates by type of violation. Our paper fills this gap by providing the first national analysis of complaint rates across multiple pathways among workers who experienced different types of labor standards violations.

A possible reason for such low complaint rates to public agencies is that workers do not recognize labor standards violations when they happen. Literature in the sociology of law suggests that disputes, broadly defined as a conflict between parties, follow a "dispute pyramid" process of "naming, blaming, and claiming" (Felstiner, Abel, and Sarat 1980): the grieving party may or may not recognize an injurious experience, and may or may not blame another party and eventually seek remedy. Likewise, workers may or may not first recognize a violation of their labor rights, then blame the employer, and eventually seek redress. Workers hold normative perspectives about acceptable treatment, which are influenced by their social networks, rather than simply applying formal legal rules (Ewick & Silbey 1998; Yang, 2017). Following these insights, our analysis measures violations through questions about workplace conditions rather than asking whether workers experienced illegal treatment, avoiding bias toward those who successfully "named" violations. When workers experienced violations but did not complain, we ask why they chose not to, allowing us to identify which stage of the dispute pyramid constrained their response: whether they failed to "name" the condition as illegal or progressed further but still did not seek remedy.

Another possible reason for low complaint rates to state authorities is that workers have alternative complaint pathways through employer-based systems. These internal complaint

systems are especially relevant in the US, unlike many European countries that have extensive dispute-resolution mechanisms through labor courts (Walker & Hamilton, 2011). This employer-centered litigation approach creates two distinct grievance contexts: unionized and non-unionized settings. On unionized sites, grievance provisions negotiated in collective bargaining agreements are the classical tools for managing employee complaints (Colvin, 2003; Lewin, 2005). In non-union settings, there is a plethora of "Alternative Dispute Resolution" (ADR) systems, which typically involve complaints review panels, ombuds programs, mediation and arbitration[10] (L. B. Bingham, 2004; Walker & Hamilton, 2011).

Complaint rates through these internal pathways vary significantly by complaint type, whether there is a collective agreement, and depending on the ADR's reliance on formal vs. informal and written vs. oral procedures (Antcliff & Saundry, 2009; Bemmels, 1993; Kleiner et al., 1995; Lewin & Peterson, 1988). For example, Lewin & Peterson (1988) find that complaint rates increase when management and unions have a policy of written complaints, whereas the opposite occurs when the ADR recommends informal resolution of disputes (Bemmels, 1993). More generally, Bernhardt et al. (2009) found that, among workers who face a violation and do not complain, most do not complain out of fear of retaliation. Such fear of retaliation aligns with ethnographic evidence revealing that managers often refuse to address complaints, attempt to dissuade complainants, or mishandle formal procedures (Woodrow & Guest, 2014). Despite this prior work on internal grievance systems, no study has comprehensively measured rates of internal complaints across different channels nor compared internal versus external complaint behavior among the same workers. We fill this gap by providing the first comprehensive data on both internal and external complaint rates and pathways among U.S. workers.

[10] See (Walker & Hamilton, 2011) for a review of employer-employee grievance systems.

In principle, employer-based grievance systems should enable firms to identify and remedy labor law violations internally, reducing the need for public agency intervention. However, two significant concerns challenge an optimistic view of internal complaint systems. First, research suggests these internal complaint pathways may not effectively protect workers' interests. Research predominantly finds that grievance systems harm individual workers, with grievance filers experiencing retaliation for their complaints and higher turnover (Lewin & Peterson, 1988; Olson-Buchanan & Boswell, 2002; Snider, 2010; Walker & Hamilton, 2011). Second, and more fundamentally, employer-based programs often serve as substitutes rather than complements to public enforcement (L. Bingham & Chachere, 1999). This substitution effect is often forced through mandatory arbitration clauses. These clauses prevent workers from filing complaints to public agencies and bringing individual or class actions to court, and cover approximately 20% of the non-unionized workforce (Sternlight, 2015). A similar effect may be produced by non-disclosure agreements (Sockin et al., 2022). This is especially concerning if grievance procedures supposedly designed to protect employees in effect prevent workers from having *de facto* labor rights. Therefore, rather than improving compliance with labor rights, these internal systems may actually suppress them while creating barriers to public enforcement.

Given that complaint rates to public agencies are so low and employer-based systems do not reliably protect workers, the effectiveness of public enforcement is key to securing workers' rights. This underscores the importance of assessing the effectiveness of complaint-based enforcement - the primary approach for most agencies.

[Table 1: Complaint vs compliance matrix]

Effective complaint-based enforcement requires that places with more violations generate more complaints. To discuss this relation, Weil & Pyles' (2005) 2×2 matrix, depicted in Table 1,

categorizes labor relations contexts into four quadrants based on high/low violation and complaint rates. Complaint-based enforcement is effective when high-violation industries also generate high complaints (quadrant 1) and low-violation industries generate few complaints (quadrant 4). Using USDOL Wage and Hour and OSHA data, the authors estimated industry-level violation and complaint rates and found minimal correlation between these dimensions, with many industries falling into the problematic quadrant 2 of low complaints and high violations. They estimated that for every 130 overtime violations, only one complaint is received.

As we discuss in the next subsection, several studies have identified factors that affect workers' propensity to complain, helping explain this violation-complaint gap. Despite this work, our knowledge of the relationship between violations and complaint rates remains very limited. Attempts at updating Weil & Pyles' (2005) empirical study of this relationship are limited to studies of minimum wage compliance in the city of San Francisco (Fine et al., 2021; D. Galvin et al., 2020). Furthermore, these authors' analysis suffers from a selection bias: their administrative data comes from Wage and Hour and OSHA inspections, which systematically underrepresent violations in workplaces where workers do not complain. This is an important knowledge gap for understanding the effectiveness of complaint-based enforcement. We overcome these data limitations through a Shift Project worker survey, which allows us to observe both labor standards violations and workers' complaint behavior across multiple internal and external pathways. We use these data to estimate firm-level violation and complaint patterns, placing firms in the four quadrants of the complaint matrix in Table 1, enabling us to assess whether complaint-based enforcement effectively targets high-violation firms.

1.4. Predictors of Complaint Behavior

The current system of wage and hour labor enforcement is primarily based on individual worker complaints and assumes that complaints are a reliable signal of underlying violations. Yet, as described above, we lack evidence supporting that assumption. Indeed, complaints likely provide a noisy signal of underlying violations, given the range of factors that affect workers' likelihood to complain.

Most employment laws provide the right to complain at the individual-level.[11] In making decisions, workers presumably weigh the benefits of exercising their right to complain in order to recover wages owed to them or to protect against health and safety risks against the costs of exercising those rights, including possible retaliation by employers. In this sense, the decision to complain reflects Hirschman's classic exit versus voice tradeoff, where the potential costs of exit, namely the cost of voluntary departure compared to remaining and exercising voice by complaining, where that may entail being fired, with these costs varying based on workers' outside options in the labor market. Tight labor markets afford workers better alternatives, therefore increasing their power to complain (Badaoui & Walsh, 2022). Slack markets and social disadvantages produce the opposite effect, as employers in complaint-dependent enforcement systems have incentives to violate the rights of workers least likely to report violations (Yaniv, 1994). In support of this view, empirical research shows that vulnerable workers in low-wage sectors file complaints far below proportionate to their actual experiences of wage theft and safety violations (Fine, 2017). Specific barriers include immigration status and deportation threats, retaliation fears, adverse local labor market conditions, and legal constraints such as mandatory

[11] The exception to this at the federal level is the Mine Safety and Health Act that expressly requires that workers be provided a representative to assist in the exercise of rights, in both union and nonunion mines (Morantz, 2013). Several states (Oregon and Washington) have created requirements for health and safety committees under state-administered OSHA programs (Weil, 1999).

arbitration clauses that prevent access to justice (Alexander & Prasad, 2013; Andersson et al., 2014; Badaoui & Walsh, 2022; Clibborn & Hanna-Osborne, 2023; Grittner & Johnson, 2021; Sternlight, 2015).

The presence of unions may also directly affect the benefits and costs of complaining. The benefits arising from complaints has a public goods character, where other workers also subject to violations derive benefit from a complaint lodged by an individual. Unions can play a role as a collective agent that solves this public goods problem. Even more, through their actions a union can lower the cost of exercising rights both by being a more efficient means to collect and share information about rights and conditions as well as lowering the likelihood of employer retaliation through the representation role (Weil, 2005). Fine & Gordon (2010) argue for formalizing this role through co-enforcement partnerships between labor inspectorates and worker organizations such as unions and worker centers. Literature has shown that worker unionization produces positive effects on workers' exercise of rights across workplace safety, unemployment insurance, and workers' compensation (Blank & Card, 1991; Budd & McCall, 1997, p. 199; Krueger & Burton, 1990; Morantz, 2013; Smith, 1986; Sojourner & Yang, 2022; Weil, 1991, 2001). Labor market concentration, search frictions, and information imperfections produce the opposite effect, by reducing workers' ability to change jobs (Azar & Marinescu, 2024; Sokolova & Sorensen, 2021; Weil, 2005). Decreased worker mobility, therefore, raises the importance of complaining as a mechanism for improving working conditions.

While previous literature has identified various factors affecting complaint propensity, it has not distinguished how these factors differently influence internal versus external complaint channels, nor provided comprehensive data linking retaliation fears and experiences to complaint behavior across different pathways. We address these gaps by examining complaint determinants

across multiple complaint channels while providing novel evidence on both retaliation fears and actual retaliation experiences among U.S. workers in the food services and retail sectors.

3. Data and Methods

3.1 Shift Project Survey Data

We draw on data collected from hourly workers employed at large firms in the US service sector by the Shift Project. The Shift Project has developed novel methods for surveying this target population of workers, using paid advertisements on Meta (Facebook and Instagram) to both develop sampling frames of workers at specific firms, such as Walmart or McDonalds, and then to use paid advertisements to recruit those workers to complete surveys.

Specifically, the Shift Project constructs dozens of firm-specific "audiences" on Meta's advertising platform comprised of those Facebook and Instagram users who Meta identifies as being employed at each of the specific firms in the Shift sampling frame. These firms are drawn from the National Retail Federation's list of top 100 retailers and the Restaurant Business' list of top 100 restaurant chains. While not all companies can be targeted on Meta platforms, Shift successfully sampled 44 of the top 50 retailers and 48 of the top 50 restaurants. The Shift data also samples respondents from 135 other large companies, a purposive mix of retailers ranked 50-100, restaurants ranked 50-100, and large companies in hospitality and logistics that are not represented on the NRF or Restaurant Business lists. A subset of these companies is surveyed at every wave, with other companies rotating in and out of the sample purposively, depending on the wave. Shift then delivers employer-specific survey recruitment messages to these audiences on Facebook and Instagram as paid ads. These advertisements include a simple message: "*Survey for [EMPLOYER NAME] workers. Take a short survey and tell us about your job at [EMPLOYER NAME]*" along with an image of a worker and workplace resembling that of the targeted firm and a link to take

the survey. Respondents who click on the link are taken off Facebook to a Harvard Qualtrics survey that collects detailed reports of job quality, worker economic security, and worker and family health and wellbeing.

The Shift Project has used this approach to collect 17 repeated cross-sections of data from approximately 296 thousand hourly workers. We draw on a subset of these data, collected in waves 15, 16, and 17 of the survey from 17,401 hourly workers, fielded between September 2023 and November 2024, that included a detailed module we designed to gauge potential labor standards violations. We also use a more limited sample of respondents from only waves 16 and 17 that collected detailed information on complaint behavior and retaliation. We detail our analysis samples, which include only survey responses with complete data on all outcomes and covariates (described below), in Appendix Table A1.

3.2 Measuring Labor Standards Violations

As described in the preceding section, rather than use worker reports to directly measure labor standards violations, work in the area often relies on complaints as lodged in administrative data (Ji & Weil, 2015; Stansbury, 2025; Weil & Pyles, 2005). Other research turns to the CPS (Clemens & Strain, 2022; Cooper & Kroeger, 2017; Fine et al., 2021; Fry & Lindsay, 1997; D. J. Galvin, 2016), which allows for only narrow measurement of violations, or to resource-intensive and geographically focused approaches, such as the UWS (Bernhardt et al., 2013). A number of relatively small-scale and place/industry-specific surveys have also been undertaken often through collaborations of worker advocates and academics (e.g., Gutelius & Pinto (2024) in logistics; Boggess et al. (2017) in construction).

We build on these survey approaches with a new survey that aims to collect information on multiple forms of FLSA violations with broad geographic reach. We develop a module of items

that asked workers to report on experiences at work in the prior 12 months (or since starting their jobs for those with less than 12 months of tenure) regarding a variety of pay, hour, work requirements (e.g. when and how they "clocked in,"), employer practices (e.g. charges for meal breaks) and other aspects of work directly observable by the worker.[12] Responses were then compared with the major provisions of the Fair Labor Standards Act that establish federal minimum labor standards to assess compliance. Figure 1 shows the specific items asked in the module. In addition to these items, respondents were also asked to report their hourly wage, not including tips. Workers who reported receiving tips were also asked to report the amount they usually earned in tips, which was divided by usual weekly hours, and added to the hourly wage.

[Figure 1: Survey questions about labor standards violations on the Shift Project survey.]

We then assessed whether the hourly wage (including tips) was less than the prevailing minimum wage in their place of work, compared with data from the US Department of Labor (USDOL) on both state and federal minimum wages at the time of the survey.[13] We plot the incidence of violation of each of these measures. We also broadly categorize the measures into "serious violations" and "less serious violations". Serious violations include not being paid time and a half for overtime, being required to perform tasks before clocking in or after clocking out, not being paid for all hours worked on the clock, not receiving pay for paid break times, not receiving complete and correct amount of money from tips, timekeeping system automatically clocks out with no pay after that (auto clocked out), manager changed time record, not been paid commissions or bonuses owed. Less serious violations include being required to buy a uniform or

[12] We compiled and tested these questions with a number of unions and worker advocacy organizations and experts to ensure we framed questions that could be readily observed by workers without knowledge of the underlying law or regulation. We compared responses with requirements of the applicable state and federal law regulating those aspects of work.

[13] The USDOL discloses data on federal and state minimum wages at https://www.dol.gov/agencies/whd/state/minimum-wage/history (consulted on September 2025).

special equipment causing pay to fall below minimum wage, not being paid for training time, meals not eaten deducted from paycheck, not reimbursed gas/insurance, pay deductions for short register, paid late, paid by voucher or required to go to check cashing company, asked to wait to cash paycheck, and paid by cash with no record. We also produce a summative index of the number of violations that workers reported experiencing.

3.3 Measuring Complaint Channels

As part of the FLSA sequence and immediately following the violation questions above, workers who reported at least one potential violation from the FLSA module were asked, "Did you make a report or complaint (or attempt to do so) about this/any of these problems to your manager, supervisor, employer, or to a government agency?" Workers who reported that they did were then asked, "When you made a report or complaint about this/any of these problems, who did you make it to?," and were asked to select all that applied from a list inclusive of (1) Coworker(s), (2) Supervisor, (3) Manager above my supervisor, (4) Company grievance procedure, (5) Union rep or union organizer, (6) Human resources, (7) Someone at a nonprofit, community organization, or worker center, (8) City or County Labor Regulator such as an Office of Labor Standards, (9) State Labor Regulator, (10) Federal Labor Regulator such as OSHA or the Department of Labor, or (11) other. From these questions, we first construct a dichotomous measure of if the respondent made any complaint or not. We then group response options (1), (2), (3), (4), and (6) to code a variable for any internal complaint or not and we group response options (5), (7), (8), (9), and (10) to code a variable for any external complaint. Here, we also construct measures that contrast external complaints to a government agency (options (8), (9), or (10)) versus to a third party (options (5) and (7)). We use these variables to describe the actual complaint channels that workers used after experiencing a likely labor standards violation, both overall and by the intensity of violation.

A key question in prior literature is whether formal complaints, which are the mainstay outcome of prior research, accurately proxy for underlying violations, which may be under-reported, but also reported with significant bias. Weil & Pyles (2005) originally proposed the conceptual approach of contrasting these two measures, underlying violations and complaints, to categorize industries in terms of quadrants categorized as (1) "low violation-low complaint," (2) "high violation-low complaint," (3) "low violation-high complaint," and (4) "high violation-high complaint," where density in quadrant 2 was of particular concern. We follow this approach, but produce the quadrant plot at the firm level, rather than industry-level, using the Shift Project reports, generating one plot that uses the correspondence of serious violation rates and complaints to all sources (including within company) and a second plot that uses the correspondence of serious violation rates and complaints to local, state, or federal regulators.[14]. While the quadrant analysis reveals the distribution of firms across violation and complaint rates, we also examine the correlation between these measures to assess whether complaints consistently track violations across firms even if all complaint rates fall in the low quadrant.

3.4 Measuring Retaliation

Respondents who reported a potential violation and reported making a complaint were asked, "Did you experience any form of retaliation from your manager/supervisor/employer because you made a report or complaint?" and were asked to select all that applied from among: (1) I was assigned to a worse work schedule, (2) I was assigned to worse work duties, (3) My hours or pay were reduced, (4) I was disciplined or given a warning, (5) I was demoted, (6) My manager/supervisor reported me to an immigration authority, (7) My manager/supervisor

[14] We limit the sample to firms with at least 25 workers, and we split firms into quadrants above or below the 25% complaint and violation rates.

threatened me with negative job consequences, (8) My manager/supervisor threatened me about my immigration status, (9) I was denied a promotion or raise, (10) Other, (11) None of these. We use these items as stand-alone dichotomous variables. We also use them to construct a firm-level measure of retaliatory environment by calculating the percentage of workers at each company who experienced retaliation after making a complaint (limited to companies with more than 25 survey respondents). This includes workers who reported items (1) through (10) in the question regarding experience retaliation.

Respondents who reported a potential violation, but did not report making a complaint were instead asked, "Why didn't you make a report or complaint?" These respondents were asked to choose the top three reasons from the following list: (1) I did not know how to make a report or complaint, (2) I didn't think that making a report or complaint would be effective/worth the trouble, (3) At the time, I didn't know that my employer's actions were illegal, (4) I was worried that I would be assigned to a worse work schedule, (5) I was worried that I would be assigned to worse work duties, (6) I was worried my hours or pay would be reduced, (7) I was worried that I would be disciplined or given a warning, (8) I was worried that I would be demoted, (9) I was worried that I would be fired, (10) I was worried my employer would report me to an immigration authority, (11) I was worried I would be denied a promotion or raise, (12) Other, or (13) None of these. We also construct a firm-level measure of fear environment by calculating the percentage of workers at each company who did not complain about violations due to fears of retaliation (again limited to companies with more than 25 respondents). This captures workers who reported items (4) through (11) in the question "Why didn't you make a report or complaint?"

We use these two variables, asked of two different samples, to describe the share of workers experiencing / fearing these forms of retaliation and to describe the correspondence in the relative

importance of the specific forms of retaliation that were asked of both groups (demotion, worse duties, denied promotion, disciplined, worse schedule, and hours reduction) between those who made a complaint and experienced retaliation vs. those who did not make a complaint and feared retaliation.

3.5 Determinants of Complaint Behavior

Finally, we model the correlates of complaint behavior. To do so, we construct a dichotomous measure of lodging a complaint (to any source) as the dependent variable as well as dichotomous variables that capture making an internal complaint only and making an external complaint. Drawing on the theory and literature described in Section 2, we construct a set of measures that operationalize these potential correlates of complaint behavior. We detail these measures and the underlying data sources in Table 2, and provide descriptive statistics in Table 3, merging these measures, variously, at the firm and county-level to the Shift Project micro-data. In addition to these key independent variables, we also include controls for worker demographics including gender, age, race, and educational attainment as well as state, year, and industry fixed-effects.

[Table 2: Description of Variables Used in the Regression Analysis]

We first provide bivariate evidence of the association between complaints (overall, just internal, and external) and each of these key predictors. We then estimate a linear probability model of complaints on the set of independent variables, controlling for worker demographics and year, state and industry fixed effects[15]. Here, our measures of fear environment and of retaliation

[15] Our main analysis examines complaint behavior among workers who experienced violations. There is likely selection into violations, as employers may choose to violate the rights of more vulnerable workers. Therefore, our complaint model estimates what predicts complaint behavior among workers who actually face violations, rather than modeling what would predict complaints if violations were randomly distributed (e.g., via a Heckman selection

environment are only available for a smaller sample of workers that are employed at firms for which we have at least 25 valid responses on those underlying survey items. In addition to the linear probability models, we also estimate a logit model for robustness. Here too, we estimate this on the full sample (without retaliation and fear environment) and the smaller sample (that allows us to include the measures).

[Table 3: Descriptive Statistics for the Baseline Sample Used in Regression]

4 Results

4.1 Violation of Wage and Hour Laws

We use the Shift Project survey data to measure a range of wage and hour labor rights violations. This data addresses limitations in existing research by combining national scope with direct worker reports, not requiring workers' knowledge of the law or previous complaint filing. Figure 2 depicts the incidence of labor standards violations among hourly workers in our sample, grouped into three categories: pay time, pay deduction, and pay method violations as well as into the broad categories of "any," "serious," and "less serious" violations.[16]

[Figure 2: Incidence of Wage and Hours Violations]

Figure 2 demonstrates that wage and hour violations are widespread in retail and food services. Overall, 38% of workers in our sample report at least one labor standards violation, with the pay time category being the most prevalent at 31%. This pay time non-compliance comprises working off the clock (14%), improper overtime pay (10%), and unpaid hours (9%).[17] Although

model). We focus on the former because it answers the policy-relevant question of what predicts complaints among the population that actually experiences violations.

[16] Appendix Table A2 provides a detailed breakdown of violations by number and severity.

[17] While related, these violations represent distinct forms of wage theft: workers may not be paid for all hours worked even when those hours are recorded, and they may receive compensation for all recorded hours but still not receive the legally required overtime pay of at least 1.5 times their base hourly rate.

prior compliance research has primarily focused on minimum wage non-compliance (Ashenfelter & Smith, 1979; Clemens & Strain, 2022; Garnero, 2018), such infraction - occurring at a 3% rate - affects far fewer workers in our sample than working off the clock or irregular overtime pay. This finding aligns with the Department of Labor enforcement data, which indicates that violations concerning overtime account for a much greater share of back wages recovered than those regarding minimum wage.[18]

Pay deduction violations affect 17% of workers, while pay method violations impact 7%. Here, failure to reimburse, failure to pay for training time, and late payment are the most common violations in these categories.

Although we cannot measure the monetary severity of these violations, we capture their incidence across what we classify as serious violations. These include tasks performed before or after clocking, unpaid hours on the clock, withheld tips, having a timekeeping system or a manager that falsely adjusts time records, withheld commissions or bonuses, unpaid mandatory paid leave, and overtime pay below 1.5 times the base hourly rate. Notably, 31% of workers experience at least one serious violation, underscoring that costly wage and hour law violations are prevalent in the retail and food services. Our results provide the first national estimates of the extent of wage and hour violations for these sectors, establishing the foundation for this paper's analysis of workers' complaint behavior.

Two potential measurement concerns with self-reported violation data are that inattentive respondents might inflate rare violation rates through random affirmative responses and that respondents might indiscriminately select violations to express general job dissatisfaction. We address both concerns in the Appendix. Figure A2 reproduces Figure 2 restricting to the 92% of

[18] See U.S. Department of Labor, Wage and Hour Division enforcement statistics, https://www.dol.gov/agencies/whd/data/charts/fair-labor-standards-act (accessed November 9, 2024).

respondents who passed the survey attention check; violation rates are virtually unchanged. Figure A1 shows that the distribution of violations among affected workers is heavily right-skewed, with nearly half reporting only one violation, inconsistent with indiscriminate selection of response options.

4.2 Complaint Channels

While we show that violations are common, prior research has rarely been able to directly map such experiences onto worker complaints, because it has either examined direct reports of violation without complaint data (such as in the CPS) or examined administrative data on complaints without access to the underlying rates of violation. The Shift Project survey data are designed to make this link.

We start by asking workers who experienced a violation whether they filed a complaint. Table 4 reveals four key results. First, most workers do not complain: only 26.5% of workers facing any violation report it. Second, among those who do complain, the vast majority pursue internal rather than external channels of complaint. Specifically, 25.7% of workers facing violations complain internally, while just 2.9% file external complaints. Faced with an instance when they were deprived of labor rights at work by managers, supervisors, or the firms' HR apparatus, workers overwhelmingly turn to exactly those actors to lodge a complaint. Third, complaints to enforcement agencies represent a tiny fraction. Only 1.4% of workers who experience violations make these complaints. Less than 1% of the workers in our sample who faced a violation turned to a local agency, similarly tiny shares turned to a state agency, and just 0.8% turned to a federal agency. This suggests that using formal complaints to stand-in for violations is likely to under-represent true violations by several orders of magnitude.

Governmental regulators are not alone in being far off workers' radar. Just 1.6% of workers who experience violations turn to a union and fewer than 0.5% of those workers turn to a non-profit.[19,20]

[Table 4: Complaint Frequency Across Reporting Channels Conditional on Type and Number of Violations]

Fourth, the likelihood of a complaint increases with the severity and frequency of the violation. Complaint rates rise from 26.5% for any violation to 28.3% for serious violations and 31.9% for three or more violations. Enforcement agency complaint rates increase from 1.4% to 1.5% and 2.5%, respectively. It likely reflects both a declining tolerance for violations and increasing potential benefits from formal complaints, as more serious and frequent violations typically yield higher back wage recoveries.

4.3 The Violation-Complaint Relationship

The substantial gap between workers' violations and complaint behavior raises a key question: Do complaints serve as reliable signals of underlying violations? The hypothesis that formal complaints, even if an understatement of the true level of violations, are an unbiased measure of relative prevalence is fundamental to complaint-driven enforcement strategies. Figure 3 examines the firm-level relationship between violation and complaint rates in 31 firms in 2024. The high and low quadrants are split by a 25% threshold for both violation and complaint rates.

The quadrant analysis reveals that many firms fall into quadrants that are problematic for complaint-driven enforcement: high violation-low complaint (quadrant 2) or low violation-high

[19] We also asked workers what they would do if they faced a hypothetical serious labor standards violation. Figure A3 in the appendix shows that workers substantially overestimate their actual complaint rates compared to their stated hypothetical behavior. While the range of actual complaints across the several channels ranges from 0% to 20%, the range of hypothetical complaints is up to 80%. For instance, while 20% of workers who faced violations actually complained to a supervisor, 75% said they would. While less than 1% actually complained to a federal labor regulator, 10% said they would.

[20] Appendix Table A3 provides the full breakdown of complaint destinations.

complaint (quadrant 3). This pattern appears in both Panel A (all complaints) and Panel B (complaints to enforcers only). For instance, in Panel A, 50% of Dunkin Donuts workers report a serious violation, but just 15% report complaining to anyone about such violations. At Dollar Tree, nearly 40% of workers report violations, but almost no one makes a complaint. In contrast, at Whole Foods, fewer than 20% of workers report a violation, but relatively large shares of that group make a complaint (40%). While the 25% threshold is arbitrary, the lack of a clear positive correlation suggests this finding is robust to other thresholds. Indeed, the correlation between serious violation rates and complaint rates across firms is essentially zero ($r = -0.16$), indicating that firms with higher violation rates are no more likely—and may even be slightly less likely—to generate complaints.

[Figure 3: Violation Quadrants: Are Complaints a Good Signal of Violations?]

In Panel B of Figure 3, we examine the correspondence between serious violations and complaints specifically to regulators. The advantage here is that it is only these forms of complaints that would produce administrative data of the kind used in complaint-based enforcement. The patterns here are particularly striking. All firm-level complaint rates to enforcers are low, resulting in all firms falling within Quadrants 1 and 2. This finding has important implications for enforcement. It suggests that complaint-driven enforcement mechanisms often lack good information about which firms violate labor standards. While the best-fit line in Panel B appears steeper than in Panel A, this is an artifact of different y-axis scales (0-6% in Panel B versus 0-50% in Panel A); the actual correlation remains very weak ($r = 0.12$). Even when restricting attention to complaints filed with enforcement agencies, there is virtually no relationship between a firm's violation rate and its complaint rate.

These results indicate that improving enforcement requires more than simply converting internal complaints to external ones, and point toward two complementary policy directions: implementing more strategic, proactive enforcement that does not rely primarily on complaints, and developing a better understanding of complaint behavior to identify and strengthen the factors that motivate workers to report labor standards violations.

4.4 Barriers to Complaint Behavior

What could potentially explain the violation-complaint gap just discussed? As we reviewed above, the dispute pyramid framework (Felstiner et al., 1981) suggests that, facing a violation, workers may or may not recognize it, and if they do, they may or may not blame the employer and seek remedy. To find reasons for the violation-complaint gap and identify where workers lie in this dispute pyramid, we asked workers who faced a violation but did not complain why they did not file a complaint.

Table 5 presents the distribution of reasons cited by workers who experienced violations but chose not to file complaints. The results reveal several important barriers to complaint behavior. First, knowledge gaps play a meaningful but lesser role than other factors: 8.6% of workers did not recognize that their experience constituted an illegal labor standard violation, while an additional 12.2% knew something was wrong but did not know how to file a complaint. Second, and more prominently, 27.8% of workers thought filing a complaint would be ineffective, the single most common reason for not complaining.

[Table 5: Reasons for Not Complaining Among Workers Who Experienced Violations]

Another reason that workers do not complain is fear of retaliation. Table 5 shows that 23% of workers did not complain about a labor standard violation because they feared retaliation. This

table also breaks down specific forms of retaliation that workers feared, revealing that concerns about economic consequences dominate workers' calculus. Fear of being fired (9%) and fear of reduced hours (9%) are the most frequently cited retaliation concerns, followed by fears of receiving a worse schedule (6%) or being disciplined (6%). Concerns about career progression, such as being denied a promotion (4%) or being demoted (3%), are less common but still present. How well do these fears align with actual retaliation experiences? In Figure 4, we compare the shares of workers who did not complain due to fear of different forms of retaliation to actual experiences of retaliation among those who did complain.

[Figure 4: Comparison of Fear and Actual Retaliation by Type]

Reported retaliation rates among those who complained (47%) exceed the share of non-complainants who cite fear of retaliation (23%). Several factors may contribute to this gap. Workers who complain may do so multiple times, potentially inflating the observed retaliation rate. Selection may also play a role: workers who perceive lower risk are more likely to complain, meaning the 47% rate is observed among those who thought it relatively safe, so actual risk could be higher. Finally, social desirability bias may lead workers to understate their fear of retaliation in hypothetical scenarios.[21]

4.5 Determinants of Complaint Behavior

Given substantial gaps between violations and complaints, and feared and actual retaliation, we now examine factors that may influence workers' complaint behavior. As discussed in our conceptual framework, individual complaint decisions are likely to be affected by the

[21] However, there is an important caveat to this analysis. The samples of workers on the Y and X axes of Figure 4 are different. We only ask workers who did not complain about their fears of retaliation (Y-axis); and we only ask workers who did complain about their experiences of retaliation (X-axis). This constraint prevents comparison of rates in the same sample but still provides valuable insights into the retaliation environment facing workers in these industries.

presence of a collective agent—a union—that can both act on behalf of multiple workers as well as protect against the risks of retaliation in various forms.

Table 6 presents mean complaint rates, conditional on experiencing a violation, across high and low levels of factors that may influence worker voice. For each factor, we split the sample at its median value. We then report rates for all complaints, internal complaints only, and external complaints. The table examines county-level demographic characteristics, union membership, labor organizing activity, and firm-level retaliation environments.

[Table 6: Mean Complaint Rates by Retaliation and Voice-Enhancing Factors]

Several patterns emerge from this bivariate analysis. Most strikingly, union membership shows the strongest association with complaint behavior across all channels. External complaint rates jump from 2% among non-union workers to 17% among union members. This statistically significant difference represents over an eight-fold increase. This substantial effect suggests that collective action through unions provides workers with both protection from retaliation and mechanisms for voicing concerns about workplace violations.

The retaliation environment also shows significant effects for external complaints. Workers in high-retaliation environments have lower external complaint rates, and this difference is statistically significant. There is also a positive relationship between NLRB elections in the county and external complaint rates. This suggests that areas with more labor organizing may foster environments where workers feel empowered to report complaints to enforcement agencies.

Table 7 presents our main multivariate regression results.[22] We control for worker demographics, and include year, state and industry fixed effects. Models (1), (2), and (3) use the

[22] For robustness, we present results for logit models with the same controls in the appendix Table A4. The results are similar between the linear probability models and the logit models.

full sample of workers who faced violations, while models (4), (5), and (6) include firm-level retaliation environment measures, which restrict the sample to firms with more than 25 workers to ensure reliable calculation of these company-level variables.

[Table 7: LPM Regression Results]

Serious violations emerge as significant predictors of complaint behavior across both sets of models; however, their effect on complaints runs through internal complaints, as the coefficient for external complaints is zero. Workers facing serious violations are 9 percentage points more likely to make any complaint and 8 percentage points more likely to make internal complaints in the full sample, compared to those facing less serious violations. This relationship likely reflects the higher benefits, as well as moral considerations, where workers find serious violations unforgivable or unjustifiable.

Union membership demonstrates a distinctive pattern across models. While union members are significantly more likely to make any complaint, they show no significant association with internal-only complaints in models (2) and (5). Instead, union members are substantially more likely to complain externally. This suggests that union members are far more likely to complain; however, when they do, they often bypass internal channels and instead go directly to external enforcement mechanisms. This finding highlights the significance of collective action mechanisms in empowering workers to utilize external voice channels that can prompt enforcement actions.[23]

[23] Appendix Table A5 shows that the union membership coefficient is stable across specifications that sequentially add covariates, suggesting the association is not driven by confounding with observable characteristics. Appendix Table A6 interacts union membership with violation severity measures: the interaction with serious violations is positive and marginally significant for external complaints, while the interaction with three or more violations is negative and marginally significant for any complaint — consistent with union membership lowering the complaint

County-level demographic characteristics reveal interesting patterns. The percentage of immigrants in the county shows negative associations with complaint behavior in some cases, especially when including firm-level environment measures in models (4) through (6). Given the small sample of immigrants in our data, this might not be capturing reduced willingness to complain among immigrant workers in the sample, and possibly reflects non-complying employers' strategic location in areas with socially vulnerable worker populations.

The inclusion of firm-level retaliation environment measures in models (4) through (6) reveals a puzzling pattern that contradicts our bivariate findings. While Table 6 showed that workers in high-retaliation environments had lower external complaint rates (-0.02), the multivariate results show a positive coefficient (+0.1) for external complaints, though the coefficient is not significant. This sign reversal presents a puzzle about the relationship between retaliation and complaint behavior.

5. Conclusion

This paper provides new evidence on labor standards violations and worker complaint behavior using novel survey data collected from national data of retail and food service sector workers. Our findings reveal three key results. First, wage and hour violations are widespread, affecting 38% of workers overall and 31% experiencing serious violations. Violations such as working off the clock and being underpaid for overtime are far more common than minimum wage violations. Second, workers rarely complain about these violations: only 26.5% file any complaint, and just 1.4% file with enforcement agencies. Third, complaints do not reliably signal underlying violations: firms with high violation rates often have low complaint rates, undermining the effectiveness of complaint-based enforcement strategies.

threshold for workers who might not otherwise act, while workers facing extensive violations may already be motivated to complain regardless of union status.

These findings extend previous research on labor standards compliance in important ways. While studies like Bernhardt et al. (2009) documented high violation rates in three cities, our results provide up-to-date and the first national estimates across multiple violation types for key low-wage sectors. Our findings on complaint rates align with Weil & Pyles' (2005) documentation of low industry-level complaint rates to enforcement agencies. We add to this by showing that the pattern holds at the firm level, even when internal complaints are included. Most significantly, we provide the first empirical evidence linking violation and complaint behavior at the firm level, confirming Weil and Pyles' theoretical concern that many high-violation workplaces fall into the problematic "high-violation-low-complaint" quadrant in Table 1.

Our analysis suggests unions are particularly important. While non-union workers have a 2% external complaint rate, union participation is associated with a 15 percentage-point increase in complaint rates, controlling for workers' demographic characteristics and several factors that may influence complaint rates. This represents an eight-fold increase. This finding suggests that collective action provides workers with both the knowledge and protection necessary to report violations to enforcement agencies. However, even among union members, external complaint rates remain relatively low, highlighting the broader challenges facing complaint-based enforcement.

Our results have important implications for labor standards enforcement policy. The substantial gap between violations and complaints, combined with evidence that complaints poorly signal underlying violations, suggests that enforcement strategies relying primarily on worker complaints will systematically miss many violating workplaces. This supports arguments for more proactive, strategic enforcement approaches that do not depend on worker reports. At the same time, policies that strengthen workers' ability to complain safely, such as supporting union

organizing and protecting against retaliation, could help make complaints a better signal of violations.

The findings also point to directions for future research. Understanding why some firms fall into different quadrants of the violation-complaint matrix could inform more targeted enforcement strategies. Furthermore, prior research has been limited by the lack of surveys designed to assess violations across a broad set of wage and hour standards, and by enforcement data that suffers from selection bias due to its reliance on worker complaints. Our approach of measuring labor standards violations and complaints from worker surveys overcomes this important data limitation. It therefore provides a methodological template for studying labor standards violations and complaints across a range of labor standards, assessing enforcement effectiveness in other areas of workplace regulation, and helping build new strategic enforcement tools. Future data collection efforts could further strengthen this approach by designing survey instruments that allow violations to be inferred from sequences of questions, for example, collecting detailed time diaries coupled with information on hours paid to identify work-hour violations.[24]

[24] The trade-off is that more detailed questions would likely require a reduction in sample size or survey approach (e.g. the detailed pay and expenditure diaries used by Morduch & Schneider (2017) in their study of working household financial flows).

6. References

Abraham, K., & Houseman, S. (2022). What Do We Know About Alternative Work Arrangements in the United States? A Synthesis of Research Evidence from Household Surveys, and Administrative Data. https://research.upjohn.org/reports/271

Alexander, C., & Prasad, A. (2013). Bottom Up Workplace Law Enforcement: An Empirical Analysis (SSRN Scholarly Paper No. 2212751). Social Science Research Network. https://papers.ssrn.com/abstract=2212751

Andersson, F., García-Pérez, M., Haltiwanger, J., McCue, K., & Sanders, S. (2014). Workplace Concentration of Immigrants. Demography, 51(6), 2281–2306. https://doi.org/10.1007/s13524-014-0352-3

Antcliff, V., & Saundry, R. (2009). Accompaniment, Workplace Representation and Disciplinary Outcomes in British Workplaces—Just a Formality? British Journal of Industrial Relations, 47(1), 100–121. https://doi.org/10.1111/j.1467-8543.2008.00709.x

Ashenfelter, O., & Smith, R. S. (1979). Compliance with the Minimum Wage Law. Journal of Political Economy, 87(2), 333–350. https://doi.org/10.1086/260759

Azar, J., & Marinescu, I. (2024). Monopsony Power in the Labor Market: From Theory to Policy. Annual Review of Economics, 16(Volume 16, 2024), 491–518. https://doi.org/10.1146/annurev-economics-072823-030431

Badaoui, E., & Walsh, F. (2022). Productivity, non-compliance and the minimum wage. Journal of Development Economics, 155, 102778-. https://doi.org/10.1016/j.jdeveco.2021.102778

Becker, G. S. (1968). Crime and Punishment: An Economic Approach. Journal of Political Economy, 76(2), 169–217. https://doi.org/10.1086/259394

Bemmels, B. (1993). The Determinants of Grievance Initiation. Industrial and Labor Relations Review, 47(2), 285–301.

Bernhardt, A., Milkman, R., & Theodore, N. (2009). Broken laws, unprotected workers. In The American prospect (Vol. 20, Issue 8). The American Prospect, Inc.

Bernhardt, A., Spiller, M. W., & Theodore, N. (2013). Employers Gone Rogue: Explaining Industry Variation in Violations of Workplace Laws. ILR Review, 66(4), 808–832. https://doi.org/10.1177/001979391306600404

Bingham, L. B. (2004). Employment dispute resolution: The case for mediation. Conflict Resol. Q., 22, 145.

Bingham, L., & Chachere, D. (1999). Dispute resolution in employment: The need for research. In Employment dispute resolution and worker rights in the changing workplace. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C33&q=lisa+Bingham+%26+Chachere+1999&btnG=

Blank, R. M., & Card, D. E. (1991). Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation? The Quarterly Journal of Economics, 106(4), 1157–1189. https://doi.org/10.2307/2937960

Boggess, B., Cornejo, J., Theodore, N., & Timm, E. (2017). Build a Better South: Construction Working Conditions in the Southern U.S. Workers Defense Project. https://search.issuelab.org/resource/build-a-better-south-construction-working-conditions-in-the-southern-u-s.html

Budd, J. W., & McCall, B. P. (1997). The Effect of Unions on the Receipt of Unemployment Insurance Benefits. Industrial and Labor Relations Review, 50(3), 478. https://doi.org/10.2307/2525186

Chang, Y.-M., & Ehrlich, I. (1985). On the Economics of Compliance with the Minimum Wage Law. Journal of Political Economy, 93(1), 84–91. https://doi.org/10.1086/261288

Clemens, J., & Strain, M. R. (2022). Understanding "Wage Theft": Evasion and avoidance responses to minimum wage increases. Labour Economics, 79, 102285. https://doi.org/10.1016/j.labeco.2022.102285

Clibborn, S., & Hanna-Osborne, S. (2023). The employer perspective on wage law non-compliance: State of the field and a framework for new understanding. Industrial Relations: A Journal of Economy and Society, 62(4), 411–438. https://doi.org/10.1111/irel.12333

Cohen, L., Gurun, U., & Ozel, N. B. (2023). Too Many Managers: The Strategic Use of Titles to Avoid Overtime Payments (Working Paper No. 30826). National Bureau of Economic Research. https://doi.org/10.3386/w30826

Colvin, A. J. S. (2003). The Dual Transformation of Workplace Dispute Resolution. Industrial Relations: A Journal of Economy and Society, 42(4), 712–735. https://doi.org/10.1111/1468-232X.00312

Cooper, D., & Kroeger, T. (2017). Employers steal billions from workers' paychecks each year. Economic Policy Institute. https://www.epi.org/publication/employers-steal-billions-from-workers-paychecks-each-year/

Dahl, G. B., & Knepper, M. (2023). Age Discrimination across the Business Cycle. American Economic Journal: Economic Policy, 15(4), 75–112. https://doi.org/10.1257/pol.20210169

Dahl, G. B., & Knepper, M. (2026). Why Is Workplace Sexual Harassment Underreported? The Value of Outside Options amid the Threat of Retaliation. American Economic Review, 116(3), 897–933. https://doi.org/10.1257/aer.20221703

Ehrenberg, R. G., & Schumann, P. L. (1981). Compliance with the Overtime Pay Provisions of the Fair Labor Standards Act (No. W0815). National Bureau of Economic Research. https://doi.org/10.3386/w0815

Feld, B. (2024). Direct and Spillover Effects of Enforcing Labor Standards: Evidence from Argentina. Journal of Human Resources, 59(5), 1503–1534. https://doi.org/10.3368/jhr.0221-11490R2

Felstiner, W. L. F., Abel, R. L., & Sarat, A. (1981). The Emergence and Transformation of Disputes: Naming, Blaming, Claiming . . . Law & Society Review, 15(3–4), 631–654. https://doi.org/10.2307/3053505

Fine, J. (2017). New Approaches to Enforcing Labor Standards: How Co-enforcement Partnerships between Government and Civil Society Are Showing the Way Forward. University of Chicago Legal Forum.

Fine, J., & Gordon, J. (2010). Strengthening Labor Standards Enforcement through Partnerships with Workers' Organizations. Politics & Society, 38(4), 552–585.

https://doi.org/10.1177/0032329210381240

Fine, J., J. Galvin, D., Round, J., & Shepherd, H. (2021). Wage Theft in a Recession: Unemployment, Labour Violations, and Enforcement Strategies for Difficult Times. International Journal of Comparative Labour Law and Industrial Relations, 37(Issue 2/3), 107–132. https://doi.org/10.54648/IJCL2021006

Flanagan, J. (2020). Alt-Enforcers: The Emergence Of State Attorneys General As Workplace Rights Enforcers. Chicago-Kent Law Review, 95(1), 103.

Fry, R., & Lindsay, L. (1997). The Incidence of Subminimum Pay among Native and Immigrant Workers. Population Research and Policy Review.

Gallup. (2025). The American Job Quality Study: 2025 State of the U.S. Labor Force. Jobs for the Future; Gallup; The Families & Workers Fund; W.E. Upjohn Institute for Employment Research.

Galvin, D. J. (2016). Deterring Wage Theft: Alt-Labor, State Politics, and the Policy Determinants of Minimum Wage Compliance. Perspectives on Politics, 14(2), 324–350. https://doi.org/10.1017/S1537592716000050

Galvin, D., Round, J., & Fine, J. (2020). A Roadmap for Strategic Enforcement: Complaints and Compliance with San Francisco's Minimum Wage | Rutgers School of Management and Labor Relations. https://smlr.rutgers.edu/wjl-ru/beyond-bill-studies-SF

Garnero, A. (2018). The dog that barks doesn't bite: Coverage and compliance of sectoral minimum wages in Italy. IZA Journal of Labor Policy, 7(1). https://doi.org/10.1186/s40173-018-0096-6

Gerstein, T. (2020). State and Local Workers' Rights Innovations: New Players, New Laws, New Methods of Enforcement. Saint Louis University Law Journal, 65(1). https://scholarship.law.slu.edu/lj/vol65/iss1/5

Grenier, G. (1982). On Compliance with the Minimum Wage Law. Journal of Political Economy, 90(1), 184–187. https://doi.org/10.1086/261048

Grittner, A., & Johnson, M. (2021). When Labor Enforcement and Immigration Enforcement Collide: Deterring Worker Complaints Worsens Workplace Safety. Upjohn Institute Working Papers.

https://doi.org/10.17848/wp21-353

Gutelius, B., & Pinto, S. (2024). Handling Hardship: Data on Economic Insecurity Among Amazon Warehouse Workers [Report]. University of Illinois Chicago. https://doi.org/10.25417/uic.25823068.v1

Hamermesh, D. S., & Trejo, S. J. (2000). The Demand for Hours of Labor: Direct Evidence from California. Review of Economics and Statistics, 82(1), 38–47. https://doi.org/10.1162/003465300558614

Hoffmann, F., Lee, D. S., & Lemieux, T. (2020). Growing Income Inequality in the United States and Other Advanced Economies. Journal of Economic Perspectives, 34(4), 52–78. https://doi.org/10.1257/jep.34.4.52

Howell, D. R., & Kalleberg, A. L. (2019). Declining Job Quality in the United States: Explanations and Evidence. RSF: The Russell Sage Foundation Journal of the Social Sciences, 5(4), 1–53. https://doi.org/10.7758/RSF.2019.5.4.01

Jayaraman, S., Dropkin, J., Siby, S., Alston, L. R., & Markowitz, S. (2011). Dangerous dining: Health and safety in the New York City restaurant industry. Journal of Occupational and Environmental Medicine, 53(12), 1418–1424. https://doi.org/10.1097/JOM.0b013e3182363b9f

Ji, M., & Weil, D. (2015). The Impact of Franchising on Labor Standards Compliance. ILR Review, 68(5), 977–1006. https://doi.org/10.1177/0019793915586384

Johnson, M. S. (2020). Regulation by Shaming: Deterrence Effects of Publicizing Violations of Workplace Safety and Health Laws. American Economic Review, 110(6), 1866–1904. https://doi.org/10.1257/aer.20180501

Johnson, M. S., Levine, D. I., & Toffel, M. W. (2023). Improving Regulatory Effectiveness through Better Targeting: Evidence from OSHA. American Economic Journal: Applied Economics, 15(4), 30–67. https://doi.org/10.1257/app.20200659

Kleiner, M. M., Nickelsburg, G., & Pilarski, A. (1995). Monitoring, Grievances, and Plant Performance. Industrial Relations: A Journal of Economy and Society, 34(2), 169–189.

https://doi.org/10.1111/j.1468-232X.1995.tb00367.x

Kleiner, M. M., & Weil, D. (2012). Evaluating the effectiveness of National Labor Relations Act remedies: Analysis and comparison with other workplace penalty policies. https://www.elgaronline.com/edcollchap/edcoll/9781849801010/9781849801010.00013.xml

Krueger, A. B., & Burton, J. F. (1990). The Employers' Costs of Workers' Compensation Insurance: Magnitudes, Determinants, and Public Policy. The Review of Economics and Statistics, 72(2), 228. https://doi.org/10.2307/2109712

Lewin, D. (2005). Unionism and employment conflict resolution: Rethinking collective voice and its consequences. Journal of Labor Research, 26(2), 209–239. https://doi.org/10.1007/s12122-005-1023-3

Lewin, D., & Peterson, R. B. (1988). The modern grievance procedure in the United States. Quorum Books.

Maestas, N., Mullen, K. J., Powell, D., von Wachter, T., & Wenger, J. B. (2017). Working Conditions in the United States: Results of the 2015 American Working Conditions Survey (RR-2014). RAND Corporation.

Morantz, A. D. (2013). Coal Mine Safety: Do Unions Make a Difference? ILR Review, 66(1), 88–116. https://doi.org/10.1177/001979391306600104

Morduch, J. & R. Schneider. (2017). The financial diaries: How Americans cope in a world of uncertainty. Princeton University Press

Olson-Buchanan, J. B., & Boswell, W. R. (2002). The role of employee loyalty and formality in voicing discontent. Journal of Applied Psychology, 87(6), 1167–1174. https://doi.org/10.1037/0021-9010.87.6.1167

Poydock, M., & Zhang, J. (Sonia). (2024). More than $1.5 billion in stolen wages recovered for workers between 2021 and 2023. Economic Policy Institute. https://www.epi.org/publication/wage-theft-2021-23/

Schneider, D., & Harknett, K. (2022). What's to Like? Facebook as a Tool for Survey Data Collection.

Sociological Methods & Research, 51(1), 108–140. https://doi.org/10.1177/0049124119882477

Schneider, D., & Harknett, K (2019). Consequences of Routine Work Schedule Instability for Worker Health and Well-Being. American Sociological Review 84(1): 82-114.

Shierholz, H. (2018). Low Wages and High Stakes: How Eroding Labor Standards Contribute to Inequality (Policy Proposal 2018-07). The Hamilton Project, Brookings Institution.

Smith, R. S. (1986). Greasing the Squeaky Wheel: The Relative Productivity of OSHA Complaint Inspections. Industrial and Labor Relations Review, 40(1), 35. https://doi.org/10.2307/2523944

Snider, E. M. (2010). The FLSA Antiretaliation Provision: Defining the Outer Contours of What Constitutes an Employee Complaint. Iowa Law Review, 96(1), 385–408.

Sockin, J., Sojourner, A., & Starr, E. P. (2022). Non-Disclosure Agreements and Externalities from Silence. Academy of Management Proceedings, 2022(1), 15402. https://doi.org/10.5465/AMBPP.2022.15402abstract

Sojourner, A., & Yang, J. (2022). Effects of Union Certification on Workplace-Safety Enforcement: Regression-Discontinuity Evidence. ILR Review, 75(2), 373–401. https://doi.org/10.1177/0019793920953089

Sokolova, A., & Sorensen, T. (2021). Monopsony in Labor Markets: A Meta-Analysis. ILR Review, 74(1), 27–55. https://doi.org/10.1177/0019793920965562

Stansbury, A. (2021). Do US Firms Have an Incentive to Comply with the FLSA and the NLRA? (Working Paper 21-9). Peterson Institute for International Economics (PIIE). https://www.piie.com/publications/working-papers/do-us-firms-have-incentive-comply-flsa-and-nlra

Stansbury, A. (2025). Incentives to Comply with the Minimum Wage in the United States and the United Kingdom. ILR Review, 78(1), 190–216. https://doi.org/10.1177/00197939241299417

Sternlight, J. (2015). Disarming Employees: How American Employers are Using Mandatory Arbitration to Deprive Workers of Legal Protection. Brooklyn Law Review, 80(4). https://brooklynworks.brooklaw.edu/blr/vol80/iss4/3

Trejo, S. J. (1991). The Effects of Overtime Pay Regulation on Worker Compensation. The American Economic Review, 81(4), 719–740.

Trejo, S. J. (2003). Does the Statutory Overtime Premium Discourage Long Workweeks? Industrial and Labor Relations Review, 56(3), 530. https://doi.org/10.2307/3590923

Tung, I., Leberstein, S., & Connolly, C. (2015). Upholding Labor Standards in Home Care: How to Build Employer Accountability Into America's Fastest-Growing Jobs. https://www.nelp.org/insights-research/upholding-labor-standards-in-home-care-how-to-build-employer-accountability-into-americas-fastest-growing-jobs/

Walker, B., & Hamilton, R. T. (2011). Employee–Employer Grievances: A Review. International Journal of Management Reviews, 13(1), 40–58. https://doi.org/10.1111/j.1468-2370.2010.00283.x

Weil, D. (1991). Enforcing OSHA: The Role of Labor Unions. Industrial Relations: A Journal of Economy and Society, 30(1), 20–36. https://doi.org/10.1111/j.1468-232X.1991.tb00773.x

Weil, D. (1999). Are Mandated Health and Safety Committees Substitutes for or Supplements to Labor Unions? Industrial and Labor Relations Review, 52(3), 339. https://doi.org/10.2307/2525139

Weil, D. (2001). Assessing OSHA Performance: New Evidence from the Construction Industry. Journal of Policy Analysis and Management, 20(4), 651–674. https://doi.org/10.1002/pam.1022

Weil, D. (2005). Individual Rights and Collective Agents: The Role of Old and New Workplace Institutions in the Regulation of Labor Markets. In R. B. Freeman, J. Hersch, & L. M. Mishel (Eds.), Emerging Labor Market Institutions for the Twenty-First Century (p. 0). University of Chicago Press. https://doi.org/10.7208/chicago/9780226261812.003.0002

Weil, D. (2018). Creating a strategic enforcement approach to address wage theft: One academic's journey in organizational change. Journal of Industrial Relations, 60(3), 437–460. https://doi.org/10.1177/0022185618765551

Weil, D., & Pyles, A. (2005). Why complain? Complaints, compliance, and the problem of enforcement in the U.S. workplace. Comparative Labor Law & Policy Journal, 27(1), 59–92.

Woodrow, C., & Guest, D. E. (2014). When good HR gets bad results: Exploring the challenge of HR

implementation in the case of workplace bullying. Human Resource Management Journal, 24(1), 38–56. https://doi.org/10.1111/1748-8583.12021

Yaniv, G. (1994). Complaining about noncompliance with the minimum wage law. International Review of Law and Economics, 14(3), 351–362. https://doi.org/10.1016/0144-8188(94)90049-3

Figures

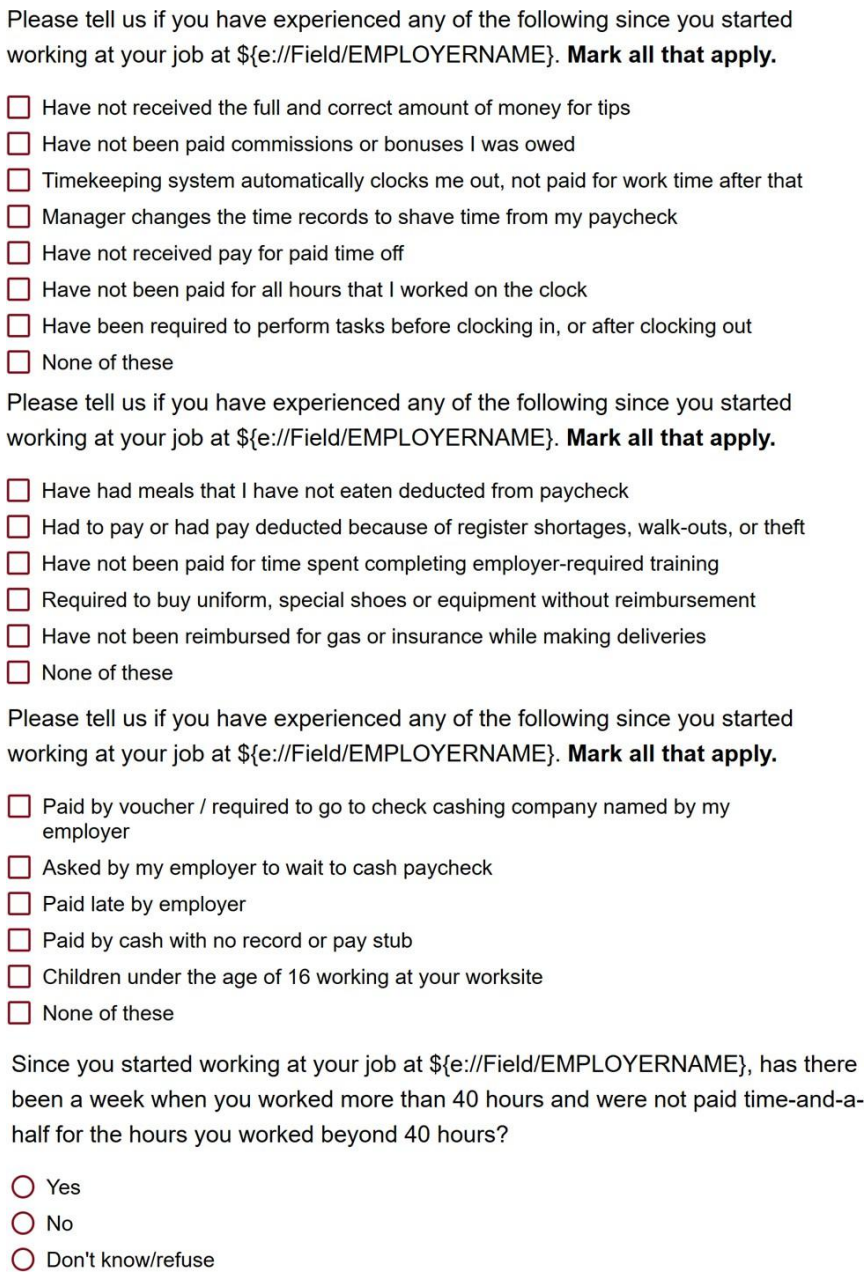


Figure 1: Survey questions about labor standards violations on the Shift Project survey.

Note: The Shift Project labor standards module was developed to measure potential Fair Labor Standards Act violations based on workers' direct reports of workplace experiences in the prior 12 months (or since job start for those with less than 12 months tenure). The module covers pay, hours, work requirements, and employer practices that are directly observable by workers. Responses were compared against FLSA provisions to assess compliance. This module was fielded in Shift Project survey waves 15, 16, and 17.

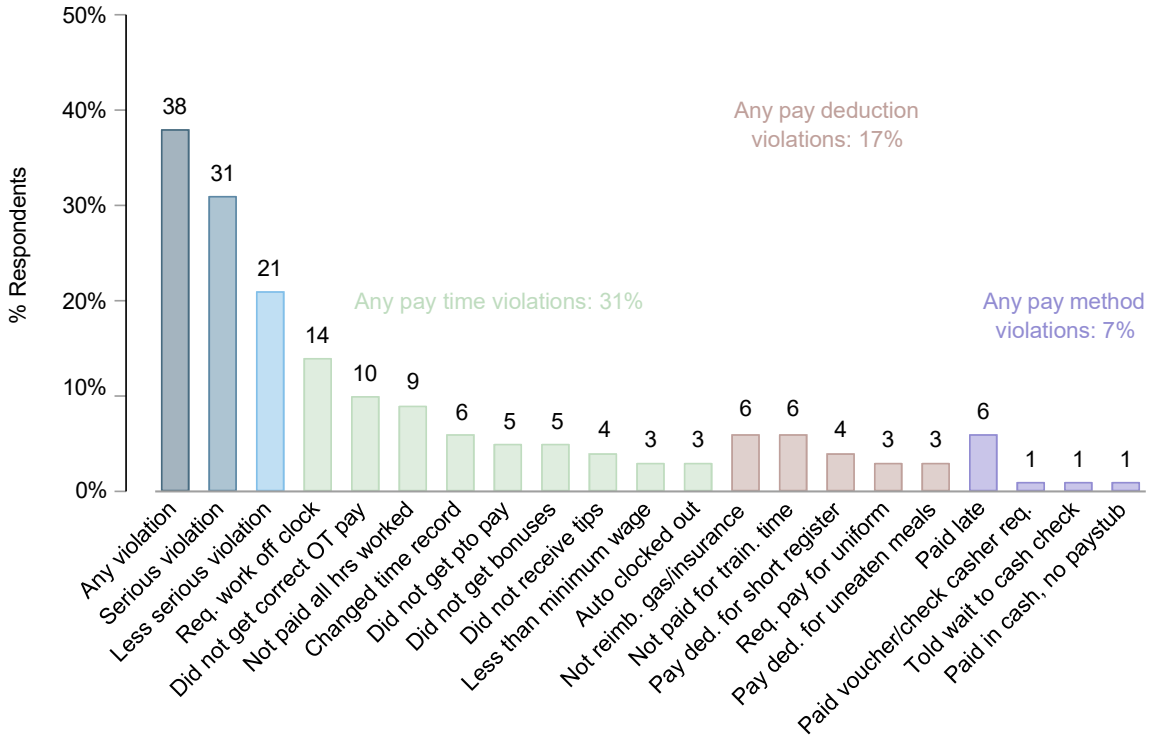
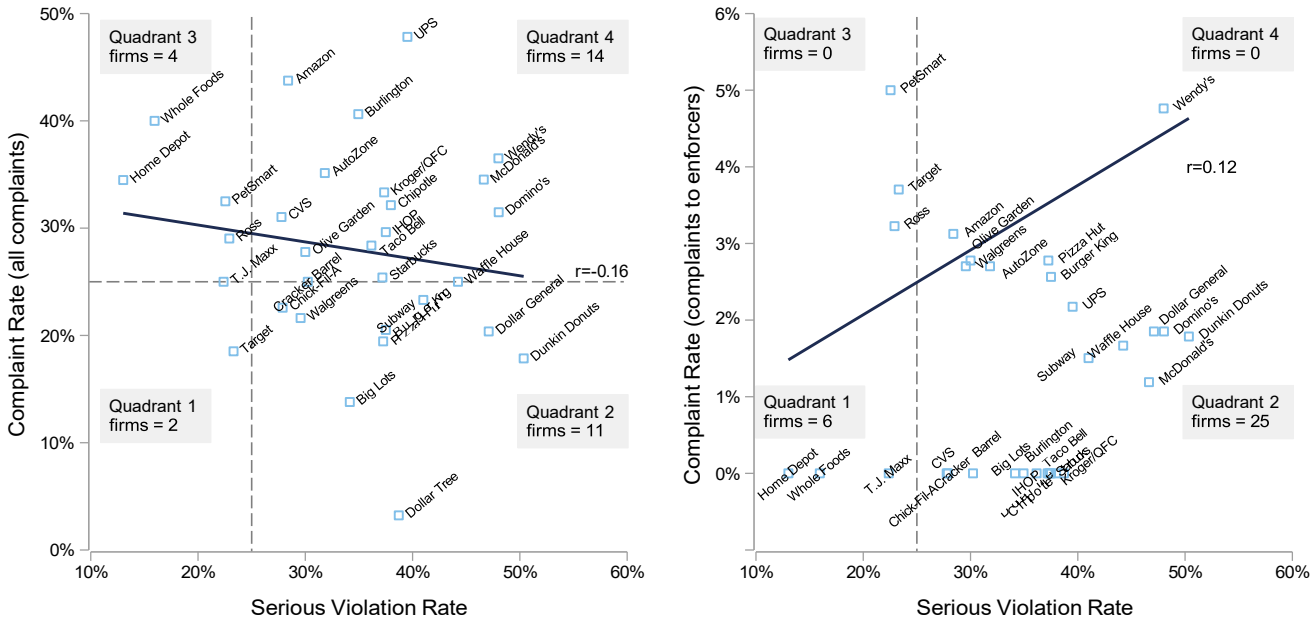


Figure 2: Incidence of Wage and Hours Violations

Note: Observations = 17,401 hourly workers [Sample A as defined in Appendix Table A1]. This figure presents the breakdown of wage and hours violations by type of violation. The sample comprises respondents who meet all of the following criteria: (1) are paid hourly and report hourly wage; (2) report less than $50 per hour in tips (exclusion of outliers); (3) have non-missing values for at least one wage and hours violation question (i.e., main sample). The "required to pay for uniform" violation is calculated under the assumption of a price of workers' uniforms of $30. Serious violations include being required to perform tasks before clocking in or after clocking out (req. work off clock), not being paid for all hours worked on the clock (not paid all hrs worked), not received full and correct amount of money from tips (didn't receive tips), timekeeping system automatically clocks out with no pay after that (auto clocked out), manager changed time record (changed time record), not been paid commissions or bonuses owed (didn't get bonuses), not received pay for paid time off (didn't get PTO pay), and not paid time and a half for overtime (didn't get correct OT pay). Less serious violations include required to buy uniform or special equipment causing pay to fall below minimum wage (req. pay for uniform), not paid for training time, meals not eaten deducted from paycheck (pay ded. for uneaten meals), not reimbursed gas/insurance, pay deductions for short register, paid late, paid by voucher or required to go to check cashing company (paid voucher/check casher req.), asked to wait to cash paycheck (told wait to cash check), and paid by cash with no record (paid in cash, no paystub).



((a)) All Complaints (0-50% scale)

((b)) Complaints to Enforcers (0-6% scale)

Figure 3: Violation Quadrants: Are Complaints a Good Signal of Violations?

Note: These figures illustrate the relationship between complaint rates (y-axis) and violation rates (x-axis) for 31 firms using 2024 data. The panels use different y-axis scales to enhance readability. Panel A shows all complaints. Panel B shows complaints to enforcers only. Baseline samples comprise 8,101 hourly workers (Sample B as defined in Appendix Table A1) and 2,201 hourly workers who faced a violation and answered questions about complaint behavior (Sample D as defined in Appendix Table A1). Firm-level rates are computed only for firms with more than 25 workers in both samples. This yields 4,535 observations in the violation rate sample (x-axis) and 1,423 in the complaint rate sample (y-axis). Quadrants split firms into above or below the 25% complaint and violation rates. Dashed lines represent the borders of the quadrants, and each point represents a firm. All firm-level complaint rates in Panel B are low, so all firms fall in Quadrants 1 and 2.

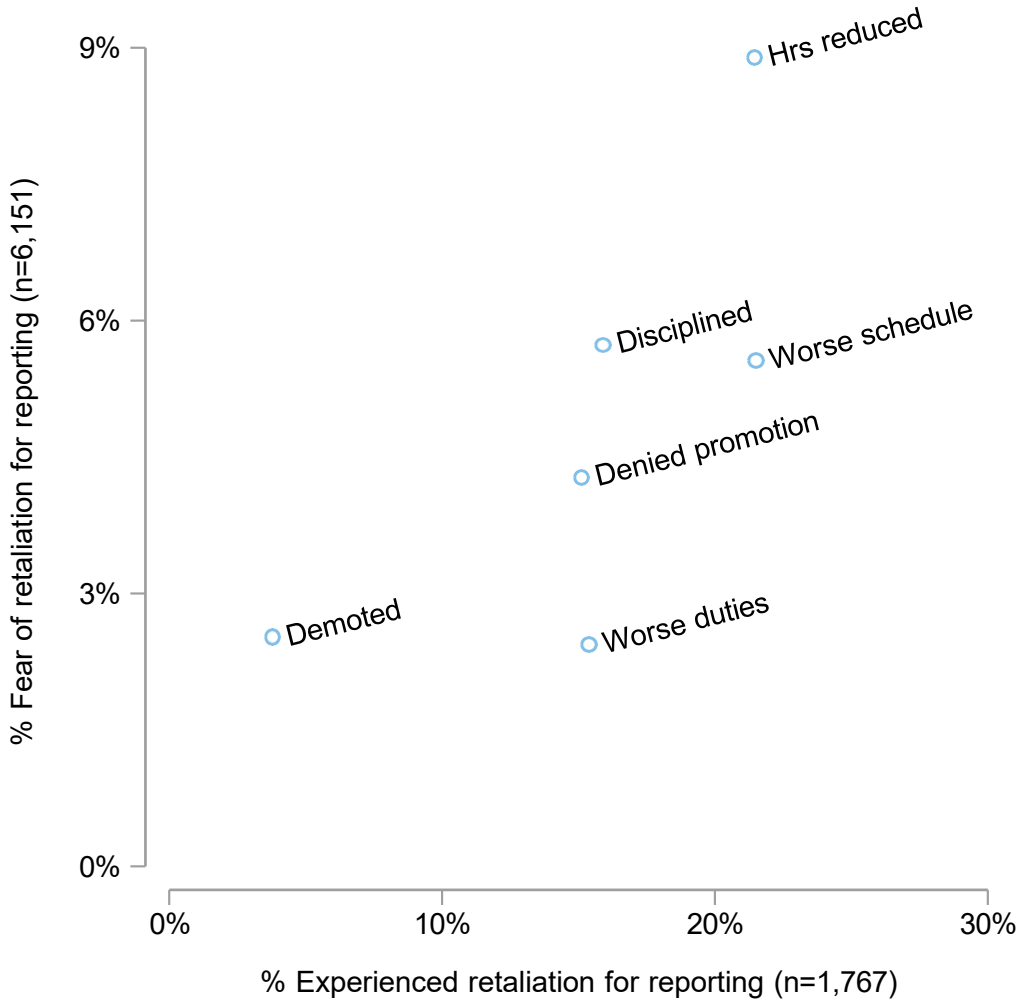


Figure 4: Comparison of Fear and Actual Retaliation by Type

Note: This figure compares the percentage of workers who feared specific types of retaliation (y-axis) with those who actually experienced these types of retaliation (x-axis) after making a complaint. Each point represents a different type of retaliation, such as being demoted or having hours reduced. The percentages on the y-axis are based on responses from workers who faced a labor standard violation, did not file a complaint, and answered all questions regarding their fear of retaliation (Observations = 6,151, Sample H as defined in Appendix Table A1). Among the workers in this sample, 22% faced a violation and did not report it out of fear of some form of retaliation. The percentages on the x-axis are derived from those who faced a labor standard violation, filed a complaint, and responded to all questions about their experiences with retaliation (Observations = 1,767, Sample I as defined in Appendix Table A1). Of this sample of workers, 47% faced some form of retaliation.

Tables

Table 1: Complaint vs compliance matrix

	Low Noncompliance	**High Noncompliance**
High Complaint Rate	QUADRANT 3	QUADRANT 4
Low Complaint Rate	QUADRANT 1	QUADRANT 2

Table 2: Description of Variables Used in the Regression Analysis

Variable	Description	Source
Cty % Immigrant	County share of immigrant population (ACS 2023 5-year estimate)	ACS (IPUMS NHGIS)
Cty Unemployment	County unemployment rate (yearly, BLS)	BLS
Union member	Self-reported union membership	Shift Project Survey
Fear environment	Percent of workers in company that did not complain about a violation due to fear of retaliation - sample of workers who faced violation but did not complain (companies w/ >25 workers in sample), company level	Shift Project Survey (authors' calculations)
Retaliation environment	Percent of workers in company that faced retaliations after complaining about a violation - sample of workers who faced violation and did complain (companies w/ >25 workers in sample), company level	Shift Project Survey (authors' calculations)
Cty deportations per 100k immigr	Number of deported people in the period 2021-2023 per 100k immigrants, county level	TRAC Immigration Data, Syracuse University
Cty NLRB elect per 100k inh	County NLRB elections per 100k inhabitants - Number of RC NLRB elections per 100k inhabitants in the 2021 to 2024 period, county level	Warehouse of Government Labor Data, compiled by Forest Gregg and available at https://labordata.bunkum.us/ (accessed on 12/2/2025)
Ct w/ deport and % imm above median	Counties above median on both the Number of deportations variable and the County Percent Immigrant variable	Authors' calculations

Table 3: Descriptive Statistics for the Baseline Sample Used in Regression Analysis

	N	Mean	SD	Percentile 10	Median	Percentile 90
Cty % Immigrant	2,201	0.06	0.04	0.01	0.05	0.13
Cty Unemployment	2,201	3.99	0.95	2.94	3.89	5.36
Union member	2,201	0.09	0.28	0.00	0.00	0.00
Fear environment	1,919	0.24	0.07	0.15	0.25	0.31
Retaliation environment	1,202	0.47	0.10	0.36	0.46	0.62
Cty deportations per 100k immigr	2,201	725.14	794.59	134.00	514.00	1471.00
Ct w/ deport and % imm above median	2,201	0.28	0.45	0.00	0.00	1.00
Cty NLRB elect per 100k inh	2,201	6.63	5.66	1.00	5.00	14.00

Note: This table presents descriptive statistics for the sample of workers who faced a violation and responded to questions about their complaint behavior. Fear environment and retaliation environment variables have smaller sample sizes because we only calculate them for workers employed at companies with more than 25 workers in the respective samples (violation sample for Fear environment, complaint sample for Retaliation environment). (See Samples D, E, and F as defined in Appendix Table A1.) These represent the samples for the regression analysis conducted in this paper.

Table 4: Complaint Frequency Across Reporting Channels Conditional on Type and Number of Violations

	Any violation	Serious violation	One	Two	Three+
Complained	26.5%	28.3%	15.8%	29.5%	31.9%
Internally	25.7%	27.3%	15.1%	28.7%	31.2%
Coworkers	6.2%	7.0%	3.0%	6.5%	6.9%
Supervisor	18.9%	19.9%	11.2%	20.7%	20.7%
Management	13.8%	14.8%	6.6%	14.9%	19.6%
Grievance procedure	2.9%	3.1%	1.0%	3.0%	2.9%
HR department	7.4%	7.8%	4.4%	7.5%	10.9%
Externally	2.9%	3.0%	1.7%	2.2%	3.3%
To any government agency	1.4%	1.5%	0.7%	0.9%	2.5%
City/County	0.6%	0.5%	<0.5%	<0.5%	1.1%
State	0.6%	0.6%	<0.5%	<0.5%	1.1%
Federal	0.8%	0.8%	0.6%	<0.5%	0.7%
To third party	1.7%	1.7%	1.1%	1.3%	1.1%
Union	1.6%	1.7%	1.1%	1.3%	1.1%
Nonprofit	<0.5%	<0.5%	<0.5%	<0.5%	<0.5%
Observations	2,201	1,772	1,053	464	276

Note: This table presents the breakdown of complaint behavior as a share of the number of workers who faced a violation and answered questions about their complaint behavior. The first column represents the baseline sample of workers who faced a violation and answered questions regarding their complaint behavior (Sample D as defined in Appendix Table A1). The subsequent columns represent subsamples of these workers: the second column includes those who faced a serious violation, while the remaining columns categorize workers by the total number of violations faced (one, two, or three or more violations).

Table 5: Reasons for Not Complaining Among Workers Who Experienced Violations

	% of workers
Didn't know how	12.2%
Didn't know illegal	8.6%
Thought ineffective	27.8%
Fear of retaliation	22.9%
Of which:	
Worse schedule	5.6%
Worse duties	2.4%
Reduced hours	8.9%
Disciplined	5.7%
Demoted	2.5%
Fired	9.1%
Denied promotion	4.3%
Worse tasks	2.5%
Observations	6,151

Note: This table presents the distribution of reasons cited by workers who experienced wage and hour violations but chose not to file complaints. Workers could select multiple reasons, so percentages do not sum to 100%. The "Fear of retaliation" category shows the overall percentage of workers who cited fear of any form of retaliation, with specific retaliation types shown in the breakdown below. (Observations = 6,151, Sample H as defined in Appendix Table A1).

Table 6: Mean Complaint Rates by Retaliation and Voice-Enhancing Factors

	Complaint			Internal Complaint Only			External Complaint		
	Low	High	Diff	Low	High	Diff	Low	High	Diff
Cty % Immigrant	0.27	0.26	-0.02	0.25	0.22	-0.03	0.02	0.03	0.01
	(0.27)	(0.45)		(0.23)	(0.43)		(0.03)	(0.15)	
		n= 2201			n= 2201			n= 2201	
Cty deportations per 100k immigr	0.26	0.28	0.02	0.23	0.24	0.01	0.03	0.03	0.01
	(0.27)	(0.44)		(0.23)	(0.42)		(0.03)	(0.16)	
		n= 2201			n= 2201			n= 2201	
Fear environment	0.27	0.26	-0.01	0.24	0.22	-0.02	0.03	0.03	0.01
	(0.26)	(0.44)		(0.23)	(0.43)		(0.03)	(0.16)	
		n= 1919			n= 1919			n= 1919	
Retaliation environment	0.28	0.29	0.01	0.23	0.26	0.03	0.05	0.03	-0.02 **
	(0.28)	(0.45)		(0.24)	(0.42)		(0.04)	(0.21)	
		n= 1202			n= 1202			n= 1202	
Union member	0.25	0.43	0.18 ***	0.23	0.25	0.02	0.02	0.17	0.15 ***
	(0.27)	(0.43)		(0.23)	(0.42)		(0.03)	(0.12)	
		n= 2201			n= 2201			n= 2201	
Cty NLRB elect per 100k inh	0.28	0.25	-0.02	0.25	0.22	-0.03 *	0.02	0.04	0.02 **
	(0.27)	(0.45)		(0.23)	(0.43)		(0.03)	(0.14)	
		n= 2201			n= 2201			n= 2201	

Note: This table presents mean complaint rates across high and low levels of factors hypothesized to influence worker voice through retaliation or voice-enhancing mechanisms. For each factor, the sample is split at the median (e.g., above or below median county % immigrant), with "High" and "Low" referring to observations above and below or on the median, respectively. We report complaint rates for: (1) any complaint, (2) internal complaints only, and (3) external complaints regardless of internal filing. "Cty % Immigrant" is the percentage of county population that is immigrant. "Cty deportations per 100k immigr" is deportations per 100,000 immigrants in the county. "Union member" indicates self-reported union membership. "Cty NLRB elect per 100k inh" is NLRB elections per 100,000 county inhabitants, proxying organized labor activity. "Fear environment" measures the percentage of workers in companies who did not complain about violations due to fear of retaliation, while "Retaliation environment" measures the percentage who faced retaliation after complaining, both calculated at the company level for companies with more than 25 workers in their respective samples. Standard deviations appear in parentheses; differences and statistical significance are reported. Samples used are D, E, and F as defined in Appendix Table A1.

Table 7: LPM Regression Results

	(1)	(2)	(3)	(4)	(5)	(6)
	Complaint	Internal Complaint Only	External Complaint	Complaint	Internal Complaint Only	External Complaint
Serious FLSA violation	0.09***	0.08***	0.00	0.12***	0.12***	-0.00
	(0.02)	(0.02)	(0.01)	(0.03)	(0.03)	(0.01)
Three or more violations	0.04*	0.04	0.01	0.05	0.05	-0.00
	(0.02)	(0.03)	(0.01)	(0.03)	(0.04)	(0.01)
Cty % Immigrant	-0.28	-0.21	-0.08	-1.01***	-0.95***	-0.09
	(0.27)	(0.25)	(0.09)	(0.31)	(0.29)	(0.14)
Cty Unemployment	-0.01	-0.01	0.00	-0.00	-0.01	0.01
	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
Union member	0.17***	0.02	0.14***	0.16***	0.01	0.14***
	(0.04)	(0.05)	(0.03)	(0.05)	(0.06)	(0.04)
High deport & high immigrant share	-0.01	-0.01	0.01	-0.01	-0.02	0.02
	(0.03)	(0.03)	(0.01)	(0.04)	(0.04)	(0.02)
Cty deportations per 100k immigr	0.00	0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Cty NLRB elect per 100k inh	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Fear environment				0.15	0.06	0.04
				(0.26)	(0.24)	(0.10)
Retaliation environment				0.11	0.08	0.04
				(0.14)	(0.14)	(0.04)
Baseline Complaint Rate	0.27	0.23	0.03	0.27	0.23	0.03
Observations	2,201	2,201	2,201	1,202	1,202	1,202
Adjusted R-squared	0.025	0.009	0.086	0.036	0.016	0.128
Other Controls	Worker's Demog	Worker's Demog	Worker's Demog	Worker's Demog	Worker's Demog	Worker's Demog
Fixed Effects	Year, State and Industry	Year, State and Industry	Year, State and Industry	Year, State and Industry	Year, State and Industry	Year, State and Industry

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Note: This table presents our main regression results. The dependent variables are: (1) whether a worker made a complaint (Complaint), (2) whether the worker made a complaint only internal to the firm (Internal Complaint Only), and (3) whether the worker made a complaint externally, irrespective of whether it was also made internally (External Complaint). These regressions are estimated with year, industry, and state fixed effects. Serious violations include working off the clock, underpayment of hours, tip withholding, automatic clock-out, managerial time alterations, unpaid commissions, withheld PTO pay, and unpaid overtime. The category "Three or more violations" refers to instances of facing three or more labor standards violations. "Cty % Immigrant" corresponds to the percentage of the county population that is immigrant, while "Cty Unemployment" indicates the unemployment level in the county. "Union member" indicates self-reported union membership. Cty NLRB elect per 100k inh indicates the number of NLRB elections held per 100,000 inhabitants in the county. The variable 'Ct w/ deport and % imm above median' indicates counties with levels of deportations and percentage of immigrants in population above median. Cty deportations per 100k immigr is the number of deportations per 100,000 immigrants in the county. The worker's demographic controls are gender, age, race, and educational attainment. "Fear environment" measures the percentage of workers in the company who did not complain about a violation due to fear of retaliation (among workers who faced violations but did not complain), while "Retaliation environment" measures the percentage of workers in the company who faced retaliation after complaining about a violation (among workers who faced violations and did complain), both calculated at the company level for companies with more than 25 workers in the sample. Models (1), (2), and (3) use Sample D, and models (4), (5), and (6) use the intersection of Samples E and F as defined in Appendix Table A1.

Appendix

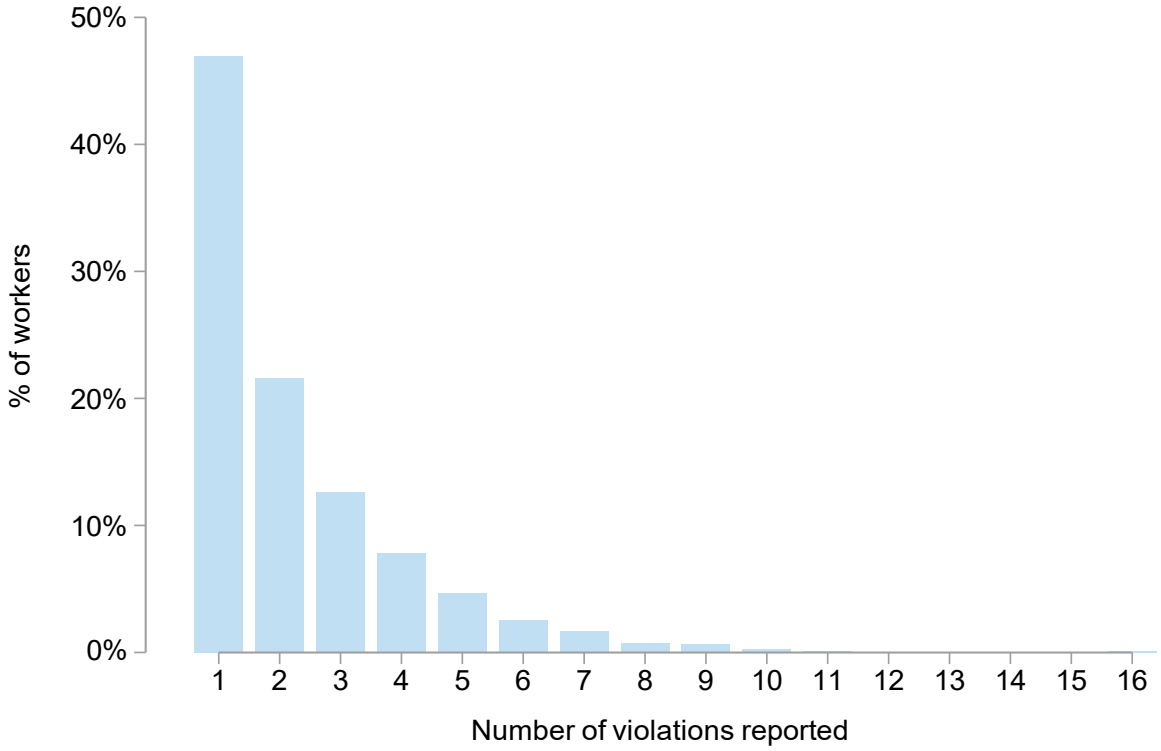


Figure A1: Distribution of Number of Violations Reported

Note: Observations = 6,633 hourly workers who reported at least one violation [subset of Sample A as defined in Appendix Table A1]. This figure shows the distribution of the number of wage and hours violations reported by workers who experienced at least one violation. The distribution is heavily right-skewed: the mean number of violations is 2.3, the 5th percentile is 1, and the 95th percentile is 6. Nearly half (47%) of workers who reported a violation reported only one, and over two-thirds reported two or fewer. This pattern is inconsistent with the hypothesis that respondents are indiscriminately selecting violations to express general job dissatisfaction, as such behavior would produce a distribution concentrated at higher violation counts.

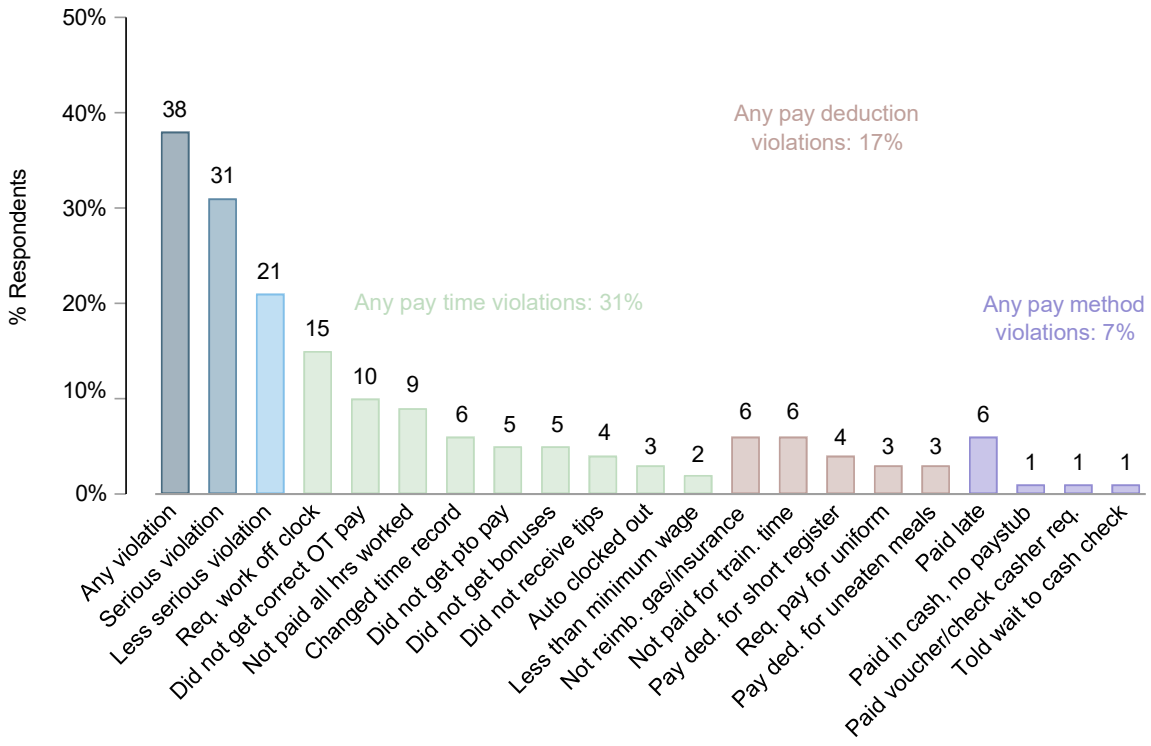


Figure A2: Incidence of Wage and Hours Violations: Attention Check Sample

Note: Observations = 15,920 hourly workers who passed the survey attention check [subset of Sample A as defined in Appendix Table A1]. This figure reproduces Figure 2 restricting the sample to the 91.6% of respondents who correctly answered the embedded attention check question. The overall violation rate is 38%, virtually identical to the 38% in the full sample. Individual violation rates are also nearly unchanged, with only minor differences of at most one percentage point (e.g., "Req. work off clock" rises from 14% to 15%, and "Less than minimum wage" falls from 3% to 2%). These results indicate that inattentive respondents do not meaningfully inflate reported violation rates.

Table A1: Samples Used Across Figures and Tables

Sample	Inclusion Criteria	Years	N	Used In
A	(1) Paid hourly and report hourly wage; (2) Report less than $50/hour in tips; (3) Non-missing values for at least one violation question	2023 & 2024	17,401	Figure 2; Appendix Table A2 (Column 1)
B	Same as Sample A	2024 only	8,101	Appendix Table A2 (Column 2); Serious violation rates (X-axes) in Figure 3
C	Same as Sample A + Answered questions about hypothetical complaint behavior	2024 only	8,099	Appendix Figure A3
D	Same as Sample A + Faced a violation + Answered complaint behavior questions	2024 only	2,201	Table 3; Tables 4, 6, 7, A4, Complaint rates (y-axes) in Figure 3
E	Same as Sample D + Worker employed at company with >25 workers in violation sample (for Fear environment calculation)	2024 only	1,919	Tables 6, 7, A4 (regressions including Fear environment)
F	Same as Sample D + Worker employed at company with >25 workers in complaint sample (for Retaliation environment calculation)	2024 only	1,202	Tables 6, 7, A4 (regressions including Fear environment and retaliation environment)
G	Same as Sample A + Faced serious violation + Answered questions about actual and hypothetical complaint behavior	2024 only	1,770	Figure A3
H	Same as Sample A + Faced violation + Did not complain + Answered fear of retaliation questions	2023 & 2024	6,151	Fear axis (y-axis) in Figure 4
I	Same as Sample A + Faced violation + Did complain + Answered retaliation questions	2023 & 2024	1,767	Retaliation axis (x-axis) in Figure 4

Note: This table defines the different samples used throughout the paper. Questions about labor standards violations, complaint behavior, fear of retaliation, and actual retaliation experiences were included in both 2023 and 2024 survey waves, while questions about the destination of complaint behavior and hypothetical complaint behavior were only asked in 2024. This explains why some samples include both years while others are restricted to 2024 only. Firm-level analyses in Figure 3 use subsets of these samples restricted to firms with more than 25 workers in the respective samples.

Table A2: Wage and Hours Violations: Breakdown by Number and Severity

	% of respondents (2023 and 2024)	% of respondents (only 2024)
Any violation	38.1	37.0
Serious violation	30.8	30.1
One	17.9	17.6
Two	8.2	8.0
Three +	4.8	4.6
Observations	17,401	8,101

Note: This table presents the breakdown of wage and hours violations by severity and number of violations. The sample comprises respondents who meet all of the following criteria: (1) are paid hourly and report hourly wage; (2) report less than $50 per hour in tips (exclusion of outliers); (3) have non-missing values for at least one wage and hours violation question. Questions about workers' complaint behavior were only asked in the 2024 survey waves. Therefore, we present the violations breakdown for 2024 separately in this table so this sample can be compared to the sample of workers who replied to questions about their complaint behavior.

Table A3: Complaint Behavior: Breakdown by Complaint Destinations

	% of respondents (Only 2024)
Any complaint	26.5%
Only complained internally	23.4%
Complained externally	2.9%
Complained to local, state or fed enforcement	1.4%
Observations	2,201

Note: This table presents the breakdown of complaint behavior as a share of the number of workers who faced a violation and answered questions about their complaint behavior. Questions about workers' complaint behavior were only asked in the 2024 survey waves. The sample comprises respondents who meet all of the following criteria: (1) are paid hourly and report hourly wage; (2) report less than $50 per hour in tips (exclusion of outliers); (3) have non-missing values for at least one wage and hours violation question; (4) have non-missing values for all complaint behavior questions.

Table A4: Logit Regression Results with retaliation variables - Average marginal effects

	(1)	(2)	(3)	(4)	(5)	(6)
	Complaint	Internal Complaint Only	External Complaint	Complaint	Internal Complaint Only	External Complaint
Serious FLSA violation	0.09***	0.08***	0.00	0.12***	0.12***	-0.00
	(0.02)	(0.03)	(0.01)	(0.03)	(0.03)	(0.01)
Three or more violations	0.04*	0.04	0.01	0.04	0.05	-0.00
	(0.02)	(0.02)	(0.01)	(0.03)	(0.03)	(0.01)
Cty % Immigrant	-0.25	-0.20	-0.06	-0.68***	-0.72***	0.00
	(0.25)	(0.24)	(0.09)	(0.26)	(0.24)	(0.15)
Cty Unemployment	-0.01	-0.01	0.00*	-0.01	-0.02	0.01*
	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)
Union member	0.15***	0.03	0.06***	0.16***	0.01	0.07***
	(0.03)	(0.05)	(0.01)	(0.05)	(0.06)	(0.01)
High deport & high immigrant share	-0.01	-0.00	0.00	-0.01	-0.01	0.01
	(0.02)	(0.02)	(0.01)	(0.04)	(0.03)	(0.01)
Cty deportations per 100k immigr	0.00	0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Cty NLRB elect per 100k inh	-0.00**	-0.00**	0.00	-0.00**	-0.00*	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Fear environment				0.05	0.01	-0.07
				(0.26)	(0.26)	(0.11)
Retaliation environment				0.09	0.06	0.10***
				(0.15)	(0.15)	(0.03)
Observations	2,183	2,183	2,138	1,198	1,198	1,198
Other Controls	Worker's Demog	Worker's Demog	Worker's Demog	Worker's Demog	Worker's Demog	Worker's Demog
Fixed Effects	Year and Industry	Year and Industry	Year and Industry	Year and Industry	Year and Industry	Year and Industry

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Note: This table presents our main regression results using logistic regression with average marginal effects reported. The dependent variables are: (1) whether a worker made a complaint (Complaint), (2) whether the worker made a complaint only internal to the firm (Internal Complaint Only), and (3) whether the worker made a complaint externally, irrespective of whether it was also made internally (External Complaint). These regressions are estimated with industry fixed effects. State fixed effects are excluded because the sample is not large enough for the maximum likelihood estimator to handle such high-dimensional fixed effects. Serious violations include working off the clock, underpayment of hours, tip withholding, automatic clock-out, managerial time alterations, unpaid commissions, withheld PTO pay, and unpaid overtime. The category "Three or more violations" refers to instances of facing three or more labor standards violations. "Cty % Immigrant" corresponds to the percentage of the county population that is immigrant, while "Cty Unemployment" indicates the unemployment level in the county. "Union member" indicates self-reported union membership. Cty NLRB elect per 100k inh indicates the number of NLRB elections held per 100,000 inhabitants in the county. The variable 'Ct w/ deport and % imm above median' indicates counties with levels of deportations and percentage of immigrants in population above median. Cty deportations per 100k immigr is the number of deportations per 100,000 immigrants in the county. The worker's demographic controls are gender, age, race, and educational attainment. "Fear environment" measures the percentage of workers in the company who did not complain about a violation due to fear of retaliation (among workers who faced violations but did not complain), while "Retaliation environment" measures the percentage of workers in the company who faced retaliation after complaining about a violation (among workers who faced violations and did complain), both calculated at the company level for companies with more than 25 workers in the sample. Models (1), (2), and (3) use Sample D, while models (4), (5), and (6) use the intersection of Samples E and F as defined in Appendix Table A1. Observed sample sizes are slightly smaller than the base samples because certain categories within the categorical variable gender have no variation in the outcome, causing those observations to be dropped from estimation.

Table A5: Sensitivity of Union Membership Coefficient to Model Specification

	Any Complaint	Internal Only	External
(1) Bivariate	0.19***	-0.02	0.19**
	(0.05)	(0.06)	(0.08)
(2) + Violation severity	0.18***	-0.03	0.19**
	(0.05)	(0.06)	(0.08)
(3) + Worker demographics	0.17***	-0.03	0.18***
	(0.05)	(0.06)	(0.07)
(4) + County controls and FE	0.17***	0.01	0.14***
	(0.05)	(0.06)	(0.04)
(5) Full model	0.16***	0.01	0.14***
	(0.05)	(0.06)	(0.04)
Observations	1,202	1,202	1,202

Note: This table reports the coefficient on the union membership indicator across five progressively richer specifications. Each cell shows the estimated effect of union membership on the probability of complaining, with standard errors clustered at the employer level in parentheses. Specification (1) includes only union membership. Specification (2) adds violation severity (serious violation indicator and three-or-more violations indicator). Specification (3) adds worker demographics (gender, age, race, education). Specification (4) adds county-level controls (immigrant share, unemployment rate, deportation rate, NLRB elections, high-deportation/high-immigrant indicator) and year, industry, and state fixed effects. Specification (5) is the full model from Table 7 columns (4)–(6), adding firm-level fear and retaliation environment measures. The sample is held constant at the intersection of Samples E and F as defined in Appendix Table A1; observations may vary marginally across specifications due to singleton fixed effects in specifications (4) and (5). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A6: LPM Results with Union Membership Interactions

	(1) Complaint	(2) Internal Complaint Only	(3) External Complaint
Serious FLSA violation	0.12***	0.12***	-0.01
	(0.03)	(0.03)	(0.01)
Three or more violations	0.07*	0.07*	0.00
	(0.04)	(0.04)	(0.01)
Cty % Immigrant	-1.01***	-0.94***	-0.09
	(0.31)	(0.29)	(0.14)
Cty Unemployment	-0.00	-0.01	0.01
	(0.01)	(0.01)	(0.01)
Union member	0.16**	0.08	0.08
	(0.08)	(0.08)	(0.06)
Union × Serious violation	0.04	-0.06	0.08*
	(0.10)	(0.09)	(0.05)
Union × Three or more violations	-0.23*	-0.14	-0.07
	(0.13)	(0.09)	(0.06)
High deport & high immigrant share	-0.00	-0.02	0.02
	(0.04)	(0.04)	(0.02)
Cty deportations per 100k immigr	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)
Cty NLRB elect per 100k inh	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)
Fear environment	0.15	0.06	0.05
	(0.26)	(0.25)	(0.09)
Retaliation environment	0.11	0.08	0.05
	(0.14)	(0.14)	(0.04)
Baseline Complaint Rate	0.27	0.23	0.03
Observations	1,202	1,202	1,202
Adjusted R-squared	0.037	0.016	0.130
Other Controls	Worker's Demog	Worker's Demog	Worker's Demog
Fixed Effects	Year, State and Industry	Year, State and Industry	Year, State and Industry

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Note: This table augments the full specification from Table 7 columns (4)–(6) with interaction terms between union membership and violation severity measures. "Union × Serious violation" captures the differential effect of union membership for workers who experienced a serious FLSA violation. "Union × Three or more violations" captures the differential effect for workers who experienced three or more violations. All other variables and fixed effects are identical to Table 7 columns (4)–(6). The sample uses the intersection of Samples E and F as defined in Appendix Table A1. Standard errors are clustered at the employer level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

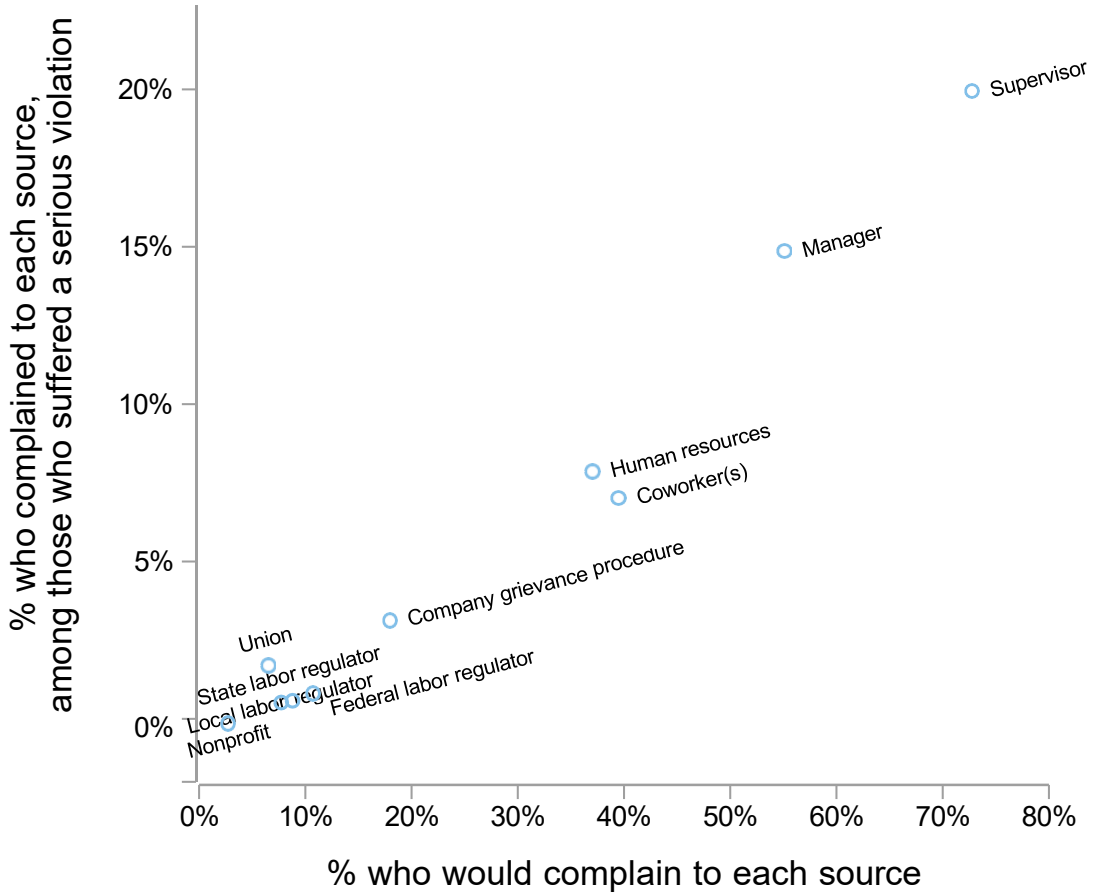


Figure A3: Comparison of Actual and Hypothetical Worker Complaint Destinations Among Workers Who Faced a Serious Wage and Hours Violation and Made a Complaint

Note: Observations = 1,770 [Sample G as defined in Appendix Table A1]. This figure compares actual complaint behavior (y-axis) with hypothetical complaint intentions (x-axis) for workers who faced a serious wage and hours violation. The y-axis shows the percentage of workers who complained to each source, conditional on having faced a serious violation. The x-axis shows the percentage who say they would complain to these sources if faced with a hypothetical "serious problem at work". Each point represents a different complaint destination. The sample includes workers who faced a serious violation and responded to questions regarding both their actual complaint behavior and their hypothetical complaint behavior in the event of encountering a serious violation.