

Fraud at a Distance? How Remote Work Shapes Financial Misconduct*

John M. Barrios Jessie Guo Yanping Zhu

September 2025

Abstract

Financial misconduct is often a team activity, facilitated by face-to-face interactions, shared norms, and trust. We exploit the sudden shift to remote work during COVID-19 to examine how workplace organization shapes collusion and financial misconduct. Using a novel firm-level measure of work-from-home feasibility, we find that firms that are more able to operate remotely experienced large post-2020 declines in misconduct. This decline is found across multiple misreporting proxies and is robust to various alternative measures of remote work. Cross-sectional tests indicate stronger declines in teamwork-intensive firms, firms with effective internal controls, and firms with weaker pre-COVID employee perceptions of culture and leadership. Overall, our findings reflect that financial misconduct is a team activity, sensitive to the organizational structure of the firm, with important implications for governance and organizational design.

Keywords: Financial Misconduct; Remote Work; Collusion; Internal Controls; Corporate Governance.

JEL Classifications: M41; G38; D23; J24; K22.

*Barrios: Yale University & NBER, john.m.barrios@yale.edu. Guo: New York University, jg6180@stern.nyu.edu. Zhu: New York University, yz10705@stern.nyu.edu. We thank Mary Billings, Christine Cuny, Raphael Duguay, Aneesh Raghunandan, Gurpal Sran, Edward Watts, and seminar participants at NYU for valuable comments and suggestions. All errors are our own.

1. Introduction

Financial misconduct distorts capital allocation, undermines contracts, and erodes market trust (Coffee Jr, 2005; Dyck et al., 2010; Karpoff et al., 2017). While various regulatory reforms have been implemented to improve transparency, large-scale scandals continue, underscoring that rules alone are not enough. Most fraud is not perpetrated by lone actors, rather, it requires coordination between insiders, supported by interpersonal trust, informal communication, and repeated interactions (Khanna et al., 2015; Soltes, 2016). Thus, understanding the organizational dynamics that facilitate this collusion is critical.

In this paper, we focus on how workplace organization shapes the ability of insiders to coordinate, and thus facilitates or constrains collusion. We exploit the abrupt, large-scale shift to work from home (WFH) during and after the COVID-19 pandemic as a natural experiment. Before 2020, remote work was uncommon and concentrated in a few sectors (Barrero et al., 2021; Bloom et al., 2024). Pandemic lockdowns forced firms across the economy to adopt WFH almost overnight, fundamentally reshaping how employees interacted. By disrupting interpersonal contact, team cohesion, informal communication, and managerial oversight, features that are central to initiating and sustaining collusive misconduct (Bloom et al., 2022; Yang et al., 2022b), this change provides a unique setting to examine how changes in internal coordination affect the incidence of financial fraud.

Specifically, we examine whether WFH disrupts the “technology of collusion” within firms. Large-scale financial misconduct is rarely a solo act. It usually depends on repeated interaction, informal trust, and tacit coordination between teams (Khanna et al., 2015; Soltes, 2016). In terms of a repeated game, collusion requires frequent contact and mutual monitoring to maintain cooperation (Green and Porter, 1984; Rotemberg and Saloner, 1986). Consistent with this mechanism, research finds that firms with stronger teamwork cultures are more prone to misconduct (Liu et al., 2023), and corruption-tolerant group norms significantly increase the risk of fraud (Liu, 2016). Remote work undermines this infrastructure as it physically separates potential co-conspirators, shifts conversations onto auditable digital rails (e.g., emails, Slack, Zoom), and weakens the social glue

that can sustain illicit cooperation ([Bennett and Hatfield, 2013](#)).

At the same time, WFH potentially weakens monitoring. Prior research finds that stronger monitoring environments limit misreporting ([Ashbaugh-Skaife et al., 2008](#)), while weaker oversight increases misreporting risk ([Donelson et al., 2017](#)), and the design of audits influences the effectiveness of oversight ([Bhaskar et al., 2019](#)). Remote work, through its physical separation, can disrupt these mechanisms by reducing informal supervision from peers, managers, and auditors ([Committee of Sponsoring Organizations of the Treadway Commission \(COSO\), 2009](#)). Consistent with this, internal auditors reported diminished coverage and control effectiveness during the pandemic ([Delfino and van der Kolk, 2021](#)). Complementary evidence shows that interview-based studies link remote settings to greater fraud risk due to reduced accountability ([Śmialek-Liszczyńska and Wojtkowiak, 2023](#)), while experimental work finds that physical separation worsens principal–agent frictions by creating more opportunities for misbehavior ([Burbano and Chiles, 2022](#)). Taken together, these findings suggest that WFH can facilitate misconduct.

Overall, if misconduct is fundamentally group-based, as suggested by evidence on teamwork culture ([Liu et al., 2023](#)), corruption norms ([Liu, 2016](#)), trust-fueled collusion ([Lee and Chuang, 2018](#)), and insider networks ([Ahern, 2017](#)), then WFH should reduce it by raising coordination costs and weakening group norms. If, instead, oversight is the binding constraint, remote work could facilitate misconduct by lowering accountability. Determining which of these forces dominates is ultimately an empirical question.

To test whether remote work weakens oversight or disrupts collusion, we need to identify which firms were more exposed to the shift. A central feature of our design is the construction of a firm-level measure of the feasibility of WFH, which allows us to implement a difference-in-differences strategy around the COVID-19 shock. Prior research typically proxies remote exposure using MSA-level averages, which assigns firms the telework potential of their headquarters’ location ([Barrios et al., 2024](#); [Dingel and Neiman, 2020](#); [Gupta et al., 2022](#)). But this approach assumes that all firms in a city face the same remote-work constraints, ignoring heterogeneity in occupational structure across firms.

To address this issue, we adapt the [Dingel and Neiman \(2020\)](#) methodology to the firm level using two complementary data sources. LinkUp job postings capture forward-looking labor demand, while Revelio Labs provides workforce records that reflect realized employment. By mapping each firm’s occupational mix into O*NET teleworkability scores, we create a granular, time-varying measure of the feasibility of WFH that varies between firms, even within the same industry and location. For example, a New York–based investment bank and a logistics firm can operate geographically side by side, but differ fundamentally in their ability to work remotely.

We validate our firm-level WFH measure in several ways. Firms with higher pre-COVID feasibility were more likely to adopt remote or hybrid work in practice, as reflected in employee-reported work–life balance ratings from Revelio and firm-level policy disclosures in the Flex Index ([Scoop Media, 2023](#)). The LinkUp and Revelio-based components of the measure are also highly correlated, further supporting its reliability as a proxy for WFH capacity.

Using this firm-level measure, we implement a difference-in-differences design that compares changes in misconduct before and after 2020 across firms with varying *ex ante* capacities to work remotely. The onset of COVID-19 and stay-at-home mandates provide a common shock that forced firms to translate latent feasibility into realized WFH at scale, while occupational structure predetermined the extent of this shift.

Following prior literature, we define financial misconduct as intentional material misstatements in financial reporting designed to deceive investors ([Dyck et al., 2010](#); [Karpoff et al., 2017](#)).¹ Specifically, we measure misconduct using two complementary proxies: Rule 10b-5 securities class-action lawsuits and fraudulent restatements from Audit Analytics. Importantly, we measure misconduct in the year it was committed, not in the year it was detected. To address concerns that our findings reflect detection rather than incidence, we also examine discretionary accruals as a continuous proxy for misreporting. Our use of multiple proxies mitigates the risk of misclassification that arises when relying on a single measure of misreporting ([Armstrong et al., 2010](#)).

Our research design includes firm fixed effects to absorb time-invariant firm heterogeneity, year

¹This definition aligns with prior research focusing on senior management’s manipulation of financial statements to mislead investors ([Armstrong et al., 2010](#); [Karpoff et al., 2017](#)).

fixed effects to capture aggregate shocks, and a rich set of lagged firm controls. Our sample spans more than 7,000 firm-year observations between 2017 and 2022, covering a wide cross-section of industries and geographies. By combining a plausibly exogenous shock with predetermined variation in firms' ability to adopt WFH, our design isolates the effect of remote work on the "technology of collusion" from contemporaneous business conditions. In doing so, it aligns with a growing literature that leverages pandemic-based identification strategies in finance and accounting (e.g., [Causholli et al., 2022](#)).

Using this design, we find that remote work is significantly related to reduced financial misconduct. Firms with higher pre-COVID WFH feasibility experienced larger post-2020 declines in fraud relative to less teleworkable firms. The effect is economically large: moving from the first to the third quartile of feasibility lowers the likelihood of misconduct by about 2 percentage points, equal to the unconditional mean in our sample. In other words, the transition to remote work cuts the expected incidence of misconduct in half.

A natural concern is that our main result reflects underlying differences across firms rather than a causal effect. Event-study estimates help alleviate this concern: we find no evidence of differential pre-trends before 2020, while the treatment effect grows progressively more negative in 2021 and 2022, consistent with a persistent structural change rather than a temporary shock. This dynamic pattern supports our view that once remote work raises coordination costs and increases traceability, sustaining collusive fraud becomes increasingly difficult.

To further address the possibility that our results are driven by changes in detection rather than true incidence, we turn to discretionary accruals. Unlike lawsuits or restatements, accrual-based measures capture misreporting continuously and do not rely on ex post discovery. Consistent with our interpretation, we observe significant declines in discretionary accruals among high-WFH-feasibility firms, reinforcing that remote work reduced underlying misreporting rather than simply altering the likelihood of detection.

While our baseline results speak to the extensive margin, we next examine how long frauds persist once initiated, the intensive margin. After 2020, firms with higher WFH feasibility expe-

rienced substantially shorter detection lags, with the time between the onset of fraudulent activity and the filing of a securities class action falling by nearly 50 percent. This finding reinforces our mechanism that remote work both discourages the initiation of collusion and makes ongoing schemes less sustainable, while also making it difficult to reconcile with a simple “loss of oversight” story.

Taken together, our results point to a mechanism in which WFH reshaped the economics of collusion within firms, increasing coordination costs, weakening informal trust, and increasing traceability. To sharpen the mechanism, we next turn to a set of cross-sectional tests that exploit differences in teamwork intensity, governance, internal controls, and employee sentiment at firms.

Our first test examines teamwork intensity. If collusion is central to fraud, then WFH should have a stronger effect in firms where day-to-day operations rely more heavily on collaboration. We measure teamwork using text-based indicators from earnings-call transcripts developed by [Li et al. \(2021\)](#). We find that the decline in misconduct is nearly twice as large in high-teamwork firms compared to low-teamwork firms. This heterogeneity underscores the mechanism: when fraud is a team production problem, raising coordination costs through remote work most sharply deters misconduct in settings where joint effort is prevalent.

Next, we examine whether the effect of WFH depends on the governance environment. Our framework predicts that if collusion is central to sustaining fraud, WFH should reduce misconduct across governance regimes, but the magnitude may vary depending on how much scope insiders had to collude before the pandemic. Consistent with this view, we find declines in misconduct in both high- and low-governance firms, with larger effects in weak-governance settings. We interpret this as reflecting greater latitude for collusion when institutional checks were weaker: before COVID, insiders in these firms faced fewer constraints, making coordinated misreporting more feasible. The sudden increase in coordination costs from remote work therefore had a sharper bite. By contrast, in strong-governance firms where collusion was already more constrained, WFH still reduced misconduct, but the incremental effect was smaller.

Next, we examine whether the strength of firms’ internal controls and the broader quality of their

information environment shape our results. We find that the decline in misconduct is concentrated in firms with effective SOX 302 and 404 designations. In these firms, existing controls already constrained individual manipulation, so fraudulent reporting typically required collusion. The shift to remote work increased the cost of such collusion and accelerated its discovery, producing sharper reductions in misconduct. By contrast, in firms with ineffective controls, where unilateral manipulation remained feasible, the marginal impact of remote work is weaker (harder to detect).

Finally, we examine whether remote work's impact on misconduct depends on a firm's organizational climate, captured through employee perceptions of culture and leadership. While governance and internal controls capture formal monitoring, employee sentiment provides us a window into how employees perceive management and whether they view the firm as trustworthy, potentially shaping their behavior. Weak sentiment signals fractured trust, where employees may suspect executives of being self-serving, or feel exploited by the firm, creating conditions where both employees and managers are more willing to collude and "cheat."

Using pre-COVID employee reviews from Revelio Labs, we find that misconduct decreases most in firms with weaker sentiment (i.e., those with low ratings of culture, CEO, and senior leadership). These low-trust environments were more prone to opportunism before the pandemic, and the added coordination costs and traceability of remote work made collusion especially difficult to sustain. After COVID, we also observe relative improvements in sentiment at these low-rated firms, while highly rated firms show little change. This convergence suggests that remote work reduced the reliance on informal in-person networks that had previously advantaged firms with stronger cultures. Importantly, these shifts are also consistent with our misreporting results: firms most exposed to WFH not only experienced the largest declines in collusive misconduct but also reported improvements in employee sentiment, reinforcing the view that remote work reshaped the cultural foundations that support fraud.

Our paper makes several contributions to the literature. First, we add to the research on financial misreporting. Prior work has emphasized predictors of fraud, including board structure ([Agrawal and Chadha, 2005](#)), general business conditions ([Povel et al., 2007](#); [Wang et al., 2010](#)), market- and

regulatory-based institutions (Dyck et al., 2010), and executive compensation (Armstrong et al., 2010; Efendi et al., 2007). This literature has focused largely on incentives, governance, and external monitoring. We complement these studies by showing that the organizational setting in which insiders interact—specifically, the shift to remote work—has first-order effects on fraud. By documenting how WFH alters collusion costs, trust, and traceability, we provide new evidence that financial misreporting depends not only on incentives but also on the organizational technologies that enable coordination.

Our study also speaks to an emerging perspective that views fraud as a team-production problem. Large-scale misreporting rarely results from a single actor; it requires coordination, trust, and collective rationalization across multiple insiders (Khanna et al., 2015; Soltes, 2016). By documenting that WFH reduced misconduct primarily in teamwork-intensive firms, in firms with effective controls that require collusion to override safeguards, and in firms where employee sentiment signals fractured trust in management, we show that the feasibility of collusion is central to understanding when fraud occurs. In doing so, we bring team-based theories of misconduct into direct conversation with the financial reporting literature, highlighting the interplay between organizational culture, coordination technologies, and fraud.

Finally, our study contributes to the growing literature on remote work. WFH has become a durable feature of the labor market: Barrero et al. (2021) estimate that 20 percent of workdays will remain remote post-pandemic, up from 5 percent before, and Dingel and Neiman (2020) find that 37 percent of U.S. jobs are fully remote-feasible. Prior research has examined how this shift affects productivity (Bloom et al., 2015), labor supply (Barrero et al., 2021), entrepreneurship (Barrios et al., 2024), employee conduct (Cumming et al., 2023), job satisfaction (Ding and Ma, 2023), and audit quality (Causholli et al., 2022). We extend this literature by showing that WFH also shapes a core financial outcome: the integrity of firms’ external reporting.

A central innovation of our study is the construction of a firm-level WFH feasibility measure that adapts the Dingel and Neiman (2020) methodology to each firm’s occupational mix using LinkUp job postings and Revelio Labs workforce data. Whereas prior work typically relies on

MSA-level averages—assigning the same telework potential to all firms in a given location—our approach captures variation at the firm level, reflecting differences in job composition even within the same industry or city. We validate this measure using employee work-life balance ratings and hand-collected data on firm policies from the Flex Index. This advancement in measurement not only strengthens our identification strategy but also provides a tool for future research on how remote work shapes firm behavior, capital markets, and organizational dynamics more broadly.

2. Institutional Details and Hypothesis Development

2.1. Work From Home

The prevalence of remote work has been steadily rising, enabled by advances in computing, telecommunications, and widespread home internet access. These trends were dramatically accelerated by the COVID-19 pandemic, which forced a large share of the workforce to seek remote arrangements, many of which continue today. Before the pandemic, roughly 5 percent of U.S. employees were classified as working from home, but this figure surged to nearly 50 percent in April 2020 ([Brynjolfsson et al., 2020](#)). Furthermore, surveys suggest that this shift is here to stay: approximately 20 percent of workdays are expected to remain remote post-pandemic, compared to 5 percent before ([Barrero et al., 2021](#); [Teodorovicz et al., 2021](#)).

While there is concern that WFH may hinder career advancement ([Golden et al., 2017](#)) or be unsuitable for certain tasks ([Adams-Prassl et al., 2022](#)), empirical evidence suggests that remote work is turning into a mainstream arrangement. [Dingel and Neiman \(2020\)](#) estimate that 37 percent of U.S. jobs are fully compatible with remote work. Moreover, WFH adoption has been particularly high among highly educated, high-income, and white collar workers ([Bick et al., 2020](#)). Studies also highlight the effects on work-family balance, documenting both the benefits of flexibility ([Barrios et al., 2024](#); [Mas and Pallais, 2017](#)) and costs related to stress and anxiety, especially along gender lines ([Tabassum et al., 2022](#); [Zhou and Flinchbaugh, 2022](#)).

Studies have also focused on the productivity implications of WFH. Here, the evidence is

mixed. Some studies report higher productivity under WFH, particularly when employees self-select (Bloom et al., 2015; Emanuel and Harrington, 2024), while others find declines due to more interruptions or weaker collaboration (Gibbs et al., 2023). Quasi-natural experiments also suggest modest gains from “work-from-anywhere” models, such as those used by the U.S. Patent Office, where WFH leads to productivity gains of around 4 percent (Choudhury et al., 2021).

Overall, the evidence suggests that WFH is not simply a temporary response to the pandemic, but rather a new structural feature of labor markets, with heterogeneous effects across workers, firms, and tasks. The persistence of WFH with its organizational implications makes it a natural setting to examine how it shapes employee monitoring, coordination, and, ultimately, financial misconduct.

2.2. *Hypothesis Development*

Financial misconduct undermines contracts, distorts capital allocation, and erodes trust in markets (Coffee Jr, 2005; Dyck et al., 2010; Karpoff et al., 2017). While regulatory reforms have improved transparency, large-scale scandals continue to emerge, suggesting that rules alone are insufficient. A growing body of work shows that major frauds are rarely the work of isolated individuals; instead, they require sustained coordination across multiple insiders, supported by trust networks, informal communication, and repeated interactions (Khanna et al., 2015; Soltes, 2016). Consistent with this team-based view, Liu (2016) documents that firms with stronger “corruption cultures” are significantly more likely to engage in fraud, back-dating, and opportunistic trading.² Similarly, Liu et al. (2023) find that teamwork-intensive corporate cultures are associated with a higher incidence of financial statement misconduct, highlighting that organizational reliance on collaboration can create fertile ground for collusion. In addition, internal control weaknesses exacerbate this risk, leading to lower accrual quality and more frequent misreporting (Doyle et al., 2007a,b). Thus, understanding how organizational structures affect the feasibility of such collusion

²Liu (2016) documents that the effects operate both through the selection of corrupt insiders and the reinforcement of group norms.

is critical.

The COVID-19 pandemic triggered a large-scale shift to remote work, disrupting patterns of workplace interaction. On the one hand, WFH may raise the cost of collusion. By physically separating employees, moving conversations onto auditable digital platforms, and weakening the informal glue that sustains cooperation, remote work can erode the “technology of collusion.” In repeated game models, sustaining collusion depends on frequent interaction and mutual monitoring ([Green and Porter, 1984](#); [Rotemberg and Saloner, 1986](#)). Remote work disrupts both, making it more difficult to coordinate and maintain illicit agreements. Consistent with this view, empirical evidence shows that remote arrangements reduce informal and cross-group connectivity by about 25 percent, limiting the opportunities for employees to coordinate through spontaneous in-person interactions ([Yang et al., 2022a](#)). Taken together, these insights suggest that WFH should deter group-based misconduct by raising coordination costs and improving traceability.

However, WFH can weaken the monitoring environment, increasing the risk of misreporting. Physical distance reduces informal supervision by peers, managers, and auditors. Specifically, internal auditors reported diminished coverage during the pandemic ([Committee of Sponsoring Organizations of the Treadway Commission \(COSO\), 2009](#); [Delfino and van der Kolk, 2021](#)). Interview-based studies of remote occupational fraud further highlight how geography (or physical distance) and weak oversight reduces monitoring effectiveness ([Śmiałek-Liszczyńska and Wojtkowiak, 2023](#)), while experimental evidence finds that the physical separation inherent in remote settings exacerbates principal–agent frictions by creating opportunities for misbehavior ([Burbano and Chiles, 2022](#)). Consistent with this, previous research finds that stronger monitoring environments restrict misreporting ([Ashbaugh-Skaife et al., 2008](#)), whereas weaker oversight increases the risk of fraud ([Donelson et al., 2017](#)). Moreover, evidence from the audit literature finds that the integration of internal control and financial statement audits can alter the effectiveness of oversight, suggesting that monitoring quality is not uniform across environments ([Bhaskar et al., 2019](#)). From this perspective, WFH could facilitate misconduct by lowering accountability and detection.

Because these mechanisms operate in opposite directions, the net effect of WFH on financial

misconduct is theoretically ambiguous, leading us to state our hypothesis in the null form:

H₀: Firms with greater feasibility to adopt remote work experienced no differential change in financial misconduct after the onset of the COVID-19 pandemic.

Rejecting this null would provide evidence that remote work primarily disrupted collusion or undermined monitoring, thereby shedding light on the organizational dynamics that shape financial misconduct.

3. Data, Measures, and Samples

3.1. Remote Work Measures

Our primary measure of remote work feasibility is constructed at the firm level. Following [Dingel and Neiman \(2020\)](#), we map each occupation to a binary teleworkability score based on O*NET surveys, but we apply these scores to the occupational structure of each firm. To capture this structure, we draw on two complementary sources of data.³

3.1.1. LinkUp Job Postings Data

LinkUp provides a comprehensive dataset of job postings sourced directly from the career pages of more than 50,000 employers, with coverage beginning in 2007. The database is updated monthly by crawling company websites and records detailed information on each posting, including its creation and deletion dates, job description, standardized O*NET occupation code, job title, and location. By 2023, LinkUp covered approximately 89.3% of U.S. public firms, collectively accounting for 97.9% of public-firm total assets ([Berger et al., 2024](#)).

³For comparability with prior work, we also construct the conventional MSA-level measure that assigns each firm the average telework feasibility of its headquarters' metropolitan area (e.g., [Barrios et al., 2024](#); [Gupta et al., 2022](#)). However, this approach has important limitations: it captures only regional averages, assumes all firms in the same MSA face identical constraints, and may be confounded by local labor market conditions. We therefore treat the MSA measure as a benchmark and relegate its construction and results to Appendix B, where we show that our findings are robust to using this specification.

The richness of the LinkUp data allows us to capture a company’s demand for different occupations, thus providing a forward-looking proxy of its workforce composition. Because each posting is mapped via a natural language processing algorithm to an O*NET occupation code, we can directly link the postings to the teleworkability classifications in [Dingel and Neiman \(2020\)](#).

Formally, we define the firm-level measure for firm i in year t as:

$$WFH\ Feasibility\ LinkUp_{i,t} = \sum_{o \in O_{i,t}} w_{i,o,t} \times Remote\ Work\ Score_o, \quad (1)$$

where i indexes firms, t indexes years, and o indexes occupation categories. $w_{i,o,t}$ is the share of occupation o postings among all company i postings in year t , and $Remote\ Work\ Score_o$ is the teleworkability score at the occupation level from [Dingel and Neiman \(2020\)](#). Thus, $WFH\ Feasibility\ LinkUp_{i,t}$ represents the share of jobs at firm i that could be performed remotely, based on its prior hiring mix. Because the LinkUp data track postings historically, this measure reflects the composition of positions firms were actively seeking to fill in the years leading up to the pandemic, rather than only contemporaneous employment. For identification, we focus on the pre-COVID baseline and use the 2019 value ($WFH\ Feasibility\ LinkUp_{19}$), which captures each firm’s realized hiring patterns immediately before the pandemic.

3.1.2. Revelio Labs Workforce Data

Although the LinkUp-based measure captures firms’ historical hiring flows up to 2019, it does not directly reflect the composition of their existing workforce. To address this limitation, we turn to Revelio Labs, a widely used database that compiles the near-universe of LinkedIn résumés to reconstruct granular employee-level job histories. The dataset includes company identifiers, job titles, standardized occupation categories, and start and end dates, based on self-reported professional records of individuals. By aggregating these records, we obtain a snapshot of the occupational structure realized by each firm as of 2019. Because each position is assigned an O*NET occupation code, we can directly apply [Dingel and Neiman \(2020\)](#) teleworkability scores

to the job categories of the employees. This enables us to measure the share of the current workforce of a company that could be performed remotely.

Formally, we construct *WFH Feasibility Revelio Labs* using the same weighted average approach described in Eq. (1), substituting realized employment shares for job postings, and use the 2019 value (*WFH Feasibility Revelio Labs*₁₉). This measure complements the LinkUp-based measure: whereas LinkUp reflects firms' historical hiring intentions prior to the pandemic, Revelio captures the actual stock of jobs held by employees prior to COVID-19.

3.1.3. Composite Firm-Level Measure

Our preferred measure of remote work feasibility combines the strengths of both data sources. Specifically, we construct *WFH Feasibility* as the average of the LinkUp- and Revelio-based measures.⁴ The LinkUp measure reflects the historical hiring flows of firms up to 2019, while the Revelio measure captures the occupational stock of employees realized. The average of the two reduces the measurement error and provides a more complete proxy for each firm's latent capacity to operate remotely. Consistent with our identification strategy, we use the 2019 value (*WFH Feasibility*₁₉), the year immediately preceding the COVID-19 pandemic.

Figure 1 illustrates the distribution of the composite measure in the 48 Fama-French industries. Industries dependent on manual labor or physical presence, such as Gold, Meals, and Coal Mining, exhibit the lowest remote work feasibility. In contrast, knowledge-intensive and service-oriented industries such as Computers, Banking, and Business Services display the highest feasibility, consistent with existing evidence (e.g., [Bureau of Labor Statistics, 2024](#)).

[Insert Figure 1 near here]

We validate the composite measure in three ways. First, we show that *WFH Feasibility LinkUp* and *WFH Feasibility Revelio Labs* are strongly correlated, indicating that hiring flows and realized workforce structures capture the same underlying construct. Figure 2 illustrates this relationship

⁴In unreported analysis, we show robustness to alternative aggregation methods, including the geometric mean and the maximum of the two measures.

in 2019, showing a binned scatter in which firms are grouped into 20 bins by *WFH Feasibility LinkUp*₁₉ and the average values of *WFH Feasibility LinkUp*₁₉ and *WFH Feasibility Revelio Labs*₁₉ are displayed. The figure reveals a clear positive correlation, confirming that the two measures track similar variation in remote work potential.

[Insert Figure 2 near here]

Second, we examine the relationship between WFH feasibility and employee-reported work–life balance (WLB) from Revelio Labs. WLB is measured on a 1–5 scale (in half-point increments), with higher scores indicating greater satisfaction. If firms with greater remote work capacity offer more flexibility, they should exhibit higher WLB ratings (Tabassum et al., 2022). Figure 3 illustrates this relationship for the period before COVID (2017-2019), grouping firms into 20 bins by *WFH Feasibility*₁₉ and plotting average feasibility against average WLB.⁵ The figure shows a clear positive association, supporting the validity of our measure.

[Insert Figure 3 near here]

Third, we benchmark our measure against the Flex Index, a dataset of firm-level remote work policies compiled by Scoop through surveys (with email verification) and manual collection of public disclosures (Scoop, 2023). We hand-collected the Flex Index data and matched 13,267 firms in the Flex Index to Compustat using fuzzy name matching via Refinitiv.⁶ Figure 4 shows a binned scatter plot of *WFH Feasibility*₁₉ against the Flex Index, grouping firms into 20 bins. The positive correlation further supports the claim that our composite measure captures significant variation in remote work capacity of firms.

[Insert Figure 4 near here]

⁵We restrict to the pre-period because COVID-19 likely altered employees' work–life balance.

⁶We matched 662 firms to Compustat. In untabulated tests, we find that our main result is robust to using the Flex Index as a firm-level WFH measure.

3.2. *Financial Misconduct*

Our financial misconduct data are drawn from two sources: securities class action lawsuits filed under Rule 10b-5 of the Securities Exchange Act of 1934 and restatements related to intentional or fraudulent misreporting ([Armstrong et al., 2010](#); [Bentley et al., 2013](#)). As noted in [Armstrong et al. \(2010\)](#) and [Amiram et al. \(2018\)](#), corporate financial misconduct may not always manifest in a single form, and existing databases might suffer from misclassifications of events as financial misconduct. Accordingly, we base our measure on the two sources and construct an indicator variable, *Misconduct*, equal to 1 if a firm is implicated in either (i) a Rule 10b-5 class action lawsuit alleging accounting manipulation or (ii) a restatement attributed to intentional or fraudulent misreporting in a year, and zero otherwise. Importantly, we measure misconduct in the year it was committed, not in the year it was detected.

Data on class action lawsuits is obtained from the Stanford Securities Class Action Clearinghouse, which records federal securities class action filings from 2017 to 2022. We restrict to fraud lawsuits brought under Rule 10b-5 of the Securities Exchange Act of 1934. These lawsuits are typically filed by investors who claim they were misled by a company’s fraudulent financial statements or omissions of material facts in connection with purchase or sale of securities.

Data on financial restatements related to accounting manipulation is obtained from Audit Analytics, which collects restatement information from 8-Ks or periodic reports (e.g., 10-Ks, 10-K/As, 10-Qs, 10-KSB, 40F, 20F, etc.). We identify accounting restatements between 2017 and 2022 that relate to reporting manipulation classified as accounting fraud. In addition, following [Karpoff et al. \(2017\)](#), we classify a restatement as an intentional manipulation if it is designated as both non-clerical and not a simple misapplication of an accounting rule, implying potential intent. Our fraudulent restatement variable, therefore, captures restatements attributable to either fraudulent or intentional misreporting.

One potential concern with our measure of corporate financial misconduct is that it requires detection by external parties. As such, it reflects not only a firm’s true misconduct but also outsiders’ ability to identify it. To mitigate this concern, we follow [Dai et al. \(2025\)](#) and employ the absolute

value of discretionary accruals as an alternative proxy for financial misconduct that does not rely on *ex post* detection. Specifically, we compute three commonly used measures of discretionary accruals: the [McNichols \(2002\)](#) model, the modified [Jones \(1991\)](#) model, and the [Dechow and Dichev \(2002\)](#) model.⁷

3.3. *Other Data*

According to the Centers for Disease Control and Prevention (CDC), stay-at-home mandates were implemented in March 2020 for the vast majority (approximately 97 percent) of areas in the U.S., with the remaining 3 percent implementing them in April 2020. Therefore, we define the *Post* variable to equal zero before 2020 and 1 from 2020 onward.

We incorporate the employee’s sentiment and rating data from Revelio Labs in our tests of the mechanism. Specifically, we use Revelio Labs’ Individual Sentiment dataset, which applies natural language processing to employee reviews and captures employees’ ratings of their employers across multiple dimensions, including overall firm rating, senior management, CEO, workplace environment, and other aspects of the employment experience.

We obtain firm fundamental characteristics from Compustat, internal control weakness data from Audit Analytics, governance score data from LSEG ESG, and a measure for a firm’s teamwork intensity from [Li et al. \(2021\)](#).

3.4. *Samples and Summary Statistics*

3.4.1. *Samples*

To construct the firm-year sample for our analyses, we start with all Compustat firms with non-missing values for the control variables from 2017 to 2022. We then merge in our financial misconduct measures, defined as either Rule 10b-5 class action lawsuits or restatements related to intentional or fraudulent misreporting. We code *Misconduct* equal to 1 if a firm engages in at least

⁷We use the code provided by [Armstrong et al. \(2022\)](#) to calculate these three measures.

one of these two types of misconduct in a given year, and zero otherwise.

Next, we require non-missing values for the 2019 measures of firm-level remote work potential, including *WFH Feasibility LinkUp*₁₉, *WFH Feasibility Revelio Labs*₁₉, or *WFH Feasibility*₁₉. Restricting the sample to firms with non-missing values for *WFH Feasibility LinkUp*₁₉ yields 7,376 firm-year observations from 1,445 unique firms between 2017 and 2022 (hereafter, LinkUp sample). Restricting instead to firms with non-missing values for *WFH Feasibility Revelio Labs*₁₉ yields 7,312 firm-year observations from 1,429 unique firms over the same period (hereafter, Revelio Labs sample). As discussed above, our preferred composite measure *WFH Feasibility*₁₉ is the average of these two measures, which requires non-missing values for both inputs. Accordingly, the main sample used in our analyses consists of 7,312 firm-year observations from 1,429 unique firms between 2017 and 2022.

In addition, we construct an MSA-level sample. We begin with all Compustat firms headquartered in an MSA with non-missing values for the control variables between 2017 and 2022. We then merge the financial misconduct measures and the MSA-level WFH feasibility measure. The final MSA-level sample consists of 17,650 firm-year observations across 246 unique MSAs over the 2017–2022 period (hereafter, MSA sample).

3.4.2. Summary Statistics

Table 1 reports the descriptive statistics. All continuous variables are winsorized at the 1st and 99th percentiles. The mean value of our primary outcome variable, *Misconduct*, is 0.019, indicating that approximately 2% of firm-year observations in our sample were involved in financial misconduct during the sample period, comparable to that documented in prior research (e.g., [Armstrong et al., 2010](#)). The average probability that a firm is subject to a class action lawsuit under Rule 10b-5 (*SCAC*) is 1.8%, whereas the probability of a restatement attributable to intentional or fraudulent misreporting (*Restatement*) is only 0.1%. The mean of our composite measure of remote work feasibility, *WFH Feasibility*₁₉, is 0.618. Among the individual components, the average *WFH Feasibility LinkUp*₁₉ is 0.594, while the average *WFH Feasibility Revelio Labs*₁₉ is slightly higher

at 0.633. Table B.2 in Appendix B presents the summary statistics for the MSA sample.

[Insert Table 1 near here]

4. Empirical Methodology and Main Results

4.1. Empirical Methodology: COVID-19 Pandemic and WFH Mandates

The onset of the COVID-19 pandemic and the subsequent stay-at-home mandates provide a unique natural experiment to examine the effect of internal coordination on financial misconduct. Before 2020, remote work was relatively uncommon and concentrated in a few sectors (Barrero et al., 2021; Bloom et al., 2024). The pandemic forced firms to transition to remote work almost overnight, not only transforming remote work potential into realized remote work but also fundamentally reshaping how employees interacted. This shift disrupted interpersonal contact, team cohesion, informal communication, and managerial oversight, organizational characteristics that are central to initiating and maintaining collusive misconduct (Bloom et al., 2022; Yang et al., 2022b). Accordingly, the pandemic provides an ideal setting to examine how changes in internal coordination influence the incidence of financial fraud.

We employ a difference-in-differences design, comparing changes in the likelihood of misconduct before and after the onset of the pandemic between firms with different levels of pre-COVID WFH feasibility. Specifically, we estimate the following linear probability model with a continuous treatment variable:

$$Misconduct_{i,t} = \alpha + \beta_1 WFH\ Feasibility_{19,i} \times Post_t + \Gamma' X_{i,t-1} + \delta_t + \theta_i + \epsilon_{i,t}, \quad (2)$$

where i indexes firm and t indexes year. $WFH\ Feasibility_{19,i}$ is a continuous measure of pre-COVID WFH potential, defined as the average of *WFH Feasibility LinkUp₁₉* and *WFH Feasibility Revelio Labs₁₉*. $Post_t$ is an indicator variable equal to 1 from 2020 onward and zero otherwise.

Following prior literature (e.g., Liu, 2016; Raghunandan, 2021), we control for lagged firm characteristics that might affect financial misconduct in the vector $X_{i,t-1}$, including: *Cash*, cash holdings scaled by total assets; *Size*, the natural logarithm of total assets; *ROA*, net income scaled by total assets; *BTM*, the book value of equity divided by the market value of equity; *Growth*, total assets in year t divided by total assets in year $t - 1$; *Ln MV*, the natural logarithm of market value; *Loss*, an indicator equal to 1 if income is negative, and zero otherwise; *Leverage*, total liabilities scaled by total assets; *Capex*, capital expenditures during the year scaled by total assets; *Intangibles*, intangible assets scaled by total assets; *R&D*, research and development expenditures scaled by total assets; *Dividends*, ratio of dividends to net income; and *Return*, 12-month cumulative returns after adjusting for stock splits and stock dividends. The model also includes year fixed effects, δ_t , and firm fixed effects, θ_i , to control for time-varying economic conditions and time-invariant characteristics of the firm that might affect corporate financial misconduct. Standard errors are clustered at the Fama-French 48 industry level.

4.2. Main Results

4.2.1. WFH Feasibility and Financial Misconduct

Columns (1) and (2) of Table 2, Panel A, report the estimation results from Eq. (2). Both columns include firm and year fixed effects, while column (2) adds controls for firm characteristics. The coefficient on the interaction term $WFH\ Feasibility_{19} \times Post$ is negative and statistically significant in both columns. The coefficient in column (2) suggests that increasing $WFH\ Feasibility_{19}$ from the first quartile (0.454) to the third quartile (0.799) reduces the likelihood of financial misconduct by approximately 2 percent, which is equal to the unconditional sample mean. A one-standard deviation increase in $WFH\ Feasibility_{19}$ reduces the likelihood of financial misconduct by 1 percent.

Columns (3) through (6) of Panel A report results using binary treatment variables *WFH Feasibility Indicator* and *WFH Feasibility Quartile* in place of the continuous treatment variable $WFH\ Feasibility_{19}$. In columns (3) and (4), the treatment variable *WFH Feasibility Indicator* is an indicator variable equal to 1 if a firm's $WFH\ Feasibility_{19}$ is above the sample median, and zero

otherwise. Column (4) shows that, in the post period, firms with above-median *WFH Feasibility*₁₉ exhibited a 2 percent lower likelihood of financial misconduct relative to firms below the median. In columns (5) and (6), we restrict the sample to firms in the bottom and top quartiles of *WFH Feasibility*₁₉. The treatment variable *WFH Feasibility Quartile* is an indicator that takes a value of 1 for firms above the third quartile, and zero for firms below the first quartile. The results in column (6) indicate that following the onset of the COVID-19 pandemic, firms in the top quartile reduced the likelihood of misconduct by approximately 3 percent.

In panel B of Table 2, we demonstrate the robustness of the results for our different proxies of WFH feasibility and to a Logit specification. Columns (1) and (2) use alternative measures of WFH feasibility constructed separately from the LinkUp and Revelio Labs datasets. As discussed in Section 3.1, the LinkUp data reflect forward-looking WFH feasibility based on firms' job postings, whereas the Revelio Labs data capture contemporaneous feasibility based on existing employment composition. The main results remain robust in columns (1) and (2). Column (3) re-estimates the model using a Logit specification.⁸ The coefficient suggests that following COVID-19, increasing *WFH Feasibility*₁₉ by 1 unit decreases the odds of corporate financial misconduct by a factor of 0.05. A back-of-the-envelope calculation indicates that this corresponds to approximately a 1 percent reduction in the probability of misconduct.

[Insert Table 2 near here]

To assess potential pre-trends, we estimate a modified version of Eq. (2), replacing *Post* with year indicators for each year in the interaction term *WFH Feasibility*₁₉ × *Post*. Figure 5 plots the coefficient estimates relative to 2019, the last year before COVID-19, and their 90 percent confidence intervals. The estimates show no systematic differences in trends prior to 2020, supporting the parallel-trend assumption. Beginning in 2021, however, the coefficients become negative and statistically significant, consistent with a sustained decline in misconduct among firms with higher pre-COVID WFH feasibility.

⁸Because many firms in our sample did not experience financial misconduct during the sample period, the estimation software drops these observations when estimating the Logit model. As a result, the Logit regressions are estimated based on fewer observations.

[Insert Figure 5 near here]

4.2.2. *Types of Financial Misconduct and Timeliness of Detection*

Although our baseline results use a broad measure of misconduct, different forms of misreporting can respond differently to the shift to remote work. In Panel A of Table 3, we examine the effect of WFH on different forms of financial misconduct by replacing the dependent variable in Eq. (2) with *SCAC*, an indicator equal to 1 if a firm is alleged in a Rule 10b-5 class action lawsuit in a given year, and zero otherwise, or *Restatement*, an indicator equal to 1 if a firm issues a fraudulent restatement or intentional restatement in a given year, and zero otherwise. Column (1) shows that, following COVID-19, firms with higher pre-COVID WFH feasibility were significantly less likely to be alleged in Rule 10b-5 class action lawsuits. The coefficient estimate implies that increasing *WFH Feasibility*₁₉ from the first to the third quartile reduces the likelihood of such allegations by approximately 2 percent. Column (2) yields a negative but insignificant coefficient when the dependent variable is *Restatement*, likely due to the limited number of fraudulent restatements in our sample.⁹

Beyond the incidence of misconduct, an important question is whether remote work also influences how quickly fraud is uncovered once it occurs. Panel B of Table 3 examines this intensive margin by focusing on the timeliness of securities class action filings. Specifically, we test whether firms with higher WFH feasibility faced Rule 10b-5 class action lawsuits more quickly in the post-period. For this analysis, we restrict the sample to observations with Rule 10b-5 class action lawsuits and estimate a modified version of Eq. (2) that includes industry or industry and year fixed effects. The dependent variable is *Log of Lawsuit Lag Days*, defined as the number of days between the date of the alleged violation of Rule 10b-5 and the date of filing of the class action lawsuit. Column (2) of Panel B shows that, following COVID-19, lawsuits were filed more promptly against firms with higher WFH feasibility. The coefficient on the interaction term

⁹In Appendix B, Table B.4, we present evidence that after COVID-19, firms with higher pre-COVID WFH feasibility were significantly less likely to have fraudulent restatement, using our alternative empirical strategy specified in Eq. (3).

$WFH\ Feasibility_{19} \times Post$ is significant and negative, suggesting that increasing a firm's $WFH\ Feasibility_{19}$ from the first to the third quartile shortens the detection period by approximately 50 percent in the post-period.

One potential concern is that our main results might reflect differences in detection rather than a true reduction in financial misconduct. In principle, firms with higher WFH feasibility could simply have fewer cases detected in the post-period, even if underlying misconduct did not change. Panel B helps address this possibility by examining how quickly misconduct is uncovered once it occurs. If remote work primarily reduced detection, we would expect longer lags in the filing of lawsuits against high-WFH firms. Instead, the results show the opposite: after COVID-19, Rule 10b-5 lawsuits were filed significantly more quickly for firms with greater WFH feasibility. This finding is inconsistent with a pure detection story and supports our interpretation that remote work reduced the incidence and sustainability of collusive misconduct.

[Insert Table 3 near here]

4.2.3. *Effect on Discretionary Accruals*

To further address the concern that our main results might reflect changes in detection, we use the absolute value of discretionary accruals as an alternative proxy for financial misconduct that does not rely on *ex post* detection. We compute three commonly used measures of discretionary accruals: the [McNichols \(2002\)](#) model, the modified [Jones \(1991\)](#) model, and the [Dechow and Dichev \(2002\)](#) model.

Table 4 reports the estimation results of Eq. (2) using the following three measures as dependent variables: $DAMc$, absolute value of discretionary accrual estimate from the [McNichols \(2002\)](#) model, $DAMJ$, absolute value of discretionary accrual estimate from the modified [Jones \(1991\)](#) model, and $DADD$, absolute value of discretionary accrual estimate from the [Dechow and Dichev \(2002\)](#) model. Columns (1) and (2) indicate that after COVID-19, firms with higher WFH feasibility exhibited significantly lower discretionary accruals as measured by the [McNichols \(2002\)](#) model

and the modified [Jones \(1991\)](#) model. Although the coefficient on the interaction term in column (3) is statistically insignificant, it remains negative when using the [Dechow and Dichev \(2002\)](#) model. Overall, these results indicate that our main findings are robust to alternative proxies for financial misconduct that do not depend on *ex post* detection.

[Insert Table 4 near here]

4.2.4. *Robustness to an MSA-Level Measure of WFH*

As a robustness test, we re-estimate our baseline specification using an alternative design in which WFH feasibility is defined at the geographic level. Specifically, we assign each firm the pre-COVID telework share of its headquarters MSA from [Gupta et al. \(2022\)](#), following the approach in [Barrios et al. \(2024\)](#). This specification captures regional variation in teleworkability and absorbs local economic conditions through time-varying MSA-level covariates (income, population, GDP growth, unemployment). The treatment effect is then identified by comparing firms in more versus less teleworkable MSAs before and after 2020.

This MSA-based design is less precise than our firm-level approach, since it assumes that all firms within an MSA face identical remote-work constraints and may misclassify multi-location firms. Nonetheless, it aligns with prior literature and provides a useful benchmark. Appendix B reports details and results (Tables B.2–B.4), which confirm that our findings are robust to this alternative specification.

5. Mechanism Tests

In this section, we provide three sets of tests to corroborate our proposed mechanism through which remote work reduces corporate financial misconduct. Specifically, we argue that WFH has reshaped the economics of collusion within firms by raising coordination costs, increasing traceability, and weakening informal trust. Because financial misconduct relies on interpersonal

trust and cohesive team relationships that suppress internal dissent (Khanna et al., 2015; Soltes, 2016), the shift to remote work increases the costs of engaging in financial misconduct and deters financial misconduct.

5.1. *Intensity of Teamwork*

If collusion within firms is central to financial misconduct, then remote work should reduce misconduct more in firms with stronger team cohesion and collaboration, particularly at the high level, since such misconduct typically involves top management. To test this prediction, we measure team cohesiveness using the teamwork culture index from Li et al. (2021). This measure is constructed by developing a dictionary of terms related to “teamwork” using state-of-the-art machine learning techniques applied to Q&A sessions of historical earnings call transcripts. The teamwork culture score of a company is calculated as the weighted frequency of these terms in its earnings call transcripts. This measure is conceptually appropriate as a proxy for team cohesiveness because Q&A sessions are typically led by top executives and thus reflect values emphasized by leadership. As Guiso et al. (2015) argue, corporate values are enforced by leaders. Therefore, this measure is likely to capture the extent to which coordination and teamwork are promoted across different levels of the organization.

We divide companies into two subsamples based on the median of the average teamwork culture score for companies over 2017-2019.¹⁰ We then estimate Eq. (2) separately for the two subsamples and compare the coefficients on the interaction term $WFH\ Feasibility_{19} \times Post$ estimated from the two subsamples using a Wald test.

Table 5 reports the results. Column (1) reports estimates for firms with above-median *Teamwork*, while column (2) reports estimates for firms with below-median *Teamwork*. The coefficient on the interaction term $WFH\ Feasibility_{19} \times Post$ is twice as large in magnitude in column (1) relative to column (2). Moreover, the coefficient in column (1) is statistically significant at 1 percent, whereas

¹⁰Li et al. (2021) construct the measure as a three-year moving average, reflecting the persistence of corporate culture. Thus, the 2019 value in the data is the average from 2017 to 2019, which covers the pre-period of our sample.

in column (2) it is significant at 10 percent. A Wald test shows that the coefficient estimate from the above-median *Teamwork* subsample is significantly more negative than the corresponding estimate from the below-median *Teamwork* subsample. These results are consistent with the proposed mechanism: remote work disrupts team coordination and thereby reduces financial misconduct, as such misconduct arises from collusive behavior.

[Insert Table 5 near here]

5.2. *Governance and Financial Reporting Environment*

In this section, we first examine whether the effect of remote work on financial misconduct depends on firms' governance quality. If remote work reduces misconduct by disrupting collusion, then we should observe declines in misconduct regardless of governance quality. However, because weaker governance may facilitate collusion, the effect should be stronger in poorly governed firms.

We measure governance quality using the governance pillar score from LSEG's ESG database. This score is constructed as a weighted average of standardized percentile-ranked measures that capture the governance board and oversight dimensions, such as board independence, diversity, committees, executive compensation, and shareholder rights. In columns (1) and (2) of Table 6, Panel A, we divide firms into two subsamples based on the median *Governance Score*. For each firm, *Governance Score* is calculated as the average governance pillar score over 2015-2019, the five years preceding COVID-19, to capture persistence of governance quality. We then estimate Eq. (2) for each subsample. Column (1) reports results for above-median firms, and column (2) for below-median firms. Consistent with our prediction, in both groups, firms with higher remote work feasibility experienced a statistically significant decline in misconduct after the onset of the pandemic, but the magnitude of the effect is larger among firms with weaker governance. The results indicate that firms with weaker governance had more latitude to collude prior to COVID-19, and that the increase in coordination costs associated with remote work was greater for these firms.

Next, we consider whether the effect depends on the effectiveness of internal controls over

financial reporting. We proxy for a firm's internal control over financial reporting using disclosures under SOX Sections 302 and 404. SOX 302 requires management to disclose internal control weaknesses quarterly, but these disclosures are not audited. SOX 404 requires an annual auditor-attested report on the effectiveness of internal controls on financial reporting.

Separating governance from internal controls over financial reporting clarifies two channels through which WFH can reduce misconduct. Weak internal controls provide insiders with greater latitude, making collusion easier to initiate and sustain. In contrast, strong internal controls increase monitoring and increase the likelihood that unilateral manipulation will be detected. In such environments, misconduct typically requires coordination across multiple insiders to circumvent formal reporting processes. If remote work disrupts collusion, its effect should therefore be more pronounced when internal controls are effective, since fraud in these settings is inherently a team-based activity rather than an individual act.

Columns (1) and (2) of Table 6, Panel B, partition firms into two groups by whether they reported any SOX 302 weaknesses over 2015-2019, the five years preceding COVID-19, and estimate Eq. (2) on each subsample. Column (1) reports the results for firms without weaknesses (SOX 302 Effective subsample), while column (2) reports results for firms with weaknesses (SOX 302 Ineffective subsample). Consistent with our prediction, after the onset of the pandemic, companies with higher remote work feasibility in the SOX 302 Effective subsample experienced a significant decline in misconduct, while the effect is insignificant in the SOX 302 Ineffective subsample.

Columns (3) and (4) of Panel B repeat this analysis using SOX 404. Column (3) reports the results for firms without SOX 404 weaknesses (SOX 404 Effective subsample), and column (4) reports results for firms with weaknesses (SOX 404 Ineffective subsample). Again, consistent with our prediction, following the onset of the pandemic, firms with higher remote work feasibility in the SOX 404 Effective subsample exhibited a statistically significant decline in misconduct, while the effect is insignificant among firms with SOX 404 weaknesses.

[Insert Table 6 near here]

5.3. *Workplace Climate and Informal Trust*

In this section, we examine whether the effect of remote work on financial misconduct depends on a firm's organizational climate, proxied by employee perceptions of culture and leadership. Whereas governance structures and internal controls capture formal monitoring mechanisms (Ashbaugh-Skaife et al., 2008; Bhaskar et al., 2019; Donelson et al., 2017), employee reviews of the firm, CEO, and senior leadership provide a window into informal norms and trust within the organization (Liu, 2016). Low ratings can signal a weaker organizational climate, where top management can be viewed as self-serving or exploitative. In such environments, collusion and misreporting are more likely, either because employees are more willing to participate in opportunistic behavior or because executives feel greater latitude to expropriate both employees and investors (Ahern, 2017; Lee and Chuang, 2018; Liu et al., 2023). Thus, the integrity of reporting can be especially sensitive to remote work in firms with a weak organizational climate.

We measure employee sentiment using Revelio Labs' Individual Sentiment dataset, which reports employees' overall rating of the company, their ratings of the CEO, and their ratings of senior leadership. For each firm, we compute annual ratings as the average of individual employees' responses, then average these ratings over 2015–2019, the five years preceding COVID-19. We split the sample into two groups based on the median of each metric. We then estimate Eq. (2) separately for each subsample.

Panel A of Table 7 reports the results: columns (1) and (2) compare firms with above- and below-median overall ratings, columns (3) and (4) compare above- and below-median CEO ratings, and columns (5) and (6) compare above- and below-median senior leadership ratings. Across the three partitions, the effect of remote work on financial misconduct is consistently larger in magnitude for firms with below-median ratings. In addition, columns (1) and (2) indicate that the effect is statistically significant only for firms with below-median overall ratings. For CEO ratings, the coefficient on the interaction term is significant at 5 percent for firms with above-median ratings but at 1 percent for firms with below-median ratings (columns (3)-(4)). Columns (5) and (6) show that the coefficient is significant at 10 percent for firms with above-median senior leadership ratings

but at 1 percent for firms with below-median senior leadership ratings. Furthermore, Wald tests show that the interaction coefficient $WFH\ Feasibility_{19} \times Post$ is significantly more negative among firms with below-median overall rating than among firms with above-median overall rating, and the same holds for the subsamples split by senior leadership rating. These results are consistent with the prediction that fractured trust within the firm increases employee incentives to collaborate or gives executives greater latitude to engage in misconduct.

To further corroborate this interpretation, we next examine whether sentiment improved in initially low-rated firms following the onset of the COVID-19 pandemic and the shift to remote work. In Panel B of Table 7, we repeat our analyses in Panel A but replace the dependent variable with time-varying firm-level *Overall Rating*, *CEO Rating*, and *Senior Leadership Rating*. We find consistent evidence that ratings improved in the post-period for firms with high remote work potential among subsamples with low pre-period ratings, whereas the effect is statistically insignificant among subsamples of firms with high pre-period ratings. Wald test shows that the interaction term $WFH\ Feasibility_{19} \times Post$ is significantly more positive among firms with below-median *Overall Rating* than among firms with above-median *Overall Rating*. These results suggest that following COVID-19, firms with greater remote work exposure not only experienced larger reductions in misconduct but also exhibited improvements in employee perceptions of CEO and management trustworthiness, consistent with the mechanism that remote work reshapes the cultural foundations that facilitate collusion.

[Insert Table 7 near here]

6. Conclusion

This paper studies how the sudden expansion of remote work reshaped the economics of financial misconduct. Using the COVID-19 pandemic as a shock and using a novel firm-level measure of the feasibility of WFH, we show that firms that were better able to transition to remote work experienced significant declines in financial fraud after 2020. These reductions are evident across

multiple proxies and cannot be explained by changes in detection alone. Event-study dynamics confirm no pretrends and increasingly negative effects post-2020, consistent with a persistent shift in the feasibility of collusion.

Our cross-sectional analyses further sharpen our mechanism. The effect of WFH is nearly twice as large in teamwork-intensive firms, where fraud depends most on coordination, and in firms with effective internal controls, where collusion is required to override safeguards. At the same time, we find that misconduct declines in both strong- and weak-governance firms, but the effect is larger in weak-governance firms, which is consistent with insiders in those settings having greater scope to collude before COVID, and thus being more constrained once remote work raised coordination costs. Finally, evidence from employee sentiment shows that the sharpest declines occur in low-sentiment firms, and that sentiment itself improved post-pandemic in these firms, reinforcing the view that WFH reshaped the cultural foundations that sustain collusion.

Overall, our results highlight that fraud is fundamentally a team-based activity, sensitive not only to incentives and formal monitoring but also to how workplace organization shapes the costs of collusion. By documenting that WFH reduced the incidence and persistence of misconduct, we contribute to the literature on financial reporting and governance, while also extending the growing literature on the consequences of remote work. More broadly, our findings suggest that organizational design, in this case, the adoption of remote work, can have first-order effects on the integrity of capital markets.

References

- Adams-Prassl, A., Boneva, T., Golin, M., Rauh, C., 2022. Work that can be done from home: Evidence on variation within and across occupations and industries. *Labour Economics* 74, 102083.
- Agrawal, A., Chadha, S., 2005. Corporate governance and accounting scandals. *The Journal of Law and Economics* 48, 371–406.
- Ahern, K.R., 2017. Information networks: Evidence from illegal insider trading tips. *Journal of Financial Economics* 125, 26–47.
- Amiram, D., Bozanic, Z., Cox, J.D., Dupont, Q., Karpoff, J.M., Sloan, R., 2018. Financial reporting fraud and other forms of misconduct: a multidisciplinary review of the literature. *Review of Accounting Studies* 23, 732–783.
- Armstrong, C., Kepler, J.D., Samuels, D., Taylor, D., 2022. Causality redux: The evolution of empirical methods in accounting research and the growth of quasi-experiments. *Journal of Accounting and Economics* 74, 101521.
- Armstrong, C.S., Jagolinzer, A.D., Larcker, D.F., 2010. Chief executive officer equity incentives and accounting irregularities. *Journal of Accounting Research* 48, 225–271.
- Ashbaugh-Skaife, H., Collins, D.W., Kinney, W.R.J., LaFond, R., 2008. The effect of sox internal control deficiencies on firm risk and cost of equity. *Journal of Accounting Research* 46, 1141–1183.
- Barrero, J.M., Bloom, N., Davis, S.J., 2021. Why working from home will stick. Technical Report. National Bureau of Economic Research.
- Barrios, J.M., Hochberg, Y., Yi, H.L., 2024. Hustling From Home? Work From Home Flexibility and Entrepreneurial Entry. Technical Report. National Bureau of Economic Research.
- Bennett, G.B., Hatfield, R.C., 2013. The effect of the social mismatch between staff auditors and client management on the collection of audit evidence. *The Accounting Review* 88, 31–50.
- Bentley, K.A., Omer, T.C., Sharp, N.Y., 2013. Business strategy, financial reporting irregularities, and audit effort. *Contemporary Accounting Research* 30, 780–817.
- Berger, P.G., Cai, W., Qiu, L., Shen, C.X., 2024. Employer and employee responses to generative ai: Early evidence. Available at SSRN 4874061 .
- Bhaskar, L.S., Schroeder, J.H., Shepardson, M.L., 2019. Integration of internal control and financial statement audits: Are two audits better than one? *The Accounting Review* 94, 53–81.
- Bick, A., Blandin, A., Mertens, K., et al., 2020. Work from home after the COVID-19 outbreak.
- Bloom, N., Han, R., Liang, J., 2022. How hybrid working from home works out. National Bureau of Economic Research Working Paper Series .

- Bloom, N., Han, R., Liang, J., 2024. Hybrid working from home improves retention without damaging performance. *Nature* , 1–6.
- Bloom, N., Liang, J., Roberts, J., Ying, Z.J., 2015. Does working from home work? evidence from a chinese experiment. *The Quarterly Journal of Economics* 130, 165–218.
- Brynjolfsson, E., Horton, J.J., Ozimek, A., Rock, D., Sharma, G., TuYe, H.Y., 2020. COVID-19 and remote work: An early look at us data. *National Bureau of Economic Research* .
- Burbano, V.C., Chiles, B., 2022. Mitigating gig and remote worker misconduct: Evidence from a real effort experiment. *Organization Science* 33, 1273–1299.
- Bureau of Labor Statistics, 2024. The rise in remote work since the pandemic and its impact on productivity.
- Causholli, M., Cheng, S.Y.M., Golshan, N., 2022. Does working from home impact audit quality? evidence from non-pharmaceutical interventions during COVID-19 .
- Choudhury, P., Foroughi, C., Larson, B., 2021. Work-from-anywhere: The productivity effects of geographic flexibility. *Strategic Management Journal* 42, 655–683.
- Coffee Jr, J.C., 2005. A theory of corporate scandals: Why the usa and europe differ. *Oxford Review of Economic Policy* 21, 198–211.
- Committee of Sponsoring Organizations of the Treadway Commission (COSO), 2009. Guidance on the monitoring component of internal control systems. *COSO Report* .
- Cumming, D., Firth, C., Gathergood, J., Stewart, N., 2023. Work-from-home and the risk of securities misconduct. *European Financial Management* 29, 1054–1077.
- Dai, R., Dong, X., Shroff, N., Tan, Q., 2025. Does us immigration policy facilitate financial misconduct? *Journal of Accounting Research* .
- Dechow, P.M., Dichev, I.D., 2002. The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review* 77, 35–59.
- Delfino, D., van der Kolk, B., 2021. Implications of the COVID-19 pandemic on internal auditing. *International Journal of Auditing* 25, 179–197.
- Ding, Y., Ma, M.S., 2023. Return-to-office mandates. Available at SSRN 4675401 .
- Dingel, J., Neiman, B., 2020. How many jobs can be done at home? *Journal of Public Economics* 189, 104235–104235.
- Donelson, D.C., Ege, M.S., McInnis, J.M., 2017. Internal control weaknesses and financial reporting fraud. *Auditing: A Journal of Practice & Theory* 36, 45–69.
- Doyle, J.T., Ge, W., McVay, S.E., 2007a. Accruals quality and internal control over financial reporting. *The Accounting Review* 82, 1141–1170.

- Doyle, J.T., Ge, W., McVay, S.E., 2007b. Determinants of weaknesses in internal control over financial reporting. *Journal of Accounting and Economics* 44, 193–223.
- Dyck, A., Morse, A., Zingales, L., 2010. Who blows the whistle on corporate fraud? *The Journal of Finance* 65, 2213–2253.
- Efendi, J., Srivastava, A., Swanson, E.P., 2007. Why do corporate managers misstate financial statements? the role of option compensation and other factors. *Journal of Financial Economics* 85, 667–708.
- Emanuel, N., Harrington, E., 2024. Working remotely? selection, treatment, and the market for remote work. *American Economic Journal: Applied Economics* 16, 528–559.
- Gibbs, M., Mengel, F., Siemroth, C., 2023. Work from home and productivity: Evidence from personnel and analytics data on information technology professionals. *Journal of Political Economy Microeconomics* 1, 7–41.
- Golden, T., Eddleston, K.A., Powell, G.N., 2017. The impact of teleworking on career success: A signaling-based view, in: *Academy of Management Proceedings*, Academy of Management Briarcliff Manor, NY 10510. p. 14757.
- Green, E.J., Porter, R.H., 1984. Noncooperative collusion under imperfect price information. *Econometrica* 52, 87–100.
- Guiso, L., Sapienza, P., Zingales, L., 2015. The value of corporate culture. *Journal of financial economics* 117, 60–76.
- Gupta, A., Mittal, V., Peeters, J., Van Nieuwerburgh, S., 2022. Flattening the curve: pandemic-induced revaluation of urban real estate. *Journal of Financial Economics* 146, 594–636.
- Jones, J.J., 1991. Earnings management during import relief investigations. *Journal of Accounting Research* 29, 193–228.
- Karpoff, J.M., Koester, A., Lee, D.S., Martin, G.S., 2017. Proxies and databases in financial misconduct research. *The Accounting Review* 92, 129–163.
- Khanna, V., Kim, E.H., Lu, Y., 2015. Ceo connectedness and corporate fraud. *The Journal of Finance* 70, 1203–1252.
- Lee, W., Chuang, Y., 2018. Experimental investigation into the role of trust in collusion. *Business Ethics: A European Review* 27, 2–15.
- Li, K., Mai, F., Shen, R., Yan, X., 2021. Measuring corporate culture using machine learning. *The Review of Financial Studies* 34, 3265–3315.
- Liu, C., Ryan, D., Lin, G., Xu, C., 2023. No rose without a thorn: Corporate teamwork culture and financial statement misconduct. *Journal of Behavioral and Experimental Finance* 37, 100786.
- Liu, X., 2016. Corruption culture and corporate misconduct. *Journal of Financial Economics* 122, 307–327.

- Mas, A., Pallais, A., 2017. Valuing alternative work arrangements. *American Economic Review* 107, 3722–3759.
- McNichols, M.F., 2002. Discussion of the quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review* 77, 61–69.
- Povel, P., Singh, R., Winton, A., 2007. Booms, busts, and fraud. *The Review of Financial Studies* 20, 1219–1254.
- Raghunandan, A., 2021. Financial misconduct and employee mistreatment: Evidence from wage theft. *Review of Accounting Studies* 26, 867–905.
- Rotemberg, J.J., Saloner, G., 1986. A supergame-theoretic model of price wars during booms. *The American Economic Review* 76, 390–407.
- Scoop, 2023. Flexible Work is Here to Stay: Report From Scoop Finds that More Than 75% of Companies Are Expected to Offer Work Location Flexibility in the Future. Technical Report. PRWeb.
- Scoop Media, 2023. Flex Index: Firm-level work-from-home policy data. <https://www.flexindex.com/explore>. Accessed June, 2025.
- Śmialek-Liszczyńska, P., Wojtkowiak, G., 2023. Employee control and occupational fraud in remote work. *Humanities and Social Sciences* 30, 269–277.
- Soltes, E., 2016. Why They Do It: Inside the Mind of the White-Collar Criminal. PublicAffairs.
- Tabassum, A., Ezzedeen, S.R., Singh, P., 2022. Work-family balance while working from home during COVID-19: Role of job crafting and home crafting, in: *Academy of Management Proceedings*, Academy of Management Briarcliff Manor, NY 10510. p. 10682.
- Teodorovicz, T., Sadun, R., Kun, A.L., Shaer, O., 2021. Working from home during COVID19: Evidence from time-use studies. Harvard Business School.
- Wang, T.Y., Winton, A., Yu, X., 2010. Corporate fraud and business conditions: Evidence from ipos. *The Journal of Finance* 65, 2255–2292.
- Yang, L., Holtz, D., Jaffe, S., Suri, S., Sinha, S., Weston, J., Joyce, C., Shah, N., Sherman, K., Hecht, B., et al., 2022a. The effects of remote work on collaboration among information workers. *Nature Human Behaviour* 6, 43–54.
- Yang, L., Holtz, D., Jaffe, S., Suri, S., Teevan, J., 2022b. Remote work and collaboration networks: Evidence from slack. *Nature Human Behaviour* 6, 43–54.
- Zhou, Q., Flinchbaugh, C., 2022. Gender and the impact of the transition to work from home, in: *Academy of Management Proceedings*, Academy of Management Briarcliff Manor, NY 10510. p. 17382.

A. Variable Definitions

Variable	Definition
Firm-Year Variables	
<i>Misconduct</i>	An indicator variable that takes the value of one if the firm has one of the two types of financial misconduct from the class action lawsuit or restatement, and zero otherwise.
<i>SCAC</i>	An indicator variable that takes the value of one if the firm has been alleged for the Rule 10b-5 class action lawsuit, and zero otherwise.
<i>Restatement</i>	An indicator variable that takes the value of one if the firm has a fraudulent restatement or has an intentional restatement, and zero otherwise.
<i>Post</i>	An indicator variable that takes the value of one from 2020 onward, and zero otherwise.
<i>WFH Feasibility LinkUp</i>	Share of jobs of a firm that can be performed remotely, constructed from LinkUp job posting data following Eq. (1).
<i>WFH Feasibility Revelio Labs</i>	Share of jobs of a firm that can be performed remotely, constructed from Revelio Labs Workforce data following Eq. (1).
<i>WFH Feasibility</i>	Average of <i>WFH Feasibility LinkUp</i> and <i>WFH Feasibility Revelio Labs</i> .
<i>Log of Lawsuit Lag Days</i>	The natural log of the number of days between the start of the alleged misconduct period and the lawsuit filing date.
<i>DAMc</i>	Absolute value of discretionary accruals measured as the residuals from the McNichols (2002) model.
<i>DAMJ</i>	Absolute value of discretionary accruals measured as the residuals from the modified Jones (1991) model.
<i>DADD</i>	Absolute value of discretionary accruals measured as the residuals from the Dechow and Dichev (2002) model.
<i>Overall Rating</i>	Average of each employee's overall rating of the company.
<i>CEO Rating</i>	Average of each employee's rating of the CEO's performance.
<i>Senior Leadership Rating</i>	Average of each employee's rating of the company's senior management.
<i>WLB Rating</i>	Average of each employee's rating of the company's work-life balance.
<i>Cash</i>	Cash holdings scaled by total assets.
<i>Size</i>	The natural logarithm of total assets.
<i>ROA</i>	Net income scaled by total assets.
<i>BTM</i>	The book value of equity divided by the market value of equity.
<i>Loss</i>	Indicator that equals one if income is negative, and zero otherwise.
<i>Leverage</i>	Total liabilities scaled by total assets.
<i>Intangibles</i>	Intangible assets scaled by total assets.
<i>Ln MV</i>	The natural logarithm of firm market value.

<i>Growth</i>	Total assets in year t divided by total assets in year $t - 1$.
<i>Dividends</i>	Total dividends divided by net income.
<i>Return</i>	12-month cumulative returns after adjusting for stock splits and stock dividends.
<i>Capex</i>	Capital expenditures scaled by total assets.
<i>R&D</i>	Research and development expenditures scaled by total assets.
<hr/> Cross-Sectional Variables <hr/>	
<i>WFH Feasibility LinkUp₁₉</i>	<i>WFH Feasibility LinkUp</i> measured in 2019.
<i>WFH Feasibility Revelio Labs₁₉</i>	<i>WFH Feasibility Revelio Labs</i> measured in 2019.
<i>WFH Feasibility₁₉</i>	<i>WFH Feasibility</i> measured in 2019.
<i>WFH Feasibility Flex Index</i>	A categorical variable equal to 2 if the firm has a fully remote policy, 1 if it has a hybrid policy, and zero otherwise, as developed by Scoop (2023) .
<i>Teamwork</i>	Teamwork culture score from Li et al. (2021) , averaged over 2017-2019.
<i>Governance Score</i>	Companies' performance on corporate governance practices relative to industry peers on a 0-1 scale provided by LSEG ESG, averaged over 2015-2019.
<i>Effective 302</i>	An indicator variable equal to one if no internal control weakness under SOX section 302 is reported during 2015-2019, and zero otherwise.
<i>Effective 404</i>	An indicator variable equal to one if no internal control weakness under SOX section 404 is reported during 2015-2019, and zero otherwise.

B. Alternative Specification Results

A potential concern is that corporate financial misconduct may be driven by local economic conditions in the regions where firms operate. The COVID-19 pandemic might affect the economic conditions of different counties and cities to varying degrees, raising the possibility that our estimation strategy in Eq. (2) captures the effects of changes in local economic conditions rather than the effects of COVID-19 and the associated WFH mandates on firms' internal coordination. To address this concern, we exploit cross-sectional variation in the telework feasibility of the firm's headquarter MSA as a pre-pandemic measure of WFH potential, following [Barrios et al. \(2024\)](#). Specifically, we estimate the following linear probability DiD model:

$$Misconduct_{i,m,t} = \alpha + \beta_1 WFH\ Feasibility\ MSA_{i,m} \times Post_t + \Gamma' X_{i,m,t-1} + \delta_t + \theta_i + \epsilon_{i,m,t}, \quad (3)$$

where i indexes firm, m indexes MSA, and t indexes year. $WFH\ Feasibility\ MSA_{i,m}$ is the share of teleworkable jobs in firm i 's headquarter MSA m from [Gupta et al. \(2022\)](#), measured in 2019. $Post_t$ is an indicator variable equal to 1 from 2020 onward, and zero otherwise. In addition to the firm-year controls included in Eq. (2), we include time-varying MSA-level economic variables: *Income*, the natural logarithm of total income; *Population*, the natural logarithm of total population; *GDP Growth*, GDP growth rate; *Unemployment*, unemployment rate. These variables control for local economic conditions that might confound our estimates. We include year and firm fixed effects, and cluster standard errors at the MSA level.

Below, we show that our main results are robust to the alternative specification in Eq. (3). Our variable of interest is the interaction term $Post_t \times WFH\ Feasibility\ MSA_{i,m}$, which captures the incremental change in financial misconduct for firms with higher telework feasibility after the pandemic compared to firms with lower telework feasibility. β_1 estimates the effect of WFH and stay-at-home mandates on financial misconduct.

This approach has important limitations. It assumes that a firm's WFH feasibility is determined entirely by the occupational composition of its headquarters MSA, even though many firms operate across multiple locations. As such, the MSA measure conflates regional averages with firm-level exposure. By contrast, our preferred firm-level measure—constructed from LinkUp job postings and Revelio Labs workforce records—more precisely captures variation in remote work feasibility by incorporating both realized and prospective occupational structures. For this reason, we regard Eq. (2) as the preferred specification and present those results in the main text, while reporting the MSA-based design here as a robustness check.

Table B.1: Definitions of Variables at MSA-Year Level

Variable	Definition
<i>WFH Feasibility MSA</i>	The percentage of jobs amenable to remote work in an MSA measured in 2019 from Gupta et al. (2022) .
<i>Population</i>	The natural logarithm of total population in an MSA.
<i>Income</i>	The natural logarithm of total income in an MSA.
<i>GDP Growth</i>	Annual growth rate of Gross Domestic Product (GDP) in an MSA.
<i>Unemployment</i>	The number of unemployed people as a percentage of the labor force in an MSA.

Table B.2: Descriptive Statistics

Variables	(1) N	(2) Mean	(3) SD	(4) P25	(5) P50	(6) P75
Misconduct	17,650	0.019	0.136	0.000	0.000	0.000
WFH Feasibility MSA	17,650	0.395	0.049	0.368	0.395	0.420
Post	17,650	0.494	0.500	0.000	0.000	1.000
SCAC	17,650	0.018	0.134	0.000	0.000	0.000
Restatement	17,650	0.001	0.027	0.000	0.000	0.000
Cash	17,650	0.176	0.230	0.021	0.083	0.223
Size	17,650	6.125	2.948	4.322	6.598	8.131
ROA	17,650	-0.528	2.570	-0.150	0.008	0.049
BTM	17,650	0.379	1.148	0.141	0.400	0.775
Loss	17,650	0.428	0.495	0.000	0.000	1.000
Leverage	17,650	0.479	1.310	0.050	0.222	0.445
Intangibles	17,650	0.166	0.219	0.000	0.050	0.279
Ln MV	17,650	6.087	2.518	4.291	6.200	7.919
Growth	17,650	0.293	1.196	-0.035	0.058	0.212
Dividends	17,650	0.169	0.682	0.000	0.000	0.242
Return	17,650	0.356	1.493	-0.221	0.055	0.369
Capex	17,650	0.028	0.041	0.002	0.013	0.036
R&D	17,650	0.218	8.146	0.000	0.000	0.054
Population	17,650	15.083	1.223	14.499	15.351	15.797
Income	17,650	14.074	1.200	13.426	14.337	14.746
GDP Growth	17,650	0.027	0.035	0.009	0.027	0.048
Unemployment	17,650	4.960	1.988	3.600	4.400	5.600

This table reports summary statistics for the variables in the paper. The sample period is from 2017 to 2022. The unit of observation is a firm-MSA-year. All continuous variables are winsorized at the 1st and 99th percentiles. Variables are defined in Appendix [A](#) and [B](#).

**Table B.3: Effect of Remote Work on Financial Misconduct using MSA-Level Design
(Robustness Check)**

<i>Dependent Variable:</i>	<i>Misconduct</i>	
	(1)	(2)
Post × WFH Feasibility MSA	-0.086** (0.039)	-0.100*** (0.037)
Cash		-0.001 (0.013)
Size		-0.001 (0.003)
ROA		0.001 (0.001)
BTM		-0.003* (0.002)
Growth		0.001 (0.001)
Ln MV		0.007*** (0.002)
Loss		-0.007* (0.004)
Leverage		0.001 (0.001)
Capex		-0.032 (0.034)
Intangibles		0.014 (0.014)
R&D		0.000 (0.000)
Dividends		0.001 (0.002)
Return		0.001** (0.001)
Income		-0.196 (0.147)
Population		0.061 (0.130)
GDP Growth		-0.077 (0.058)
Unemployment		-0.003* (0.002)
Firm FE	Yes	Yes
Year FE	Yes	Yes
Clusters	MSA	MSA
Adj. R ²	0.028	0.029
N	17,650	17,650

This table presents the results from DiD estimation of Eq. (3), where the dependent variable is *Misconduct* in all regressions. The level of observation is a firm-MSA-year. Standard errors are reported in parentheses and are clustered at the MSA level. Variables are defined in Appendix A and B. Levels of significance are presented as follows: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table B.4: Effect of Remote Work on Different Forms of Corporate Financial Misconduct using MSA-Level Design (Robustness Check)

<i>Dependent Variable:</i>	(1) <i>SCAC</i>	(2) <i>Restatement</i>
Post × WFH Feasibility MSA	-0.087** (0.039)	-0.013** (0.006)
Firm Controls	Yes	Yes
MSA Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Clusters	MSA	MSA
Adj. R ²	0.027	0.120
N	17,650	17,650

This table presents DiD estimation results of Eq. (3), where the dependent variables are *SCAC* in column (1) and *Restatement* in column (2). Standard errors are reported in parentheses and are clustered at the MSA level. Variables are defined in Appendix A and B. Levels of significance are presented as follows: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

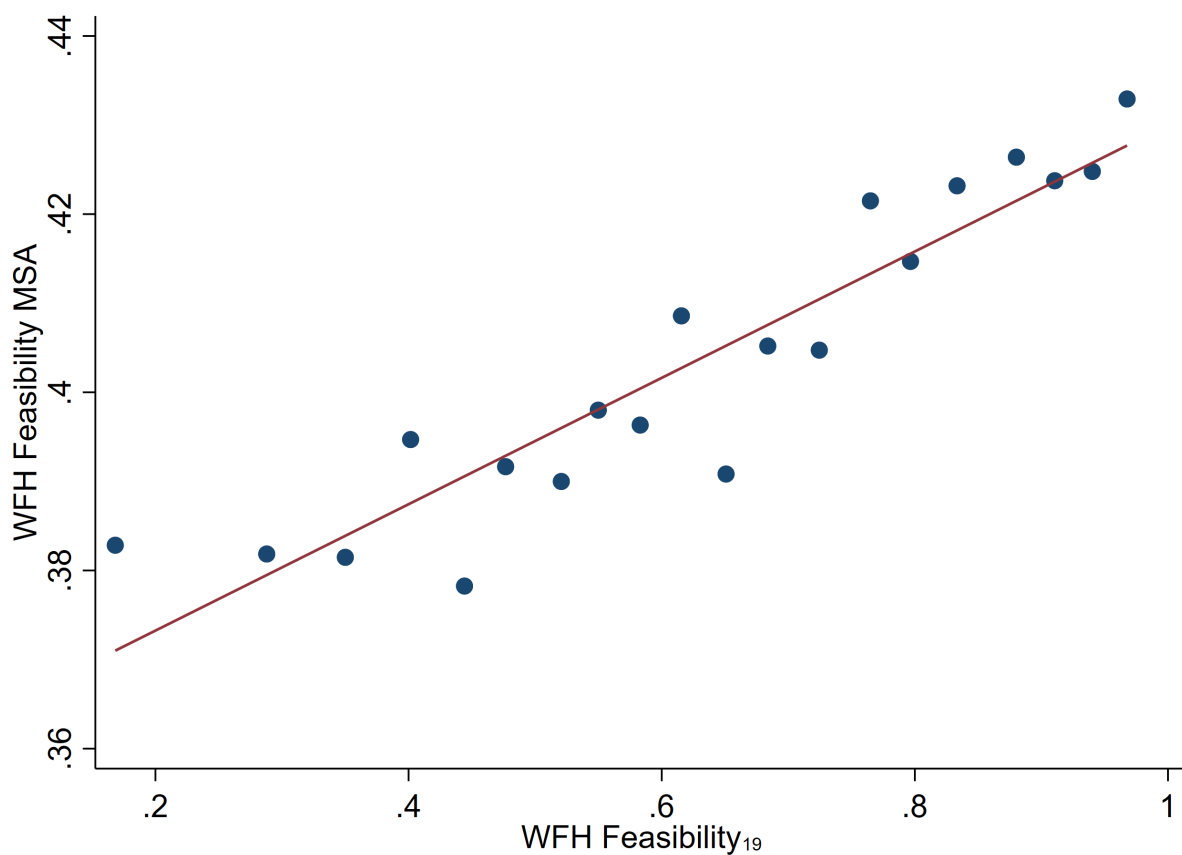


Fig. B.1: Correlation between Firm-Level WFH Feasibility Measure and MSA-Level WFH Feasibility Measure. This figure presents a binned scatter plot of the firm-level WFH feasibility measure and the MSA-level WFH feasibility measure. Firms are grouped into 20 bins based on *WFH Feasibility*₁₉, and the figure plots the average *WFH Feasibility*₁₉ and *WFH Feasibility MSA* within each bin. The x-axis reports *WFH Feasibility*₁₉, and the y-axis reports *WFH Feasibility MSA*. All variables are defined in Appendix [A](#) and [B](#).

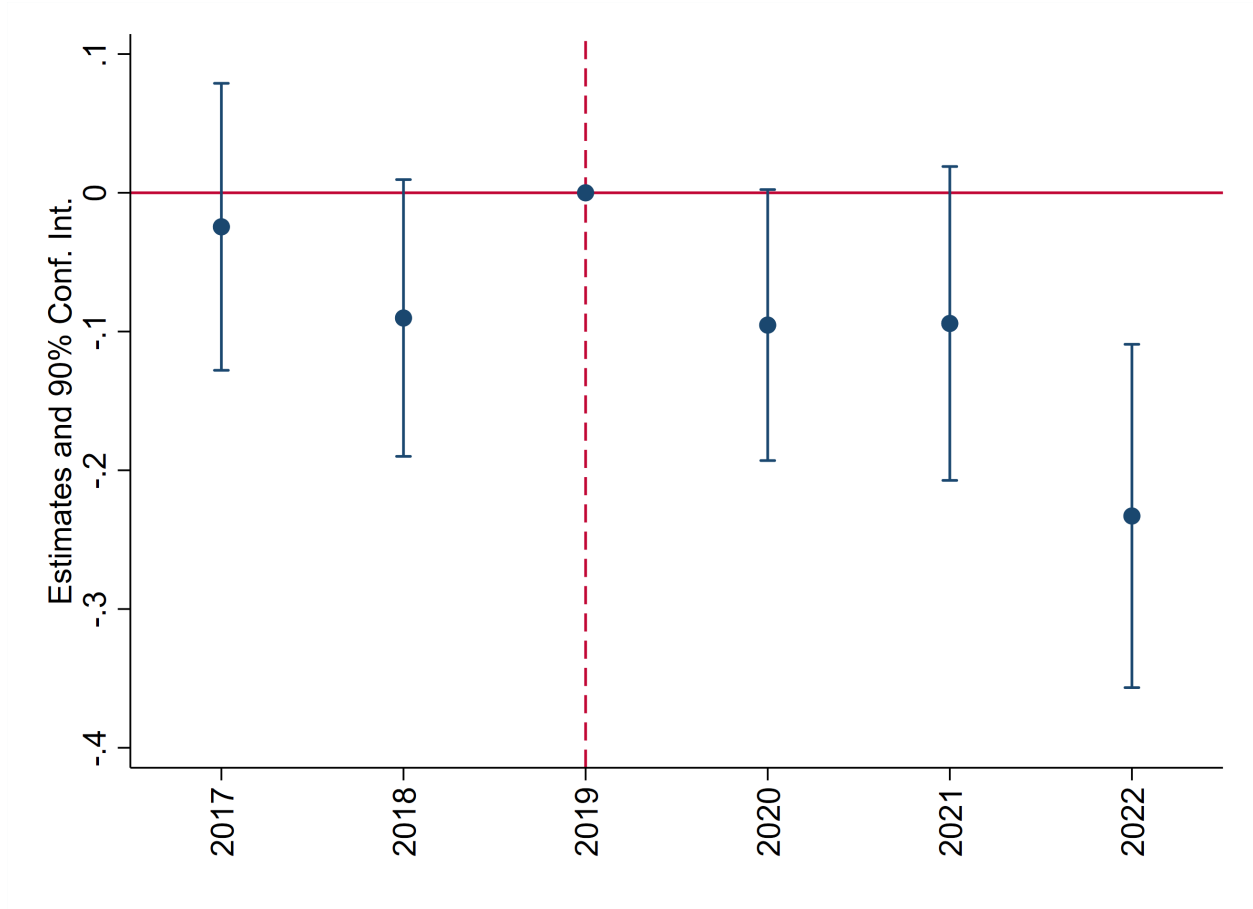


Fig. B.2: Dynamic Effects of Work from Home on Financial Misconduct at the MSA Level.

This figure plots coefficient estimates on year-by-year indicators and their 90% confidence intervals from dynamic DiD estimations of Eq. (3) at the firm-MSA-year level, in which the dependent variable is *Misconduct*. Coefficient estimates are reported relative to 2019, the last pre-COVID year. The regression includes firm and year fixed effects, and all firm characteristics and MSA characteristics control variables in the regression. Standard errors are clustered at the MSA level. All variables are defined in Appendix A and B.

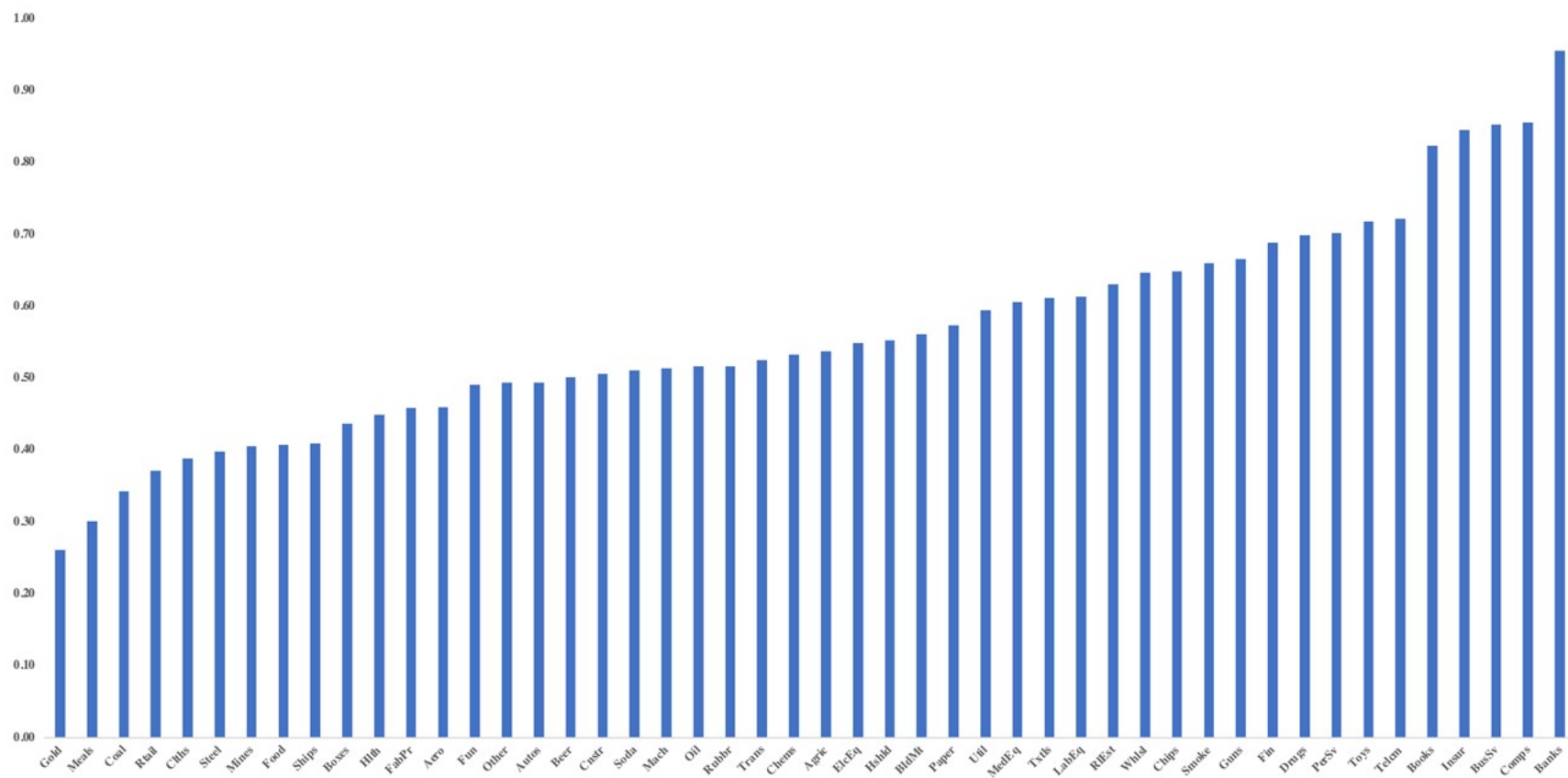


Fig. 1: Average WFH Feasibility Across Fama-French 48 Industries. This figure plots the average $WFH\ Feasibility_{19}$ for firms in the Fama-French 48 industries. The x-axis reports the industry classifications, and the y-axis shows the average WFH feasibility in 2019. All variables are defined in [Appendix A](#).

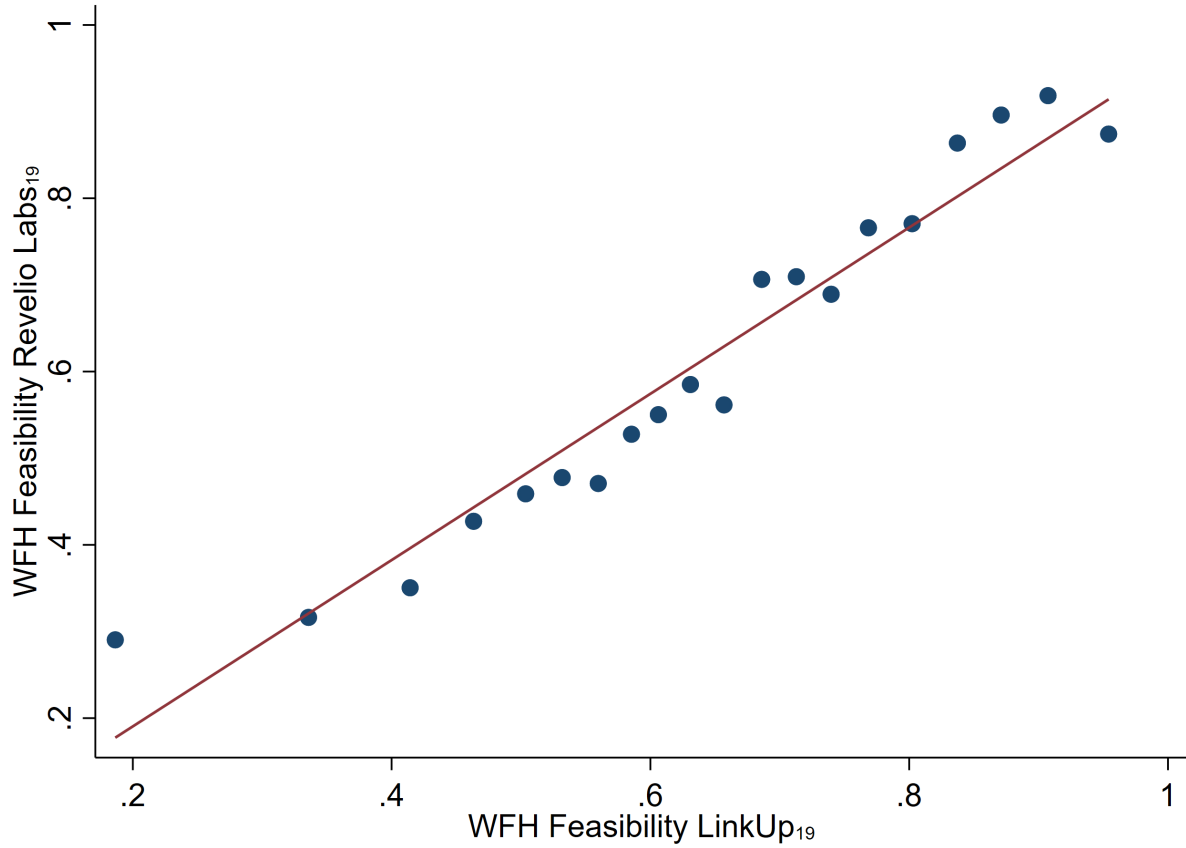


Fig. 2: Correlation Between WFH Feasibility Measures from LinkUp and Revelio Labs. This figure presents a binned scatter plot of WFH feasibility in 2019 using two data sources: LinkUp and Revelio Labs. Firms are grouped into 20 bins based on *WFH Feasibility LinkUp₁₉*, and the figure plots the average *WFH Feasibility LinkUp₁₉* and *WFH Feasibility Revelio Labs₁₉* within each bin. The x-axis reports *WFH Feasibility LinkUp₁₉*, and the y-axis reports *WFH Feasibility Revelio Labs₁₉*. All variables are defined in Appendix [A](#).

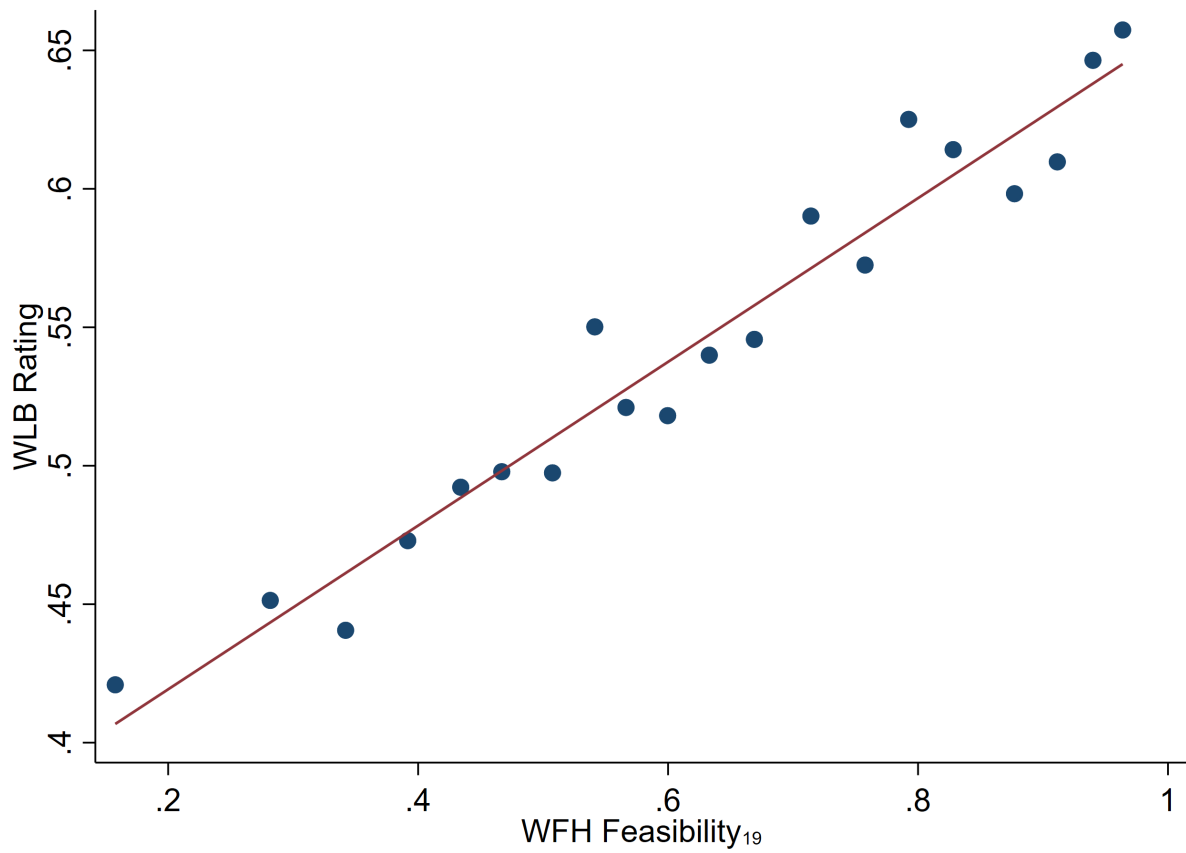


Fig. 3: Correlation Between WFH Feasibility and Employees' WLB Rating. This figure presents a binned scatter plot of *WFH Feasibility*₁₉ and employees' WLB ratings from Revelio Labs over the pre-period (2017–2019). Firms are grouped into 20 bins based on *WFH Feasibility*₁₉, and the figure plots the average *WFH Feasibility*₁₉ and *WLB Rating* within each bin. The x-axis reports *WFH Feasibility*₁₉, and the y-axis reports *WLB Rating*. All variables are defined in Appendix A.

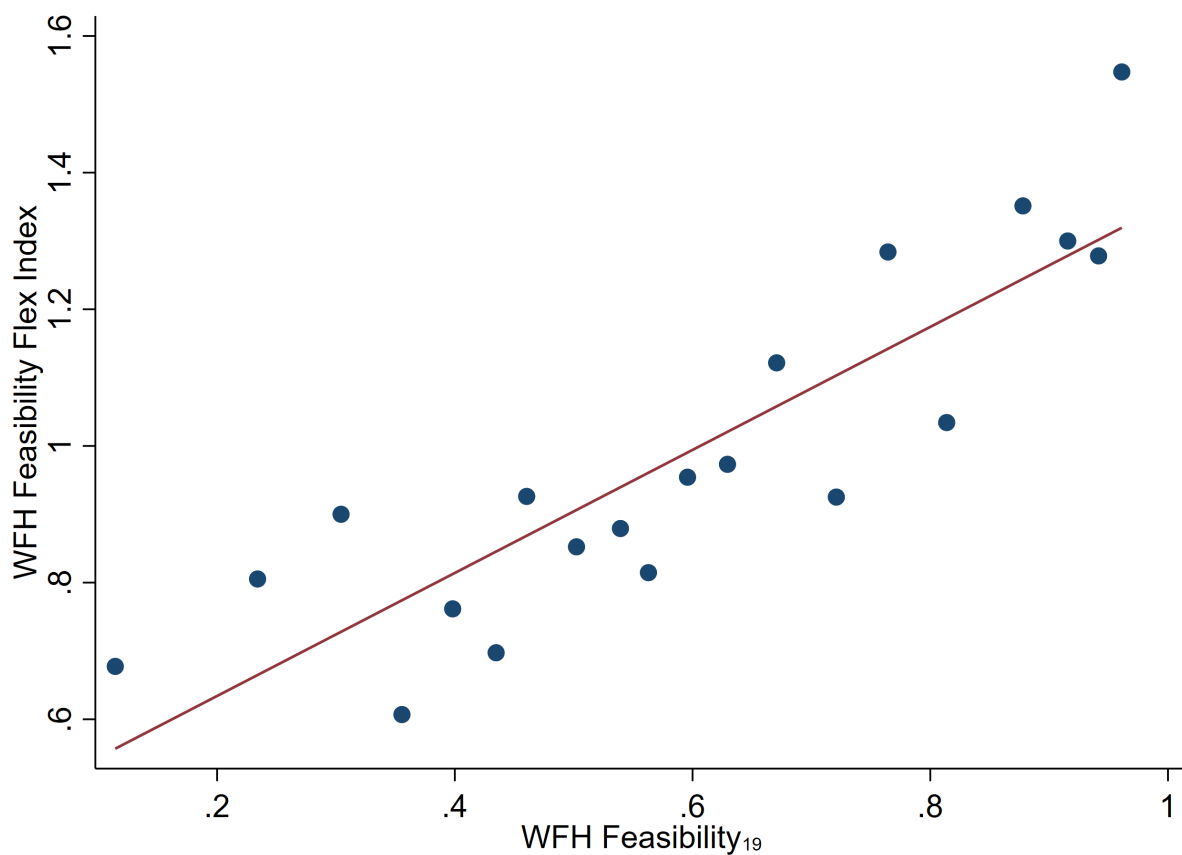


Fig. 4: Correlation Between WFH Feasibility and Flex Index. This figure presents a binned scatter plot of WFH feasibility in 2019 and WFH policy measures from the Flex Index provided by Scoop. Firms are grouped into 20 bins based on *WFH Feasibility*₁₉, and the figure plots the average *WFH Feasibility*₁₉ and *WFH Feasibility Flex Index* within each bin. The x-axis reports *WFH Feasibility*₁₉, and the y-axis reports *WFH Feasibility Flex Index*. All variables are defined in Appendix A.

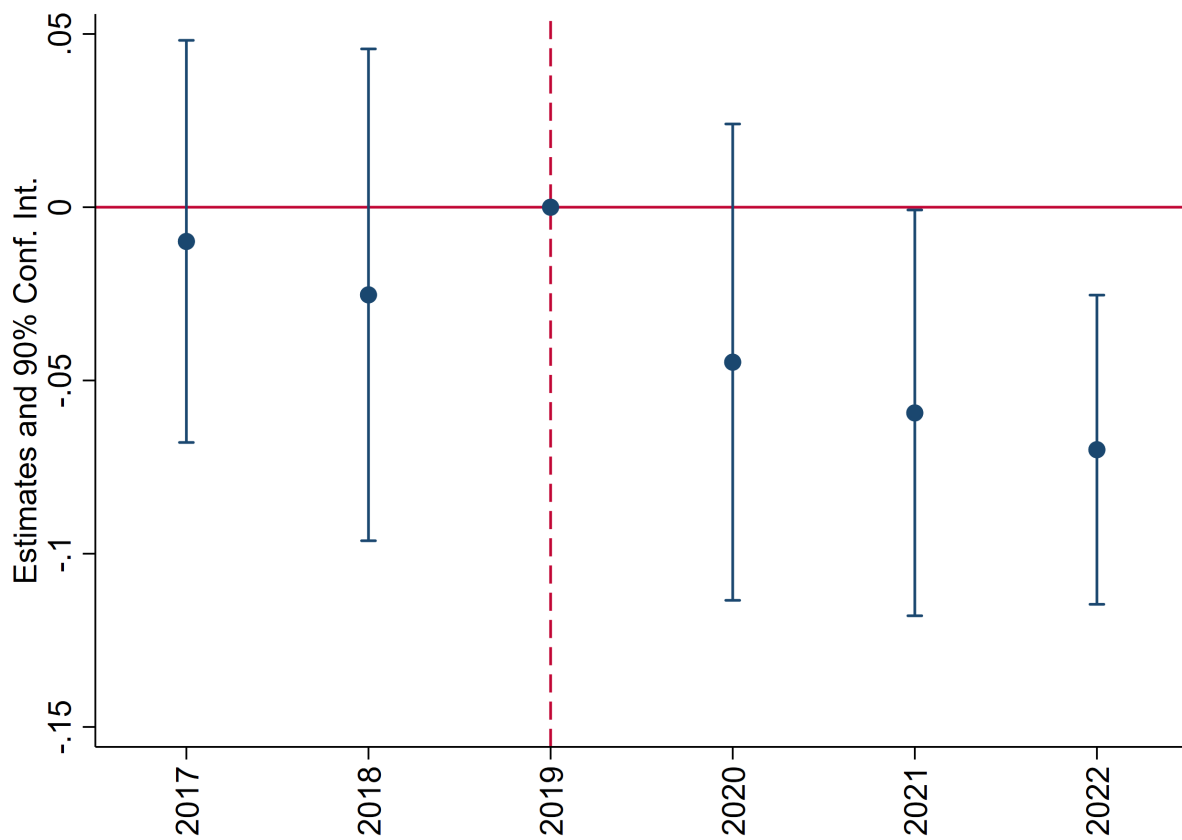


Fig. 5: Dynamic Effects of WFH on Financial Misconduct. This figure plots coefficient estimates on year-by-year indicators and their 90% confidence intervals from dynamic DiD estimations of Eq. (2), in which the dependent variable is *Misconduct*. Coefficient estimates are reported relative to 2019, the last pre-COVID year. The regression includes firm and year fixed effects, and all firm characteristics control variables in the regression. Standard errors are clustered at the Fama-French 48 industry level. All variables are defined in Appendix A.

Table 1: Descriptive Statistics

Variables	N	Mean	SD	P25	P50	P75
Misconduct	7,312	0.019	0.137	0.000	0.000	0.000
WFH Feasibility ₁₉	7,312	0.618	0.219	0.454	0.618	0.799
Post	7,312	0.504	0.500	0.000	1.000	1.000
SCAC	7,312	0.019	0.136	0.000	0.000	0.000
Restatement	7,312	0.000	0.017	0.000	0.000	0.000
Cash	7,312	0.163	0.184	0.033	0.100	0.219
Size	7,312	7.106	2.044	5.786	7.202	8.534
ROA	7,312	-0.071	0.544	-0.067	0.024	0.068
BTM	7,312	0.405	0.726	0.154	0.331	0.604
Loss	7,312	0.377	0.485	0.000	0.000	1.000
Leverage	7,312	0.312	0.347	0.103	0.282	0.431
Intangibles	7,312	0.203	0.219	0.011	0.117	0.346
Ln MV	7,312	7.315	2.100	6.005	7.439	8.751
Growth	7,312	0.168	0.596	-0.026	0.055	0.189
Dividends	7,312	0.237	0.790	0.000	0.000	0.280
Return	7,312	0.263	1.077	-0.175	0.086	0.389
Capex	7,312	0.035	0.038	0.010	0.023	0.045
R&D	7,312	0.075	0.166	0.000	0.007	0.082
WFH Feasibility LinkUp ₁₉	7,376	0.594	0.297	0.357	0.605	0.879
WFH Feasibility Revelio Labs ₁₉	7,312	0.633	0.192	0.516	0.640	0.777
WFH Feasibility Flex Index	2,995	0.984	0.618	1.000	1.000	1.000
Log of Lawsuit Lag Days	137	5.798	0.972	5.247	5.905	6.492
DAMc	6,613	0.133	0.196	0.026	0.071	0.163
DAMJ	6,888	0.180	0.240	0.044	0.119	0.237
DADD	7,011	0.128	0.191	0.026	0.068	0.155
Effective 302	7,184	0.763	0.425	1.000	1.000	1.000
Effective 404	7,103	0.809	0.393	1.000	1.000	1.000
Governance Score	6,355	0.465	0.200	0.313	0.466	0.625
Teamwork	6,549	2.700	1.767	1.447	2.177	3.426
Overall Rating	6,373	0.587	0.196	0.456	0.581	0.711
CEO Rating	5,959	0.572	0.221	0.410	0.561	0.714
Senior Leadership Rating	6,142	0.492	0.205	0.348	0.474	0.600
WLB Rating	6,257	0.554	0.201	0.413	0.533	0.667

This table presents the summary statistics of the variables used in the paper. All continuous variables are winsorized at the 1st and 99th percentiles. All variables are defined in Appendix A.

Table 2: Effect of Remote Work on Corporate Financial Misconduct

Panel A: Main Effects						
<i>Dependent Variable:</i>	<i>Misconduct</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
Post × WFH Feasibility ₁₉	-0.042** (0.016)	-0.046*** (0.015)				
Post × WFH Feasibility Indicator			-0.015* (0.008)	-0.016** (0.007)		
Post × WFH Feasibility Quartile					-0.023** (0.010)	-0.025** (0.010)
Cash		-0.015 (0.017)		-0.015 (0.017)		-0.058** (0.027)
Size		-0.005 (0.008)		-0.005 (0.008)		-0.018 (0.017)
ROA		0.009*** (0.003)		0.009*** (0.003)		0.013** (0.006)
BTM		-0.001 (0.005)		-0.001 (0.005)		0.006 (0.006)
Growth		0.002 (0.003)		0.002 (0.003)		-0.003 (0.004)
Ln MV		0.012* (0.007)		0.011 (0.006)		0.018* (0.010)
Loss		-0.008 (0.005)		-0.008 (0.005)		-0.005 (0.006)
Leverage		0.027*** (0.009)		0.028*** (0.009)		0.034* (0.017)
Capex		0.018 (0.078)		0.007 (0.075)		-0.158 (0.144)
Intangibles		-0.013 (0.022)		-0.015 (0.022)		-0.037 (0.035)
R&D		0.037*** (0.008)		0.038*** (0.008)		0.057*** (0.011)

Dividends		-0.002 (0.002)		-0.002 (0.002)		0.001 (0.004)
Return		0.003* (0.002)		0.003* (0.002)		0.005 (0.004)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.045	0.047	0.044	0.047	0.042	0.047
N	7,312	7,312	7,312	7,312	3,644	3,644

Panel B: LinkUp Sample, Revelio Labs Sample, and Logit Regression

<i>Dependent Variable:</i>	<i>Misconduct</i>		
	(1) LinkUp Sample	(2) Revelio Labs Sample	(3) Logit
Post × WFH Feasibility LinkUp ₁₉	-0.028*** (0.008)		
Post × WFH Feasibility Revelio Labs ₁₉		-0.049** (0.020)	
Post × WFH Feasibility ₁₉			-2.947*** (0.917)
Firm Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adj. R ² (Pseudo R ²)	0.043	0.047	0.119
N	7,376	7,312	664

This table presents DiD estimation results of Eq. (2), where the dependent variable is *Misconduct* in all regressions. Panel A presents results based on the main sample. *WFH Feasibility Indicator* is an indicator variable that takes the value of 1 if *WFH Feasibility*₁₉ is above the median, and zero otherwise. *WFH Feasibility Quartile* is an indicator variable that takes the value of 1 if *WFH Feasibility*₁₉ is in the fourth quartile, and zero if *WFH Feasibility*₁₉ is in the first quartile. Panel B presents the results using the LinkUp sample, Revelio Labs sample, and a Logit regression on the main sample. Standard errors are reported in parentheses and are clustered at the Fama-French 48-industry level. ***, **, and * indicate statistical significance at 1%, 5%, and 10%, respectively. All variables are defined in Appendix A.

Table 3: Effect of Remote Work on Different Forms of Corporate Financial Misconduct and Detection Timeliness

Panel A: Effect on Different Forms of Corporate Financial Misconduct		
<i>Dependent Variable:</i>	(1) <i>SCAC</i>	(2) <i>Restatement</i>
Post \times WFH Feasibility ₁₉	-0.045*** (0.015)	-0.001 (0.001)
Firm Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Adj. R ²	0.049	-0.028
N	7,312	7,312
Panel B: Effect on Timeliness of Class Action Lawsuits		
<i>Dependent Variable:</i>	<i>Log of Lawsuit Lag Days</i>	
	(1)	(2)
Post	1.199** (0.460)	
WFH Feasibility ₁₉	1.218 (0.799)	1.236 (0.737)
Post \times WFH Feasibility ₁₉	-1.342** (0.557)	-1.467** (0.532)
Firm Controls	Yes	Yes
Industry FE	Yes	Yes
Year FE	No	Yes
Adj. R ²	0.005	0.005
N	137	137

Panel A of this table presents DiD estimation results of Eq. (2), where the dependent variables are *SCAC* in column (1) and *Restatement* in column (2). Panel B of this table presents DiD estimation results of Eq. (2), where the dependent variable is *Log of Lawsuit Lag Days* across both columns, using a sample restricted to observations with *SCAC* = 1. Standard errors are reported in parentheses and are clustered at the Fama-French 48-industry level. ***, **, and * indicate statistical significance at 1%, 5%, and 10%, respectively. All variables are defined in Appendix A.

Table 4: Effect of Remote Work on Discretionary Accruals

<i>Dependent Variable:</i>	(1) <i>DAMc</i>	(2) <i>DAMJ</i>	(3) <i>DADD</i>
Post \times WFH Feasibility ₁₉	-0.075** (0.036)	-0.069* (0.039)	-0.052 (0.051)
Firm Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adj. R ²	0.506	0.395	0.508
N	6,613	6,888	7,011

This table presents DiD estimation results of Eq. (2), where the dependent variables are *DAMc* in column (1), *DAMJ* in column (2), and *DADD* in column (3). Standard errors are reported in parentheses and are clustered at the Fama-French 48-industry level. ***, **, and * indicate statistical significance at 1%, 5%, and 10%, respectively. All variables are defined in Appendix A.

Table 5: Intensity of Teamwork

<i>Dependent Variable:</i>	<i>Misconduct</i>	
	(1) High Teamwork	(2) Low Teamwork
Post \times WFH Feasibility ₁₉	-0.067*** (0.020)	-0.034* (0.019)
Firm Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Adj. R ²	0.032	0.037
N	3,313	3,370
Coef. Diff.	-0.033*	

This table presents DiD estimation results of Eq. (2) for two subsamples, where the dependent variable is *Misconduct* in both columns. We partition firms by median *Teamwork*. Column (1) presents the estimates for above-median firms, and column (2) for below-median firms. We also report Wald tests comparing the coefficients on the interaction term *WFH Feasibility*₁₉ \times *Post* estimated from the subsamples. Standard errors are reported in parentheses and are clustered at the Fama-French 48-industry level. ***, **, and * indicate statistical significance at 1%, 5%, and 10%, respectively. All variables are defined in Appendix A.

Table 6: Governance and Financial Reporting Environment

Panel A: Governance Environment

<i>Dependent Variable:</i>	<i>Misconduct</i>	
	(1) High Gov. Score	(2) Low Gov. Score
Post \times WFH Feasibility ₁₉	-0.042* (0.023)	-0.063** (0.029)
Firm Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Adj. R ²	0.055	0.038
N	3,570	2,785
Coef. Diff.	0.021	

Panel B: Financial Reporting Environment

<i>Dependent Variable:</i>	<i>Misconduct</i>			
	(1) SOX 302 Effective	(2) SOX 302 Ineffective	(3) SOX 404 Effective	(4) SOX 404 Ineffective
Post \times WFH Feasibility ₁₉	-0.059*** (0.018)	-0.004 (0.029)	-0.054*** (0.019)	-0.012 (0.030)
Firm Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R ²	0.042	0.086	0.043	0.057
N	5,482	1,702	5,744	1,359
Coef. Diff.	-0.055*		-0.042	

Panel A of this table presents DiD estimation results of Eq. (2) for two subsamples, where the dependent variable is *Misconduct* in both columns. We partition the firms by the median *Governance Score*, which summarizes board and oversight structures, including board independence, committees, compensation, and shareholder rights. Column (1) presents estimates for above-median firms, and column (2) for below-median firms. Panel B of this table presents DiD estimation results for four subsamples, where the dependent variable is *Misconduct* across all columns. Columns (1)-(2) partition firms by *Effective_302*, and columns (3)-(4) by *Effective_404*. SOX 302 and SOX 404 internal control weaknesses proxy for the effectiveness of internal controls over financial reporting. Column (1) report results for firms with *Effective_302* = 1, column (2) for firms with *Effective_302* = 0, column (3) for firms with *Effective_404* = 1, and column (4) for firms with *Effective_404* = 0. We also report Wald tests comparing the coefficients on the interaction term *WFH Feasibility*₁₉ \times *Post* across subsamples defined by the same variable. Standard errors are reported in parentheses and are clustered at the Fama-French 48-industry level. ***, **, and * indicate statistical significance at 1%, 5%, and 10%, respectively. All variables are defined in Appendix A.

Table 7: Trust Relationships Inside the Firm

Panel A: Cross-Sectional Analyses						
Dependent Variable:	Misconduct					
	(1) High Overall Rating	(2) Low Overall Rating	(3) High CEO Rating	(4) Low CEO Rating	(5) High Senior Leadership	(6) Low Senior Leadership
Post × WFH Feasibility ₁₉	-0.020 (0.015)	-0.069*** (0.023)	-0.032** (0.014)	-0.054*** (0.020)	-0.025* (0.013)	-0.059*** (0.018)
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.068	0.043	0.067	0.049	0.071	0.041
N	3,238	3,582	3,092	3,408	3,160	3,567
Coef. Diff.	0.049**		0.022		0.034**	
Panel B: Changes in the Ratings						
Dependent Variable:	Overall Rating		CEO Rating		Senior Leadership	
	(1) High Overall Rating	(2) Low Overall Rating	(3) High CEO Rating	(4) Low CEO Rating	(5) High Senior Leadership	(6) Low Senior Leadership
Post × WFH Feasibility ₁₉	-0.012 (0.037)	0.071** (0.029)	0.052 (0.044)	0.095*** (0.029)	0.042 (0.046)	0.071** (0.029)
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.261	0.354	0.354	0.462	0.318	0.389
N	3,017	3,274	2,828	3,034	2,818	3,229
Coef. Diff.	-0.083**		-0.044		-0.028	

Panel A of this table presents DiD estimation results of Eq. (2) for six subsamples, where the dependent variable is *Misconduct* in all columns. Columns (1)–(2) split firms by the median of the average *Overall Rating* over 2015–2019, columns (3)–(4) by the median of the average *CEO Rating*, and columns (5)–(6) by the median of the average *Senior Leadership Rating*. Panel B repeats the analysis for the same six subsamples, but the dependent variables are time-varying firm-level *Overall Rating* in columns (1)–(2), *CEO Rating* in columns (3)–(4), and *Senior Leadership Rating* in columns (5)–(6). We also report Wald tests comparing the coefficients on *WFH Feasibility*₁₉ × *Post* across subsamples defined by the same variable. Standard errors are reported in parentheses and are clustered at the Fama-French 48-industry level. ***, **, and * indicate statistical significance at 1%, 5%, and 10%, respectively. All variables are defined in Appendix A. 55