Corporate Labor Misconduct and Government Contract Termination for Convenience

Abstract

A prominent feature of government contracting is that the federal government has a unilateral right to terminate the contract for convenience as long as the termination is in "the Government's interest." We provide the first large sample evidence on government contract termination for convenience and examine whether it can be triggered by contractors' labor misconduct. We find that when contractors were penalized for serious labor misconduct in the previous year, their government contracts are more likely to be terminated for convenience. The effect is stronger when the misconduct is more severe or recurring, when the contractor receives higher media attention, and when competition for government contracts is more intensive in the industry. In contrast, we find no evidence that contractors' non-labor misconduct, including environmental and financial misconduct (e.g., accounting fraud), is associated with contract termination for convenience.

JEL Classification: K2, M41, M42

Keywords: Government contracting; Termination for convenience; Corporate misconduct; Labor violations; Corporate social responsibility (CSR); Environmental, social, and governance (ESG) activities

1. Introduction

The U.S. federal government spends about 40% of its discretionary spending on contracts for goods and services.¹ In fiscal year 2019, the government spent more than \$586 billion on these contracts.² A prominent feature of government contracting is that the federal government has a unilateral right to terminate the contract for convenience (termination for convenience, or TFC). TFC is to bring to an end the performance of all or part of the work specified in a contract before the contract expires when it is in "the Government's interest" to do so, regardless the contractor's performance (Manuel, Lunder, and Liu 2015; Feldman 2016).³ Even when a TFC clause is not explicitly included in a government contract, such a clause is incorporated "as a matter of law" (Manuel et al. 2015).⁴

While the government contract TFC is a very interesting phenomenon, little large sample empirical evidence exists to study this phenomenon, despite the growing academic interest in government contracting (e.g., Goldman et al. 2013; Heese and Perez-Cavazo 2019; Broggard et al. 2021). Contract TFC provides a clean setting to study the government's incentive to contract with a firm. While it seems logical that studies based on initial contract allocation amounts (e.g., Goldman et al. 2013; Brown and Huang 2020) could provide evidence on the government's willingness to contract with a firm, this may not be true. A firm's low government contract totals could be due to the firm's reluctance to bid for and/or the government's reluctance to award contracts to the firm. Empirically it is extremely challenging to control for the firm's bidding incentives. TFC allows researchers to circumvent this

¹ Source: https://www.gao.gov/blog/snapshot-government-wide-contracting-fy-2019-infographic.

² We use "the government" to mean the federal government throughout the paper.

³ The TFC clause of government contracts maps largely to a legal rule for contract breach remedies in the theoretical contracting literature. In such as rule, victims are compensated for costs that have been incurred but not for expected profits (e.g., Rogerson 1984; Che and Chung 1999; Fischel and Sykes 1999; Wickelgren 2001). Che and Chung (1999) show that such a rule could be optimal under certain conditions, providing theoretical support for the TFC provision in government contracts.

⁴ In contrast, while a TFC clause could be included in a private-sector contract, such as a lease contract or construction contract, it is an outcome of the negotiation between contracting parties. In addition, TFC clauses in private-sector contracts may not be legally binding, while TFC in government contracts is rarely legally challenged.

empirical challenge—the termination decision for an outstanding contract is *unilaterally* made by the government agency and thus clearly reflects the agency's disincentive to contract with a firm.

In this paper, we provide the first large sample evidence on government contract TFC and examine whether contractors' labor misconduct can trigger TFC of their government contracts. We focus on labor misconduct because labor issues draw particular attention from regulators in the context of government contracting. First, the Federal Acquisition Regulation (FAR) requires agencies to select best-value qualified responsible contract bidders or offerors. In particular, compliance with labor laws is viewed as part of such responsibility (Executive Order 13673).⁵ Both the Clinton and Obama administrations made attempts to require federal agencies to closely monitor contractors' workplace violations, and the Biden administration is making similar attempts (Bereznay 2018; Dodge and Testo 2021). Second, as government procurement is funded by taxpayer money, contractors are required to have a satisfactory record of integrity and business ethics to help the government fulfill its accountability. For this reason, the government cares about whether contractors treat their employees well, presumably because labor abuses are viewed as violating the public interest and thus are inconsistent with an accountable public image. Such preference of the government is clearly reflected in the additional labor laws imposed on government contractors, such as the Davis-Bacon Act and the Contract Work Hours and Safety Standards Act.⁶

While it is unclear what exactly constitutes "the Government's interest" in the context of contract TFC, we conjecture that continuing business relationships with contractors that are known by the public to have serious labor misconduct could damage the government's reputation and thus is not in the government's interest. It is also possible that frequent labor law

⁵ We provide detailed discussion of Executive Order 13673 in Section 3.

⁶ We provide detailed discussion of these laws in Section 2.3.

violations indicate less effective workplaces, lower productivity, and lower likelihood of "timely, predictable, and satisfactory delivery of goods and services to the Federal Government" (Executive Order 13673), and if so it would be in the government's interest to terminate the contract for convenience. Therefore, we predict that contractors with labor misconduct are more likely to face contract termination by the government for convenience.

This prediction, however, is not obvious because how government agencies make termination decisions is largely a black box. According to the Government Accountability Office (GAO), a firm should not automatically be considered non-responsible simply because of law violations by the firm or its personnel (Feldman 2016). Even if contracting with firms with labor misconduct is considered non-responsible and thus violates the public interest, there is mounting evidence that government procurement is influenced by political connections, and federal agencies do not necessarily maximize the public interest (e.g., Brown and Huang 2020; Broggard et al. 2021). Practitioners also complain that federal agencies tend to err in their judgment of the contract awardee's responsibility (Feldman 2016). Moreover, TFC could be costly for the government because it may have to compensate for the costs that have been incurred, certain post-termination and other costs, and a small allowance for profit (Wickelgren 2001; Feldman 2016). It may also be costly for the agency to find another contractor to perform the contract work. Therefore, it is an empirical question whether contractors are more likely to face contract TFC after being convicted for labor misconduct.

Using the procurement contract data from USASpending.gov (e.g., Heese and Perez-Cavazos 2019), we find that 0.35% of initial contracts are subsequently fully or partially terminated for convenience by the government. The average TFC amount is \$1.12 billion per year in the period 2001–2020, while the average new contract award is \$207.99 billion per year in the same period. Thus, TFC is not a trivial phenomenon. In contrast, termination for default (TFD), which is based on the contractor's anticipated or actual failure to perform substantially

as required by the contract, is much less frequent, with an annual average amount of 0.16 billion; 0.03% of initial contracts are subsequently fully or partially terminated for default by the government.⁷

We test the effect of labor misconduct on government contract TFC using the labor misconduct data from Good Jobs First's Violation Tracker database (e.g., Raghunandan 2021a,b; Heese et al. 2021). As labor violations recorded in the database tend to be minor (Heese et al. 2021), we focus on violations with penalty amounts larger than \$20,000, which we define as "serious labor misconduct."⁸ We conduct the analysis at the firm-year level using a sample of firms with outstanding government contracts available for termination and a model with firm, agency-year, and industry-year fixed effects.⁹

For the sample period 2001–2019, we find that 15.7% of firms with outstanding government contracts available for termination experience at least one TFC during a fiscal year. When a contractor was penalized for a serious labor misconduct in the previous year, its likelihood of having at least one government contract TFC and total TFC amount in the current year both increase significantly. To put the economic magnitudes in perspective, the likelihood of having TFC increases by 2.5 percentage points, which account for 16% of the average annual likelihood in our sample; the total TFC amount increases by 38.4%. In an intensive margin analysis, we find that among firm-years with at least one TFC, serious labor misconduct increases TFC amount significantly by 28.4%.¹⁰

⁷ As we discuss in Section 2.2, the term "termination for cause" is also used for TFD for contracts of commercial items. Our statistics of TFD include termination for cause.

⁸ The cutoff of \$20,000 is close to the top quartile of the penalty amounts for all labor misconduct recorded in the database (\$22,068). For labor misconduct with penalty amount below \$20,000, we find no evidence that they are associated with government contract TFC.

⁹ As a firm can have contracts with multiple agencies in a year, we use the agency with which the firm has the largest contract amount (top agency) to define agency-year fixed effects.

¹⁰ This finding is based on a model with industry and agency-year fixed effects. As we explain in Section 5.3, including a restrictive set of fixed effects in the relatively small conditional sample substantially reduces the variation of the treatment variable conditional on the fixed effects and control variables (Armstrong et al. 2021).

One major concern is that labor misconduct is endogenous and our finding could be due to omitted variables that are associated with both labor misconduct and government contract TFC. Our main research design relies on the use of a set of fixed effects (i.e., firm, agency-year, and industry-year fixed effects) for identification (e.g., Heese and Perez-Cavazos 2019). To further strengthen identification, we show that our findings are robust in three ways: to using the entropy-balancing approach to address the differences between firm-years with serious labor misconduct and those without misconduct (Hainmueller 2012); to restricting the sample to firms with at least one serious labor misconduct in the sample period to address the concern that firms with and without labor misconduct could be fundamentally different; and to additionally controlling for headquarters state-year fixed effects to address the confounding effects of local macroeconomic conditions.

We further investigate the effect heterogeneity to improve identification. We explore circumstances under which contractor labor misconduct is more likely to increase the government agency's incentives to terminate the contractor's contracts for convenience to protect "the Government's interest", expecting the effect to be stronger under those circumstances. For a correlated omitted variable to explain our main finding, the variable has to also explain all our cross-sectional findings.

We first expect the effect of labor misconduct to be stronger when it is more severe. Measuring severity with the total penalty amount of all serious labor misconduct in a year, we find evidence consistent with our expectation. Second, we show that the effect is stronger when the labor misconduct is recurring—when it is preceded by another serious labor misconduct in the previous two years. This is presumably because recurring labor violations could be viewed as more serious violations of the public interest and thus "the Government's interest." Third, we examine how the effect of labor misconduct on contract TFC varies with firms' media coverage. If the effect we document is due to government agencies' perception that doing business with firms with labor misconduct could be viewed by the public and taxpayers as violating "the Government's interest", the effect is likely to be stronger when the misbehaving firms have higher media coverage and thus are more closely monitored by the public. Our empirical evidence is consistent with this prediction. Finally, we predict that when more firms in the industry are competing for government contracts, it would be less costly for an agency to terminate contracts in response to labor misconduct, because the cost of switching to a new contractor would be lower. Consistent with this prediction, we find that the effect of labor misconduct on TFC is stronger when the industry competition for government contracts is more intensive.

In additional analyses, we explore whether other corporate misconduct also leads to government contract TFC. We find that non-labor misconduct, including environment violations and financial misconduct (e.g., accounting fraud), does not lead to an increase in contract TFC. This finding suggests that the impact of corporate misconduct on TFC is context specific—the government responds to some but not all misconduct. In addition, we find no significant evidence that serious labor misconduct could trigger government contract TFD.

Our study contributes to the literature of government contracting. Prior research has studied the impact of government contracting (e.g., Dhaliwal et al. 2016; Goldman 2020), initial contract allocation (e.g., Goldman et al. 2013; Tahoun 2014; Brown and Huang 2020), contract design (e.g., Heese and Perez-Cavazos 2019), and contract renegotiation (Broggard et al. 2021). To the best of our knowledge, we are the first to provide large sample evidence on contract termination, in particular TFC, and show how different types of contractor misconduct impacts contract TFC differently. In particular, we find that labor misconduct can trigger contract TFC, while other misconduct does not.

Our study also adds to the literature on the economic consequences of corporate misconduct and corporate social responsibility (CSR) violations (e.g., Karpoff and Lott 1993;

Karpoff et al. 2005; Karpoff et al. 2008; Murphy et al. 2009; Johnson et al. 2014; Amiram et al. 2018). Prior studies typically focus on the impacts of misconduct revelation on executives, shareholders, or debtholders. We show the adverse consequence of labor misconduct along the supply chain; that is, it reduces the federal government's incentive to contract with the firm. Our finding of no significant impact of environmental violations or financial misconduct highlights that different types of misconduct could have differential impacts.

In a related paper, Flammer (2018) finds that firms with better overall CSR performance, as measured with the KLD ratings, receive more government procurement contracts. She attributes this finding to the notion that CSR improves the government's trust in a firm, mitigating the agency problem due to the information asymmetry between the government and the firm. Our study focuses on contract TFC, instead of initial contract allocation. Our argument of why labor misconduct could trigger TFC is also fundamentally different from Flammer's (2018) argument based on information asymmetry.¹¹ Our study also differs from Karpoff et al. (1999) and Heese and Perez-Cavazo (2019) in that they both examine how government procurement fraud affects subsequent government contracting.¹²

Section 2 discusses institutional backgrounds. Section 3 develops our main hypothesis. Section 4 provides descriptive evidence on government contract termination. Section 5 presents our empirical analyses, and Section 6 concludes.

2. Institutional Background

2.1 Federal Government Procurement

The U.S. federal government is one of the largest customers of the private sector (Goldman 2020; Broggard et al. 2021; Cohen et al. 2021). According to the GAO, in fiscal year

¹¹ The differential impacts of different types of misconduct we document also distinguish our study from Flammer (2018), which focuses firms' *overall* CSR performance.

¹² Our study is also different from Johnson et al. (2014), which focuses on how general customers respond to the revelation of financial fraud.

2019, the federal government spent \$586.2 billion on contracts for goods (\$39%) and services (61%), with 65% spent by the Department of Defense (DOD).¹³ Among the civilian agencies, the Department of Energy spent the most (5.7%), followed by the Department of Veterans Affairs (4.7%), the Department of Health and Human Services (4.5%), and the National Aeronautics and Space Administration (3.1%).

The process of federal government procurement is highly regulated, primarily the Federal Acquisition Regulations (FAR). According to FAR, purchasing agencies need to first post the contract opportunities on the Federal Business Opportunities website and then select contractors on a competitive basis. When selecting contractors, the Contracting Officer (CO) needs to evaluate the offers from all bidders and to determine whether a prospective contractor meets the criteria set forth in the FAR. Generally, COs should choose the lowest-priced (or best-value) qualified *responsible* bidder or offeror (Manuel 2013). To be determined responsible, prospective contractors must meet the general standards set up by the FAR, including criteria related to both their conduct and capabilities (Manuel 2013; FAR 9.104-1). In addition to requiring the contractors to have necessary operational and accounting controls and adequate resources to ensure satisfactory contract performance, the FAR also requires that contractors have "satisfactory record of integrity and business ethics" (FAR 9.104-1).

After a contract is signed, it can be renegotiated (modified) subsequently. Broggard et al. (2021) show that contract renegotiations account for most of the funds allocated through government contracts. In their sample, modifications of existing contracts account for the allocation of \$1.9 trillion out of \$2.3 trillion in total. The government agencies can also terminate a contract before it expires, as we detail below.

¹³ Source: https://www.gao.gov/blog/snapshot-government-wide-contracting-fy-2019-infographic.

2.2 Termination of Government Contracts

Contract terminations are provided for in government contracts under standard FAR clauses. Government agencies can terminate a contract for convenience (TFC) or for default (TFD). TFC is the exercise of the government's right to bring to an end the performance of all (full termination) or part (partial termination) of work specified in a contract before it expires when it is in the "Government's interest" to do so (Manuel et al. 2015; Feldman 2016). TFC is based on the "Government's interest", as opposed to the contractor's actual or anticipated failure to perform. Unlike TFC, TFD is based on the contractor's anticipated or actual failure to perform substantially as required by the contract. The term "termination for cause" is also used for TFD for contracts of commercial items. In practice, TFC is more common than TFD. Based on our data, in the period 2000-2020, the average annual TFC amount is \$1.12 billion, while average annual TFD amount (including termination for cause) is only \$0.16 billion. Appendix A provides several examples of TFC and TFD.

The FAR does not explicitly define what constitutes "the Government's interest." However, according to Feldman (2016, pp. 595), the government's reservation of the right to terminate contracts for convenience is "extremely broad", and is not limited to a change in government requirements or a decrease in the need for the purchase items. Manuel et al. (2015) provide some examples, including: i) when the government no longer needs the goods or services; ii) the work specified in the contract is proving impossible or too costly; iii) the contractor refuses to accept a contract modification; iv) the business relationship between the agency and contractor has deteriorated; v) the agency wants to avoid a dispute with the Congress or the Comptroller General; vi) the agency has decided to perform work in-house or to restructure its contractual arrangements, and so on. They further argue that "Termination in almost any other circumstances could also be found to be in the government's interest" (pp. 6).

The government's right to terminate a contract for convenience is embodied in standard "Termination for Convenience of the Government" clauses. Typical examples include the FAR's "Termination for Convenience of the Government (Fixed-Price)" clause and the "Termination for the Government's Convenience" term in the "Commercial Items" clause, a part of the standard terms for commercial item contracts (Feldman 2016). However, even when the contract does not explicitly include such a clause, the government is generally still able to exercise this right (Manuel et al. 2015; Feldman 2016). In the FAR court case *G.L. Christian and Associates v. United States* in 1963, the U.S. Court of Claims, the predecessor of the Court of Appeals for the D.C. Circuit, held that even though TFC clauses are not explicitly included in a contract, such clauses were incorporated "as a matter of law", and viewed TFC as a "deeply ingrained strand of public procurement policy" (Manuel et al. 2015). The case has become known as the Christian Doctrine, which permits the incorporation of mandatory clauses by operation of law even if such clauses are physically absent in the contract.

When terminating a contract for convenience, the CO needs to follow the procedure set up by the FAR. Contractors should be notified in writing, and the notice must contain the effective date and the extent of termination and any special instructions. When a contract is terminated for convenience, the government is required to make a fair and prompt settlement with the contractor. The settlement terms are based on the negotiation between the government and the contractor. The general rule is that the contractor may recover the costs that have been incurred, certain post-termination costs, settlement expenses, and a small allowance for profit (Wickelgren 2001; Feldman 2016). TFC is generally viewed as a significant risk faced by government contractors (Millman 2019).

2.3 Labor Regulations for Contractors

While the primary goal of government procurement is to obtain goods and services on a competitive basis, various basic socioeconomic objectives have been addressed throughout the process (Feldman 2016). For example, programs that provide contracting preferences for small disadvantaged businesses, and women- or veteran-owned small businesses. Further, there are requirements for contractors to comply with policies arising under various laws, such as labor standards statutes and federal environmental laws (Feldman 2016; Kholer et al. 2020). Thus, government contractors must comply with labor standards imposed under various federal statutes, which were enacted to prevent substandard working conditions and wage rates in the contract performance. We discuss several important statutes below as examples, including the Davis-Bacon Act (DBA), the Contract Work Hours and Safety Standards Act, the Walsh-Healey Act, and the Service Contract Act.

The DBA requires contractors to pay prevailing wages, including basic hourly rates and fringe benefits payments, on projects involving the construction, alteration, or repair of public buildings. Failure by contractors to pay required wages can result in several actions, including termination of the contract for default, assessment of excess re-procurement costs, and debarment of the contractor from government contracting (Feldman 2016). The Contract Work Hours and Safety Standards Act supplements the DBA by providing that the wages paid on public works contracts must be calculated on the basis of a standard workweek of 40 hours, and the contractor must pay overtime wages of no less than 150% of the base rate. The Act also

forbids working conditions that are hazardous, unsanitary, or dangerous to employee safety or health.

The Walsh-Healey Act establishes labor standards for government contracts above \$10,000 to manufacture or furnish goods. The law sets the minimum wage equal to the prevailing wage as determined by the Secretary of Labor and establishes overtime pay for hours worked by contractor employees in excess of 40 hours per week. The Act also sets standards for job health and safety and the use of convict labor. The Service Contract Act (SCA) establishes labor standards for contracts that are primarily for services. It requires contractors performing services on prime contracts in excess of \$2,500 to pay service employees prevailing wage rates and fringe benefits, or the rates contained in a predecessor contractor's collective bargaining agreement.

In addition to complying with laws that are specific to them, like most private sector employers, government contractors are covered by labor laws, including notably the Occupational Safety and Health Act of 1970 (OSH Act) and the Fair Labor Standards Act of 1938 (FLSA). However, in practice, it is unclear whether violations of such laws adversely affect government agencies' willingness to contract with a firm. The GAO (2010, 2019, 2020) reports that the Department of Defense (DOD) has awarded contracts to some companies that the Department of Labor (DOL) found to have violated federal labor laws, including wage, workplace safety, and health standards.

3. Hypothesis Development

As government procurement is funded by taxpayer money, it is not surprising that prospective contractors are required to have a satisfactory record of integrity and business ethics to help the government fulfill its accountability, and that the procurement process is designed to help promote various socioeconomic objectives (Manuel 2013; Feldman 2016; Kholer et al. 2020). The extra labor law compliance requirements for government contractors discussed in Section 2.3 suggest that the government cares, or is required to care, much about whether contractors treat their employees well, presumably because workplace abuses are viewed as violating the public interest. In a similar vein, firms that do not comply with equal employment opportunity requirements, and firms with repeated violations of laws are found to be non-responsible per the FAR (Manuel 2013), and are excluded from the federal procurement market, again because contracting with such firms is not in the public interest.

Labor law violations could be viewed as noncompliance with the requirement of maintaining "a satisfactory record of integrity and business ethics" and could thus disqualify the firm from being considered a "responsible" contractor (Manuel 2013). As part of his efforts to increase the regulation of labor practice of contractors, President Obama issued Executive Order 13673, Fair Pay and Safe Workplaces (FPSW), on July 31, 2014, to "promote economy and efficiency in procurement by contracting with *responsible* sources who *comply with labor laws*" (emphasis added).¹⁴ Based on the order, each agency should require prospective contractors to disclose any labor law violations they had in the three years prior to contract awards, and to require contractors to update the information every six months during the contract performance.¹⁵ While the order was revoked by President Trump on November 6, 2017, it reflected the government's general concern about contractor workplace violations.¹⁶ Similar attempts were also made during the presidency of Clinton (Bereznay 2018). The Biden Administration has subsequently tried to impose similar requirements (Dodge and Testo 2021).

Recall that grounds for contract TFC include any reason in "the Government's interest". Perhaps intentionally broad, it likely includes the desire to avoid supporting contractors known by the public to have serious labor misconduct. It is also possible that frequent labor law

 ¹⁴ In addition to FPSW, President Obama issued Executive Orders 13494, 13495, and 13496 in January 2009 to increases labor regulation for contractors (Bereznay 2018).
 ¹⁵ See https://obamawhitehouse.archives.gov/the-press-office/2014/07/31/executive-order-fair-pay-and-safe-

workplaces.

¹⁶ FPSW was heavily criticized by courts, practitioners, and the contracting community. In the end, it did not survive judicial scrutiny (Bereznay 2018).

violations indicate less effective workplaces, lower productivity, and lower likelihood of "timely, predictable, and satisfactory delivery of goods and services to the Federal Government" (Executive Order 13673), and thus it would be in the government's interest to terminate the contract for convenience. Thus, we predict that contractors with labor misconduct are more likely to face contract termination by the government for convenience.

H1: Government contractors are more likely to face contract termination for convenience after being convicted for labor misconduct.

This prediction is not obvious because it is unclear whether COs actually consider that terminating contracts of firms with labor law violations is in the government's interest. GAO holds that a firm should not be automatically considered non-responsible simply because of law violations by the firm or its personnel (Feldman 2016). It is also possible that COs err in approving the awardee's responsibility, as many practitioners have complained (Feldman 2016). Even if terminating a contract due to labor misconduct is in the government's interest, COs may not do so due to their connections with the contractor. Prior studies have shown that both the initial allocation and renegotiation of government contracts are influenced by political connections (e.g., Tahoun 2014; Brown and Huang 2020; Broggard et al. 2021). In addition, as we discuss in Section 2.2., TFC involves some monetary costs for the government. The agency may also need to pay more for a different contractor, or they may not be able to find another contractor. If such costs are sufficiently high, we may not observe an increase in TFC after a contractor is convicted for labor misconduct.

4. Descriptive Statistics on Contract Termination

Before investigating how labor misconduct affects government contract TFC, we provide descriptive statistics on TFC using government contract data from USASpending.gov (e.g., Heese and Perez-Cavazos 2019; Samuels 2020). This database contains detailed information

on government contracts, such as contractor name, amount, various terms, and industry code. In this analysis, we include all contract observations in the database.¹⁷ Table 1, Panel A reports the frequency and amount of TFC for the period 2001–2020, along with the statistics for new contracts and TFD for comparison. On average, 9,008 contracts are terminated for convenience per year, while 453 contracts are terminated for default. In an average year, the number of contracts terminated for convenience accounts for 0.32% of the number of new contracts signed. The average TFC dollar volume per year is \$1.12 billion, which is nontrivial compared to the average amount of new contracts, \$207.99 billion. In contrast, the average TFD volume per year is only \$0.16 billion.

The procurement data also allow us to trace whether a new contract experiences TFC and TFD before the contract expires. Table 1, Panel B reports the proportion of new contracts signed in each year that are subsequently terminated for convenience or default. To allow enough time to trace the contract outcome, we focus on the new contracts signed during 2001–2015. The proportion of new contracts that experience TFC subsequently ranges between 0.1% (2001) and 0.6% (2012), with an annual average of 0.35%. The proportion of new contracts that experience TFD subsequently ranges between 0.02% (2001–2005, 2007–2008, and 2015) and 0.09% (2006), with an annual average of 0.03%.

To show the time series variation of TFC and TFD, we visualize the amount of each for each year in Figure 1. Figure 1A is based on dollar volume; Figure 1B is based on the dollar volume relative to the total dollar volume of new contracts. The patterns are fairly consistent in Figures 1A and 1B. The dollar amount of TFC exhibits an increasing trend from 2001 to 2020, while there is no obvious trend for TFD. The TFC amounts peak in 2012 (Figure 1A) or

¹⁷ In the raw contract data, some contracts are terminated immediately after they are signed (e.g., on the same day). We assume such cases are for book keeping convenience and not really new contracts or terminations. In particular, if any termination takes place within three days after a new contract is signed, we net off the new contract amount with the termination amount when identifying new contracts and contract terminations. Our main results in Section 5 are robust to removing this data filter.

2013 (Figure 1B), which may be due to the federal government's budget issue. The federal government experienced a shutdown from Oct 1 to Oct 17, 2013 due to funding issues, which was the third-longest government shutdown in U.S. history. In contrast, the trend of the annual amount of TFD is fairly flat in Figures 1A and 1B. Figure 2 presents the time series variations based on the number of cases for TFC and TFD. Figure 1A is based on the annual frequency; Figure 1B is based on the annual frequency relative to the annual number of new contracts. The patterns are largely consistent with those in Figure 1, except that the frequency of TFC is the highest in 2020, presumably due to the COVID-19 pandemic.

5. Empirical Analyses

5.1 Research Design

We estimate the following OLS regression to test H1 at the firm-year level using firmyears with outstanding government contracts available for termination:

$$TFC = \alpha + \beta \times Labor_Misconduct + \gamma \times Controls + Firm FE + Agency-Year FE + Industry-Year FE + \varepsilon.$$
(1)

The dependent variable TFC is one of our two measures of contract TFC: TFC_Dummy and $Ln(1+TFC_Amt)$. TFC_Dummy is an indicator variable that equals one if a firm experiences any TFC during a fiscal year and zero otherwise. $Ln(1+TFC_Amt)$ is the natural logarithm of one plus TFC_Amt , the total TFC amount during a fiscal year. The independent variable of interest is *Labor_Misconduct*, an indicator variable that equals one if a firm was penalized for a labor misconduct in the previous year. This variable is coded using the penalty date of the misconduct, not the actual date of misconduct, because government agencies need to know of the misconduct first before responding.

We identify outstanding contracts available for termination in the following way. First, we assume that all contracts outstanding at the beginning of a fiscal year are open for termination. We identify these contracts by tracing all initial contracts signed prior to the fiscal year, adjusting for all subsequent modifications and terminations. Second, we assume all new contracts signed during the fiscal year, except those signed in the last three days, are available for termination. We require a 3-day gap between the initial contract date and possible termination because it is unlikely that a newly signed contract is terminated within three days (see Section 2.2). The use of a 3-day gap is somewhat arbitrary. Our main results are robust to using 10-day or 15-day gap.¹⁸

We include firm fixed effects to control for time-invariant firm heterogeneity and focus on the effect of labor misconduct on within-firm changes of TFC. Agency-year and industryyear fixed effects are included to control for the impacts of federal budget conditions and other macro-economic factors at the agency and industry levels, respectively. As a firm can have contracts with multiple agencies in a year, we use the agency with which the firm has the largest contract amount (top agency) to define agency-year fixed effects. We cluster standard errors by each firm to account for possible within-firm dependence of the error terms (Peterson 2009).

Controls refers to control variables. Given that we are the first to study TFC of government contracts and no theory exists about what factors could drive TFC, we control for several firm and contract characteristics that may be associated with TFC intuitively. Specifically, we control for firm size (*Size*), profitability (*ROA* and *Loss*), market-to-book ratio (*MTB*), leverage ratio (*Lev*), operating risk, measured with return volatility (*RetVol*) and Alman's (1968) Z-score (*ZScore*), and political connection (*Political_Connect*). Following prior studies (e.g., Correia 2014), we measure political connection with a firm's Political Action Committee (PAC) contributions. *Political_Connect* is coded as one if a firm has PAC contributions in the most recent election cycle and zero otherwise. Detailed definitions of these control variables are provided in Appendix B. As an agency's TFC decisions are generally a

¹⁸ When imposing the 10-day (15-day) gap, we also assume that in the raw contract data, if any termination takes place within 10 days (15-days) after a new contract is signed, it is for book keeping convenience and is not really a termination. We net off the new contract amount with the termination amount when identifying new contracts and contract terminations (see footnote 17).

black box, we do not have ex ante predictions on how these variables are associated with TFC. Even for political connections, prior studies document mixed findings on their impacts in government contracting (e.g., Tahoun 2014; Heese and Perez-Cavazos 2019).

In addition, we control for three contract-related variables: *Total_Contract*, *Fixed_Price_Contract*, and *Commercial_Contract*. *Total_Contract* is the natural logarithm of the total outstanding contract amounts available for termination during the year. We expect *Total_Contract* to be positively associated with the likelihood and amount of TFC. *Fixed_Price_Contract* is the percentage of contracts that are fixed-price ones. *Commercial_Contract* is the percentage of contracts that are for commercial items—goods or services that are available in the commercial market. We control for these two contract characteristics because fixed-price contracts and contracts of commercial items typically have a TFC clause (see Section 2.2). However, as we discuss in Section 2.2, even when a contract does not include a TFC clause, it will be incorporated into the contract as a matter of law under the Christian doctrine (Manuel et al. 2015; Feldman 2016). Thus, the effects of these two contract variables are unclear ex ante.

5.2 Data and Summary Statistics

We obtain government contract data from USASpending.gov, and firm accounting and market information from Compustat and CRSP, respectively. Using a fuzzy matching algorithm, we merge the government contract data with Compustat by the name of the vendor's parent company and then verify the matching manually (e.g., Samuels 2021; He et al. 2021). We obtain the corporate misconduct data from the Violation Tracker database provided by the Corporate Research Project of Good Jobs First (e.g., Raghunandan 2021a,b; Heese et al. 2021). The database covers a large number of facility-level federal violations and the resulting

penalties since 2000. It provides information of facility name, industry code, parent firm name, violation type, penalty date, penalty amount, and so on.¹⁹

We identify the following violations recorded in the Violation Tracker database as labor misconduct: 1) workplace safety or health violations, 2) wage and hour violations, 3) labor relations violations, 4) employment discrimination, 5) benefit plan administrator violations, 6) employment screening violations, 7) Family and Medical Leave Act violations, and 8) work visa violations. As the labor misconduct recorded in Violation Tracker is typically minor based on the penalty amount, to focus on economically more meaningful misconduct, we include only that with penalty amount above \$20,000, which we label as "serious labor misconduct." The cutoff of \$20,000 is close to the top quartile of the penalty amounts for all labor misconduct recorded in the database (\$22,068).²⁰

Since we define the treatment variable *Labor_Misconduct* using convicted misconduct in the previous year, we start the sample in 2001. We end the sample in 2019 to exclude the period affected by the COVID-19 pandemic. As explained in Section 5.1, our analysis is conditional on firm-years with outstanding government contracts available for termination. After requiring the availability of all variables used in equation (1), our final sample consists of 18,342 firm-year observations for the sample period 2001–2019.

Table 2 reports summary statistics for the sample. The mean of *TFC_Dummy* is 0.157, indicating that 15.7% of firm-years experience at least one TFC. Thus, TFC is common among contractors. Conditional on the existence of TFC, the average amount terminated in a year is \$1.74 million, while the median amount is only \$0.04 million. 7.2% of firm-years were penalized for labor misconduct at least once in the previous year. An average firm has total

¹⁹ Violation Tracker provides the current parent company of a facility, not the parent company at the time of penalty. We adjust the parent company data using the historical parent firm data provided by Aneesh Raghunanda (e.g., Raghunandan 2021a,b; Heese et al. 2021).

²⁰ To provide a benchmark for evaluating the \$20,000 cutoff, OSHA uses a common cutoff of \$40,000 to determine whether a workplace safety and health violation is severe enough to warrant public shaming via agency press releases (Johnson 2020).

outstanding contracts available for termination of \$292.99 million, while median outstanding contract amount is only \$1.37 million. On average, 85.8% of outstanding contracts are fixed-price contracts, and 49.0% are for commercial items. The average market capitalization is \$6.322 billion, and the average ROA is -0.01%. 26.9% of firm-years report a loss, and 13.6% have political connections.

5.3 Baseline Results

Table 3 reports the OLS regression results of estimating equation (1). Columns 1 and 2 report the results for the dependent variable TFC_Dummy . In column 1, we include only *Labor_Misconduct* and firm, agency-year, industry-year fixed effects. The coefficient of *Labor_Misconduct* is positive and significant (0.028, *t*-statistic = 2.45). We include all control variables in column 2 and continue to find a positive and significant coefficient of *Labor_Misconduct* (0.025, *t*-statistic = 2.21). These results indicate that when a firm was penalized in the previous year for serious labor misconduct, the likelihood of its government contracts being terminated by the government for convenience increases relative to contractors in the same industry and contractors that contract with the same top agency. The coefficient estimate in the full model in column 2 indicates an increase of 2.5 percentage points in the likelihood of TFC, which is economically meaningful compared to 15.7%, the average likelihood of TFC in our sample.

Columns 3 and 4 report the results using $Ln(1+TFC_Amt)$ as the dependent variable, without and with control variables, respectively. The coefficient of *Labor_Misconduct* is positive and significant in both columns, 0.359 (*t*-statistic = 3.00) and 0.325 (*t*-statistic = 2.74), respectively. Thus, when a firm was penalized in the previous year for serious labor misconduct, the contract amount terminated by the government for convenience increases relative to contractors in the same industry and to contractors that contract with the same top agency. The coefficient estimate in the full model in column 4, 0.325, translates to an increase of 38.4% in TFC amount.²¹

Given that only 15.7% of contractors have TFC in our sample, our findings for TFC amount in columns 3 and 4 could be completely driven by the change in the likelihood of having a TFC, and it is unclear whether labor misconduct increases TFC amount conditional on the existence of TFC. To shed light on this issue, we re-run the regression in column 4 using firm-years with at least one TFC. The results are reported in column 5. The sample size drops from 18, 342 to 2,405. The coefficient of *Labor_Misconduct* is positive, but insignificant (*t*-statistic = 1.53). However, the statistical insignificance could be due to the lack of sufficient variation in the variable *Labor_Misconduct* in a relatively small sample with a very restrictive set of fixed effects (Armstrong et al. 2021). In particular, there might not be sufficient within-firm variation in labor misconduct in this conditional sample. Thus, we also estimate a model with industry and agency-year fixed effects and report the results in column 6. We find a positive and significant coefficient of *Labor_Misconduct* (0.258, *t*-statistic = 1.81).²² Based on a calculation similar to the one in footnote 21, the coefficient estimate 0.258 translates to an increase of 29.4% in TFC amount. Thus, serious labor misconduct also increases TFC amount conditional on the existence of TFC.

Overall, the results in Table 3 are consistent our prediction in H1 that government contractors are more likely to face contract TFC after being convicted for labor misconduct. We next discuss the effects of the control variables using the full sample results in columns 2 and 4. We find that larger firms are more likely to face TFC and have larger TFC amounts, while more profitable firms have lower TFC amounts, and firms with higher market-to-book

²¹ The economic effect is calculated as follows. Denote TFC amount with and without labor misconduct with y_1 and y_0 , respectively. Equation (1) implies that $\ln(1+y_1)=\ln(1+y_0)+\beta_1$. Thus, the relative increase of TFC amount is $y_1/y_0-1=(1+1/y_0) e^{\beta_1} - 1/y_0-1$. If y_0 is set to the sample mean of 148,000, the relative increase is 38.4% when $\beta_1 = 0.325$. We use a similar approach to calculate the economic effects for the subsequent tests.

²² The sample sizes in columns 5 and 6 are different because singleton observations are dropped and the two columns use different fixed effects.

ratios are less likely to face TFC.²³ The two risk variables, *RetVol* and *ZScore*, are not significantly associated with TFC. As expected, the total contract amount is strongly and positively associated with TFC likelihood and amount. The fraction of fixed-price contracts is positively associated with, while the fraction of commercial item contracts is not associated with TFC likelihood and amount. Notably, the effect of political connections is insignificant, which is consistent with Heese and Perez-Cavozos' (2019) finding that political connections do not affect an agency's response to contract design changes.²⁴

5.4 Cross-sectional Tests

5.4.1 Severity of Labor Misconduct

We first examine how the documented effect differs by severity of labor misconduct. We predict the effect to be stronger for more severe misconduct. We measure the severity of misconduct by the total penalty amount of all misconduct in a year, with the top quintile in each year classified as the more severe group, flagged with the indicator variable *Labor_Misconduct_High*, and the remaining quintiles classified as the less severe group, labeled with the indicator variable *Labor_Misconduct_High* (*Labor_Misconduct_Low*) is an indicator variable equal to one if a firm was penalized for labor misconduct in the previous year and the total penalty amount is in the top quintile (the bottom four quintiles) of the year, and zero otherwise.

We estimate equation (1) with *Labor_Misconduct* replaced with *Labor_Misconduct_High* and *Labor_Misconduct_Low* and report the results in Table 4. Columns 1 and 2 report the results for *TFC_Dummy*; columns 3 and 4 report the results for

²³ The positive coefficient of *Size* could be due to larger firms having more government contracts and thus a larger base for termination. The correlation between *Size* and *Total Contract* is 33%.

²⁴ In an untabulated test, we add the interaction of *Labor*_Misconduct and *Political_Connect* to the model and find that the coefficient is insignificant for both TFC likelihood and amount. Thus, the effect of labor misconduct does not vary with firms' political connection either.

 $Ln(1+TFC_Amt)$. The results for control variables are omitted for brevity. In all regressions, the coefficient of *Labor_Misconduct_High* is significantly larger than that of *Labor_Misconduct_Low*. For instance, in the full model for *TFC_Dummy* in column 2, the coefficients of the high and low group indicators are 0.069 (*t*-statistic = 3.23), and 0.015 (*t*-statistic = 1.29), respectively, and the difference between the two coefficients is significant. These results suggest that firms penalized for the most severe labor misconduct in the previous year have a 6.9 percentage points higher likelihood of TFC than firms without misconduct, and their TFC likelihood is 5.4 percentage points higher than firms penalized for relatively less severe labor misconduct. Overall, the results in Table 4 are consistent with our expectation that the effect of labor misconduct on government contract TFC is stronger when the misconduct is more severe.

5.4.2 Recurrence of Labor Misconduct

Government agencies may distinguish between recurring versus nonrecurring labor misconduct. If a contractor consistently has labor violations, government agencies may be more responsive by terminating contracts for convenience, because recurring labor violations could be viewed as more serious violation of the public interest and thus "the Government's interest." Therefore, the effect of labor misconduct on contract TFC is expected to be stronger for recurring misconduct. To test this prediction, we decompose *Labor_Misconduct* into *Labor_Misconduct_Recur* and *Labor_Misconduct_NonRecur*. *Labor_Misconduct_Recur* is an indicator variable that equals one if a contractor has serious labor misconduct in year *t-1*, but not in *t-2* or *t-3*, and zero otherwise. *Labor_Misconduct* in year *t-1*, but not in *t-2* or *t-3*, and zero otherwise. and the firm-years with serious labor.

²⁵ We find similar results when defining *Labor_Misconduct_Recur* and *Labor_Misconduct_NonRecur* using the misconduct information in *t-2* only. For instance, *Labor_Misconduct_Recur* equals one if a contractor has serious labor misconduct in year *t-1*, as well as in *t-2*, and zero otherwise.

misconduct in our sample are classified as having recurring serious labor misconduct.

Table 5 reports the results of this analysis. As we need the misconduct information in *t-2* and *t-3* to define *Labor_Misconduct_Recur* and *Labor_Misconduct_NonRecur*, we shorten the sample period to 2003–2019 and the sample size decreases from 18,342 to 16,646. Columns 1 and 2 report the results for *TFC_Dummy*; columns 3 and 4 report the results for *Ln(1+TFC_Amt)*. In all regressions, the coefficient of *Labor_Misconduct_Recur* is positive and significant, while the coefficient of *Labor_Misconduct_NonRecur* is insignificant. Moreover, the difference of the two coefficients is significant when the dependent variable is TFC amount (columns 3 and 4). As expected, the coefficient of *Labor_Misconduct_Recur* is larger in magnitude than the corresponding coefficient of *Labor_Misconduct* in Table 3—0.031 vs. 0.025 for column 2 and 0.485 vs. 0.325 for column 4. These results are consistent with our expectation that the effect of labor misconduct on government contract TFC is stronger when the misconduct is recurring.

5.4.3 Media Coverage

If the effect documented in Table 3 is due to government agencies' perception that doing business with firms with labor misconduct could be viewed by the public and taxpayers as violating "the Government's interest", the effect is likely to be stronger when the misbehaving firms are more closely monitored by the public. To test this prediction, we examine how the effect varies with contractors' media coverage, measured as the number news articles covering a firm in a year in RevenPack. Following prior studies, we consider articles with relevance score above 90 (e.g., Drake et al. 2014). We create an indicator variable *High_Media*, which equals one if a firm-year's media coverage in year *t-1* (the same as the misconduct penalty year) is in the top tercile of the sample, and zero otherwise, and add the variable and its interaction

with *Labor_Misconduct* to equation (1).²⁶

Table 6 reports the results of this analysis, with columns 1 and 2 reporting the results for TFC_Dummy and columns 3 and 4 for $Ln(1+TFC_Amt)$. In both columns 1 and 2, the coefficient of Labor_Misconduct×High_Media is significantly positive, 0.050 (*t*-statistic = 2.01) when control variables are not included and 0.053 (*t*-statistic = 2.18) when control variables are included. These results indicate that the effect of labor misconduct on the likelihood of government contract TFC is stronger when contractors have higher media coverage. The results based on TFC amount in columns 3 and 4 present a similar picture. The coefficient of Labor_Misconduct×High_Media is 0.564 (*t*-statistic = 2.14) when control variables are not included, and 0.597 (*t*-statistic = 2.13) when control variables are included. Collectively, these results indicate that the effect of labor misconduct on TFC of government contracts is more pronounced for contractors with higher media coverage.

5.4.4 Industry Contract Competition

We next examine how the documented effect in Table 4 varies with the level of industry competition for government contracts. As we discuss in Section 3, TFC could be costly for the agency if it needs to pay more for a different contractor, or is not able to find another contractor. We expect when such cost is lower, the effect of labor misconduct on TFC will be stronger. To test this prediction, we measure the agency's cost of switching to a new contract with the level of industry competition for government contracts. If more firms in the industry are competing for government contracts, it would be less costly for the agency to switch to a new contractor.

We measure industry competition for government contracts by the average number of bidders for a competed contract (a contract with a bidding process) in each 6-digit NAICS industry. We follow He et al.'s (2021) approach to identify contracts with a bidding process,

²⁶ When we define *High_Media* using the sample media, the results are consistent, though slightly weaker statistically.

requiring the variable "Extent Competed" in the government contract dataset to take one of the following values: "Full and Open Competition after Exclusion of Sources", "Full and Open Competition", "Competed under SAP", and "Follow On to Competed Action", or the variable "Fair Opportunity/Limited Resources" to take the value "FAIR". Using this competition measure, we create an indicator variable *High_Comp*, which equals one if the industry average number of bidders is in the top tercile of the previous year (the year of misconduct penalty), and zero otherwise. We add this variable and its interaction with *Labor_Misconduct* to equation (1).²⁷

Table 7 reports the results. Columns 1 and 2 report the results for TFC_Dummy ; columns 3 and 4 report the results for $Ln(1+TFC_Amt)$. In both columns 1 and 2, the coefficient of $Labor_Misconduct \times High_Comp$ is significantly positive, 0.048 (*t*-statistic = 2.09) when control variables are not included and 0.052 (*t*-statistic = 2.29) when control variables are included. These results indicate that the effect of labor misconduct on the likelihood of government contract TFC is stronger when competition for government contracts is more intensive in a firm's industry. The results based on TFC amount in columns 3 and 4 are similar. In both columns, the coefficient of $Labor_Misconduct \times High_Comp$ is significantly positive, 0.573 (*t*-statistic = 2.28) when control variables are not included. Taken together, these results indicate that the effect of labor misconduct when more firms in the industry are competing for government contracts.

5.5 The Impacts of Other Corporate Misconduct

We further explore whether other corporate misconduct, such as environmental violations and financial misconduct, have a similar effect on TFC of government contracts. As we discuss

²⁷ When we define *High_Comp* using the annual sample median, the results are consistent.

in Section 2.3, the government pursues various basic socioeconomic objectives throughout the procurement process (Feldman 2016). Because corporate misconduct generally damages firm reputations, the federal government may also be more likely to terminate contractors' contracts for convenience after observing non-labor misconduct. However, as in the case of labor misconduct, the effect is ambiguous ex ante because how government agencies make termination decisions is largely a black box.

We first explore contractors' environmental misconduct. Using the environmental misconduct data from the Violation Tracker database (the violation category "environmental violation"), we define an indicator variable Env Misconduct, which equals one if a firm was penalized for an environmental violation with penalty amount greater than \$20,000 in the previous year and zero otherwise.²⁸ We then replace Labor Misconduct with Env Misconduct in equation (1). The results reported in columns 1 and 6 Table 8 indicate that the coefficients of Env Misconduct are insignificant for both TFC likelihood and amount. In an untabulated test, we explore whether more serious environmental violations could trigger government TFC defining indicator variables Env Misconduct High contract by and Env Misconduct Low in a similar way as for labor misconduct, and find that neither is significantly associated with TFC likelihood or amount. The evidence from these tests indicates that environmental misconduct does not significantly increase TFC of government contracts.

We next explore whether the detection of financial misconduct of government contractors increases contract TFC. We measure financial misconduct using the broad category "financial offenses" in Violator Tracker, which include a variety of financial violations, such as "accounting fraud or deficiencies", "banking violation", and "insider trading".²⁹ We define an

²⁸ The mean of *Env* Misconduct is 0.05.

²⁹ Specifically, financial offenses include "accounting fraud or deficiencies, anti-money-laundering deficiencies, banking violation, bankruptcy professional violation, economic sanction violation, insider trading, investor protection violation, mortgage abuses, payday lending violation, tax violations, and toxic securities abuses". (https://www.goodjobsfirst.org/violation-tracker-offense-groups).

indicator variable *Fin_Misconduct* in a similar way as for *Labor_Misconduct*, also focusing on violations with penalty amount greater than \$20,000.³⁰ The results reported in columns 2 and 7 of Table 8 indicate that financial misconduct does not significantly increase TFC of government contracts. In an untabulated test, we separately explore more versus less serious financial misconduct, as we do for labor and environmental misconduct, and find that neither is significantly associated with TFC likelihood or amount.

To focus on the effect of accounting fraud, we measure accounting fraud using the SEC Accounting and Auditing Enforcement Releases (AAER) database (e.g., Dechow et al. 2011; Li et al. 2021). We define an indicator variable *Acct_Fraud*, which equals one if a firm had an AAER in the previous year and zero otherwise.³¹ We then replace *Labor_Misconduct* with *Acct_Fraud* and estimate equation (1). Columns 3 and 8 of Table 8 report that the coefficients of *Acct_Fraud* are insignificant for both TFC likelihood and amount. We find similar results when defining *Acct_Fraud* using the violation category "accounting fraud or deficiencies" in the Violation Tracker database (untabulated). Thus, we find no significant evidence that government agencies respond to contractors' accounting fraud by terminating government contracts for convenience.

Next, we explore all non-labor misconduct together by defining an indicator variable *Non_Labor_Misconduct* using all non-labor misconduct recorded in Violation Tracker with penalties greater than \$20,000.³² The results reported in columns 4 and 8 of Table 8 indicate that *Non_Labor_Misconduct* is not significantly associated with TFC likelihood or amount. We also separately explore more versus less severe non-labor misconduct and find that neither is significantly associated with TFC likelihood or amount (untabulated). Finally, we plug *Env_Misconduct* and *Fin_Misconduct* together with *Labor_Misconduct* into the model, and

³⁰ The mean of *Fin_Misconduct* is 0.004.

³¹ The mean of Acct Fraud is 0.009.

³² The mean of *Non_Labor_Misconduct* is 0.08.

find that the coefficients of *Env_Misconduct* and *Fin_Misconduct* are insignificant while the coefficient of *Labor_Misconduct* is positive and significant (columns 5 and 10), with the magnitude very close to the corresponding one in Table 3.³³ Taken together, the analyses in this subsection indicate that non-labor misconduct does not trigger government contract TFC.

5.6 Labor Misconduct and Contract Termination for Default

We also explore whether the conviction of contractors' labor misconduct leads to government contract TFD (including termination for cause). As we discuss in Section 2.2, TFD is based on the contractor's anticipated or actual failure to perform substantially as required by the contract, not in "the Government's interest." As it is unclear whether the conviction for labor misconduct can substantially lower a contractor's ability to carry out the contract, the impact of labor misconduct on TFD is ambiguous ex ante. To explore this question, we defined two new dependent variables, TFD_Dummy and $Ln(1+TFD_Amt)$, which are parallel to TFC_Dummy and $Ln(1+TFC_Amt)$ but based on TFD. We use these two variables as dependent variables and estimate equation (1). The results are reported in columns 1, 2, 4, and 5 of Table 9. In all models, the coefficients of *Labor_Misconduct* are insignificant. To explore the possibility that more serious labor misconduct could have a significant impact on TFD, we replace *Labor_Misconduct* with *Labor_Misconduct_High* and *Labor_Misconduct_Low* and report the results in columns 3 and 6. Once again we find neither coefficient is significant. Thus, we do not find significant evidence that labor misconduct of contractors leads to contract TFD.

5.7 Robustness Tests

Finally, we subject our main findings in Table 3 to a battery of robustness tests. First, we use the entropy-balancing approach, which weights the observations in the sample to

³³ In an untabulated analysis, we plug *Labor_Misconduct* and *Non_Labor_Misconduct* together into the model, and find that the coefficient of *Non_Labor_Misconduct* is insignificant while that of *Labor_Misconduct* is positive and significant for both dependent variables.

achieve covariate balance, to control for the differences between firm-years with serious labor misconduct and those without misconduct (Hainmueller 2012; Huang 2022; Berger and Lee 2022). The results are reported in columns 1 and 4 of Table 10. The results are consistent with those in columns 2 and 4 of Table 3, and the magnitudes are slightly larger, 0.030 vs. 0.025 for *TFC_Dummy* and 0.385 vs. 0.325 for *TFC_Amt*.

Second, we restrict the sample to firms with at least one serious labor misconduct in the sample period to address the concern that firms which have never been convicted for serious labor misconduct are fundamentally different from those which have been. While our research design focuses on within-firm variation of labor misconduct, firms without misconduct convictions can still influence the estimate of treatment effect because they are included as a benchmark through agency-year and industry-year fixed effects to evaluate the treatment effect. Columns 2 and 5 of Table 5 report the results of this analysis. We continue to find a positive and significant coefficient of *Labor_Misconduct* in each model and the magnitudes are comparable to those in columns 2 and 4 of Table 3. Finally, we add headquarters state-year fixed effects to equation (1) to further control for the potential influence of the state-level macroeconomic conditions. We find consistent results, as reported in columns 3 and 6 of Table 10.

6. Conclusion

This paper examines an important contractual right of the federal government in its procurement contracts with government contractors. Contract Termination for Convenience (TFC) allows for the termination of a contract unilaterally for "the Government's interest", even if the contractor is performing well. We first provide large sample evidence on the frequency, magnitude, and trend of TFC. We then focus on examining whether and how contractors' labor misconduct affects federal agencies' incentive to terminate contracts for convenience, motivated by the observation that the Federal Acquisition Regulation (FAR)

requires agencies to select best-value qualified *responsible* contract bidders or offerors, and that the government pursues various socioeconomic objectives throughout the procurement process because it involves the use of taxpayer money.

We find that when contractors are penalized for serious labor misconduct (with penalty amounts greater than \$20,000) in the previous year, they are more likely to face contract TFC. The effect is stronger when the misconduct is more severe or recurring, when the contractor receives higher media attention, and when competition for government contracts is more intensive in the industry. In contrast, we find no evidence that contractors' non-labor misconduct, including environmental and financial misconduct, is associated with contract TFC. In addition, we find no significant evidence that serious labor misconduct could trigger government contract termination for default, which is based on the contractor's anticipated or actual failure to perform substantially as required by the contract.

Our study contributes to the literature of government contracting, by providing the first large sample evidence on contract termination, in particular termination for convenience, and showing that contractors' labor misconduct leads to contract termination for convenience, but not termination for default. We also add to the literature on the economic consequences of corporate misconduct and corporate social responsibility violations, providing evidence on such consequences from the perspective of government contracting.

Government contract TFC provides a clean setting to study the government's willingness to contract with a firm, because it allows researchers to hold contractors' contracting incentives constant and focus on the government's contracting incentives. This feature allows researchers to circumvent an issue that contaminates studies using initial contract allocation to analyze the government's willingness to contract with a firm. That issue is the fact that low government contract amounts for a given firm may not only reflect the government's reluctance to award contracts, but also the firm's reluctance to bid for contracts.

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Future studies can leverage this unique advantage of TFC to study or re-study the federal government's incentives to contract with firms in various settings.

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Appendix A Examples of TFC and TFD

Example 1: Partial TFC

The Department of the Interior (DOI) signed a contract with Perini Management Services Inc, a construction company located in Massachusetts, on September 30, 2010. The total contract amount was \$22,996,542. The contract was expected to end on September 23, 2012. The contractor's job was to design and build Wide Ruins Community School. On December 21, 2011, the contract was partially terminated for convenience by DOI by \$21,072,231. The remaining contract was closed out on September 23, 2012 with a payment of \$323,233.³⁴

Example 2: Full TFC

Unit Company, a construction firm in Alaska, entered a contract with the Department of Defense (DOD) on April 10, 2014 to design and construct warm storage hangars. The total contract amount was \$25,545,700. The contract was expected to end on January 10. 2016. About one month later, on May 29, 2014, DOD terminated the contract for convenience fully.³⁵

Example 3: TFD

Galaxy Scientific Corporation, which specializes in portable optical near-infrared spectroscopy, signed a contract with the Department of Homeland Security (DHS) on September 23, 2005 to provide 25 HULD (Hardened Unit Load Device) units and related maintenance and repair services. The total contract amount was \$1,243,400. The contract was expected to end on April 21, 2010. On March 20, 2006, DHS terminated the contract for default by \$1,046,040.

³⁴ Source:

https://www.usaspending.gov/award/CONT_AWD_INICMK00100017_1450_INF98210AD002_1448. ³⁵ Source: https://www.usaspending.gov/award/CONT_AWD_W911KB14C0007_9700_-NONE-_-NONE-_

Variable	Definition
Acct_Fraud	An indicator variable that equals one if a firm had an Accounting and Auditing Enforcement Release (AAER) in the previous year and zero otherwise.
Commercial_Contract	The percentage of contracts for commercial items among the total amount of outstanding contracts available for termination during a fiscal year.
Env_Misconduct	An indicator variable that equals one if a firm had at least one environmental misconduct with penalty amount no less than \$20,000 in the previous year and zero otherwise.
Fin_Misconduct	An indicator variable that equals one if a firm had at least one financial misconduct with penalty amount no less than \$20,000 in the previous year and zero otherwise.
Fixed_Price_Contract	The percentage of fixed-price contracts among the total amount of outstanding contracts available for termination during a fiscal year.
High_Comp	An indicator variable that equals one if the average number of bidders for a competed government contract in a 6-digit NAICS industry is in the top tercile of year <i>t</i> - <i>1</i> , and zero otherwise.
High_Media	An indicator variable that equals one if a firm's media coverage in year $t-1$ is in the top tercile of the sample, and zero otherwise.
Labor_Misconduct	An indicator variable that equals one if a firm has at least one labor misconduct with penalty amount no less than \$20,000 in the previous year and zero otherwise.
Labor_Misconduct_High	An indicator variable equal to one if a firm had at least one labor misconduct with penalty amount no less than \$20,000 in the previous year and the total penalty amount was in the top quintile of the year, and zero otherwise.
Labor_Misconduct_Low	An indicator variable equal to one if a firm had at least one labor misconduct with penalty amount no less than \$20,000 in the previous year and the total penalty amount was in the bottom four quintiles of the year, and zero otherwise.
Labor_Misconduct_NonRecur	An indicator variable that equals one if a contractor had at least one labor misconduct with penalty amount no less than $20,000$ in year <i>t</i> -1 but no such labor misconduct in <i>t</i> -2 or <i>t</i> -3, and zero otherwise.
Labor_Misconduct_Recur	An indicator variable that equals one if a contractor had at least one labor misconduct with penalty amount no less than $20,000$ both in year <i>t</i> -1 and in <i>t</i> -2 or <i>t</i> -3, and zero otherwise.
Lev	Total liabilities divided by total assets at the beginning of a fiscal year.
Ln(1+TFC_Amt)	The natural logarithm of one plus <i>TFC_Amt</i> , the total TFC amount during a fiscal year.
Ln(1+TFD_Amt)	The natural logarithm of one plus <i>TFD_Amt</i> , the total TFD amount during a fiscal year.
Loss	An indicator variable that equals one if income before extraordinary items at the beginning of a fiscal year is less than zero and zero otherwise.
Mark Cap	The market capitalization (in billion dollars) at the beginning of a fiscal year.
МТВ	The market value of equity divided by the book value of equity at the beginning of a fiscal year.
Non_Labor_Misconduct	An indicator variable that equals one if a firm had at least one non-labor- related misconduct with penalty amount no less than \$20,000 in the previous year and zero otherwise.

Appendix B: Variable Definitions

Political Connect	An indicator variable that equals one if a firm made contribution to a
Tonneal_Connect	politician through a PAC in the most recent election cycle prior to a fiscal
	year and zero otherwise.
RetVol	The standard deviation of the firm's daily stock returns in the previous fiscal year.
ROA	Income before extraordinary items divided by total assets, calculated at the beginning of fiscal year.
Size	The natural logarithm of the market value of equity at the beginning of a fiscal year.
TFC_Amt	The total termination for convenience amount during a fiscal year.
TFC_Dummy	An indicator variable that equals one if a firm experiences any TFC during a fiscal year and zero otherwise.
TFD_Dummy	An indicator variable that equals one if a firm experiences any TFD during a fiscal year and zero otherwise.
Total_Contract	The natural logarithm of the total amount of outstanding contracts available for termination during a fiscal year.
ZScore	Altman's (1968) bankruptcy prediction score computed as $1.2 \times$ (current assets minus current liabilities, divided by total assets) + $1.4 \times$ (retained earnings divided by total assets) + $3.3 \times$ (earnings before interest and taxes divided by total assets) + $0.6 \times$ (market value of equity divided by total liabilities) + $0.999 \times$ (sales divided by total assets) at the beginning of a fiscal year.

Figure 1 Amount of Contract Termination by Year



Figure 1A Termination Amount

Figure 1B Termination Amount Relative to Total New Contract Amount



This figure plots the total amount for government contract termination, separately for TFC and TFD, for each government fiscal year from 2001 to 2020. Each government fiscal year spans from October of the previous calendar year to September of the current calendar year. Figure 1A is based on the raw termination amount. Figure 1B is based on the percentage of the total termination amount relative to the total new contract amount.

Figure 2 The Frequency of Contract Termination by Year



Figure 2A Frequency of Termination

Figure 2B Termination Frequency Relative to Number of New Contracts



This figure plots the frequency of government contract termination, separately for TFC and TFD, for each government fiscal year from 2001 to 2020. Each government fiscal year spans from October of the previous calendar year to September of the current calendar year. Figure 1A plots the raw frequency of termination. Figure 1B plots the percentage of the termination frequency relative to the number of new contracts in the same year.

Panel A: Number of Contracts and Amount by Year												
	New Co	ontracts		Terminatio	on for Conveni	ence	Termination for Default					
Fiscal Year	Ν	Total value (\$ billion)	Ν	% of N of new contracts	Total value (\$ billion)	% of total value of new contracts	Ν	% of N of new contracts	Total value (\$ billion)	% of total value of new contracts		
2001	433,698	96.31	602	0.14	0.11	0.12	97	0.02	0.14	0.14		
2002	557,831	113.81	664	0.12	0.24	0.21	100	0.02	0.03	0.02		
2003	846,731	147.45	1,134	0.13	0.24	0.16	119	0.01	0.02	0.01		
2004	1,519,907	153.31	2,030	0.13	0.31	0.20	222	0.01	0.19	0.12		
2005	2,279,808	187.12	3,576	0.16	0.34	0.18	266	0.01	0.06	0.03		
2006	3,094,778	208.94	6,402	0.21	0.58	0.28	403	0.01	0.05	0.03		
2007	3,265,391	217.73	8,565	0.26	0.56	0.26	632	0.02	0.07	0.03		
2008	3,579,736	265.79	8,289	0.23	0.94	0.35	585	0.02	0.45	0.17		
2009	2,487,378	262.47	9,657	0.39	1.16	0.44	678	0.03	0.34	0.13		
2010	2,431,758	276.49	10,388	0.43	1.33	0.48	630	0.03	0.11	0.04		
2011	2,207,596	241.46	10,990	0.50	1.85	0.77	655	0.03	0.16	0.07		
2012	1,965,169	236.97	14,598	0.74	2.69	1.13	572	0.03	0.38	0.16		
2013	1,401,043	192.33	8,070	0.58	2.23	1.16	559	0.04	0.24	0.12		
2014	1,447,419	191.22	6,337	0.44	1.22	0.64	485	0.03	0.16	0.08		
2015	3,269,664	190.66	6,683	0.20	1.24	0.65	598	0.02	0.16	0.08		
2016	3,687,060	197.39	8,251	0.22	1.55	0.78	495	0.01	0.08	0.04		
2017	3,673,559	216.75	9,103	0.25	1.28	0.59	529	0.01	0.18	0.08		
2018	4,451,487	245.86	9,488	0.21	1.31	0.53	505	0.01	0.09	0.03		
2019	5,363,476	252.81	13,971	0.26	1.45	0.57	479	0.01	0.13	0.05		
2020	4,935,184	265.01	41,369	0.84	1.78	0.67	447	0.01	0.16	0.06		
Mean	2,644,934	207.99	9,008	0.32	1.12	0.51	453	0.02	0.16	0.08		

 Table 1 Descriptive Statistics on Government Contract Termination

		New Contracts Termi	nated for Convenience	New Contracts Terr	ninated for Default
Fiscal Year	No. of New Contracts	Subsec	quently	Subseq	uently
		Ν	Percentage	Ν	Percentage
2001	433,698	642	0.1	94	0.02
2002	557,831	1,063	0.2	115	0.02
2003	846,731	1,920	0.2	175	0.02
2004	1,519,907	3,611	0.2	252	0.02
2005	2,279,808	7,243	0.3	378	0.02
2006	3,094,778	7,851	0.3	2,916	0.09
2007	3,265,391	9,004	0.3	652	0.02
2008	3,579,736	9,590	0.3	726	0.02
2009	2,487,378	13,068	0.5	742	0.03
2010	2,431,758	10,956	0.5	664	0.03
2011	2,207,596	10,915	0.5	575	0.03
2012	1,965,169	10,918	0.6	582	0.03
2013	1,401,043	6,541	0.5	465	0.03
2014	1,447,419	6,815	0.5	505	0.03
2015	3,269,664	7,360	0.2	582	0.02
2016	3,687,060	8,601	0.2	438	0.01
2017	3,673,559	9,126	0.2	475	0.01
2018	4,451,487	8,306	0.2	438	0.01
2019	5,363,476	13,299	0.2	388	0.01
2020	4,935,184	32,855	0.7	87	0.00
Mean	2,644,934	8,984	0.3	562	0.02

Panel B: Proportion of Initial Contracts Terminated Subsequently by Year

This table reports descriptive statistics for new government contracts and contract terminations for each fiscal year from 2001-2020. Panel A reports the number of contracts and contract amounts. Panel B reports the number of those contracts that are subsequently terminated for convenience (default). Contract termination for default includes termination for cause. Each government fiscal year spans from October of the previous calendar year to September of the current calendar year.

	Ν	Mean	STD	P25	Median	P75
TFC_Dummy	18,342	0.157	0.364	0	0	0
<i>TFC_Amt</i> (\$ m)	18,342	0.148	1.934	0	0	0
<i>TFC_Amt</i> (\$ m) (<i>TFC_Dummy</i> =1)	2,879	0.94	4.805	0.008	0.039	0.208
Ln(1+TFC_Amt)	18,342	1.658	3.966	0	0	0
Labor_Misconduct	18,342	0.072	0.259	0	0	0
Mark Cap	18,342	6.322	20.261	0.176	0.779	3.186
Size	18,342	6.638	2.138	5.168	6.657	8.066
ROA	18,342	-0.001	0.174	-0.006	0.041	0.077
MTB	18,342	3.289	3.933	1.382	2.254	3.732
Lev	18,342	0.478	0.21	0.319	0.485	0.624
Loss	18,342	0.269	0.443	0	0	1
RetVol	18,342	0.031	0.017	0.019	0.026	0.037
ZScore	18,342	4.391	5.406	2.19	3.462	5.337
Political_Connect	18,342	0.136	0.342	0	0	0
Total_Contract (\$ m, unlogged)	18,342	292.99	1957.705	0.117	1.371	18.096
Total_Contract	18,342	14.282	3.422	11.673	14.131	16.711
Fixed_Price_Contract	18,342	85.844	28.254	90.714	100	100
Commercial_Contract	18,342	49.048	40.316	4.322	47.81	94.382

Table 2 Summary Statistics

The table reports summary statistics for the sample. The sample period is from 2001 to 2019. Variable definitions are in Appendix B.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variables:	TFC_D	Jummy		Ln(1+Tl	FC_Amt)	
Labor_Misconduct	0.028**	0.025**	0.359***	0.325***	0.189	0.258*
	(2.45)	(2.21)	(3.00)	(2.74)	(1.53)	(1.81)
Size		0.021***		0.218***	0.134	-0.010
		(3.67)		(3.72)	(0.92)	(-0.24)
ROA		-0.025		-0.348*	-0.793	-2.618***
		(-1.33)		(-1.82)	(-0.65)	(-4.03)
MTB		-0.002**		-0.013	0.012	0.014
		(-2.06)		(-1.48)	(0.67)	(0.84)
Lev		0.031		0.395	-0.023	-0.073
		(1.16)		(1.40)	(-0.03)	(-0.17)
Loss		0.006		0.051	-0.002	-0.428***
		(0.75)		(0.63)	(-0.01)	(-2.70)
RetVol		0.361		3.294	-7.053	-3.865
		(1.62)		(1.41)	(-0.78)	(-0.66)
ZScore		-0.000		-0.001	-0.052	-0.003
		(-0.24)		(-0.16)	(-1.28)	(-0.12)
Political Connect		-0.003		-0.012	0.034	-0.110
—		(-0.25)		(-0.10)	(0.23)	(-0.79)
Total Contract		0.018***		0.194***	0.309***	0.436***
—		(8.64)		(9.14)	(3.39)	(15.04)
Fixed Price Contract		0.000*		0.003*	0.157	0.023
		(1.71)		(1.81)	(0.28)	(0.08)
Commercial_Contract		-0.000		-0.001	-0.150	-0.093
		(-1.33)		(-1.42)	(-0.39)	(-0.39)
Agency-Year FE	Y	Y	Y	Y	Y	Y
Industry-Year FE	Y	Y	Y	Y	Y	Ν
Firm FE	Y	Y	Y	Y	Y	Ν
Industry FE	Ν	Ν	Ν	Ν	Ν	Y
Observations	18,342	18,342	18,342	18,342	2,405	2,781
Adj. R-squared	0.452	0.457	0.507	0.511	0.514	0.341
Sample		Full s	ample		Firm-year	s with TFC

Table 3 Labor Misconduct and Government Contract Termination for Convenience

This table reports OLS regression results of the effect of labor misconduct on the likelihood and amount of government contract termination for convenience. The sample period is 2001-2019. Columns 1-4 are based on the full sample; columns 5 and 6 are based on firm-years with at least one contract TFC. The sample sizes in columns 5 and 6 are different because singleton observations are dropped and the two columns use different fixed effects. All variables are defined in Appendix B. Robust standard errors are clustered by firm. *t*-statistics are reported in parentheses below the coefficient estimates. Intercepts are not reported. ***, ** and * indicate significance at the 0.01, 0.05, and 0.10 two-tailed levels, respectively.

	(1)	(2)	(3)	(4)
Dependent Variables:	TFC	Dummy	Ln(l+T)	FC_Amt)
Labor_Misconduct_High	0.073***	0.069***	0.746***	0.707***
	(3.34)	(3.23)	(3.31)	(3.19)
Labor_Misconduct_Low	0.018	0.015	0.272**	0.239*
	(1.53)	(1.29)	(2.18)	(1.93)
<i>p</i> -value for diff. in coefficients	0.010	0.010	0.037	0.036
Control Variable	Ν	Y	Ν	Y
Agency-Year FE	Y	Y	Y	Y
Industry-Year FE	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y
Observations	18,342	18,342	18,342	18,342
Adj. R-squared	0.453	0.457	0.507	0.511

Table 4 Cross-sectional Tests Based on Severity of Misconduct

This table reports the cross-sectional tests based on misconduct severity for the effect of labor misconduct on the likelihood and amount of government contract termination for convenience. The sample period is 2001–2019. The severity of misconduct is measured by the total fine amount, with the top quintile in each year classified as the high group and the remaining quintiles as the low group. All variables are defined in Appendix B. Robust standard errors are clustered by firm. *t*-statistics are reported in parentheses below the coefficient estimates. Intercepts and control variables are not reported. ***, ** and * indicate significance at the 0.01, 0.05, and 0.10 two-tailed levels, respectively.

	(1)	(2)	(3)	(4)
Dependent Variables:	TFC	Dummy	Ln(l+T)	FC_Amt)
Labor_Misconduct_Recur	0.033*	0.031*	0.513***	0.485**
	(1.78)	(1.65)	(2.64)	(2.52)
Labor_Misconduct_NonRecur	0.007	0.005	0.079	0.056
	(0.52)	(0.38)	(0.56)	(0.40)
<i>p</i> -value for diff. in coefficients	0.234	0.241	0.058	0.059
Control Variable	Ν	Y	Ν	Y
Agency-Year FE	Y	Y	Y	Y
Industry-Year FE	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y
Observations	16,646	16,646	16,646	16,646
Adj. R-squared	0.469	0.472	0.524	0.527

Table 5 Cross-sectional Tests Based on Recurrence of Misconduct

This table reports the cross-sectional tests based on whether the labor misconduct is recurring for the effect of labor misconduct on the likelihood and amount of government contract termination for convenience. The sample period is 2003–2019. A labor misconduct is classified as recurring if there is at least one labor misconduct in the previous two years. All variables are defined in Appendix B. Robust standard errors are clustered by firm. *t*-statistics are reported in parentheses below the coefficient estimates. Intercepts and control variables are not reported. ***, ** and * indicate significance at the 0.01, 0.05, and 0.10 two-tailed levels, respectively.

	(1) (2)		(3)	(4)
Dependent Variables:	TFC_L	Dummy	Ln(1+TH	FC_Amt)
Labor_Misconduct	-0.002	-0.007	0.021	-0.032
	(-0.11)	(-0.39)	(0.11)	(-0.17)
Labor_Misconduct×High_Media	0.050**	0.053**	0.564**	0.597**
	(2.01)	(2.18)	(2.14)	(2.31)
High Media	0.021**	0.013	0.204**	0.116
	(2.31)	(1.39)	(2.20)	(1.25)
Control Variables	Ν	Y	Ν	Y
Agency-Year FE	Y	Y	Y	Y
Industry-Year FE	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y
Observations	18,342	18,342	18,342	18,342
Adj. R-squared	0.453	0.457	0.507	0.511

Table 6 Cross-sectional Tests Based on Media Coverage

This table reports the cross-sectional tests based on media coverage for the effect of labor misconduct on the likelihood and amount of government contract termination for convenience. The sample period is 2001–2019. All variables are defined in Appendix B. Robust standard errors are clustered by firm. *t*-statistics are reported in parentheses below the coefficient estimates. Intercepts and control variables are not reported. ***, ** and * indicate significance at the 0.01, 0.05, and 0.10 two-tailed levels, respectively.

	(1) (2)		(3)	(4)	
Dependent Variables:	TFC_D	итту	$Ln(l+TFC_Amt)$		
Labor_Misconduct	0.008	0.003	0.122	0.070	
	(0.55)	(0.23)	(0.78)	(0.45)	
Labor_Misconduct×High_Comp	0.048**	0.052**	0.573**	0.616**	
	(2.09)	(2.29)	(2.28)	(2.48)	
High Comp	-0.011	-0.014	-0.149	-0.175*	
	(-1.17)	(-1.44)	(-1.40)	(-1.69)	
Control Variables	Ν	Y	Ν	Y	
Agency-Year FE	Y	Y	Y	Y	
Industry-Year FE	Y	Y	Y	Y	
Firm FE	Y	Y	Y	Y	
Observations	18,342	18,342	18,342	18,342	
Adj. R-squared	0.453	0.457	0.507	0.511	

Table 7 Cross-sectional Tests Based on Contract Competition

This table reports the cross-sectional tests based on industry competition for government contracts for the effect of labor misconduct on the likelihood and amount of government contract termination for convenience. The sample period is 2001–2019. All variables are defined in Appendix B. Robust standard errors are clustered by firm. *t*-statistics are reported in parentheses below the coefficient estimates. Intercepts and control variables are not reported. ***, ** and * indicate significance at the 0.01, 0.05, and 0.10 two-tailed levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dependent Variables:		TFC_D	итту				Ln(l+7)	FC_Amt)		
Env_Misconduct	-0.005				-0.006	-0.148				-0.158
	(-0.37)				(-0.43)	(-1.08)				(-1.16)
Fin_Misconduct		-0.035			-0.036		-0.327			-0.338
		(-0.95)			(-0.97)		(-0.76)			(-0.79)
Acct Fraud			0.010					0.122		
—			(0.33)					(0.40)		
Non Labor Misconduct				-0.009					-0.144	
				(-0.82)					(-1.25)	
Labor Misconduct				. ,	0.025**				· · ·	0.328***
					(2.22)					(2.77)
Control Variables	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Agency-Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Industry-Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	18,342	18,342	18,342	18,342	18,342	18,342	18,342	18,342	18,342	18,342
Adj. R-squared	0.456	0.456	0.456	0.456	0.452	0.510	0.510	0.510	0.510	0.511

Table 8 Non-Labor Misconduct and Government Contract Termination for Convenience

This table reports OLS regression results of the effect of non-labor misconduct on the likelihood and amount of government contract termination for convenience. The sample period is 2001–2019. All variables are defined in Appendix B. Robust standard errors are clustered by firm. *t*-statistics are reported in parentheses below the coefficient estimates. Intercepts are not reported. ***, ** and * indicate significance at the 0.01, 0.05, and 0.10 two-tailed levels, respectively.

	(1)	(2)	(3)	(3)	(4)	(6)
Dependent Variables:	T	FD_Dummy	,	Ln	e(1+TFD_Amt)	
Labor_Misconduct	-0.003	-0.003		-0.018	-0.022	
	(-0.61)	(-0.68)		(-0.37)	(-0.44)	
Labor_Misconduct_High			0.005			0.027
			(0.38)			(0.27)
Labor_Misconduct_Low			-0.005			-0.033
			(-1.13)			(-0.68)
Size		0.001	0.001		0.014	0.014
		(0.58)	(0.59)		(1.01)	(1.02)
ROA		-0.007	-0.007		-0.064	-0.064
		(-1.39)	(-1.39)		(-1.30)	(-1.31)
MTB		0.000	0.000		0.002	0.002
		(0.49)	(0.50)		(0.82)	(0.83)
Lev		0.003	0.003		-0.001	-0.002
		(0.42)	(0.41)		(-0.02)	(-0.02)
Loss		-0.004*	-0.004*		-0.030	-0.030
		(-1.73)	(-1.73)		(-1.32)	(-1.32)
RetVol		0.038	0.037		0.485	0.481
		(0.48)	(0.48)		(0.63)	(0.63)
ZScore		0.000	0.000		-0.001	-0.001
		(0.13)	(0.10)		(-0.57)	(-0.59)
Political Connect		0.006	0.006		0.056	0.056
—		(1.43)	(1.44)		(1.25)	(1.26)
Total Contract		0.001*	0.001*		0.008	0.008
—		(1.78)	(1.77)		(1.63)	(1.63)
Fixed Price Contract		0.000	0.006		0.000	0.037
		(0.99)	(1.00)		(0.70)	(0.71)
Commercial Contract		0.000	0.001		0.000	0.014
_		(0.21)	(0.22)		(0.56)	(0.56)
Agency-Year FE	Y	Y	Y	Y	Y	Y
Industry-Year FE	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y
Observations	18,342	18,342	18,342	18,342	18,342	18,342
Adj. R-squared	0.047	0.047	0.047	0.033	0.033	0.033

Table 9 Labor Misconduct and Government Contract Termination for Default

This table reports OLS regression results of the effect of labor misconduct on the likelihood and amount of government contract termination for default. The sample period is 2001–2019. All variables are defined in Appendix B. Robust standard errors are clustered by firm. *t*-statistics are reported in parentheses below the coefficient estimates. Intercepts are not reported. ***, ** and * indicate significance at the 0.01, 0.05, and 0.10 two-tailed levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variables:	TFC_Dummy			Ln(1+TFC_Amt)		
Labor_Misconduct	0.030** (2.32)	0.025* (1.96)	0.025** (2.21)	0.385*** (2.85)	0.291** (2.17)	0.325*** (2.74)
Control Variables	Y	Y	Y	Y	Y	Y
Agency-Year FE	Y	Y	Y	Y	Y	Y
Industry-Year FE	Y	Y	Y	Y	Y	Y
State-Year FE	Ν	Ν	Y	Ν	Ν	Y
Firm FE	Y	Y	Y	Y	Y	Y
Observations	18,342	5,545	18,342	18,342	5,545	18,342
Adj. R-squared	0.636	0.507	0.457	0.697	0.561	0.511

Table 10 Robustness Tests

This table reports robustness tests for the effect of labor misconduct on the likelihood and amount of government contract termination for convenience. The sample period is 2001-2019. Columns 1 and 4 report the results using the entropy-balancing approach. In columns 2 and 5, the sample is restricted to firms that have at least one serious labor misconduct in the sample period. In columns 3 and 6, we add state-year fixed effects to the main model, where the state is a firm's headquarters state. All variables are defined in Appendix B. Robust standard errors are clustered by firm. *t*-statistics are reported in parentheses below the coefficient estimates. Intercepts are not reported. ***, ** and * indicate significance at the 0.01, 0.05, and 0.10 two-tailed levels, respectively.