Windfall federal grants and local government corruption

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Abstract

Although preventing and detecting public sector corruption is critically important to citizens and regulators, surprisingly little US accounting research addresses it. Our study investigates whether federal grant shocks (deemed "windfalls") increase occurrences of local public official corruption, and whether local, state and federal audit oversight and an active press help ameliorate that relationship. Using a unique hand-collected dataset of local public corruption constructed from court filings, we find that grant windfalls are associated with significantly more public corruption charges filed. With respect to local audit oversight, questioned costs and audit findings exacerbate windfall-corruption relations, while modified opinions and material weaknesses have no significant effect. State oversight results suggest a greater percentage of state fraud auditors on staff, as well as the appointment of a State Auditor who is a Certified Fraud Auditor, weakens the windfalls-corruption relationship. The appointment of a new federal oversight agency coupled with a windfall also has a deterrence effect, suggesting that a newly appointed oversight agency has "fresh eyes" and monitors the local government more closely. Although somewhat mixed, results also demonstrate a robust local news media helps reduce windfalls-corruption relations. Additional analyses suggest that results are stronger when the lead criminal charge is specifically related to federal programs ("666" charges). Overall, we contribute to extant literature by exploring accounting-related aspects of local public corruption that may help inform federal regulators interested in strengthening the Single Audit process.

JEL Keywords: Governmental Accounting, Federal Grants, Fraud Auditing, Material Weakness, Press Transparency

1. Introduction

Federal grants constitute a significant revenue source for many local governments, with awards greatly expanding from $135 billion to $1.2 trillion between 1990 and 2022. Given this high growth rate and breadth of grants spanning 1670 federal programs, regulators have expressed concerns about adequate oversight (Office of Management and Budget 2020). For example, the GAO has criticized the federal government's grant management systems, concluding that they lack "effective oversight tools to reasonably assure that grants are used for their intended purposes and that the risks of fraud, waste, and abuse are minimized" (GAO 2011). Such concerns seem warranted, as examples of corruption, waste, and fraud are frequently described by the popular press. As just one example, the mayor and accountant of Stonecrest, Georgia were recently charged with defrauding local churches, businesses, and nonprofit organizations out of hundreds of thousands of dollars from a $6.2 million federal COVID-19 relief fund grant, using it to pay off the mortgage on the mayor's lake house and cover college tuition for the accountant's son (Travis 2022).

The purpose of our study is to investigate whether sudden expansions in federal grant revenues (deemed "windfalls") are associated with higher rates of local government public corruption, and whether auditing mechanisms and the presence of an active local press help ameliorate the relationship. The awarding of federal grants to a local government can be viewed as a principal-agent problem in which incentives among the various parties are imperfectly aligned, enabling the agent to act opportunistically. In this case, the federal government (the ultimate principal) authorizes employees in the local government (the ultimate agents) to deploy grant resources, producing a risk that the agents will operate in a manner that runs counter to the principal's objectives. In addition to the federal government, several parties hold an interest in

monitoring local employees' behavior, including the state and members of the public. Because severe collective action problems occur with such a large number of principals, intermediaries such as a local press often emerge to reduce information asymmetries and facilitate monitoring by the public. Our study examines whether the monitoring and oversight mechanisms employed by principals and intermediaries at the federal, state, and local levels affect the manifestation of corruption in the presence of grant windfalls.

To perform our analyses, we construct a novel hand-collected dataset of local public corruption cases from U.S. attorney court case filings, and flesh out details using Department of Justice press releases and news articles. To our knowledge, our study is the first in the field to specifically operationalize criminal corruption activity at the local government level using court filings against defendants who are public employees.[1] Typically, studies in accounting and finance use aggregate state-level counts of Department of Justice Public Integrity Section (PIN) summary conviction data to proxy for local government corruption (e.g., Butler et al. 2009) which has inherent weaknesses. In addition to issues that arise from state-level aggregation, the reliability of PIN data has been questioned because it is based on a survey of prosecutors rather than administrative records.[2]

Our sample includes all identifiable local public corruption cases filed between 2005 and 2018, reflecting 1003 unique cases with 1,174 local public defendants. These cases are complemented with a control sample of highly similar local governments using propensity score matching procedures. Descriptive statistics reveal that U.S. attorneys file corruption-related charges against local government employees working in a range of positions from very senior to

[1] Our sample is comprised of local governments, including counties, cities, and towns. For parsimony, we refer to them as "municipalities" and "local governments."
[2] Please see Cordis and Milyo (2013) for a full discussion of the limitations of PIN survey data. We discuss this in more detail in the Data and Specification section.

quite junior. Specifically, approximately 18% of defendants are elected officials; 13.9% are high-level (elected or appointed) local administrators (e.g., mayors, city managers, county supervisors, and police chiefs); 12% are council members with governance responsibilities; 17.3% are mid-level supervisors; and 56.3% are non-supervisory, lower-level employees.

We expect that the large increase in revenues reflected in federal grant windfalls—operationalized as the top quintile of residuals from specifications of expected yearly federal grants—create an outsized opportunity for corruption.[3] Thus, we begin by examining whether federal grant windfalls are associated with more local corruption, finding significantly positive relations between windfalls and the number of public sector employees charged with corruption in the subsequent two years. The economic magnitude is significant, with the presence of a windfall associated with a 28% increase in public officials charged.

Because the ability of principals to ensure accountability of local government officials depends on their capacity to detect corrupt actions (Avis, Ferraz & Finnan, 2018), we next consider three levels of audit oversight (federal, state, and local), as well as external monitoring by the news media. At the federal level, we focus on instances in which the federal oversight agency changes, because such shifts lead to changes in oversight personnel, new approaches to the Single Audit process, and a general increase in scrutiny. Results show that the positive relations between grant windfalls and corruption are significantly reduced in the presence of a new federal oversight agency.

At the state level, we use two measures of fraud auditing - whether the State Auditor holds the qualification of Certified Fraud Examiner (CFE), and the number of staff fraud auditors

[3] Specifically, we define windfall grants using the residuals from a first-stage regression of current federal grants on prior federal grants and entity size, and our analysis alternately defines windfalls as the top quartile/decile of residuals, and the top decile of grant revenue/total revenue, respectively. We discuss this in more detail in section 3.2.1.

employed by the state.[4] State auditors can have a significant impact on policies affecting local governments in part by influencing resources and training devoted to fraud auditing versus other priorities. Thus, we expect that State Auditors who are also CFEs are "fraud experts" and will place greater emphasis on fraud detection. Regression results show that the windfall-corruption relationship is reduced in the presence of more state-level staff fraud auditors, and a difference-in-differences analysis shows that when a state shifts from having a non-CFE state auditor to one with that qualification, corruption subsequently falls.

At the local level, we focus on Single Audit outcomes from independent external audits over federal grants (Tysiac 2021).[5] We expect that local governments with poor grant audit outcomes are more likely to experience corruption charges against their personnel in the wake of a grant windfall. Findings suggest that the presence of either questioned costs or audit findings exacerbate the positive relationship between grant windfalls and public corruption filings. In contrast, the presence of grant-level material weaknesses and modified grant audit opinions do not significantly affect windfall-corruption relations.

Finally, a more active and vibrant press can deter corruption by providing transparency regarding government operations to the general public. We use the shock of a local newspaper closure to assess whether local press presence affects the windfall-corruption relationship. Although somewhat mixed, a difference-in-differences analysis suggests that the relationship between windfalls and local corruption increases following the closure of a daily newspaper in the same county.

[4] The NASACT classifies agencies in charge of local government audits using a variety of titles, such as State Auditor, Auditor General, and Legislative Auditor. For parsimony, we refer to them collectively as State Auditor.
[5] Single Audits are required for municipalities expending $500,000 or more ($750,000 following December, 2014) in federal awards annually (OMB Circular A-133 and Uniform Guidance, 2 CFR 200.512 (d)). Note that the measures we use specifically relate to federal grants – i.e., whether the auditors specifically report a material weakness over grants, rather than more general material weaknesses over the entity as a whole.

Additional analyses explore public corruption in greater depth by considering whether relations vary based on the specific corruption charges filed. In other words, some criminal charge codes relate directly to federal grants, whereas others reflect crimes that could apply to any domain of government activity. The evidence suggests that results are stronger when the lead charge specifically references federal grants than when the lead charge is more general. These findings are consistent with arguments that grant windfalls can compromise existing oversight systems, and that officials' ability to shift other funds within the government enable corruption in activities tangential to grant operations (Gore et al. 2023).[6]

While preventing and detecting corruption in local government operations is of critical importance to both citizens and regulators, surprisingly few studies investigate accounting-related aspects of local government corruption. One exception is Nakhmurina (2023), who finds that implementing state-level fiscal distress monitoring processes affects a variety of local government fiscal decisions, including a decrease in aggregate state per capita corruption convictions. Perhaps closest to the current study, Cuny et al. (2020) find that several audit outcomes (deemed "stewardship") worsen when municipalities have powerful Congressional representation. That is, locales with powerful Congressional representatives are more likely to report negative audit outcomes such as financial statement material weaknesses, significant deficiencies, and material noncompliance with laws and regulation. While their study's findings are interesting and important, our study differs in at least two important respects. First, while our focus is on the role of federal grants in aiding criminal corruption, Cuny et al. study the role of political influence and connections in audit outcomes. Second, our focus is on actions by local

[6] Since prosecutors consider a number of factors in deciding lead charges, including the strength of the evidence, the severity of penalties, the plea bargain process, and other contextual factors, interpretation of lead charges should be done cautiously.

government officials that are severe and deceptive enough to result in criminal charges, and that are coded by US Attorneys as 'public corruption.' In contrast, the audit outcomes Cuny et al. study are indicative of a less severe outcome, more akin to mismanagement or poor quality than to criminal activity. Importantly, however, our findings show that these poor quality management practices facilitate the emergence of criminal-level corruption.

More generally, our study complements and extends this literature by investigating actual local corruption levels and studying whether the relationship between a major resource windfall and corruption is moderated by a range of monitoring at the federal, state, and local levels, including the presence of actors that can root out and report improprieties. To our knowledge, no prior study explores similar aspects of public sector corruption.

We also add to literature investigating how the presence of a strong and vibrant press affects corruption. Our evidence that local government corruption increases following newspaper closures complements studies investigating press freedom and corruption across countries and within weaker institutional environments (Bruneti and Weder 2003; Bhattacharyya and Hodler 2015). The fact that the press appears to deter corruption, even in the U.S. context with its strong institutions, is a testament to its importance in reducing information asymmetries for the public at large and underscores the important role that the media plays in society.

Finally, our study has important public policy implications. Federal regulators consider the Single Audit process critically important in reducing waste and fraud, yet little research explores the extent to which such regulations are effective (GAO 2011). One exception is Brumley, Thompson, and Urcan (2021), who find that negative Single Audit outcomes such as modified audit reports do not result in agencies subsequently reducing the amount of federal grants awarded, implying that Single Audit outcomes are not consequential for state and local

governments. Our findings that questioned costs and audit findings exacerbate the positive effects of windfall grants on public corruption, while grant-level material weaknesses and modified opinions have no significant impact, complements and extends this research. Coupled with our results showing that oversight by new federal agencies helps ameliorate windfall-corruption relations, this research may help inform federal regulators interested in strengthening the Single Audit process (GAO 2011). Moreover, there are clear public policy implications from our findings that windfall-corruption relations are ameliorated in the presence of a shift in federal oversight agency, a larger fraction of the state auditing staff that is dedicated to fraud detection, and the installation of a new state auditor with CFE credentials.

The remainder of the paper proceeds as follows. Section two discusses the background and hypotheses, section three describes the data and specifications, section four presents results, section five provides alternate tests, while section six concludes.

2. Background and hypothesis development

2.1Principal-Agent Theory in Federal Grant Administration

When the federal government awards a grant to a local government, a multi-layered agency problem arises in which several different principals hold an interest in monitoring local employees. As the primary principal, the federal government names a single federal agency to implement its Single Audit process to oversee grant awards. However, because the federal government is so far removed from day-to-day operations, it also broadly relies on state and local monitoring mechanisms. States have their own direct interest in preventing the misuse of federal funds, since persistent malfeasance can lead to increased federal monitoring and might endanger future funding opportunities. Thus, the state government serves as both an agent of the federal

government and a principal with its own interest in monitoring local entities' use of federal funds.

Members of the public can also be viewed as principals (Moe 1984) who delegate the rights and responsibilities of making societal decisions to their government (their agent). However, the collective action problems that arise with a multiplicity of principals, coupled with extensive information asymmetries between the general public and government officials, can prevent effective monitoring (Miller 2005). The presence of a robust news media can overcome these problems by providing extensive information to the public at a low cost (Besley, Burgess and Pratt 2002a; Besley and Burgess 2001). In this manner, although the general public lacks capacity to engage in direct monitoring, a free press can serve as an intermediary by undertaking such activities on their behalf.

The fact that multiple principals and agents—ranging from the federal government to state and local governments, to the general public—have an interest in resource allocation poses a common, but complex, agency problem given the presence of so many conflicting priorities (de la O, Fernández-Vázquez and Garcia 2023). At any level, the politician or bureaucrat engaged in oversight may be accountable to several different constituencies, including supervisors, voters, political parties, or oversight personnel at the next level up, each potentially emphasizing different priorities and preferences. Thus, employees across the thousands of local governments in the United States face different combinations of monitoring mechanisms aimed at aligning their behavior to ensure effective grant administration.

Given the complex principal-agent situations that arise, we make the assumption that within any municipality, some fraction of employees are willing to act opportunistically and engage in corrupt practices, given a perception of sufficient reward. Drawing on research

stemming from the fraud triangle originally conceived by Cressey (1953), we also assume that those willing to engage in corruption will make their decision based on the incentives, opportunity, and rationalization inherent in their individual circumstances. While a large body of research examines aspects of the fraud triangle within the corporate setting, considerably fewer studies focus on government and nonprofit entities. Recent research by Fogarty et al. (2021) exploring fraud in religious organizations finds relatively stronger evidence for the importance of opportunity, compared to incentives and rationalization, in nonprofit fraud. Hence, we focus on windfall federal grants as an opportunity for public officials to engage in public corruption.

2.2 Windfall grants

Federal grants provide civil servants with an outsized opportunity to both engage in corrupt practices and evade discovery. When politicians and bureaucrats gain access to new or expanded revenue sources, they encounter a learning curve for grant administration and oversight. Since new monitoring and oversight procedures necessary to deter opportunistic action generally take time to refine, large increases in grant revenues (i.e., windfalls) provide opportunistic actors with an expectation that they can engage in corrupt practices before such systems are adequately implemented. Likewise, when a grant is well-established, individuals involved fall into particular patterns of behavior, and deviations from those patterns can be detectable by others. However, if corrupt transactions take place with new revenue sources, individuals outside of the formal administration process have less basis to detect anomalies. Hence, new or expanded funding sources provide an opportunity to exploit loopholes in oversight.

A large inflow of federal grants can also provide windows for bad actors not directly associated with particular grants. Increases in federal grant funds place stress on municipalities'

internal control systems, which may not be able to keep up. For example, the federal government offered substantial grant funding to states and localities to address challenges from the 2008-2009 financial crisis, but no additional resources were provided to administer and monitor the new funding. This led some state regulators to express concerns about the effects of such funds on local governments' internal controls (Florida Auditor General 2008).

Although some grants are focused on a particular purpose, the general presence of federal funds enables officials to shift other non-grant funds, which are more fungible, to alternative programs and needs. For example, a Department of Justice grant awarded to a police department can allow city officials to reduce other funds normally provided to the police. In addition, the use of government "fund accounting" can obfuscate corruption (Zimmerman 1977). Fund accounting essentially treats a municipality as an unconsolidated entity, and extant literature suggests transfers across funds are used to manipulate financial outlook (Gore et al. 2023; Costello et al. 2017). Thus, a sudden large increase in federal grant funds creates spillover effects that can provide cover to criminal activity in ancillary activities and funds.

Two past studies examine relations between windfall grants and corruption, but the results are limited and not clear-cut. Using PIN data, Leeson and Sobel (2008) find an increase in aggregate total local corruption following administration of FEMA grants. However, by leveraging a different (arguably superior) data source, Cordis and Milyo (2015) find no statistically significant relationship in the context of FEMA. Research also identifies a positive relationship between windfall revenue increases and rent-seeking behavior in the context of developing countries and emerging markets (e.g. Maldonado 2011; Ades and Di Tella 1999). However, such countries are defined by their weak institutional environments (Khanna and Palepu 2000), limiting the applicability of findings to the US context in which institutions are

generally much stronger, and federal grants are subject to clear oversight processes. Therefore, it is an open empirical question whether greater federal grant funding contributes to US public sector corruption. We propose the following hypothesis:

> H1: *Ceteris paribus*, there is a positive relationship between federal grant windfalls and local public corruption filings.

3. Specifications, sample, and descriptive statistics

3.1 Specifications

3.1.1 Measuring windfall federal grants

Windfalls occur when a local government receives an unusually large amount of federal grant funding compared with prior years. Following models used in the nonprofit excess cash and investment literatures (e.g. Core, Guay, and Verdi 2006; Biddle, Hilary, and Verdi 2009), we measure windfall federal grants by employing residuals from the following OLS specification.

$$\text{Federal grants}_{s,t} = \text{Federal grants}_{s,t-1} + \text{Entity size}_{s,t-1} + \varepsilon_{s,t} \quad (1)$$

We estimate Eq. (1) at the local government level by year and entity type, i.e. county or municipality, where subscripts s and t denote local government and year, respectively. *Federal grants* are total federal grants scaled by population for a given entity-year, and *Entity Size* is the natural log of local government population.

3.1.2. Baseline specification for H1

Our hypothesis investigates whether federal grant windfalls lead to subsequent increases in local government corruption filings. We use the following OLS specification:

$$\text{Corruption}_{s,t} = \beta_0 + \beta_1 \text{ Top windfalls}_{s,t-1,t-2} + \beta_2 \text{ Cash}_{s,t-1} + \beta_3 \text{ General Revenue}_{s,t-1} + \beta_4 \text{ Size}_{s,t-1} + \beta_5 \text{ Personal Income}_{s,t-1} + \Sigma\text{Entity Type FE} + \Sigma\text{State FE} + \Sigma\text{Year FE} + e_{s,t} \quad (2)$$

Where subscript s and t denote entity and year. We define *Corruption* as the log of one plus the total number of local public officials referred for corrupt acts per entity-year. *Top*

windfalls is an indicator variable set to one if an entity's windfall grant residual is in the top quintile of the distribution in either of the prior two years.

We use a two-year lagged window to calculate *Top windfalls* and our corresponding cross-sectional monitoring mechanisms (in Section 4.2) for several reasons. First, we are uncertain about the timing of the lag between windfall federal grants and when corruption will be caught and charged.[7] A challenge with all corruption research is that its clandestine nature makes occurrences of corruption impossible to pinpoint precisely. Second, there is generally a long lag in financial report release, often accompanied by long delays in audit completion (Chen et al. 2023). Third, local auditors typically evaluate grant risk measures over a two-year timeframe (Tysiac 2021).

We include several control variables to account for other factors that may influence public corruption. Cash holdings (*Cash)* considers that liquid assets are more easily subject to misappropriation. *General Revenue* considers that total revenue, rather than a specific revenue source, may drive corruption. Personal income per capita (*Personal income*) controls for macroeconomic conditions, which could affect civil servants' valence for material reward, while *Size* is the log of local government population. Detailed descriptions of all variables are provided in Appendix A. State and year fixed effects control for unobserved state- and time-invariant factors common across all states, such as state laws, and entity type fixed effects control for whether the government is a municipality or a county. Standard errors are clustered by entity. All continuous variables are winsorized at the 1st and 99th percentiles of the distribution.

3.2 Measuring corruption

[7] Review of court cases, press releases, and news articles reveals that we are seldom able to pinpoint exactly when the corruption takes place.

The President of the United States appoints US Attorneys, each of whom is assigned responsibility for one of 93 judicial districts. US Attorneys are responsible for litigating civil and criminal federal cases in their districts, including those involving public corruption. The public corruption litigation process typically begins when a case is referred to US Attorneys by federal agencies such as the FBI or by state Attorneys General. US Attorneys make the final decision on whether to file charges and consider a broad variety of charges as falling under public corruption (see Supplemental Appendix Table SA1 for a comprehensive list of public corruption charges filed in our sample). Once filed, cases may result in a variety of outcomes such as a finding of guilt followed by sentencing (most frequent), a not guilty verdict, or dismissal of the case with or without prejudice.

3.3 Corruption sample

To identify all possible local government officials referred for corruption by U.S. attorneys, we use a combination of data from the Transactional Records Access Clearinghouse (TRAC) at Syracuse University, the Integrated Database from the Federal Judicial Center (IDB), Public Access to Court Electronic Records (PACER), and google searches. We use these data to identify details of corruption case filings, including defendant names and the corresponding local government entity. TRAC uses Freedom of Information Act processes to identify public officials charged with corruption by US Attorneys; however, the data lack critical information such as the defendant's name, government employer, and position. Hence, for each public corruption case flagged in TRAC, we match observations with IDB to obtain the federal court case numbers. Using the court case numbers, we manually collect defendant names from US federal court documents via PACER. We next use the defendant's name to conduct online searches to identify their public employers. The detailed process is outlined in Appendix B.

Table 1, Panel A reports the corruption sample selection process. We begin with 2,607 local public corruption defendant cases identified by TRAC and filed by US Attorneys between 2005 and 2018.[8] We drop 152 cases that were filed in DC, PR, VI, and GU. We drop 299 cases that cannot be matched with IDB, 57 cases with no public officials involved, 308 cases involving entities without a corresponding Census identifier (e.g., Native American Tribes and nonprofit entities), 63 cases that involve state rather than local government officials, and 554 private defendants.[9] The process yields a total of 1,174 local public officials charged with corruption, representing 788 unique entity-years and 572 unique public entities.[10] The sample distribution is presented as a visualization in Figure 1.

While the sample used for our regression analyses is somewhat smaller due to data constraints, i.e., we are unable to identify grant awards for those entities not in the Single Audit database, we begin by presenting descriptive statistics for the full sample of corruption cases. Such statistics are interesting in part because they help shed light on details regarding public corruption that were not previously available to studies utilizing aggregated FBI PIN conviction data (e.g. Butler et al. 2009).

Table 1, Panels B and C display the number of defendants and government entities by entity type. Among 572 unique entities, 331 or 57.8% are cities or townships, 160 or 28% are counties, and 14.2% are special districts or school districts. Within these entities, 400 (34%) are employed by law enforcement agencies. Panels D and E of Table 1 classify our sample by defendant position, both in terms of the level of position and whether they were elected or

[8] The sample begins in 2005 because most case information is available on PACER beginning that year.
[9] With respect to private defendants, there is typically a public official involved in and charged in the same or a related case. We drop private defendants from our analyses, but we retain all public defendants for these cases.
[10] Because the majority of schools and special districts in our sample either do not have separate census identifiers, and/or are not within the Single Audit database, we restrict local government entities to municipalities and counties.

appointed officials. Panel F of Table 1 delineates the sample by lead charges, which are grouped into four categories including bribery and extortion, embezzlement and fraud, 666 charges (charges directly related to corruption involving federal grants), and all other charges. The specific charges grouped in each category can be found in Supplemental Appendix Table SA1.

3.3 Control sample construction

Corruption filings are rare events; thus, the sample of local governments with corruption filings represents a very small proportion of total governments (approximately 1%). To construct a control sample comprised of entities without corruption filings, we first trim the population of potential control entities using an estimated propensity score to filter out observations that are unlikely to act as valid counterfactuals for the corrupt entity-year observations. Specifically, for each corrupt entity-year observation, we identify ten control entities in the same year, state, and same entity type with the closest propensity score with less than 0.05 in score difference.[11] We next use entropy balancing to reweight the matched observations such that the post-weighted means and variances are nearly identical between treatment (corrupt entities) and control (no corruption) observations. Entropy balancing preserves the full sample while achieving a high degree of covariate balance and also can balance on higher-order moments of covariate distributions (Stuart 2010). For both procedures, we match observations from the corruption sample and control sample on government entity cash holdings, general revenue, size (log of population), and personal income per capita. We also require that both corrupt and control entities are in the Single Audit database. This process leads to a final sample of 3,278 entity-years.

[11] Two specifications tests alternately include five and twenty control entities, respectively, with substantially similar results.

Data for control variables are from the U.S. Census. With respect to our cross-sectional tests, data for grant-level material weaknesses, modified opinions, questioned costs, audit findings, and federal oversight agencies are from the Single Audit database.[12] Data for State fraud auditors are collected from an annual survey conducted by the National Association of State Auditors, Comptrollers and Treasurers (NASACT). Data on newspaper closures are from the State of Local News Project Database maintained by Northwestern University (Medill 2023).

3.4 Descriptive statistics for main sample

Table 2, Panel A reports the corruption sample for our regression analyses. We drop entities not in the Single Audit database (i.e., 137 defendants from special districts or school districts, and 449 from entities not present in the database for at least two consecutive years). Our main sample includes 588 unique defendants, representing 361 unique entity-years. Table 2, Panel B displays means and variances for the matching variables after entropy balancing procedures. Following entropy balancing, the means and variances are nearly identical between the corrupt and corresponding control entities. Table 2, Panel C presents statistics for sample variables. The average of the natural log of 1 plus the number of defendants is 0.097, which corresponds to 1.1 defendants on average. With respect to our audit oversight variables, approximately 25% of local governments have a new federal agency, 10.5% of State Auditors are CFEs, and 2.4% of state staff auditors are fraud auditors. Many local governments have poor audit outcomes over grants, with 13.7% reporting material weaknesses, 13% have modified grant audit opinions, 14% have questioned costs, and 28% report audit findings. Newspaper closures are a rare occurrence at 4.8%.

[12] We lose 314 observations due to missing values in cross-sectional monitoring variables.

Panel C displays Spearman and Pearson correlations among our variables. The corruption is significantly positively related to top windfall, cash, general revenue, and entity size.

4. Results

4.1. Results for H1

Results for Hypothesis 1, which examines whether federal grant windfalls are associated with subsequent increases in public corruption, are displayed in Table 3. Findings in Column 1 show that *Top windfalls* are significantly positive. Findings are economically significant as well, with *Top Windfalls* associated with a 28% increase in the number of public corruption defendants.[13] Effects are consistent for model 2, where we include *Bottom windfalls* in the bottom quintile of the distribution, although the coefficient is not statistically significant. Using the top windfall estimates from model 2 also illustrates the economic significance of the windfall effects in that a top windfall in either of the previous two years increases the number of defendants charged by 27%. In supplemental analyses, we decompose *Top Windfalls* into the prior two years (*Top Windfalls*$_{t-1}$ and *Top Windfalls*$_{t-2}$) and find similar results (see Supplemental Appendix Table SA2). Overall, the evidence provides strong support for H1, in that federal grant windfalls are significantly associated with subsequent local public official corruption.

4.2. Cross-sectional tests of monitoring mechanisms

We next explore whether auditing oversight (at the federal, state, and local levels) and the presence of news media affect windfall-corruption relations.

4.2.1 Audit oversight

[13] The magnitude of the effect of windfalls on the number of defendants is calculated as ($e^{.245}$-1=.278) and ($e^{.236}$-1=.266) in columns 1 and 2, respectively.

Considering the principal-agent problems previously described, we next investigate three levels of potential audit monitoring at the federal, state, and local levels, recognizing that auditing oversight can have at least three functions – fraud *prevention* through internal control quality, fraud *deterrence*, and fraud *detection*. Internal controls are designed to prevent material misstatements, including those caused by theft and corruption, whereas auditing processes are designed to both align the interests of the principal and agent (since the agent will be punished when cheating is detected) and monitor for non-compliance (detection). Moreover, visible auditing processes – including those specifically oriented toward fraud – can also serve as a deterrent to corruption.

Federal oversight

Federal government agencies rely upon Single Audits to help prevent fraud and waste in federal grants, with an emphasis on internal controls and independent audits (GAO 2011). Yet extant research regarding the impact of Single Audits is surprisingly limited and mixed. Brumley et al. (2021) find that negative Single Audit outcomes such as modified opinions do not result in a subsequent reduction in federal grant awards. Yet to our knowledge, no prior research examines whether Single Audit processes affect public corruption. In contrast, several studies do examine auditing and government corruption in the international context. Some research suggests audits are effective anti-corruption techniques when introduced in emerging markets, such as reducing resource losses in Indonesia (Olken 2007) and Brazil (Zamboni and Litschig 2015). On the other hand, de la O, Fernández-Vázquez and Garcia (2023) find that the imposition of a federal auditing program on states in Mexico did not induce compliance among government officials. Thus, the effectiveness of audits may depend upon a range of factors such as the institutional environment and bureaucratic structures, and empirical results arising in

weaker institutional environments such as Brazil, Indonesia, and Mexico may not translate to the US context. In our study, we examine these relationships in a relatively less corrupt context in which relatively strong oversight and controls have been in place for decades.

Each local government receiving significant federal funds is assigned a federal "oversight agency" to monitor them through the Single Audit process. Agencies have latitude in terms of how they monitor entities, and the oversight agency assigned to a given municipality occasionally changes. Because the agency assigned oversight is the largest provider of federal funds to the municipality, a change in the oversight agency indicates the largest resource provider is new. Presumably, a new agency will closely examine the municipality's finances, particularly during the transition period. Essentially, we expect that such a new oversight agency will have "fresh eyes" and audit the local government more closely. Moreover, because their audit protocols and implementation are likely to differ from the predecessor agency, its auditing procedures may be less predictable to local officials, making them harder to circumvent. Because such added scrutiny can be expected when a new federal oversight agency is named, we expect there to be a deterrent effect on local government officials. Hence, we expect windfall-corruption relations to decline in the presence of new oversight agencies.

State oversight

In addition to federal oversight, municipal fiscal actions are subject to monitoring by state governments, including financial reporting and auditing (Baber and Gore 2008). While many states specifically monitor local government accounting and auditing, the extent to which fraud auditing is prioritized varies. In contrast to a typical financial statement audit, which focuses on the discovery of material misstatements regardless of whether driven by error or fraud, fraud auditors are specifically trained to detect fraud and corruption via detailed fraud-specific

procedures. The presence of a State Auditor trained in fraud detection and a robust fraud auditing function can instill an anti-fraud culture and formal anti-fraud policy protocols, all of which can deter corruption in the long run (Singleton and Singleton, 2010).

We argue that a visibly strong fraud auditing function will deter improper actions, thus preventing corrupt practices from occurring and consequently reducing the number of court filings of public corruption cases. At the same time, strong *ex post* systems to monitor and investigate potential fraud will increase detection of corruption, which should lead to more filings of public corruption cases. Because the presence of strong state fraud audit monitoring has both deterrent and detection effects, we make no explicit directional predictions regarding the effect of state oversight on windfall-corruption relations.

Local oversight

At the local level, we consider whether the outcomes of the local government's independent external audit suggest greater risk over federal grants through the Single Audit process. Specifically, we examine whether the relationship between grant windfalls and corruption filings is exacerbated when independent auditors report more problems with federal grants (e.g., grant-level material weaknesses, questioned costs, modified opinions, or audit findings). Overall, we anticipate that the presence of weak grant audit outcomes will reduce civil servants' perceptions that their actions will be detected, and hence exacerbate windfall-corruption relations.

4.2.2 Results for federal, state, and local audit oversight

We explore whether federal, state, and local audit oversight mechanisms affect the windfall-corruption relations by modifying equation (2), as follows:

$$Corruption_{s,t} = \lambda_0 + \lambda_1 \text{ Top Windfall}_{s,t-1,t-2} \times \text{Monitoring mechanism}_{s,t-1} + \lambda_2 \text{ Top Windfall}_{s,t-1,t-2} + \lambda_3 \text{ Monitoring mechanism}_{s,t-1,t-2} + \text{Controls}_{s,t-1} + \Sigma\text{State FE} + \Sigma\text{Year FE} + \varrho_{s,t} \quad (3)$$

Where all variables are described previously, except for *Monitoring mechanism*, which is alternately defined as federal, state, or local audit oversight mechanisms. We begin by exploring federal and state mechanisms. *New fed monitor* is an indicator set to one for the year in which there is a new federal oversight agency (else zero). *% Fraud auditors* is the percentage of state auditing staff specializing in fraud detection, while *CFE State Auditor* is an indicator set to one if the State Auditor is a CFE (else zero). If federal or state monitoring affects the windfall-corruption relationship, then we anticipate a significant coefficient for *Top windfall * Monitoring mechanism*.

Results are presented in Table 4, Panel A. Model 1 shows that *Top windfall * New fed monitor* is significantly negative. The economic magnitude of the effects are quite strong, with new federal agencies reducing the main effect of *Top windfall* by approximately 24% ($e^{-.280}$-1=-.244). Hence consistent with our expectations, the positive windfall-corruption relationship is reduced in the presence of the added scrutiny of a new federal oversight agency.

Column 2 explores whether the presence of a stronger state-level fraud auditing function exacerbates or tamps down corruption following local government windfalls. Results demonstrate that a higher percentage of fraud auditors on the state auditor staff is associated with a significant reduction in the corruption-windfall relations. Specifically, *% Fraud auditors*Top windfalls* is significantly negative, suggesting a deterrent effect. However, results should be interpreted with some caution, since the economic magnitude is relatively weak. That is, while the *% Fraud auditors*Top windfalls* interaction term coefficients suggest a magnitude of -0.86 ($e^{-1.946}$-1=-0.857), the median *% Fraud auditors* variable reduces the effect of a windfall by less

than half a percent; at the 75th percentile this translates to approximately 2.5%. Column 3 displays a saturated model which includes both federal and state monitoring mechanisms, with substantively similar results.

We next construct a difference in differences analysis to examine whether a change from a State Auditor who is not a CFE to one that is a CFE influences corruption (Table 4, Panel B). Column 1 demonstrates a statistically significant effect, whereby *Top Windfall * New CFE_After* is statistically significant ($p<0.01$). Column 2 tests for whether the appointment of a CFE has an effect in the first through fourth year of their appointment in column 2, while also testing for parallel trends. The interaction between the treated group and windfall is significant for one year following the new CFE's appointment while later years are not, suggesting that there is a short-term deterrence effect of a change in the CFE status of the State Auditor. This effect is quite strong in that it reduces corruption filings by approximately 65% ($e^{-1.067}-1=-.6567$). Overall, considering the combined effects of state fraud auditing in panels A and B, we conclude that although monitoring at the state level may possibly result in the detection of more corruption, any such effect is dominated by the impact that state-level monitoring has on deterring fraud.

We next investigate whether local-level audit monitoring mechanisms affect the relationship between windfall grants and corruption by alternately including four local-level proxies for *Monitoring mechanism* in Eq. 3. We focus on measures considered important by governmental auditing practitioners when determining the extent of risk over grant major programs (AICPA 2009). These include material weaknesses, questioned costs, modified audit opinions, and audit findings, each measured at the grant level.

Table 5 presents our findings. Column 1 shows that the effect of *Top windfall * Material weakness* is not statistically significant. Model 2 similarly shows no statistically significant

effects for grant-level modified opinions. With respect to the effects of grant *Questioned costs* in column 3, the interaction with *Top windfalls* is significantly positive ($p<0.05$). The economic effect is quite strong in that having questioned costs in the presence of windfalls increases corruption by 28% ($e^{.245}$-1).

Model 4 investigates effects of local independent auditor *Findings*.[14] The interaction between *Top windfalls* and *Findings* is significantly positive ($p<0.01$). The coefficients show that adverse findings increase corruption by about 29% ($e^{.258}$-1) and, if coupled with *Top windfall,* by over 46% ($e^{.258+.124}$-1=.465).

Column 5 reports specifications combining the four local audit measures, where *High grant risk* is defined as an indicator set to one for either a material weakness, modified audit opinion, questioned cost, or audit finding. The interaction between this variable and *Top windfall* is positive and significant ($p<.05$), increasing corruption by 23% ($e^{.208}$-1). Overall, although somewhat mixed, our results suggest that the presence of some grant-level negative audit outcomes exacerbate the windfall-corruption relationship, while others have no significant effect.

4.2.3 Media Presence

Members of the public at large have a clear disadvantage in monitoring local government officials for corruption. Corruption is inherently a clandestine endeavor, more likely to thrive in opaque contexts in which actors can obscure public access to information. The news media is one of the primary avenues to make information available to the public (Adut, 2005; Thompson, 2000), and through its reporting has the potential to align government incentives with the public interest, place a check on government actions, and interrupt corrupt transactions. The press has

[14] Alternate specifications separately explore effects of external independent auditors versus local audits conducted by State government auditors (Baber et al. 2013). Results show that the effects of State government auditors are not statistically different from those of independent external auditors.

long been portrayed as a watchdog for fraud. Miller (2006) finds that the media often publicize cases of fraud before government agencies such as the SEC, and Dyek et al. (2010) estimate that fraud in large public firms was first identified by the media in 13% of corporate fraud cases.

The link between the news media and accountability goes beyond detecting fraud and corruption per se. Prior research finds, for example, that state governments are more responsive to natural disasters when newspaper circulation is higher (Besley and Burgess 2002). We expect that a strong media presence can help overcome these problems by acting as an intermediary to reduce information asymmetries (Besley, Burgess & Pratt, 2002b; Besley & Burgess, 2001).

Scholarship linking a free press to lower corruption is relatively robust in the non-US context, owing to corruption's greater prevalence in countries with weaker institutional environments (Bhattacharyya and Hodler 2015; Schulze, Sjahrir and Zakharov 2016; Dutta and Roy 2016; Suphachalasai, 2005). For example, Avis, Ferraz & Finnan (2018) find that when the Brazilian government implemented an audit in one municipality, corruption levels declined in that locale and also in *neighboring* municipalities where the media reported audit results.

A stronger news presence can deter corruption by heightening the chances that ethical lapses will be made public, thus lowering the expected value of any private gains. Thus, a sizable press presence increases the likelihood that anomalies will be detected, and offenders apprehended (Clemente, Durand and Porac, 2016), which can deter corrupt actions before they occur, particularly when corrupt officials have previously been vilified by the media (Graffin, Bundy, Porac, Wade and Quinn 2013). Likewise, we expect that a sharp decline in local news reporting will provide greater opportunities for bad actors in local governments. In order to address endogeneity concerns, we test this proposed relationship using a difference in differences

analysis to ascertain whether a daily newspaper closure within a county subsequently leads to an increase in local corruption.

4.2.4 Results for press monitoring

We use the following difference in differences design to exploit variation in daily newspaper closures:

$$\text{Corruption}_{,t} = \lambda_0 + \lambda_1 \text{ Top Windfall}_{s,t-1} \times \text{News Closure}_s \times \text{News\_Closure\_After}_{s,t-1} + \lambda_2 \text{ Top Windfall}_{s,t-1} \times \text{News Closure}_s + \lambda_3 \text{ News\_Closure\_After}_{s,t-1} + \lambda_4 \text{ Top Windfall}_{s,t-1} + \text{Controls}_{s,t-1} + \Sigma\text{State FE} + \Sigma\text{Year FE} + \varrho_{s,t} \quad (4)$$

Where all variables are defined previously, except for the difference-in-differences estimator *News Closure* × *News_Closure_ After,* an indicator set to one for state-years following the closure of a daily newspaper in the county. We use a 4-year pre- and post-event window.

Table 6 presents the results. Column 1 shows that *TopWindfall* x *News_Closure_After* is significantly positive ($p<.05$), suggesting a daily newspaper closure magnifies the positive relationship between windfalls and local corruption. As seen in Column 2, the significant effect is present in Years 1, 2, 3, and 4 following newspaper closure. However, parallel trends in Column 2 also show the effect is significant in the first two pre-periods. Because of this significance in the pre-periods, we individually investigated each of the newspapers that closed during our sample period. Newspaper closures typically occur due to severe drops in revenues; thus, it was not surprising to find that a clear majority of newspapers report large declines in circulation going into their final year of operation, with more than 70% publishing fewer than seven issues per week prior to their closure. Thus, although we view a newspaper closure as a discrete event, given that resources become stretched thin in advance of decisions to shut down operations, it is not surprising that closure effects begin having a significant impact in the years immediately preceding the closure event, itself.

5. Additional analysis

5.1. Types of corruption charges

We next examine whether our results vary based on the lead charge filed by US Attorneys. US attorneys broadly consider *all* offenses committed by public officials to be "public corruption," and then use sub-classifications to charge public officials with crimes. As examples, fraud, embezzlement, bribery, conspiracy, extortion, and official misconduct charges are each considered public corruption, among others (see Supplemental Appendix Table X).[15]

On one hand, it is plausible that our findings vary based on charges that more directly correspond with federal grants, or that may be more readily prevented or detected by auditing or press mechanisms. However, it is also possible that the corruption identified in our sample is emblematic of a culture of corruption more broadly, in which case, results may not vary based on the charges filed. Complicating matters, prosecutors tend to charge defendants with the charges that they can readily prove, rather than those that are more consequential but for which they have less evidence; the infamous gangster Al Capone is an example of this, who was ultimately jailed for tax evasion rather than his presumed extensive criminal activities.

Supplemental analyses employ decision rules that classify cases into categories based on their most salient characteristics.[16] Specifically, we distill the approximately 180 charge codes into four categories based on the lead charge code, which is the first charge listed, and is

[15] Note that isolating cases as "fraud" using US attorney charge codes does not meaningfully align with our study. The legal definition of fraud is defined under 18 U.S.C. § 1001 as "knowingly and intentionally doing any of the following: Falsifying, concealing, or covering up by any trick, scheme, or device a material fact; making any materially false, fictitious, or fraudulent statement or representation; or making or using any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry." Hence *ex ante*, we would not expect windfall grants to be more likely to lead to fraud charges than any other sub-classifications of public corruption.

[16] Three researchers independently classified each charge code.

typically considered the most important: 1) "666" charges (i.e., charges of 18 USC § 666—Theft or Bribery Concerning Programs Receiving Federal Funds), 2) bribery and extortion, 3) fraud and embezzlement, and 4) all other. The 666 category is particularly interesting because the charge code directly relates to the misuse of federal funds.[17] Unfortunately, however, the 666 category combines actions corresponding to both bribery and fraud. Thus, while this category is arguably closely linked to our windfall measure, it combines charges in a manner that makes more nuanced interpretation difficult.

Table 7 displays results. Columns 1 and 2 partition our sample between cases with any 666 lead charge code and no 666 (all other) lead charge codes.[18] We note that the magnitude of coefficients is significantly larger for the 666 category. *Top windfall* is 0.469 ($p<0.01$) and 0.176 ($p<0.01$) for defendants with any 666 charges and no 666 charges in columns 1 and 2, respectively. Tests of restrictions suggest that the coefficient magnitudes are statistically significantly different ($p<0.01$). Overall, findings from the charge code analysis suggest that windfall-corruption relations vary based on lead charges filed by prosecutors.

6. Conclusion

We examine whether large federal grant shocks (deemed "windfalls") contribute to local government public corruption and, considering the setting as a multi-layered principal-agent problem, whether federal, state, and local auditing oversight mechanisms and press transparency

[17] Although the "666" charges pinpoint fraud and bribery specifically related to federal funds, we anticipate that windfall federal grants will lead to corruption that extends beyond theft from the grant, itself. While some federal grant funds are confined to specific purposes (and others are quite broad), the presence of federal grants enables a government to shift other non-grant funds, which are more fungible, to alternative uses. For example, a city with a police department receiving Department of Justice grant funds may reduce the police department's budget for the year, thus effectively expanding the city's fungible resources overall. Thus, a sudden increase in federal grant funds can provide cover to criminal activity in ancillary activities and funds.

[18] Note that for this analysis, we analyze codes at the entity-year level, so that the same entity-year cannot be in both columns simultaneously.

help ameliorate that relationship. We construct a unique hand-collected dataset of local public corruption from U.S. attorney court filings to operationalize public corruption.

Our study adds to the literature in several respects. First, we expand the literature examining local government corruption. Although important to citizens and regulators, relatively few studies explore accounting-related aspects of local government corruption. Two recent exceptions are works by Nakhmurina (2023) and Cuny et al. (2020). Nakhmurina's (2023) investigation of state-level fiscal distress monitoring processes finds that the introduction of monitoring policies associates with several fiscal outcomes, including fewer state corruption convictions per capita. Similarly, Cuny et al. (2020) find negative auditing outcomes such as financial statement material weaknesses worsen when local governments have powerful Congressional representation. Our study complements and extends this literature by focusing on specifically identified local government corruption and windfall grants, including whether federal, state, and local auditing oversight helps attenuate these relations.

Second, many lament the decline in local news coverage over the past few decades (Martin and McCrain 2019), expressing concern that such reductions compromise the public's awareness of local political and administrative issues (Peterson, 2021). Our study provides additional insight into the importance of local news media by illustrating the potential benefit of local news reporters in stifling public corruption.

Our study also has important public policy implications. Our findings that some grant-level audit outcomes such as questioned costs and audit findings exacerbate the effects of windfall grants on public corruption, while others have no impact, fills a gap in the literature on the effectiveness of the Single Audit process, which may inform federal regulators interested in strengthening it. In addition, our evidence that a higher percentage of state staff fraud auditors

helps reduce it, suggests state governments may consider making investments in staff fraud auditors. We believe that further disentangling the relationships among local, state, and federal oversight systems, as well as the media, on the detection, deterrence and prevention of corruption is a fruitful avenue for future research.

References

Ades, A. and Di Tella, R., 1999. Rents, competition, and corruption. *American Economic Review 89*(4): 982 – 993.

Adut, A., 2005. A theory of scandal: Victorians, Homosexuality, and the fall of Oscar Wilde. *Politics and art* New York: Cambridge University Press.

American Institute of Certified Public Accountants (AICPA), 2016. https://us.aicpa.org/content/dam/aicpa/forthepublic/auditcommitteeeffectiveness/downloadabledocuments/achilles_heel.pdf

American Institute of Certified Public Accountants (AICPA), 2009. Government Auditing Standards and Circular A-133 Audits. New York, NY: American Institute of Certified Public Accountants.

Baber, W., Beck, A., Koester, A. 2024. Separation in the municipal debt market following GASB 34 implementation. *The Accounting Review*, forthcoming.

Besley, T., Burgess, R. 2002b. The political economy of government responsiveness: Theory and evidence from India. *Quarterly Journal of Economics* November: 1415-51.

Besley, Timothy, Robin Burgess & Andrea Pratt. 2002a. Mass Media and Political Accountability. In World Bank. 2002. The Right to Tell : The Role of Mass Media in Economic Development. WBI Development Studies. Washington, DC. Edited by Roumeen Islam.

Bhattacharyya, S., Hodler, R. 2015. Media freedom and democracy in the fight against corruption. *European Journal of Political Economy* 39: 13-24.

Besley, T., Burgess, R. 2001. Political agency, government responsiveness and the role of the media. *European Economic Review* 45(4-6): 629-640.

Biddle, G., Hilary, G., Verdi, R. 2009. How does financial reporting quality relate to investment efficiency? *Journal of Accounting & Economics* 48(2-3): 112-131.

Brandeis, Louis D. 1914, *Other People's Money and How the Bankers Use It*. Frederick A. Stokes Company: New York. Originally published in Harper's Weekly: Page 92.

Brumley, B., Thompson, A., Urcan, O. 2021. Do decision makers use audit reports as intended? Evidence from the 2014 Uniform Guidance. Unpublished working paper, University of Illinois.

Butler, A., Fauver, L., Mortal, S. 2009. Corruption, political connections, and municipal finance. *Review of Financial Studies* 22(7): 2873-2905.

Camaj, L. 2013. The media's role in fighting corruption: Media effects on governmental accountability. *The International Journal of Press/Politics* 18(1): 21-42.

Clemente, M. Durand R., and J. Porac. 2016. Organizational wrongdoing and media bias. *Organizational wrongdoing: Key Perspectives and new directions*. Eds Palmer, D. Smith-Crowe, K. and R. Greenwood Cambridge University Press 435-466.

Cordis, A., Milyo, J. 2015. Don't blame the weather: Federal natural disaster aid and public corruption. Unpublished working paper, Mercatus Center. .

Cordis, A., Warren, P. 2014. Sunshine as disinfectant: The effect of state Freedom of Information Act laws on public corruption. *Journal of Public Economics* 115: 18–36.

Core, J., Guay, W., Verdi, R. 2006. Agency problems of excess endowment holdings in not-for-profit firms. *Journal of Accounting & Economics* 41: 307-333.

Cressey, D. 1953. Other people's money: A study of the social psychology of embezzlement. Glencoe, IL: Free Press.

Cuny, C. 2018. When knowledge is power: Evidence from the municipal bond market. *Journal of Accounting and Economics* 65(1): 109-128.

Cuny, C., Kim, J., Mehta, M. 2020. Politically connected governments. *Journal of Accounting Research*, forthcoming.

de la. O, A., Fernández-Vázquez, P., García, F. 2023. Federal and state audits do not increase compliance with a grant program to improve municipal infrastructure: A pre-registered field experiment. *Journal of Development Economics* 162: 1030-43.

Duguay, R. 2018. The economic consequences of financial audit regulations in the charitable sector. Unpublished working paper, Yale University.

Dutta, N., Roy, S. 2016. The interactive impact of press freedom and media reach on corruption. *Economic Modeling* 58: 227-236.

Florida Auditor General, 2008. Audit implications of the American Recovery and Reinvestment Act and a summary of findings of the single audit for the fiscal year ended June 30, 2008. Legislative briefing, State of Florida.

Fogarty, T. and R. Warren. 2021. Stealing from the collection plate: exploring embezzlement by Catholic priests. Unpublished working paper, Case Western Reserve University.

Glaeser, E., Saks, R. 2006. Corruption in America. *Journal of Public Economics* 90(6-7): 1053-1072.

Gore, A., Henderson, B., Ji, Y. 2024. Do municipal bond prices reflect internal control quality? Unpublished working paper, The George Washington University.

Gore, A., Ji, Y., Kulp, S. 2023. Do governments hide resources from unions? The influence of public sector unions on reported discretionary fund balance ratios. *Journal of Accounting Research*, forthcoming.

Graffin, S., Bundy, J., Porac, J., Wade, J., Quinn, D. Falls from grace and the hazards of high status: The 2009 British expense scandal and its impact on parliamentary elites. Administrative Science Quarterly 58: 313-345.

Khanna, T. and Palepu, K., 2000. Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *Journal of Finance* 55(2): 867-891.

Leeson, P., Sobel, R. 2008. Weathering corruption. *Journal of Law and Economics* 51: 667-81.

Lindstedt, C., Naurin, D. 2010. Transparency is not enough: Making transparency effective in reducing corruption. *International Political Science Review* 31(3): 301-322.

Maldonado, S. 2011. Resource windfall and corruption: Evidence from Peru. Unpublished manuscript. UC Berkeley.

Martin, G., & McCrain, J. 2019. Local news and national politics. *American Political Science Review*, *113*(2), 372–384.

Medill 2023. The State of Local News Project Database. Maintained by Northwestern University's Medill Local News Initiative. https://localnewsinitiative.northwestern.edu/projects/state-of-local-news/2023/report/

Miller, G. J. (2005). The political evolution of principal-agent models. *Annu. Rev. Polit. Sci.*, *8*, 203-225.

Moe, T. 1984. The new economics of organization. *American journal of political science*.

Nakhmurina, A. 2023. Does fiscal monitoring make better governments? Evidence from US municipalities. *The Accounting Review*, forthcoming.

Peterson, E. 2021. Not dead yet: Political learning from newspapers in a changing media landscape. *Political Behavior* 43(1): 339-361.

Petrovits, C., Shakespeare, C., Shih, A. 2011. The causes and consequences of internal control problems in nonprofit organizations. *The Accounting Review* 86(1): 325-357.

Rechtman, Y. 2019. The risks of fraud collusion: Are we only looking at lit corners? *The CPA Journal* 89(3): 14-15.

Schulze, G., Sjahrir, B., Zakharov, N. 2016. Corruption in Russia. *Journal of Law and Economics* 59: 135-171.

Shurr, A. 2019. Galloway begins second term as auditor, announces public corruption and fraud division. *The Missouri Times*. 1/14/2019. (https://themissouritimes.com/galloway-begins-second-term-as-auditor-announces-public-corruption-and-fraud-division/)

Singleton, T., Singleton, A. 2010. *Fraud auditing and forensic accounting,* John Wiley and sons: Hoboken, N.J.

Suphachalasai, S. 2005. Bureaucratic corruption and mass media (January 2005). Environmental Economy and Policy Research Discussion Paper No. 05.

Tassin, K., Waymire, T., Hines, C. 2019. A historical evaluation of the single audit: Thirty years from initial legislation to uniform guidance. *Journal of Governmental & Nonprofit Accounting* 8(1): 21-35.

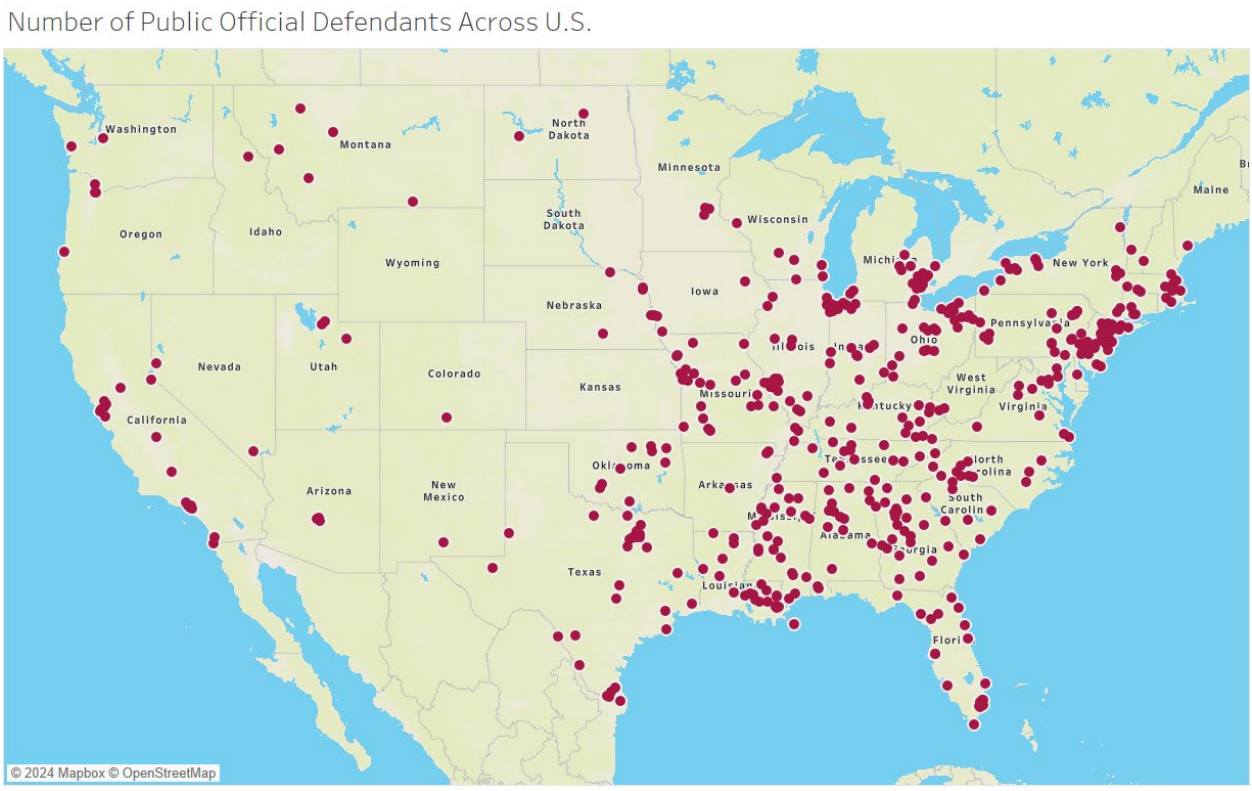
Thompson, J. 2000. *Political Scandal: Power and visibility in the media age*. Blackwell Publishers: Malden MA.

Travis, R. January 5, 2022. New Year, old crime: Covid relief fraud still on the minds of Georgia prosecutors. *Atlanta Journal Constitution.*

Tysiac, K. 2021. Single audit: Pandemic aid and major program determinations. *Journal of Accountancy*, May 6, 2021.

Zimmerman, J. 1977. The municipal accounting maze: An analysis of incentives. *Journal of Accounting Research* 15: 107-144.

Figure 1
Visualization of corruption cases



Map based on Longitude (generated) and Latitude (generated) and Latitude (generated). For pane Latitude (generated): Details are shown for zipcode. The view is filtered on zipcode, which excludes 96817 and 99723.

This table displays a visualization of the corruption sample presented in Table 1.

Appendix A: Variable Definitions

Variable	Definition	Source
Main variables		
Top Windfall	An indicator set to one if the Windfall is in the top quintile of the sample distribution; Windfall is the residual term from modeling federal grants in specification (1)	Single Audit Database; U.S. Census Bureau
Corruption	One plus the natural logarithm of the number of defendants in cases flagged by US Attorneys as public corruption.	Various sources, Hand collected
Control variables		
Cash	Cash holdings for a given local government-year.	U.S. Census Bureau
General Revenue	General revenues for a given local government-year.	U.S. Census Bureau
Personal Income	Natural log of county per capital personal income.	U.S. Census Bureau
Size	Natural log of population of a given local government-year.	U.S. Census Bureau
Audit oversight variables		
Findings	An indicator set to one if the single audit reported that current year findings affect direct funds in either of the past two years.	Single Audit database
% Fraud Auditors	The average ratio of number of staff for state agency fraud audits divided by total number of staff in the prior two years.	NASACT
High grant risk	An indicator set to one if there is either a material weakness, modified opinion, questioned cost, or audit finding in either of the past two years.	Single Audit database
Material Weakness	An indicator set to one for a material weakness in a major program in either of the past two years.	Single Audit database
Modified Opinion	An indicator set to one for modified opinions issued for a major program in either of the past two years.	Single Audit database
New CFE	An indicator set to one for states with a new State Auditor who is also a CFE	NASACT
New CFE - After	An indicator set to one for years following a *New CFE*	NASACT
New Fed Monitor	An indicator set to one if the oversight agency has changed in either of the past two years.	Single Audit database
Questioned Cost	An indicator set to one if the single audit disclosed any known questioned costs in either of the past two years.	Single Audit database
Newspaper variables		
News Closure	An indicator set to one for counties with a daily newspaper closure during the sample period.	Medill Local News Initiative database
News Closure - After	An indicator set to one for years following a *News Closure*	Medill Local News Initiative database

Appendix B: Corruption Sample Construction

No single source is available to provide all of the data necessary to construct our local government-level corruption sample. Therefore, we undertook a four-step process of hand-matching across several different sources, as follows.

Step 1

We first downloaded the set of all possible local government officials charged with corruption from the Transactional Records Access Clearinghouse (TRAC) at Syracuse University. The TRAC database codes cases as relating to public corruption by local officials, based on an indicator assigned by the US Attorneys prosecuting the cases (Program Code 16). The TRAC data provide a comprehensive set of cases meeting this criterion. The database is anonymized and hence lacks key information such as the defendant's name and employer, but does include information on the court district, filing date, sentencing date, referral date, disposition type, length of prison sentence, length of probation sentence, amount of fine imposed, and lead charge. This resulted in 2607 cases. We then drop 152 cases that are filed in DC, PR, VI, or GU.

Step 2

To obtain the official case/docket numbers, we matched TRAC data at the defendant level to data from the Integrated Database from the Federal Judicial Center (IDB). Since a given case will appear in both the TRAC and IDB data each year from the referral year until the year in which the case is terminated, we retained only the latest year that a defendant appeared in each dataset to avoid duplication. This resulted in 2,455 cases.

To match TRAC data to IDB data, we used the following fields: district code, filing date, disposed date/sentence date, charge code, prison length, probation length, amount of fee imposed, and number of defendants involved in the same case. We first employed exact matching and if there was no perfect match, we relaxed the criteria to identify potential matches using the following criteria: 1) a 100% match on the district code; 2) a filing date differing by no more than a week; and 3) a perfect match on one of the following: a) length of prison sentence; b) length of probation; or c) amount of imposed fee. By individually examining each of these matches, it appeared that inconsistencies were due to either errors with data entry or the fact that case details changed over time (e.g. through a modification of sentence), and also because databases were created at different points in the process. A common example where small matching differences occurred involved situations in which multiple defendants were listed on the same case, and a perfect match arose for all defendants except one. Final matches were confirmed in Step 4 below, providing confidence that all matches constructed through this process involved the correct defendants. However, in 299 out of 2,455 cases, a match could not be made/confirmed, and these cases were dropped.

Step 3

After compiling the list of local public corruption cases with case/docket numbers in Steps 1 and 2, we next used the docket number to obtain defendant information using the Public Access to Court Electronic Records (PACER) database, which is maintained by the Administrative Office of the US Courts. Since key PACER data are unavailable to the general public prior to November, 2004, we limited our matching to defendants charged in 2005 or later. Similarly, since a considerable proportion of cases filed after 2018 have yet to be resolved, we ended data collection with 2018. Using the docket number, we collected the names of all defendants associated with a case, as well as the official name of the criminal case, and the full case name. The full case name is constructed in such a way to indicate the judge, the defendant number, and the defendant's name. Since the IDB dataset also contains the defendant number, we used this to match cases at the defendant level when a given case involved multiple defendants that were otherwise indistinguishable. By way of Step 3, our dataset now contained all cases from 2005-2018 flagged as "public corruption" by US Attorneys, as well as defendant-level details such as the defendant's name, date of the criminal filing, and a text description from the indictment or other court filing.

Step 4

To identify the public entities involved, and also to provide an additional verification check, we used the defendant's name and the case location to search a number of sources, including PACER documents such as filings and indictments, Department of Justice press releases, and (when the filings and DOJ press releases did not name a

specific employer), Google searches.[19] For each defendant, we collected the name of their employer and position at the time of the crime or (when the defendant was not directly employed by a local government), the local government at the heart of the crime. To confirm the matching process, we verified that at least one defendant in the criminal scheme was an employee of a local government (indicating that the case that was identified met the criteria for being flagged as a case of "local corruption" by US Attorneys in the original TRAC data).

It is important to note that a large number of cases flagged as local corruption (Program Code 16) included both public officials and co-conspirators who are private defendants (with 611 private-sector defendants in total). For the purposes of this study, we considered only defendants who were employed by local governments, and dropped any co-conspirators who were not, themselves, public employees. But future researchers should take note that simple counts of defendants coded as Program Code 16 (in TRAC) do not correspond directly with the number of public employees charged with corruption.

[19] There is one case in which a defendant could not be matched in the PACER data, likely due to a court data entry error regarding the case/docket number.

Table 1
Corruption Case Statistics

Panel A: Sample selection

	Unique Defendants
TRAC local corruption cases filed between 2005 and 2018	2,607
Observations dropped due to:	
Case filed in (DC, PR, VI, GU)	152
Unable to be Matched	299
Private Case (with no public official involved)	57
No Census identifier (e.g. Authorities, tribes, nonprofit political parties)	308
Defendants are State Officials	63
Private Defendant (with public officials involved)	554
Total	1,174

Panel B: Sample distribution by entity type

	Total	Municipalities	Counties	Special district	School districts
Unique Defendant	1,174	752	285	47	90
% of Total	100%	64%	24.3%	4%	7.7%
Unique Case	1,003	640	243	44	76
% of Total	100%	64%	24%	4%	8%
Unique Entity-Year (Referral Year)	788	483	210	41	54
% of Total	100%	61%	27%	5%	7%
Unique Entity	572	331	160	36	45
% of Total	100%	58%	28%	6%	8%

Panel C: Sample distribution by sub-entity type

	Total	Law Enforcement	General government
Unique Defendant	1,174	400	774
% of Total	100%	34%	66%
Entity-Year (Referral Year)	832	277	555
% of Total	100%	33%	67%

Panel D: Sample distribution by defendant position level

	Total	High level officials*	Other managers	Low-level employees	Council members**
Defendant	1174	164	204	662	144
% of Total	100%	14%	17%	56%	12%
Entity-Year (Referral Year)	877	146	174	440	117
% of Total	100%	17%	20%	50%	13%

*High level officials include mayors, county supervisors, city managers, sheriffs, police chiefs, principals, and school superintendents.
**Council members includes those charged with governance such as council members, board members, and trustees.

Panel E: Sample distribution by defendants elected versus appointed

	Total	Elected	Appointed
Unique Defendant	1174	213	961
% of Total	100%	18%	82%
Entity-Year (Referral Year)	820	177	643
% of Total	100%	22%	78%

Panel F: Sample distribution by lead charge

	Total	"666"	bribery-extortion	Fraud-embezzlement	Other	Missing charge code
Unique Defendant	1174	284	194	291	370	35
% of Total	100%	24%	17%	25%	32%	3%
Entity-Year (Referral Year)	901	230	135	238	269	29
% of Total	100%	26%	15%	26%	30%	3%

Note: This table describes the corruption sample. Panel A shows the corruption sample selection. Panels B, C, D, E, and F display corruption sample distribution by entity type, sub-entity type, defendant position level, elected versus appointed defendants, and defendant lead charge code, respectively.

Table 2
Sample Descriptive Statistics

Panel A: Main Analyses Sample selection

	Unique Defendant	Unique Entity-Year
Corruption observations	1174	788
Observations excluded due to:		
Special districts or School districts	137	95
Entity not in Single Audit Database	449	332
Total	588	361

Panel B: Entropy Balanced Matching

	Pre- Entropy Balanced Matching			*Post-Entropy Balanced Matching*		
	Corruption=1	Corruption=0	Diff	Corruption=1	Corruption=0	Diff
	(a)	(b)	(a-b)	(c)	(d)	(c-d)
N	361	2917		361	2917	
Cash	1.115	0.9525	0.163***	1.115	1.114	0.001
General revenue	2.268	1.936	0.332***	2.268	2.274	-0.006
Size	11.643	11.32	0.323***	11.643	11.668	-0.025
Personal income	10.588	10.54	0.048***	10.588	10.598	-0.01

Panel C: Means, standard deviations and percentiles

Variable	**N**	**Mean**	**25%**	**Med.**	**75%**	**Std Dev**
Corruption	3,278	0.097	0.000	0.000	0.000	0.300
Windfall	3,278	33.568	-13.085	5.052	52.612	82.475
Top windfall	3,278	0.275	0.000	0.000	0.000	0.446
Cash	3,278	0.973	0.365	0.724	1.295	0.896
General revenue	3,278	1.984	1.006	1.545	2.580	1.385
Size	3,278	11.427	10.830	11.508	11.925	1.106
Personal income	3,278	10.559	10.387	10.538	10.698	0.254
New fed monitor	3,278	0.37	0.000	0.000	1.000	0.483
% Fraud Auditors on Staff	3,278	0.024	0.000	0.005	0.030	0.060
CFE State Auditor	3,278	0.109	0.000	0.000	0.000	0.312
Material weakness	3,278	0.194	0.000	0.000	0.000	0.395
Modified opinion	3,278	0.177	0.000	0.000	0.000	0.382
Questioned costs	3,278	0.205	0.000	0.000	0.000	0.404
Audit findings	3,278	0.370	0.000	0.000	1.000	0.483
High grant risk	3,278	0.442	0.000	0.000	1.000	0.497
News Closure	2,763	4.8%	0.000	0.000	0.000	0.213
News Closure - After	2,763	1.9%	0.000	0.000	0.000	0.137
New CFE	3,076	7.4%	0.000	0.000	0.000	0.263
New CFE - After	3,076	4.3%	0.000	0.000	0.000	0.202

Table 2
Sample Descriptive Statistics (continued)

	(1) Corruption	(2) Top Windfall	(3) Cash	(4) General revenue	(5) Size	(6) Personal income	(7) New fed monitor	(8) % Fraud Auditors	(9) Material weakness	(10) Modified 0pinion	(11) Questioned costs	(12) Audit finding	(13) High grant risk	(14) New CFE	(15) News Closure
(1)	1	**0.104**	**0.075**	**0.110**	**0.081**	**0.061**	**-0.077**	-0.006	**0.154**	**0.149**	**0.169**	**0.148**	**0.145**	-0.012	0.045
(2)	**0.082**	1.000	**0.237**	**0.370**	**-0.243**	0.035	0.014	0.044	**0.081**	**0.087**	**0.144**	**0.099**	**0.112**	0.002	0.017
(3)	**0.069**	**0.217**	1.000	**0.603**	**-0.227**	**0.207**	-0.005	-0.021	0.010	0.005	**0.080**	**0.121**	**0.075**	**0.067**	**0.141**
(4)	**0.080**	**0.381**	**0.602**	1.000	**-0.274**	**0.343**	-0.036	**-0.070**	**0.065**	**0.080**	**0.129**	**0.091**	**0.095**	**-0.091**	**0.081**
(5)	**0.082**	**-0.194**	**-0.165**	**-0.244**	1.000	**0.240**	**-0.193**	**-0.138**	0.041	**0.073**	**0.138**	**0.152**	**0.166**	-0.012	**0.085**
(6)	**0.050**	0.029	**0.225**	**0.316**	**0.235**	1.000	**-0.160**	**-0.117**	0.036	**0.060**	**0.122**	**0.151**	**0.136**	**-0.075**	**0.187**
(7)	**-0.080**	0.014	-0.023	**-0.056**	**-0.182**	**-0.169**	1.000	**0.121**	**-0.066**	**-0.097**	**-0.132**	**-0.195**	**-0.161**	0.005	**-0.066**
(8)	-0.006	0.036	**-0.105**	**-0.147**	-0.021	**-0.191**	**0.115**	1.000	-0.026	-0.018	-0.031	-0.044	-0.043	**0.109**	**-0.075**
(9)	**0.148**	**0.081**	0.002	**0.063**	0.043	0.043	**-0.066**	**-0.061**	1.000	**0.663**	**0.408**	**0.404**	**0.551**	0.004	-0.001
(10)	**0.148**	**0.087**	0.005	**0.088**	**0.075**	**0.061**	**-0.097**	**-0.047**	**0.663**	1.000	**0.474**	**0.394**	**0.521**	0.018	**0.072**
(11)	**0.147**	**0.144**	**0.093**	**0.154**	**0.142**	**0.122**	**-0.132**	**-0.045**	**0.408**	**0.474**	1.000	**0.466**	**0.570**	0.022	**0.058**
(12)	**0.138**	**0.099**	**0.137**	**0.118**	**0.138**	**0.156**	**-0.195**	**-0.113**	**0.404**	**0.394**	**0.466**	1.000	**0.859**	0.015	**0.096**
(13)	**0.140**	**0.112**	**0.078**	**0.116**	**0.155**	**0.146**	**-0.161**	**-0.091**	**0.551**	**0.521**	**0.570**	**0.859**	1.000	0.001	**0.078**
(14)	-0.006	0.002	0.041	**-0.127**	0.015	-0.034	0.005	**0.248**	0.004	0.018	0.022	0.015	0.001	1.000	**-0.065**
(15)	0.028	0.017	**0.152**	**0.091**	**0.070**	**0.177**	**-0.066**	**-0.144**	-0.001	**0.072**	**0.058**	**0.096**	**0.078**	**-0.065**	1.000

Note: This table presents descriptive statistics for our sample. Panel A shows the sample selection for the main sample. Panel B displays the mean and variance for matching variables before and after entropy balancing. Panel C shows descriptive statistics for the main sample. Panel D provides correlations among variables, with the Spearman (Pearson) values provided below (above) the diagonal. Bolded numbers are significant at the 1% level. Note all continuous variables are winsorized at the 1st and 99th percentiles of their distribution. Please see Appendix A for variable definitions.

Table 3
Windfall Grants and Public Corruption

VARIABLES	(1)	(2)
Top Windfall	0.245***	0.236***
	(4.133	(3.997)
Bottom Windfall		-0.047
		(1.191)
$Cash_{t-1}$	-0.034	-0.034
	(1.073)	(1.060)
$General\ Revenue_{t-1}$	0.051*	0.050*
	(1.812)	(1.776)
$Size_{t-1}$	0.050*	0.049
	(1.693)	(1.637)
$Personal\ income_{t-1}$	0.049	0.047
	(0.356)	(0.345)
Observations	3,278	3,278
Adj R-squared	6.9%	7.0%
Fixed Effects	Year, State & Entity Type	Year, State & Entity Type

***, **, and * indicate significance at p<.01, .05, and .10, based on two-tailed tests.

Note: This table displays OLS specifications of relations between federal grant windfalls and subsequent local government corruption cases filed. The dependent variable is the natural log of one plus the number of public officials charged with corruption in a given local government. *Top Windfall* is an indicator set to one for municipalities in the top quintile of residuals from Eq. (1) in either of the prior two years. All continuous variables are winsorized at the 1st and 99th percentiles of their distribution. t-statistics are based on robust standard errors clustered by entity. Please see Appendix A for variable definitions.

Table 4
Windfall Grants Conditioned on Federal and State Monitoring

Panel A. Federal and State Monitoring

VARIABLES	(1)	(2)	(3)
Top Windfall	0.323***	0.293***	0.355***
	(5.486)	(4.652)	(5.809)
New Fed Monitor	0.018		0.009
	(0.381)		(0.192)
Top Windfall * New Fed Monitor	-0.280***		-0.250***
	(3.370)		(2.972)
% Fraud Auditors		0.291	0.221
		(1.069)	(0.801)
Top Windfall * % Fraud Auditors		-1.946***	-1.652***
		(3.642)	(3.264)
$Cash_{t-1}$	-0.039	-0.032	-0.037
	(1.270)	(1.005)	(1.192)
$General\ Revenue_{t-1}$	0.053*	0.050*	0.053*
	(1.961)	(1.817)	(1.951)
$Size_{t-1}$	0.037	0.049*	0.036
	(1.257)	(1.652)	(1.230)
$Personal\ income_{t-1}$	0.050	0.048	0.048
	(0.366)	(0.358)	(0.358)
Observations	3,278	3,278	3,278
Adj R-squared	8.4%	7.8%	9.0%
Fixed Effects	Year, State & Entity Type	Year, State & Entity Type	Year, State & Entity Type

***, **, and * indicate significance at p<.01, .05, and .10, based on two-tailed tests.

Note: This table displays OLS specifications of relations between windfall federal grants and subsequent public corruption, conditioned on federal or state monitoring. The dependent variable is the natural log of one plus the number of public officials charged with corruption in a given local government. *Top Windfall* is an indicator set to one for municipalities in the top quintile of residuals from Eq. (1) in either of the prior two years. *New fed monitor* is an indicator set to one if the oversight agency has changed in either of the prior two years. *% Fraud Auditors* is the average of the percentages of state auditor staff that are fraud auditors in the past two years. t-statistics are based on robust standard errors clustered by entity. Please see Appendix A for variable definitions.

Table 4 (continued)
Windfall Grants Conditioned on Federal and State Monitoring

Panel B. Difference-in-differences specifications of State CFE Auditor Change

VARIABLES	(1)	(2)
Top Windfall$_{t-1}$	0.306***	0.306***
	(4.251)	(4.262)
Top Windfall$_{t-1}$ * New CFE	-0.009	0.148
	(0.051)	(0.315)
New CFE After	0.021	
	(0.087)	
Top Windfall$_{t-1}$ * New CFE After	-0.672***	
	(4.304)	
New CFE – Yr		-0.016
		(0.056)
Top Windfall$_{t-1}$ * New CFE – Yr		-0.591
		(1.164)
New CFE – Post 1 Yr		0.322
		(1.437)
Top Windfall$_{t-1}$ * New CFE – Post 1 Yr		-1.067**
		(2.191)
New CFE – Post 2 Yr		-0.009
		(0.035)
Top Windfall$_{t-1}$ * New CFE – Post 2 Yr		-0.597
		(1.166)
New CFE – Post 3 Yr		-0.083
		(0.274)
Top Windfall$_{t-1}$ * New CFE – Post 3 Yr		-0.669
		(1.327)
New CFE – Post 4 Yr		0.069
		(0.266)
Top Windfall$_{t-1}$ * New CFE – Post 4 Yr		-0.864*
		(1.811)
New CFE – Pre 1 Yr		-0.070
		(0.286)
Top Windfall$_{t-1}$ * New CFE – Pre 1 Yr		0.322
		(0.476)
New CFE – Pre 2 Yr		0.346
		(1.414)
Top Windfall$_{t-1}$ * New CFE – Pre 2 Yr		-0.486
		(0.936)

New CFE – Pre 3 Yr		-0.192
		(1.113)
Top Windfal$_{lt-1}$ * New CFE – Pre 3 Yr		-0.080
		(0.166)
Cash$_{t-1}$	-0.027	-0.029
	(0.798)	(0.853)
General revenue$_{t-1}$	0.036	0.039
	(1.328)	(1.421)
Size$_{t-1}$	0.035	0.038
	(1.114)	(1.207)
Personal income$_{t-1}$	0.069	0.071
	(0.494)	(0.508)
Observations	3,076	3,076
Adj R-squared	0.077	0.085
Fixed Effects	Year, State & Entity Type	Year, State & Entity Type

***, **, and * indicate significance at p<.01, .05, and .10, based on two-tailed tests.

Note: This table reports OLS estimates of difference-in-differences specifications of windfall federal grants and public corruption. *Top Windfall* $_{t-1}$ is an indicator set to one for municipalities in the top quintile of residuals from Eq. (1) in the prior year. *New CFE* is an indicator set to one if the entity is in a state with a new CFE State Auditor. *After* is an indicator set to one for entity-years following a new CFE State Auditor. Column 2 includes three years prior to a new CFE State Auditor for a parallel trends test. All continuous variables are winsorized at the 1st and 99th percentiles of their distribution. t-statistics are based on robust standard errors clustered by entity. Please see Appendix A for variable definitions.

Table 5
Windfall Grants and Local Audit Monitoring

VARIABLES	(1)	(2)	(3)	(4)	(5)
Top Windfall	0.179***	0.199***	0.124**	0.080	0.094
	(3.155)	(3.576)	(2.325)	(1.467)	(1.501)
Material Weakness	0.159***				
	(2.719)				
Top Windfall * Material Weakness	0.145				
	(1.428)				
Modified Opinion		0.149**			
		(2.447)			
Top Windfall * Modified Opinion		0.101			
		(0.977)			
Questioned Costs			0.121***		
			(2.622)		
Top Windfall * Questioned Costs			0.245**		
			(2.476)		
Findings				0.097**	
				(2.309)	
Top Windfall * Findings				0.258***	
				(2.953)	
High grant risk					0.102**
					(2.485)
Top Windfall * High grant risk					0.208**
					(2.247)
$Cash_{t-1}$	-0.024	-0.025	-0.037	-0.040	-0.035
	(0.798)	(0.820)	(1.214)	(1.292)	(1.130)
General $revenue_{t-1}$	0.037	0.041	0.039	0.047*	0.045*
	(1.395)	(1.515)	(1.610)	(1.811)	(1.663)
$Size_{t-1}$	0.033	0.035	0.022	0.013	0.022
	(1.139)	(1.173)	(0.757)	(0.423)	(0.764)
Personal $income_{t-1}$	0.053	0.052	0.032	0.042	0.047
	(0.428)	(0.418)	(0.268)	(0.342)	(0.372)
Observations	3,278	3,278	3,278	3,278	3,278
Adj R-squared	10.2%	9.2%	10.9%	10.4%	9.7%
Fixed Effects	Year, State & Entity Type	Year, State & Entity Type	Year, State & Entity Type	Year, State & Entity Type	Year, State & Entity Type

***, **, and * indicate significance at p<.01, .05, and .10, based on two-tailed tests.

Note: This table displays OLS specifications of relations between windfall federal grants and subsequent public corruption, conditioned on local government audit monitoring. The dependent variable is the natural log of one plus the number of public officials charged with corruption in a given local government. *Top Windfall* is an indicator set to one for municipalities in the top quintile of residuals from Eq. (1) in either of the prior two years. *Material Weakness* is an indicator set to one if there is material weakness in a major program in either of the prior two years.

Modified Opinion is an indicator set to one if there is a modified opinion on a major program in either of the prior two years. *Questioned Costs* is an indicator set to one if there are any grant questioned costs in either of the prior two years. *Findings* is an indicator set to one if the single audit reported that current year findings affect direct funds in either of the prior two years. *High grant risk* is an indicator set to one if the municipality has either a material weakness, modified opinion, questioned cost, or a finding in either of the prior two years. All continuous variables are winsorized at the 1st and 99th percentiles of their distribution. t-statistics are based on robust standard errors clustered by entity. Please see Appendix A for variable definitions.

Table 6
Windfall Grants and Local Newspaper Closures
Difference in Differences Specifications

VARIABLES	(1)	(2)
Top Windfall $_{t-1}$	0.248***	0.248***
	(3.768)	(3.751)
News Closure	-0.006	-0.091
	(0.062)	(0.499)
Top Windfall$_{t-1}$ × News Closure	0.227	-0.415**
	(0.710)	(2.069)
News Closure After	-0.193	
	(1.238)	
Top Windfall$_{t-1}$ × News Closure After	0.607**	
	(2.421)	
News Closure Yr		-0.279
		(1.502)
Top Windfall$_{t-1}$ × News Closure Yr		1.792***
		(7.425)
News Closure Post 1 Yr		0.102
		(0.349)
Top Windfall$_{t-1}$ × News Closure Post 1 Yr		1.612***
		(4.774)
News Closure Post 2 Yr		-0.270
		(1.442)
Top Windfall$_{t-1}$ × News Closure Post 2 Yr		1.146***
		(2.686)
News Closure Post 3 Yr		0.066
		(0.243)
Top Windfall$_{t-1}$ × News Closure Post 3 Yr		1.207**
		(2.315)
News Closure Post 4 Yr		-0.371*
		(1.886)
Top Windfall$_{t-1}$ × News Closure Post 4 Yr		0.921***
		(3.825)
News Closure Pre 1 Yr		-0.089
		(0.347)
Top Windfall$_{t-1}$ × News Closure Pre 1 Yr		1.426**
		(2.081)
News Closure Pre 2 Yr		0.023
		(0.084)
Top Windfall$_{t-1}$ × News Closure Pre 2 Yr		0.595*
		(1.670)
News Closure Pre 3 Yr		0.244
		(1.122)

Top Windfall$_{t-1}$ × News Closure Pre 3 Yr		0.296
		(1.091)
Cash$_{t-1}$	-0.021	-0.017
	(0.625)	(0.492)
General revenue$_{t-1}$	0.029	0.027
	(1.099)	(1.046)
Size$_{t-1}$	0.045	0.048
	(1.349)	(1.433)
Personal income$_{t-1}$	-0.029	-0.046
	(0.270)	(0.421)
Observations	2,763	2,763
Adj R-squared	8.4%	9.9%
Fixed Effects	Year, State & Entity Type	Year, State & Entity Type

***, **, and * indicate significance at p<.01, .05, and .10, based on two-tailed tests.

Note: This table employs OLS estimates of difference-in-differences specifications of windfall federal grants and public corruption. The sample size is reduced due to the availability of newspaper closure data. *Top Windfall* $_{t-1}$ is an indicator set to one for municipalities in the top quintile of residuals from Eq. (1) in the prior year. *News closure* is an indicator set to one if the entity is in a county that experienced a newspaper closure. *After* is an indicator set to one for entity-years following a newspaper closure in the county. Column 2 includes three years prior to the newspaper closure for a parallel trends test. All continuous variables are winsorized at the 1st and 99th percentiles of their distribution. t-statistics are based on robust standard errors clustered by entity. Please see Appendix A for variable definitions.

Table 7
Windfall Grants and Public Corruption Based on Lead Charge

VARIABLES	(1) Lead charge: 666	(2) Lead charge: non-666
Top Windfall	0.469***	0.176***
	(4.169)	(3.201)
	Diff: p =0.0054	
$Cash_{t-1}$	-0.057	-0.005
	(0.798)	(0.149)
General $revenue_{t-1}$	0.059	0.02
	(0.915)	(0.856)
$Size_{t-1}$	0.097	0.03
	(1.331)	(0.981)
Personal $income_{t-1}$	0.495	0.048
	(1.611)	(0.432)
Observations	741	1976
Adj R-squared	20%	4%
Fixed Effects	Year, State & Entity Type	Year, State & Entity Type

***, **, and * indicate significance at p<.01, .05, and .10, based on two-tailed tests.

Note: This table displays OLS specifications of relations between windfall federal grants and subsequent public corruption, partitioned on the lead charge code assigned by US attorneys. The dependent variable is one plus the natural log of the number of public officials charged with corruption in a given local government. *Top Windfall* is an indicator set to one for municipalities in the top quintile of residuals from Eq. (1). Column (1) shows entity-years with corruption cases where any lead charge is related to federal programs (*Lead charge: 666*) and Column (2) shows entity-years with all other corruption cases, where no lead charge is related to federal programs (*Lead charge: No 666*). t-statistics are based on robust standard errors clustered by entity. Please see Appendix A for variable definitions.