# Do grantors use audit reports as intended? Evidence from the 2014 Uniform Guidance

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**ABSTRACT:** Single Audits are intended to be the primary accountability mechanism for monitoring federal grants which totaled $848 billion in 2025. Due to longstanding concerns that federal agencies did not monitor grant recipients' Single Audit reports consistently, the 2014 *Uniform Guidance* issued by the Office of Management and Budget required federal agencies to increase the use of Single Audits for grants management. We find that modified Single Audit reports are associated with lower future grants after the Uniform Guidance, suggesting greater use of Single Audits for grant decision-making. Our findings have important policy implications for the oversight of federal awards and provide large sample evidence that the Uniform Guidance improved grant recipients' accountability for their use of taxpayer dollars.

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## I. INTRODUCTION

*"Federal agencies do not systematically use audit findings to identify and understand emerging and persistent issues related to grant programs and grantee use of funds" (GAO 2011).*

In 2025, the U.S. federal government awarded $848 billion, or 16% of the federal budget, in federal grants (OMB 2026).[1] Grants are awarded to states, local governments, and nonprofit organizations to provide public services including healthcare, education, and housing. Under the Single Audit Act of 1984, grant recipients that expend more than a threshold amount in federal grants during a fiscal year are required to undergo a "Single Audit" that consists of a financial statement audit and a compliance audit of grant spending. Single Audits are intended to be the primary accountability mechanism for monitoring against waste, fraud, and abuse of federal grants and federal agencies should rely on this audit "to the maximum extent practicable" when allocating and monitoring federal grants (OMB 1996, p.2). However, numerous Government Accountability Office (GAO) studies document deficiencies in federal agencies' use of Single Audits reports (GAO 2009, GAO 2011, GAO 2017).[2] In response, the Office of Management and Budget (OMB) strengthened requirements for federal agencies to use Single Audit reports as part of the 2014 *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (hereafter "Uniform Guidance") (White House 2014).

We examine whether federal grant decisions are more sensitive to Single Audit reports following the Uniform Guidance. The use of Single Audit reports as an accountability

[1] The OMB publishes outlays of federal grants to state and local governments. These figures do not include nonprofit organizations.

[2] Examples of questioned use of federal funds include a 2018 Department of Housing and Urban Development audit of Jefferson Parish, LA in 2018 which required the parish to provide support for, or repay, $1,020,121 for payments made to contractors for work that was not performed, excessive materials costs, and other deficiencies (https://www.hudoig.gov/open-recommendation/2018-fw-1001-001-c-jefferson-parish-jefferson-la-did-not-always-properly) and a 2010 Department of Justice audit that questioned nearly 80 percent of the expenditures on a grant to the Allegheny County Medical Examiner's office that was intended to improve their capabilities and purchase equipment (https://oig.justice.gov/reports/audit-office-justice-programs-national-institute-justice-cooperative-agreement-allegheny).

mechanism is important to the broad set of stakeholders who pay taxes to fund federal programs and/or rely on services from federal programs. Because the costs to perform Single Audits can be substantial and are ultimately borne by taxpayers and donors, it is also important to understand whether the audit costs yield societal benefits. The average annual audit cost for nonprofits is $167,000 (FERF 2015) and can exceed $1 million and 9,000 hours for large governments.[3] Therefore, our research question provides evidence to policymakers and stakeholders on whether the Uniform Guidance improved the use of Single Audit reports as an accountability mechanism for taxpayer dollars or whether further reforms are needed. Finally, compliance auditing is a growing area of interest among stakeholders, practitioners, and regulators yet prior research devotes little attention to the usefulness of compliance audit reports for decision-making.

To provide background information, we conduct semi-structured interviews with ten participants from five government units about how their organizations use Single Audit reports in the grants management process. The participants described using Single Audit reports for initial risk assessments, to set terms and conditions on new grants, and for updating risk assessments on existing grants. They also discussed how they view different types of audit findings in the report and how they monitor resolution of those findings. The nature and extent of the changes and/or improvements described by the participants after the Uniform Guidance varied based on the extent and quality of monitoring that was in place before the Uniform Guidance. Some of the changes they described include lower workload, updated checklists, and better controls and tracking systems.

[3] For example, the Single Audit cost for the State of Vermont for fiscal year 2018 was $1.3 million comprising 9,375 hours. The State of Ohio fiscal year 2018 cost of the financial statement portion of the Single Audit was $433,024 comprising 6,368 hours.

Our sample consists of Single Audit reports for state and local governments, school districts, special districts, and nonprofit organizations over the five-year period after December 26, 2014, the effective date of the Uniform Guidance. We use a composite measure of modified Single Audit reports that considers all types of audit findings. We define a modified Single Audit report as a report that communicates any of the following matters in a financial statement or compliance audit: 1) a qualified, adverse, or disclaimer of opinion, 2) a material weakness or significant deficiency, or 3) a questioned cost related to federal grants. We use federal grants awarded in the period following a Single Audit filing date as our dependent variable because it represents an observable summary measure of federal agency activity over the life of the grants management process. We focus on competitive federal grants because noncompetitive grants are based on pre-specified formulas (such as population and poverty rates) and are unlikely to be affected by monitoring Single Audit reports.

We find that modified Single Audit reports are associated with lower future federal grants after the Uniform Guidance. This result is consistent with the Uniform Guidance provisions that require grantors to increase their use of Single Audit reports in grant decision-making by improving their processes for monitoring and responding to modified Single Audit reports.

Next, the Uniform Guidance changed the conduct of the compliance, or major program, component of Single Audit but did not impact the financial statement audit. For this reason, we examine whether the Uniform Guidance implementation differentially impacts monitoring of compliance versus financial statement findings. We define a modified financial statement audit as a report that includes a modified opinion over the financial statements or a significant deficiency or material weakness in internal control over financial reporting. We define a modified compliance audit as a report that includes a modified opinion, significant deficiency,

material weakness, or questioned cost for the compliance audit over major programs. We find that both financial statement and compliance audit findings are associated with lower future federal grants, suggesting that both types of audit findings are important for monitoring grants.

Finally, we examine whether the Uniform Guidance implementation differentially impacts new versus existing grants. The Uniform Guidance requires federal agencies to perform risk assessments for grantees during the pre-award phase when applicants are considered for new grants and during the post-award phase after grant recipients are selected (i.e., existing grants). Existing grants can span multiple years and, therefore, require monitoring of Single Audit reports from year to year. We separate competitive federal grants into new versus existing grants and find that future federal grants are lower for both types of grantees with modified Single Audit reports following the Uniform Guidance. However, our findings are stronger for existing grants, suggesting that federal agencies are reluctant to exclude risky applicants from consideration for new grants. We also disaggregate existing grants into three categories: continuation, revision, and completion. We find that modified Single Audit reports are negatively associated with future grants in the revision category only. This analysis clarifies the mechanism through which modified Single Audit reports lead to lower future grant funding and rules out potential alternate explanations around grant completion.

Our study contributes to the sparse literature on the use of Single Audit reports for external monitoring (Petrovits, Shakespeare, and Shih 2011; Zender 2011; Peterson, Kleinman, and Bloch 2021; Dong 2024). Each of these studies pre-date the Uniform Guidance, examines only one type of grant recipient, and/or one type of audit report modification, and finds mixed results. To our knowledge, our study is the first to examine all types of audit findings using a comprehensive sample of government and nonprofit federal award recipients to provide initial

evidence on the effect of the Uniform Guidance. Importantly, the interviews provide novel insights into how the Uniform Guidance impacted how federal agencies use Single Audit reports and complement the archival analysis. Collectively, our findings suggest that the Uniform Guidance improved the use of Single Audit reports to award and manage competitive grants which should be of interest to the OMB, as well as policymakers working on bipartisan measures to reduce wasteful spending of taxpayer dollars (White House 2009; White House 2011; White House 2018; OMB 2020).

Our study also contributes to the emerging literature on compliance auditing. Most prior auditing literature examines the annual financial statement audit for public companies because it is mandated by the Securities and Exchange Commission but prior literature devotes little attention to compliance auditing. However, in recent years, the scope of compliance assurance services has grown (e.g., SOC reports; cybersecurity assessments; environmental, social, and governance reports) in response to a growing demand for these services from business partners of public companies, investors, regulators, and other parties. Our study uses a mandatory compliance audit setting where audit findings are observable to provide insight on the value of compliance auditing to the broader audit market. Our study is also timely because the Public Company Accounting Oversight Board issued a proposal to expand auditor responsibilities for compliance matters as part of the annual financial statement audit in response to concerns that auditing standards for public companies are not strong enough to protect investors from compliance failures.[4]

Finally, our study contributes to the large literature on how decision makers use audit reports and audited information. Prior studies examining public companies conclude that audit

[4] https://pcaobus.org/about/rules-rulemaking/rulemaking-dockets/docket-051

reports are often pre-empted by other disclosures or that investors do not view audit reports as incrementally informative (Chow and Rice 1982; Elliott 1982; Dodd, Dopuch, Holthausen, and Leftwich 1984; Dopuch, Holthausen, and Leftwich 1986; Czerney, Schmidt, and Thompson 2018; Gutierrez, Minutti-Meza, Tatum, and Vulcheva 2018; Lennox, Schmidt, and Thompson 2022). We examine federal agencies as a novel user base for audit reports before and after OMB intervention to increase audit report use for grants management. Our results suggest that the Uniform Guidance increased federal agencies' use of audit reports and our interviews highlight frictions that limit grantors' ability to respond to modified audit reports. Thus, our study underscores the difficulty that standard setters, policymakers, and researchers face when assessing the usefulness and information content of audit reports for decision makers. We also contribute to the limited literature on the audit risk model by showing that reducing audit scope and raising materiality for the compliance audit reduces the frequency of modified reports.

## II. BACKGROUND AND PRIOR LITERATURE

### Single Audit Act

Prior to the Single Audit Act of 1984, federal agencies performed their own program audits for federal award recipients. The Single Audit Act simplified monitoring and compliance costs for federal award recipients by consolidating these audits into one report that meets the audit requirement for all federal programs (see Tassin, Waymire, and Hines 2019 for a historical review of the Single Audit). The original act applied only to state, local, and tribal governments but it was amended in 1996 to include nonprofit organizations.[5] The purposes of the act are to "promote sound financial management, including effective internal controls, with respect to

[5] Submission of Single Audits is required under the Single Audit Act of 1984 (amended in 1996), OMB Circular A-133, and OMB Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements for Federal Awards.

federal awards," "promote the efficient and effective use of audit resources," and "ensure that Federal departments and agencies, to the maximum extent practicable, rely upon and use the audit work" (OMB 1996, p.2). A Single Audit consists of a financial statement audit and a compliance audit that tests whether the recipient spent the federal awards in accordance with federal laws and grant guidelines. The audits must be performed by independent accounting firms or state auditors.

When a Single Audit includes a modified audit report, finding, or questioned cost, the grantee should prepare a corrective action plan to remediate the matter and submit the plan to the grantor (i.e., federal awarding agency). The federal agency must issue a written determination, referred to as a management decision letter, to the grantee stating whether it agrees with the proposed corrective action plan for each finding.[6] The management decision letter also includes "the expected auditee action to repay disallowed costs, make adjustments, or take other action" as applicable (2 CFR § 200.521(a)). If the proposed corrective action plan is inadequate, the grantor can impose additional requirements. Management decision letters must be issued within six months of receipt of the Single Audit filing in the Federal Audit Clearinghouse (2 CFR § 200.521(d)). Federal award recipients are not required to remedy audit findings if no management decision letter is issued, if two years have passed since the Single Audit filing, or if no agency is actively following up on the finding (GAO 2017). Therefore, deficiencies in federal agencies' procedures for monitoring audit findings and issuing timely management decision letters can limit the agencies' abilities to require remediation and recover misused funds.

**Uniform Guidance**

[6] Entities that receive funding from more than one federal agency are assigned a cognizant agency or oversight agency. This agency is responsible for coordinating with the other federal agencies to issue the management decision letter.

According to OMB guidance and legal precedent, grant recipients that do not comply with federal grant guidelines can be subject to consequences such as "administrative actions to terminate and recover the grant funds, or suspension from eligibility for future grant awards" (CRS 2017, p.7). The Uniform Guidance reinforced existing requirements for federal agencies to use Single Audit reports during the pre-award phase (where the grantor reviews new grant applications and makes funding decisions) and the post-award phase (where the grantor monitors existing grants for compliance with grant conditions). In the pre-award phase, federal agencies must perform a risk assessment of a potential grantee before awards are issued to determine how the grantee will be monitored (2 § CFR 200.205). Risk assessment considerations include the applicant's financial stability, the quality of the applicant's management systems, their history of performance in managing federal awards, audit reports and findings, and the applicant's ability to implement regulatory and other requirements (2 CFR § 200.206). In the post-award phase, federal agencies must review and update the initial risk assessment on a periodic basis and issue management decision letters, as needed.

Due to ongoing concerns that Single Audit reports were not being used as intended (GAO 2009; GAO 2011; GAO 2017), the Uniform Guidance also established three new requirements related to Single Audit reports.[7,8] First, federal agencies are required to develop policies and procedures to obtain and review Single Audit reports in a timely manner. Second, they are required to "develop a baseline, metrics, and targets to track, over time, the effectiveness of the

[7] In 2009, the GAO reported that the "federal oversight structure for the Single Audit process does not include a designated function or entity to monitor whether or how well federal awarding agencies are implementing Single Audit requirements" (GAO 2009). In 2017, based on a review of Single Audit reports filed prior to the Uniform Guidance, the GAO found ongoing failures to obtain Single Audit reports and follow-up on audit findings (GAO 2017).

[8] The Uniform Guidance also combined eight OMB Circulars (i.e., grant regulations) into a single, "uniform" set of guidance that includes three sections: administrative requirements, cost principles, and audit requirements. Our study focuses on the audit requirements.

Federal agency's process to follow-up on audit findings and on the effectiveness of Single Audits in improving non-federal entity accountability and their use by federal awarding agencies in making award decisions" (2 CFR § 200.513(c)(3)). Finally, federal agencies were required to create two oversight positions to monitor compliance with the Single Audit provisions of the Uniform Guidance (2 CFR § 200.513(c)(5-6)).

The Uniform Guidance did not change the financial statement audit portion of the Single Audit which is governed by professional auditing standards. However, the Uniform Guidance changed the conduct of the compliance audit in three ways: 1) the materiality threshold for the schedule of findings and questioned costs increased from $10,000 to $25,000, 2) the percentage of total expenditures that must be tested (i.e., scope of coverage) decreased from twenty-five percent to twenty percent for low-risk auditees, and 3) auditors used a different process to determine which programs to test.[9] All else equal, reducing the audit scope and raising materiality for findings and questioned costs should reduce the likelihood that auditors detect and/or report findings.

**Prior Literature**

Prior research examining the use of Single Audit reports in funding decisions before the Uniform Guidance is sparse. Peterson et al. (2021) use a sample of large cities to examine the effect of internal control deficiencies on subsequent federal funding. They find that internal control deficiencies are associated with lower subsequent funding, suggesting that poor audit performance decreases the level of funding that cities receive for public services. In contrast,

[9] Auditors must classify federal programs into Type A for larger programs and Type B for smaller programs to determine which programs to test. The threshold for Type A versus Type B classification depends on the magnitude of federal expenditures. Auditors then assess whether the programs are low risk or high risk. Auditors must test all high-risk Type A programs, all high-risk Type B programs, and additional programs as needed to meet the percentage of coverage rule. For grantees expending less than $25 million, the Uniform Guidance raised the Type A threshold from $300,000 to $750,000. See 2 CFR § 200.518.

Zender (2011) uses a sample of state governments and finds no association between modified audit reports and subsequent funding. Petrovits et al. (2011) use a sample of nonprofit organizations and examine the association between internal control deficiencies reported in Single Audit reports and funding from private donations and government grants. They find that internal control deficiencies are associated with lower subsequent donations and government grants. To our knowledge, Dong (2024) is the only study that uses a sample period that includes the post-Uniform Guidance period. Using a sample of school districts, Dong (2024) compares audited and unaudited school districts and finds a decline in the financial health and educational performance of unaudited school districts following the Uniform Guidance.

**Background Interviews with Federal Grants Personnel**

We conducted semi-structured interviews with federal employees knowledgeable about their unit's use of Single Audits following the Uniform Guidance. This approach allows us to gain key insights that are not available using other methods and allows us to tailor the interview to the participants' area of experience and expertise (Malsch and Salterio 2016). Appendix A presents the interview guide.

We identified potential participants with significant experience using publicly available resources and through referral by other potential participants. We spoke with ten participants representing five different government units that, collectively, awarded at least 50 percent of the competitive funds in the sample. We spoke with at least one participant at each unit who had been in their current role or a similar role for at least 10 years and therefore had experience in their role prior to the Uniform Guidance. Because the pool of potential subjects is small, we take additional steps to protect the participants' anonymity (following Maksymov and Westermann 2026) and do not identify the government units, the participants' titles, average length of

experience, or other potentially identifying information. For the same reason, we do not provide detailed descriptions of the policies and procedures at the government units because identifying a unit would aid in identifying a participant. The minimum duration of interview time per government unit was more than 30 minutes and the maximum was more than two hours. Three of the ten participants agreed to record their interview. The same authors attended each interview and the same author conducted every interview while the other took detailed notes. The participants' responses to the interview questions were remarkably similar except with respect to unit-specific programs, policies, and procedures which, by definition, cannot converge across interviews. By the end of the interview process, we were not obtaining new insights.

*How do federal agencies use Single Audit reports and issue management decision letters?*

Participants from 2 units (3 units) described centralized (decentralized) processes for distributing Single Audit data to decision makers. Participants from two units described using checklists and participants from four units mentioned formal systems to monitor program compliance and financial reporting quality and performance. The program offices conduct compliance monitoring but fiscal monitoring (i.e., monitoring the GAAP financial statements and audit reports) can occur at the program office, agency, or department level. The involvement of the finance and risk management functions and the Office of the Inspector General in monitoring Single Audits varies with the organizational structure of each unit.

*Pre-award and post-award monitoring*

All participants with experience in the pre-award process confirmed that Single Audits, when available, are used to assess risk for new grant applications.[10] Participants from three units described competitive award decisions based on peer review and/or programmatic needs. Only

[10] Grantees who do not meet the expenditure threshold for a Single Audit submit other information that is used to assess their financial condition and ability to administer the grant.

one participant stated that the program offices at their government unit remove applicants from consideration for new awards based on risk assessment. A participant from a different unit stated "it's very rare that we would deny someone an award because of an audit finding…[it would] have to be something very severe like some sort of criminal activity." A different participant also noted that their government unit may need to award funds to high-risk grantees in order to achieve their programmatic objectives.

The agency then tailors non-standard terms and conditions to new awards as needed based on their risk assessment. Such modifications can include 1) requiring the grantee to submit more frequent reports to the agency, 2) increasing the frequency of desk reviews, site visits, or periodic audits, 3) requiring the grantee to obtain pre-approval to expend funds for certain types of expenditures, 4) requiring the grantee to expend their own funds and submit their expenses for reimbursement, 5) requiring the grantee to enter into a compliance agreement to remediate deficiencies, 6) designating a third-party to manage the grant, and 7) requiring the grantee to implement internal controls and/or a training program for administering federal awards. These responses are consistent with the Uniform Guidance provisions requiring federal agencies to perform risk assessments prior to awarding new grants.

In the post-award process, management decision letters may include requests for additional documentation surrounding the Single Audit finding and/or documentation or proof that the finding is resolved. The program offices can also impose new requirements on grantees that are similar to the terms and conditions for higher risk new awards discussed previously. Participants from three government units emphasized conducting desk reviews and/or site visits following modified audit reports. Because desk reviews and site visits can identify additional control deficiencies and/or questioned costs that were not reported in the Single Audit, these

monitoring approaches may result in grantors recouping ineligible expenditures incremental to those identified during the Single Audit. These monitoring steps provide an additional mechanism through which audit report monitoring can lead to lower future grant funding.

We asked participants how their units assess major program versus financial statement deficiencies. Participants from four of the five units stated that they review all Single Audit report modifications and emphasized the severity of financial statement modifications due to the implications for major program compliance.

> "There are certain things that would be cross cutting you know so, for example, payroll. You know it is unlikely that they're going to handle their payroll differently for [our government unit] than they do for [a different government unit], because [that's] how payroll works, so that is why we also look at the [other] programs."

> "…if there's an issue with their financial statements…it's going to be more or less a crosscutting finding because if the financial statement is going to be a problem for one [program], it's going to be a problem for every, you know, federal organization."

Participants from four of five units stated that although findings in the programs of other agencies often are not relevant to their programs, they review them for risk assessment purposes to determine whether those issues potentially impact their grants.

> "Especially when we're dealing with the state, [our unit] does not rise up to a major program, you know, so we also look at the audit results for the programs that have been audited"

> "there's definitely some relationship between the findings and potential other issues that could come up, depending on what those finding tell you."

In summary, the participants stated that their unit does not restrict their monitoring to findings in their own programs and instead reviews Single Audit report modifications to assess the potential implications for their own programs.

With respect to follow-up on management decision letters, participants from three units stated that the issues in their programs typically are remediated and that un-remediated audit

findings are unusual. Although the GAO (2017) emphasizes the importance of monitoring repeat findings, the participants typically did not consider un-remediated findings to represent risk factors beyond the finding itself. One participant used the example of a corrective action plan requiring a new internal control system and said "as long as they've implemented other work arounds or controls to mitigate the risk or resolve the issue…we're going to be patient." A participant at a different government unit stated that repeat findings are not common among their programs. The participants stated an expectation that grantees implement their corrective action plans and remediate the findings promptly. When findings are not remediated or the grantee is not making reasonable progress on their corrective action plan, the most common response is to increase or escalate monitoring.

*Impact of the Uniform Guidance*

The impact of the Uniform Guidance varied based on the processes that were already in place at the agencies. Participants from two units stated that their workload is lower because the Uniform Guidance raised the filing threshold for Single Audits. The participants described developing the tracking metrics required under the Uniform Guidance for collecting and reviewing Single Audit reports (two units), updated internal checklists (one unit), better guidance for auditors in the annual compliance supplement (two units), and implementing new internal control procedures and systems (two units). With respect to the new tracking system, one participant stated:

> "We knew that there was an issue with being able to track management decision letters and whether or not they were being completed… I think today we're in a lot better position to ensure that all the requirements [for] the Single Audit are satisfied."

*Political considerations*

We did not ask participants about political considerations but, in all interviews, we asked whether or under what conditions the agency would consider reducing or withholding funds due to Single Audit findings. In this context, participants from three of the five units mentioned Congress as a constraint to monitoring. One participant stated that Congress limits their unit's ability to monitor certain grantees. Participants from two other different government units said:

"…with this big a program that we have, if we withheld [government unit] dollars, we would get a call from the senator's office or the congressional office."

"We don't do that, again, because of the population we serve…that isn't the best way to do it and it's not looked upon favorably by Congress and others like that."

These statements are consistent with the conclusions in Heese et al. (2017) who argue that federal agency employees are astute and aware of political incentives that arise from congressional oversight.

In summary, the interviews provide background evidence on the use of Single Audits by grantors for pre-award risk assessment and post-award monitoring and the impact of the Uniform Guidance. Collectively, these interviews provide background, inform our hypotheses, and support the validity of the research design choices.

## III. HYPOTHESIS DEVELOPMENT

If the Uniform Guidance increased the use of Single Audits when monitoring federal grants, the incremental association between modified audit reports and future federal grants should be negative after the Uniform Guidance for several reasons. In the pre-award phase, risk assessment criteria including financial stability, management control system quality, and the history of current and past noncompliance with federal grant requirements are included in Single Audit reports. All else equal in a competitive grant application process, greater reliance on Single Audit reports should direct new grant funding to less risky applicants. In the post-award phase,

the new requirements for federal agencies to develop tracking metrics and monitor their effectiveness in following up on audit findings should strengthen Single Audit monitoring. For example, identifying an internal control deficiency that resulted in ineligible costs should reduce or eliminate federal expenditures for such costs in future periods. Grantors may disallow the use of federal funds for a particular expense category until an internal control deficiency is remediated or remove the grantee from consideration for new grants based on the risk assessment. Further, a desk review or site visit in response to a modified Single Audit report may identify additional matters that were not reported by the auditor. Finally, the Uniform Guidance raised the Single Audit threshold to $750,000 which should reduce grantor workload and allow for more effective monitoring.

However, it is possible that the Uniform Guidance had no immediate effect if the required changes to policies and procedures were not implemented or were implemented with a long lag.[11] Prior research provides limited evidence on the time required to implement new systems.[12] Fisher (1994) documents that federal agencies experienced difficulty implementing new internal controls under the Federal Managers' Financial Integrity Act of 1982. The auditing literature documents that public companies often do not remediate deficiencies in internal control over financial reporting in a timely manner (e.g., Goh 2009; Hammersley, Myers, and Zhou 2012) and that remediation efforts may not be successful (Myllymäki 2014; Imdieke 2022).

[11] The time required to implement the recommendations in GAO (2017) to adopt systems to track and monitor high risk and repeat findings was two years for two departments, four and five years for two agencies within one department, and one department has not yet implemented their system ten years after the effective date of the Uniform Guidance.

[12] In the management control literature, numerous studies examine small and emerging growth companies' decisions to adopt various management control systems (e.g., Sandino 2007) but typically do not quantify the length of time required to implement specific control systems. These studies likely have little relevance to federal agencies' internal control implementations due to differences in economic purpose, size and scope of operations, and the endogenous versus exogenous demand for internal control systems.

Collectively, these studies suggest that economic entities require time to implement new internal controls or remediate control deficiencies.

In summary, at least some federal agencies were not monitoring Single Audit reports appropriately prior to the Uniform Guidance (GAO 2009; GAO 2011; GAO 2017) and it is unclear ex-ante whether these new requirements improved monitoring effectiveness. For these reasons, we state Hypothesis 1 in the null form:

> **H1**: There is no difference in the association between modified Single Audit reports and subsequent federal funding following the Uniform Guidance.

Next, the Uniform Guidance changed the conduct of the compliance, or major program, component of the Single Audit. The Uniform Guidance did not change the financial statement audit portion of the Single Audit which is governed by professional standards promulgated by the Auditing Standards Board or the GAO, as applicable. All else equal, reducing the scope of the compliance audit (lowering the percentage of coverage and raising the Type A program threshold) and raising the materiality threshold for findings and questioned costs should reduce the likelihood that auditors detect and/or report compliance findings. For these reasons, Single Audit reports may include fewer major program findings in the post-Uniform Guidance period.

Although fewer compliance findings could reduce grantor workload and allow grant administrators to devote more time to monitoring more serious deficiencies, these changes could increase monitoring difficulty by reducing the observable signals of potential misuse of funds and lowering the diagnosticity of audit reports. Because the audit-related changes under the Uniform Guidance potentially impact the association between Single Audit findings and future federal funding, we pose Hypothesis 2 as follows:

> **H2:** The difference in the association between modified Single Audit reports and subsequent federal funding following the Uniform Guidance does not vary between major program and financial statement findings.

Finally, we explore whether new grants (i.e., funding in the first year of an award) were differentially impacted by the Uniform Guidance relative to existing grants (i.e., funding in subsequent years for a multi-year award). Greater reliance on Single Audit reports in the pre-award phase could direct new grant funding to less risky applicants. For example, federal agencies may remove a high-risk applicant from consideration for an award based on the risk assessment. At other times, federal agencies may select a high-risk applicant for an award in order to achieve their programmatic objectives due to a lack of low-risk applicants that qualify for an award. Further, when grant decisions are made based on competitive peer review processes, the pre-award risk assessment may focus primarily on developing contractual terms to manage risk rather than avoiding risk.

In the post-award phase, the new requirements for federal agencies to develop tracking metrics and improve the timeliness of the management decision letter process could strengthen the association between Single Audit findings and future federal awards in two ways. First, grantors may request additional information from the grantee prior to issuing the management decision letter (CFR 200.521) and this additional information, in combination with the corrective action plan and repayment of disallowed costs, may result in downward revisions of existing grants in future years. Further, any additional monitoring included in a new award contract occurs in the post-award period and this monitoring may reveal additional ineligible costs and other deficiencies that can lead to an award modification in future years. However, GAO (2017) reports deficiencies in these systems for several departments in the post-Uniform Guidance period. .

In summary, it is unclear whether Uniform Guidance differentially affected new versus existing grants. We state Hypothesis 3 in the null form:

**H3:** The difference in the association, if any, between modified Single Audit reports and subsequent federal funding following the Uniform Guidance does not vary between new and existing grants.

## IV.RESEARCH DESIGN

Federal grant funding represents an observable summary measure of federal agency decision-making that captures the pre-award phase and post-award phase of the grants management process. We use the natural logarithm of total federal funding for competitive grants in year *t*+1 (*COMPETITIVE*) as the dependent variable per the USAspending.gov database. We exclude noncompetitive grants because federal agencies must distribute these funds based on eligibility requirements and formulas established by Congress. The USAspending.gov database includes the award date and allows us to calculate the awards between the filing of a Single Audit report in *t* and the filing of a Single Audit report in *t*+1. This feature allows us to isolate the most recent Single Audit report available to the grantor at the time a grant decision is made.[13] Figure 1 presents an example of this timeline.

Single Audit reports can include findings for the financial statement audit and/or compliance audit over major programs. Financial statement audit findings can include a modified opinion (*OPINION_FS*), material weakness in internal controls (*MW_FS*), and/or significant deficiency in internal controls (*SD_FS*). Compliance audit findings can include a modified opinion (*OPINION_MP*), material weakness in internal controls (*MW_MP*), and/or significant deficiency in internal controls (*SD_MP*), and/or questioned cost (*QCOSTS*). Questioned costs can arise due to a lack of supporting documentation or failure to comply with federal grant

[13] Prior studies typically use federal expenditures as reported in the Federal Audit Clearinghouse. Federal expenditures are reported as of the grantee's year-end date and grantees can file their audit reports up to nine months after year-end. Clearinghouse data does not allow us to observe when a given grant decision was made during the fiscal year. Due to the long filing lag, the most recent available Single Audit report may be stale at the time a new award is made. Thus, using federal award data from USAspending.gov allows for better measurement and a tighter research design because we can determine which audit report was used at the time of grant decisions throughout the year.

guidelines. We performed correspondence analysis to determine the dimensionality of the data and conclude that these seven variables comprise one dimension. For this reason, we create a composite measure of audit findings in year *t* as our main independent variable of interest. *MODIFIED_ANY* is an indicator variable equal to one if the Single Audit report is modified in year *t*, and zero otherwise.

The Uniform Guidance applies to new awards and incremental funding on or after December 26, 2014.[14] We set an indicator variable equal to one for Single Audit reports filed in the Federal Audit Clearinghouse after the effective date of the Uniform Guidance (*POST*) and interact *POST* with *MODIFIED_ANY*.[15] We estimate the following OLS model (Model 1):

$$COMPETITIVE_{t+1} = \beta_0 + \beta_1 MODIFIED_ANY_t + \beta_2 MODIFIED_ANY_t \times POST$$
$$+ \text{Controls} + \text{Grantee Fixed Effects} + \text{Year Fixed Effects} + \varepsilon \quad (1)$$

Following H1, if the Uniform Guidance had no effect on (increases) the use of Single Audits, the sum of the coefficients for *MODIFIED_ANY* + *MODIFIED_ANY* × *POST* should be insignificant (negative).

Model 1 controls for grantee-specific factors that could influence future federal funding following Petrovits et al. (2011). *GOINGCONCERN* equals one if the audit report includes going concern language and zero otherwise. We expect a negative coefficient for going concern because grantors may increase monitoring and may be less willing to award new funds to financially distressed grantees. *LOWRISK* equals one if the entity satisfies the OMB's criteria for a "low-risk" auditee and zero otherwise. Because low-risk grantees must have unmodified Single

[14] The auditor provisions in the Uniform Guidance apply to fiscal years beginning on or after December 26, 2014. Therefore, the implementation date for the federal agencies was earlier than the implementation date for clients and their auditors. In additional analysis, we use the implementation date for grantees which varies based on their fiscal year-end and find consistent results using this alternative date.

[15] Year fixed effects subsume the main effect for *POST*.

Audits in the previous *two* years among other criteria, we do not expect a negative coefficient for low-risk grantees.[16] *LATEFILING* equals one if the grantee submitted the Single Audit to the Federal Audit Clearinghouse after the filing deadline. We make no directional prediction for late filings because governments can experience lengthy reporting lags (Sohl, Waymire, and Webb 2018; Henke and Maher 2016) and most nonprofits do not face strict financial statement deadlines.

Next, we control for differences in auditors' expertise, resources, and incentives. We include an indicator variable equal to one if the auditor is a state auditor (*STATEAUDITOR*) because prior research documents lower audit quality among state auditors than external accounting firms (Baber, Gore, Rich, and Zhang 2013; Lopez and Peters 2010).[17] We include indicator variables for Big N auditors (*BIGN*) and auditors (non-Big N and non-state) that perform at least 100 Single Audits during our sample period, and zero otherwise (*SPECIALIST*). We do not make directional predictions for auditor type. Clients of larger auditors may receive more federal awards as a function of size. Alternately, clients of larger auditors may receive fewer modified audit reports because such auditors select less risky clients. On the other hand, higher quality auditors should be more likely to detect deficiencies in grantees' financial reporting and compliance and to report such matters in the Single Audit report. For this reason, Single Audits conducted by Big N and specialist auditors could be more likely to include findings than Single Audits conducted by other independent auditors or state auditors.

[16] Although the multicollinearity diagnostics on the models indicate no problem with *LOW RISK* and *GOING CONCERN* as control variables, we re-estimate our models after dropping *LOW RISK* and *GOING CONCERN* and find consistent results (untabulated).

[17] The statutory authority of state auditors over governments and nonprofits varies by state under state. The state auditor has no authority over local governments in 21 states, has authority over certain types of governments in 12 states, and has some authority over all governments in the remaining states but typically does not exercise this authority. 10 states grant the state auditor authority over nonprofits but the scope is typically very narrow. Only 50 NFP observations in the sample are audited by a state auditor.

Grantees with bond financing are subject to additional monitoring from underwriters, rating agencies, and bond holders and may have differential financial reporting quality than grantees that do not issue debt. Therefore, we include an indicator variable equal to one if the grantee has municipal bonds outstanding (*BONDS*) and an indicator variable equal to one if the grantee issued new debt during the year (*ISSUE*) per Muni Atlas. Finally, we include year fixed effects to address concerns that our results are attributable to macroeconomic unobservable characteristics. Year fixed effects absorb the coefficient estimate for *POST*. We also include entity (i.e., grantee) fixed effects to control for unobservable grantee characteristics that can impact federal funding. We provide variable definitions in Appendix B.

To test H2, we create separate variables for financial statement findings and compliance findings. *MODIFIED_FS* equals one if the auditor reports a modified opinion, material weakness, or significant deficiency for the financial statement audit and *MODIFIED_MP* equals one if the auditor reports a modified opinion, material weakness, significant deficiency, or questioned cost for the compliance audit over major programs. We then re-estimate Model 1 substituting these independent variables for *MODIFIED_ANY* and test whether the sum of the coefficients for *MODIFIED_FS* and *MODIFIED_MP* and their respective interaction terms are significantly different from zero and significantly different from each other.

To test H3, we decompose total competitive federal funding into *NEW* and *EXISTING* as the sum of competitive federal funding for new versus existing grants, respectively, based on the action type categories in the USAspending.gov database. The action type categories in the USAspending.gov database include (1) new funding under a federal program ("New"), (2) continued funding for existing awards ("Continuation"), (3) funding changes and cancellations ("Revision"), and (4) funding adjustments to completed projects ("Completed"). Federal

agencies that reduce or cancel funding in response to single audit findings should be classified in the "Revision" category.[18] We replace the dependent variable in Model (1) with *NEW* and *EXISTING* and separately estimate the model using each measure. For existing awards, we decompose funding for the separate categories of *CONTINUATION*, *REVISION*, and *COMPLETED* as reported in USAspending.gov. We then re-estimate Model 1 substituting these dependent variables and test whether the sum of the coefficients for *NEW* and *EXISTING* and their respective interaction terms are significantly different from zero and from each other.

## V. SAMPLE SELECTION AND RESULTS

### Sample Selection and Descriptive Statistics

Table 1 presents the sample selection. We begin with all Single Audit reports submitted to the Federal Audit Clearinghouse from 2009 to 2019, representing the five years before and five years after the effective date of the Uniform Guidance. The Federal Audit Clearinghouse classifies entities as states, counties, cities, special districts, schools, tribal organizations, territories, nonprofits, and other/unknown entities.[19] We exclude other or unknown entities so that we can correctly classify auditees. Because we use the period between the filing of a Single Audit report in $t$ and $t$+1 to calculate future federal funding, we exclude observations that are missing a filing date in the subsequent period. We use the Data Universal Numbering System (DUNS) number to merge the Federal Audit Clearinghouse database with the USAspending.gov database. Because federal loans and non-financial assistance are not subject to the Uniform Guidance requirements, we exclude grantees that only receive loans, non-financial assistance,

[18] Funding for a single federal award can occur over multiple years. For example, a $1,000,000 federal award may be allocated at $200,000 per year over five years. For year one, the USAspending.gov database will include $200,000. For years two through five, $200,000 can be included in the continuation category but federal agencies also have discretion to revise the annual award of $200,000 upward or downward.

[19] Schools include primary and secondary schools, vocational schools, and community colleges. Private universities are classified as nonprofit organizations. State universities are excluded because the U.S. Census Bureau's survey methodology does not include dependent units.

and/or unknown types of assistance. We exclude observations for U.S. territories and observations that are missing requisite information in the National Center for Charitable Statistics (NCCS) files. Finally, we exclude entities that do not have at least one observation in both the pre-period and post-period. Our final sample includes 199,237 observations.

Table 2 presents descriptive statistics for the variables in Model 1. Table 2, Panel A presents descriptive statistics for the nature and frequency of audit findings in year *t*. Thirty-two percent of Single Audit reports in the sample include at least one audit finding. Significant deficiencies are the most common audit report modification (12 percent for compliance audits and 16 percent for financial statement audits). All types of compliance audit findings are significantly less frequent in the post-Uniform Guidance period. These statistics are consistent with the Uniform Guidance reducing the scope of the compliance audit and raising the materiality threshold for findings and questioned costs and provide descriptive evidence relevant to H1 and H2. Table 2, Panel B presents descriptive statistics for the variables used in the regression analyses. Consistent with Table 2, Panel A, audit report modifications are significantly less common following the Uniform Guidance (*MODIFIED_ANY* $p<0.01$). The grantees in the post-Uniform Guidance period make fewer late filings (*LATEFILING*, $p<0.01$) and retain specialist auditors at higher rates (*SPECIALIST*, $p<0.01$).

**Regression Results**

Table 3 presents Model 1 estimates testing whether the association between modified Single Audit reports in *t* and competitive federal funding in *t+1* differs before and after the Uniform Guidance (H1). In Column (1), the coefficient for *MODIFIED_ANY* represents the association between modified Single Audit reports and future federal funding before the Uniform Guidance. The coefficient for *MODIFIED_ANY* is positive ($p<0.01$), suggesting higher federal

funding when the auditor reports a Single Audit finding in the pre-Uniform Guidance period. The positive coefficient is consistent with numerous GAO accounts of ineffective grant monitoring (GAO 2009; GAO 2011; GAO 2017) and with interview evidence that program offices may need to award funds to risky grantees in order to meet their programmatic objectives.[20] In contrast, the coefficient for *MODIFIED_ANY* × *POST* is negative and significant ($p<0.01$) and the sum of the coefficients for *MODIFIED_ANY* + *MODIFIED_ANY* × *POST* is negative and significantly different from zero (F statistic 70.7, $p<0.01$). The coefficient magnitude for the interaction term indicates that Single Audit findings are associated with 52 percent incrementally lower subsequent funding following the Uniform Guidance. Because federal grants are more sensitive to audit findings following the Uniform Guidance, these results indicate that the Uniform Guidance improved monitoring of Single Audit reports and provide evidence to reject the null hypothesis for H1.[21]

Table 3, Column (2) presents the results of testing H2. The coefficients for *MODIFIED_MP* × *POST* and *MODIFIED_FS* × *POST* are both negative and significant (both $p<0.01$) and the sum of the coefficients for *MODIFIED_MP* + *MODIFIED_MP* × *POST* and *MODIFIED_FS* + *MODIFIED_FS* × *POST* are negative and significantly different from zero (F statistic 23.06, $p<0.01$ and 25.95, $p<0.01$ respectively). The sum of the coefficients for *MODIFIED_MP* + *MODIFIED_MP* × *POST* are not significantly different from the sum of the

[20] To investigate this result further, we estimate Model 1 with separate indicators by year and find that the positive coefficient in the pre-period is found only in 2009. This is consistent with the increase in federal grants under the American Reinvestment and Recovery Act following the financial crisis. We also estimate Model 1 separately by federal agency and find that the positive and significant coefficient for *MODIFIED_ANY* is limited to the competitive grants issued by Department of Education and Department of Housing and Urban Development. Both departments fund essential housing and educational services, including services to disadvantaged groups, and the Department of Education administered the second largest amount of funds under the American Reinvestment and Recovery Act.

[21] Our results are robust to using a specification that interacts all of the independent variables in Model (1) with *POST* based on deHaan, Moon, Shipman, Swanquist, and Whited (2023).

coefficients for *MODIFIED_FS* + *MODIFIED_FS* × *POST*. These results indicate that federal agencies attend to both major program and financial statement report modifications when assessing risk and responding to audit findings in the post-period. The similarity in coefficient magnitudes is also consistent with statements from most interview participants that they monitor all types of findings, including findings in unrelated programs, and view deficiencies in the financial statement audit very seriously.

Table 4 presents the results of testing H3 proposing that the association between modified audit reports and future federal funding following the Uniform Guidance does not differ between new and existing grants. In Panel A, the dependent variable in Column (1) is *NEW* and the dependent variable in Column (2) is *EXISTING*. The coefficient for *MODIFIED_ANY* × *POST* is negative and significant ($p<0.01$) in both columns and the coefficient in Column 2 for existing grants is significantly larger than the coefficient in Column 1 for new grants ($p<0.01$). These results suggest that the impact of the Uniform Guidance is stronger in the post-award process than the pre-award process. In Table 4, Panel B, we further decompose existing grants based on the categories of existing awards in the USAspending.gov database (continuation, revision, and completed). Reductions in federal funding in response to grant monitoring should be concentrated in the "Revision" category (the category for changes and cancellations). Accordingly, the coefficient for *MODIFIED_ANY* × *POST* is negative and significant only for "Revisions" in Column (2) but not for the other modification categories in Columns (1) and (3). These results clarify that the mechanism through which modified Single Audit reports are associated with lower future funding is through revisions to existing grants (reductions in funding or recovery of ineligible costs by offsetting future funding) and rule out concerns that the associations we document are due to grant completion/expiration.

## Additional Analyses

### *Government versus nonprofit grantee*

Our sample consists of 50 percent governmental grantees (state and local governments, special districts, and schools) and 50 percent nonprofit grantees that provide housing, education, social, and other services. Governments and nonprofits differ in numerous ways including governance structure, sources of funds, political connections to Congress and federal agencies, and in the scope of operations. Importantly, governments provide services in a geographically fixed area and typically do not compete with other parties to deliver those services to residents. For example, typically only one school district provides educational services to a given address and only one unit of government (state, city, county) is responsible for maintaining a given section of roadway. In contrast, multiple nonprofits may deliver similar services in a geographic area. Because federal agencies may have more options in meeting their programmatic objectives when awarding grants to nonprofits, competitive federal awards may be more sensitive to Single Audit findings among nonprofits than governments.

We partition the sample into governments versus nonprofits to determine whether our results are found in one versus both sets of grantees. This analysis is presented in Table 5. Table 5, Column (1) presents the results of estimating Model 1 only on governments and Column (2) presents the results of estimating Model 1 only on nonprofits. The coefficients for *MODIFIED_ANY* × *POST* are negative and significant in both columns ($p<0.01$) and the sum of the coefficients for the main effects and interaction terms are also negative and significant (both $p<0.01$). The coefficient for *MODIFIED_ANY* × *POST* is significantly larger among the nonprofit subsample than among the government subsample.[22] Together, these results indicate

[22] We further disaggregate the nonprofits based on the nature of services they deliver and find that the coefficients for *MODIFIED_ANY* × *POST* are negative and significant among nonprofits that deliver housing services and

that the results for H1 are found among both governments and nonprofits and the stronger results among nonprofits is consistent with greater competition for federal awards among nonprofits than governments.

***Change in Audit Threshold***

Because the Uniform Guidance raised the threshold required to obtain a Single Audit from entities that expend $500,000 in federal awards during a fiscal year to entities that expend $750,000 in a fiscal year, the sample includes observations in the pre-Uniform Guidance period that are no longer subject to the Single Audit Act in the post-Uniform Guidance period. To alleviate concerns that our results are due to this change in threshold, we re-estimate Model 1 using only observations that expend at least $750,000 in federal awards in a year (191,862 observations). The results are shown in Table 6 and the inferences are consistent with our main analysis.

***Shorter Measurement Window***

We use a sample period that spans five years before (December 26, 2009 to December 25, 2014) and five years after (December 26, 2014 to December 25, 2019) the effective date of the Uniform Guidance because federal agencies may require extended time to implement changes to the grants management process (e.g., Fisher 1994) and because several of the recommendations from the GAO (GAO 2017) were not implemented until after our sample period ended. For robustness, we restrict our sample to one year before (December 26, 2013 to December 25, 2014) and one year after (December 26, 2014 to December 25, 2015) the effective date of the Uniform Guidance and re-estimate Model 1. As shown in Table 7, the coefficient on

educational services (excluding private universities) and are not significant among private universities and social service organizations.

*MODIFIED_ANY* × *POST* is negative and significant ($p<0.01$). Thus, our main results are robust to restricting the sample period to a shorter measurement window.

***Falsification Test***

Noncompetitive grants provide an opportunity to conduct a falsification test because they are distributed based on eligibility requirements and formulas established by Congress. Table 8 provides results from estimating Model 1 where we replace the dependent variable with the natural logarithm of noncompetitive grants (*NONCOMPETITIVE*). The coefficients for *MODIFIED_ANY* and *MODIFIED_ANY* × *POST* are not significant in this specification. These findings reinforce our confidence that federal agencies use Single Audit findings in awarding *competitive* federal grants and reduce concerns of correlated-omitted variables.

***Untabulated Analyses***

The results for H2 suggest that both financial statement and major program findings are negatively associated with future federal funding following the Uniform Guidance. This finding is also consistent with statements from interview participants who stated that their units review all findings but note that findings in other programs are not always relevant to their own programs. To test this empirically, we re-estimate Model 1 after replacing *MODIFIED_MP* with two new independent variables. *MODIFIED_MP_SAME* equals one if the major program audit reported a modification related to that agency's awards and *MODIFIED_MP_OTHER* equals one if the major program audit reported a modification related to another agency's awards. We also include *MODIFIED_FS* for completeness. The coefficients for *MODIFIED_MP _SAME* × *POST* and *MODIFIED_MP_OTHER* × *POST* are negative and significant and the coefficients are not significantly different from each other. These results further support that grantors review and respond to all Single Audit report modifications.

Based on comments from participants regarding political considerations, we also perform a cross-sectional test based on whether a grantee's Congressional representation includes members in the House of Representatives and Senate on the ten most powerful congressional committees following Cuny et al. (2020). We obtain congressional committee assignment data from Charles Stewart III through November 2017 and extend his data manually through the end of our sample period using archived committee assignments as reported by the Offices of the Clerk of the House of Representatives and Senate. Members of the House of Representatives represent a congressional district and members of the Senate represent a state. We map the congressional data to the Federal Audit Clearinghouse data using the congressional district relationship files from the U.S. Census Bureau. Modified audit reports are associated with lower future funding following the Uniform Guidance for grantees with both stronger and weaker political connections but the magnitude is smaller for grantees with stronger political connections. These results suggest that federal agencies applied stricter monitoring to grantees with weaker political connections following the Uniform Guidance and are consistent with the findings in Cuny, Kim, and Mehta (2020) who find that politically connected governments are weaker stewards of federal awards.

## VII. CONCLUSION

We examine the effect of the Uniform Guidance on the association between Single Audit reports and subsequent federal funding. Our study is motivated by long-standing concerns that federal agencies do not rely on Single Audit reports to make grant decisions and whether the OMB's release of the Uniform Guidance improved the use of these reports. We find that modified Single Audit reports are negatively associated with future federal funding in the post-implementation period, suggesting that the Uniform Guidance increased the use of Single Audit

reports to monitor federal award recipients. We find this negative association for both financial statement findings and compliance findings. We perform additional tests to examine whether this association varies based on type of award (new versus existing) and type of grantee (government versus nonprofit organization). We find that the negative association between modified Single Audit reports and future federal funding is stronger for existing grants, suggesting that federal agencies are more likely to hold grant recipients accountable in the post-award phase. We also find that the negative association between modified Single Audit reports and future federal funding is stronger for nonprofit organizations.

Together, our archival analysis and interviews provide important and novel evidence on how grantor monitoring can impact future funding and the usefulness of Single Audit reports. However, an important limitation of our study is that we cannot observe the full set of grantor responses to Single Audit findings using archival data. This limitation provides opportunities for future research.

## REFERENCES


Baber, W., A. Gore, K. Rich, and J. Zhang. 2013. Accounting restatements, governance, and municipal debt financing. *Journal of Accounting and Economics* 56 (2-3): 212-227.

Chow, C.W. and J. Rice. 1982. Qualified audit opinions and auditor switching. *The Accounting Review* 57 (April): 326-335.

Congressional Research Service (CRS). 2017. The federal government's authority to impose conditions on grant funds. Available at: https://www.congress.gov/crs_external_products/R/PDF/R44797/R44797.5.pdf

Cuny, C., J. Kim, and M. Mehta. 2020. Politically connected governments. *Journal of Accounting Research* 58 (4): 915-952.

Czerney, K., J. Schmidt, and A. Thompson. 2018. Do investors respond to explanatory language included in unqualified audit reports? *Contemporary Accounting Research* 36 (1): 198-229.

deHaan, E., J. R. Moon, J. E. Shipman, Q. T. Swanquist, and R. L. Whited. 2023. Control variables in interactive models. *Journal of Financial Reporting* 8 (2): 77-85.

Dodd, P., N. Dopuch, R. Holthausen and R. Leftwich, 1984. Qualified audit opinions and stock prices: Information content, announcement dates and concurrent disclosures. *Journal of Accounting and Economics* 6 (1): 3-38.

Dong, Q. 2024. The impact of single audits on school districts. Working paper. Hong Kong University of Science and Technology.

Dopuch, N., R. Holthausen, and R. Leftwich. 1986. Abnormal stock returns associated with media disclosures of 'Subject to' qualified audit opinions. *Journal of Accounting and Economics* 8 (2): 93–117.

Elliott, J. 1982. 'Subject to' audit opinions and abnormal security returns: outcomes and ambiguities. *Journal of Accounting Research* 20 (2): 617–638.

Financial Executives Research Foundation (FERF). 2015. Audit fee report. Available at: https://www.financialexecutives.org/ferf/download/2015%20Final/2015-018.pdf

Fisher, A. 1994. Changing executive branch agencies: An examining of federal government efforts to institute internal controls. Unpublished dissertation. Walden University.

Goh, B. 2009. Audit committees, boards of directors, and remediation of material weaknesses in internal control. *Contemporary Accounting Research* 26 (2): 549-579.

Government Accountability Office (GAO). 2009. Single Audit: Opportunities exist to improve the Single Audit process and oversight. Available at: https://www.gao.gov/assets/100/96011.pdf

Government Accountability Office (GAO). 2011. Federal grants: Improvements needed in oversight and accountability processes. Available at: https://www.gao.gov/products/GAO-11-773T

Government Accountability Office (GAO). 2017. Single Audits: Improvements needed in selected agencies' oversight of federal awards. Available at: https://www.gao.gov/products/GAO-17-159

Gutierrez, E., M. Minutti-Meza, K. Tatum, and M. Vulcheva. 2018. Consequences of adopting an expanded auditor's report in the United Kingdom. *Review of Accounting Studies* 23 (4): 1543-1587.

Hammersley, J., L. Myers, and J. Zhou. 2012. The failure to remediate previously disclosed material weaknesses in internal controls. *Auditing: A Journal of Practice and Theory* 31 (2): 73-111.

Henke, T. and J. Maher. 2016. Government reporting timeliness and municipal credit market implications. *Journal of Governmental and Nonprofit Accounting* 5 (1): 1-24.

Imdieke, A. 2022. The role of timing and management's remediation actions in preventing failed remediation of material weaknesses in internal controls. *Contemporary Accounting Research* 39 (1): 157-198.

Lennox, C., J. Schmidt, and A. Thompson. 2022. Why are expanded audit reports not informative to investors? Evidence from the United Kingdom. *Review of Accounting Studies* 28 (2): 497-532.

Lopez, D. and G. Peters. 2010. Internal control reporting differences among public and governmental auditors: the case of city and county Circular A-133 audits. *Journal of Accounting and Public Policy* 29 (5): 481-502.

Maksymov, E. and K. Westermann. 2026. The PCAOB inspections process over global network firms: Synthesizing the perspective of former inspectors with prior research. *Review of Accounting Studies* 31(2): 1-45.

Malsch, B and S. Salterio. 2016. "Doing good field research": Assessing the quality of audit field research. *Auditing: A Journal of Practice & Theory*. (35) 1: 1-22.

Myllymäki, E. R. 2014. The persistence in the association between section 404 material weaknesses and financial reporting quality. *Auditing: A Journal of Practice and Theory* 33 (1): 93–116.

Office of Management and Budget (OMB). 1996. Public Law 104-156, The Single Audit Act Amendments of 1996. Available at: https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/about_omb/104-156.pdf

Office of Management and Budget (OMB). 2020. Guidance for grants and agreements. Available at: https://www.govinfo.gov/content/pkg/FR-2020-01-22/pdf/2019-28524.pdf

Office of Management and Budget (OMB). 2026. Table 12.1 "Summary Comparison of Total Outlays for Grants to State and Local Governments: 1940-2025." Available at: https://trumpwhitehouse.archives.gov/omb/historical-tables/

Peterson, A., G. Kleinman, and R. Bloch, R. 2021. Funding implications of the Single Audit. *Journal of Government Financial Management* 71 (1): 48-53.

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

Sandino, T. 2007. Introducing the first management control systems: evidence from the retail sector. *The Accounting Review* 82 (1): 265-293.

Sohl, S., T. Waymire, and T. Webb. 2018. Determinants of bifurcated local government reporting lag: the potential for XBRL to improve timeliness. *Journal of Emerging Technologies in Accounting* 15 (1): 121-140.

Tassin, K., T. Waymire, and C. Hines. 2019. A historical evaluation of the Single Audit: Thirty years from initial legislation to Uniform Guidance. *Journal of Governmental & Nonprofit Accounting* 8: 21-35.

The White House. 2009. Executive Order 13520 – Reducing Improper Payments and Eliminating Waste in Federal Programs. Available at: https://obamawhitehouse.archives.gov/the-press-office/executive-order-reducing-improper-payments

The White House. 2011. Presidential Memorandum – Administrative Flexibility. Available at: https://obamawhitehouse.archives.gov/the-press-office/2011/02/28/presidential-memorandum-administrative-flexibility

The White House. 2014. Transforming the Landscape of Federal Financial Assistance. Available at: https://obamawhitehouse.archives.gov/blog/2014/12/18/transforming-landscape-federal-financial-assistance

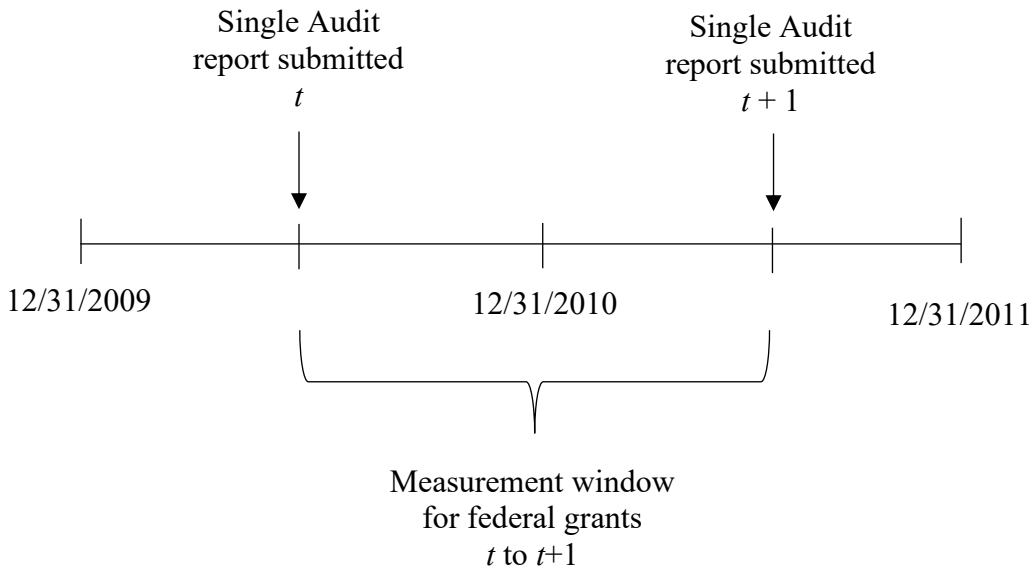
The White House. 2018. President's Management Agenda. Available at: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf

Thompson, A. 2022. Political connections and the SEC confidential treatment process. *Journal of Accounting and Economics* 74 (1): 101511.

Wielk, E. 2024. This tax day, BPC's new poll breaks down Americans' perceptions on taxes. Bipartisan Policy Center.

Zender, J. R. 2011. Single Audit Act findings and their impact on state funding levels. Working Paper. Available at: http://etd.auburn.edu/handle/10415/2581

**FIGURE 1**
Timeline




This figure shows the timeline of federal grant measurement window for a firm with fiscal year ending December 31. Federal grants for tear t+1 are measured after the submission of year t single audit report and includes all grants until year t+1 single audit submission date.

## APPENDIX A
Interview Guide

1. What is your role at the [Federal Agency Name]?

2. Can you describe the process for reviewing single audit reports?
    a. What is the role of the parent agency versus the subagencies in reviewing single audit reports within the [Federal Agency Name]? For example, does each subagency restrict monitoring to the federal programs it funds?
    b. What is the role of the [Federal Agency Name] versus other federal agencies in reviewing single audit reports? For example, does your agency restrict monitoring to the federal programs it funds?

3. Can you describe the process for issuing management decision letters to auditees in response to single audit findings?
    a. What consequences do auditees face and how often do you use each type of consequence (e.g., very common, sometimes, rare)?
    b. What sorts of factors affect which type of consequence you use (e.g., severity or frequency of audit findings)?
    c. How do you monitor repeat findings and when did you start?
    d. How are questioned costs typically dealt with?

4. I am familiar with the 2014 Uniform Guidance. Can you describe how it affected the processes for reviewing single audit reports and issuing management decision letters? Do you think it changed auditors' incentives to report findings and auditees' accountability for audit findings?

5. Are there any changes or improvements you would make to how single audit reports are used if given the opportunity?

6. Is there anything else you would like for me to know about how single audit reports are used?

**APPENDIX B**
Variable Definitions

| Dependent Variables | |
|---|---|
| *COMPETITIVE* | The natural log of total grants awarded by federal agencies through a competitive process during a reporting period. |
| *NONCOMPETITIVE* | The natural log of total grants awarded by federal agencies through a noncompetitive process (i.e., formula grants) during a reporting period. |
| *NEW* | The natural log of total new grants awarded by federal agencies through a competitive process during a reporting period (i.e., single year grants and the first year for grants awarded over multiple years). |
| *EXISTING* | The natural log of total existing grants (continuation, revision, completed) awarded by federal agencies through a competitive process during a reporting period (i.e., subsequent years for grants awarded over multiple years). |
| *CONTINUATION* | For existing grants, the natural log of additional funding in a subsequent budget period for the federal government that relates to an agreement initiated in a previous budget period. |
| *REVISION* | For existing grants, the natural log of deobligations in a subsequent budget period for the federal government that relates to an agreement initiated in a previous budget period. |
| *COMPLETED* | For existing grants, the natural log of funding adjustments to a completed project (e.g., not all funds spent). |

| Audit Variables | |
|---|---|
| *MODIFIED_ANY* | An indicator variable that equals 1 if the Single Audit reported a modified opinion, material weakness, significant deficiency, or questioned cost; otherwise 0. |
| *MODIFIED_FS* | An indicator variable that equals 1 if the audit over the financial statements reported a modified opinion, material weakness, or significant deficiency; otherwise 0. |
| *MODIFIED_MP* | An indicator variable that equals 1 if the audit over major program compliance reported a modified opinion, material weakness, significant deficiency, or questioned costs; otherwise 0. |
| *OPINION_MP* | An indicator variable that equals 1 if the audit over major program compliance reported a modified opinion; otherwise 0. |
| *MW_MP* | An indicator variable that equals 1 if the audit over major program compliance reported a material weakness in internal controls; otherwise 0. |
| *SD_MP* | An indicator variable that equals 1 if the audit over major program compliance reported a significant deficiency in internal controls; otherwise 0. |
| *QCOSTS* | An indicator variable that equals 1 if the Single Audit reported a questioned cost; otherwise 0. |
| *OPINION_FS* | An indicator variable that equals 1 if the audit over the financial statements reported a modified opinion; otherwise 0. |

**APPENDIX B** (continued)

| Audit Variables | |
|---|---|
| *MW_FS* | An indicator variable that equals 1 if the audit over the financial statements reported a material weakness in internal controls; otherwise 0. |
| *SD_FS* | An indicator variable that equals 1 if the audit over the financial statements reported a significant deficiency in internal controls; otherwise 0. |

| Other Variables | |
|---|---|
| *POST* | An indicator variable that equals 1 if the Single Audit report was filed after the December 26, 2014 effective date of the Uniform Guidance; otherwise 0. |
| *GOINGCONCERN* | An indicator variable that equals 1 if the audit reported a going concern explanation; otherwise 0. |
| *LOWRISK* | An indicator variable that equals 1 if the auditee satisfies the conditions to qualify as a "low-risk" auditee; otherwise 0. |
| *LATEFILING* | An indicator variable that equals 1 if the audit report was submitted over nine months after the fiscal year end; otherwise 0. |
| *BIGN* | An indicator variable that equals 1 if the audit was performed by a Big4 auditor; otherwise 0. |
| *STATEAUDITOR* | An indicator variable that equals 1 if the audit was performed by a state auditor; otherwise 0. |
| *SPECIALIST* | An indicator variable that equals 1 if the auditor is not classified as *BIGN* or *STATEAUDITOR* and performed 100 or more audits during the sample period; otherwise 0. |
| *BONDS* | An indicator variable equal to one if the government has municipal bonds outstanding. |
| *ISSUE* | An indicator variable that equals 1 if the government issues bonds during the fiscal year; otherwise 0. |
| *REVENUE* | The natural log of service program revenue on IRS Form 990 for nonprofits. |

**Table 1**
Sample selection

| | |
|---|---|
| Single Audit reports submitted to the Federal Audit Clearinghouse 2009-2019 | 412,843 |
| Less: Audit reports not classified as governments or nonprofits | 52,850 |
| Less: Missing audit report in the subsequent period | 43,508 |
| Less: Missing federal award identifier (DUNS) | 56,650 |
| Less: Missing NCCS data | 38,179 |
| Less: U.S. territories | 940 |
| Less: At least one audit report in the pre and post-periods | 21,479 |
| Final Sample | 199,237 |

Table 1 summarizes the sample selection criteria.

**Table 2**
Descriptive statistics

Panel A: Nature and frequency of audit findings

| | Total (N = 199,237) | | *POST* = 0 (N = 105,682) | | *POST* = 1 (N = 93,555) | |
|---|---|---|---|---|---|---|
| | N | % Sample | N | % Sample | N | % Sample |
| $MODIFIED_ANY_t = 1$ | 64,454 | 32.35 | 36,165 | 34.22 | 28,289 | 30.24 |
| $MODIFIED_MP_t = 1$ | 32,875 | 16.50 | 19,213 | 18.18 | 13,662 | 14.60 |
| $OPINION_MP_t = 1$ | 8,675 | 4.35 | 5,178 | 4.90 | 3,497 | 3.74 |
| $MW_MP_t = 1$ | 10,085 | 5.06 | 6,225 | 5.89 | 3,860 | 4.13 |
| $SD_MP_t = 1$ | 23,388 | 11.74 | 14,140 | 13.38 | 9,248 | 9.89 |
| $QCOSTS_t = 1$ | 9,552 | 4.79 | 6,035 | 5.71 | 3,517 | 3.76 |
| $MODIFIED_FS_t = 1$ | 51,546 | 25.87 | 28,621 | 27.08 | 22,925 | 24.50 |
| $OPINION_FS_t = 1$ | 11,325 | 5.68 | 5,142 | 4.87 | 6,183 | 6.61 |
| $MW_FS_t = 1$ | 23,615 | 11.85 | 13,380 | 12.66 | 10,235 | 10.94 |
| $SD_FS_t = 1$ | 32,747 | 16.44 | 20,337 | 19.24 | 12,410 | 13.26 |

Panel B: Descriptive statistics for the dependent and independent variables

| | Total (N = 199,237) | | *POST* = 0 (N = 105,682) | | *POST* = 1 (N = 93,555) | | Difference |
|---|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | Mean | SD | Mean |
| $COMPETITIVE_{t+1}$* | 1.376 | 5.311 | 1.199 | 4.847 | 1.575 | 5.784 | -0.376*** |
| $MODIFIED_ANY_t$ | 0.324 | 0.468 | 0.342 | 0.474 | 0.302 | 0.459 | 0.040*** |
| $GOINGCONCERN_t$ | 0.006 | 0.076 | 0.006 | 0.075 | 0.006 | 0.078 | 0.000 |
| $LOWRISK_t$ | 0.657 | 0.475 | 0.630 | 0.483 | 0.687 | 0.464 | -0.057*** |
| $LATEFILING_t$ | 0.088 | 0.283 | 0.091 | 0.288 | 0.084 | 0.278 | 0.007*** |
| $BIGN_t$ | 0.020 | 0.140 | 0.022 | 0.148 | 0.017 | 0.130 | 0.005*** |
| $STATE_AUDITOR_t$ | 0.050 | 0.218 | 0.050 | 0.217 | 0.050 | 0.218 | -0.001 |
| $SPECIALIST_t$ | 0.468 | 0.499 | 0.445 | 0.497 | 0.493 | 0.500 | -0.047*** |
| $BONDS_t$ | 0.314 | 0.464 | 0.311 | 0.463 | 0.317 | 0.465 | -0.005*** |
| $ISSUE_t$ | 0.106 | 0.307 | 0.106 | 0.307 | 0.106 | 0.308 | 0.000 |

Table 2 presents descriptive statistics for our final sample of 199,237 observations. Panel A presents descriptive statistics for the nature and frequency of Single Audit findings in our sample. Panel B presents descriptive statistics for the dependent variable, independent variable of interest, and control variables. *COMPETITIVE** is not logged for ease of interpretation and reported in millions. Refer to Appendix B for all variable definitions.

**Table 3**
Association between audit findings and federal grants

| | $COMPETITIVE_{t+1}$ | |
|---|---|---|
| Variables | (1) | (2) |
| $MODIFIED_ANY_t \times POST$ | -0.736*** | |
| | (-13.517) | |
| $MODIFIED_ANY_t$ | 0.344*** | |
| | (8.691) | |
| $MODIFIED_MP_t \times POST$ | | -0.375*** |
| | | (-5.256) |
| $MODIFIED_MP_t$ | | 0.098** |
| | | (2.194) |
| $MODIFIED_FS_t \times POST$ | | -0.544*** |
| | | (-9.067) |
| $MODIFIED_FS_t$ | | 0.288*** |
| | | (6.425) |
| $GOINGCONCERN_t$ | -0.354* | -0.352* |
| | (-1.722) | (-1.716) |
| $LOWRISK_t$ | 0.069** | 0.070** |
| | (2.084) | (2.095) |
| $LATEFILING_t$ | -1.303*** | -1.302*** |
| | (-26.357) | (-26.312) |
| $BIGN_t$ | 1.038*** | 1.051*** |
| | (3.647) | (3.691) |
| $STATEAUDITOR_t$ | -0.032 | -0.035 |
| | (-0.274) | (-0.297) |
| $SPECIALIST_t$ | -0.118*** | -0.117*** |
| | (-2.780) | (-2.765) |
| $BONDS_t$ | -0.914*** | -0.920*** |
| | (-9.644) | (-9.719) |
| $ISSUE_t$ | -0.107*** | -0.107*** |
| | (-2.974) | (-2.991) |
| Constant | 6.129*** | 6.135*** |
| | (135.356) | (135.316) |
| Entity FE | Yes | Yes |
| Year FE | Yes | Yes |
| Observations | 199,237 | 199,237 |
| R-squared | 0.691 | 0.691 |

In Column (1): ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic = 75.70, p<0.01
In Column (2): ($MODIFIED_MP_t + MODIFIED_MP_t \times POST = 0$), F Statistic = 23.06, p<0.01
In Column (2): ($MODIFIED_FS_t + MODIFIED_FS_t \times POST = 0$), F Statistic = 25.95, p<0.01
In Column (2): ($MODIFIED_MP_t + MODIFIED_MP_t \times POST$) = ($MODIFIED_FS_t + MODIFIED_FS_t \times POST = 0$), F statistic = 0.60, p>0.10
Refer to Appendix B for all variable definitions. Robust t-statistics are in parentheses and statistical significance is denoted as *** p<0.01, ** p<0.05, * p<0.10. Standard errors are clustered by entity.

**Table 4**
New versus Existing Grants

Panel A: New and existing federal grants

| | $NEW_{t+1}$ | $EXISTING_{t+1}$ |
|---|---|---|
| Variables | (1) | (2) |
| $MODIFIED_ANY_t \times POST$ (H3) | -0.505*** | -0.728*** |
| | (-9.333) | (-15.060) |
| *F Statistic for coefficient difference* | *16.21*** | |
| $MODIFIED_ANY_t$ | 0.242*** | 0.283*** |
| | (6.046) | (8.547) |
| $GOINGCONCERN_t$ | -0.549*** | -0.145 |
| | (-2.878) | (-0.773) |
| $LOWRISK_t$ | 0.042 | -0.009 |
| | (1.251) | (-0.328) |
| $LATEFILING_t$ | -1.079*** | -0.754*** |
| | (-22.686) | (-19.038) |
| $BIGN_t$ | 0.628** | 0.793*** |
| | (2.222) | (2.590) |
| $STATEAUDITOR_t$ | -0.077 | 0.089 |
| | (-0.731) | (0.978) |
| $SPECIALIST_t$ | -0.122*** | 0.011 |
| | (-2.867) | (0.321) |
| $BONDS_t$ | -0.299*** | -0.476*** |
| | (-3.202) | (-5.689) |
| $ISSUE_t$ | -0.042 | -0.062** |
| | (-1.194) | (-2.283) |
| Constant | 4.395*** | 3.712*** |
| | (96.370) | (96.123) |
| Entity FE | Yes | Yes |
| Year FE | Yes | Yes |
| Observations | 199,237 | 199,237 |
| R-squared | 0.556 | 0.735 |

In Column (1): ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic = 33.05, $p<0.01$
In Column (2): ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic = 126.23, $p<0.01$

**Table 4** (continued)
New versus Existing Grants

Panel B: Types of existing federal grants

| | $CONTINUATION_{t+1}$ | $REVISION_{t+1}$ | $COMPLETED_{t+1}$ |
|---|---|---|---|
| Variables | (1) | (2) | (3) |
| $MODIFIED_ANY_t \times POST$ | 0.012 | -0.767*** | -0.007 |
| | (0.348) | (-16.600) | (-1.130) |
| $MODIFIED_ANY_t$ | -0.019 | 0.330*** | 0.002 |
| | (-0.753) | (10.655) | (0.406) |
| $GOINGCONCERN_t$ | 0.147 | -0.307 | 0.018 |
| | (1.099) | (-1.616) | (1.020) |
| $LOWRISK_t$ | 0.029 | -0.016 | -0.001 |
| | (1.401) | (-0.603) | (-0.130) |
| $LATEFILING_t$ | -0.641*** | -0.595*** | -0.017*** |
| | (-18.186) | (-17.166) | (-4.239) |
| $BIGN_t$ | -0.099 | 0.952*** | -0.118* |
| | (-0.448) | (3.037) | (-1.955) |
| $STATEAUDITOR_t$ | 0.054 | 0.066 | 0.005* |
| | (0.791) | (0.853) | (1.874) |
| $SPECIALIST_t$ | -0.022 | -0.020 | 0.006 |
| | (-0.834) | (-0.601) | (1.551) |
| $BONDS_t$ | -0.089 | -0.489*** | -0.016*** |
| | (-1.296) | (-7.240) | (-4.321) |
| $ISSUE_t$ | -0.053** | -0.029 | 0.001 |
| | (-2.141) | (-1.342) | (0.511) |
| Constant | 2.314*** | 2.720*** | 0.037*** |
| | (76.374) | (79.370) | (9.130) |
| Entity FE | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes |
| Observations | 199,237 | 199,237 | 199,237 |
| R-squared | 0.767 | 0.673 | 0.271 |

In Column (1): ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic = 0.08
In Column (2): ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic = 128.92, p<0.01
In Column (3): ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic =0.70

Table 4 presents our results for the role of grant type on the baseline association between Single Audit findings in *t* and federal grants in *t*+1. Refer to Appendix B for all variable definitions. Robust t-statistics are in parentheses and statistical significance is denoted as *** p<0.01, ** p<0.05, * p<0.10. Standard errors are clustered by entity.

**Table 5**
Government versus Nonprofit Grantees

| | $COMPETITIVE_{t+1}$ | |
|---|---|---|
| | Governments | Nonprofits |
| Variables | (1) | (2) |
| $MODIFIED_ANY_t \times POST$ | -0.755*** | -1.023*** |
| | (-10.125) | (-11.485) |
| *F statistic for coefficient difference* | *5.66*** | |
| $MODIFIED_ANY_t$ | 0.452*** | 0.359*** |
| | (8.143) | (6.134) |
| $GOINGCONCERN_t$ | -0.198 | -0.264 |
| | (-0.583) | (-1.029) |
| $LOWRISK_t$ | -0.030 | 0.167*** |
| | (-0.661) | (3.435) |
| $LATEFILING_t$ | -0.840*** | -1.789*** |
| | (-12.593) | (-24.812) |
| $BIGN_t$ | 0.038 | 1.501*** |
| | (0.070) | (4.608) |
| $STATEAUDITOR_t$ | -0.168 | 0.151 |
| | (-1.390) | (0.304) |
| $SPECIALIST_t$ | -0.234*** | 0.029 |
| | (-3.920) | (0.486) |
| $BONDS_t$ | -0.468*** | |
| | (-4.634) | |
| $ISSUE_t$ | -0.071** | |
| | (-1.995) | |
| $REVENUE_t$ | | -0.007 |
| | | (-0.210) |
| Constant | 4.520*** | 7.482*** |
| | (57.174) | (16.174) |
| Entity FE | Yes | Yes |
| Year FE | Yes | Yes |
| Observations | 99,486 | 99,751 |
| R-squared | 0.643 | 0.698 |

In Column (1): ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic =25.47, p<0.01
In Column (2): ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic = 85.87, p<0.01

Table 5 presents our results for the role of grantee type on the baseline association between Single Audit findings in *t* and federal grants in *t*+1. Refer to Appendix B for all variable definitions. Robust t-statistics are in parentheses and statistical significance is denoted as *** p<0.01, ** p<0.05, * p<0.10. Standard errors are clustered by entity.

**Table 6**
Change in audit threshold to $750,000

| | $COMPETITIVE_{t+1}$ |
|---|---|
| Variables | (1) |
| $MODIFIED_ANY_t \times POST$ | -0.757*** |
| | (-13.505) |
| $MODIFIED_ANY_t$ | 0.369*** |
| | (8.993) |
| $GOINGCONCERN_t$ | -0.304 |
| | (-1.433) |
| $LOWRISK_t$ | 0.086** |
| | (2.498) |
| $LATEFILING_t$ | -1.303*** |
| | (-25.457) |
| $BIGN_t$ | 1.032*** |
| | (3.604) |
| $STATEAUDITOR_t$ | -0.011 |
| | (-0.090) |
| $SPECIALIST_t$ | -0.120*** |
| | (-2.747) |
| $BONDS_t$ | -0.948*** |
| | (-8.885) |
| $ISSUE_t$ | -0.104*** |
| | (-2.847) |
| Constant | 6.209*** |
| | (126.777) |
| Entity FE | Yes |
| Year FE | Yes |
| Observations | 191,862 |
| R-squared | 0.692 |

Test ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic = 71.59, p<0.01

Table 6 presents our results after excluding observations with less than $750,000 in federal expenditures in a fiscal year. Refer to Appendix B for all variable definitions. Robust t-statistics are in parentheses and statistical significance is denoted as *** p<0.01, ** p<0.05, * p<0.10. Standard errors are clustered by entity.

**Table 7**
Shorter measurement window

| | $COMPETITIVE_{t+1}$ |
|---|---|
| Variables | (1) |
| $MODIFIED_ANY_t \times POST$ | -0.310*** |
| | (-3.581) |
| $MODIFIED_ANY_t$ | 0.049 |
| | (0.586) |
| $GOINGCONCERN_t$ | -0.114 |
| | (-0.230) |
| $LOWRISK_t$ | 0.018 |
| | (0.206) |
| $LATEFILING_t$ | -1.413*** |
| | (-13.076) |
| $BIGN_t$ | -0.262 |
| | (-0.396) |
| $STATEAUDITOR_t$ | 0.085 |
| | (0.236) |
| $SPECIALIST_t$ | 0.034 |
| | (0.332) |
| $BONDS_t$ | -0.103 |
| | (-0.168) |
| $ISSUE_t$ | -0.213*** |
| | (-3.023) |
| Constant | 5.860*** |
| | (27.615) |
| Entity FE | Yes |
| Year FE | Yes |
| Observations | 46,292 |
| R-squared | 0.877 |

Test: ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic = 7.66, p<0.01

Table 7 presents our results using a sample period of one year before and one year after the Uniform Guidance (December 26, 2013 to December 25, 2015). Refer to Appendix B for all variable definitions. Robust t-statistics are in parentheses and statistical significance is denoted as *** p<0.01, ** p<0.05, * p<0.10. Standard errors are clustered by entity.

**Table 8**
Falsification test

| | $NONCOMPETITIVE_{t+1}$ |
|---|---|
| Variables | (1) |
| $MODIFIED_ANY_t \times POST$ | -0.026 |
| | (-1.337) |
| $MODIFIED_ANY_t$ | 0.022 |
| | (1.429) |
| $GOINGCONCERN_t$ | -0.017 |
| | (-0.123) |
| $LOWRISK_t$ | 0.011 |
| | (0.890) |
| $LATEFILING_t$ | -0.101*** |
| | (-4.991) |
| $BIGN_t$ | -0.057 |
| | (-0.473) |
| $STATEAUDITOR_t$ | -0.014 |
| | (-0.199) |
| $SPECIALIST_t$ | -0.024* |
| | (-1.693) |
| $BONDS_t$ | -0.189*** |
| | (-5.774) |
| $ISSUE_t$ | -0.016 |
| | (-1.070) |
| Constant | 12.985*** |
| | (628.085) |
| Entity FE | Yes |
| Year FE | Yes |
| Observations | 24,754 |
| R-squared | 0.901 |

Test: ($MODIFIED_ANY_t + MODIFIED_ANY_t \times POST = 0$), F Statistic = 0.04

Table 8 presents our results of the falsification test using noncompetitive funds. Refer to Appendix B for all variable definitions. Robust t-statistics are in parentheses and statistical significance is denoted as *** p<0.01, ** p<0.05, * p<0.10. Standard errors are clustered by entity.