



# Are disasters extraordinary? Reporting nonrecurring items in the government setting

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## Abstract

We explore reporting nonrecurring gains and losses (extraordinary and special items) among municipalities. We begin by documenting the nature, type, and frequency of reporting, finding that surprisingly few municipalities report items, including those with FEMA disasters and despite GASB standards. Results suggest municipalities with CPA-finance directors are significantly more likely to report items, while less likely reported among those led by unelected bureaucrats (council-manager political governance). Moreover, nonrecurring items are systematically associated with surpluses and deficits in a manner suggesting strategic reporting. Specifically, our evidence suggests officials report income-increasing nonrecurring items to reduce or avoid reporting deficits, and income-decreasing items to reduce surpluses. Strategic reporting is generally magnified when state laws allow direct voter initiatives and reduced when state laws mandate GAAP accounting or external audits. Overall, we conclude that accounting expertise and political governance structures are significant determinants of reporting nonrecurring items, and that some officials strategically report them.

**Keywords** Governmental accounting · Nonrecurring items · Special items · CFO accounting expertise · Initiative provisions · GAAP laws

**JEL classifications** M40 · M41 · M48

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## 1 Introduction

Hurricane Katrina had a devastating impact across the southern United States in 2005. Despite the extensive damage it caused, many local governments did not report the financial consequences of this event as a nonrecurring item. More recently, the treatment of gains and losses corresponding to the COVID pandemic and government shutdowns gave rise to intense debate regarding whether municipal governments should treat them as extraordinary. The Government Accounting Standards Board (GASB) issued guidance suggesting that COVID-related items should not be treated as nonrecurring, since viruses are neither unusual nor infrequent (Government Accounting Standards Board 2020). Others, such as the Texas Society of CPAs (Texas Society of CPAs 2020), argued otherwise:

GASB has chosen to identify the extraordinary event to be the presence of a coronavirus rather than an unprecedented shutdown of the US economy. The extraordinary shutdown is the event that resulted in the CARES Act legislation, not the presence of the virus.

The disparate reporting treatment and debate over these events raise questions about whether and how politicians and bureaucrats report arguably nonrecurring events. Investigating the accounting treatment of nonrecurring items is also important due to the significant impact they can have on the reported financial performance of local governments. For example, the City of Highland Village, Texas, reported a \$925,000 legal settlement to recover damages related to the design and construction of the city's municipal complex in 2003, which turned a pre-nonrecurring item deficit into a surplus.

The purpose of our study is to explore nonrecurring items in the governmental setting. Despite their economic importance and GASB reporting requirements, to our knowledge, no prior study investigates them. We begin by descriptively documenting the reporting frequency, typical items reported, and their characteristics, using a large hand-collected sample of county and municipal comprehensive annual financial reports issued between 2003 and 2012. Municipalities most commonly report gains and losses on asset sales, legal settlements, disasters, and the early extinguishment of debt. In contrast, most corporate special items involve either restructuring charges or goodwill impairments (Johnson et al. 2011), which are not relevant in the government setting.

With respect to reporting frequency and salient characteristics, municipalities are more likely to report positive than negative items (about 56% and 44%, respectively), while corporations are substantially more likely to report negative than positive nonrecurring items (75% versus 25%; Johnson et al. 2011). Government nonrecurring items are reported with surprisingly low frequency, at 4% of total observations, with 24% of municipalities reporting items at least once.<sup>1</sup> Among those municipalities reporting nonrecurring items, the mean (median) magnitude of reported items is eco-

<sup>1</sup> For parsimony, we interchangeably use the terms “entity,” “local government,” and “municipality” throughout the study to refer to a combination of counties and municipalities.

nomically significant at \$18.9 (\$2.6) million in gains and \$11.6 (\$2.4) million in losses, respectively.<sup>2</sup> To place this in context, these items represent a mean (median) of \$346.16 (\$36.34) per capita, which is economically meaningful, particularly to citizens. Moreover, among the subset that report nonrecurring items, a nontrivial portion move the government from a deficit to a surplus (i.e., 38% avoid deficits by disclosing positive items) or from a surplus to a deficit (approximately 10%).

We next explore whether a lack of accounting knowledge and/or local government political structures are associated with the likelihood of reporting nonrecurring items. In particular, the relatively low reporting frequency raises questions about accounting expertise among government finance directors. Municipal finance directors have primary responsibility for implementing governmental financial reporting policies yet may lack sophisticated accounting knowledge. For example, Dambra et al. (2023) suggest that, prior to implementation of GASB 68 regarding pensions, some county officials were unaware that they had an unfunded pension liability. Although not specifically finance directors, it suggests a general lack of accounting knowledge on the part of municipal officials. Our results show that municipal finance directors who are Certified Public Accountants (CPAs) are significantly more likely to report nonrecurring items. This finding is particularly interesting because it contrasts with governmental research, such as Folz and Shults (2018), who find *less* sophisticated finance managers are more likely to make aggressive accounting choices.

We also examine whether local government political governance structure is associated with reporting nonrecurring items. Some local government operations are primarily overseen by an elected politician, such as a city mayor or county supervisor, while others are led by an unelected bureaucrat (e.g., an appointed city manager). Such governance structures are colloquially known as “form of government,” with council-manager governments primarily led by a bureaucrat. Whether political governance structure is associated with reporting nonrecurring items is not obvious. Politicians face periodic elections, which can help align their incentives with those of citizens. In contrast, bureaucrats report to an elected council and are likely incentivized by professional career concerns (Zimmerman 1977). While somewhat mixed, our evidence suggests that nonrecurring items are less likely to be reported under the council-manager form of government. Interestingly, our findings differ from disclosure literature such as Evans and Patton (1983), which tends to find city manager structures are more likely to voluntarily disclose information.

Nonrecurring items are the joint result of politicians’ reporting choices and the underlying events that trigger them. To help discern whether the low reporting frequency is driven by a lack of underlying events, corroborating analysis explores relations surrounding the exogenous shock of federally declared Federal Emergency Management Agency (FEMA) disasters, which are significant random events such as hurricanes, fires, and floods. We restrict this analysis to the subset of municipalities

<sup>2</sup> Our sample is comprised of municipalities that won the GFOA disclosure award; hence it may understate the frequency of occurrence of nonrecurring items. To investigate this possibility, we examine all municipalities for the State of Michigan from 2010 to 2012 using detailed accounting data posted online. We find that 7.4% disclose a nonrecurring item overall, and, for the subset of Michigan entities receiving the GFOA award, only 3.7% report nonrecurring items. This suggests use of GFOA data may understate the frequency of nonrecurring items.

with a federally declared disaster during our sample timeframe. Hence, each entity experiences a significant event that is outside of politicians' control, but is arguably very likely to trigger the reporting of a nonrecurring item.

Descriptive statistics from this subsample reveal that, although all municipalities experience a disaster and despite GASB standards requiring disclosure, only 15% of municipalities report nonrecurring items. Multivariate results from this analysis corroborate prior findings: CPA finance directors are significantly more likely to report nonrecurring items, and while somewhat mixed, bureaucrat-led municipalities are less likely to do so. Overall, it appears that municipal officials' decisions to report nonrecurring items are primarily a reporting choice.

To provide additional insight, we next conduct a series of tests that consider whether these reporting choices can be strategic in nature. Specifically, we investigate whether the magnitude of reported items is associated with strategically managing "net income" (i.e., the excess of revenues over expenditures or net surplus). Although somewhat mixed, the literature suggests that some politicians have incentives to strategically report accounting information to avoid reporting large accumulations of resources or deficits (e.g., Costello et al. 2017; Beck 2018) or in response to union incentives (Bonsall et al. 2019). Others argue that there is little demand for detailed accounting information from municipalities, the information supplied is difficult to interpret, and users focus less on the bottom line and more on other factors, such as budgets and fund balances (Zimmerman 1977; Naughton and Spamann 2015; Gore et al. 2023). Moreover, to the extent that incumbent politicians and bureaucrats are entrenched, incentives to strategically report nonrecurring items may not be substantial.

To investigate whether politicians strategically report nonrecurring items, we decompose items into positive (income-increasing) and negative (income-decreasing) components to explore differential impacts on surpluses and deficits. Specifically, we investigate whether income-increasing nonrecurring items are systematically reported by municipalities with pre-item deficits and, conversely, whether income-decreasing items are reported when governments have pre-item surpluses. If positive (negative) nonrecurring items are truly random and transitory, then the magnitude should be unrelated with the deficit (surplus) that otherwise would be reported.<sup>3</sup> Controlling for other methods to strategically manage net surplus found significant in the literature, we find that positive nonrecurring items are systematically associated with reducing or eliminating deficits. Municipalities with surpluses are significantly more likely to report negative nonrecurring items, suggesting that politicians strategically use these items to reduce (or smooth) current year excess resources. While results from this analysis cannot be construed as causal, the evidence is consistent with some politicians and bureaucrats strategically reporting nonrecurring items to reduce surpluses and to reduce or avoid deficits.

<sup>3</sup> We combine extraordinary and special items into nonrecurring items because our primary data source, the Government Finance Officers Association (GFOA) Financial Indicators database, does not distinguish between them. Untabulated analyses use hand-collected data for a subset of our sample and separately specify extraordinary and special items; results are similar, although some coefficient magnitudes are larger for specifications of extraordinary items than for those of special items. Also, our analyses include a large sample of municipalities that do not report nonrecurring items.

To further explore these findings, we investigate three state-level mechanisms that can potentially encourage or discourage politicians to strategically employ nonrecurring items: state laws that allow citizens to place initiatives on the ballot, that mandate GAAP accounting, or that require external audits. Some state laws allow voters to directly place initiatives on the ballot, many of which constrain politicians' flexibility over taxes and spending (Matsusaka 1995). To avoid these constraints, politicians in direct initiative states have incentives to signal fiscal responsibility by reporting smaller surpluses and avoiding deficits, because voters generally prefer that governments break even (Matsusaka 1995; Gordon 2009; Gore 2009). Hence politicians in direct initiative states have greater incentives to strategically report nonrecurring items to avoid deficits and large surpluses. State laws mandating that local governments comply with GAAP accounting or undergo external audits increase monitoring by state regulators and therefore reduce incentives to strategically report items (Baber and Gore 2008). Accordingly, we examine whether the strategic reporting findings are more consequential when state laws allow direct voter initiatives and are reduced when states mandate GAAP accounting and/or audits.

Results suggest that municipalities in direct initiative states report significantly greater positive (negative) nonrecurring items when they have a pre-item deficit (surplus). Effects are significantly reduced when municipalities are subject to state laws mandating GAAP accounting or audit requirements. Overall, our evidence suggests that politicians and bureaucrats strategically employ nonrecurring items when states allow voter ballot initiatives, while reducing these activities under increased monitoring through more restrictive state disclosure and audit laws.

Our study contributes to the literature in several respects. First, we comprehensively explore reporting nonrecurring items in the governmental setting. We descriptively document the frequency, types, and characteristics of nonrecurring items, which vary significantly from the corporate setting. Our evidence shows that a large proportion of government officials do not report nonrecurring items, seemingly in contradiction to GAAP standards. Reporting nonrecurring items is significantly more likely among municipalities employing CPAs as finance directors, and while somewhat mixed, less likely among governments led by an unelected bureaucrat. This evidence may be of interest to regulators and help answer GASB's recent call for more research about governmental nonrecurring items (Government Accounting Standards Board 2021).

Although corporate literature studies nonrecurring items (e.g., Ronen and Sadan 1975; Bartov 1993; Francis et al. 1996; Johnson et al. 2011), the governmental setting differs fundamentally such that results of studies in other contexts may not apply. For example, compared to corporate shareholders, citizens are not typically strong monitors over municipal financial reporting, and tend to rely on political institutions such as state laws to constrain and monitor local government officials (Zimmerman 1977). Similarly, the nature of the political setting, including differing political governance structures, renders it unique from the corporate setting. Hence we can investigate whether governments led by politicians versus bureaucrats moderate or exacerbate strategic reporting of nonrecurring items.

In addition, the reporting standards differ between the two settings, such as the FASB's elimination (and GASB's continuation) of reporting extraordinary items.

These differences were highlighted recently with the debate over treatment of COVID pandemic-related gains and losses. In fact, while the GASB proactively issued a technical bulletin over whether pandemic events should be treated as nonrecurring, to our knowledge, FASB was silent on the matter (GASB 2020). Given the divergence in standards and treatment of recent events, studying governmental nonrecurring items is an open and interesting research question.

Our study also adds to literature exploring governmental strategic financial reporting. Two prior studies examine strategic reporting with respect to balanced budget restrictions and raising capital using the Statement of Revenues, Expenditures, and Changes in Fund Balance (henceforth “income statement” for parsimony), where nonrecurring items are displayed, in a manner that potentially corresponds to our study. Costello et al. (2017) investigate state government incentives to take strategic fiscal actions to meet balanced budget restrictions. In particular, they find that state government politicians strategically sell assets and transfer funds to reduce deficits to comply with strict balanced budget laws, but do not find similar evidence with regard to reducing surpluses. Beck (2018) finds evidence that California municipalities engage in opportunistic financial reporting using the Other Financing Sources/ Uses line item surrounding municipal bond issuance.

Using a broad sample of local governments, our study complements and extends this literature by exploring strategic incentives to report nonrecurring items, an ongoing accounting choice.<sup>4</sup> We document evidence that, controlling for other methods of strategic reporting, local government politicians strategically reduce *both* surpluses and deficits using this approach. Prior literature predominantly explores incentives to decrease deficits, rather than smoothing incentives to reduce surpluses (Naughton et al. 2015). The latter is interesting due to the unique nature of government accounting, which has a theoretical goal of breaking even. In addition, we find that state regulations requiring GAAP compliance and audits constrain politicians by reducing strategic reporting. To our knowledge, the latter has not been previously documented in the literature.

Our study also has important implications for public policy. Specifically, our research is important for evaluating government officials’ stewardship over financial reporting. The stewardship function plays a key role in the governmental area and is one of the primary purposes of governmental accounting standards (Government Accounting Standards Boards 2006). As such, our evidence that finance directors who are CPAs are significantly more likely to report nonrecurring items while strategic reporting behavior is significantly reduced when states require GAAP and external audits may be of interest to state and federal regulators.

<sup>4</sup> Although less direct, our study also complements other work more generally examining state government incentives to manipulate accounting information. For example, Bonsall et al. (2019) and Naughton et al. (2015) explore incentives to manipulate state pension plan assumptions. State governments differ significantly from local governments in terms of size, governance structures, voter mobility (Tiebout, 1956), disclosure requirements, and audits because GAAP compliance and external audits are voluntary (Beck, 2018). Our study also differs from literature such as Costello et al. (2017) by studying an ongoing accounting choice.

## 2 Background and determinants of reporting nonrecurring items

### 2.1 Background on accounting for nonrecurring items

Standard-setters require unusual and/or infrequent events or transactions to be treated differently from core revenues and expenditures. The nonrecurring elements—specifically, extraordinary and special items—represent transitory inflows and outflows. Given that these are atypical events, governmental accounting standards require nonrecurring items to be prominently disclosed as a separate line item on the face of the statement of revenues, expenditures, and changes in fund balance, the governmental equivalent of an income statement. Specifically, extraordinary items result from transactions that are both unusual and infrequent, while special items are reported when transactions meet only one of the two criteria (GASB Statement 34 and APB Opinion 30).

There are at least two noticeable differences between reporting requirements for government and corporate entities. First, FASB standards do not specifically use the term “special items” for transactions that are unusual or infrequent, although academics and practitioners have long used the term. In contrast, GASB 34 overtly requires specifying items as special.<sup>5</sup> Second, disclosure requirements are stricter in the governmental setting, where municipalities are required to report special items as a separate income statement line item and describe their nature, either on that same line or within the footnotes. In contrast, firms have greater reporting latitude: they can display special items either as a separate line item or bundle them with other line items and explain them in the footnotes. Extraordinary items must be displayed on their own financial statement line in the government setting, while reporting extraordinary items was discontinued by FASB standards in 2015 (Accounting Standards Update 2015-01). The GASB treatment of nonrecurring items allows users of municipal financial statements to readily distinguish transitory gains and losses from core revenues and expenditures.

### 2.2 Determinants of reporting nonrecurring items

Although several attributes of municipalities and municipal officials could be associated with financial reporting choices, we focus on two factors hypothesized as significant determinants of reporting nonrecurring items—finance director accounting knowledge and whether municipalities are led by politicians or bureaucrats. Finance directors are directly responsible for financial reporting, while the head of government oversees operations as a whole, including reporting choices.

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<sup>5</sup> GASB requires that special items are within the control of municipal officials, which is not necessary in the corporate setting. This requirement does not impact our results as our findings are consistent for both types of items. That said, we further study asset sales (which are arguably more controllable by politicians) in Sect. 5.

### 2.2.1 Lack of accounting knowledge

While either an elected politician or an appointed administrator (referred to as Chief Administrative Officers or CAOs) is ultimately responsible for local government operations, finance directors, fairly similar to CFOs, are responsible for implementing financial reporting policies. We investigate whether the finance director's background is associated with reporting nonrecurring items. Municipal finance directors often possess governmental-specific training and credentials, such as the certified government financial manager designation, rather than a more specialized accounting certification, such as a CPA. In contrast, it is common for CFOs of publicly traded companies to be CPAs, including approximately 39% of all S&P 500 CFOs in 2005 (Krishnan et al. 2009).

Although municipal finance directors have primary responsibility for governmental financial reporting, they may not have expertise in more complex or unusual areas of accounting. For example, Dambra et al. (2023) suggest that, prior to implementation of GASB 68 over pensions, some county officials were unaware that they had an unfunded pension liability. Although the Dambra et al. (2023) study does not specifically focus on finance directors, their findings are consistent with a general lack of sophisticated accounting knowledge on the part of municipal officials. Abramova et al. (2021) find that, among California cities, finance director presence, and particularly those who are also treasurers, is associated with longer financial reports and winning the GFOA disclosure award. Due to their additional specialized training and knowledge, municipal finance directors who are CPAs arguably have more expertise about accounting and financial reporting and hence are more likely to report nonrecurring items.

### 2.2.2 Politicians versus bureaucrats

We next consider whether local government political governance structures are associated with reporting nonrecurring items. In practice, there are two general types of governance structures, where either an elected politician, such as a city mayor or county supervisor (e.g., the strong mayor structure), or an appointed bureaucrat (council-manager structure), are primarily responsible for the day-to-day operations. Although both structures have elected councils, the public elects mayors and supervisors. In contrast, an elected council typically appoints CAOs under the council-manager structure. Depending upon the governance structure, either a politician or a CAO holds relatively more decision-making authority over financial reporting (Compton et al. 2017). Whether and how this influences financial reporting choices over nonrecurring items is not obvious.

Governments primarily led by an elected official may be more responsive to voters because they face periodic elections. Competitive elections help align politicians' incentives with those of citizens, in which case they are more likely to be transparent and voluntarily disclose information (Van Lent 2012), including reporting nonrecurring items. On the other hand, if politicians are entrenched and elections are not competitive, politicians may be relatively unconcerned about financial reporting, including reporting nonrecurring items.

In contrast, appointed bureaucrats are likely incentivized by career concerns, including future employment prospects, professional recognition, and potential termination pressures from political risk (Whalley 2013; Compton et al. 2017). CAOs are often selected for their expertise in managing governments, while the only qualifications for politicians are typically age and residency (Whalley 2013).

Previous research has somewhat inconsistent findings with respect to political governance structures and financial reporting policies. Evans and Patton (1983) find positive associations between participation in a disclosure award program and council-manager governance, but find no significant difference in winning disclosure awards. Giroux and McClelland (2003) find marginally significant evidence that large council-manager cities disclose more information, using a disclosure index. Figlio and O'Sullivan (2001) suggest that municipalities run by city managers are significantly more likely to engage in manipulating "real" decisions by cutting relatively more spending on core services than administrative overhead, in response to statewide tax limitation laws. Hence relations between political structures and reporting nonrecurring items are not clear, and we make no directional prediction.

### 3 Sample selection and descriptive statistics

#### 3.1 Sample selection

Our sample encompasses all municipalities (cities, towns, villages, and boroughs) and counties that receive the Certificate of Achievement for Excellence in Financial Reporting award for their comprehensive annual financial reports for fiscal years 2003 to 2012.<sup>6</sup> We use the Financial Indicators Database from the Government Finance Officers Association (GFOA) to identify nonrecurring items and supplement the data by hand-collecting additional details from comprehensive annual financial reports. Because all sample entities receive the disclosure award, disclosure quality is fairly comparable across all municipalities, and GAAP accounting standards are employed.<sup>7</sup> We use the Single Audit database to identify government finance directors and whether they are CPAs, and the International City/County Management Association (ICMA) databases to identify the form of political governance. Data for control variables are from the U.S. Census and the GFOA financial indicators database. Requiring nonmissing data for revenues, expenditures, and nonrecurring items results in 19,712 observations; after further merging with the

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<sup>6</sup> The sample ends in 2012 because this is the last date for which the GFOA financial indicators data (used to identify nonrecurring items) were available when we initiated the study.

<sup>7</sup> Specifically, state disclosure regulations can vary substantially. Some states require GAAP, while others have no disclosure regulations (Baber & Gore, 2008). Using the GFOA database ensures consistency in accounting standards across our sample, so that our results are not driven by decisions to comply with GAAP. That said, if municipalities choosing to pursue the GFOA disclosure award are less likely to strategically manage net surplus, it effectively biases against finding results.

Single Audit and ICMA databases, our final sample encompasses 7,978 observations. Since nonrecurring items are relatively uncommon events, we winsorize nonrecurring items at the top and bottom 0.25%, and all other continuous variables at the top and bottom 1%.<sup>8</sup>

### 3.2 Descriptive statistics for nonrecurring items

Descriptive statistics for nonrecurring items are presented in Table 1.<sup>9</sup> Panel A displays statistics for total observations as well as by type of entity. Nonrecurring items are present in about 4% of our observations and do not vary substantially across the type of local government (municipality versus county).<sup>10</sup>

Table 1 Panel B delineates nonrecurring items between special and extraordinary items, using hand-collected data from comprehensive annual financial reports for more than 90% of our sample.<sup>11</sup> Special items are more common than extraordinary items (at 66.8% and 33.2%, respectively), consistent with their theoretical definition. Furthermore, extraordinary items are more biased toward increasing income, with 62.1% positive items and 37.9% negative items. In contrast, special items are about evenly distributed between income-increasing (52.3%) and income-decreasing (47.7%). For comparison purposes, during the same period as our sample, about 43% of corporations report nonrecurring items each year; items are almost entirely comprised of special items (98%), and significantly more are income-decreasing (75%) than income-increasing (25%) (Potepa 2020). Overall, governmental nonrecurring items are reported much less often than in the corporate setting, commonly use extraordinary items, and are more frequently income-increasing.

Table 1 Panel C displays the types of nonrecurring items that governments report, again using hand-collected data from comprehensive annual financial reports. Gains and losses on asset sales are the most prevalent, occurring in about one-quarter of our sample.<sup>12</sup> Legal settlements are the next most common general

<sup>8</sup> We acknowledge that winsorizing nonrecurring items at the 0.25% level differs from the typical approach of 1% (e.g. Bartov, 1993). Given that nonrecurring items comprise only 4% of the sample, additional winsorizing could unduly influence the distribution. Nevertheless, we conduct robustness checks that alternately winsorize the top and bottom 0.5% and 1%. All the results hold with the same significance level, albeit with relatively smaller coefficients.

<sup>9</sup> This is based on our full sample of entities before observations are dropped due to missing other variables.

<sup>10</sup> Although the univariate analysis suggests no substantial differences exist between cities and counties, unreported tests show findings are robust to removing counties from the sample.

<sup>11</sup> Comprehensive annual financial reports are primarily collected from local government websites, with 25 of the reports collected through direct requests to entities. Most cases involve a municipality providing the full report. Note that the number of nonrecurring items in Panels B and C do not necessarily align with other panels because there can be multiple nonrecurring items (i.e., both extraordinary and special or both positive and negative) during the same period.

<sup>12</sup> Robustness tests show our main findings are consistent after excluding asset sale gains and losses from nonrecurring items.

**Table 1** Descriptive statistics for nonrecurring items

**Panel A: Frequency of Nonrecurring Items for All Observations**

Variable	Overall			By Type of Entity		
	N	Nonzero N	Percent	County	Nonzero N	Percent
NonRecur	22,936	911	3.97%	4,980	216	4.34%
				Muni	695	3.80%

**Panel B: Special versus Extraordinary Items**

Type of Nonrecurring Item	All		Positive		Negative	
	N	Percent	N	Percent	N	Percent
Special Items	621	66.8%	325	52.3%	296	47.7%
Extraordinary Items	309	33.2%	192	62.1%	117	37.9%
Total	930	100.0%	517		413	

**Panel C: Category of Nonrecurring Items**

Type of Nonrecurring Item	All		Positive		Negative	
	N	Percent	N	Percent	N	Percent
Asset Impairment	58	5.5%	0	0%	58	100%
Charitable Donation/ Receipt	28	2.7%	16	57.1%	12	42.9%
Disaster	64	6.1%	25	39.1%	39	60.9%
Gain/Loss on Early Debt Extinguishment	60	5.7%	31	51.2%	29	48.8%
Gain/Loss on Sale	276	26.3%	167	60.5%	109	39.5%
Change in Reporting Entity or Fund	173	16.5%	122	70.5%	51	29.5%
Legal Settlement	107	10.2%	75	70.1%	32	29.9%
Other	141	13.4%	71	50.4%	70	49.6%
Unexplained	40	3.8%	18	45.0%	21	55.0%
Unavailable CAFR	102	9.7%	60	58.8%	43	94.2%
Total	1,049	100.0%	585	55.8%	464	44.2%

**Panel D: Magnitude of Nonrecurring Items**

Variable	Unscaled (\$ millions)			Scaled by Population (\$)		
	N	Mean	Median	N	Mean	Median
NonRecur	911	5.44	0.07	911	30.44	1.54
NonRecur+	508	18.91	2.58	508	337.68	42.46
NonRecur-	403	11.57	2.44	403	356.84	29.22
AbsVal(NonRecur)	911	15.67	2.47	911	346.16	36.34

Table 1 describes the frequency, magnitude, and category of nonrecurring items for our sample. Panel A shows the frequency of occurrence, including the type of entity. Panel B reports our sample decomposed into special versus extraordinary items, while Panel C describes the categories of nonrecurring items. Panel D presents the magnitude of nonrecurring items. Note that totals in Panels B and C sum to greater than our final sample of 911 nonzero observations (in Panels A and D) because entities may report more than one nonrecurring item. Please see Appendix A for variable definitions

category, at approximately 10%. A number of nonrecurring items also result from the early extinguishment of debt (5.7%) and from disasters (6.1%). Finally, the change in reporting entity or fund definition category is relatively large because 155 observations involve a California Supreme Court decision to include economic redevelopment agency component units within primary government operations.<sup>13</sup> Overall, the composition is quite different from the corporate setting, where the most common nonrecurring items correspond to restructuring charges and the largest in magnitude relate to goodwill impairments (Potepa 2020). Together, these two items comprise half of corporate nonrecurring items, while neither plays a significant role in the government setting.

Although governmental nonrecurring gains and losses are appropriately uncommon, Panel D demonstrates that, given a municipality reports one, on average, the economic impact is significant, with a mean absolute value of \$15.67 million. Income-increasing items have a larger magnitude than income-decreasing items, with means of \$18.9 million and \$11.6 million, respectively. To illustrate the impact on citizens, nonrecurring items result in a mean (median) of \$346.16 (\$36.34) per capita.

In addition, untabulated descriptive statistics reveal that, on average, governments with deficits that report nonrecurring items often succeed in eliminating those deficits. That is, among the 375 observations with deficits before nonrecurring items, 38% of municipalities avoided reporting deficits by disclosing nonrecurring items. Similarly, among the 536 observations with surpluses before nonrecurring items, 10% reduced the surplus to a deficit position by reporting nonrecurring items. Thus nonrecurring items can have an economically meaningful impact on the reported government financial outlook.

### 3.3 Descriptive statistics for main specifications

Table 2 Panel A provides descriptive statistics for our main specifications. Sample sizes are smaller than in Table 1 due to excluding observations with missing data for control variables. Most municipalities report an overall net surplus, with a mean (median) *Net surplus* of \$36 (\$22) million. About one-fourth of sample entities are in states that require external audits, 36% are in states that legally require GAAP accounting, and 53% are in states with laws allowing voter initiatives. Approximately 10% of governments have a finance director who is a CPA (*FD-CPA*), while 77% are primarily run by an unelected bureaucrat (*Council-manager*). Most municipalities experience growth in revenue and population. Panel B provides correlations among primary variables, with Pearson (Spearman) values above (below) the diagonal. Income-increasing nonrecurring items are positively associated with pre-item *Deficit* and voter initiative laws (*Initiative*) while negatively associated with revenue growth (*ChgRevenue*), *Audit law*, and *GAAP state*. Income-decreasing nonrecurring items are positively associated with pre-item *Surplus* and voter initiatives (*Initiative*) while negatively associated with *ChgRevenue*.

<sup>13</sup> Results are qualitatively similar if we remove the 2012 California observations as a robustness check.

## 4 Specifications and results

### 4.1 Determinants of nonrecurring items

We examine whether finance director accounting knowledge and political governance structure are associated with reporting nonrecurring items, using the following OLS specification:<sup>14</sup>

$$NonRecurItems_t = a + b_1FD - CPA_t + b_2Council - manager_t + Controls_t + \sum Fixed\ Effects + e_t. \quad (1)$$

*FD-CPA* is an indicator set to one if the individual responsible for financial reporting is a CPA, else zero.<sup>15</sup> *Council-manager* is an indicator set to one if the municipality is primarily run by an unelected bureaucrat (e.g., a council-manager or council-administrator form of government), and zero otherwise. Our dependent variable is *NonRecurItems*, defined as an indicator set to one if a municipality reports a nonrecurring item and zero otherwise.

Although nonrecurring items are somewhat random and hence difficult to predict, we include several controls to consider other factors that may impact reporting transitory items.<sup>16</sup> The first two reflect financial constraints within the resources and obligations of an entity: *High Debt* and *Low Cash*. *High Debt* equals one if total debt divided by total assets is in the highest quartile in a given year, and zero otherwise. *Low Cash* equals one if the municipality is in the lowest quartile of cash to expenditures, and zero otherwise.<sup>17</sup> *IGRev* is defined as the total of all state and federal intergovernmental revenues and proxies for state and federal monitoring (Costello et al. 2017; Gore 2009).<sup>18</sup> We use two measures of growth. Change in population (*Chg-Population*) considers that growing municipalities may be more likely to report nonrecurring items, while change in revenue (*ChgRevenue*) captures growth (or decline)

<sup>14</sup> Although the dependent variable is a binary variable, recent literature suggests high-dimensional fixed effects in nonlinear models can generate biased estimates and recommends a linear model, such as OLS, in such cases (Greene, 2004; Arellano & Hahn, 2007; Armstrong et al., 2022).

<sup>15</sup> We use the Single Audit database to identify the individual primarily responsible for Single Audit financial reporting (Gore and Na 2020) as well as whether that person is a CPA. We acknowledge that the Single Audit database may under-identify CPAs, which effectively biases against finding results. In a study of California municipalities, Abramova et al. (2021) use the presence of a finance director and/or Treasurer as the individual in charge of financial report preparation. In alternate tests (unreported), we add an additional control for whether the finance director is also a treasurer, with consistent results, and the treasurer indicator is not significant.

<sup>16</sup> In additional (untabulated) analysis, we utilize propensity-score matching using the control variables, with qualitatively similar results.

<sup>17</sup> We use indicators to capture municipalities with very low levels of cash and very high levels of debt because they are likely to have the strongest incentives to sell assets and other transactions to generate more liquid resources. In contrast, we expect less need for governments at the median to do this, so a continuous variable may not capture the nonlinear nature of the relationship. Nonetheless, unreported specifications yield similar results using continuous measures for both variables.

<sup>18</sup> *IGRev* is measured at the governmental funds level, and we assume that municipalities that wish to strategically manage the general fund net surplus can rely on transfers and fund type classification manipulation to obtain the desired effect (Gore et al. 2023).

Table 2 Descriptive statistics

Panel A: Descriptive Statistics for Main Specifications

Variable	N	Mean	Lower Quartile	Median	Upper Quartile	Standard Deviation
NonRecur	7,978	2.424	0	0	0	41.37
NonRecur+	7,978	3.897	0	0	0	38.08
NonRecur-	7,978	1.473	0	0	0	15.808
NonRecur Items	7,978	0.041	0	0	0	0.199
Net Surplus	7,978	36.159	-24.294	22.337	78.672	167.205
Surplus	7,978	69.53	0	22.337	78.672	129.906
Deficit	7,978	33.371	0	0	24.294	80.253
High Debt	7,978	0.25	0	0	1	0.449
Low Cash	7,978	0.25	0	0	1	0.455
OtherFin	7,978	-22.633	-59.198	-10.927	23.622	139.321
IGRev	7,978	146.078	20.152	78.356	168.956	205.944
ChgRevenue	7,978	4.292	-1.648	3.326	9.113	12.654
ChgPopulation	7,978	0.882	0	0.42	1.646	3.472
LogPop	7,978	10.695	10.87	10.873	11.485	1.077
Complex	7,978	0.919	0	1	1	0.273
FD-CPA	7,978	0.093	0	0	0	0.29
Council-manager	7,978	0.767	0	1	1	0.423
Audit Law	7,978	0.256	0	0	1	0.437
GAAP State	7,978	0.356	0	0	1	0.479
Initiative	7,978	0.529	0	0	1	0.499

**Table 2** (continued)

Panel B: Correlation Matrices																		
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1) NonRecur Items	NA	<b>0.758</b>	<b>0.636</b>	0.006	<b>0.060</b>	-0.017	-0.003	-0.013	-0.031	<b>-0.048</b>	0.005	<b>0.061</b>	0.007	0.019	0.002	<b>0.067</b>	<b>-0.038</b>	-0.024
2) NonRecur+	<b>0.494</b>	NA	-0.021	<b>-0.083</b>	<b>0.131</b>	-0.017	-0.005	-0.005	-0.028	<b>-0.030</b>	0.012	<b>0.042</b>	0.006	0.002	0.003	<b>0.042</b>	<b>-0.049</b>	<b>-0.038</b>
3) NonRecur-	<b>0.449</b>	-0.010	NA	<b>0.106</b>	-0.061	-0.005	0.000	-0.015	-0.014	<b>-0.039</b>	-0.007	<b>0.043</b>	0.004	0.026	-0.001	<b>0.054</b>	-0.001	0.007
4) Surplus	<b>0.066</b>	<b>-0.040</b>	<b>0.240</b>	NA	<b>-0.824</b>	<b>-0.762</b>	<b>-0.118</b>	0.002	<b>0.188</b>	<b>0.141</b>	0.027	-0.005	<b>-0.080</b>	-0.024	0.020	<b>-0.068</b>	<b>0.063</b>	0.008
5) Deficit	<b>0.156</b>	<b>0.382</b>	-0.028	<b>-0.223</b>	NA	<b>0.667</b>	<b>0.103</b>	-0.003	<b>-0.064</b>	<b>-0.109</b>	-0.022	<b>-0.079</b>	<b>0.047</b>	<b>0.032</b>	-0.017	<b>0.050</b>	<b>-0.040</b>	<b>0.030</b>
6) OtherFin	-0.003	0.010	0.015	<b>-0.686</b>	<b>0.518</b>	NA	<b>0.056</b>	<b>-0.040</b>	<b>-0.148</b>	-0.020	-0.018	<b>-0.055</b>	<b>0.085</b>	<b>0.046</b>	-0.010	<b>0.041</b>	<b>-0.068</b>	0.008
7) Low Cash	-0.003	-0.013	0.004	<b>-0.080</b>	<b>0.058</b>	<b>0.049</b>	NA	<b>0.240</b>	<b>0.100</b>	-0.028	<b>-0.070</b>	<b>0.059</b>	0.000	0.025	<b>-0.137</b>	-0.004	<b>0.049</b>	0.004
8) High Debt	-0.013	-0.009	-0.005	<b>0.034</b>	-0.026	<b>-0.066</b>	<b>0.240</b>	NA	-0.001	0.021	0.026	<b>0.101</b>	<b>-0.046</b>	0.015	<b>-0.087</b>	<b>-0.258</b>	<b>-0.107</b>	<b>-0.120</b>
9) IGRev	-0.022	-0.017	-0.012	<b>0.268</b>	0.001	<b>-0.203</b>	<b>0.158</b>	<b>0.094</b>	NA	0.020	<b>-0.067</b>	<b>-0.224</b>	<b>-0.071</b>	0.000	<b>-0.062</b>	<b>-0.109</b>	<b>0.317</b>	<b>0.030</b>
10) ChgRevenue	<b>-0.045</b>	-0.029	<b>-0.058</b>	<b>0.082</b>	<b>-0.031</b>	-0.002	-0.023	0.002	<b>0.030</b>	NA	<b>0.126</b>	<b>-0.067</b>	-0.005	-0.011	-0.010	<b>-0.064</b>	<b>-0.036</b>	-0.002
11) ChgPopulation	-0.006	0.016	-0.009	-0.011	-0.005	0.011	<b>-0.043</b>	0.017	<b>-0.060</b>	<b>0.112</b>	NA	<b>0.117</b>	0.023	-0.005	<b>0.060</b>	0.004	<b>-0.056</b>	<b>-0.048</b>
12) LogPop	<b>0.062</b>	0.010	0.009	<b>-0.096</b>	<b>-0.097</b>	-0.006	<b>0.084</b>	<b>0.111</b>	<b>-0.161</b>	<b>-0.073</b>	<b>0.047</b>	NA	<b>0.098</b>	0.016	0.012	<b>0.115</b>	<b>-0.125</b>	<b>-0.080</b>
13) Complex	0.007	0.004	-0.012	<b>-0.096</b>	0.017	<b>0.086</b>	0.000	<b>-0.046</b>	<b>-0.128</b>	0.002	0.016	<b>0.091</b>	NA	<b>0.049</b>	<b>0.098</b>	<b>0.077</b>	0.000	<b>0.053</b>
14) FD-CPA	0.019	0.001	0.005	-0.028	<b>0.059</b>	<b>0.054</b>	0.025	0.015	-0.005	-0.009	0.000	0.014	<b>0.049</b>	NA	<b>-0.037</b>	<b>-0.042</b>	<b>0.053</b>	<b>0.055</b>
15) Council-manager	0.002	0.017	0.000	0.007	0.004	0.004	<b>-0.137</b>	<b>-0.087</b>	<b>-0.101</b>	-0.002	0.025	-0.017	<b>0.098</b>	<b>-0.037</b>	NA	<b>0.109</b>	-0.017	<b>-0.082</b>
16) Initiative	<b>0.067</b>	<b>0.069</b>	<b>0.044</b>	<b>-0.071</b>	<b>0.068</b>	<b>0.083</b>	-0.004	<b>-0.258</b>	<b>-0.246</b>	-0.027	-0.020	<b>0.098</b>	<b>0.077</b>	<b>-0.042</b>	<b>0.109</b>	NA	<b>0.118</b>	<b>0.250</b>
17) GAAP State	<b>-0.038</b>	<b>-0.054</b>	-0.011	<b>0.034</b>	-0.007	<b>-0.030</b>	<b>0.049</b>	<b>-0.107</b>	<b>0.184</b>	-0.016	-0.014	<b>-0.109</b>	0.000	<b>0.053</b>	-0.017	<b>0.118</b>	NA	<b>0.536</b>
18) Audit Law	-0.024	<b>-0.047</b>	0.000	0.019	<b>0.064</b>	0.027	0.004	<b>-0.120</b>	<b>-0.103</b>	0.012	-0.006	<b>-0.064</b>	<b>0.053</b>	<b>0.055</b>	<b>-0.082</b>	<b>0.250</b>	<b>0.536</b>	NA

This table describes the sample used for our analyses. Panel A shows descriptive statistics for all variables. Panel B provides correlations between variables, with the Spearman (Pearson) values provided below (above) the diagonal. The number of observations differs from Table 1 due to lead/lags in variables employed. Please see Appendix A for variable definitions

in taxes and fees, which may place political pressure on elected officials.<sup>19</sup> *Complex* measures entity complexity and is an indicator variable set to 1 if the entity has any enterprise funds, and entity size (*LogPop*) is the log of population. All continuous, nonpercentage variables, except *LogPop*, are scaled by population, and standard errors are clustered by entity. Municipality fixed effects control for an array of time-invariant entity-related factors that could drive financial reporting decisions, such as government type and state. We also include year fixed effects.<sup>20</sup>

Primary specifications include municipality-specific controls along with entity fixed effects to consider underlying factors that may drive both the choice of a CPA finance director and the decision to report nonrecurring items.<sup>21</sup> An alternate approach uses first-stage entropy balancing. Entropy balancing reweights observations, such that the post-weighted means and variances of independent variables for the control sample are very similar to those of the treatment sample (Zha-Giedt 2023). Specifically, we balance all independent variables: *Net Surplus*, *Low Cash*, *High Debt*, *IGRev*, *ChgRevenue*, *ChgPopulation*, *LogPop*, and *Complex*. Additionally, we match on entity type, year, and state.<sup>22</sup>

Table 3 presents the results, where Column 1 shows the original sample and column 2 displays the entropy-balanced sample. Column 1 shows a significantly positive relation between nonrecurring items and finance directors with accounting expertise (*FD-CPA* coefficient of 0.056; t-statistic of 2.87). As we include entity fixed effects, *FD-CPA* effectively captures the differential effect of having a CPA versus a non-CPA within the same municipality. Entropy balancing results in Column 2 are similar, except the coefficient magnitudes and adjusted  $R^2$  are larger. Thus our evidence shows municipal finance directors with accounting expertise are significantly more likely to report nonrecurring items. Turning to political governance structure, we examine whether municipalities primarily led by an appointed bureaucrat (*Council-manager*=1) or an elected politician (*Council-manager*=0) are associated with reporting nonrecurring items. Column 1 shows a negative relation, but is not statistically significant, perhaps because governance structures rarely change over time and entity fixed effects largely absorb effects.<sup>23</sup> However, entropy balancing results in column 2 show a significantly negative relation (coefficient of -0.269; t-statistic of 2.84), with coefficients larger in magnitude. Overall, while somewhat mixed, the evidence suggests reporting nonrecurring items is significantly associated with local government political governance structure: municipalities led by an unelected bureaucrat are somewhat less likely to report nonrecurring items. Interestingly, our finding that council-manager political structures are less likely to disclose nonrecurring items differs from the positive relations found in disclosure literature, such as

<sup>19</sup> In untabulated tests, we include an additional control for the level of capital assets, although ex ante, the direction of the relationship is unclear. Results are qualitatively similar.

<sup>20</sup> In an additional analysis, findings are qualitatively similar if we use combined state-year fixed effects or deflate our measures by total revenues rather than population.

<sup>21</sup> Form of government rarely varies within a given government across our sample timeframe; hence it is unlikely that correlated omitted variables are a concern.

<sup>22</sup> We present descriptive statistics following entropy balancing in Supplemental Appendix 1.

<sup>23</sup> Results for *council-manager* are similar when entity fixed effects are not included.

Evans and Patton (1983) and Giroux and McClelland (2003), perhaps owing to the nature of nonrecurring items compared to other types of disclosures.

#### 4.2 Investigating the low reporting rate: exogenous event shock test using FEMA disasters

Reported nonrecurring items are the joint result of politicians' reporting choices and the underlying events that trigger them. In other words, the presence or absence of reported items results from a combination of (i) the presence or lack of underlying events, and (ii) municipal officials' reporting choices. To help disentangle these effects, as well as to learn more about politicians' decisions to report nonrecurring items, we preliminarily explore relations surrounding the exogenous shock of presidentially declared disasters. Disasters, such as floods, hurricanes, and earthquakes, are significant, unpredictable, random events. We confine this analysis to the subset of municipalities that declare a federal disaster during our sample timeframe; hence each municipality experiences a significant event that is arguably very likely to trigger reporting a nonrecurring item that is not within the politician's control.

We use FEMA disaster aid provided to county and municipal governments to identify the subset of our sample affected by presidentially declared disasters. Hence each entity has experienced a significant event that in theory should be disclosed as a special or extraordinary item. Next, we identify municipalities that report nonrecurring items associated with a disaster, as well as those that receive disaster aid but did not report nonrecurring items, and drop the remaining governments from the analysis. We use three-year windows surrounding receipt of disaster aid to consider potential reporting lags. Unreported descriptive statistics reveal that, although all entities experience a disaster and despite GASB pronouncements outlining their disclosure, surprisingly, only 15% report nonrecurring items.<sup>24</sup>

Results are reported in Table 4. We use specification (1) and control for the amount of disaster aid received. Findings are largely consistent with those presented in Table 3. That is, *FD-CPA* is statistically significant in both Column 1 and using entropy balancing in Column 2, albeit with larger coefficients and adjusted  $R^2$ . *Council-manager* is negative but not statistically significant in Column 1, while statistically significant with entropy balancing in Column 2. Overall, evidence from this test suggests the low rate of governments reporting nonrecurring items is primarily due to reporting decisions on the part of municipal officials rather than due to an absence of underlying events.

<sup>24</sup> One concern is that our results could be driven by repeated natural disasters. If so, then entities experiencing repeated natural disasters theoretically should not record the economic implications as nonrecurring items as they fail to be unusual or infrequent. Nonetheless, to address concerns that some regions are more prone to natural disasters, we re-run our analyses after excluding municipalities (i) with more than three presidentially declared disasters, and (ii) located within traditional hurricane zones (i.e., AL, FL, GA, LA, MS, NC, SC, and TX). Results are generally consistent with those reported and are displayed in Supplemental Appendix 2. In addition, alternate specifications use two-year windows surrounding disaster aid, with consistent results (Supplemental Appendix 2).

**Table 3** Determinants of reporting nonrecurring items

	(1)	(2)
<i>Dependent variable:</i>	<i>NonRecur Items</i>	<i>NonRecur Items</i>
<i>FD-CPA</i>	0.056*** (2.87)	0.260*** (2.84)
<i>Council-manager</i>	-0.028 (1.24)	-0.269*** (2.84)
<i>Net Surplus</i>	-0.000 (1.64)	-0.000 (1.19)
<i>Low Cash</i>	-0.003 (0.29)	-0.008 (0.13)
<i>High Debt</i>	0.010 (0.96)	-0.020 (0.37)
<i>IGRev</i>	-0.000 (1.01)	-0.000 (0.35)
<i>ChgRevenue</i>	-0.000* (1.72)	0.000 (0.01)
<i>ChgPopulation</i>	-0.001 (0.76)	-0.003 (0.69)
<i>LogPop</i>	-0.012 (0.63)	0.009 (0.14)
<i>Complex</i>	-0.015 (0.26)	-0.192 (1.05)
Fixed Effects	Year & Entity	Year & Entity
Clustered std. errors	Entity	Entity
Observations	7,978	7,978
Adjusted R-squared	20.0%	59.6%

This table examines determinants of reporting nonrecurring items using an OLS specification. The sample is smaller than in Table 1 due to data availability. Column (2) presents results with an entropy-balanced sample. Nonrecurring items are winsorized at the top and bottom 0.25%, and all other continuous variables are winsorized at the top and bottom 1%. Please see Appendix A for variable definitions

### 4.3 Strategic reporting of nonrecurring items

The low rate of governments reporting nonrecurring items, despite GAAP standards and having an underlying FEMA disaster event, is intriguing. In addition, univariate correlations in Table 2 Panel B show that income-increasing and income-decreasing nonrecurring items are not randomly distributed with respect to pre-item surpluses and deficits, which may suggest strategic reporting.

To provide additional insight over politicians' decisions to report nonrecurring items, we next conduct a series of tests that consider whether these reporting choices can be strategic. Whether and how politicians strategically report nonrecurring items is unknown. On one hand, because extraordinary and special items are prominently displayed on the face of the income statement, politicians may be inclined to use them strategically. Negative news generated by deficits can hurt politicians' reelec-

tion prospects, and, in the case of bureaucrats, can impact current and future job prospects if government financial stewardship over citizen resources is in question. Hence officials may be inclined to strategically use income-increasing items to avoid deficits. Similarly, municipal officials may strategically use income-decreasing items to reduce surpluses when politically expedient, such as during union contract negotiations, to avoid union demands for large pay increases by appearing financially constrained (Gore et al. 2023). Overall, if nonrecurring items are strategically reported to manage net surplus, then we anticipate systematic relations between reported nonrecurring items and net surplus.

On the other hand, governments may not have strong incentives to strategically report extraordinary and special items. Entrenched politicians may be unconcerned with strategically reporting items because it is unlikely to affect reelection prospects. Citizen stakeholders may focus on the budget rather than the income statement or net surplus, so municipal officials may be indifferent to reporting nonrecurring items (Naughton and Spamann 2015). Moreover, strategic reporting of nonrecurring items may not be significant in light of other tools politicians can employ, such as strategically managing fund balance accounts or managing “real” net surplus through interfund transfers (Gore et al. 2023; Beck 2018). If nonrecurring items are not used strategically, then we expect no systematic relations between reported nonrecurring items and net surplus.

Politicians potentially use nonrecurring items strategically in at least two manners. First, they may create a nonrecurring item by engaging in a real transaction that they would not have otherwise, to reach a reporting goal (e.g., increasing or decreasing a deficit or surplus). Second, municipal officials may shift the timing of when transactions occur, such as by delaying or accelerating a transaction that creates a nonrecurring item.<sup>25</sup> For example, a municipality could deliberately delay (or accelerate) completing paperwork associated with receipt of a federal disaster aid grant. Note that, while similar, in the first case, politicians can exert control over *whether* the events occur, while in the second, politicians have some control over the timing.<sup>26</sup>

Due to their nonprofit nature, governments have incentives to report net surplus that breaks even or is close to zero. Nonrecurring items differentially impact net surplus, depending upon whether there is an excess of revenues over expenditures (a surplus) or an excess of expenditures over revenues (a deficit). Accordingly,

<sup>25</sup> Our empirical tests capture each of these possibilities. That said, we acknowledge that there may be other means of strategically reporting nonrecurring items, such as taking advantage of the complexity inherent in governmental fund accounting (Zimmerman, 1977). For example, under fund accounting, some funds use modified accrual accounting (similar to cash basis), while others use full accrual. To the extent that full accrual required under GAAP standards constrains politicians’ actions, it is plausible that it impacts the strategic use of nonrecurring items.

<sup>26</sup> We acknowledge a potential third scenario, albeit more indirect, whereby politicians unable to avoid reporting a nonrecurring item may engage in real strategic activities by adjusting *other* budgeted revenues and expenditures, perhaps by using budgetary slack. Note that this third scenario is difficult to test empirically because government financial reports do not disclose enough detail to determine original and amended budgeted numbers. That said, we conduct an additional test in Sect. 5 that examines whether strategic reporting of nonrecurring items is reduced when strict balanced budget requirements are in place.

**Table 4** Determinants of reporting nonrecurring items for a subset of events: presidentially declared disasters

	(1)	(2)
Dependent variable:	<i>NonRecur Items</i>	<i>NonRecur Items</i>
<i>FD-CPA</i>	0.101** (2.40)	0.317** (2.38)
<i>Council-manager</i>	-0.028 (0.55)	-0.398** (2.22)
<i>Disaster</i>	0.000 (0.24)	-0.000 (0.43)
<i>Net Surplus</i>	-0.000** (1.97)	-0.000 (1.27)
<i>Low Cash</i>	-0.030* (1.82)	-0.030 (0.29)
<i>High Debt</i>	0.033* (1.71)	0.091 (1.01)
<i>IGRev</i>	0.000 (0.25)	0.000 (0.90)
<i>ChgRevenue</i>	0.000 (0.06)	-0.000 (0.25)
<i>ChgPopulation</i>	-0.002* (1.75)	-0.005 (0.80)
<i>LogPop</i>	0.034 (0.94)	0.132* (1.67)
<i>Complex</i>	-0.177 (1.15)	-0.504** (2.33)
Fixed Effects	Year & Entity	Year & Entity
Clustered std. errors	Entity	Entity
Observations	5,334	5,334
Adjusted R-squared	28.8%	63.8%

This table examines the determinants of reporting nonrecurring items for the subset experiencing an outside shock of a presidentially declared disaster. The sample includes all government entities that received FEMA disaster aid for the three-year window surrounding receipt of assistance. Column (2) presents results with entropy balancing. Nonrecurring items are winsorized at the top and bottom 0.25%, and all other continuous variables are winsorized at the top and bottom 1%. Please see Appendix A for variable definitions

we decompose nonrecurring items into positive (income-increasing) and negative (income-decreasing) components, following corporate literature (Cready et al. 2010; Gaver and Gaver 1998). It is also plausible that municipal financial statement users (i.e., citizens, credit markets, and regulators) differentially view government deficits and surpluses, hence affecting incentives to report nonrecurring items.

We first consider whether local governments use positive nonrecurring items to avoid deficits, which politicians prefer to avoid reporting. Citizens may prefer that municipalities avoid incurring deficits, considering it a reflection of poor financial stewardship on the part of municipal officials (Cuny et al. 2020). A number of states require governments to break even and may increase restrictions on the activities of government officials who incur deficits. For example, Michigan requires that municipalities with deficits file deficit reduction plans, and penalties accrue to entities that

do not comply. Strategically reporting income-increasing nonrecurring items is one means for politicians and bureaucrats to reduce or avoid reporting deficits.

Politicians may also use special and extraordinary items to smooth surpluses in periods when revenues exceed expenditures beyond a reasonable amount. High surpluses may upset citizens, who prefer lower taxes or increased services (Gore 2009). Similarly, unions may demand higher wages and benefits when governments run surpluses. An ability to sustain consistent, low surpluses is viewed positively by bond market participants (Standard and Poors 2012; Cuny 2016). Strategically reporting income-decreasing nonrecurring items is a means of reducing reported surpluses. Hence we next examine whether politicians and bureaucrats strategically report positive items to reduce or eliminate deficits and negative nonrecurring items to smooth surpluses.

#### 4.4 Definition and properties of general fund net surplus

To study strategic reporting of nonrecurring items, we follow prior literature in our focus on the general fund net surplus, considered the primary operating fund on which external users focus (Gore et al. 2023; Costello et al. 2017). The general fund is also emphasized among credit market participants, such as bond ratings agencies, and within bond offering materials (Standard & Poors 2012).<sup>27</sup>

We begin by preliminarily exploring properties of general fund net surplus both before and after including the impact of nonrecurring items. Net surplus is defined as the difference between general fund revenues and expenditures. To isolate the impact of nonrecurring items on net surplus, we drop all observations that do not report nonrecurring items for this test. Results are presented in Fig. 1.<sup>28</sup> We first display the distribution of general fund net surplus, *including* nonrecurring items (*Net Surplus Including NonRecur*)—hence, this is the reported bottom-line net surplus. Municipalities tend to report small positive net surpluses and tend to avoid reporting large accumulations of either surpluses or deficits, which closely aligns with the theoretical goal of breaking even.

We next show observations after *excluding* the effect of nonrecurring items (*Net Surplus Excluding NonRecur*)—that is, we add back any nonrecurring losses and subtract any nonrecurring gains. On average, *including* nonrecurring items (*Net Surplus Including NonRecur*) moves the general fund net surplus closer to zero from both sides of the distribution. We assess whether the two distributions are statistically different using the nonparametric Kolmogorov-Smirnov test, which examines whether two samples are drawn from populations with the same distribution. Untabulated results show that the distribution for *Net Surplus Excluding NonRecur* is significantly different from that of *Net Surplus Including NonRecur* ( $p$ -value  $< 0.0001$ ). Although

<sup>27</sup> As a robustness check, we define net surplus as the difference between revenues and expenditures for all governmental fund types, with largely consistent results.

<sup>28</sup> The density plots overlaid on the histograms use a kernel density estimate. A kernel density estimate makes no assumptions about the underlying distribution of the data and estimates the probability density function by averaging over local regions using kernels.

preliminary, findings suggest that reporting nonrecurring items is not random and that they serve to reduce both surpluses and deficits.

#### 4.5 Tests of strategic reporting of nonrecurring items

To investigate strategic reporting, we test whether the deficit or surplus *before* nonrecurring items is associated with the magnitude of nonrecurring items, using the following OLS specification:

$$NonRecur_t = a + b_1 Surplus_t + b_2 Deficit_t + Controls_t + \sum Fixed\ Effects + e_t. \quad (2)$$

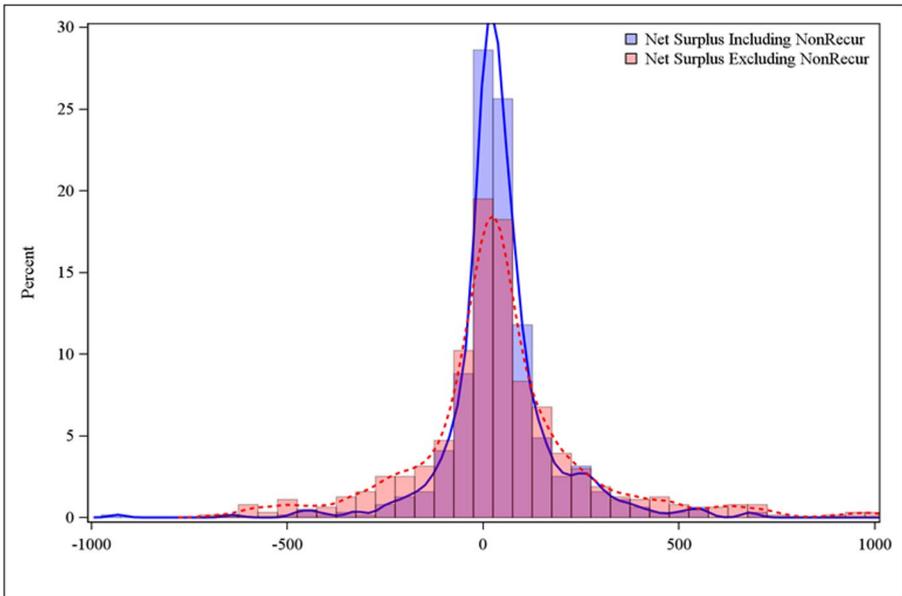
*NonRecur* is defined as the magnitude of nonrecurring items for a given year. We define net surplus excluding nonrecurring items as the dollar value of general fund revenues less expenditures, then add back any nonrecurring items. We then decompose net surplus before nonrecurring items into *Surplus*, defined as an excess of revenues over expenditures (else 0), and *Deficit*, defined as an excess of expenditures over revenues (zero otherwise). Note that we also multiply *Deficit* by  $-1$  to ease interpretation of the coefficients. The dependent variable, *NonRecur*, is similarly decomposed into positive and negative components. *NonRecur*<sup>+</sup> equals *NonRecur* when *NonRecur* is positive, and zero otherwise. *NonRecur*<sup>-</sup> equals *NonRecur* if *NonRecur* is negative (and then multiplied by  $-1$ ), and zero otherwise.

If politicians use income-increasing nonrecurring items to reduce or avoid reporting deficits, then we expect a positive coefficient on *Deficit* when nonrecurring items are positive. In contrast, if municipalities use income-decreasing nonrecurring items to avoid reporting excessive surpluses, then we anticipate a positive coefficient on *Surplus* when the dependent variable is negative nonrecurring items. Controls are the same as in Eq. (1), except we also control for an alternative method of strategic reporting identified in the literature (Beck 2018); *OtherFin* is the net amount of other financing sources and uses reported in the income statement.<sup>29</sup> *FD-CPA* and *Council-manager* are also included as controls.<sup>30</sup>

Table 5 displays the results. The evidence in Column 1 suggests municipalities use income-increasing nonrecurring items to avoid deficits. Specifically, officials are significantly more likely to report an offsetting, positive nonrecurring item when they have a deficit before the nonrecurring item (*Deficit* coefficient = 0.375 and t-statistic = 9.49). This suggests that politicians and bureaucrats strategically report nonrecurring items to reduce or avoid deficits. We also find evidence that municipalities reduce surpluses using income-decreasing nonrecurring items, as detailed in column 2. The surplus before the impact of special and extraordinary items significantly predicts negative nonrecurring items (*Surplus* coefficient = 0.107 and

<sup>29</sup> As a robustness check, we include *OtherFin* as a control in Eq. (1), with consistent results.

<sup>30</sup> Inclusion of *FD-CPA* and *Council-manager* variables substantially reduces the sample size due to merging with the Single Audit and ICMA databases, respectively. Robustness checks drop these two variables and use a larger sample; results are generally consistent with those presented here (see Supplemental Appendix 3).



**Fig. 1** Distribution of general fund net surplus including and excluding nonrecurring items. Figure 1 displays the distribution of general fund net surplus for the subset of municipalities with nonzero nonrecurring items, both preceding (*Net Surplus Excluding NonRecur*, in red) and following (*Net Surplus Including NonRecur*, in blue) the effect of nonrecurring items. We create bins of net surplus using \$50 dollar per capita increments and report the percentage of the sample that falls within each bin. The difference between the red and blue columns shows the relative impact of reporting nonrecurring items. The density plots overlaid on the histograms use a kernel density estimate. A Kolmogorov-Smirnov test indicates these distributions are significantly different (D-statistic=0.158,  $p$ -value <0.0001)

t-statistic = 6.93).<sup>31</sup> Hence politicians are significantly more likely to report negative nonrecurring items when faced with a surplus (before the nonrecurring item), resulting in smaller surpluses. Overall, our evidence suggests that politicians and bureaucrats strategically report nonrecurring items to reduce or avoid deficits and to smooth surpluses.

#### 4.6 Cross-sectional tests

We explore three state-level mechanisms that may impact government officials’ decisions to strategically use nonrecurring items: states with stronger citizen rights (i.e., allow direct initiative provisions), states that mandate GAAP accounting, and states requiring external audits.

Some states allow voters to actively participate in government by directly placing initiatives on the ballot. Gordon (2009) suggests such direct democracy provisions provide incentives for elected officials to act in voters’ interests. Empirical evidence generally supports this characterization. For example, direct democracy provisions

<sup>31</sup> Alternate specifications use the entropy balanced sample, with consistent results (see Supplemental Appendix 3).

are associated with lower government spending and taxes (Matsusaka 1995) and fewer restatements, consistent with the initiative process aligning politicians' incentives with those of voters'. Yet other things equal, politicians dislike outside initiatives constraining spending and revenue, preferring greater flexibility and fewer constraints imposed by activist citizens engaged in "citizen lawmaking."<sup>32</sup> Politicians in initiative states have greater incentives to avoid reporting large surpluses or deficits; hence we examine whether results are magnified among direct initiative states.

In addition, we explore two potential monitoring mechanisms: states that mandate GAAP and audits. State laws dictate whether local governments are required to follow GAAP accounting standards, with some states mandating that municipalities follow GAAP, while others do not require it (Baber and Gore 2008). GAAP regulations pre-commit regulators to enforcement and municipalities to disclosure; absent such commitment, municipalities can withhold disclosures opportunistically (Bushee and Leuz 2005).<sup>33</sup> Similarly, state laws mandating external audits can influence municipal disclosure decisions, such as when external auditors encourage GAAP compliance, particularly when auditors assist in financial report preparation, which exceeds 70% among North Carolina cities (Elder and Yebba 2024).

We test whether strategic reporting is affected by state laws by modifying Eq. 2 as follows:

$$\begin{aligned} NonRecur_t = & a + b_1 Surplus_t + b_2 Deficit_t + \\ & b_3 Surplus_t * State\ law + b_4 Deficit_t * State\ law + \\ & b_5 State\ law + Controls_t + \sum Fixed\ Effects + e_t, \end{aligned} \quad (3)$$

where *State law* is alternately measured as *Initiative*, *GAAP*, or *Audit law*. *Initiative* is an indicator set to one for states allowing direct voter initiatives, and zero otherwise (Matsusaka 1995; IRI 2020).<sup>34</sup> *GAAP State* is an indicator variable set to one for states that mandate GAAP accounting, and *Audit Law* is set to one for states requiring external audits (Baber and Gore 2008). If strategic reporting is magnified when *Initiative* laws are in place, then we expect positive interaction terms for *Surplus\*Initiative* and *Deficit\*Initiative*. If state monitoring mechanisms reduce strategic reporting, then we anticipate significantly negative interaction terms for *Surplus\*GAAP State (Audit Law)* and *Deficit\*GAAP State (Audit Law)*. We also include entity and year fixed

<sup>32</sup> Recent high-profile examples include the United Kingdom's 2016 referendum to exit the European Union and citizen initiatives that forced votes over issues that politicians would prefer to avoid, such as marijuana legalization across several states (Matsusaka, 2017).

<sup>33</sup> Violating GAAP can be costly, for example, if states closely monitor municipalities and penalize them, such as through withholding revenues, or if the bond market charges them higher interest costs (Baber et al. 2013).

<sup>34</sup> Alternate specifications define *Initiative* to include either direct or indirect initiatives, with consistent results (Matsusaka, 1995). We also consider the extent of voter activism by defining *Initiative* as the number of initiatives placed on the state ballot in the preceding five years, with consistent results. Although we define initiatives at the state level, it is likely to capture the extent to which they are used at the local government level because there is a high correlation between state and local initiatives (Matsusaka, 2017).

**Table 5** Associations between nonrecurring items and surplus/deficit reduction

Dependent variable:	(1) NonRecur +	(2) NonRecur -
<i>Surplus<sub>t</sub></i>	-0.015* (1.66)	0.107*** (6.93)
<i>Deficit<sub>t</sub></i>	0.375*** (9.49)	-0.003 (0.65)
<i>FD-CPA</i>	4.042** (2.30)	2.012 (1.56)
<i>Council-manager</i>	-6.688** (2.06)	-0.974 (0.48)
<i>OtherFin</i>	-0.116*** (6.83)	0.034*** (4.81)
<i>Low Cash</i>	-5.314*** (3.53)	2.349*** (3.04)
<i>High Debt</i>	-0.723 (0.42)	1.921*** (2.75)
<i>IGRev</i>	-0.013 (1.27)	-0.006 (1.41)
<i>ChgRevenue</i>	0.031 (0.75)	-0.140*** (6.10)
<i>ChgPopulation</i>	0.061 (0.41)	0.029 (0.63)
<i>LogPop</i>	9.770*** (3.07)	4.937** (2.08)
<i>Complex</i>	-1.601 (0.29)	0.677 (0.15)
Fixed Effects	Year & Entity	Year & Entity
Clustered std. errors	Entity	Entity
Observations	7,978	7,978
Adjusted R-squared	41.6%	36.0%

This table examines relations between surplus/deficit reduction and nonrecurring items. Column 1 (2) shows specifications for positive (negative) nonrecurring items. Nonrecurring items are winsorized at the top and bottom 0.25%, and all other continuous variables are winsorized at the top and bottom 1%. Please see Appendix A for variable definitions

effects. Note that the main effect of each state law is absorbed by the entity fixed effects.

Results are presented in Table 6. All regressions are fully specified by interacting each state law with all control variables to consider that states with particular laws may differ from other states.<sup>35</sup> Columns 1–2 display results for state initiatives. Findings suggest that strategic use of nonrecurring items is magnified when states have direct initiative laws. Specifically, the coefficient for *Deficit\*Initiative* is significantly positive in column 1 (coefficient of 0.410 and t-statistic 6.62), indicating that municipalities in initiative states who would otherwise report deficits are signifi-

<sup>35</sup> For example, states that allow voter initiatives are predominantly in the western United States. For parsimony, the interactions with control variables are not displayed in the tables.

cantly more likely to report positive nonrecurring items. Conversely, the coefficient for  $Surplus * Initiative$  in column 2 is significant when the dependent variable is negative nonrecurring items (coefficient of 0.088; t-statistic=3.04). Untabulated F-tests demonstrate that  $Deficit + Deficit * Initiative$  and  $Surplus + Surplus * Initiative$  are each statistically significant at  $p < 0.001$ .

Table 6 columns 3–4 displays results for state GAAP laws. Column 3 shows that the positive relations between deficits and positive items are significantly lower under state GAAP requirements. Specifically, the coefficient for  $Deficit_i * GAAP State$  is significantly negative (coefficient=-0.438 and t-statistic=7.67). We also find that GAAP requirements significantly impact nonrecurring items when municipalities report surpluses in column 4 ( $Surplus_i * GAAP State$ )—that is, the coefficient is significantly negative (coefficient of -0.069 t-statistic=2.35). In addition, untabulated F-tests reveal that  $Deficit + Deficit_i * GAAP State$  and  $Surplus + Surplus_i * GAAP State$  are each significant at  $p < 0.001$ . Results are consistent with increased monitoring by state regulators constraining officials' ability to engage in strategic reporting behavior in GAAP states.

Table 6 Columns 5–6 present results for state audit laws. Evidence in Column 5 suggests politicians and bureaucrats are less likely to use income-increasing nonrecurring items to reduce deficits when states mandate audits, with  $Deficit * Audit Law$  significantly negative (coefficient of -0.450 and t-statistic of 9.22). Tests of restrictions show that  $Deficit + Deficit * Audit Law$  is statistically significant at  $p < 0.001$ . Column 6 examines relations for surpluses, showing a negative but not statistically significant coefficient for  $Surplus * Audit Law$  (coefficient of -0.035; t-statistic of 1.00). To consider the effect of all state laws simultaneously, we present a combined specification in Table 6 panel B. Results are largely consistent with those in panel A.<sup>36</sup>

In summary, evidence from cross-sectional tests is consistent with magnified effects of strategic reporting when states allow direct voter initiatives. Our evidence also generally suggests that governments are more constrained from engaging in strategic use of nonrecurring items when states mandate GAAP accounting or external audits.

## 5 Additional analysis

### 5.1 Asset sales

We next explore whether our results hold for the subset of municipalities that sell assets. Asset sales are interesting because politicians have more control over the event compared to some others, which can make them relatively more subject to “real” strategic behavior. For example, government officials may strategically sell

<sup>36</sup> While the coefficient for  $Initiative * Surplus$  in column 1 is significantly positive in Table 6 Panel B, it is significantly smaller than the coefficient for  $Initiative * Deficit$ . We also repeat cross-sectional tests using the entropy balanced sample, and results are consistent (see Supplemental Appendix 3).

**Table 6** Associations between nonrecurring items and surplus/deficit reduction with state laws

**Panel A. Individual state laws**

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)
	<i>NonRecur</i> +	<i>NonRecur</i> -	<i>NonRecur</i> +	<i>NonRecur</i> -	<i>NonRecur</i> +	<i>NonRecur</i> -
<i>Surplus<sub>t</sub></i>	-0.025*** (2.78)	0.055*** (2.61)	-0.002 (0.19)	0.132*** (6.88)	-0.004 (0.38)	0.115*** (6.41)
<i>Deficit<sub>t</sub></i>	0.098** (2.48)	-0.000 (0.02)	0.509*** (10.44)	-0.003 (0.51)	0.479*** (10.19)	-0.004 (0.72)
<i>Initiative*Surplus<sub>t</sub></i>	0.030* (1.93)	0.088*** (3.04)				
<i>Initiative*Deficit<sub>t</sub></i>	0.410*** (6.62)	0.001 (0.05)				
<i>GAAP State*Surplus<sub>t</sub></i>			-0.012 (1.01)	-0.069** (2.35)		
<i>GAAP State*Deficit<sub>t</sub></i>			-0.438*** (7.67)	0.007 (0.69)		
<i>Audit Law*Surplus<sub>t</sub></i>					-0.011 (0.90)	-0.035 (1.00)
<i>Audit Law*Deficit<sub>t</sub></i>					-0.450*** (9.22)	0.011 (0.92)
<i>FD-CPA</i>	3.889** (1.97)	-0.691 (0.76)	5.306*** (2.95)	0.803 (0.43)	5.677*** (3.75)	0.950 (0.63)
<i>Council Manager</i>	-4.874*** (4.03)	-0.532 (0.96)	-8.552** (2.22)	-1.879 (1.30)	-7.618** (2.07)	-0.734 (0.78)
<i>OtherFin</i>	-0.041** (2.24)	0.023** (2.19)	-0.150*** (7.24)	0.034*** (3.86)	-0.127*** (6.39)	0.042*** (5.17)
<i>Low Cash</i>	-1.733** (2.19)	0.447 (0.68)	-7.832*** (4.09)	2.179** (2.42)	-7.487*** (4.10)	2.364*** (2.69)
<i>High Debt</i>	0.592 (0.43)	1.805* (1.89)	-2.127 (0.98)	1.339** (2.12)	-0.605 (0.31)	1.565** (2.09)
<i>IGRev</i>	-0.006 (1.52)	-0.002 (0.55)	0.001 (0.03)	-0.009 (1.23)	-0.016 (1.12)	-0.006 (1.32)
<i>ChgRevenue</i>	0.073*** (2.58)	-0.054** (2.19)	0.056 (1.03)	-0.180*** (5.93)	0.033 (0.62)	-0.156*** (5.53)
<i>ChgPopulation</i>	-0.008 (0.12)	0.023 (0.69)	-0.009 (0.05)	-0.026 (0.43)	0.036 (0.19)	0.011 (0.19)
<i>LogPop</i>	-1.563 (0.86)	-1.501 (0.29)	15.007*** (3.09)	5.684* (1.69)	12.215*** (2.87)	6.184*** (3.05)
<i>Complex</i>	7.974 (1.12)	4.274 (0.83)	-1.638 (0.24)	-1.584 (0.31)	-1.019 (0.20)	2.074 (0.43)
Fully Interacted	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Year & Entity	Year & Entity	Year & Entity	Year & Entity	Year & Entity	Year & Entity
Clustered std. errors	Entity	Entity	Entity	Entity	Entity	Entity
Observations	7,978	7,978	7,978	7,978	7,978	7,978
Adjusted R-squared	48%	39.3%	48.6%	38.1%	47.7%	36.6%

**Table 6** (continued)**Panel B. Combined state law analysis**

Dependent variable:	(1)	(2)
	<i>NonRecur</i> +	<i>NonRecur</i> -
<i>Surplus<sub>t</sub></i>	-0.020* (1.82)	0.080*** (3.55)
<i>Deficit<sub>t</sub></i>	0.227*** (4.70)	0.001 (0.12)
<i>Initiative*Surplus<sub>t</sub></i>	0.047*** (3.25)	0.085*** (2.68)
<i>Initiative*Deficit<sub>t</sub></i>	0.455*** (7.42)	-0.001 (0.12)
<i>GAAP State*Surplus<sub>t</sub></i>	0.002 (0.08)	-0.065** (2.16)
<i>GAAP State*Deficit<sub>t</sub></i>	-0.247*** (3.94)	0.007 (0.42)
<i>Audit Law*Surplus<sub>t</sub></i>	-0.032 (1.29)	0.001 (0.03)
<i>Audit Law*Deficit<sub>t</sub></i>	-0.353*** (5.67)	0.005 (0.29)
<i>FD-CPA</i>	3.725* (1.78)	-1.208 (0.98)
<i>Council Manager</i>	-5.657*** (3.55)	-1.419 (0.79)
<i>OtherFin</i>	-0.079*** (3.35)	0.021** (2.05)
<i>Low Cash</i>	-3.795*** (3.11)	0.477 (0.56)
<i>High Debt</i>	-0.474 (0.32)	1.417* (1.80)
<i>IGRev</i>	0.020 (1.52)	-0.006 (0.92)
<i>ChgRevenue</i>	0.086** (2.11)	-0.091*** (3.51)
<i>ChgPopulation</i>	-0.011 (0.11)	-0.031 (0.67)
<i>LogPop</i>	3.745 (1.18)	0.955 (0.27)
<i>Complex</i>	16.651 (1.34)	-1.670 (0.62)
Fully interacted	Yes	Yes
Fixed Effects	Year & Entity	Year & Entity
Clustered std. errors	Entity	Entity

**Table 6** (continued)

Observations	7,978	7,978
Adjusted R-squared	57.4%	41.6%

This table examines relations between surplus/deficit reduction and nonrecurring items, conditioned on state laws. Columns (1) and (2) present results conditioned on state laws allowing direct voter initiatives; Columns (3) and (4) conditioned on state GAAP laws; and Columns (5) and (6) conditioned on mandatory state audit laws. Panel B combines three state laws into one specification. All specifications are fully interacted, with interactions omitted due to space limitations. Nonrecurring items are winsorized at the top and bottom 0.25%, and all other continuous variables are winsorized at the top and bottom 1%. Please see Appendix A for variable definitions.

an asset that citizens prefer to keep rather than engaging in more palatable deficit-reduction choices, such as reducing administrative overhead expenditures (e.g., Figlio and O’Sullivan 2001). Similarly, findings in Costello et al. (2017) suggest that state government politicians may strategically sell assets to avoid deficits.<sup>37</sup> If officials strategically sell assets to reduce deficits or smooth surpluses, then it is not clear whether they will also report sales as nonrecurring—that is, they accomplish their reporting goals by engaging in “real” strategic asset sales. Because our expectations are not clear, we consider this analysis preliminary and exploratory in nature.

To test this, we hand-collect data for the subset of our sample with asset sales (3,527 observations). We next identify municipalities that report nonrecurring items associated with an asset sale as well as those that had asset sales but did not report nonrecurring items and drop the remaining observations. Untabulated descriptive statistics show that the mean (median) asset sale is \$270,807 (\$33,270). Overall, about 6% of asset sale observations are reported as nonrecurring items, with the majority reported as special items (91%), perhaps due to municipal officials’ ability to control them, which comports with GASB standards for special items.

Results are reported in Table 7. We utilize specification (2) and also control for the amount of the asset sale.<sup>38</sup> Results suggest that municipalities continue to systematically report nonrecurring items to reduce or avoid both deficits and surpluses. Although preliminary, the evidence is consistent with strategic reporting of nonrecurring items surrounding asset sales.

## 5.2 Can relations be mechanical?

One potential concern with our strategic reporting analyses is whether the relationship between the underlying event and the surplus or deficit may not be independent, and hence our findings may be mechanical to some extent. For example, nonrecurring federal disaster aid could be provided because there is a large deficit caused by a

<sup>37</sup> Although both our study and Costello et al. (2017) in part consider asset sales, Costello et al. (2017) focus on state government *sale* of assets (a “real” activity), while we focus on how municipalities *report* them—asset sales can be reported as either core or transitory. Moreover, nonrecurring items encompass a variety of transactions, with gains and losses from asset sales representing only 26% of our sample. This suggests local government politicians employ a broader strategy of strategically using transitory items.

<sup>38</sup> Results are similar if we (i) drop the control for the amount of the asset sale, (ii) include a control for municipalities with multiple asset sales, and (iii) drop entities with more than four asset sales.

disaster; hence there will be positive relations between deficits and income-increasing nonrecurring items by construction. Note that for relations to be mechanical, at a minimum, the underlying events and nonrecurring items must transpire within the same period. This is because our research design tests whether there are systematic relations between reported nonrecurring items and surpluses or deficits in the same year.

We consider this possibility by examining in detail the three most common categories of nonrecurring items in our sample, which collectively comprise about 70% of the categorized items. We hand-collect disclosure details for two types—lawsuits and disasters—and find that many of them do not take place in the same timeframe. With respect to lawsuits, the underlying event triggering the litigation precedes the settlement in 28 of 29 cases examined. For disasters, nonrecurring items are reported in the same year as the disaster event for 18 of 34 items. Among the 18 reported within the same year, nine items are positive and nine are negative, so half do not offset a corresponding deficit.<sup>39</sup> Therefore disaster aid does not appear to mechanically cancel out poor financial performance caused by disasters for the majority of this sample. A third common type of nonrecurring item—changes in reporting entity and fund—is primarily the exogenous result of a court ruling and are therefore unlikely to mechanically coincide with pre-item performance.

### 5.3 State balanced budget requirements

In Sect. 4, we discuss two means by which politicians can strategically use nonrecurring items—by timing either the creation or reporting of an underlying nonrecurring event. We next consider a third, albeit more indirect, method of strategic management: by strategically managing *other* revenues and expenditures in anticipation of a nonrecurring item. In other words, given a municipality incurs an unavoidable nonrecurring item in the current period, politicians can strategically choose to adjust revenues and expenditures elsewhere on the income statement, perhaps through budgetary slack or constraints.<sup>40</sup> Such real strategic decisions can impose negative economic consequences on citizens. For example, a bureaucrat could strategically decrease spending for a popular park in anticipation of reporting a nonrecurring loss.

Ideally, we could directly test budgetary slack using budget and actual data for “other” revenues and expenditures; unfortunately, data constraints preclude such an analysis (e.g., we lack detailed entity-level original and adjusted budget data). Although indirect, we next study budgetary constraints imposed through state laws reducing local government budgetary flexibility. Specifically, some states have restrictive balanced budget requirements that place pressure on local politicians to

<sup>39</sup> In addition to coinciding within the same year, one would expect positive reported nonrecurring items to coincide with deficits, while we find that reported items are often income-decreasing rather than income-increasing.

<sup>40</sup> This scenario is somewhat similar to misclassification arguments along the lines of McVay (2006), yet subtle differences exist, including the role of budgets and budgetary slack, since budgets are often adopted one or two years in advance and politicians are constrained by both the budget and budgetary basis of accounting used.

**Table 7** Nonrecurring items for a subset of events: asset sales

Dependent variable:	(1)	(2)
	<i>NonRecur +</i>	<i>NonRecur -</i>
<i>Surplus<sub>t</sub></i>	-0.023 (1.62)	0.084** (2.46)
<i>Deficit<sub>t</sub></i>	0.241*** (3.03)	-0.004 (0.40)
<i>FD-CPA</i>	8.135* (1.97)	1.557 (1.15)
<i>Council-manager</i>	-2.788 (0.71)	-0.775 (0.45)
<i>AssetSale</i>	0.015 (0.12)	0.018 (0.50)
<i>OtherFin</i>	-0.107*** (2.60)	0.019 (1.12)
<i>Low Cash</i>	-3.601** (2.19)	1.883* (1.82)
<i>High Debt</i>	3.998 (0.97)	2.876* (1.83)
<i>IGRev</i>	-0.024 (1.07)	-0.003 (0.31)
<i>ChgRevenue</i>	-0.034 (0.50)	-0.143** (2.37)
<i>ChgPopulation</i>	-0.165 (0.68)	0.198* (1.96)
<i>LogPop</i>	4.131 (0.52)	-1.212 (0.63)
<i>Complex</i>	-5.756 (0.45)	-0.174 (0.04)
Fixed Effects	Year & Entity	Year & Entity
Clustered std. errors	Entity	Entity
Observations	1,691	1,691
Adjusted R-squared	39.4%	39.2%

This table examines relations between surplus/deficit reduction and nonrecurring items for the subset reporting an asset sale. The sample includes all municipalities reporting asset sales in their financial reports. Column 1 (2) shows specifications for positive (negative) nonrecurring items. Nonrecurring items are winsorized at the top and bottom 0.25%, and all other continuous variables are winsorized at the top and bottom 1%. Please see Appendix A for variable definitions.

avoid reporting deficits. Municipalities subject to such budgetary constraints have greater incentives to strategically manage nonrecurring items to avoid reporting deficits.

We next investigate whether municipalities in states with restrictive balanced budget rules strategically manage nonrecurring items. Evidence (reported in Supplemental Appendix 4) shows that results are magnified when states have these rules. While we cannot directly test whether these findings are due to strategically managing “other” revenues and expenditures, the results do suggest that state-imposed budgetary constraints create incentives to engage in strategic reporting behavior surrounding nonrecurring items.

## 5.4 Bond issuance

We next preliminarily consider whether net surplus smoothing relations are stronger when entities plan to issue public bonds. The empirical approach mirrors our earlier cross-sectional tests by including an indicator set to one if the municipality issues a public bond in the one-year window surrounding publication of year  $t$ 's financial statements, and interacting it with *Surplus* and *Deficit*. We restrict analysis to municipalities issuing public bonds during our sample period to avoid inadvertently measuring differences across entities that do versus do not access public bond markets. Findings show that nonrecurring items reduce surpluses (but not deficits) preceding bond issuances. While preliminary, the evidence is consistent with politicians maintaining consistent, lower surpluses preceding public bond offerings, which aligns with the value placed on consistency suggested by Cuny (2016) and some findings in Beck (2018). The lack of significant results for deficits may suggest that municipalities in poor financial situations avoid the bond market. The financial sophistication of credit rating agencies and institutional investors compared to the average citizen may also reduce the effectiveness of this strategy.

## 6 Conclusion

We explore reporting nonrecurring gains and losses—extraordinary and special items—in the governmental setting. Although economically important and despite GAAP requirements, no prior research investigates them. Descriptive evidence documents the common types, characteristics and reporting frequency, revealing a low reporting frequency. Primary evidence shows nonrecurring items are reported significantly more often when municipal finance directors are CPAs and, while somewhat mixed, less often when governments are led by a bureaucrat (council-manager form of government) rather than by an elected politician. Further analysis focuses on FEMA disasters, corroborating primary findings, and continuing to show a surprisingly low incidence of reporting items, despite having underlying events that presumably could trigger nonrecurring items.

We next construct several tests to explore whether reporting nonrecurring items can be strategic in nature. The evidence suggests that reported nonrecurring items systematically reduce or smooth both surpluses and deficits, consistent with strategic reporting. Effects are more substantial when state laws allow voters to directly place initiatives on the ballot and substantially less when state laws mandate GAAP accounting or external audits. While our analyses cannot be construed as causal, specifications control for entity fixed effects and corroborating analysis employs entropy balancing to help consider differences across treatment and control groups. Overall, we provide comprehensive evidence on the reporting of nonrecurring items in the government setting.

Our study makes several contributions to the literature. Using an extensive hand-collected dataset, we descriptively document the nature, characteristics, and frequency of reporting of governmental nonrecurring items. We explore whether accounting knowledge and political governance structures are significant determinants of reporting nonrecurring items. In so doing, we advance the literature on nonrecurring items in

general, and perhaps more importantly, help answer the GASB’s call for more research on governmental extraordinary and special items (GASB 2021). Our study also complements and extends the literature on opportunistic governmental financial reporting that suggests state governments strategically report “real” activities such as asset sales, transfers, and pension plan assumptions to reduce or avoid reporting deficits (e.g., Bonsall et al. 2019; Costello et al. 2017; Naughton et al. 2015). Controlling for other methods of strategic reporting, we document evidence consistent with municipalities strategically reducing (or smoothing) *both* surpluses and deficits. Prior literature primarily focuses on incentives to reduce deficits rather than on surplus reduction. We also find that state regulations such as GAAP and audit laws are associated with less municipal strategic reporting, which, to our knowledge, has not previously been documented.

Finally, our findings may be of interest to state and federal government regulators and policymakers because they suggest that governments may not strictly follow GAAP standards in the case of nonrecurring items.

## Appendix A: variable definitions

Variable	Definition
AbsVal(NonRecur)	Absolute value of <i>NonRecur</i>
Audit Law	Indicator variable set to one if the municipality is in a state that requires an external audit following Baber and Gore (2008), zero otherwise
Asset Sales	Asset sales in dollars, divided by population
ChgPopulation	Percentage change in entity population relative to prior year
ChgGrowth	Percentage change in revenue relative to prior year
Council-manager	Indicator variable set to one if the municipality is primarily run by an unelected bureaucrat, zero otherwise
Complex	Indicator variable set to 1 if current assets, current liabilities, operating income, or change in net assets of enterprise funds are not equal to zero
Deficit	<i>Net Surplus</i> if less than zero then multiplied by negative one, zero otherwise
Disaster	Presidentially declared FEMA disaster grant in dollars, divided by population
FD-CPA	Indicator variable set to one if the individual responsible for financial reporting is a CPA, zero otherwise
GAAP State	Indicator variable set to one if the municipality is in a state that legally requires GAAP accounting, defined following Baber and Gore (2008), zero otherwise
High Debt	Indicator variable set to one for entities in the highest quartile for debt to assets in a given year, zero otherwise
IGRev	Total general fund intergovernmental revenues, deflated by population
Initiative	Indicator variable set to one if the municipality is in a state with a direct initiative process, zero otherwise
Logpop	Natural logarithm of the population
Low Cash	Indicator variable set to one for entities in the bottom quartile of cash to expenditures in a given year, zero otherwise
Net Surplus	Difference between revenues and expenditures of the general fund, after removing the impact of nonrecurring items, deflated by population
NonRecur	Sum of special and extraordinary items reported by the entity in Governmental Funds for a given year, deflated by population
NonRecur+	<i>NonRecur</i> if greater than zero, zero otherwise

Variable	Definition
NonRecur-	<i>NonRecur</i> if less than zero then multiplied by negative one, zero otherwise
NonRecur Items	Indicator variable set to one for entities report nonrecurring items, zero otherwise
OtherFin	The net amount of other financing sources and uses reported in the government's general fund, deflated by population
Surplus	<i>Net Surplus</i> if greater than zero, zero otherwise

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**Data Availability** While the data used in this paper is generally is proprietary, we are open to sharing the data we own. Therefore, our categorization of nonrecurring items is available upon request.

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