
Uncovering Municipal Fiscal Distress in the United States

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Abstract: This paper builds on the literature examining the circumstances surrounding municipal fiscal distress by constructing a broader picture of the factors related to distress and why some cities file for bankruptcy or seek state intervention while others do not. Drawing on previous work, we identified a set of eight possible factors that may serve as predictors of municipal insolvency in the United States. In this article, we examine how prevalent these factors are across 42 fiscally distressed cities and identify significant associations between these factors. We then analyze how these eight factors vary between fiscally distressed cities that have filed for bankruptcy and those cities that are distressed but have not filed for bankruptcy. We found that high percentages of public union density and unfunded pension liabilities were most prevalent risk factors among cities and that significant associations exist between unfunded pension liabilities and three other factors: fiscal home rule authority, intergovernmental aid, and tax and expenditure limits. We also found that both low levels of state aid and evidence of financial mismanagement were more common among distressed cities that filed for bankruptcy than those that did not. Lastly, we identify areas where future research is needed.

Key Words: municipal insolvency, municipal bankruptcy, unfunded pension liability, financial mismanagement; fiscal distress.

JEL Classification: H72, H75, H76

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The early months of the COVID-19 pandemic fundamentally altered the global and national economy. State-mandated shutdowns of non-essential businesses across the U.S. resulted in immediate economic hardships for workers, businesses, and governments alike and the long-term economic impacts appeared dire. In April of 2020, The Center on Budget and Policy Priorities estimated that U.S. states had lost 25% of their revenues as a direct result of pandemic shutdowns and predicted that the gap in state budgets could be as high as \$500 billion by the summer of 2022 (Frum, 2020). However, more recent data from the National Association of State Budget Officers found that general revenue funds were 2.2 percentage points higher than forecasted prior to the pandemic (Clemens, 2022). In response to the

apparent looming economic crisis then Senate Majority Leader Mitch McConnell advanced the idea that state bankruptcy may be a more viable economic solution for fiscally distressed states than relying on federal aid, sparking an immediate outcry from governors and legislators on both sides of the aisle (Frum 2020). Senator McConnell's position is consistent with prior Republican support for state bankruptcy predicated on the lack of federal oversight for state-level allocation of federal aid. He highlighted specific concerns about the use of federal aid money to remedy fiscal distress stemming from financial mismanagement and unfunded pension liabilities for public sector employees that predate the COVID-19 crisis (Frum 2020). In the second round of COVID-19 aid, Senator McConnell and the Senate passed a 900-billion-dollar bipartisan pandemic relief bill December, and due to continued opposition from the Republicans, no new spending for state and local governments made it into the bill (Stein & DeBonis 2020). While states are currently barred from declaring bankruptcy by federal law, municipalities in some states may file for bankruptcy. In this way, better understanding the factors contributing to fiscal distress and bankruptcy at the municipal level may provide insight into the issues that states may face in the future and help inform the debate on state bankruptcy.

Historically, cities, towns, and counties in the United States have rarely filed for municipal bankruptcy, even when in severe fiscal distress. Between 1980 and 2012, fewer than 250 bankruptcy cases were filed under Chapter 9 (Deal, Kamnikar, & Kamnikar 2009). From 2008 to 2012, one out of every 1,668 general-purpose local governments filed for bankruptcy, and these were mainly special-purpose entities, such as utility authorities and taxing districts (Maciag 2014). However, the recent high-profile filings in Detroit, Michigan and San Bernardino, Stockton, and Vallejo, California, as well as the slow economic recovery and the rise in pension and retiree health care costs, along with other fixed costs of municipal government (Global Credit Research 2015), have alarmed some policymakers. Chief among these concerns are whether there will be a higher volume of municipalities filing for bankruptcy and what strategies may best prevent future financial crises (Pew Charitable Trusts 2015).

According to report by the Pew Charitable Trusts (2016), states do in fact have responsibility in the financial failure of municipalities, despite their willful lack of involvement in local fiscal health. Indeed, according to the same report, only 22 states make some effort to monitor municipal fiscal health and detect states of fiscal distress in municipalities. Of those 22 states, only eight of them are described by Pew as "early warning states" wherein which there are laws that define local fiscal distress and systems that detect when municipalities are declining toward a state of fiscal distress.

Municipal bankruptcy is a complicated process, which differs among states and among municipalities. Federal law allows municipalities to seek protection under Chapter 9 of the United States Bankruptcy Code (Yang 2019a). Chapter 9 utilizes many provisions from other chapters of the Bankruptcy Code, including Chapter 11, which is primarily used for corporate reorganizations (Dabney et al. 2012). Both general-purpose municipalities, such as cities and towns, and special-purpose entities, such as water and sewer districts, may use Chapter 9 to adjust their debts (Skeel 2012).

Twelve states authorize municipal bankruptcy without conditions, twelve conditionally authorize it, two states prohibit it, and the rest provide no specific authorization regarding municipal bankruptcies (Eucalitto, De Pena, & Younger 2013). In practice, municipalities rarely file for bankruptcy even in states where they have authorization to do so because the hurdles to filing are set exceedingly high (Watson, Handley, & Hassett 2005). Likewise, at the state level, little is being done to actively identify states of local fiscal distress (Pew Charitable Trust, 2016). As a result, there is a need for a more robust understanding of factors relating to municipal bankruptcy and fiscal distress more broadly. This paper builds on previous work (Coordes & Reilly, 2017), as well as the existing literature studying the circumstances surrounding municipal fiscal distress and municipal bankruptcy, by identifying the factors that may drive fiscal distress at the municipal level, examining associations between these factors, and identifying how these factors vary between fiscally distressed municipalities that file for bankruptcy and those that do not.

Background

Legal scholars have focused on the use of municipal bankruptcy and its overall effectiveness for resolving fiscal problems. Opinions on the effectiveness of the practice are mixed. On one hand, judges can use Chapter 9 to encourage reluctant local officials to make prudent but politically unpopular decisions in order to achieve financial stability (McConnell & Picker 1993; Yang 2018). However, municipal bankruptcy can also create or exacerbate harms for various stakeholders. For this reason, some scholars argue that proactive state oversight may be more desirable than bankruptcy in some cases (Gao, Lee, & Murphy 2019; Kimhi 2010; Yang 2019a). Gillette (2012) has focused on the power of bankruptcy courts, suggesting that judges should be permitted to impose resource adjustments on municipalities to encourage them to better internalize the costs of their activities. Subsequently, Gillette & Skeel (2015) argued that bankruptcy, in addition to serving as a debt relief mechanism, must also address a municipality's governance problems in order to be effective. In addition to these practical limitations, concern also exists that municipal bankruptcy law does not align with the goals of the bankruptcy system more generally (Coordes, 2016).

A second branch of literature, promulgated by policymakers, economists, and legal scholars, seeks to understand how and why fiscal crises have led to municipal bankruptcy. Various theories exist as to why municipalities go bankrupt (Park, 2004), and the effects of the 2008 financial crisis on municipalities have generated further interest in this area (Gao, Lee, & Murphy 2018; Peck, 2013; Yang 2018; Yang 2019a). Several recent descriptive case studies on municipal bankruptcies have been published, which have attempted to offer insight into local governmental decision-making and the various structural, political, and economic constraints placed on state and local governments (Callahan & Pisano, 2014; Deal, Kamnikar, & Kamnikar 2009; Farley, 2015; Neil, 2015). Some researchers have suggested that municipal bankruptcy should be explored separately from municipal governments in severe fiscal distress because not all municipalities facing fiscal crises go

bankrupt (Park, 2004). Others have recommended that insolvent governments more generally should be studied to obtain a more holistic and accurate understanding of the fiscal crises that result in bankruptcies (Hendrick & Crosby, 2014). Singla, Comeaux, Kirchner, & Glenn (2014) found that the fiscal stress in the California cities of San Bernardino, Stockton and Vallejo that filed Chapter 9 bankruptcy was not demonstrably more extreme than that found in similar California cities. Recently, other scholars have used economic and political theories of financial reform to analyze state adoption of municipal bankruptcy laws (Rossi and Yun 2015) and the impact of these laws on distressed municipalities (Yang 2019a), including whether they produce a contagion effect within a particular region (Gao, Lee, & Murphy 2019; Yang 2018). The ensuing economic consequences of the COVID-19 pandemic may very well spur more interest in the topic if state and municipal budget gaps reach predicted levels by 2022 (Frum 2020).

Existing literatures includes detailed case studies of how municipalities have entered a state of fiscal distress (Coordes & Reilly, 2017). These case studies reveal eight factors in particular that appear in fiscally distressed cities. We seek to expand on these findings by taking a look at how these factors appear among a larger group of fiscally distressed cities. In order to do this, we have constructed a data set of 42 fiscally distressed cities and look at the prevalence of and associations among eight factors related to fiscal distress among the cities in our data set. Building on these findings, we then construct a broader picture of why some cities may file for bankruptcy while others do not, even though they face similar levels of fiscal distress and have similar access to bankruptcy. The framing of this article is in public financial management; therefore we do not review other theoretical frames such as inter-governmental relations/federalism, political economy, macroeconomics, or other tangential fields that would be affected if these municipalities went under water. This article also more concretely identifies prominent contributors to municipal fiscal distress, singling out unfunded pension liabilities, tax and expenditure limits, intergovernmental aid, financial mismanagement and triggering events as key factors that affect many municipalities' fiscal health.

Factors Related to Fiscal Distress

As previously noted, we began by identifying the following set of possible factors that may serve as predictors of municipal insolvency in the United States (Coordes & Reilly, 2017). The factors we identified previously include: access to municipal bankruptcy, intergovernmental aid, tax and expenditure limits, unfunded pension liabilities, fiscal home rule, public sector union density, financial mismanagement, and triggering events.

Access to municipal bankruptcy (AMB). Local governments may only seek Chapter 9 protection if they are located in a state that explicitly authorizes them to file. Although about half of the states specifically authorize their municipalities to file for bankruptcy, many impose conditions on this authorization. Other states are silent with respect to how a municipality may file for Chapter 9; this silence is interpreted as a prohibition on municipal bankruptcy under federal law (Gao, Lee, & Murphy 2019; Maciag 2013). Thus, we surmise

that municipalities in states with restrictive or no authorization for a bankruptcy filing are more likely to seek out a state receivership program or enact reforms on their own instead of taking advantage of the federal bankruptcy solution when available.

Intergovernmental aid (IA). The IA that cities receive from their state affects the degree to which cities can provide vital services to residents and even temporary delays can put a financial strain on cities (Yang 2019b). More cities than ever are facing cuts in this area, meaning that they must find other revenue options to substitute for decreased state aid (Scharff 2016). We therefore surmise that cities receiving lower amounts of aid will, in the absence of alternative options, struggle to fill budget gaps during a fiscal crisis. This may make distressed municipalities more likely to file for bankruptcy provided they are authorized to do so (Gao, Lee, & Murphy 2019).

Tax and expenditure limits (TELS). TELS link restrictions on revenues or spending to either a fixed target or to increases in an index, such as population or inflation. States may also impose other requirements, such as a legislative supermajority or voter approval, on the creation of new taxes. Local governments may even impose their own TELS in some instances (Tax Policy Center 2009). Concrete evidence on whether TELS limit state and local spending is scarce (Gordon 2008), but some research shows that TELS can limit state expenditures when combined with a supermajority requirement to raise taxes (Knight 2000). Nevertheless, we predict that municipalities subject to TELS will have a greater need for federal and state assistance with fiscal crises, particularly when TELS are combined with limitations on state aid and taxing authority.

Unfunded pension liability (UPL). The public pension crisis in the United States is reaching unprecedented proportions and UPLs pose a significant problem for municipalities, as reflected in Senator McConnell's recent remarks (Frum 2020). It has been estimated that unfunded liabilities for pension and retiree health care range anywhere from \$1.2 to over \$4 trillion (Eucalitto 2012; Novy-Marx & Rauh 2011; Pew Charitable Trusts 2012; Rauh 2016). Large UPLs, coupled with unfunded retiree health benefits, have been linked to the likelihood that more municipalities will become insolvent (Lieberman 2013; Reilly 2012; Winegarden 2014).

Fiscal home rule (FHR). Granting FHR powers to a municipality influences the discretion that municipality has to structure its fiscal affairs. Almost all states recognize some form of FHR but the extent of these powers varies depending on the jurisdiction, and some municipalities can legislate without being subject to state intervention (Gillette & Skeel 2015; Kossis 2012). FHR authority does not answer the question of whether a city is authorized to file for bankruptcy. Yet, we predict that municipalities with greater FHR authority will have more options available to overcome distress. As such, these municipalities may not need to seek outside help to deal with their problems.

Public Sector Union Density (PUD). Many studies link unionism and collective bargaining with higher costs of government (cf. Anzia and Moe 2015; Folke, Hirano, & Snyder 2011; Vallenta 1989; Zax & Ichniowski 1988). Hunter and Rankin (1988) suggested that public sector unions' political power has a significant impact on fringe benefits, and other scholars have found an association between collective bargaining and enhanced employee pension coverage (Freeman 1985; Norcross 2011). We predict that local

governments with a higher density of public sector union membership will face more challenges stemming from unsustainable wages and benefits and the limited ability of the municipality to renegotiate collective bargaining agreements.

Financial Mismanagement (FM). FM impacts fiscal insolvency in local governments, and is usually manifested in the town, municipality or special district issuing too much debt (Watson, Handley, & Hassett 2005; Winegarden 2014). Typically, fiscal instability emerges after years of mismanagement and economic decline. We therefore have looked at documentation of poor management of fiscal resources, such as excessive debt issuances, as a contributing factor to municipal distress.

Triggering event (TE). In the past few decades, several high-profile events have led explicitly to a fiscal crisis or bankruptcy (Watson, Handley, & Hassett 2005). For example, public officials in Orange County, California utilized a highly leveraged strategy of derivatives-based speculation that resulted in a loss of \$1.7 billion in the county's portfolio and led to the county filing for bankruptcy (Fudge 2014). In other cases, events were unpredictable and uncontrollable circumstances or events, including industrial accidents, major storms and, most recently, the COVID-19 pandemic, that decimated local and regional economies resulting in fiscal distress (Florida 2020; Miao, Chen, Lu, and Abrigo 2020). Watson, Handley, and Hassett 2005). We therefore looked for documentation of either internal or external events that contributed to the municipality's distress.

Methodology

We first acquired a list of all U.S. cities from the U.S. Census Bureau website and then narrowed down the list to include all cities with populations above 15,000. We then downloaded the data from the Population Estimates spreadsheet in the City & Towns Totals section of the U.S. Census Bureau's American FactFinder. We further narrowed the sample of cities to include only the most recent city and town population estimates from 2014. The list of cities with populations of 15,000 or above included 2246 individual municipalities. These 2246 cities formed the initial sample set from which data would be gathered.

Previous research focuses on the relationship between below investment grade credit ratings on municipal bonds and municipal bankruptcies or state receivership programs (Coordes & Reilly, 2017). In order to construct a larger data set than was used in previous case studies, we elected to use either the existence of a municipal bankruptcy or below investment grade credit ratings on bonds to identify fiscally distressed cities. We obtained a list of municipalities that have filed bankruptcy since the financial crisis of 2008, which yielded 13 relevant municipalities (Dabney et al. 2012). We then compared these 13 cities to the list of 2246 municipalities, noting cities with both a population of 15,000 and a bankruptcy filing in the spreadsheet. Out of the 13 municipal bankruptcies since 2008, 8 cities that had filed also had populations of 15,000 or higher. We used the Electronic Municipal Market Access (EMMA) web database provided by the Municipal Securities Rulemaking Board (MSRB) (2015) to access municipal bond rating data.

We gathered data for each of the 2246 cities above 15,000 people utilizing the following standard criterion for searching the EMMA web-database. We utilized the Advanced Search option to investigate municipal bonds for each of the 2246 cities, making sure that all fields on the web-database search tool were completed uniformly for all cities. We used standard date range where the Dated Date field was filled with the range 01/01/2007 to 5/30/2016. The Security Type field had the option Municipal Bonds and Notes selected. The Source of Repayment field had the option General Obligation selected. The State field was filled in with the state relative to each city's location. In the Issuer Name field utilizing quotation mark search operators around the words, the city's name was entered. We used this standardized method of searching the database 2246 times for each individual city.

Once the database records were found on the website, we manually examined each line was to look at the bond ratings corresponding to municipal bonds issued by the city being reviewed. Bond ratings were reviewed for municipally issued bonds for each of the 2246 cities. Ratings from each of the 4 ratings agencies were consulted: Fitch, KBRA, Moody's, and S&P. Bond issuances with ratings below investment grade were noted for each of the 2246 cities including the 8 cities with bankruptcies since 2008. Fitch, Moody's, and S&P provided the greatest source of ratings for all cities. Occurrences of long-term debt ratings on bonds at or lower than BBB+ or Baa1 on the respective scale were notated in the spreadsheet next to each of the 2246 cities. Once each city was individually reviewed for credit ratings, the list of 2246 cities was condensed to include only those cities above 15,000 in population with bankruptcies or low credit ratings, this yielded a list of 42 cities with populations of 15,000 or higher that have had either municipal bankruptcy filings since 2008 or below investment grade rated bonds since 2007 or both. The same eight factors listed previously were examined in relation to each city. Each factor was then coded in terms of risk of municipal fiscal distress for each city.

To better understand how these municipal factors might present in fiscally distressed cities, we used statistical tests to analyze the association between each of the eight factors outlined above. The Pearson Chi-Square test of association was used. Given the small sample size, and subsequent small cell counts in some of the contingency tables, we also ran a Fisher Exact Test and calculated a Cramer's V to approximate the effect size of significant associations in the analysis. Significant results (determined by p-values less than 0.05) indicate that the two tested factors are not independent and thus associated. The effect size for each statistically significant result is also listed in the findings tables. When we found an association between factors, we then examined the relevant contingency table, paying particular attention to large differences between expected and observed values within cells. These differences allow us to gain more insight into how particular factors might work together to make a city vulnerable to fiscal distress.

Access to Municipal Bankruptcy (AMB)

State policies for granting access to Chapter 9 bankruptcy for municipalities were determined by examining state laws through Westlaw. In addition to reviewing state laws explicitly relating to municipal bankruptcy, other state laws relating to financial policies and practices were examined to obtain a fuller picture of a municipality's access to bankruptcy in any given state. States were then scaled according to the ease with which a municipality may access bankruptcy. States that did not have laws explicitly concerning access to Chapter 9 were deemed not to grant their municipalities access at all, in accordance with 11 U.S.C. § 109(c)(2), which requires explicit state law authorization for bankruptcy. States with no preconditions to accessing bankruptcy were coded low; authorization with any preconditions was coded moderate; and no authorization was coded high. Table 1 compiles the determination for AMB by state.

Intergovernmental Aid (IA)

Parameters for IA, where possible, were determined via state law research on Westlaw. IA expressed as a percentage of total state revenues was obtained from a 2015 report on Cities & State Fiscal Structure compiled by the National League of Cities and confirmed, where possible, via publicly accessible news reports (McFarland & Hoene 2015). When IA as a proportion of total state revenue was greater than 30% the risk factor was coded low, between 20 – 29% moderate, and less than 20% high. Coding was based on the range of IA for all of the states in our sample. Table 1 compiles the determination for IA by state.

Tax & Expenditure Limits (TELS)

State TELS were determined by looking at state statutes and constitutional provisions via Westlaw. Limitations were also confirmed by looking at the website for each state's Department of Revenue as well as a 2015 report on Cities & State Fiscal Structure compiled by the National League of Cities (McFarland & Hoene 2015). A state with no TELS was coded as low; a state with semi-binding TELS, moderate; and a state with binding TELS, high. Coding was based on the convention used in the National League of Cities Report to label TELS as binding or semi-binding (McFarland & Hoene 2015). Table 1 compiles the determination for TELS by state.

TABLE 1: DETERMINATION OF AMB, IA, TELs & UPL BY STATE^a Denotes cities that filed bankruptcy

| CITIES | STATE | AMB | IA | TELs | Percent Pension Liability Funded (2013) |
|---|-------|-----------------------------|-----|--------------|---|
| Albertville, Prichard ^a | AL | Express Authorization | 8% | Non-binding | 66% |
| Glendale | AZ | Express Authorization | 21% | Binding | 72% |
| San Bernardino ^a , Irvine, Vallejo ^a , Stockton ^a | CA | Authorization | 8% | Binding | 72% |
| New Britain, West Haven | CT | Authorization | 39% | No TELs | 48% |
| Coralville | IA | No Authorization/ Silent | 10% | Semi-binding | 81% |
| Bridgeview, Chicago, Lombard | IL | Authorization | 24% | Semi-binding | 39% |
| Hammond | IN | No Authorization/ Silent | 19% | Semi-binding | 65% |
| Covington | KY | Authorization | 5% | Semi-binding | 44% |
| New Orleans ^a | LA | Authorization | 14% | Semi-binding | 58% |
| Baltimore | MD | No Authorization/ Silent | 32% | Non-binding | 65% |
| Allen Park, Detroit ^a | MI | Authorization | 16% | Semi-binding | 60% |
| Ferguson | MO | Express Authorization | 8% | Semi-binding | 77% |
| Pearl | MS | No Authorization/ Silent | 23% | Semi-binding | 58% |
| Atlantic City, Bayonne, Jersey City | NJ | Authorization | 24% | Binding | 63% |
| North Las Vegas | NV | No Authorization/ Silent | 26% | Binding | 69% |
| Glen Cove, Long Beach, Utica, Elmira, Lockport, Niagara Falls, Newburgh, Poughkeepsie | NY | Authorization | 30% | Semi-binding | 89% |
| Massillon, Garfield Heights, Maple Heights, Niles | OH | Authorization | 13% | Semi-binding | 74% |
| Harrisburg ^a , Scranton | PA | Authorization | 22% | Semi-binding | 62% |
| Central Falls, Providence ^a | RI | Effectively Unauthorized | 29% | Semi-binding | 58% |
| Wenatchee | WA | Express Authorization | 9% | Semi-binding | 81% |

Unfunded Pension Liability Ratio (UPL)

A measure that accounted for the UPL ratio of each of the 42 cities was developed using data from the table presented in The Pew Charitable Trusts' report *The State Pensions Funding Gap* (2015). The data from the most recent year (2013) was narrowed down to only the states corresponding to each of the 42 cities being studied. The percentage presented gives the ratio of public sector pension liability in each state that was funded in 2013. States with lower funded ratios therefore had greater ratios of unfunded pension liability and presented greater risk of financial instability. States with a pension funded liability ratio 80% and over were coded low; ratios between 70% and 79% were coded moderate; and those states below 70% were coded high. Table 1 compiles the determination for UPL by state.

Fiscal Home Rule (FHR)

FHR laws were determined by searching the annotated state statutes and constitutional provisions available via the online legal research service, Westlaw. To ascertain limitations on FHR, various publicly available reports were used, including reports from the Citizen Advocacy Center, various municipal leagues, and state websites. When FHR or the ability to raise taxes was available to the municipality the risk was coded low; when few restraints were present, moderate; and a high code was assigned for significant restraints or no FHR availability. The 42 cities with low credit ratings and/or bankruptcies are shown in Table 2, along with the determination on FHR.

Local Government Public Sector Union Density (PUD)

PUD was explored by researching the percentage of government employees in local areas that were unionized. Data was obtained from the most recent year Current Population Survey (CPS) produced by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics. The data from 2014 is from the UnionStats database organized according to Metropolitan Statistical Area (MSA) (Hirsch & Macpherson 2014). Data from 2014 was then narrowed down to include only the relevant MSAs to which the 42 cities studied belonged. These data were then sorted and ranked from greatest to least by the percentage of government workers in unions to give an index of public sector union density for each MSA that includes and surrounds the 42 cities being studied. The percentage for each area was calculated by taking the total number of public sector union members in each MSA and dividing by the total amount of public sector workers per the same MSA. When union membership among public sector workers was less than 30% cities were coded low; between 31% to 50%, moderate; and above 50%, high. PUD determinations are presented in Table 2.

TABLE 2: DETERMINATION OF FHR & PUD^a Denotes cities that filed for bankruptcy

| CITY | STATE | Fiscal Home Rule Re- strictions | PUD (% Membership) |
|-----------------------------|-------|------------------------------------|--------------------|
| Albertville | AL | No | 21.78 |
| Prichard ^a | AL | No | 52.71 |
| Glendale | AZ | Yes | 19.75 |
| San Bernardino ^a | CA | Yes | 54.61 |
| Irvine | CA | Yes | 55.8 |
| Vallejo ^a | CA | Yes | 58.49 |
| Stockton ^a | CA | Yes | 72.83 |
| New Britain | CT | No | 56.56 |
| West Haven | CT | No | 62.74 |
| Coralville | IA | Some | 21.1 |
| Bridgeview | IL | Yes | 56.34 |
| Chicago | IL | Yes | 56.34 |
| Lombard | IL | Some | 56.34 |
| Hammond | IN | No | 56.34 |
| Covington | KY | Yes | 36.4 |
| New Orleans ^a | LA | Some | 9.4 |
| Baltimore | MD | Yes | 34.01 |
| Allen Park | MI | Yes | 55 |
| Detroit ^a | MI | Some | 55 |
| Ferguson | MO | Yes | 37.46 |
| Pearl | MS | Some | 2.79 |
| Atlantic City | NJ | No | 57.16 |
| Bayonne | NJ | Some | 67.86 |
| Jersey City | NJ | Some | 67.86 |
| North Las Vegas | NV | No | 78.62 |
| Glen Cove | NY | Some | 67.86 |
| Long Beach | NY | Some | 67.86 |
| Utica | NY | No | 73.12 |
| Elmira | NY | Some | 74.68 |
| Lockport | NY | Some | 76.73 |
| Niagara Falls | NY | No | 76.73 |
| Newburgh | NY | Some | 73.45 |
| Poughkeepsie | NY | Some | 83.45 |
| Massillon | OH | Some | 38.89 |
| Garfield Heights | OH | Some | 54.73 |
| Maple Heights | OH | Some | 54.73 |

TABLE 2, continued

^a Denotes cities that filed for bankruptcy

| CITY | STATE | Fiscal Home Rule Re- restrictions | PUD (% Membership) |
|-------------------------|-------|--------------------------------------|--------------------|
| Niles | OH | Some | 60.76 |
| Harrisburg ^a | PA | No | 46.41 |
| Scranton | PA | Yes | 54.79 |
| Central Falls | RI | Yes | 64.11 |
| Providence ^a | RI | No | 64.11 |
| Wenatchee | WA | No | 55.43 |

Financial Mismanagement (FM)

Bond issuance reports issued by Fitch, KBRA, Moody's, and Standard & Poor (S&P) were reviewed for any documentation of FM. In addition, documentation of any mismanagement was obtained via journal articles, government reports or news articles. When no documentation was found the factor was coded as low; when there was some evidence, moderate; and when there was evidence that this was major factor, high.

Triggering Event (TE)

Similar to our approach with determining whether FM was a factor in the municipalities' fiscal distress, we reviewed bond issuance reports, journal articles, government reports and news articles to determine whether an internal or external triggering event was a factor. If no triggering event was found the factor was coded as low; if it appeared an event was a contributing factor, moderate; and when there was evidence that there was a major triggering event that contributed to the municipality becoming insolvent, high. The determinations for FM and TE determinations are shown in Table 3.

TABLE 3: DETERMINATION OF FM & TE^a Denotes cities that filed for bankruptcy

| City | State | FM | TE (Factor) | TE Detail |
|-----------------------------|-------|---------------|--------------|--|
| Albertville | AL | Some Evidence | Contributing | Debts exceed revenues |
| Prichard ^a | AL | Major Factor | Major | Multiple bankruptcies, hurricanes, oil spill |
| Glendale | AZ | Major Factor | Major | Sports Arena/Facilities |
| San Bernardino ^a | CA | Major Factor | No Event | |
| Irvine | CA | Major Factor | Major | Park |
| Vallejo ^a | CA | Some Evidence | No Event | |
| Stockton ^a | CA | Major Factor | Major | Ill-timed bond offering |
| New Britain | CT | No Doc. | No Event | |
| West Haven | CT | No Doc. | No Event | |
| Coralville | IA | Major Factor | Major | Sports Arena/Facilities |
| Bridgeview | IL | Some Evidence | Major | Stadium debt |
| Chicago | IL | Major Factor | Contributing | Pension ruling from IL Sup. Ct. |
| Lombard | IL | Some Evidence | Contributing | Public safety pensions |
| Hammond | IN | No Doc. | No Event | |
| Covington | KY | Some Evidence | Contributing | Negative population & labor force growth, finances tied to payroll taxes |
| New Orleans ^a | LA | Major Factor | Major | Hurricane Katrina, Gulf oil spill |
| Baltimore | MD | No Doc. | No Event | |
| Allen Park | MI | Major Factor | Major | Fraudulent bond offerings, movie studio construction |
| Detroit ^a | MI | Major Factor | Contributing | Auto industry relocation |
| Ferguson | MO | Major Factor | Major | Costs associated with police shooting of Michael Brown & DOJ investigation |
| Pearl | MS | Major Factor | Major | Sports Arena/Facilities |
| Atlantic City | NJ | Major Factor | Major | Casinos, budget dependent on state aid |
| Bayonne | NJ | No Doc. | No Event | |
| Jersey City | NJ | Major Factor | No Event | |
| North Las Vegas | NV | Major Factor | Major | City Hall and water treatment facility |
| Glen Cove | NY | Some Evidence | Contributing | Continued deficit operations despite issuing deficit reduction bonds |
| Long Beach | NY | Major Factor | Major | Hurricane Sandy |
| Utica | NY | Major Factor | No Event | |
| Elmira | NY | Some Evidence | Contributing | Financial deterioration, continued deficit operations |
| Lockport | NY | Some Evidence | Contributing | Continued deficit operations |
| Niagara Falls | NY | No Doc. | No Event | |
| Newburgh | NY | No Doc. | No Event | |

TABLE 3:, continued^a Denotes cities that filed for bankruptcy

| City | State | FM | TE (Factor) | TE Detail |
|----------------------------|-------|---------------|--------------|---|
| Poughkeepsie | NY | No Doc. | No Event | |
| Massillon | OH | No Doc. | No Event | |
| Garfield Heights | OH | No Doc. | Contributing | Previously in state of fiscal emergency |
| Maple Heights | OH | No Doc. | Contributing | Declining tax base |
| Niles | OH | Some Evidence | Major | State of fiscal emergency |
| Harrisburg ^a | PA | Major Factor | Major | Garbage incinerator |
| Scranton | PA | Some Evidence | Contributing | |
| Central Falls ^a | RI | Some Evidence | Contributing | High density small city, low SES pop. |
| Providence | RI | Major Factor | No Event | |
| Wenatchee | WA | Some Evidence | Major | Arena debt loan default |

FINDINGS

First, we looked at how prevalent factors were among the 42 cities. Table 4 summarizes the number and percentage of cities that were coded high, moderate, and low respectively for each factor. The factor most prevalent at the high-risk level was public sector union density. Seventy-nine percent of cities had over 50% union membership among public sector employees. The factor least prevalent at the high-risk level was access to municipal bankruptcy. Only seventeen percent of cities were not authorized to file for bankruptcy under state law.

TABLE 4: FACTORS BY RISK LEVEL

| Factor | Number of | Number of | Number of |
|--------------------------------|-------------|-------------|-------------|
| Access to Municipal Bankruptcy | 7 | 30 | 5 |
| Intergovernmental Aid | 18 | 13 | 11 |
| Tax & Expenditure Limits | 9 (21%) | 28 (67%) | 5 (12%) |
| Unfunded Pension Liability | 22 (52%) | 10 (24%) | 10 (24%) |
| Public Sector Union Density | 33 (79%) | 5 (12%) | 4 (10%) |
| Fiscal Home Rule | 12 (29%) | 17 (40%) | 13 (31%) |
| Financial Mismanagement | 19 (45%) | 12 (29%) | 11 (26%) |
| Trigger Event | 16 | 12 | 14 |

In order to better understand how combinations of these factors might present in fiscally distressed cities, we tested the association between each of the factors mentioned above using the classic Pearson Chi-Square test of association. Given the small sample size, and thus the small cell counts in some contingency tables, we also ran a Fisher Exact Test and calculated a Cramer's V to approximate the effect size of significant associations. Significant results (determined by p-values less than 0.05) indicate that the two tested factors are not independent and thus associated. When we found an association between factors, we then examined the relevant contingency table, paying particular attention to large differences between expected and observed values within cells. These differences allow us to gain more insight into how particular factors might work together to make a city vulnerable to fiscal distress. The factors we found to be associated are summarized in Table 5.

Table 5. Significant Associations Between Factors

| Factors | χ^2 | P-Value | Fisher Exact Test | Cramer V |
|---|----------|----------|-------------------|----------|
| Financial Mismanagement X Triggering Event | 28.8609 | 0.00000 | 0.000000 | 0.586159 |
| Unfunded Pension Liability X Fiscal Home Rule | 12.96454 | 0.01145 | 0.005633 | 0.392861 |
| Unfunded Pension Liability X Intergovernmental Aid | 30.49858 | 0.00000 | 0.000000 | 0.60256 |
| Unfunded Pension Liability X Tax & Expenditure Limits | 12.87879 | 0.011883 | 0.014401 | 0.39156 |

The first two factors that we found to be associated were financial mismanagement and triggering events. Table 6 shows the contingency table for these two factors, with the expected value for each cell shown in italics below the observed value. The number in parentheses is the quantified contribution that the difference between the observed and expected values makes to the statistically significant χ^2 value. The largest differences between the observed and expected values are bolded. The largest difference between observed and expected values is for cities for which we found no evidence of mismanagement nor evidence of a triggering event that contributed to fiscal distress.

TABLE 6: Financial Mismanagement x Triggering Event Contingency

| TABLE 6: FM x TE | Triggering Event | Major Factor | Contributing Factor | No Event | Total |
|-----------------------------|---------------------|------------------------------------|-----------------------------------|-----------------------------------|-------|
| Financial Mis-management | Major Documentation | 13 <i>7.23</i> (4.60) | 2 <i>5.43</i> (2.17) | 4 <i>6.33</i> (0.86) | 19 |
| | Some Documentation | 3 <i>4.57</i> (0.54) | 8 3.43 (6.09) | 1 <i>4.00</i> (2.25) | 12 |
| | No Documentation | 0 <i>4.19</i> (4.19) | 2 <i>3.14</i> (0.41) | 9 3.67 (7.74) | 11 |
| | Total | 16 | 12 | 12 | 42 |

The second set of factors that we found to be associated were unfunded pension liabilities and fiscal home rule. Table 7 shows the contingency table for these two factors, with the expected value for each cell shown in italics below the observed value. The number in parentheses is the quantified contribution that the difference between the observed and expected values makes to the statistically significant X^2 value. The largest differences between the observed and expected values are bolded. Among cities with minimal or no restrictions on FHR (low risk), we see fewer cities than expected with a low percentage of UPL and more cities than expected with a moderate percentage of UPL. Among cities with some restrictions on FHR (moderate risk), we see more cities than expected with a low percentage of UPL. Among cities with serious restrictions on FHR (high risk), we see fewer cities than expected with a moderate percentage of UPL and more cities than expected with a high percentage of UPL. This pattern indicates that some restrictions on FHR may actually be more beneficial in terms of protecting cities from large UPLs, while no or minimal restrictions and serious restrictions respectively may actually make cities more vulnerable to this particular factor related to fiscal distress.

Table 7: Unfunded Pension Liability x Fiscal Home Rule Contingency Table

| | | Fiscal Home Rule | | | |
|-------------------------------|---------------|--|-----------------------------------|--|-------|
| | | High Risk | Moderate Risk | Low Risk | Total |
| Unfunded Pension Liability | High Risk | 9 <i>6.29</i> (1.17) | 6 <i>8.90</i> (0.94) | 7 <i>6.81</i> (0.01) | 22 |
| | Moderate Risk | 0 <i>2.86</i> (2.86) | 4 <i>4.05</i> (0.00) | 6 <i>3.10</i> (2.71) | 10 |
| | Low Risk | 3 <i>2.86</i> (0.01) | 7 <i>4.05</i> (2.14) | 0 <i>3.10</i> (2.71) | 10 |
| | Total | 12 | 17 | 13 | 42 |

The third set of factors that we found to be associated were unfunded pension liabilities and intergovernmental aid. Table 8 shows the contingency table for these two factors, with the expected value for each cell shown in italics below the observed value. The number in parentheses is the quantified contribution that the difference between the observed and expected values makes to the statistically significant χ^2 value. The largest difference between the observed and expected values is bolded. Among cities who receive 30% or more in IA (low risk), we see many more cities than expected with a low percentage of UPLs. Interestingly, among cities with less than 20% IA (high risk), we see more cities than expected with a moderate percentage of UPLs, but not with a high amount of UPL. Among cities with 20% - 29% of IA (moderate risk), we see a higher than expected number of cities with a high percentage of UPLs. Unlike FHR restrictions, maximizing the amount of IA available to municipalities might have a positive effect in terms of reducing the amount of UPLs.

| | | Intergovernmental Aid | | | |
|----------------------------|---------------|-----------------------|---------------|----------------|-------|
| | | High Risk | Moderate Risk | Low Risk | Total |
| Unfunded Pension Liability | High Risk | 7 | 12 | 3 | 22 |
| | | <i>9.43</i> | 6.81 | <i>5.76</i> | |
| | | (0.63) | (3.96) | (1.32) | |
| | Moderate Risk | 9 | 1 | 1 | 10 |
| | | <i>4.29</i> | <i>3.10</i> | <i>2.62</i> | |
| | | (5.17) | (1.42) | (1.00) | |
| | Low Risk | 2 | 0 | 8 | 10 |
| | | <i>4.29</i> | <i>3.10</i> | 2.62 | |
| | | (1.22) | (3.10) | (11.05) | |
| Total | 18 | 13 | 12 | 42 | |
| | | | | | |
| | | | | | |

The last set of factors that we found to be associated were unfunded pension liabilities and tax and expenditure limits. Table 9 shows the contingency table for these two factors, with the expected value for each cell shown in italics below the observed value. The number in parentheses is the quantified contribution that the difference between the observed and expected values makes to the statistically significant χ^2 value. The largest differences between the observed and expected values are bolded. Among cities that have non-binding TELs (low risk), we see more cities than expected with a high percentage of UPL. Among cities with semi-binding TELs (moderate risk), we see more cities than expected with a low percentage of UPL. Among cities with binding TELs (high risk), we see more cities than expected with a moderate percentage of UPL, but fewer cities than expected with a low percentage of UPL. Like the pattern found in the FHR analysis, this pattern indicates that semi-binding TELs may actually be more beneficial in terms of protecting cities from large UPLs, while no or minimal restrictions and serious restrictions respectively may actually make cities more vulnerable to this particular factor associated with fiscal distress.

Table 9: Unfunded Pension Liability x Tax & Expenditure Limits Contingency

| | | Tax & Expenditure Limits | | | |
|----------------------------|---------------|----------------------------|------------------------------|----------------------------|-------|
| | | High Risk | Moderate Risk | Low Risk | Total |
| Unfunded Pension Liability | High Risk | 4 <i>4.71</i> (0.12) | 13 <i>14.67</i> (0.19) | 5 <i>2.62</i> (2.17) | 22 |
| | Moderate Risk | 5 <i>2.14</i> (3.82) | 5 <i>6.67</i> (0.42) | 0 <i>1.19</i> (1.19) | 10 |
| | Low Risk | 0 <i>2.14</i> (2.14) | 10 <i>6.67</i> (1.66) | 0 <i>1.19</i> (1.19) | 10 |
| | Total | 9 | 28 | 5 | 42 |

In addition to examining associations between factors, we were also interested in how factors might differ between fiscally distressed cities that filed for bankruptcy and those that did not. First, we excluded the seven cities that did not have access to municipal bankruptcy under state law from these analyses. This left us with a total of 35 cities of which seven filed for bankruptcy and twenty-eight did not. We then tested the association between each of the factors and bankruptcy filing status using the classic Pearson Chi-Square test of association. Given the small sample size, and thus the small cell counts in some contingency tables, we also ran a Fisher Exact Test and calculated a Cramer's V to approximate the effect size of significant associations. Significant results (determined by low p-values) indicate that the tested factor and bankruptcy filing status are not independent (and thus associated). When we found an association between factors we then examined the relevant contingency table, paying particular attention to large differences between expected and observed values within cells. These differences allowed us to gain more insight into how the presence of particular factors might relate to the use or avoidance of bankruptcy as a way of responding to fiscal distress. The factors we found to be associated are summarized in Table 10.

TABLE 10: SIGNIFICANT ASSOCIATIONS BY FILING STATUS

| Factors | χ^2 | P-Value | Fisher Exact Test | Cramer V |
|---|----------|----------|-------------------|----------|
| Intergovernmental Aid X Filing Status | 6.006944 | 0.049614 | 0.046244 | 0.414279 |
| Financial Mismanagement X Filing Status | 6.818182 | 0.033071 | 0.040862 | 0.441367 |

One factor that we found to be associated with filing status was IA. Table 11 shows the contingency table for these two factors, with the expected value for each cell shown in italics below the observed value. The number in parentheses is the quantified contribution that the difference between the observed and expected values makes to the statistically significant χ^2 value. The largest differences between the observed and expected values are bolded. More filing cities than expected received less than 20% in IA (high risk). None of the cities that filed received more than 30% in IA (low risk), indicating that receiving comparatively little aid might increase the likelihood that a distressed city files for bankruptcy under certain circumstances.

Table 11: Intergovernmental Aid by Filing Status Contingency

| | | Bankruptcy Filing Status | | |
|-----------------------|---------------|---------------------------|----------------------|-------|
| | | Bankruptcy | No Bankruptcy | Total |
| Intergovernmental Aid | High Risk | 6 3.2 (2.45) | 10 12.8 (0.61) | 16 |
| | Moderate Risk | 1 2.8 (1.16) | 8 7.2 (0.09) | 9 |
| | Low Risk | 0 2 (2) | 10 8.0 (0.5) | 10 |
| | Total | 7 | 28 | 35 |

The other factor that we found to be associated with filing status was FM. Table 12 shows the contingency table for these two factors, with the expected value for each cell shown in italics below the observed value. The number in parentheses is the quantified contribution that the difference between the observed and expected values makes to the statistically significant χ^2 value. The largest differences between the observed and expected values are bolded. We found more cities with significant evidence of mismanagement than expected file for bankruptcy. None of the filing cities fell into our “no documentation” group, indicating that significant financial mismanagement may make distressed cities more likely to file for bankruptcy.

Table 12: Financial Mismanagement x Filing Status Contingency

| | | Bankruptcy Filing Status | | |
|-------------------------|----------------------|--------------------------|---------------------|-------|
| | | Bankruptcy | No Bankruptcy | Total |
| Financial Mismanagement | Significant Evidence | 6 3.0 (3.0) | 9 12.0 (0.75) | 15 |
| | Some Evidence | 1 2.2 (0.65) | 10 8.8 (0.16) | 11 |
| | No Documentation | 0 1.8 (1.8) | 9 7.2 (0.45) | 9 |
| | Total | 7 | 28 | 35 |

Discussion

Our findings show that the most prevalent factors among fiscally distressed cities in our sample are Public Sector Union Density (PUD) and Unfunded Pension Liability (UPL), listed as high as 76% and 52% respectively. Financial Mismanagement (FM) (listed high by 45% of the sample) and Intergovernmental Aid (IA) (as a proportion of total state revenues) followed these two factors by 43%. At least one of the two most prevalent factors were a major contributor in all but three of the cities in our sample; and at least one of the four top factors was evident in all but one of the sample cities. It is worth noting that Unfunded Pension Liability and Financial Mismanagement are also two of the concerns Senator Mitch McConnell explicitly raised during discussions about providing federal aid to states experiencing fiscal distress in the wake of the COVID-19 pandemic (Frum 2020). The prevalence of these factors among the distressed cities lends some credence to Senator McConnell's concerns.

Additionally, both FM and UPL were significantly associated with other factors prevalent among sampled cities. It was not surprising that UPL was associated with the degree to which a city had some form of Fiscal Home Rule (FHR), the amount of IA available, and the type of TELs imposed on cities. Access to state aid and/or the ability to raise revenue can be critical in responding to these exploding municipal costs (Gao, Lee, & Murphy 2019; Yang 2019b). Our analyses show that IA may be especially important for fiscally distressed cities considering bankruptcy, given the association between low levels of aid and filing for bankruptcy.

State and local governments are facing huge pension and retiree healthcare obligations that have significantly contributed to their financial woes. Increasingly, financially strapped municipalities are eyeing bankruptcies and state intervention programs in an effort to discharge or reduce their public pension, wage, and benefit obligations. Pension and healthcare costs for retirees have risen faster than inflation for several reasons.

Retirees are living longer than ever, low interest rates have sharply cut the returns on pension funds used to pay benefits, and many of the promises made to public employees are not sustainable. As a result, many jurisdictions are struggling to make payments into these systems, leaving less each year to spend on essential governmental services. The Great Recession was not the chief cause of the pension and retiree healthcare problem, although it chipped away at the value of investments. In some cases, state and local governments have diverted scarce money away from paying their full share of pension costs and toward addressing more immediate concerns. When governments fall behind on their retirement contributions, they must find even more money later to make up the difference (Reilly 2012). In this way, short-term funding gaps add up to create long-term problems that may be exacerbated by unanticipated and unavoidable events like the current COVID-19 crisis.

It has taken years of discussion to determine how best to account for government pension systems' growing unfunded liabilities. In 2012, the Government Accounting Standards Board (GASB), which sets the public sector's accounting standards, discovered a loophole in these standards that allowed public agencies to exclude unfunded pension and retiree health care liabilities from their official accounting statements. These updated standards were adopted in an attempt to be more transparent and provide more information for policymakers. GASB should have required the reporting of these unfunded liabilities for the past three decades but failed to do so. Effective June 30, 2015, public agencies across the nation were forced to bring their unfunded pension liabilities onto the books and include these large negative balances for purposes of calculating their "net position"—perhaps the best single indicator of a public agency's overall financial position. State and local governments are now required to post their net pension liability—the difference between the projected benefits payments and the assets set aside to cover those payments—on financial statements (Lambert & Byrnes 2012). The net position for public agencies took another large hit in 2017, when they were forced to bring liabilities related to retiree health care and "other post-employment obligations" (OPEB) onto the books.

Seven states protect public pensions in their constitutions, and five of those seven (Arizona, Illinois, Louisiana, Michigan, and New York) turned up repeatedly in our sample. Strong constitutional pension protections have been upheld by state courts, including by the Illinois Supreme Court as recently as March 2016. When pensions cannot be changed even through the legislative process, cities may be helpless to dig themselves out of the financial problems caused by unfunded pension liabilities. Cities located in states with mandatory pension increases or a strong union presence are often faced with unsupportable obligations.

Poor financial management will only serve to exacerbate the aforementioned conditions, particularly when cities that are already fiscally vulnerable experience triggering events (Watson, Handley, and Hassett 2005). The association between triggering events and financial mismanagement suggests that these two factors may be interrelated. Financial mismanagement may contribute to trigger events in cases where municipal officials knowingly make risky financial decisions. As risky investments or initiatives progress, they

may continue to stress the economic resources of the municipality until they culminate in a triggering event. While some events that directly or indirectly contribute to insolvency involve financial mismanagement, in other cases years of mismanagement may leave cities more economically vulnerable when unpredictable events like hurricanes or industrial accidents occur (Miao, Chen, Lu, and Abrigo 2020). These events are not caused by risky financial decisions, but they may then serve as a catalyst that pushes the city from a vulnerable position into one of serious fiscal distress. It is also worth noting, that among distressed cities in this study, more cities than expected that filed for bankruptcy had significant evidence of mismanagement. It is possible that mismanagement occurs when municipal officials have fewer options (IA, TELs, etc.) to deal with economic issues, thereby increasing the likelihood of bankruptcy. For this reason, we stress that all key factors should be monitored in order to avoid fiscal distress and, when distress occurs, resolving issues with a focus on these factors ought to be a central consideration.

Our analysis also indicates the incredible variance in the forms of municipal fiscal distress, as well as the multitude of ways that states and cities have sought to address this distress. A close examination of the cities and towns included in our sample reveals new insights about the extent to which myriad factors interact to produce local government distress, causing a municipality to seek out external relief mechanisms.

Bankruptcy, a mechanism utilized by some of the municipalities in our sample, can provide some forms of relief, but it does not always serve cities well. For example, bankruptcy typically does not resolve problems related to governance and fiscal mismanagement. Additionally, although some judges have ruled that pension obligations can be modified in bankruptcy, most municipalities have been reluctant to use bankruptcy to reform their pension systems. Perhaps the federal bankruptcy system's greatest strength when it comes to addressing fiscal distress is the power it gives municipalities to non-consensually renegotiate contracts. This power may be most useful in cities where union density is high and unions are likely to put up strong resistance to changes to their contracts and benefits. Given the prevalence of the high union density factor in the sample cities, it may be beneficial for more distressed municipalities to consider bankruptcy as a targeted option to address problems related to union contracts. Yet, previous research indicated that strong unions can continue to play a powerful role in a bankruptcy case and may ultimately block or delay needed reforms.

Municipal bankruptcy is not the only option for cities in fiscal distress, however, and most municipalities utilize state intervention programs rather than Chapter 9. Existing cases studies indicated that these state programs are not a panacea and can themselves be limited by many factors, including openness to state involvement in municipal affairs, the state's fiscal position, and the history of the state's relationship with its municipalities (Coordes & Reilly, 2017). In the current study, we examined whether there was an association between each factor and bankruptcy filing status for fiscally distressed cities with legal access to Chapter 9. We found associations between intergovernmental aid and filing status and financial mismanagement and filing status respectively. Like bankruptcy, state receiverships and intervention programs do not provide a complete solution to municipal fiscal distress. In all, the expanded data set we used for this study allowed us to

more broadly test the conclusions reached in previous case studies. The results from this study largely bolster those conclusions (Coordes & Reilly, 2017), while identifying new and important relationships among the factors that warrant further attention from policymakers and government officials.

In light of this discussion, it is important to consider limitations to this study. First, the survey sample focused on municipalities over 15,000. Although this data set is significantly expanded from our previous work, it still does not cover the multitude of smaller municipalities or the experience of other municipal entities, such as special taxing districts, water authorities, and the like. Additionally, by relying on publicly available information, such as reports and news articles, we were necessarily receiving an incomplete picture of the true impact of these factors on municipal decision-making. Finally, given the idiosyncratic nature of municipal government, we have not been able to account for all of the factors that contribute to municipal fiscal distress, despite our efforts to be as comprehensive as possible. Nevertheless, this research offers important insight into possible predictors of municipal fiscal distress in the United States, as well as which factors may be working together to consistently produce poor outcomes for cities and towns.

Thus, in this article, we have identified many factors that, working separately and together, contribute to municipal fiscal health. Many of these factors are not adequately addressed by existing relief mechanisms. This article significantly expands upon our previous work to identify connections among these factors within a larger subset of municipal entities. Further research is needed into how federal, state, and local policies should be crafted to address these factors on a larger scale. Using the information in this article, policymakers can focus on creating forms of relief, beyond those that currently exist, to address the underlying causes of municipal distress more completely.

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