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Statement of Purpose

The *Journal of Public and Nonprofit Affairs* (*JPNA*) focuses on providing a connection between the practice and research of public affairs. This is accomplished with scholarly research, practical applications of the research, and no fees for publishing or journal access. *JPNA* publishes research from diverse theoretical, methodological, and disciplinary backgrounds that address topics related to the affairs and management of public and nonprofit organizations.

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Introduction to the Issue

Robert J. Eger, III – Naval Postgraduate School

The publication of this issue marks a new era for the *Journal of Public and Nonprofit Affairs* as we move towards publishing three issues each year. The ability to expand the number of issues we publish would not be possible without the interest from readers, the submission of quality research from authors, and the willingness of reviewers to provide feedback on those submitted manuscripts. For all of your help and support, thank you.

In this issue we have published four research articles that span the range of public affairs. In the first piece, Lee and Clerkin (2017) looks at why nonprofit organizations adopt outcome measures. Using a survey of 263 human service nonprofits, they find that nonprofits are more likely to adopt measures when they are more risk-taking, influences by institutional pressures, and have more human resource and political capabilities. Bland's (2017) article looks at the process side of network effectiveness, focusing on process-related divergence at the street level. Using a sample of social welfare networks in Virginia, Bland shows that participation in a network may result in a sense-making challenge for street-level participants. This allows for the conclusion that those at the managerial and street levels must ensure a collective or shared understanding of how their networks should operate.

Taylor, Faulk, and Schaal (2017) look at the effectiveness of state policies to change local government structures by considering the successes and failures of Indiana's Government Modernization Act. Although public support overwhelmingly backed town-township consolidation, city-county consolidation was defeated. Using a comparative case study, Taylor et al. find that greater demographic diversity and the potential for large shifts in costs from urban to rural customers stimulated opposition to consolidations. In the final research article, Feng and Neely (2017) considers the use of going concern opinions in local governments. The opinions indicate an auditors doubt about a governments ability to continue operation and that they are most often cited for deficiency in funds and losses or declines in revenue. They also find evidence that going concern disclosures improve after the enactment of GASB No. 56.

We are also proud to publish our second survey article, *Research of the Effects of Limitations on Taxes and Expenditures*, by Stallmann, Maher, Deller, and Park (2017). In the piece, Stallmann et al. review the literature on TELs at both the state and local level to provide of their theoretical, operational, and empirical contexts. By providing an overview of the state of the field, the work provides a foundation of understanding for academics conducting research on tax issues and practitioners engaged in the policy process. The culmination of the piece is the establishment of a research agenda for future work being conducted on TELs.

In our section "Current Issues in Practice", we provide a piece from Semeah, Campbell, Cowper, and Peet (2017) on barriers to health care access for veterans. The efforts of the Department of Veterans Affairs to end veteran homeless have been met with some success, but it has also produced safety concerns when providing home-based services. Included in these concerns are threats of violence towards health care workers. In their study, Semeah et al. Discuss how these concerns act as a barrier to services and hinder access to optimal patient outcomes. They find that 70% of home-based service providers have been exposed to violence and aggression, allowing them to conclude that we need to study how to overcome the barriers that are created by this treatment as we move towards eradicating veteran homelessness.

Eger, R. J. (2017). Introduction to the issue. *Journal of Public and Nonprofit Affairs*, *3*(2), 109-110. doi:10.20899/jpna.3.2.109-110

We are also pleased to offer two book reviews. Stutts (2017) provides a review *Philanthropy in Democratic Societies: History, Institutions, Values* by Rob Reich, Chiara Corelli, and Lucy Bernholz. In her review, Stutts notes that the intent of the book is to expand the discussion on philanthropy, allowing it to cross disciplinary lines, and that the text would serve well as an introductory resource for those looking to improve their understanding of philanthropic studies. In the second review of this issue, Vonasek (2017) looks at Shayne Kavanagh and Daniel William's recent text, *Informed Decision-Making through Forecasting: A Practitioner's Guide to a Government Review Analysis*. The book serves as a guide or "how to" book on budgeting, to which Vonasek concludes that it is essential reading for both academics and practitioners engaged in the budgetary process.

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Research Article

The Adoption of Outcome Measurement in Human Service Nonprofits

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Performance measurement has received increasing attention in the nonprofit sector. While the current scholarship has emphasized the balanced use of performance measures, only a limited number of nonprofits have adopted outcome measurement. In this study, we investigate what factors explain a variation in the adoption of outcome measurement based on survey data from 263 human service nonprofits. The results of logistic regression find that human service nonprofits are more likely to adopt outcome measures when they are more risk-taking, influenced by institutional pressures, and have higher human resource and political capacities.

Keywords: Outcome Measurement, Performance Evaluation, Nonprofit Organizations

Performance measurement has received growing academic and practitioner attention in the nonprofit sector due to increasing emphasis on accountability in nonprofits' funding and competitive pressures within the sector (Cairns, Harris, Hutchison, & Tricker, 2005; Ebrahim & Rangan, 2010; Lee & Nowell, 2015; Moxham, 2009). Furthermore, according to a survey of public charity and private foundation employees conducted by McLean and Brouwer (2010), about 40% of respondents answered that the total contributions to their organizations decreased in 2010 compared with the previous year. In response to these pressures, performance measurement in the nonprofit sector has been increasingly emphasized as a way to document an organization's impact to funders as they compete for a shrinking pool of resources.

Scholars have developed a variety of performance measurement tools for nonprofit organizations (Lee & Nowell, 2015). One way to measure performance is through a logic model, which is defined as "a tool used to help identify the linkage between program activities and outputs to desired outcomes" (Hatry, Lampkin, Morley, & Cowan, 2003, p. 3). Using a logic model, organizations can conceptualize their performance as inputs, processes, outputs, and outcomes. Inputs refer to the financial, human, organizational, and community resources that go into programs. Processes are the program activities conducted using the inputs. Outputs refer to the products or services directly produced through program activities, which are typically measured by the number of people served, frequency of services provided, number of goods transferred to the clients, and so on. Last, outcomes are the substantial changes, benefits, or values resulting from the programs and services, which are generally measured by the program participants' modified behaviors, improved living conditions, and the increased skills or knowledge of people served (Ebrahim & Rangan, 2010; Lee & Nowell, 2015; Taylor-Powell & Henert, 2008; W.K. Kellogg Foundation, 2004).

In particular, outcome measurement has become important. Bohte and Meier (2000) highlight that the absence of outcome measures deprives organizations of important information about their effectiveness. Lack of systematic and thoughtful data collection can produce goal displacement because nonprofits may focus on generating easily measureable data or figures that please stakeholders, rather than accomplishing the more meaningful, but more difficult to measure outcomes. If nonprofits use only output measures, they may single-mindedly focus on

Lee, C., & Clerkin, R. M. (2017). The adoption of outcome measurement in human service nonprofits. *Journal of Public and Nonprofit Affairs, 3*(2), 111-134. doi:10.20899/jpna.3.2.111-134

achieving outputs, neglecting the longer-term performance measured by outcomes (Bohte & Meier, 2000). This form of goal displacement can result in mission drift, which is defined as "a diversion of time, energy, and money away from a nonprofit's mission" (Jones, 2007, p. 300). Outcome measurement is considered as a key to accountability in the nonprofit sector (Moxham, 2009).

The pressure to adopt outcome measurement systems is particularly acute for human service nonprofits. Most human service nonprofits receive funding from federal and state governments but function outside a system of government. Accordingly, diverse mechanisms to assure proper accountability of human service nonprofits have received increasing attention (Dicke, 2002; Dicke & Ott, 1999; Kim, 2005; Salamon, Sokolowski, & Sturza, 1999). In particular, human service nonprofits have increasingly adopted outcome measurement because outcome information is required in many grantmaking processes (Carrilio, Packard, & Clapp, 2004; Horsch, 1996; Julian & Clapp, 2000). Human service nonprofits face additional challenges because of complex accountability relationships with multiple stakeholders who have diverse, often conflicting, outcome expectations (Kim, 2005). Thus, more scholarly efforts are required in the outcome measurement of human service nonprofits to address this challenge.

However, most nonprofits prefer output measures to outcome measures (Wiener, Kirsch, & McCormack, 2002). One reason seems to be the assumption that measuring outcomes is too expensive and too slow to provide quick feedback about an organization's performance (Moore, 2003; Moxham, 2009). In this regard, only a limited number of nonprofits have adopted outcome measurement, and, correspondingly, several researchers have reported a variation in the adoption of outcome measurement (e.g., Barman & MacIndoe, 2012; Carman, 2007; Carman & Fredericks, 2008; Eckerd & Moulton, 2010; Thomson, 2010). To date, however, limited scholarship attention has been paid toward the reasons for this variation. Hence, in this study, we examine what leads nonprofits to adopt outcome measurement, and whether they report collecting data for specific outcome measures relevant to human services nonprofits. How and whether they use this data is beyond the scope of this study.

To help answer this question, we pull from three theory bases—agency theory, institutional theory, and organizational capacity—to explore potential causes for variation in the adoption of outcomes measurement by human service nonprofits. In the balance of this article, we will briefly review agency theory, institutional theory, and studies of organizational capacity to develop testable hypotheses about factors that can influence the adoption of outcome measurement by human service nonprofits. Then, we will explain the methods we use to test the hypotheses, outline key findings, and discuss the results. Finally, we will close with the implications, limitations, and contributions of our research.

Theoretical Development

Agency Theory

Agency theorists have sought to understand organizational behaviors in light of a principal–agent relationship. Their approach is based on the premise that principals and agents place greater value on their own personal gains rather than on collective goals. Correspondingly, goal conflict between principals and agents is assumed. Various incentives and sanctions for resolving the conflict and achieving goal alignment have been discussed, and redistributing (or transferring) risk between principal and agent is one of them (Davis, Schoorman, & Donaldson, 1997; Eisenhardt, 1989; Van Slyke, 2007).

In addition, agency theory postulates that the principal has imperfect information, thus not knowing exactly what the agent is doing or has done and cannot determine if the agent's behaviors are appropriate. Further, it is assumed that the agent uses this information asymmetry for its own interests, which results in opportunism (Benjamin, 2008; Eisenhardt, 1989; Van Slyke, 2007). To deal with this agency problem, the principal has two options. The first is developing an information system to reveal and control the agent's behaviors; the second is contracting on the "outcomes of the agent's behavior." Because the first option is outside the scope of our study, we focus on the second option. Principals can align the agents' interests and preferences with theirs via an outcome-based contract, "but at the price of transferring risk to the agent" (Eisenhardt, 1989, p. 61). Contracting on outcomes means that the agents are responsible for outcomes, which signifies the agents accept the risk. Accordingly, when the agents are more risk averse, they are less willing to use an outcome-based contract (Benjamin, 2008; Eisenhardt, 1989). Further, agents using an outcome-based contract would be extrinsically motivated to accomplish the outcomes in order to maximize its gains (Amaratunga & Baldry, 2002; Tornow, 1993). In brief, agency theory suggests that risk-taking nonprofits are more likely to use outcome based contracts, and these nonprofits are more likely to adopt outcome measurement. It is thus theoretically reasonable to expect a negative relationship between risk aversion and the adoption of outcome measurement.

> *H_1: Risk aversion of nonprofit organizations is negatively associated with the adoption of outcome measurement.*

Institutional Theory

Institutional theory holds that organizations seek to obtain legitimacy because it enhances organizational growth and survival by providing means to acquire various resources such as capital, human resources, technology, and networks (Aldrich & Fiol, 1994; Dart, 2004; Eckerd & Moulton, 2010; Meyer & Rowan, 1977; Zimmerman & Zeitz, 2002; Zucker, 1987). In this regard, Dart (2004) argues that institutional theory is "built around the concept of legitimacy" (p. 415). According to Suchman (1995), legitimacy is defined as "a generalized perception or assumption that the actions of an entity are socially desirable, proper or appropriate within some socially constructed system of norms, value, beliefs and definitions" (p. 574). Literature highlights that organizations can obtain the legitimacy by achieving conformity with institutional isomorphic pressures, which include coercive, mimetic, and normative isomorphism (e.g., Dart, 2004; Frumkin & Galaskiewicz, 2004).

According to DiMaggio and Powell (1983), coercive isomorphism stems from "both formal and informal pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function" (p. 150). Resource providers of nonprofits may mandate outcome measurement in the grant-making process. For example, many local United Ways require the nonprofits they fund to measure outcomes (Julian & Kombarakaran, 2006; MacIndoe & Barman, 2012). The mandates from higher authorities may provide nonprofits with an impetus for adopting outcome measurement. In consideration of this line of thought, we expect:

> *H_2: Program funding tied to mandatory outcome measurement is positively related to the adoption of outcome measurement.*

In addition to coercive isomorphism, organizations can enhance their legitimacy by conforming to mimetic pressures. Organizations tend to imitate other organizations' behaviors or practices, which are perceived to be successful when technologies are not well-defined, when goals are unclear, or when their organizational environment is uncertain (DiMaggio & Powell, 1983; Haveman, 1993). When organizations perceive that other organizations become successful by adopting some practices (e.g., performance measurement practices), the perceptions may engender “legitimacy concerns among remaining non-adopters,” which motivates them to imitate the early adopters’ behaviors (Westphal, Gulati, & Shortell, 1997, p. 371). “Even if the change is only *pro forma*” (Bolman & Deal, 1991, p. 278), the imitating behavior makes the organizations look proactive, modern, and responsive, which legitimizes them (Roy & Seguine, 2000). By following this line of logic, we expect:

> *H_{3a}: Mimetic pressure from the other organizations in the same field adopting outcomes measurement positively influences an organization’s adoption of outcome measurement.*

In addition, risk aversion may influence the relationship between mimetic isomorphism and the adoption of outcome measurement. As previously hypothesized, mimetic pressure may be positively related to the adoption of outcome measurement. Further, when nonprofits are highly risk averse, the probability of imitation may be increased. According to Lieberman and Asaba (2006), mimetic behavior mitigates risk for any given organization “while raising the risk of failure for those that did not follow” (p. 367). Similarly, Knickerbocker (1973) argues that risk minimization leads to “follow the leader” behavior. When organizations adopt similar practices, there is little chance of a certain organization’s success or failure relative to others. Although differentiation may lead to organizational success, as organizations are more risk averse, they would be more likely to want to look like other organizations rather than look different, which can be highly risky (Lieberman & Asaba, 2006). It is thus reasonable to predict:

> *H_{3b}: Risk aversion has a positive interaction on the relationship between mimetic isomorphic pressure and the adoption of outcome measurement.*

As described in the previous paragraph, we expect that mimetic isomorphism is positively related to the adoption of outcome measurement. Additionally, institutional theorists assume that organizations imitate the others’ behaviors or practices in response to uncertainty. To put it another way, they deal with the uncertainty by modeling themselves after other organizations in the same field (DiMaggio & Powell, 1983; Ellis & Shpielberg, 2003). Consistent with this, Mizruchi and Fein (1999) find that organizations choose to mimic a successful organization when they face an uncertain situation, and DiMaggio and Powell (1983) highlight that uncertainty is a force encouraging imitation. In other words, when an organizational environment creates an uncertainty, it may reinforce other organizations’ mimetic behaviors, which may include the adoption of outcome measurement. Therefore, we expect:

> *H_4: Uncertainty has a positive interaction on the relationship between mimetic isomorphic pressure and the adoption of outcome measurement.*

Normative isomorphism results from professionalism, which is defined as “collective struggle of members of an occupation to define the conditions and methods of their work” (DiMaggio & Powell, 1987, p. 152). Nonprofits, which historically are characterized as amateurish, have been strongly affected by expanded professionalization in contemporary society (Hwang & Powell, 2009; Karl, 1998). Nonprofit organizations may learn about the importance of outcome measurement and share its value through the processes of professionalization. Two mechanisms have been discussed in the literature as the main sources of the professionalism. One is the development of organizational norms by universities and other education institutions. A second is diffusion of the norms and values through professional networks or trade associations

(Barman & MacIndoe, 2012; DiMaggio & Powell, 1987; Fligstein, 1985; Hwang & Powell, 2009; Mizruchi & Fein, 1999; Radaelli, 2000). These processes of professionalization may form a normative pressure for measuring outcomes, which motivates nonprofits to adopt outcome measurement. It is thus theoretically reasonable to expect:

> *H_{5a}: Professionalism is positively associated with the adoption of outcome measurement.*

Further, the positive relationship between professionalism and outcome measurement assumed above may depend on the organization's attitude toward risk. Risk-adverse organizations might be less responsive to the normative pressure for outcome measurement resulting from professionalization. Professionalization may involve organizational changes (e.g., filtering of personnel, restructuring) in the process of developing and promulgating organizational norms regarding professional practices and behaviors (DiMaggio & Powell, 1987). As Greve (1998) noted, the changes may involve risk. In particular, in human service organizations, organizational members may fear that their jobs would be threatened if they do not meet performance goals or because they would not be able to adapt to newly adopted practices to improve performance (Proehl, 2001). Accordingly, when organizations are more risk averse, they are less willing to make the organizational changes even in the face of professionalization pressures. By following this line of logic, we expect:

> *H_{5b}: Risk aversion has a negative interaction on the relationship between professionalism and the adoption of outcome measurement.*

Organizational Capacity

Following Eisinger (2002), we define organizational capacity as "a set of attributes that help or enable an organization to fulfill its missions" (p. 117). There has been significant scholarship aimed at understanding the effects of organizational capacity on performance measurement and management (e.g., Barman & MacIndoe, 2012; Berman & Wang, 2000; Franklin, 2002; Jordan & Hackbart, 1999; MacIndoe & Barman, 2012; Melkers & Willoughby, 2005). Jordan and Hackbart (1999) find that organizational capacity significantly influences the use of performance measures for budgeting and funding. Consistent with this, Berman and Wang (2000) suggest that the success of performance measurement depends on organizational capacity for undertaking performance measurement. In particular, the authors find that technical capacity and political capacity are significantly related to the breadth and depth of performance measurement. Their research is corroborated by Barman and MacIndoe (2012) arguing that organizational capacity is a vital component of outcome measurement. Their findings indicate that administrative capacity and technical capacity are significant predictors of the adoption of outcome measurement. To summarize, a wide array of literature highlights that organizational capacity is vital to successful performance measurement.

While many prior studies have addressed how organizational capacity is related to overall system of performance measurement, we focus on outcome measurement as a specific type of performance measurement. Further, given that outcome measurement has become increasingly important in human service nonprofits, as elaborated in the following section, it is important to explore the relationship between organizations' capacities and the adoption of outcome measurement, specifically in human service nonprofits.

Following past research, we classify organizational capacity into six dimensions: financial capacity, human resource capacity, technical capacity, administrative capacity, political capacity, and network capacity (Barman & MacIndoe 2012; Berman & Wang, 2010; Christensen & Gazley, 2008; Hatry et al., 2003; MacIndoe & Barman, 2012; Poole, David, Reisman, & Nelson, 2001; Tuckman & Chang, 1991).

Financial capacity is an important capacity for undertaking outcome measurements. Hoefer (2000) surveyed Dallas nonprofits on why they did not conduct evaluations and revealed that about half of the respondents (48%) do not evaluate their programs because they do not have enough money to afford such evaluation. Nonprofits can employ performance measurement professionals, train their employees in outcome measurement, or develop a performance management system by which outcome information is appropriately used when they have sufficient financial resources for outcome measurement (MacIndoe & Barman, 2012). Therefore, we expect:

> *H_{6a}: Financial capacity is positively associated with the adoption of outcome measurement.*

A second capacity nonprofits need to adopt for outcome measurements is staff that understands the outcome measurement process. To adopt outcome measurement, nonprofits need personnel who can collect outcome data, analyze the data, explain the outcome information, and relate it to their internal processes (Hatry et al., 2003). In a national survey of U.S. counties, however, only 64% of respondents reported that they have staff who can analyze performance data (Berman & Wang, 2000). As a primary resource provider, the government has greatly influenced outcome measurement practices of nonprofits (Barman & MacIndoe, 2012; Carman, 2009; Thompson & Riccucci, 1998). Hence, Berman and Wang (2000)'s finding has implications for performance measurement in the nonprofit sector. Complementary to this, Hoefer (2000) finds that almost half of the nonprofits (48%) did not evaluate their programs because "there was not enough staff time available to conduct an evaluation" and argues that the evaluation does not achieve its potential due to the insufficient organizational capacity (p. 171). Drawing upon the past research, we expect:

> *H_{6b}: Human resource capacity is positively associated with the adoption of outcome measurement.*

A third capacity, technical capacity, refers to organizational infrastructure, information technology, and communication systems for meeting an organization's mission. In a national survey of U.S. counties, Berman and Wang (2000) find that 57.5% of respondents have relevant information technology for performance measurement, but only 29.1% can conduct surveys for measuring performance in a scientific way. The authors argue that technical capacity is significantly related to the widespread use of performance measurement. In the case of outcome measurement, nonprofits need adequate information technology and communication systems to collect, retain, analyze, and communicate their outcome measures. Therefore, we expect:

> *H_{6c}: Technical capacity is positively associated with the adoption of outcome measurement.*

A fourth dimension of organizational capacity is administrative capacity. According to Barman and MacIndoe (2012), it is defined as "an organization's ability to implement an institutionally sanctioned practice such as outcome measurement" (p. 88). Adopting an organizational practice may involve a process to establish relevant procedures and administer them in a coordinated fashion. When organizations have administrative capacity, they can implement their practices in a consistent and coordinated way (Barman & MacIndoe, 2012; Weber, 1978). Thus, it is

Table 1. Survey Responses

NTEE	Email Survey (Qualtrics)			Pop-Up Contact Window		Total
	Number of Emails Sent	Number of Emails Bounced	Number of Responses	Number of Pop-Up Windows	Number of Responses	Number of Responses
P32	167	1	45	15	1	46
P43	434	2	148	33	8	156
P46	170	1	61	9	0	61
Sum	771	4	254	57	9	263

reasonable to expect that:

> H_{6d}: *Administrative capacity is positively associated with the adoption of outcome measurement.*

A fifth capacity the literature has discussed is political capacity (e.g., Anguelovski & Carmin, 2011; Berman & Wang, 2010; Héritier, 2003). Berman and Wang (2010) highlight that counties with higher political capacity are more likely to use performance measurement. According to the authors' research findings, counties with high political capacity are more likely to work with lower-level managers on their willingness to use performance measurement. Those counties are also more likely to undertake strategies to gain the support from elected officials on the need for performance measurement. When nonprofits adopt outcome measurement, political capacity helps establish a consensus to adopt the practice, convince stakeholders, assign funding for the new practice, and legitimize it (Berman & Wang, 2010; Héritier, 2003). Following this line of logic, we expect:

> H_{6e}: *Political capacity is positively associated with the adoption of outcome measurement.*

Last, networking with other organizations and managing networks have been discussed in the literature as another dimension of organizational capacity (e.g., Christensen & Gazley, 2008; Eisinger, 2002; Moore, 2003). Obtaining all resources necessary for outcome measurement is difficult for a single nonprofit. By utilizing external networks, nonprofits may obtain various data, financial resources, competent employees, technology, and other assistance for adopting outcome measurement. Therefore, we expect:

> H_{6f}: *Network capacity is positively associated with the adoption of outcome measurement.*

Methods and Data

This study tests the above hypotheses through survey data. The sample is drawn from the National Center for Charitable Statistics (NCCS) 2012 Core Data file because it contains data of all 501(c)(3) nonprofits required to file Form 990. In order to maintain the comparability of the organizations in the sample group, we limited our study to human service nonprofits. We further restrict the analysis to three sub-industries in the human service nonprofits—foster care organizations (NTEE code P32), family violence shelters (NTEE code P43), and family counseling organizations (NTEE code P46)—because the specific performance measures we ask about depend on particular industries. We also filtered out small nonprofit organizations with total expenses below $500,000 to increase the likelihood of finding respondent organizations

Table 2. One Sample T-Test of Total Expenses

	t-test	Degree of Freedom	Sig. (2-tailed)	Mean Difference	95% Confidence Interval Lower	95% Confidence Interval Upper
Total Expenses	0.14	258	0.89	40,226.16	-533,828.57	614,280.90
Test Value = 2,642,202						

with a performance measurement system. With this sample screening, we obtained a total 1,039 human service nonprofits: 246 foster care organizations (P32), 569 family violence shelters (P43), and 224 family counseling organizations (P46). We collected contact information for each organization's executive director or president from organizational websites. Through this process, we collected 775 email addresses of executive directors and sent the questionnaire through Qualtrics. Further, for organizations without a listed email for the executive director, we were able to use a pop-up contact window on 57 websites to send the survey to additional organizations. The survey was in the field from March 5 through April 26, 2014; 317 organizations consented to participate in our survey, providing a total 263 usable cases for data analysis. This gives us a final response rate of 31.76% (see table 1 for the details of the survey response rate).

To check the representativeness of the respondents' group to the population, we performed one sample *t*-test with total expenses and chi-square test with regional distribution. The insignificant result of one sample t-test indicates that the average total expenses of respondent organizations are not significantly different from ones of population at a 95% confidence level (see table 2). In addition, cross tabulation and chi-square test of regional distribution indicate an insignificant result (p=0.62), which means there is no statistically significant difference in the regional distribution between population and respondents group (see table 3). Therefore, it can be concluded that the respondents group is representative of the population.

Measures: Dependent Variable

The Adoption of Outcome Measurement. To define and measure "adoption of outcome measurement," many researchers take a dichotomous approach. For instance, Barman and MacIndoe (2012) asked survey respondents if more than half of their programs and services are subject to outcome measurement. Carman (2007) asked interviewees and survey respondents to describe the types of data (e.g., program expenditures, activities, outputs, and outcomes) they collect. Eckerd and Moulton (2010) also asked their survey respondents to indicate the types of evaluation method (e.g., program outputs, long-term program impact or outcome) adopted by their organizations. On the other hand, instead of taking this dichotomous approach, Thomson (2010) developed an index for measuring the extent of outcome measurement based on the number of expected outcomes, level of outcomes (short-term, intermediate, and end), and number of outcomes supported by organization's evaluation tools.

We use a more robust approach than that of prior studies to measure the adoption of outcome measurement. We provided representative examples of outcome measures tailored to the nonprofit's NTEE code and asked respondents how often they collect the information on each outcome. To obtain the field-specific outcomes, we searched the American Association for Marriage and Family Therapy (AAMFT, 2013), Child and Family Services Agency (CFSA, 2012), and nonprofit organizations' websites. As a professional association of more than 25,000 marriage and family therapists in the United States, Canada, and abroad, AAMFT has established the professional standards of the marriage and family therapy. CFSA, a public child welfare agency, has developed performance indicators to measure the well-being of children and

Table 3. Crosstab and χ^2 Test of Regional Distribution

Region	Respondents	Population	Total
Midwest	72 (27.8%)	260 (25.0%)	332 (25.6%)
Northeast	40 (15.4%)	189 (18.2%)	229 (17.6%)
Puerto Rico	0 (0.0%)	4 (0.4%)	4 (0.3%)
South	82 (31.7%)	317 (30.5%)	399 (30.7%)
West	65 (25.1%)	269 (25.9%)	334 (25.7%)
Total	259 (100.0%)	1039 (100.0%)	1298 (100.0%)

In n(%), n indicates number and % indicates proportion.
Pearson $\chi^2(4) = 2.648$, $p = 0.618$

families. As to the nonprofits' websites, we selected well-developed websites showing the programs, services, and performance indicators of the organization. In addition to the example outcomes, we added an open-ended question so that respondents could enter the outcomes they are measuring but not listed in our survey. Last, drawing on MacIndoe and Barman (2012, p. 9), we asked one more question: "In the last fiscal year, what percentage of your organization's programs/services were subject to outcome measurement?" on a five-point scale. The responses to these two questions related to our dependent variable were compared in order to check the reliability of the responses.

To filter unreliable responses, we compared the responses of the question regarding the percentage of programs/services subject to outcome measurement and the count of outcome measures: 120 out of the 263 respondents answered the highest value in the percentage of outcome measurement. However, one out of the 120 respondents neither checked any outcome measure listed nor provided any additional outcome measures. In addition, we checked the cases where respondents did not check any outcome measure nor provide any additional outcome measures. We assumed that these respondents would answer the lowest value in the percentage question and found that two more responses are not reliable. Last, we found that one respondent did not answer the percentage question while he/she answered the question of example outcomes. In brief, four responses did not pass our data quality examination, and we excluded these cases from the data analysis.

As previously described, we presented a list of outcome measures tailored to each NTEE code and counted how many outcomes each respondent measures. Different from our expectation, we found very small variation in the responses and negative skewness in the distribution, which means that a large percentage of respondents checked more than 50% of the outcome measures listed in the survey. Given the skewness in our data, we collapsed the categories with low frequencies and recoded the dependent variable into dichotomous variable (see table 4).

Measures: Independent Variables

In order to avoid measuring the exact same phenomena with our dependent and independent variables, we construct our independent variables to capture overall organization attitudes toward risk, institutional pressures, and capacities. For example, if we only asked about organizational capacities specifically related to outcome measurement, we would capture the

Table 4. Dependent Variable

	P32	P43	P46	Total
Less than 50%	22%	24%	33%	26%
	(10)	(37)	(20)	(67)
More than 50%	78%	76%	67%	74%
	(35)	(117)	(40)	(192)
Total	100%	100%	100%	100%
	(45)	(154)	(60)	(259)

n is reported in parentheses

extent to which they have allocated/tailored organizational capacities to an outcome measurement system. Essentially, this would measure the extent to which they have adopted outcome measurement, which is our dependent variable. Because an outcome measurement system is but one of many management systems in a nonprofit, our strategy for measuring our independent variables provides us with insights into how overall organizational characteristics predict the likelihood of a nonprofit adopting an outcome measurement system.

Risk Aversion. This variable is measured by asking three survey items: 1.) "There is a reward/incentive system in place in the organization that encourages risk taking (using innovative ideas with the goal of improving performance)"; 2.) "Management is willing to implement appropriate organizational innovation and change"; and, 3.) "Nonmanagement employees willingly accept organizational innovation and change" (Julnes & Holzer, 2001, p. 706). These survey items are scored on a five-point Likert scale, and our overall scale of risk aversion is generated by averaging the response of the three items. The Cronbach alpha for the three items scale is 0.58.

In addition, we measured some of our independent variables (e.g., mimetic isomorphism, political capacity, network capacity) with five-point Likert scales. Because we found very small variation in the responses, we collapsed the categories with small frequencies and recoded the five-point categorical variables into dichotomous variables. Values of 4 and 5 were recoded into 1 and those of 1, 2, and 3 were recoded into 0.

Institutional Factors. First, *coercive isomorphism* is measured by asking if the nonprofit organization receives funding from the United Way (Barman & MacIndoe, 2012). As one of the first national agencies to request its network members to make a distinction between outcomes and outputs, the United Way has promoted the adoption of outcome measurement in the United States since the early 1990s (Ebrahim & Rangan, 2010) and requires its grantees to conduct outcome measurement (Hendricks, Plantz, & Pritchard, 2008). This can exert coercive pressure on the grantee organizations. Second, *mimetic isomorphism* is measured by asking "The largest organizations in our field measure their outcomes" on a five-point scale (Barman & MacIndoe, 2012). Next, we classify *uncertainty* into two dimensions: socioeconomic uncertainty and political uncertainty (Andrews, 2008). Survey items for measuring socioeconomic uncertainty and political uncertainty are "Changes in our community's socioeconomic status are predictable" (reversed) (Andrews, 2008; Guo & Acar, 2005; Hoque, 2004) and "Changes in our community's political environment are predictable" (reversed) (Andrews, 2008; Budding, 2004; Hoque, 2004) respectively. These two items are measured on a five-point scale and averaged to create the overall scale of uncertainty. Cronbach's alpha of the two items is 0.77, indicating an adequate level of reliability. Last, to measure *professionalism*, as with past scholarship (e.g., Hildebrandt & Eom, 2011; Mikkelson, 2013; Ullian & Schink, 2012), we ask if the nonprofit is accredited. The survey item for the professionalism asks, "Is your organization accredited by any external bodies?"

Table 5. Descriptive Statistics

Variables	N	Mean	Min	Max	SD
Adoption of Outcome Measurement	259	0.74	0	1	
Risk Aversion	250	2.11	1	5	0.69
United Way Funding	245	0.63	0	1	
Largest Organization's Outcome Measurement	233	0.79	0	1	
Uncertainty	229	3.00	1	5	0.88
Accreditation	240	0.46	0	1	
Financial Capacity (ER)	259	0.73	-3.25	1.00	0.42
Human Capacity	253	0.88	0	1	
Technical Capacity	257	0.73	0	1	
Administrative Capacity	258	0.98	0	1	
Political Capacity	246	0.69	0	1	
Network Capacity	252	0.77	0	1	
Organizational Age	258	37.10	8	201	23.91
Total Expenses	259	2,682,428	508,178	46,152,548	4,691,514

Organizational Capacity Factors. As described in the hypotheses section, our analysis includes six elements of organizational capacity. First, we measure *financial capacity*, using Bowman (2011)'s long-term financial capacity, equity ratio (ER), which is calculated by the following equation:

$$ER = \frac{Total\ Assets - Total\ Liabilities}{Total\ Assets}$$

Second, *human resource capacity* is measured, using a survey item, "Our organization has staff with the skills and expertise necessary to track program participants" (Poole et al., 2001). Third, the survey item for measuring *technical capacity* is "Our organization has adequate infrastructure (e.g., information technology, communication system) for daily operations" (Berman & Wang, 2010). Fourth, following prior research that administrative capacity derives from bureaucratic dimensions, including written rules regarding organizational administration (Hall, 1968; Weber, 1978), we measure *administrative capacity* by asking "Our organization has written rules concerning compensation, governance, job descriptions, conflict of interest, and/or volunteers" (Barman & MacIndoe, 2012). Fifth, as for *political capacity*, while it can comprise diverse elements, we focus on bargaining and negotiation abilities because adopting outcome measurement may involve a process for engaging and negotiating with stakeholders. We measure political capacity through the survey item, "Our organization frequently discusses operational issues with stakeholders" (Héritier, 2003). Lastly, given that outcome measurement may require various resources from external help networks, *network capacity* is measured by asking "Our organization seeks help from other organizations to improve decision making" (Christensen & Gazley, 2008; Eisinger, 2002). Except financial capacity, which is a continuous variable, the dimensions of organizational capacity are measured on five point scales, with higher scores indicating higher capacities.

Control Variables. *Organizational size* and *age* are considered here as control variables. *Organizational size* is measured, using total expenses, and *organizational age* is measured by asking survey item "In which year was your organization founded?"

Descriptive statistics of the variables are reported in table 5.

Table 6. Logistic Regression Model

Independent Variables	β	S.E.	Sig.	Odds Ratio
NTEE(1) – P32	.986	.592	.096	2.682
NTEE(2) – P43	.724	.437	.097	2.064
Risk Aversion	.970	.555	.081	2.639
United Way Funding	1.179**	.406	.004	3.251
Largest Organization's Outcome Measurement	4.621*	2.107	.029	101.618
Largest Organization's Outcome Measurement*Risk Aversion	-.993	.581	.087	.371
Uncertainty	.517	.411	.209	1.678
Uncertainty*Largest Organization's Outcome Measurement	-.765	.493	.123	.465
Accreditation	3.361**	1.175	.004	28.821
Accreditation*Risk Aversion	-1.348**	.512	.008	.260
Financial Capacity	-.367	.443	.407	.693
Human Resource Capacity	1.046*	.518	.044	2.847
Infrastructure Capacity	-.699	.441	.113	.497
Administrative Capacity	-.704	1.159	.543	.494
Political Capacity	.765*	.380	.044	2.148
Network Capacity	-.173	.411	.674	.841
Ln(Organizational Age)	.432	.382	.257	1.541
Ln(Total Expenses in 2011)	.448*	.221	.043	1.565
Constant	-11.711	3.847	.002	.000

Reference category: P46
This logistic model was obtained from the imputed data.
**$p < .01$; *$p < .05$ (two-tailed tests)

Missing Data

Since data analysis can be distorted by improper handling of missing data, we performed a missing value analysis. We found that overall, the percentage of incomplete values in our dataset is 4.54%. However, 41.31% of the cases (107 out of total 259 responses) contains missing values. Missing data is non-ignorable when the number of cases with missing information is larger than 5% (Garson, 2012a). Hence, following past research, we undertook multiple imputation to deal with the missing data problem (Graham, Hofer, Donaldson, MacKinnon, Schafer, 1997; Graham & Schafer, 1999; Schafer & Graham, 2002; Wayman, 2003). Multiple imputation is not only simpler than other methods for dealing with missing data problem but also can produce unbiased parameter estimates, in particular, when the rate of missing data is high (Wayman, 2003). In our study, multiple imputation procedure generated five imputed datasets and we used regression model derived from pooled dataset.

Results

Since we recoded the dependent variable into a binary variable, we used logistic regression for analyzing our data. In order to find the best model for the data analysis, we examined our models based on five attributes of a good model: parsimony, identifiability, goodness of fit, theoretical consistency, and predictive power (Gujarati & Porter, 2010). The best model is provided in table 6.

As reported in table 6, coercive isomorphism (united way funding), mimetic isomorphism (largest organizations' outcome measurement), professionalism (accreditation), human resource capacity, and political capacity have significant results. In addition, the interaction term between risk aversion and professionalism is significant. Last, total expenses as a control variable are statistically significant. These results are discussed in the subsequent section based on our hypotheses.

Hypothesis 1 (Risk Aversion)

Hypothesis 1 examines how risk aversion is associated with the adoption of outcome measurement. The logistic regression results show that the main effect of risk aversion is not significant. However, the interaction term between risk aversion and accreditation is negatively significant at a 0.05 level (p=0.01). These results mean that, although an organization with accreditation (see the evaluation of hypothesis 5a below) is more likely to adopt outcome measurement, the positive impact of accreditation on the adoption of outcome measurement is attenuated when the organization is more risk averse. These results provide partial support for Hypothesis 1.

Hypothesis 2 (Coercive Isomorphism)

Hypothesis 2 tests the effect of coercive isomorphism on the adoption of outcome measurement. The positive and statistically significant (p=0.00) coefficient on the "United Way funding" variable provides support for this hypothesis. As shown in table 6, the odds ratio of "United Way funding" indicates that nonprofits with United Way funding are 3.25 times more likely to adopt the outcome measurement, compared with the nonprofits without United Way funding.

Hypothesis 3a and 3b (Mimetic Isomorphism)

Hypothesis 3a predicts a positive influence of mimetic isomorphism on the adoption of outcome measurement. The regression results support this hypothesis. The "largest organizations use outcome measurement" variable is positively significant (p=0.03) in the model. The odds ratio in table 6 shows that nonprofits with more mimetic isomorphism are 101.62 times more likely to adopt outcome measurement, compared with the nonprofits with less mimetic isomorphism. On the other hand, Hypothesis 3b, which expects a positive interaction effect between mimetic isomorphism and risk aversion, is not supported by the findings. One explanation could be that adopting a similar behavior in pursuit of risk minimization is common when an organization's environment is highly competitive. To put it another way, mimetic behavior can alleviate the risk of failure by preserving "the status quo among competitors" when competitive rivalry exists or competition is intense (Lieberman & Asaba, 2006, p. 367). On the other hand, because nonprofits face less competitive environments compared with private firms, the positive interaction effect between risk aversion and mimetic behavior predicted by theory may be more applicable to for-profit organizations.

Hypothesis 4 (Uncertainty)

Hypothesis 4 examines how uncertainty influences the relationship between mimetic isomorphism and the adoption of outcome measurement. Unlike our expectation, however, the logistic regression results indicate that the influence of uncertainty is insignificant (p=0.12). This unexpected result can be explained by considering two different approaches to uncertainty. On the one hand, institutional theorists argue that mimetic behavior results from "standard responses to uncertainty" (DiMaggio & Powell, 1983, p.150). Drawing upon this institutional

Table 7. Adjusted B Coefficient and Odds Ratio of Accreditation

Risk Aversion	Adjusted b	Odds Ratio
1	2.013	7.486
2	0.665	1.944
3	-0.683	0.505
4	-2.031	0.131
5	-3.379	0.034

theory approach, we expected that uncertainty would positively influence the relationship between mimetic isomorphism and the adoption of outcome measurement. On the other hand, agency theorists maintain that uncertainty may create unexpected outcomes; thus, it is difficult for principals to correctly measure the outcomes of their agents in an uncertain environment (e.g., Celly & Frazier, 1996). Further, because the outcomes may fluctuate widely in an uncertain environment, it is difficult to control and measure the outcomes in that situation (Kumar, Scheer, & Steenkamp, 1995), which may negatively influence the adoption of outcome measurement. In this regard, agency theorists argue that uncertainty might be negatively associated with the adoption of outcome measurement. In brief, these two conflicting effects of uncertainty on the adoption of outcome measurement might cancel each other out, thus resulting in an insignificant effect.

Hypothesis 5a and 5b (Normative Isomorphism)

Hypothesis 5a tests the positive effect of professionalism on the adoption of outcome measurement, which is supported by the regression results, as "accreditation" is positively significant (p=0.00). Before interpreting the odds ratio of accreditation, we adjusted the b coefficient of accreditation because accreditation is involved in an interaction term with risk aversion (Hypothesis 5b) as follows.

*Adjusted β Coefficient of Accreditation = 3.36 – 1.35*Risk Aversion.*

We interpret the odds ratio of accreditation, following the approach of past research (e.g., Garson, 2012b; Li & Barry, 2012). As shown in table 7, the b coefficients of accreditation are positive when the risk aversion is at the low level, whereas they become negative at the high level of risk aversion. To put it another way, the positive influence of accreditation on the adoption of outcome measurement decreases as the risk aversion level increases. When risk aversion is at the lowest level, nonprofits with accreditation are 7.49 times more likely to adopt the outcome measurement than otherwise. On the other hand, when risk aversion increases 1 unit, nonprofits with accreditation are only 1.94 times more likely to adopt outcome measurement than otherwise.

Hypothesis 6a (Financial Capacity)

Unlike our expectation, Hypothesis 6a is not supported by the regression results, as financial capacity is not significant (p=0.41). A potential explanation for this finding is that small nonprofits with total expenses below $500,000 were excluded from our analysis; thus, we did not capture the full range of variation in the financial capacity of the population group. Additionally, there might be a bias in our sample. Table 8 shows that the financial capacity (ER) of the respondents group is higher than the entire population's, even though total expenses do

Table 8. ER of Respondent and Population Groups

NTEE	Respondent group (n = 259)			Population group (n = 1039)		
	Mean	SD	Median	Mean	SD	Median
P32	0.51	0.73	0.75	0.31	2.34	0.67
P43	0.81	0.20	0.88	0.77	0.49	0.88
P46	0.68	0.46	0.84	0.62	0.48	0.77
Total	0.73	0.42	0.84	0.63	1.24	0.82

not differ. Through an independent t-test, we confirmed that this difference is statistically significant with 95% confidence level. Nonprofits with higher capacity to answer surveys may also be more likely to have the organizational resources for outcome measurement.

Hypothesis 6b (Human Resource Capacity)

Hypothesis 6b is supported by the regression result as human resource capacity is positively significant (p=0.04). As shown in the odds ratio (see table 6), nonprofits with higher human resource capacity are 2.85 times more likely to adopt outcome measurement, compared with the nonprofits with lower human resource capacity.

Hypothesis 6c (Technical Capacity)

Hypothesis 6c tests the influence of technical capacity on the adoption of outcome measurement. Unlike our expectations, however, Hypothesis 6c is not supported by these data; technical capacity is not significant (p=0.11). Prior studies provide a potential explanation for this finding. In our study, technical capacity is measured by asking if the organization has adequate infrastructure (e.g., information technology) for daily operations, and a majority of the respondents (73%) agreed with this survey item in our study. However, prior studies (e.g., Corder, 2001; Saigal, 2008) argue that nonprofits do not have sufficient training to make use of their infrastructure. Even if nonprofits have adequate infrastructure for outcome measurement, it may not directly influence the adoption of outcome measurement if the staff within the agency has not received a training for the effective use of that infrastructure.

Hypothesis 6d (Administrative Capacity)

The influence of administrative capacity on the adoption of outcome measurement is not supported by the regression result (p=0.54). Very little variation in administrative capacity may explain this non-finding. Because more than 98% of respondents agreed with the survey item measuring administrative capacity, there is not much variation in this variable, meaning the effect size would need to be quite large to be statistically significant. Insufficient variation in administrative capacity might be the reason that its influence is insignificant in the analysis results.

Hypothesis 6e (Political Capacity)

Hypothesis 6e examines the effect of political capacity on the adoption of outcome measurement. Because the political capacity is positively significant in the logistic regression model at the 0.05 significance level (p=0.04), we conclude that Hypothesis 6e is supported by our findings. Table 6 indicates that nonprofits with higher political capacity are 2.15 times more likely to adopt outcome measurement, compared with the nonprofits with lower political capacity.

Hypothesis 6f (Network Capacity)

Hypothesis 6f, which examines the effect of network capacity on the adoption of outcome measurement, is not supported by the regression result (p=0.67). The characteristics of human service nonprofit organizations may explain this unexpected finding. Public organizations have a comparatively homogenous network of resources, whereas human service nonprofits have a more diverse network of resources (Corder, 2001). Cohen and Levinthal (1990) argue that human service nonprofits need capacity to manage this diverse network of resources. However, we did not capture this aspect in the survey item for measuring the network capacity. Consideration of the unique characteristics of human service nonprofits, including the complexity of networks, may result in different findings.

Discussion

Our findings indicate that each of the three theory bases we examine in this study—agency theory, institutional theory, and organizational capacity—contribute to our understanding of what facilitates (or inhibits) nonprofits adopting outcome measurements. We explore these findings in more depth below.

Agency Theory – Risk Aversion

Although there are a few studies regarding performance measurement, accountability, and issues of risk in nonprofit practice, (e.g., Benjamin, 2008), there remains limited attention paid to the effect of an organization's risk attitude on the adoption of performance measurement, focusing on outcome rather than other types of measures. Our study fills this gap by exploring the main effect and interactions of risk aversion on the adoption of outcome measurements. Agency theorists assume that principals can diversify their investments, whereas agents cannot diversify their employment; thus, they are risk averse (e.g., Davis et al., 1997; Eisenhardt, 1989). This classic assumption has been extended by subsequent organization theorists and researchers to allow risk attitudes within this theory to vary widely (e.g., Eisenhardt, 1989; MacCrimmon & Wehrung, 1986; Shapiro, 2005). Our study provides empirical evidence in favor of this more expansive approach but not in a straightforward way. Based on our findings, we do not discover a direct relationship between risk aversion and the adoption of outcome measurement. However, we do see that some of the variation in the adoption of outcome measurement can be explained by nonprofits' risk aversion interaction with other factors (e.g., institutional pressures). This finding has implications for researchers concerned with organization risk. Given that risk redistribution between principals and agents is the main issue that agency theory is concerned with, the broader organizational context must be considered to understand the impact of risk aversion on organizational decisions such as whether to adopt outcome measures. Future research should delve into the other applications of agency theory assumptions (e.g., the length of agency relationship, task programmability, and information system) as well as risk aversion not only as it relates to outcome measurement, but other organization behaviors as well.

Institutional Factors

From an institutional theory perspective, performance measurement is a largely symbolic (or ceremonial) practice to acquire institutional legitimacy by conforming to institutional norms (e.g., Eckerd & Moulton, 2010; Lee & Nowell, 2015; Modell, 2009; Roy & Seguin, 2000; Yang, 2009). In our study, we found that coercive, mimetic, and normative pressures have positive and significant influences on the adoption of outcome measurement. According to Roy and Seguin (2000), the adoption of organizational practices for improving performance can make the organization appear proactive, innovative, and effective, even if it is only ritual and ceremonial.

As shown in table 6, United Way funding is significantly related to the adoption of outcome measurement. Because the United Way is not the only grantor that imposes outcome measurement (a potential construct validity issue that is discussed with other limitations below), measuring coercive isomorphism from this one source might underestimate the true effect of coercive isomorphism on the adoption of outcomes measurement. However, the significant influence of United Way funding on outcome measurement corroborates the notion that the coercive pressure exerted on grantee organizations can shape their organizational practices.

In addition, we identified a significant relationship between mimetic isomorphism and the adoption of outcome measurement. In Barman and MacIndoe (2012)'s findings, mimetic isomorphism was insignificantly related to outcome measurement. The authors justified this result by arguing that mimetic isomorphism occurs only when the practice is widespread in the industry (Tolbert & Zucker, 1983). Whereas outcome measurement might not be common across the entire nonprofit sector, the sample used in Barman & MacIndoe's (2012) study, our focus on human service nonprofits, where outcome measurement is comparatively more widespread, may explain our significant result.

Finally, our study demonstrated the positive influence of normative isomorphism on the adoption of outcome measurement in nonprofits. The growing body of scholarship dedicated to understanding outcome measurement (e.g., Barman & MacIndoe, 2012; Eckerd & Moulton, 2010; Julnes & Holzer, 2001; MacIndoe & Barman, 2012; Melkers & Willoughby, 2005; Thomson, 2010) appears to be having an impact on the education and practice of nonprofit practitioners. Future research needs to explore whether this adoption of outcome measurements pushed by scholarship and pedagogy is only symbolic, or if it is it actually used in meaningful ways to improve organizational practices.

Organizational Capacity

By identifying the variation in human resource capacity across nonprofits and its significant effect, our study confirmed the importance of staff trained to track program participants. Capturing outcomes requires similar skills and knowledge. Our study empirically demonstrates that staff who can track program participants and analyze that data are needed for adopting outcome measurement. In addition to human resource capacity, we found a significant influence of political capacity on the adoption of outcome measurement. Although Berman and Wang (2000) already examined the effect of political capacity on performance measurement, their research was focused on public organizations. By exploring the effect of political capacity in the case of nonprofit organizations and considering other perspectives, our study both corroborates the research conducted by Berman and Wang (2000) and extends its implications to nonprofit organizations.

Interestingly, the other four dimensions of organizational capacity did not show significant results. According to Julnes and Holzer (2001), however, there are two different stages in performance measurement—adoption and implementation—which may have different mechanisms. Future researchers exploring the actual uses (e.g., outcome information uses in the strategic planning process) of outcome measures may have different findings.

Conclusion

In this article, we used agency theory, institutional theory, and organizational capacity to explore the factors related to variation in the adoption of outcome measurement. Based on survey data from 259 human service nonprofits, we found that nonprofit organizations are more likely to adopt outcome measurement when they are less risk averse; influenced by coercive, mimetic, and normative pressures; and have higher human resource and political capacities.

Although our findings provide meaningful implications for practice and theory, we note some limitations of our study. First, our study limits the generalizability of the findings. As discussed in the methods section, we excluded small nonprofits with total expenses below $500,000 in the sampling process and focused on mid- and large-sized nonprofits equipped with more skills and knowledge to develop performance measurement systems. While this filtering increases the probability finding nonprofits with a performance measurement system, it limits the generalizability of our findings to all sizes of nonprofits. Another limitation lies with the use of single item measures (e.g., coercive isomorphism—United Way funding, mimetic isomorphism—the largest organizations' outcome measurement, normative isomorphism—accreditation, financial capacity—ER), which could be criticized in terms of construct validity and scale reliability. In addition to the use of single-item measures, our study has a conceptualization issue. In operationalizing organizational attitude toward risk, we mainly focused on risk-taking inside an organization. Given that the certainty of the task environment also may affect an organization's decision to contract on outcomes and adopt outcome measurement, however, risk-taking in the task environment also needs to be considered. Finally, our 259 cases also limit the number of variables we can use in multivariate modeling. Future researchers may have different findings by using multiple measures of a single construct, collecting a sufficient number of cases (achieving a higher survey response rate), and resolving the conceptualization issue in our study.

Our research makes several contributions to the literature despite its limitations. First, although excellent work on outcome measurement has already been done (e.g., Eckerd & Moulton, 2010; Julnes & Holzer, 2001; MacIndoe & Barman, 2012; Thomson, 2010), our study discussed factors that have received comparatively limited attention in current scholarship (e.g., risk aversion, network capacity). Second, much of the prior research on the outcome measurement were grounded in analyses of particular regions (e.g., Eckerd & Moulton, 2010; MacIndoe & Barman, 2012; Thomson, 2010; Zimmermann & Stevens, 2006), which limits the generalizability of the findings. On the other hand, because our study is not limited to specific regions, it is more generalizable to human services nonprofits across the country compared with the prior research focused on one city or state. Last, since we focused on specific NTEE codes—P32, P43, and P46—we could ask about collecting specific outcome measures rather than just asking about outcome measurement generically in the survey. This strategy enhanced the reliability and validity of our survey results for U.S. nonprofits operating in those three human services fields.

Finally, while this current research focuses on the adoption of outcome measurement, the implementation of performance measurement (or actual use of performance data) needs to be examined in future research. While our findings related to institutional theory provide some evidence for the theoretical assertion that outcome measurement may be adopted for ceremonial purposes, additional study is needed to explore whether and how these systems are used in organizations. This is a fertile area for future research that has additional important implications for whether nonprofit organizations can advance their practices by better understanding and using their performance data to achieve their missions.

Disclosure Statement

The authors declare that there are no conflicts of interest that relate to the research, authorship, or publication of this article.

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Research Article

Street Level Divergence in the Functioning of Social Welfare Networks

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Much effort has been devoted to the evaluation of network effectiveness. Recent scholarship has made an important distinction between network outcomes or productivity and the underlying dynamics or processes that ultimately shape the nature of such joint actions. This article is interested in the process side of this effectiveness equation and, more specifically, in the possibility of process-related divergence at the street level. What if, due to such divergence, networks are not functioning as expected by participants at the managerial level of networks? What are the potential implications of such a mismatch? And, how might this complicate efforts to assess the process and productivity sides of the network effectiveness equation?

Keywords: Street Level Divergence, Networks, Social Welfare

In many instances, the traditional top-down approach of the government has failed to address increasingly complex issues confronting society. These failures have sparked a transformation in the delivery of many public services, such that the network has become the new shape of the public sector (Goldsmith & Eggers, 2004). As stated by Agranoff and McGuire (2001, p. 319), "[j]ust as the bureaucratic organization was the signature organizational form during the industrial age, the emerging information or knowledge age gives rise to the network, where persons link across internal functions, organization boundaries, and even geographic boundaries." The outcomes or effectiveness of this network approach can vary significantly. Yet, as reported by Vangen and Huxham (2003, p. 6), there is widespread evidence that networks are "difficult to manage and the likelihood of disappointing outputs and failure is high" (for example, see Gould, Ebers, & Clinchy, 1999; Hora & Millar, 2012). Confronting these difficulties, policymakers, practitioners, and program evaluators would like to understand the key factors contributing to the variations in network effectiveness.

The network is a discrete approach to governance, where power and control are inter-organizationally and, often, inter-jurisdictionally dispersed and decentralized. Here, as defined by Lynn, Heinrich, and Hill (2001, p. 7), the term "governance" refers to the "regimes of laws, rules, judicial decisions, and administrative practices that constrain, prescribe, and enable the provision of publicly supported goods and services." In relation to network effectiveness, then, how can participants in a dispersed and decentralized governance approach be induced to converge on the achievement of a particular objective? What factors might pose as obstacles to such convergence and the solving of what is often referred to as the collective action problem (Ostrom, 1990)? How can these factors be managed to increase the likelihood of network effectiveness?

Much scholarship has been devoted to the questions raised above and to evaluating the effectiveness of the network approach to governance (Emerson & Nabatchi, 2015; Romzek, LeRoux, Johnston, Kempf, & Piatak, 2014; Thomson & Perry, 2006; Thomson, Perry, & Miller, 2009; Turrini, Cristofoli, & Frosini, 2010). These studies make an important distinction between network outcomes or productivity and the underlying dynamics or processes that ultimately shape the nature of the joint actions taken by network participants. Each is important to network effectiveness. The processes in and of themselves matter, but they are tied to and integral to the realization of desired outcomes. Yet, as asserted by Emerson and Nabatchi

Bland, J. T. (2017). Street-level divergence in the functioning of social welfare networks. *Journal of Public and Nonprofit Affairs, 3*(2), 135-154. doi:10.20899/jpna.3.2.135-154

(2015), the study of network effectiveness requires the separation, and better articulation and specification, of the factors related to the process and productivity sides of the effectiveness equation. This article is interested in the process-related factors, which are so vital to the long-term sustainability and maintenance of networks (Turrini et al., 2010).

Scholars have already given considerable attention to the assessment of process-related factors, such as trust, reciprocity, other forms of social capital, and key structural or administrative considerations. These studies, however, do not give adequate attention to the three distinct levels of governance: the institutional, the managerial, and the technical or street levels (Lynn et al., 2001). Neglecting an important piece of the overall governance puzzle, the potential for process-related divergence at the street level is not given due consideration (Considine & Lewis, 1999, 2012; Maroulis & Wilensky, 2014). Since power and control are dispersed and decentralized in the network approach, participants at the street level may occupy the highest leverage point when it comes to process-related factors. Divergence, then, could alter the nature of the joint actions taken, otherwise referred to as network functioning, and complicate evaluations of network effectiveness.

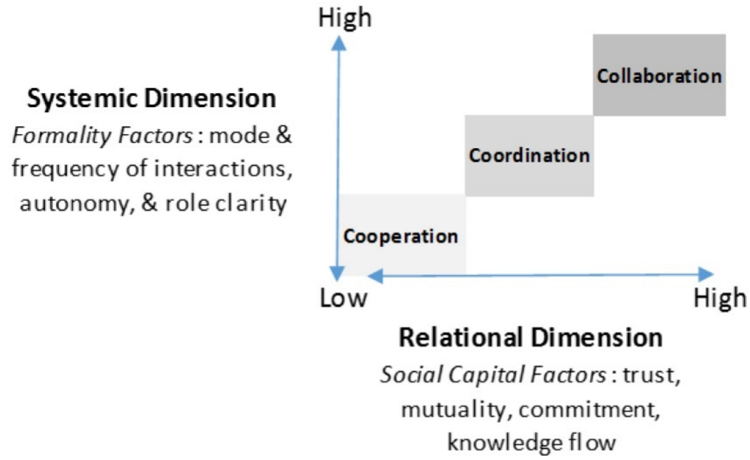
Offering an exploratory analysis of the functioning of 13 social welfare networks in Virginia, this article demonstrates the possibility of process-related divergence at the street level. Then, this article gives full consideration to the implications of such divergence and, drawing from the networks where divergence was minimal, discusses how it might be avoided. Before offering the analysis, this article provides some conceptual clarity on the process side of the effectiveness equation and introduces the concept of network functioning.

The Process Side of Network Effectiveness

As a discrete approach or form of governance, a general systems view illuminates the process side of the network effectiveness equation. Networks are systems, embedded in environments, and have their own inputs (participants and their organizations), throughput processes, and outputs and outcomes. Thomson and Perry (2006) describe the throughput processes as a "black box" because they are the least understood. Yet, it is this component that enables or makes it possible for the inputs to operate as a collective and take joint actions. Provan and Kenis (2007) argued that the network was not an undifferentiated form. To capture the potential variability in the nature of those joint actions, then, they introduced the concept of network functioning. They suggested that this variability reflected important differences in the throughput processes, including how networks are governed and the level of integration among participants. The overarching assumption was that certain variations will likely serve some purposes or objectives better than other variations.

Provan and Kenis were especially interested in how networks are governed, including whether the responsibilities are brokered or shared and whether they are participant governed or externally governed. Many other scholars, however, have emphasized the potential variability in the levels of integration among participants and how those differences relate to the objectives of the relationship (Bailey & Koney, 2000; Gajda, 2004; Mandell & Steelman, 2003; Vangen & Huxham, 2003). For example, Woodland and Hutton (2012) argue that more complex and higher stakes purposes tend to warrant higher levels of integration. This article argues that the many explanations of the variability in the levels of integration seem most relevant to the throughput processes and best capture the potential variations in the nature of the joint actions taken or network functioning.

Figure 1. The Relational and Systemic Dimensions of Network Functioning



Mattessich, Murray-Close, and Monsey (2001) offer a three-point continuum to help explain the variability in the levels of integration, which this article uses as descriptors of the potential variations in network functioning. On one end of the continuum is *cooperation*, which is where participants and their organizations relate informally, their resources remain separate, and their interactions take place on an as-needed basis. On the other end of the continuum is *collaboration*, which is where participants and their organizations relinquish much of their autonomy, pool their resources, and share risk, while pursuing a common and newly created mission. In the middle of this continuum is *coordination*, which is where participants and their organizations share compatible goals, maintain much of their autonomy, and interact around a specific task of definable length.

Assuming that certain variations in network functioning do serve some objectives better than others, participants will come together to make choices and work out agreements as to the intended variation or level of integration among participants. Emerson, Nabatchi, and Balogh (2012) call this principled engagement, which is the beginning of the throughput processes. This is where, through discovery, definition, deliberation, and determination, network participants develop a shared sense of purpose and a shared theory of action for achieving that purpose. In a mandated or top-down network, which is created by policy dictate or in response to funding requirements (Kenis & Provan, 2009), principled engagement is similar to the activation and framing stages in network formation, as outlined by Agranoff and McGuire (2001), and carried out primarily by participants in leadership or managerial roles. There are several process-related factors, then, that must be managed or balanced to help ensure that a shared theory of action (intended variation in network functioning) is actually the theory in use at the street level (Emerson & Nabatchi, 2015; Romzek et al., 2014; Thomson & Perry, 2006). Before considering the potential for process-related divergence at the street level, the next subsection outlines the key process-related factors.

Process-Related Factors

The throughput processes begin with principled engagement and the choice of a variation in network functioning (cooperation, coordination, collaboration), which will best serve the objectives of the relationship. Based on a synthesis of the literature on the varying levels of integration, as referenced above, with Emerson et al.'s (2011), Ansell and Gash's (2008), and

Thomson and Perry's (2006) writings on the throughput processes, this article groups the underlying process-related factors into two broad dimensions: the relational and systemic dimensions. As depicted in figure 1 and described below, the operationalization of each dimension as a separate continuum, will serve as the foundation for assessing the potential for process-related divergence at the street level.

Relational Dimension

The relational dimension includes four process-related factors that together reinforce or produce differing amounts of social capital: trust, internal legitimacy or mutuality, commitment, and knowledge flows. Collaboration as a variation of network functioning is relationally interpersonal and will require much higher amounts of social capital than cooperation, which is relationally impersonal. As with other forms of capital, social capital takes time to develop and requires targeted investments (Thomson, 2001). Investments that target these process-related factors, as reviewed below, will ultimately produce differing amounts of social capital. Higher levels of each factor should serve as a sound indication of higher amounts of social capital, which will ultimately determine how a network functions relationally.

Trust is the common belief among participants that they are dependable and will make a good-faith effort on behalf of the endeavor. Trust reduces transaction costs. Trust lends itself to a norm of reciprocity, which is when there is high respect for other participants and a sense of obligation that guides exchanges (Coleman, 1988). In situations where trust is low, participant exchanges are more contingent and will be guided by an "I will if you will" mentality (Thomson & Perry, 2006). Internal legitimacy or mutuality is similar to the notion of fit (Bright, 2013) and is the degree to which participants see their interests as compatible and share an overarching purpose. Commitment is the extent to which participants value the opportunity to participate in the endeavor and will go to great lengths to ensure its success (Porter, Steers, Mowday, & Boulian, 1974). Last, knowledge flows are a reflection of how freely participants share information, value the opportunity to learn from others, and whether or not these efforts actually serve as a basis for action (Coleman, 1988).

Systemic Dimension

The systemic dimension includes three process-related factors that together reinforce or shape the infrastructure or procedural arrangements that underlie a network's functioning: mode and frequency of interactions, degrees of autonomy, and role clarity. Here, the focus is on the formality of the linkages among participants. Collaboration as a variation of network functioning is often an outgrowth of felt interdependencies and includes a higher degree of risk to participants (Keast, Mandell, Brown, & Woolcock, 2004). For this reason, the linkages in a collaboration will require more formality than in a cooperation. When assessed on the three process-related factors described below, higher levels should serve as a sound indication of increased formality, which will ultimately determine how a network functions systemically.

The mode and frequency of interactions refer to type and regularity of participant interactions. Face-to-face and frequent interactions suggest there is a more formalized means of maintaining the links among participants (Woodland & Hutton, 2012). Degrees of autonomy refer to the amount of control maintained by participants and their home organizations. Formalized linkages often require the relinquishment of some autonomy and include decision-making processes requiring that major decisions be made collectively, not individually (Mandell & Steelman, 2003). Last, role clarity refers to the assignment of network-specific roles and clarified expectations, which indicates a higher level of formality.

Potential for Process-Related Divergence

The distinction between managerial and street levels of governance deserves careful consideration when assessing the process side of the effectiveness equation. Because power and control are dispersed and decentralized in the network approach, street-level participants often wield a great deal of power and discretion in carrying out their work (Lipsky, 1980; Oberfield, 2010). In contrast with the single agency approach to governance, managerial participants are quite limited in their capacity to oversee or control what happens at the street level. When it comes to the process-related factors that underlie and shape the functioning of networks, then, the street-level worker occupies a high leverage point as the day-to-day linking mechanism among participating organizations.

As street-level participants make sense of their roles and responsibilities within a network, they also are making some determinations as to the value of the relationships (Ellis, Davis, & Rummery, 1999; Jewell & Glaser, 2006; Rice & Mitchell, 1973). In other words, do they feel the benefits of participation outweigh the costs? A number of things may influence this sense-making process, including, for example, the prior experiences working together, the time commitment, the information available, and the complexity of the problem (Chen, 2010; Gofen, 2013; Mandell & Steelman, 2003; Meek, De Ladurantey, & Newell, 2007). Depending on how this sense-making process unfolds, the attitudes and perceptions of street-level workers may influence or shape how they approach network participation. What if the social capital among street-level participants is too low and the linkages are not formalized at the level necessary for the network to function as expected by managerial participants? What are the potential implications of such a mismatch in the theory of action, as developed by participants at the managerial level, and the theory in use by participants at the street level? What if the intended variation in network functioning is collaboration, but it is actually functioning as cooperation?

Investigating the potential for process-related divergence at the street level of the network approach to governance, the above questions will guide this article's exploratory analysis of the functioning of 13 social welfare networks in Virginia. Underlying the potential variability in the functioning of these networks (cooperation, coordination, or collaboration) are several process-related factors that may ultimately determine or shape their functioning. This article groups the like factors into two broad dimensions to be assessed at the street level, as a reflection of the theory in use. Then, this is compared with the theory of action or expectations of participants at the managerial level as to the variation in network functioning that best serves the objectives of their network. Several other questions are considered as well. How might process-related divergence at the street level complicate evaluations of network effectiveness? And, how can such divergence be avoided?

Thirteen Social Welfare Networks in Virginia

Virginia uses some of if its federal welfare funding to award the Employment Advancement for TANF Participants grant (Virginia Department of Social Services, 2011). This grant awarded funds to welfare-to-work programs that adopted what the request for proposals referred to as "proven service approaches," including, among other things, community partnerships and interagency collaborations. In response to these funding incentives and requirements, many organizations occupying a portion of the social welfare policy space in Virginia explored the potential benefit of linking together and adopting a network approach. This exploration, previously referred to as principled engagement, was carried out primarily by those occupying leadership or managerial roles in these organizations. The grant applications, then, effectively served as a formal expression of the shared sense of purpose that developed among organizations and a corresponding theory of action for the associated network.

Facing area-specific challenges and barriers to employment, some networks formed to address transportation, education, and childcare issues, while others dealt with substance abuse and mental health problems. Along with these important differences in the objectives or purposes of these networks, which help define the key factors in the productivity side of the effectiveness equation, their theory of action and underlying process-related expectations, as expressed in the grant proposals, were somewhat vague. Some, however, did express different expectations as to the role of the street-level participants. For example, some expected them to interact and jointly create a plan for addressing client barriers to employment, while others expected them to serve as a referral hub among service providers. In regards to a theory of action, these differences do indicate some expectations as to the level of integration (variation of network functioning) that would be necessary among participants. However, their vagueness also demonstrates that, overall, the process-side of the effectiveness equation may not have been given adequate attention in many of these networks.

These networks, then, were an ideal setting for exploring the potential for process-related divergence at the street levels of this approach to governance. Primarily, the lack of attention given to this issue meant that this was an opportunity for many of the managerial actors to clearly articulate their theory of action for the first time. And, then, to explore whether or not this variation in network functioning was actually the theory in use at the street level.

Sample and Data Collection

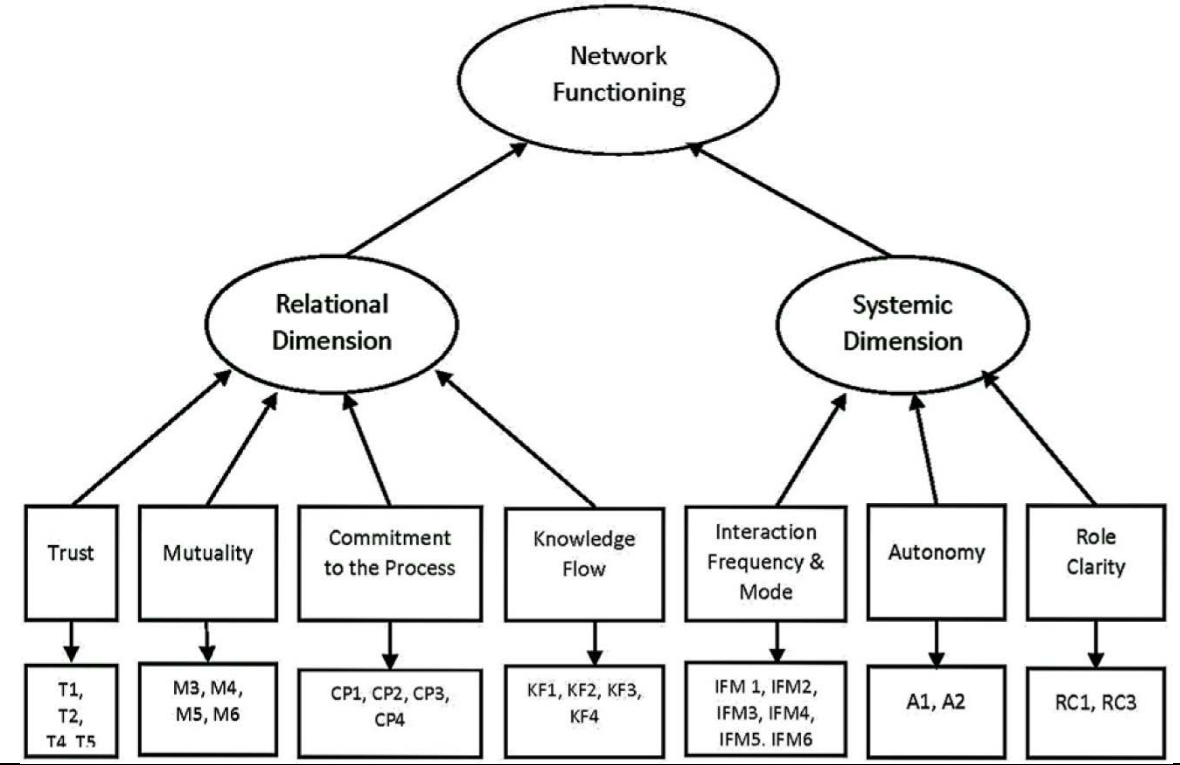
Of the 42 grant-funded social welfare networks in Virginia, this study targeted the 17 that included local departments of social service, which housed the population of interest: the Virginia Initiative for Employment Not Welfare (VIEW) caseworkers. As prime examples of street-level participants (Lipsky, 1980), the VIEW caseworkers all held the same job description, had some control over the distribution of resources, and interacted directly with the welfare clients and many other network participants. They seemed to occupy the highest leverage point, as they were ultimately responsible for client outcomes and had the most comprehensive view of what was taking place at the street level. Thirteen of the 17 programs agreed to participate in this study, providing a study population of 99 VIEW caseworkers and the corresponding 13 grant coordinators. Given the nature of these networks, the grant coordinators could provide an accurate representation of the theory of action developed by participants at the managerial level.

In addition to reviewing the grant applications and surveying and interviewing each grant coordinator to capture the theory of action for each network, this study also surveyed the VIEW caseworkers to capture the theory in use at the street level. The grant coordinators participated at 100%, while 72 VIEW caseworkers completed a survey for a response rate of 72%.

Measurements of Study Constructs at the Street Level

As depicted in figure 2, this study modeled network functioning as a higher-level formative construct comprised of two second-order formative constructs. The relational dimension, as a second-order constructs, consisted of four first-order reflective constructs. To create the initial pool of items for the relational dimension (Mattessich et al., 2001) measurements of trust (Austin, 2000; Harbert, Finnegan, & Tyler, 1997), internal legitimacy or mutuality (Margerum,

Figure 2. Measurement Model



2002), commitment to the process (Margerum, 2001, 2002; Porter et al., 1974), and knowledge flows (Coleman, 1988) were reviewed. The systemic dimension, as a second-order construct, consisted of three first-order reflective constructs. To create the initial pool of items for the systemic dimension (Mandell & Steelman, 2003; Mattessich et al., 2001) measurements of interaction frequency and mode (Agranoff & Lindsay, 1983), degrees of autonomy (Gajda, 2004; Margerum, 2002; Taylor-Powell, Rossing, & Geran, 1998), and role clarity (House & Rizzo, 1972) were reviewed.

Based on these reviews, measurement items, including mostly four-point Likert scale statements, tailored to the social welfare context, were developed for each of these first-order reflective constructs. The items were included in a draft of the VIEW caseworker survey, which was piloted to obtain feedback on the wording of the statements and to ensure that they were understood in a consistent way. Several suggestions, then, were incorporated into the final survey, which was part of a larger study (see table 1 for this study's measurement items or statements). Several of the statements were negatively phrased and reverse scored to reduce response bias, as indicated by "r" in table 1. The respondents were asked to respond based on their perception of the process-related conditions or factors at the street level. After collecting the data, the measurement model was tested in SmartPLS using techniques recommended by Diamantopoulos and Siguaw (2006) and Hair, Hult, Ringle, and Sarstedt (2016). The first step was for first-order reflective construct examination, and step two was for the formative second and higher-order constructs.

First-Order Constructs

Table 2 presents the overall quality of the reflective measures. Cronbach's alpha and composite reliability were calculated to test the reliability of the data. In this stage, TR3, M1, M2, and RC2

Table 1. Street-Level Survey Instrument

	Relational Dimension (Social Capital)
T1 (r)	When it comes to sharing my knowledge, I am concerned about the possibility of other program staff free-riding.
T2 (r)	When I share my knowledge, it reduces the incentives for other program staff to do the work themselves.
T3	When interacting with other program staff, I view them as my colleagues, not as my adversaries.
T4 (r)	When interacting with other program staff, there is little personal benefit to communicating openly with them.
T5 (r)	When interacting with other program staff, I sometimes feel threatened by those who disagree with me.
M1	What my local department of social services wants to accomplish through this program seems to be the same as the other participating organizations.
M2 (r)	Program staff do not share an overarching mission.
M3	This program is guided by a joint mission statement.
M4	Other program staff seem committed to reaching a new and improved understanding of the issues we face.
M5 (r)	Other program staff seem unwilling to compromise their positions on many issues.
M6	The interactions of other program staff are reflective of a joint responsibility for the future.
CP1	I am willing to put in a great deal of effort, beyond what is normally expected, in order to help this program be successful.
CP2	This program inspires the very best in me.
CP3	I personally feel some responsibility for the fate of this program.
CP4	Most of the other program staff are willing to do whatever it takes to ensure the success of this program.
KF1	My interactions with other program staff influence future program activities.
KF2	Overall, this program values the opportunity to engage different perspectives.
KF3	A better understanding of the problems and challenges associated with unemployment have resulted from sharing knowledge with other program staff.
KF4	I can learn a great deal from interacting with other program staff.
	Systemic Dimension (Formality)
IMF1	How often do all of the participating organizations meet face-to-face?
IMF2	How often you interact with other VIEW caseworkers concerning this program?
IMF3	How often do you interact with non-VIEW participants?
IMF4	How often are you given the opportunity to share your daily challenges with other program participants?
IMF5	How often do you engage in brainstorming activities with other program participants?
IMF6	Most of my communications with other program staff are face-to-face.
A1	Participation in this program requires the staff and their organizations to relinquish some of their control and authority.
A2	Decisions regarding program activities typically require the support of all participating organizations.
RC1	The relationships among participating organizations in this program are relatively formal (contractual).
RC2	When meeting with the other program staff formal titles or positions are rarely part of the discussion.
RC3	The assigned roles and responsibilities within this program are flexible enough to allow program staff to do what is necessary to ensure success.

Table 2. First-Order Construct (Reflective) Reliability

	AVE	Composite Reliability	Cronbach's Alpha
Relational Dimension			
Trust	.555	.831	.744
Mutuality	.531	.819	.703
Commitment to Process	.572	.842	.754
Knowledge Flow	.553	.831	.727
Systemic Dimension			
Interaction Mode & Frequency	.570	.887	.845
Autonomy	.652	.786	.503
Role Clarity	.723	.839	.624

Table 3. First-Order (Reflective) Construct Factor Loadings

	Autonomy	Commitment	Role Clarity	Knowledge Flow	Interaction Mode & Frequency	Mutuality	Trust
A1	0.674	0.060	-0.117	0.013	0.161	0.048	-0.170
A2	0.922	0.340	0.139	0.281	0.244	0.339	0.046
CP1	0.171	0.742	-0.004	0.341	0.263	0.238	0.204
CP2	0.356	0.752	0.396	0.658	0.324	0.471	0.210
CP3	0.126	0.740	0.154	0.271	0.319	0.381	0.170
CP4	0.190	0.789	0.148	0.436	0.293	0.517	0.241
RC1	0.001	0.067	0.803	0.218	0.266	0.011	0.114
RC3	0.090	0.326	0.895	0.524	0.374	0.263	0.088
KF1	0.278	0.381	0.470	0.678	0.444	0.369	-0.088
KF2	0.171	0.317	0.501	0.735	0.297	0.455	0.207
KF3	0.185	0.546	0.287	0.858	0.322	0.486	0.224
KF4	0.058	0.481	0.158	0.690	0.050	0.384	0.406
IMF1	0.131	0.308	0.266	0.322	0.781	-0.024	-0.188
IMF2	0.137	0.345	0.213	0.105	0.806	-0.072	-0.232
IMF3	0.264	0.234	0.185	0.199	0.617	0.173	-0.025
IMF4	0.139	0.289	0.299	0.250	0.808	0.089	-0.102
IMF5	0.241	0.281	0.317	0.396	0.823	0.184	-0.088
IMF6	0.268	0.343	0.444	0.361	0.669	0.085	-0.134
M3	0.216	0.431	0.045	0.464	0.134	0.670	0.225
M4	0.255	0.370	0.113	0.444	-0.045	0.815	0.326
M5	-0.029	0.237	0.165	0.394	0.022	0.698	0.511
M6	0.361	0.541	0.205	0.365	0.161	0.725	0.296
TR1	-0.100	0.114	0.068	0.113	-0.270	0.190	0.752
TR2	-0.093	0.209	-0.023	0.027	-0.197	0.214	0.583
TR4	0.144	0.277	0.154	0.381	-0.085	0.501	0.842
TR5	-0.189	0.180	0.080	0.122	-0.055	0.338	0.778

were the only indicators removed from the initial pool. The remaining items included factor loadings above the 0.5 threshold, and the corresponding reflective constructs met the other reliability criteria, although the relatively low Cronbach's alpha scores suggest that the measures could be improved in future studies.[1] Convergent validity of the reflective constructs was tested by examining the average variance extracted (AVE). As reported in table 2, all constructs met

[1] Autonomy and role clarity do not meet the Cronbach's alpha threshold. However, given that they only include two items, alpha scores tend to be quite low. These reflective constructs do display inter-item correlations in the optimal range of 0.2-0.4 (Briggs & Cheek, 1986) and meet all other reliability criteria.

Table 4. Second and Higher-Order Formative Indicator Multi-Collinearity Test

	VIF
Second-Order: Relational Dimension	
Trust	1.271
Mutuality	1.907
Commitment to Process	1.704
Knowledge Flow	1.771
Systemic Dimension	
Interaction Mode & Frequency	1.253
Autonomy	1.073
Role Clarity	1.174
Higher-Order: Network Functioning	
Relational Dimension	1.168
Systemic Dimension	1.168

the threshold of 0.5, thus providing evidence that convergent validity was achieved. Discriminant validity also was tested using the Fornell–Larcker criterion and the examination of cross loadings (see table 3). In all cases, each of the item's loadings was higher on its own construct than its cross loadings with other constructs. Discriminant validity was also tested using the heterotrait–monotrait ratio of correlations (HTMT) test, as suggested by Henseler, Ringle, and Sartedt (2015). In all cases, the HTMT value was well below 0.90, establishing discriminant validity between the reflective constructs.

Second- and Higher-Order Constructs

The second- and higher-order formative constructs were evaluated first for multicollinearity. Multicollinearity tests, as reported in table 4, showed that each indicator's variance inflation factor (VIF) value was far less that than the cut-off value of 5. Following the recommendations of Bollen (2014), all formative indicators in this measurement model were retained because they were not highly correlated in the model. This serves as evidence of discriminant validity in that the associated indicators did not belong to the other constructs.

Also reported in table 5, an assessment of the indicator validity for the second- and higher-order constructs was performed using the PLS algorithm method with a bootstrapping of 500 samples. Each path coefficient and associated t-value was calculated, and each was found to be significant. Unfortunately, there was no global measure of network functioning to correlate with each second-order formative construct and establish convergent validity.

In support of content or construct validity, the constructs and measurements are all drawn from or shaped by existing theory. Although there is room for improving several of the measurement items based on the above tests, this study is confident moving forward with this instrument and model as an assessment of the process-related factors that actually shape or determine the variation of network functioning that is in use at the street level. To score each respondent, the weighting for each item was adjusted so that they were treated equally. Then, the associated responses for each dimension were summed, and, for ease of presentation, the scores were transformed so that the scores were out of 100.

Table 5. Formative Indicator Validity

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	*t*-Statistic (|O/STDEV|)	*p*-Value
Second-Order Formative Constructs					
Trust -> Relational Dimension	0.168	0.169	0.070	2.398	0.017
Mutuality -> Relational Dimension	0.337	0.328	0.042	7.968	0.000
Commitment to the Process -> Relational Dimension	0.375	0.369	0.057	6.611	0.000
Info & Knowledge Flow -> Relational Dimension	0.380	0.373	0.050	7.635	0.000
Interaction Mode & Frequency -> Systemic Dimension	0.838	0.825	0.048	17.392	0.000
Autonomy -> Systemic Dimension	0.146	0.149	0.057	2.548	0.011
Role Clarity-> Systemic Dimension	0.237	0.232	0.048	4.992	0.000
Higher-Order Formative Construct					
Relational Dimension -> Network Functioning	0.730	0.721	0.109	6.673	0.000
Systemic Dimension -> Network Functioning	0.459	0.447	0.120	3.837	0.000

Table 6. Managerial-Level Survey Instrument

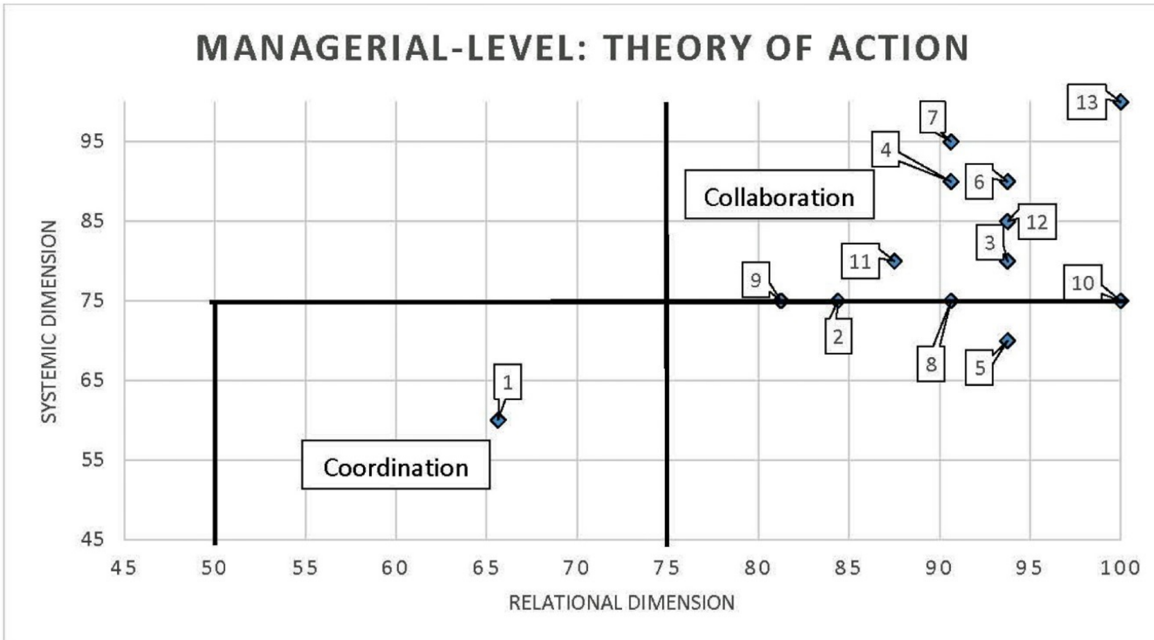
Relational Dimension (Social Capital)	
T1	Participating organizations trust one another.
T2	Participants communicate openly with one another.
M1	Participants share an overarching mission.
M2	What we are trying to accomplish as a program would be difficult for a single organization to accomplish on their own.
CP1	This program has the ability to survive anything even if it had to make some major changes to reach its goals.
CP2	Program participants are dedicated to making this program a success.
KF1	Participants are open to discussing different options or ways of working.
KF2	Informal conversations between program participants should happen on a regular basis.
Global (r)	I would expect the relationships among program participants to be relatively impersonal.
Systemic Dimension (Formality)	
IMF1	Participating organizations should regularly participate in brainstorming sessions to discuss improvements to the program.
IMF2 (r)	Most of the communications between program participants is through non-verbal means.
A1	There is a clear process for making decisions.
A2	Participants must relinquish much of their control and authority.
RC1	Participants in this program have clearly defined roles and responsibilities.
RC2	Program staff tend to act in a distinct and recognizable way (evidence use of words acronyms people outside the program may not understand)
Global	The participating organizations hold collective ownership of various assets (i.e. database or electronics)

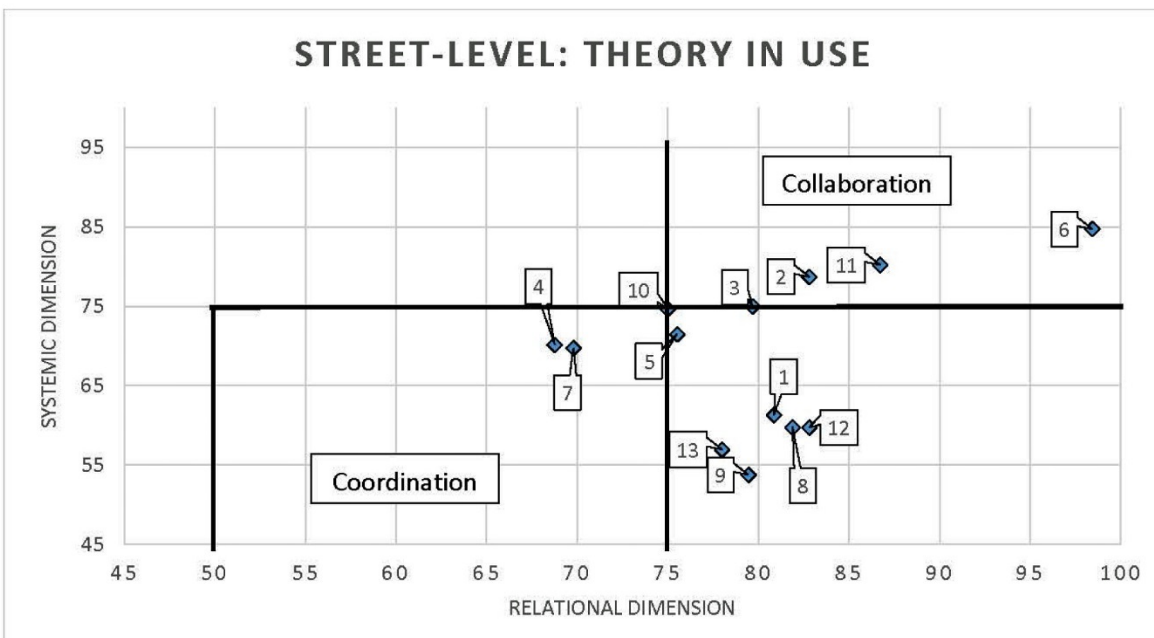
Measurements of Study Constructs at the Managerial Level

Drawing from the VIEW caseworker survey, as reported in table 6, the grant coordinator survey included several similar statements for each dimension, but the wording was altered to better capture the expectations of participants at the managerial level. Given the limited number of cases (13), non-traditional methods to test the validity and reliability of the survey instrument and data were used. This included comparing the scores of these primary statements with a global survey statement, also reported in table 6, which represented a defining characteristic of either the relational or the systemic dimension of network functioning. Then, achieving triangulation of the data, the scores were compared with notes from the interviews with each grant coordinator and the text of each network's grant proposal. More specifically, this study examined the interview responses to two open-ended questions, which were designed to assess one of the dimensions, also reported in table 6.

To score each respondent, the weighting of each item was adjusted so that the items were treated equally. Then, the associated responses for each dimension were summed, and, for ease of presentation, the scores were transformed so that the assigned scores were out of 100. In all but one case, the interviews and grant proposal supported the scores produced by this survey. Only the scores for network 1 were much lower than the other materials would suggest. Given the reliability of the other scores, then, this study was confident moving forward with the survey scores as a representation of managerial expectations or the theory of action for each network.

Figure 3. Process-Related Divergence at the Street-Level





Exploratory Analysis and Findings

An analysis and comparison of the survey scores did show some evidence in support of the existence of process-related divergence at the street level of many of these networks. First, 44% of the VIEW caseworkers relational scores indicated a level of social capital that would not support the expectations of their grant coordinators. Additionally, 66% of their systemic scores indicated a level of formality that would not support the expectations of their grant coordinators. Second, averaging the VIEW caseworkers' scores to assign each network a relational and systemic score showed that only four of the 13 networks (2, 3, 6, and 11) showed the levels of social capital and formality necessary for it to function as expected. Figure 3 depicts this mismatch between the theory in use and the theory of action, otherwise referred to as process-related divergence at the street level, visually and reports the associated scores. As depicted, the majority of the networks are showing the level of social capital necessary for them to function as expected. However, they are not showing the level of formality that would be necessary for them to function as expected. Also, notice how the quadrants depict the differences in the strength or intensity of managerial expectations and the level at which that intensity is met at the street level. At the street level, networks 2, 6, and 11 come close to matching the intensity of managerial expectations, whereas the remaining networks do not. Perhaps, the managerial-level participants need to do more to help formalize the linkages among participants at the street level. This finding raises an interesting question. Over time, would the lack of formality lead to an erosion of social capital or would the level of social capital produce a higher level of formalization?

A review of the VIEW caseworkers' scores raised another important question. To what extent did the VIEW caseworkers in each network share similar relational and systemic perspectives? To address this question, this study transformed the standard deviations of the relational and systemic scores for each network into ordinal measures of convergence. These measures depict how closely the scores cluster around their arithmetic mean and represent four levels of convergence: strong, moderate, weak, and very weak (Meier & Brudney, 2002; Pearson, 2010).[2] As depicted in table 7, none of the networks showed at least a moderate convergence on both measures.[3] This finding suggests that the VIEW caseworkers in each network were approaching their participation in the endeavor in a quite dissimilar way.

Last, these findings led to one more question of interest. Were the networks that showed little-to-no process-related divergence at the street level doing anything differently than the other networks? While the grant proposals were rather vague in regards to how each network was expected to function, networks 6 and 11 did include the most detail. Also, the grant coordinator for network 6 described two monthly meetings, the second of which specifically addressed the issue of participating in a network. The first meeting addressed policy concerns and provided participants with an opportunity to discuss their cases. The second meeting served as a training session where the network participants engaged in team-building exercises and an open dialogue or forum, where they discussed the ins and outs of working together and how their programs was supposed to function (Grant Coordinator 1, personal communication, February 8, 2011). Many of the other grant coordinators described monthly meetings, but the focus appeared to be the breakdown of cases and not the network relationship. As described by the grant coordinator, network 11 developed an extensive program orientation for new hires, which focused explicitly on working in a multi-organizational setting. This program has new hires read the grant proposal and meet with their supervisors for a one-on-one discussion of how the program is expected to function. Then, to help them build interpersonal relationships with other participants, the new hires meet with each of the network's partners, so that they can develop a personal contact with each at the outset (Grant Coordinator 11, personal communication, February 10, 2011). No other grant coordinator described such an extensive on-boarding or orientation program. Interestingly, all of the participants in network 2 are housed in one

[2] The ordinal levels of convergence are as follows: Strong the σ is $\leq$ 5% of the mean; Moderate the σ ranges between 6%–10% of the mean; Weak the σ ranges between 11%–15% of the mean; and Very Weak the σ is $\geq$ 16% of the mean.
[3] Network 12 only has one VIEW caseworker and is not included in this part of the analysis.

building, and the grant coordinator stated that this gives them the opportunity to be in constant communication (Grant Coordinator 2, personal communication, February 8, 2011). The data did not suggest anything different about network 3.

Discussion of Findings and Their Implications

Having demonstrated the potential for process-related divergence at the street level of the network approach to governance, the above findings support the notion that network participation itself may trigger a sense-making challenge for the street-level participants. Perhaps, reflecting on their experiences and the many other things that might influence this sense-making process, the VIEW caseworkers developed their own understanding of how they were supposed to link up with the other network participants, both relationally and systemically. This, then, can be understood as the theory in use by participants at the street level. It appears that more is needed to be done to ensure that the network participants, both at the managerial and street levels, developed a collective or shared understanding of how their networks should function. Complicating such efforts, however, is the reality that many of the VIEW caseworkers navigating much of the same space also arrived at different perspectives and were approaching their participation in the endeavor in a dissimilar way.

Prior to this study, the participants at the managerial levels of many of these networks had given little to no attention to articulating a shared theory of action. Yet, this study demonstrated that they did have some expectations as to how their networks should function. And, in most cases, those expectations were not being met. This supports the notion that agreements worked out during the principled engagement stage of the throughput processes do not always feed-forward to the street level. For example, the same level of trust or commitment and willingness to relinquish some autonomy in support of a shared theory of action that exists at the managerial level does not automatically exist at the street level. The potential differences in the knowledge and experiences of participants at the managerial and street levels, as well as their histories with other network participants, increase the likelihood for such process-related divergence. This makes efforts to achieve a shared understanding of network functioning all the more vital. Yet, to date, this important piece of the overall governance puzzle has not been given due consideration.

There appears to be at least two plausible explanations for this study's findings related to process-related divergence at the street level. On one hand, the expectations of the participants at the managerial level may not have met the realities or demands experienced by participants at the street level. On the other hand, this divergence could due to the lack of attention managerial actors were given to share their expectations with the street-level workers and appropriately equip them to fulfill those expectations. While the lack of in-network convergence by the VIEW caseworkers might suggest that they are adapting pragmatically to the challenges they are facing and support the first explanation, the limited articulation of a shared theory of action supports the second explanation.

As supported by the efforts of networks 6 and 11 described above, street-level participants may benefit from some guidance as to how they are supposed link up with the other network participants. This may decrease the likelihood of divergence and should include sharing the logic behind a theory of action, including how it relates to the overall objectives of a network. Mechanisms such as an extensive program orientation may help to ensure that managerial expectations actually feed-forward to the street levels and are more clearly understood. A shared understanding of network functioning, however, also may require mechanisms to generate some feedback and, similar to what is offered by this study, assess what is actually happening at the street level. Such analysis would give participants at the managerial level an opportunity to assess whether the levels of social capital and formality necessary for their network to function as expected actually exist at the street level. From here, they can revisit their expectations and either revise them or develop strategies that might generate the levels needed to realize their theory of action.

The potential for process-related divergence at the street level, as demonstrated by this study, is an important factor in the process side of the network effectiveness equation. The failure to account for this possibility can distort efforts to assess and improve the throughput processes of the network approach. As previously discussed, there is widespread evidence, as reported by Vangen and Huxham (2003, p. 6), that networks are "difficult to manage and [that] the likelihood of disappointing outputs and failures is high." While not explored here, could some of this difficulty and failure be blamed on process-related divergence at the street level? For example, if managerial participants expected the VIEW caseworkers to collectively draw upon the knowledge, expertise, and resources of other network participants to develop innovative solutions to client barriers to employment they would likely expect their network to function as collaboration. If, however, the conditions at the street level more closely align with cooperation, then the likelihood of disappointing outputs would seem to be quite high.

Conclusions

Due to the limitations of the traditional top-down approach to government, the network has indeed become the new shape of the public sector. Yet there is widespread evidence that networks are difficult to manage and that the likelihood of disappointing outputs or failure is high. This article has uncovered a potential factor that, if misunderstood and mismanaged by practitioners, could thwart their potential for realizing a collaborative advantage. The network is not an undifferentiated form or approach to governances. If certain variations in network functioning do serve some objectives better than other variations, the realization of those objectives might hinge on whether or not participants at the managerial and street levels share that understanding. At the very least, a mismatch in the expectations of managerial level participants and the actual functioning at the street levels would complicate efforts to evaluate and improve upon network effectiveness. Practitioners hoping to realize a collaborative advantage, then, could benefit from examining the degree of process-related divergence present at the street levels of their networks. Utilizing the approach of this study, this might force them to garner feedback from participants at the street level and revisit their expectations while developing strategies for achieving improved alignment. This might include investments in the growth of participant social capital (relational dimension) or efforts to establish the appropriate level of formality (systemic dimension), such that the throughput process functions as expected. It is this process that enables participants to function as a collective. Managerial- and street-level alignment will either increase the likelihood that the participants will achieve their objectives or better position them to recognize the potential limitations of their choices regarding network functioning.

To further explore this line of reasoning, future studies should examine the relationship between levels of street-level divergence in network functioning and network failure. Here, network failure should at least include outcomes or the achievement of policy goals and network sustainability. Given the relatively small study population, future studies should also replicate these efforts on a larger scale and look for ways to improve upon this study's constructs.

Disclosure Statement

The author declares that there are no conflicts of interest that relate to the research, authorship, or publication of this article.

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Research Article

Remaking Local Government: Success and Failure Under Indiana's Government Modernization Act

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During the period of 2008 to 2012, four consolidation attempts occurred under Indiana's Government Modernization Act: two proposing city–county consolidation and two proposing town–township consolidation. The town–township mergers received overwhelming support, with more than 70% of voters approving consolidation in each case. The city–county mergers, on the other hand, were each defeated by a margin of approximately two to one. In this paper, we conduct a comparative case study of the four consolidation proposals using Leland and Thurmaier's (2004) C3 model as an analytical framework. The results of our study indicate that greater demographic diversity and the potential for large cost shifts from urban to rural customers stimulated opposition to the city–county consolidations. The successful town–township consolidations were characterized by more homogeneous populations and modest and predictable fiscal impacts. We find no evidence that pre-existing functional consolidation or strong elite advocacy on behalf of consolidation leads to greater support for the referendum.

Keywords: Local Government Consolidation, Comparative Case Study, Indiana

The Government Modernization Act (GMA) was enacted by the Indiana General Assembly during the 2006 legislative session giving local government units, including counties, cities, towns, and townships, broad authority to consolidate by referendum. Prior to enactment of the GMA, local government consolidation was not codified, and it took a special act of the legislature for local government consolidation to occur. During the period 2008 to 2012, four consolidation referenda were conducted according to the process set forth in the GMA: two proposing city–county consolidation and two proposing town–township consolidation. The two town–township mergers received overwhelming support, with more than 70% of voters voting to approve consolidation in each case. The two city–county mergers, on the other hand, were each defeated by a margin of approximately two-to-one. The four consolidation attempts were similar in at least two key characteristics. All four were conducted using the same process specified in the Government Modernization Act. Furthermore, in each case proponents were recommending the consolidation of a city or town with a geographically larger and encompassing local government unit, such as a county or township.

The consolidation attempts were also, however, significantly different in key aspects. The communities affected by the town–township consolidations tended to be more homogenous with respect to social and economic characteristics than the cities and counties in which consolidation was proposed. Town and township governments, unlike cities and counties, had relatively little overlap in functional responsibilities. In the functions in which overlap existed, most notably fire protection, the towns and townships were already functionally consolidated.

These referendum results raise the question: Why did the town–township consolidations receive such high levels of support, when the city–county consolidations were so strongly opposed? In this paper, we conduct a comparative case study of the four consolidation proposals. We compare these consolidation attempts using data obtained from the consolidation proposals, minutes of reorganization committee and subcommittee meetings, and news reports about the

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consolidation efforts. In conformance with Leland and Thurmaier's C^3 model as our analytical framework, our thesis is that important features of the institutional context, crisis climate, and consolidation charter facilitated support for consolidation in the town–township cases but stimulated opposition in the city–county cases.

Literature

Much of the literature on local government consolidation has focused on city–county consolidation, although only a small number of city–county consolidation attempts have been successful at reducing costs and enhancing revenue, and many other types of consolidation occur. For example, the consolidation of intra-county government units involving cities, villages, towns, and townships also have been considered. Gaffney and Marlowe (2014) examined changes in taxes and spending for six city–city consolidations and found that total expenditures increased in three cities and decreased in three after consolidation. The expenditure decreases were due to changes in debt service. Tax revenue increased in five of the six cities. Bunch and Strauss (1992) examined the potential consolidation of nine small municipalities in western Pennsylvania and found that consolidation may provide the realization of economies of scale and reduce costs and associated budget deficits in these communities. In his examination of the short-term effects of consolidation in five Canadian municipalities, Vojnovic (2000) found that only one city, Abbotsford, limited salary increases to an average of 1.5%, while the other cities had considerably larger increases. The ability of Abbotsford to contain salary increases was due to explicit agreements regarding salary changes before the consolidation. Overall costs increased (or were expected to increase) in three municipalities and decreased in two. In her analysis of consolidation in Ottawa, Canada, Reese (2004) noted that pay and benefit levels tended to increase as differing pay systems and union contracts were renegotiated. Because wages and salaries are usually the largest component of local government budgets, increases in pay and benefit levels are likely to be associated with increases in overall expenditures.

Much of the academic literature on consolidation has focused on the process of city–county consolidation. Prior analyses consist of case studies of specific communities (Durning, 1995; Leland & Thurmaier, 2000; Savitch & Vogel, 2000, 2004), with much of this literature describing successful cases rather than analyzing why the consolidation attempts succeeded (Leland & Thurmaier, 2004). Recent comparative case studies examining the process of consolidation within a causal model (Leland & Thurmaier, 2004, 2005, 2006) bridge this gap. These comparative case studies show that consolidation attempts linked to economic development are more likely to be successful, while attempts linked to equity via redistribution of income from suburbs to city and efficiency gains from reducing duplication and achieving economies of scale are likely to fail.

Local government consolidation attempts may be unsuccessful for a variety of reasons. In his analysis of transaction costs associated with the merger of Norwegian municipalities, Sorenson (2006) found that revenue disparities and differences in party preferences among municipalities are impediments to voluntary merger. Large efficiency gains also make merger more likely to be supported by elected and administrative leaders. Leland and Thurmaier (2005, 2006) found that consolidation referenda that are approved by voters usually focus on the economic development aspects of consolidation rather than on increased equity or efficiency.

A broader literature has examined how population heterogeneity affects the number of political jurisdictions, which ultimately affects consolidation. Alesina, Baqir, and Hoxby (2004) examined factors that influence the number of political jurisdictions in a county and found that both racial and income heterogeneity positively influence the number of jurisdictions (school districts and municipalities) with race having a stronger influence. As the probability of interacting with a person of another race or income level increases, there are more jurisdictions in a county. They also note that lack of consolidation even in the face of economies of scale is how jurisdictions respond to heterogeneity. In their analysis of the amalgamation of Swedish municipalities, Hanes, Wikstrom, and Wangmar (2012) found that income differences affected municipalities' willingness to voluntarily merge. Bates, Lafrancois, and Santerre (2011) found that income differences between Connecticut public health districts negatively influence the consolidation of these districts.

To explain successful consolidation referenda, Rosenbaum and Kammerer (1974) proposed a model (R&K model), which has since been widely applied. The model has three basic elements:

1. A crisis climate develops. It may result from demographic shifts, changes in the quality of government services, or other factors. Citizens demand a government response.
2. If citizens are not satisfied with the government's response, they lose confidence in the structure of the local government and support for consolidation develops, usually bolstered by the support of civic organizations and the local media.
3. Finally, the initial support for consolidation is strengthened by accelerator events, such as a scandal or the loss of a leader. Ultimately, the effort coalesces in a consolidation referendum being on the ballot.

Leland and Thurmaier (2004) augmented the Rosenbaum and Kammerer (1974) model incorporating the work of Johnson and Feiock (1999) and Feiock and Carr (2000) to develop a causal model of the consolidation process called the C3 model of local government consolidation with testable hypotheses. The C3 model adds the referendum campaign as the final stage of the model, incorporates institutional framework, particularly the legal framework in which the consolidation attempt occurs, considers voter alienation, includes the impact of specific types of charter provisions, and expands the role that civic elites play in the process (Leland & Thurmaier, 2004).

This paper extends the literature in two primary ways. First, we consider and compare two types of local government consolidations city–county and town–township. Previous research has focused primarily on city–county consolidations with limited study of other types. Second, our consolidation cases occurred within a single state over a limited time period and governed by the same state enabling legislation, allowing us to focus on local differences. Other comparative case studies have examined cases from different states, governed by different legislation, and further apart in time, making it more difficult to make inferences.

Local Government in Indiana

Local government in Indiana consists of counties, municipalities (cities and towns), townships, school districts, and special districts (see table 1). Indiana cities are divided into three classes depending on population: first-class cities have 600,000 inhabitants or more; second-class cities have between 35,000 and 599,999 inhabitants; and third-class cities have fewer than 35,000 inhabitants. Other municipalities, regardless of population, are towns. Second- and third-class cities are governed by a mayor and city council. Towns are governed by a town council (and appointed town manager). Towns with a population of 2,000 or more may become cities through a petition of voters and a referendum. Likewise, cities may become towns through a petition of two-thirds of taxpayers to the circuit court. Indianapolis is the only first-class city

Table 1. Number of Indiana Local Governments, 1952-2012

	1952	1962	1972	1982	1992	2002	2012
IN Counties	92	92	91*	91	91	91	91
IN Municipalities	540	546	546	564	566	567	569
IN Townships	1,009	1,009	1,008	1,008	1,008	1,008	1,006
IN School Districts	1,115	884	315	305	294	294	291
IN Special Districts	293	560	832	897	939	1,125	752
IN Total	3,049	3,091	2,792	2,865	2,898	3,085	2,709

Source: U.S. Census Bureau (2013)
*With the consolidation of Indianapolis and Marion County in 1970, the Census Bureau does not count Marion County as a separate county government.

and is governed by a mayor and city–county council. The U.S. Census Bureau (2013) provides more detail about local government in Indiana.

Indiana, like several other mainly Midwestern states, continues to have the township layer of government, even though this type of government provides few functions. Townships in Indiana are general purpose governments, each led by an elected trustee and township board, and primarily oversee volunteer fire departments and emergency medical services, poor relief, cemeteries, and parks. Townships have property taxing authority. All cities and towns are within township areas.

The number of municipalities has remained stable over the past several decades. Towns make up the largest share of municipalities (approximately 80% of municipalities in the state). During 2012, there was one first-class city, 22 second-class cities, 94 third-class cities, and 452 towns. The number of school districts has decreased dramatically since 1952. The number of school districts per county ranges from 21 counties with one school corporation to 16 school corporations in Lake County. Hicks and Faulk (2014) provided additional details on the distribution of school corporations in the state.

As in most states, the number of special districts has increased dramatically since the 1950s. The decrease in special districts between 2002 and 2012 is due primarily to the reclassification of school building corporations as a component of school districts rather than special districts. In Indiana the most common types of special districts are library districts (297), soil and water conservation (94), sewerage (91), solid waste management (71), housing and community development (70), and drainage and flood control (41).

Local Government Consolidation in Indiana

There is one consolidated city–county government in Indiana, UNIGOV, which consolidated Indianapolis and Marion County in 1970 through a 1969 Act of the General Assembly. Blomquist and Parks (1993, 1995) provide information on the background and structure of UNIGOV. Segedy and Lyons (2001) and Rosentraub (2000) evaluate various aspects of UNIGOV.

A consolidation referendum was held in Evansville and Vanderburgh County in 1974, but the consolidation proposal was rejected by voters. Subsequent consolidation attempts in Evansville-Vanderburgh County failed to reach a referendum. In 1990, a citizens' committee drafted a consolidation plan, but it was tabled by the Evansville mayor and Vanderburgh County commissioners. In 2006, another citizens' committee drafted yet another consolidation plan, but legislation providing for a referendum did not pass the legislature (League of Women Voters of Southwestern Indiana, n.d.).[1] The 1974 attempt in Evansville and Vanderburgh County was the only consolidation attempt that made it to the referendum stage prior to 2006.

During the 2006 session, the Indiana General Assembly passed the Government Modernization Act (GMA) enabling government reorganization of political subdivisions. Motivated by governmental efficiency and effectiveness, this act provides a uniform process for local governments to consider and implement consolidation offering two different approaches for forming a reorganization committee charged with developing a plan of reorganization (the consolidation charter). Under one alternative, the governing bodies of the local government units considering reorganization create the reorganization committee by enacting identical resolutions. The other alternative allows reorganization proponents to file petitions supporting the creation of a reorganization committee. A petition signed by at least 5% of the voters in the subdivision must be filed with each political subdivision to be included in the reorganization proposal.[2] According to the Buschmann (2007), the two paths of this act seek to achieve balance between competing interests by equally including all affected units of government, preserving their governing autonomy, as well as embracing citizen participation in the reorganization process.

Prior to the GMA, consolidation attempts in Indiana required special legislation. Schaal, Taylor, and Faulk (2017) analyze southern states for the presence or absence of general law enabling consolidation and find that those states without general law tend to have no consolidation referenda. Only two states without general law enabling consolidation, Georgia and Florida, run counter to the trend and have held many referenda as a result of special legislation. Since passage of the GMA, several more consolidation attempts for a variety of types of governments have occurred in Indiana, providing further evidence that authorization for consolidation under general law facilitates consolidation efforts.

Data and Method

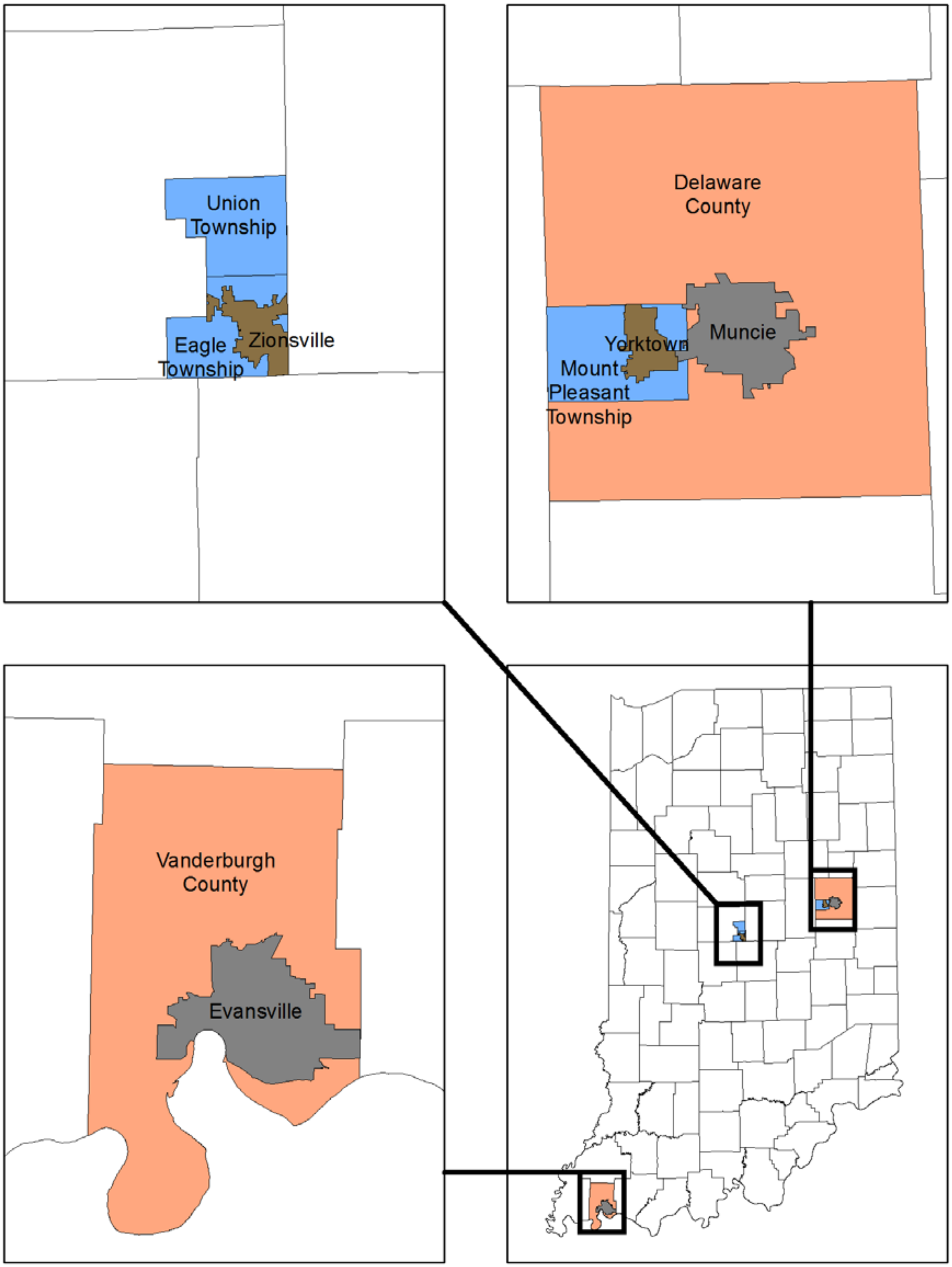
Following Leland, and Thurmaier (2004), we utilize the comparative case study method to analyze these consolidation attempts, using their C3 model as an analytical framework. Not only do case studies provide rich details, but the comparative research design allows us to "measure each case against testable (i.e., falsifiable) hypotheses" (Leland & Thurmaier, 2004).

We compare case studies of four consolidation attempts in Indiana, which occurred from 2008 to 2012: Town of Zionsville-Eagle Township-Union Township in 2008, Town of Yorktown-Mt. Pleasant Township in 2010, City of Muncie-Delaware County in 2012, and Evansville-Vanderburgh County in 2012 (see figure 1). Focusing on consolidation attempts occurring within one state and within a limited time period allows us to hold constant key variables related to the institutional context while examining the effect of variation in other characteristics across each case.

In each case study, we draw much of our data from the plans of reorganization, which are similar to a consolidation charter, and contemporaneous news reports about the development of

[1] The act to authorize the Evansville-Vanderburgh referendum was killed as the Government Modernization Act neared passage. Key legislators felt that, with the passage of the GMA, there was no need for special legislation for one community (Whitson, 2006).
[2] The number of voters is determined by the vote cast in the political subdivision for secretary of state in the most recent general election.

Figure 1. Locations of Indiana Local Government Consolidation Referenda, 2008-2012



the plans and conduct of the referendum campaign. These data are supplemented with economic and demographic data about the communities under study.

Hypotheses

Drawing on Leland and Thurmaier's (2004) C3 model, we focus on key characteristics of the institutional context, charter provisions, and referendum campaign to explain the disparate outcomes of the four consolidation referenda analyzed in this study. Each of these characteristics and our hypotheses are presented below.

Institutional Context

Leland and Thurmaier (2004) suggest that the legal framework governing consolidation attempts is a key variable affecting the likelihood that a consolidation attempt reaches a referendum. In our study, the legal framework is held constant across all cases, as all four consolidation attempts were governed by the Government Modernization Act, which allows locally initiated consolidation attempts to reach referenda. By holding this aspect of the study constant, we are able to focus on other variables and their impact on consolidation outcomes.

A community's social and economic characteristics represent other important aspects of the institutional context within which a consolidation attempt takes place. Leland and Thurmaier (2004) suggest that, when the urban and non-urban interests in a community have diverging interests, then it will be more difficult to gain approval for consolidation than in a more homogenous community. Our first hypothesis is related to these characteristics:

> *H_1: In communities in which the urban and non-urban populations exhibit diverse social and economic characteristics, there will be lower support for political consolidation than in communities in which these populations are homogenous.*

Another potentially influential factor within the institutional context is the existing state of functional consolidation in a community. Leland and Thurmaier (2004) explain that the existence of interlocal agreements for the provision of shared services may reflect a high level of trust between the governmental units. This trust may make it easier for the affected governments to consider political consolidation. In addition, existing functional consolidation decreases the complexity of the consolidation process, which may lead to greater support for consolidation. On the other hand, a high level of functional consolidation may decrease support for political consolidation because many of the benefits of shared service provision have already been gained. For the purposes of analysis, we state our second hypothesis in a form in which functional consolidation is expected to lend support to political consolidation.

> *H_2: In communities with a high level of functional consolidation, there will be greater support for political consolidation than in communities with little functional consolidation.*

Charter Provisions

Leland and Thurmaier (2004) contend that specific provisions of the consolidation proposal may help or hinder the campaign in support of consolidation. Key provisions include those that affect taxes and the number of elected officials in the consolidated government.

Proposals that avoid large changes in tax burdens are likely to receive greater support than plans that dramatically increase taxes (Leland & Thurmaier, 2004). Many city–county consolidation charters utilize provisions intended to minimize the impact on tax burdens, such as the creation of urban and non-urban tax districts with different levels of service and tax rates. Despite these provisions, the merging of city and county departments providing similar services may result in cost shifting between groups of taxpayers. In contrast, town–township consolidations encompassing a relatively smaller scope of services and with less duplication of services are likely to result in less cost shifting. The cost shifting inherent in city–county consolidation may stimulate opposition by groups of taxpayers who expect an increased tax burden as a result of consolidation, leading to our third hypothesis:

> *H_3: In communities in which political consolidation is expected to result in significant tax increases for some taxpayers, there will be lower support for political consolidation than in communities in which taxes are unchanged or reduced for all.*

Another important charter provision is the size and structure of the unified council for the consolidated government. Leland and Thurmaier (2004) suggest that a council reduced in size compared the combined city and county councils and consisting of a mix of district and at-large seats will be more likely to garner support than other configurations. Smaller councils will be perceived as more economical, and the mix of representation forms will allow the representation of geographically based interests and countywide perspectives.

All four consolidation charters analyzed in this study provided for a mix of district and at-large representation on the consolidated council. They varied, however, in the extent to which they reduced the number of elected officials in the post-consolidated government. Because the number of elected officials provides an easy to understand – if rough – measure of how much "streamlining" of government will result from consolidation, we suggest our fourth hypothesis:

> *H_4: In communities in which political consolidation will result in a large reduction in the number of elected officials, there will be greater support for political consolidation than in communities in which the reduction is small.*

Referendum Campaign

The referendum campaign is the final stage of the consolidation process. Leland and Thurmaier (2004) suggest that the role of consolidation entrepreneurs and community elites in the campaign will be a key determinant of the success or failure of the referendum. We explore this aspect of the model by focusing on the role of community elites in our final hypothesis. In particular, we examine the role of the sheriff. Leland and Thurmaier (2004) argue that the county sheriff is a power factor in other consolidation attempts.

> *H_5: In communities in which community elites are strongly supportive of political consolidation, there will be greater support for political consolidation than in communities in which community elites are largely opposed or divided.*

In the next section, we examine the history and characteristics of the four consolidation efforts in order to test these hypotheses.

Analysis and Discussion

Indiana's Government Modernization Act (GMA) governed all four consolidation attempts and provided the means by which consolidation proponents were able to place consolidation on the agenda. The GMA provides two paths for forming a reorganization committee charged with developing a plan of reorganization (the consolidation charter). Under one alternative, the governing bodies of the local government units considering reorganization create the reorganization committee by enacting identical resolutions. This was the path followed in both town–township consolidations. In the Zionsville-Union-Eagle and Yorktown-Mount Pleasant consolidations, the town council and township board(s) were the parties that initiated the consolidation effort by enacting resolutions and appointing the committee members.

The other alternative allows reorganization proponents to file petitions supporting the creation of a reorganization committee. A petition signed by at least 5% of the voters in the subdivision must be filed with each political subdivision to be included in the reorganization proposal.[3] This alternative was exercised in both city–county consolidations. In the case of the Evansville-Vanderburgh consolidation, the League of Women Voters of Southwestern Indiana organized the petition drive (Langhorne, 2009a). In the Muncie-Delaware consolidation, a local taxpayer group, Citizens of Delaware County for Property Tax Repeal (CDCPTR), was the petition drive organizer (Werner, 2010). Once the petitions were filed and verified by the county clerk, the GMA required the governing bodies of the subject political subdivisions to enact the resolutions necessary for forming a reorganization committee and then appoint members to the committee.

Crisis Climate and Power Deflation

Although we make no predictions related to the crisis climate or power deflation in these cases, a review of events leading up to the consolidation proposals provides a fuller picture of the context in which each consolidation proposal was advanced. Some elements of the crisis climates were a result of events affecting all Indiana local governments, such as the recently enacted property tax caps and the attention that the Kernan-Shepard report had attracted to local government reorganization. Other elements of the four communities' crisis climates were more local in nature.

In 2008, the Indiana General Assembly had enacted property tax caps that were partially implemented in 2009 and fully implemented in 2010 [see Faulk (2013) for a description of Indiana's property tax caps and revenue impacts]. The result of the tax caps was that nearly every local government unit in the state saw a reduction in property tax revenues, some fairly modest, others quite severe. In Muncie and Delaware County, the impact of the tax caps was large. Muncie saw a greater than 30% reduction in property tax revenues; Delaware County government saw a reduction of more than 17%. The impacts in Evansville and Vanderburgh County were more modest, less than 5% Evansville and less than 4% for Vanderburgh County government. The tax cap impacts in the towns and townships varied. In Zionsville, tax caps reduced revenues by around 6% and less than 2% in the townships. Impacts in Yorktown-Mount Pleasant were larger, around 10% for Yorktown and 8% for Mount Pleasant Township.

The Kernan-Shepard report, released in 2007, had drawn a great deal of attention to the topic of government reorganization and restructuring (Langhorne, 2009b). The report (Indiana Commission on Local Government Reform, 2007) recommended sweeping changes to Indiana local governments, including eliminating townships, replacing each county's three-member county commission with a single elected county executive, and consolidation of schools with less than 2,000 students. Although almost none of the recommendations were enacted by the General Assembly, during the years immediately after the report was released many local governments were concerned that the General Assembly would make large changes to local government in Indiana.

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[3] The number of voters is determined by the vote cast in the political subdivision for secretary of state in the most recent general election.

Table 2. Socioeconomic Characteristics and Referendum Support

	Muncie-Delaware County		Evansville-Vanderburgh County		Zionsville-Eagle-Union Townships		Yorktown-Mt. Pleasant Township	
	Urban	Non-Urban	Urban	Non-Urban	Urban	Non-Urban	Urban	Non-Urban
% Non-white	15.7	2.6	16.6	5.8	6.5	6.2	3.1	8.3
Poverty rate (%)	30.4	6.5	19.5	7.7	3.0	2.7	3.4	8.9
Per capita earnings ($)	11,710	20,147	16,045	23,560	43,711	42,881	25,089	22,281
Referendum support (%yes)	37.6		33.1		79.1		73.4	

In Muncie-Delaware and Evansville-Vanderburgh, fiscal conditions heightened the crisis climate and led to controversies that could be considered to constitute power deflation. Responding to the large reduction in property tax revenue, Muncie Mayor Sharon McShurley laid off 32 firefighters and five police officers (Smith, 2009). This controversial decision contributed to an environment in which the potential for consolidation-related efficiencies was attractive to local activists, such as the CDCPTR.

In Vanderburgh County, uncertainty about the eventual impact of the tax caps resulted in a decision by the county to not renew a homestead property tax exemption (Langhorne, 2009c). The homestead credit was later reinstated, which, along with the impact of the tax caps, resulted in a $15 million combined budget shortfall for the Evansville and the county, leading the local newspaper's editorial board to call for consideration of local government consolidation (Evansville, Vanderburgh County facing $15 million fiscal crisis, 2009). The local League of Women Voters' president referred to a need for greater government efficiency when explaining the reason for the petition drive (Langhorne, 2009a).

In Zionsville and Yorktown, property development and annexation issues contributed to the crisis climate. Zionsville officials had expressed concern about rapid development just outside town limits, which was governed by Boone County's more permissive development standards (Woodson, 2008). There also was concern among town and township officials that aggressive annexation by the nearby community of Whitestown would limit Zionsville's ability to expand (Annis, 2007; Olson, 2007).

In Delaware County, Yorktown and Muncie had been engaged in an annexation battle dating back to 2005 (Slabaugh, 2005; Yencer, 2005). This territorial conflict intensified when the Muncie-Delaware consolidation effort got underway. Yorktown and Mount Pleasant officials initiated their own consolidation effort, in part, to minimize the impact on Yorktown and Mount Pleasant in the event that the Muncie-Delaware effort was successful (Yorktown-Mt. Pleasant Township Reorganization Committee, 2011). In both the Yorktown and Zionsville cases, it is difficult to identify any instances of power deflation. The consolidation efforts served as the responses to the crises and in both cases were ultimately successful.

Institutional Context

Once set in motion in each community, the consolidation efforts proceeded under a common legal framework, but other aspects of the institutional context varied across the four communities. Our first hypothesis suggested that the level of support for consolidation would depend, in large part, on the level of socioeconomic diversity in the community. Specifically, we expect that greater support will be exhibited in communities where the urban and non-urban populations are more similar. Table 2 compares the urban and non-urban populations in each case on three dimensions: racial diversity, income, and poverty. In the city–county consolidation cases, “non-urban” refers to the portion of the county outside the city limits. In the town–township cases, “non-urban” refers to the portion of the township(s) outside the town limits.

A review of the data presented in table 2 reveals that the urban and non-urban areas in the two city–county consolidation cases were very different. In both Muncie and Evansville, the urban population was poorer, had much lower earnings, and consisted of a greater proportion of non-white residents than in the non-urban areas of the county. The communities in which the town–township consolidations occurred were more homogenous. Zionsville and the surrounding townships were similar. Yorktown was different from the other communities in that the urban population was less diverse and wealthier than the surrounding area, but the urban and non-urban areas were still more similar than in either of the city–county consolidation cases. These data indicate that the more homogeneous communities experienced greater support for consolidation than the more diverse communities, as predicted by our first hypothesis.

Our second hypothesis addressed the effect of functional consolidation on support for political consolidation. We hypothesized those communities in which a high level of functional consolidation would exhibit greater support for political consolidation. Evansville-Vanderburgh was the only community in which a large number of local government services were functionally consolidated. After the 1974 consolidation referendum was defeated, city and county officials proceeded to implement many of the consolidated functions that had been proposed in the consolidation plan. As a result of this functional consolidation, by the time of the 2012 referendum, Evansville and Vanderburgh County had 12 jointly funded local government departments: traffic engineering, central dispatch, animal control, human relations commission, purchasing, computer services, solid waste management, emergency management, building commission, area plan commission, and legal aid society (Langhorne, 2010a).

In the other communities, fewer services had been functionally consolidated. Muncie and Delaware County’s only jointly funded department was central dispatch. In Zionsville-Eagle-Union and Yorktown-Mount Pleasant, only the fire departments were jointly funded. In the case of the towns and townships, however, the fire department is the only government service for which both towns and townships are responsible, so one might claim that the towns and their surrounding townships had already implemented all the functional consolidation that was possible. In any event, within our four cases, there doesn’t appear to be any systematic relationship between functional consolidation and support for political consolidation; thus, our second hypothesis is not supported.

Charter Provisions

The consolidation charters describe how the consolidated government will be structured, and the specific provisions of the charter will influence the level of support it receives (Leland & Thurmaier, 2004). In all four cases, the reorganization committee included common charter provisions intended to garner support for consolidation. All four reorganization plans provided for at least two service districts with different levels of service and tax rates that would enable non-urban residents to avoid receiving – and paying for – the more intensive urban services provided to urban residents. All four plans also preserved, at least initially, the less-restrictive county land use ordinances that were presently in effect in the non-urban areas of the county or township (City of Evansville-Vanderburgh County Reorganization Committee, 2011; Communities of Zionsville Area for Better Government, 2008; Muncie-Delaware County Government Reorganization Committee, 2010; Yorktown-Mt. Pleasant Township Reorganization Committee, 2011). These provisions were intended to minimize the fiscal and regulatory impact of consolidation on the non-urban populations affected by the consolidation plans.

In the two town–township consolidations, only a very small fiscal impact was projected in either case. The only high-cost common service between the towns and townships was fire protection; in both cases the communities were already jointly funding their local fire departments under longstanding agreements. The remaining township services, such as park and cemetery upkeep and poor relief, would be transferred to the town government with no expectation that service costs were likely to change. The urban service districts consisting of the area within the pre-consolidation town limits would continue receiving and paying for the level of service provided prior to consolidation. The newly consolidated governments would enter into memorandums of understanding (MOUs) with the county governments to continue providing the pre-consolidation level of sheriff patrol and road maintenance (Communities of Zionsville Area for Better Government, 2008; Yorktown-Mt. Pleasant Township Reorganization Committee, 2011). As a result, the town–township consolidations were projected to produce small cost reductions for both urban and non-urban residents, primarily due to the elimination of the town trustee's salary (Crowe Horwath, 2011a; Woodson, 2007).

In the two city–county consolidations, the fiscal impact of the consolidation was a matter of contention between consolidation supporters and opponents. In both cases, one item of concern was the shifting of sheriff patrol costs from urban to non-urban taxpayers. In both reorganization plans, the police patrol function was to remain unconsolidated. The urban areas would continue to be served by the existing police department, and the sheriff would continue patrolling the non-urban areas (City of Evansville-Vanderburgh County Reorganization Committee, 2011; Muncie-Delaware County Government Reorganization Committee, 2010). In the pre-consolidation situations, city property owners, as county taxpayers, help fund the sheriff's patrol. In both cases, however, financial analyses produced by Crowe Horwath projected a substantial post-consolidation increase in the tax rate for non-urban taxpayers and decrease for urban taxpayers as a result of allocating all sheriff patrol costs to the non-urban service district (Crowe Horwath, 2010, 2011b; Gootee, 2011a).

In our third hypothesis, we predicted that consolidations in which some taxpayers were expected to experience large post-consolidation tax increases would receive less support than consolidations in which taxes are unchanged or reduced for all. In both city–county consolidations, fiscal analyses projected a potentially large shift in costs from urban to rural taxpayers. Both of these proposals were defeated soundly in the referendum. In the town–township consolidations, however, fiscal projections indicated that there would be a modest decrease in spending and little overall change in tax rates. Both of these proposals were strongly supported at the polls. Thus, our third hypothesis is supported.

Another potentially important charter provision is in regards to the number of elected officials in the consolidated government. In our fourth hypothesis we suggest that comparing the number of elected officials in the pre- and post-consolidation governments will provide observers with an easy to understand – if rough – measure of how much the consolidation will "streamline" local government. In all four cases, the reorganization plan called for a smaller number of elected officials in the consolidated government than in the separate governments.

The two city–county consolidations include a number of constitutional offices, such as sheriff, auditor, and treasurer, which could not be eliminated, although they could potentially be stripped of their powers (and salary) in the consolidated government. There is potential, however, for a reduction in the executive and legislative officials. In Evansville-Vanderburgh and Muncie-Delaware, the reorganization plan called for a reduction in executive and legislative elected officials from 20 (one city mayor, nine city council members, three county commissioners, and seven county council members) to 16 (one mayor or county executive and 15 council members), a 20% reduction (City of Evansville-Vanderburgh County Reorganization Committee, 2011; Muncie-Delaware County Government Reorganization Committee, 2010).

In Yorktown-Mount Pleasant, the consolidation reduced the executive and legislative officials from nine (five town council members, three township board members, and one township trustee) to seven (all town council members), a 22% reduction. In Zionsville-Eagle-Union the reduction was larger because of the elimination of two townships instead of one. In this case, elected officials were reduced from 13 (five town council members, six township board members, and two trustees) to seven (all town council members), a 46% reduction (Communities of Zionsville Area for Better Government, 2008; Yorktown-Mt. Pleasant Township Reorganization Committee, 2011).

Although the Zionsville consolidation resulted in a relatively large reduction in elected officials, the reductions in the other three cases were roughly the same. These results provide no support for our fourth hypothesis.

Referendum Campaign

In our fifth and final hypothesis, we predicted that campaigns in which community elites are strongly supportive would have greater success than those in which elites are divided or opposed. In the Zionsville-Eagle-Union and Yorktown-Mount Pleasant consolidations, community elites in the form of town council members, township board members, and township trustees were responsible for initiating the consolidation efforts and were supportive of the efforts of the reorganization committees in their respective communities. We are not aware of any organized opposition to either of these consolidation referenda. In these two cases, community elites were strongly supportive.

In Muncie-Delaware and Evansville-Vanderburgh elected officials did not take the initiative in placing consolidation upon the public agenda. In both cases, it was left to other groups to circulate petitions to require the elected officials to act. The Evansville-Vanderburgh effort was initiated by the League of Women Voters of Southwestern Indiana, who conducted the petition drive needed to initiate the consolidation process (Evansville-Vanderburgh County Consolidation, 2009). The Muncie-Delaware consolidation effort was initiated by the Citizens of Delaware County for Property Tax Repeal (Werner, 2010).

In Evansville-Vanderburgh, however, there were many supportive community elites. The mayor and at least one county commissioner expressed support for the effort early in the petition stage (Langhorne, 2009a, 2009b). The editorial board of the local newspaper was a strong advocate in support of the consolidation referendum (Vote 'yes' to bring community into the 21st century, 2012). The sheriff supported the consolidation effort during the campaign, but his support came only after the resolution of a long, drawn-out controversy over whether to merge the Evansville Police Department and Vanderburgh County Sheriff Office (Langhorne, 2012a).

Leland and Thurmaier (2004) argued that, among elites, the county sheriff is a particularly influential force in city–county consolidation attempts. In the Evansville-Vanderburgh effort, conflict between the sheriff and police chief during the drafting of the consolidation plan highlighted the sheriff's strong influence. Early in the process, the Evansville police chief and Vanderburgh County sheriff submitted competing proposals for consideration by the public safety subcommittee. Under the chief's proposal, the police department and sheriff's office would remain separate, but the police department would take on responsibility for law enforcement operations on a countywide basis. The sheriff's department would be responsible only for operation of the county jail, court security, and serving court papers. Under the sheriff's proposal, the two law enforcement agencies would be merged into one, under the supervision of the sheriff (Langhorne, 2010b). The public safety subcommittee voted 3–1 to recommend adoption of the sheriff's proposal by the full reorganization committee. The sheriff and other supporters of his proposal argued that law enforcement operations should be led by an elected official (Langhorne, 2010c).

As the full reorganization committee drafted the reorganization plan, the police chief and local chapter of the Fraternal Order of Police (FOP) continued to argue against consolidation of the two agencies. The FOP argued that consolidation would lead to increased costs and reduced efficiency (Langhorne, 2010c). The police chief raised concerns about the potential for conflict between the mayor and sheriff that could negatively impact law enforcement. The sheriff continued to argue that accountability for public safety properly belonged to an elected sheriff – not to an appointed police chief (Langhorne, 2010d).

At one point, the reorganization committee rejected both proposals and developed a novel proposal of its own. Under this proposal, the two agencies would remain separate, but the sheriff – not the mayor – would appoint the police chief. This plan pleased neither the chief nor the city police officers, and the sheriff found it merely "palatable" (Langhorne, 2010e). Ultimately, however, the sheriff's original proposal was included in the plan of reorganization submitted by the committee (City of Evansville-Vanderburgh County Reorganization Committee, 2011).

Under the Government Modernization Act, the governing bodies that appointed the reorganization committee, in this case the Evansville City Council and Vanderburgh County Commission, have the power to amend the plan of reorganization prior to submitting it to the voters. Once this process began, some city council members expressed concern that the law enforcement merger might be a "killer" because of opposition among their constituents (Gootee, 2011a). Officials decided to remove the law enforcement merger from the plan. Discussion then turned to whether to include provisions in the plan for future reconsideration of merging the agencies (Gootee, 2011b). Although the sheriff continued lobbying for a merger, the final plan prohibited any consideration of a law enforcement merger until after the 2024 election, if approved by voters in a referendum (Gootee, 2011c, 2011d). Despite this change to the plan, the sheriff supported consolidation during the campaign, while the Fraternal Order of Police opposed it (Langhorne, 2012a).

Over $400,000 was spent by supporters and opponents in the referendum campaign with approximately three quarters of the total being spent by the supporters. Pro-consolidation contributors included the local chamber of commerce, a number of individual businesses, and the mayor's political action fund. Opponents included the Farm Bureau and many individual contributors (Langhorne, 2012b).

In the Muncie-Delaware consolidation, the proposal had little support among community elites. While one city council member expressed support for the consolidation proposal (Gregory, 2012), the mayor, two of three county commissioners, including the commission president, and the local leaders of both political parties all opposed the consolidation effort (Roysdon & Walker, 2012a). Nothing in the public record indicates whether the sheriff took a position. In this case, unlike in Evansville-Vanderburgh, there had never been any serious discussion about merging the city police and county sheriff departments. The chair of the reorganization committee indicated that they decided very early in the process to leave the two departments separate in an attempt to avoid controversy (E. Kelly, personal communication, September 26, 2016). Unlike in Evansville-Vanderburgh, where the city council and county commission amended the plan in a manner intended to head off opposition, the Muncie City Council and Delaware County Commission used their authority to make the proposal unlikely to pass by including a double supermajority requirement for passage (Roysdon & Walker, 2012a). The local newspaper, while supportive of the goals of consolidation, urged voters to reject the proposal because it was "not ready" (Muncie StarPress, 2012).

Campaign contributions in support of and opposition to the consolidation proposal were much lower than in Evansville-Vanderburgh (less than $15,000 total), but most of the campaign support (almost $13,000) went to the opposition committee (Roysdon & Walker, 2012b). In both the Evansville-Vanderburgh and Muncie-Delaware consolidation efforts, members of the minority community expressed concerns about representation under a consolidated government, with the local NAACP president urging a "no" vote on the Muncie-Delaware proposal (Harley, 2012; Langhorne, 2012c).

In any event, these results do not support our hypothesis that elite support influences the referendum results. In Evansville-Vanderburgh there were many community elites, including the sheriff, who devoted a high level of resources to a well-funded campaign in support of the consolidation proposal, and they lost by a two-to-one margin, nearly the same as in Muncie-Delaware, where elites were strongly opposed to consolidation, and the supporters were far outspent by the opponents.

Conclusions and Extensions

Our paper enhances the consolidation literature first by examining town–township consolidations in addition to city–county consolidations. Second, it focuses on the single state of Indiana within a limited time frame guided by the same enabling legislation, thus allowing us to carefully discern local governmental differences. Comparing the institutional frameworks, charter provisions, and referendum campaigns for four consolidations involving two town–township cases and two city–county cases, our findings indicate that homogeneous communities are more likely to support consolidation efforts than diverse communities. Perhaps the more homogeneous demographics in the town–township consolidations led to more willingness for residents to trust that post-consolidation issues could be resolved. Such trust and reciprocity often develop when communities are socially engaged in networks (see Putnam, 2000).

We also find that projected fiscal impacts in the four consolidation cases substantiate our hypothesis stating that there will be less support for political consolidation if such consolidation is expected to yield significant tax increases for some taxpayers. This comparison was made possible by the inclusion of the relatively uncomplicated town–township consolidations. Because the towns and townships had few overlapping services, except fire protection, which they were already providing jointly, there was little risk of cost shifting. Neither was there much opportunity for cost savings. In this simplified problem~~,~~ environment voters could make a decision about consolidation in terms of how well it addressed the issues in the crisis climate – threats of outside development in these cases. If these town–township consolidations had been affected by threats of cost shifting similar to those in the city–county consolidations, then non-urban voters would have been faced with a more difficult cost-benefit decision in deciding if protection from unwanted encroachment was worth the increased cost of services. But in these cases, they could obtain the benefits of consolidation essentially for free. Thus, uncertainty about cost shifting between urban and rural taxpayers seems to stir up opposition to consolidation.

Our analysis fails to demonstrate, however, that communities with existing high levels of functional consolidation will have greater support for political consolidation. Duplicative services create the opportunity for cost-savings but also creates the possibility of this cost shifting. The town–township consolidations had little overlap in services and, therefore, little opportunity for savings, but this situation creates more certainty about post-consolidation cost of services. Neither do we find that large reductions in the number of elected officials has any discernable impact on the level of support for political consolidation.

Last, this paper does not find that high levels of support by community elites will necessarily translate into greater support for political consolidation. In the face of opposition, elite support and a well-funded campaign are not sufficient to achieve passage of a city–county consolidation in all cases.

For future research, we can compare these successful town–township consolidations to three proposed consolidations that were initiated during the same time frame but failed to reach referendum in the Towns of Avon and Brownsburg and the City of Greenwood with their surrounding townships. This future analysis will allow us to examine if the factors that seemed to lead to success in Zionsville and Yorktown were missing in these other three cases, leading to their failure.

Examining these unsuccessful cases also may allow us to estimate the importance of the annexation wars that occurred in the Zionsville and Yorktown areas during the period prior to consolidation. In both cases, rural residents faced the prospect of annexation by what many may have perceived as a less desirable municipality. These annexation prospects may have generated support for consolidation in the rural areas, but we cannot draw any inferences about the impact because the condition was present in both town–township consolidations.

Disclosure Statement

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Research Article

Going Concern Disclosure for Local Governments

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Going concern opinions (GCOs) indicate that auditors have significant doubt about an entity's ability to continue operation one year after the financial statement date. This study addresses the following research questions: What are the factors that motivate auditors to issue GCOs to governmental entities? Does a governmental entity disclose going concern uncertainty in the footnotes or the MD&A section of annual financial reports (AFRs) either the year before or the year when the entity receives a GCO? To what extent does the entity disclose the GCO factors used by auditors? We find that auditors most often cited two reasons, "Deficiency in Funds" and "Losses or Revenue Declines," accounting for the majority of reasons given for a going concern opinion. Further, the disclosure is most likely to be in the notes to the AFRs. In addition, we find that going concern reporting varies by auditor type (state auditors vs. public accounting firms), government size, and government type. We also find some evidence that going concern disclosures improve after the enactment of GASB No. 56. The results of our study should be of interest to stakeholders' interested in lead indicators of fiscal distress.

Keywords: Governmental Accounting, Going Concern Opinions, Going Concern Disclosure

Going concern opinions (GCOs) indicate that auditors have significant doubt about an entity's ability to continue operation one year after the financial statement date. GCOs, if issued timely and with reasonable accuracy, can be valuable information to stakeholders. In 2009, the Governmental Accounting Standard Board (GASB) released Statement No. 56, *Codification of Accounting and Financial Reporting Guidance Contained in the AICPA Statements on Auditing Standards*. GASB Statement No. 56 clarified management's responsibilities involving going concern reporting for governmental units.

This study investigates the factors that influence auditors to issue a going concern opinion to state and local governments. In addition, we also examine when and to what extent the GCO-receiving governmental entities disclose going concern uncertainty in either footnotes or management discussion and analysis section (MD&A) of their annual financial reports (AFRs). Identifying the reasons a GCO is given in the government setting can help GASB and stakeholders evaluate the content of going concern disclosure requirements. In addition, examination of the disclosure of GCOs helps inform the GASB and stakeholders whether GASB Statement No. 56 works effectively for governments.

This study addresses the following research questions: (1) What are the factors that motivate auditors to issue GCOs to governmental entities? (2) Does a governmental entity disclose going concern uncertainty in footnotes or the MD&A section of AFRs either the year before or the year when the entity receives a GCO? And, (3) to what extent does the entity disclose the GCO factors used by auditors?

To address our research questions, stage 1 of our research project involved deriving a sample of municipalities that have received a going concern opinion since 1996, codifying the reasons for the audit firm giving the going concern opinion, and the characteristics of the municipality receiving the going concern opinion. We identified a sample of 318 cities and counties that have received a going concern opinion from the Federal Audit Clearinghouse database of A-133

Feng, N. C., & Neely, D. G. (2017). Going concern disclosure for local governments. *Journal of Public and Nonprofit Affairs*, *3*(2), 176-196. doi:10.20899/jpna.3.2.176-196

audits. We collected AFRs for each of these governments from their websites or state depositories, with the assistance of the GASB staff. Stage 2 of our research utilized the AFRs collected in stage 1 and examined the determinants of GCOs given by auditors and whether governmental entities disclose these influencing factors of GCOs either in the year before or in the year when the entity receives a GCO.

We find that auditors have used seven major categories (aggregating 32 distinct reasons) of justifications that have motivated auditors to issue a going concern opinion to a governmental entity: Deficiency in Funds, Losses or Revenue Declines, State Oversight, Going Concern Given to Part of the Organization, Debt Issues, Legal, and Cash Shortage. The two most often cited reasons, “Deficiency in Funds” and “Losses or Revenue Declines,” account for the majority of reasons for giving a going concern opinion. The top two reasons remain the top two if we split our sample by total governmental fund revenues (a size proxy), or if we separately compare cities and counties. However, when we split the sample by whether the government is audited by the state, we find that “State Oversight” is the leading reason given for a going concern opinion for governments audited by the state. Furthermore, our results show that going concern disclosure improved after the enactment of GASB No. 56.

In regards to whether and to what extent a GCO-receiving governmental entity discloses going concern uncertainty in the footnotes or the MD&A section of its AFRs in the year prior to or when the entity receives a GCO, we find that most governments disclose in their notes or MD&A the reasons for receiving a going concern opinion in the year they receive the GCO, and the majority disclose the reasons in the prior year AFR as well. The notes to the financial statements is the most likely place to find the cited reasons, and around half of the current year note disclosures include a standalone note titled “Going Concern.”

The remainder of the paper is organized as follows: The next section provides background. The third section discusses the data collection process. Section four presents the detailed analysis of the research results; in section five, we summarize the findings and limitations of the study.

Background

Auditor's Going Concern Evaluation for State and Local Governments (SLGs)

The external financial statement auditor for SLGs has the responsibility to evaluate the government’s ability to continue as a going concern for a reasonable period of time, not to exceed one year beyond the financial statement date. The American Institute of Certified Public Accountants (AICPA) provides guidance for auditors regarding going concern evaluation of SLGs:

> “The auditor’s evaluation is based on the auditor’s knowledge of relevant conditions or events that exist at, or have occurred prior to, the date of the auditor’s report. Information about such conditions or events is obtained from the application of auditing procedures planned and performed to achieve audit objectives that are related to management’s assertions embodied in the financial statements being audited, including assertions required by GASB Statement No. 56. AU-C section 570 provides guidance to the auditor on (a) the adequacy of financial statement disclosure, (b) the need to modify the auditor’s report, and (c) audit documentation concerning the auditor’s going concern evaluation. Additionally, AU-C section 570 states that, ordinarily, information that significantly contradicts the going concern assumption relates to the entity's inability to

> continue to meet its obligations as they become due without substantial disposition of assets outside the ordinary course of business, restructuring of debt, externally forced revisions of its operations, or similar actions" (AICPA, 2015, p. 509).

Per AU-C section 570, when auditors determine whether the government will continue as a going concern, auditors need to perform analytical procedures, review subsequent events, review the government's compliance with the terms of debt and loans, review minutes of meetings of stockholders and boards and important committees, inquire the government's legal counsel about litigation and claims, and confirm with related and third parties of detailed arrangements to provide/maintain financial support. AICPA (2015) supplements these aforementioned procedures with additional procedures that capture items that are either unique or significant to the government. For instance, auditors need to review correspondence from rating agencies for any adverse downgrade of the entity's overall credit rating or that of any specific bond issue.

AICPA (2015) requires auditors to perform their assessment of going concern independent of management's assessment. Unique to governments, the auditor also should consider whether *other* governments have a legal or moral authority to subsidize the government being audited. For example, a city or county might be perceived to have the responsibility to financially assist special districts within their geographic borders. These subsidies should be considered when the auditor is determining whether there is substantial doubt about the ability of a government to continue as a going concern.

Going Concern Disclosure Requirements for SLGs

GASB Statement No. 34 paragraph 11(h) requires a government to include a discussion in MD&A of currently known facts, decisions, and conditions that are expected to have a significant impact on the government's financial position or results of operations.[1] Based on the GASB 34 requirements, a government should have a discussion of potential issues that are associated with going concern in MD&A, depending on the facts and circumstances that can raise substantial doubt about the government's ability to continue to operate.

GASB Statement No. 56 places several requirements for note disclosures if a government determines there is substantial doubt about its ability to continue as a going concern for the 12 month period subsequent to the financial statement date or shortly thereafter. As summarized by AICPA (2015), these note disclosure requirements include descriptions of pertinent conditions and events that lead to the going concern assessment, possible effects of aforementioned conditions and events, government officials' evaluation of the significance of those conditions and events, and mitigating factors, potential discontinuance of operations, and government officials' plans including related financial information, etc.

Going Concern Evaluations by SLGs

GASB Statement No. 56 requires SLGs to evaluate whether there is substantial doubt about their ability to continue as a going concern for 12 months beyond the financial statement date. If a

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[1] In this study, we collected data before and after the implementation of GASB No. 34. In our tabulated analysis, we include a variable for whether the government adopted GASB 34. Adoption may be due to either the fiscal year being before the implementation period or the government electing to not adopt all provisions of GASB 34. See Khumawala, Marlowe, and Neely (2014) for a discussion on why governments elect not to comply with Generally Accepted Accounting Principles (GAAP).

government currently has information that may raise substantial doubt shortly after this 12 month period (e.g. within three months after fiscal year end), the government should consider the information and disclose it appropriately. GASB No. 56 provides several examples of such information that may significantly contradict the going concern assumption (AICPA, 2015). For instance, a government is unable to continue to meet its obligations without substantial disposition of its assets or has restructuring of debt. Another example is the government's "submission to the oversight of a separate fiscal assistance authority or financial review board."

More precisely, GASB Statement No. 56 provides the following indicators that may raise significant doubt about a government's ability to continue as a going concern:

- "Negative trends. Recurring periods in which expenses and expenditures significantly exceed revenues, recurring unsubsidized operating losses in business-type activities consistent working capital deficiencies, continuing negative operating cash flows from business-type activities, or adverse key financial ratios.
- Other indications of possible financial difficulties. Default on bonds, loans or similar agreements, proximity to debt and tax limitations, denial of usual trade credit from suppliers, restructuring of debt (other than refundings), noncompliance with statutory capital or reserve requirements, or the need to seek new sources or methods of financing or to dispose of substantial assets.
- Internal matters. Work stoppages or other labor difficulties, substantial dependence on the success of a particular project or program, uneconomic long-term commitments (burdensome labor contracts for example) or the need to significantly revise operations.
- External matters. Legal proceedings, legislation, or similar matters that might jeopardize intergovernmental revenues and the fiscal sustainability of key governmental programs; loss of a critical license or patent for a business-type activity; loss of a principal customer, taxpayer, or supplier; or uninsured or underinsured catastrophe such as a drought, earthquake, or flood" (AICPA, 2015, p. 507).

GASB No. 56 also gives several additional events or conditions that may indicate substantial doubt about a government's ability to continue to operate (AICPA, 2015) such as continuous significant deficits in fund balance or net position, extremely high estimated liability for uninsured risks (e.g., large adverse legal settlements), high anticipated costs on construction or similar long-term projects that the government can reasonably finance, large pension, or other postemployment benefit obligations combined with declining revenues (including diminishing tax revenue due to recession), unwillingness of government officials to pay legally incurred liabilities or to continue funding programs at current levels, significant investment losses, bond rating downgraded below investment grade, debt covenant violations, excessive short- and long-term borrowing to reduce cash shortage, eliminate deficits or meet operating needs, and increased borrowings from component units that are unlikely to be repaid within a reasonable time frame.

GCOs and Organizations' Financial Characteristics

Though governments operate differently from for-profit firms, auditors' going concern decisions in the for-profit world may share some commonality. For instance, the for-profit literature links the likelihood of a GCO with a firm's financial distress. One important distress indicator is a firm's ability to repay its debt. Chen and Church (1992) documented that the debt default status is useful in identifying firms that have received a GCO. Mutchler (1985), Levitan and Knoblett (1985), and Menon and Schwartz (1987) revealed that factors such as short-term liquidity, profitability, and organizations' ability to generate sufficient cash flow from operations influence

Table 1. Sample Selection

	N
City and county observations identified by FAC database as having a going concern opinion	318
Less: government year observations unable to obtain a AFR	185
Less: government year observations with no going concern language in audit report	35
Total sample of going concern opinions	98
Total sample of going concern opinions for cities	80
Total sample of going concern opinions for counties	18
Total unique governments with going concern opinions	45

GCO issuance decisions.

Several studies investigated the financial distress of government units. For example, Trussel and Patrick (2013) developed a model that predicts whether a government will reduce public services, while Trussel and Patrick (2012) developed a model that predicts fiscal distress in local municipalities. Kloha, Weissert, and Kleine (2005) developed a 10 point scale that predicts local fiscal distress for a sample of Michigan municipalities. Singla, Comeaux, and Kirschner (2014) attempted to utilize fiscal distress models to differentiate local governments that file for Chapter 9 bankruptcy compared with fiscally distressed governments that do not file for bankruptcy. They find that while the models classify bankrupt governments as distressed, the level of distress is not appreciably greater for bankrupt governments compared with non-bankrupt governments.

GCOs and Nonprofit Organizations

Government and nonprofit charitable organizations (NPOs) are not profit-driven entities and the financial reporting of these two types of entities shares some similarities. There are a couple of going concern studies focusing on not-for-profit organizations. Feng (2017) reported that the likelihood that a nonprofit charitable organization (NPO) receives a GCO decreases with its liquidity, size, and its receipt of a low-risk status in a Single Audit, but increases if the NPO underreports its fundraising expenses or has continuous losses, internal control deficiencies or material noncompliance with laws and regulations. Feng (2014) also documented adverse economic consequence of GCOs in NPOs such as declining government grants and contributions after an NPO receives a GCO. Petrovits, Shakespeare, and Shih (2011) reported that having a GCO increases the likelihood that an NPO has internal control deficiencies during the post-GCO period. In turn, weak internal control allows fraud to be perpetrated, prevents an NPO from operating efficiently, and thereby weakens the NPO's viability (Greenlee, Fischer, Gordon, & Keating, 2007; Wells, 2005). Overall, while the prior literature suggested several facets to the decision to give a going concern opinion, indicators of fiscal distress play a primary role. The next section details our data collection.

Data Collection

Table 1 presents the sample selection process. We obtained the financial and auditing data from the Federal Audit Clearinghouse (FAC) Database. Because this study is funded with the Gil Crain Memorial Research Grant by GASB, GASB has collected the majority of the Annual

Table 2. Frequency Number of Times Represented in the Sample

Number of Going Concern Opinions	Frequency
10	1
7	1
6	1
5	2
4	2
3	5
2	9
1	24
Total	45

Table 3. Frequency by Year

Fiscal Year	Frequency
1996	1
1997	1
1998	1
1999	2
2000	1
2001	3
2002	3
2003	5
2004	7
2005	6
2006	6
2007	6
2008	11
2009	11
2010	16
2011	16
2012	1
2013	1
Total	98

Table 4. Frequency by Audit Firm Type

Audit Firm Type	Frequency	Percent of Total
Big 4	9	9%
State Auditor	22	23%
All other Audit Firms	67	68%
Total	98	100%

Financial Reports (AFRs) for this research.[2] We first identified 318 government-year observations that have going concern opinions.[3] We then deleted 185 government-year observations due to lack of AFRs.[4] After reading audit reports in AFRs, we remove 35

[2] We are grateful for GASB's support, especially the support from GASB Research Manager Dean Mead and his colleagues.

Table 5. Descriptive Statistics

Variable	N	Mean	Median
Cash	84	$68,470,208	$15,851,378
Total assets	81	$966,528,105	$156,359,953
Current LTD	80	$116,578,003	$4,681,439
Long term debt	80	$355,433,556	$57,250,088
Total liabilities	80	$609,140,395	$75,591,753
Net investment in capital assets	80	$368,574,943	$65,792,276
Restricted debt purposes	68	$22,213,138	$5,366,096
Restricted non-debt purposes	77	$37,237,848	$12,851,624
Total restricted funds	96	$45,799,077	$14,312,369
Total net position	84	$352,813,294	$53,155,851
Total expenses governmental activities	84	$223,046,786	$71,139,992
Total expenses	84	$280,771,243	$75,870,330
Program revenues charges for services	84	$66,939,401	$19,893,156
Net change in revenues and expenses	84	$-162,918,162	$-33,864,620
Total general revenues	84	$145,160,903	$31,134,991
Changes in net assets	84	$-17,707,662	$-1,380,277
Total unrestricted net assets	84	$-51,764,949	$-1,263,399
GFOA certificate	98	29.59%	0%
Governmental funds: Expenditures	98	$227,356,985	$60,629,024
Governmental funds: Revenues	98	$204,304,943	$57,401,013
Governmental funds: Liabilities	95	$106,054,918	$23,026,788
Governmental funds: Funds balance	98	$65,111,916	$14,994,484

government-year observations because auditors, in fact, did not issue a going concern opinion in these reports. This happened perhaps due to data errors when audit opinions were entered in the FAC database. As a result, we have 98 government-year observations with going concern opinions in our final sample. Out of these 98 government-year observations, 80 are for cities and 18 are for counties. There are 45 unique governments with going concern opinions in the sample.

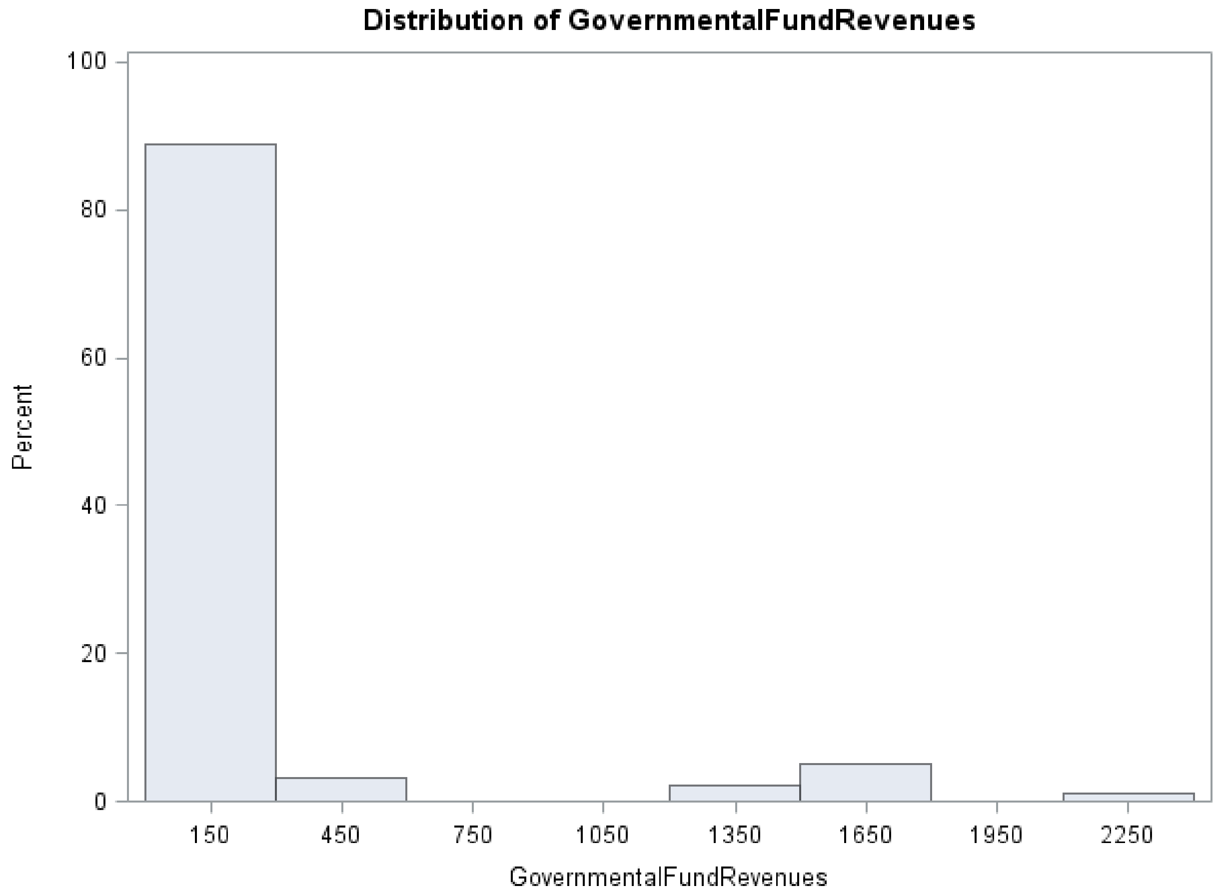
Several governments are represented more than once in our sample (see table 2). Roughly half (24 out of 45) are represented once, nine of 45 are represented twice, and five out of 45 are represented three times. In the extreme, one government is represented ten times in the sample (received 10 going concern opinions over the study period). The earliest audit year we have in our sample is 1996, and the most recent year is 2013 (see table 3). The majority of our sample is in audit years 2008 to 2011 (54 of the 98). Nine percent of the sample is audited by the Big 4, 23% are audited by the state, and 68% by other audit firms (see table 4).

Results

Descriptive Statistics

[3] The 318 government-year observations represent the total number of cities and counties with going concern opinions in the FAC database. After discussion with the GASB, it was agreed that the study should exclude all other government types (ex: school districts, special purpose entities, townships).
[4] We asked our graduate assistants to help us conduct an extensive search for AFRs either on the entities' website or via Google search engine. Our graduate assistants also contacted these governments by phone asking for AFRs.

Figure 1. Size Histogram (in millions)



About 30% of the 98 AFRs sampled have the Government Finance Officers Association (GFOA) Certificate, which indicates a high quality of financial reporting. Descriptive statistics of the sample governments are presented in table 5. The sample governments have mean values of $967 million in total assets, $609 million in total liabilities, and $353 million in total net position. The median total assets, total liabilities, and total net position of the sample governments are $156 million, $76 million, and $53 million, respectively. More than half of the mean total liabilities are long-term debt ($355 million) and the mean current portion of long-term debt amounts to $117 million. This suggests that the sample governments rely heavily on long-term borrowing. Indeed, governments restrict roughly $22 million (mean value) of net position for debt purposes. The median long-term debts of the sample are $57 million.

The mean total expenses of the sample are $280 million, including $223 million total expenses from governmental activities. The median total expenses are $75 million, with $71 million from governmental activities. The mean and median program revenue charges for services are $66 million and $19 million, respectively. The mean and median total general revenues are $145 million and $31 million, respectively. The mean and median changes in net assets are $-17 million and $-1.38 million, suggesting that the sample governments have deficits. On average, total unrestricted net assets of the sample governments are $-52 million (14% of the mean total net assets). The median total unrestricted net assets are $-1.26 million (1% of the median total net assets), indicating that some sample governments have very large negative unrestricted net assets. This evidence suggests that the sample governments lack readily available financial resources and are under financial distress.

For the governmental funds, the mean (median) total expenditures are $227 million ($61 million), and the mean (median) total revenues are $204 million ($57 million). Turning to the governmental funds balance sheet, mean (median) total liabilities are $106 million ($23 million), and the total governmental fund balance mean (median) are $65 million ($15 million). Figure 1 provides a histogram of total governmental fund revenues. Roughly 90% of the sample is below $500 million in total governmental fund revenues with the largest government reporting over $2 billion in governmental fund revenues.

Auditors' Justifications for Issuing Going Concern Opinions

A GCO indicates that an entity is likely to discontinue its operation or is unable to meet its obligations as they become due within 12 months subsequent to the financial statement date or shortly thereafter. In this study, we investigated the factors that motivate auditors to issue going concern opinions to governmental entities.

Table 6 summarizes the justifications that auditors have used in their auditor reports when they issue going concern opinions in seven categories. The categories and the number of corresponding occurrences in the sample for each category (in parentheses), ranked from top to bottom, are as follows: deficiency in funds (44); losses or revenue declines (42); state oversight (29); going concern given to part of the organization (24); debt issues (13); legal (9); and, cash shortage (7). The categories are further explained in the appendix.

In accordance with GASB Statement 56, governments are required to make disclosures when there is substantial doubt about their ability to continue as a going concern. In the category of "deficiency in funds," out of 44 AFRs, about 68% disclose the issue in the MD&A and 95% disclose similar information in footnotes in the going concern year; 52% disclose the issue in the MD&A and 68% in the footnotes in the year prior to the going concern year. About 36% of 44 AFRs in the category have a footnote labeled "Going Concern Note." About 68% of these 44 AFRs adopted GASB 34.

For the 42 AFRs within the category of "losses or revenue declines," about 55% disclose the issue in the MD&A and 86% disclose similar information in the footnotes of the going concern year, and only 43% disclose the issue in MD&A and 52% in the footnotes in the year prior to the issuance of GCOs. About 48% of the 42 AFRs in the category have a footnote entitled "Going Concern." About 67% of these 42 AFRs adopted GASB 34.

Out of 29 cases in the category of "state oversight," about 59% disclose the issue in the MD&A and 100% disclose similar information in the footnotes of the going concern year and 34% in the MD&A and 100% in the footnotes of the year prior to the going concern year. About 17% of the 29 AFRs in the category have a footnote entitled "Going Concern." About 76% of these 29 AFRs adopted GASB 34.

In the category of "going concern given to part of the organization," out of the 24 AFRs, about 42% disclose the issue in the MD&A and 75% disclose similar information in the footnotes of the going concern year, and 33% in the MD&A and 75% in the footnotes of the year prior to the going concern year. About 54% of 24 AFRs in the category have a footnote entitled "Going Concern." About 79% of these 24 AFRs adopted GASB 34.

For 13 cases in the category of "debt issues," about 31% of AFRs disclose the issue in the MD&A and 85% disclose similar information in the footnotes of the going concern year, and 23% in the

Table 6. Reasons for Going Concern

Going Concern Reason	N	MD&A	PY_MD&A	Notes	PY_Notes	PY_AFR	Had PY_MD&A	GASB 34	Going Concern
Deficiency in Funds	44	68.18%	52.27%	95.45%	68.18%	84.09%	54.55%	68.18%	36.36%
Losses or Revenue Declines	42	54.76%	42.86%	85.71%	52.38%	80.95%	54.76%	66.67%	47.62%
State Oversight	29	58.62%	34.48%	100.00%	65.52%	93.10%	68.97%	75.86%	17.24%
Going Concern Given to Part of the Organization	24	41.67%	33.33%	75.00%	75.00%	83.33%	66.67%	79.17%	54.17%
Debt Issues	13	30.77%	23.08%	84.62%	69.23%	69.23%	46.15%	53.85%	61.54%
Legal	9	100.0%	66.67%	100.0%	66.67%	88.89%	88.89%	100.0%	55.56%
Cash Shortage	7	85.71%	14.29%	100.0%	57.14%	85.71%	71.43%	85.71%	57.14%

Some governments list more than one reason. *N* will not equal 98.
MD&A: Whether the government discloses Going Concern reasons in current year's MD&A section of its financial report.
PY_MD&A: Whether the government discloses Going Concern reasons in previous year's MD&A section of its financial report.
Notes: Whether the government discloses Going Concern reasons in current year's footnotes of its financial report.
PY_Notes: Whether the government discloses Going Concern reasons in prior year's footnotes of its financial report.
PY_AFR: Whether the government had a prior year annual financial report.
Had PY_MD_A: Whether the government had the MD&A section in its prior year's financial report.
GASB 34: Whether the government follows GASB No. 34.
Going Concern: Whether the government has a footnote labeled as going concern.

MD&A and 69% in the footnotes of the year prior to the going concern year. About 62% of the 13 AFRs in the category have a footnote entitled "Going Concern." About 54% of these 13 AFRs adopted GASB 34.

Within the "legal" category, 100% of the nine AFRs disclose the issue in the MD&A and the footnotes of the going concern year, but only 34% of the nine AFRs disclose the issue in the MD&A and 66% of the nine AFRs disclose in the footnotes of the year prior to the going concern year. About 56% of nine AFRs in the category have a footnote titled "Going Concern." All nine AFRs adopted GASB 34.

Out of seven cases in the category of "cash shortage," about 86% of AFRs disclose the issue in the MD&A and 100% disclose similar information in the footnotes of the going concern year. However, only 14% of the seven cases disclose the issue in the MD&A and 57% of the seven cases disclose in the footnotes of the year prior to the going concern year. About 57% of the seven AFRs in the category have a footnote entitled "Going Concern." About 86% of these seven AFRs adopted GASB 34.

It appears that the majority of AFRs disclose cash shortages and legal issues in the footnotes and MD&A sections during the current year. Other GCO-related issues are more likely to be disclosed in the footnotes than in the MD&A section of the current year. Almost all of the sample organizations that had MD&A sections in the previous year disclose GCO-related factors in the MD&A section for the current year. The proportion of AFRs that contains GCO-related factors declined substantially (except for Going Concern Given to Part of the Organization) the year before the organizations received GCOs.

Consistent with the literature that we cited previously, we find that "deficiency in funds" and "losses or revenue declines" are the top reasons that auditors cite for giving going concern opinions. Disclosure of going concern factors occurs more often in the notes than in the MD&A perhaps due to either the fact that not all of the sample have MD&A (see footnote 1) or management's tendency to window dress performance in the MD&A and thus be less likely to disclose the distress there.

Auditors' Justifications for Issuing Going Concern Opinions by Auditor Type

We performed several additional analyses regarding the going concern justifications. Specifically, we tested whether auditor justifications vary by auditor type, the size of the government, the type of government, and whether the audit opinion was rendered before or after GASB 56. To test whether differences in auditor justifications are statistically different, we performed chi-squared tests. If the p-value was sufficiently small, we reject the null hypothesis that the two variables are independent and conclude that there is an association between the frequency of the going concern reason that the auditor cited and auditor type, the size of the government, the type of government, and/or whether the audit opinion was rendered before or after GASB 56.

Our first supplemental analysis considers whether the going concern reporting varies by type of auditor. Tables 7 and 8 present the going concern justifications for state auditors and public accounting firms, respectively. For state auditors, the most cited reason for a going concern is "State Oversight," followed by "Deficiency in Funds." This is in contrast with the overall sample that had "State Oversight" cited as the third most common reason. For the top two reasons, the majority of the observations disclose in the current year MD&A, while all observations disclose

Table 7. Reasons for Going Concern, Governments Audited by the State

Going Concern Reason	N	MD&A	PY_MD&A	Notes	PY_Notes	PY_AFR	Had PY_MD&A	GASB 34	Going Concern	χ^2 Test of State & Public Accounting
Debt issues	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.09**
State oversight	16	62.50%	43.75%	100.0%	75.0%	100.0%	56.25%	62.5%	0%	27.86***
Legal	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.70
Going concern given to part of the organization	1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	5.63**
Losses or revenue declines	3	66.67%	33.33%	66.67%	33.33%	100.0%	100.0%	100.0%	0%	8.91***
Deficiency in funds	9	77.78%	66.67%	100.0%	77.78%	100.0%	66.67%	66.67%	0%	0.05
Cash shortage	3	66.67%	0%	100.0%	66.67%	100.0%	66.67%	66.67%	0%	2.06

*,**,*** significant at the $p<0.1$, $p<0.05$, and $p<0.01$ respectively.
N/A refers to cases were reason was not cited at all (Not Applicable).

Table 8. Reasons for Going Concern, Governments Audited by a Public Accounting Firm

Going Concern Reason	N	MD&A	PY_MD&A	Notes	PY_Notes	PY_AFR	Had PY_MD&A	GASB 34	Going Concern
Debt Issues	13	30.77%	46.15%	84.62%	69.23%	69.23%	46.15%	53.85%	61.54%
State Oversight	13	53.85%	23.08%	100.0%	53.85%	84.62%	84.62%	92.31	38.46%
Legal	9	100.0%	66.67%	100.0%	66.67%	88.89%	88.89%	100.%	55.56%
Going Concern Given to Part of the Organization	23	39.13%	30.43%	73.91%	73.91%	82.61%	65.22%	78.26%	52.17%
Losses or Revenue Declines	39	53.85%	43.59%	87.18%	53.85%	79.49%	51.28%	64.10%	51.28%
Deficiency in Funds	35	65.71%	48.57%	94.29%	65.71%	80.0%	51.43%	68.57%	45.71%
Cash Shortage	4	100.0%	25.0%	100.0%	50.0%	75.0%	75.0%	100.0%	100.0%

in the notes. There is a noticeable drop off in note disclosure in the prior year AFR for both "State Oversight" and "Deficiency in Funds." The single largest drop occurred in "Cash Shortage" and "Losses or Revenue Declines," which each, respectively, fell by a difference of 33.33%.

In contrast with state auditors, the most often cited reason for a going concern opinion issued by public accounting firms is "Losses or Revenue Declines," followed by "Deficiency in Funds," and "Going Concern Given to Part of the Organization." While "State Oversight" was the leading reason cited by state auditors, "State Oversight" was only the fourth most cited reason for a going concern opinion given by public accounting firms. The chi-square test shows that the differences between state auditors and public accounting firms are statistically significant for "Debt Issues" ($p<0.05$), "State Oversight" ($p<0.01$), "Going Concern Given to Part of the Organization" ($p<0.05$), and "Losses or Revenue Declines" ($p<0.01$). Similar to state auditors, public accounting firms had considerably less disclosure in the year prior to receiving a going concern opinion. The largest decline in disclosure rate was for "Cash Shortage," which went from 100% in the current year to 50% in the year prior to a going concern opinion being issued.

Auditors' Justifications for Issuing Going Concern Opinions by Government Size

In our second supplemental analysis, we compared the going concern justifications of larger governments with those of smaller governments. Prior literature reports that larger entities have more resources than smaller ones, thus the going concern justifications may differ per entity size. We defined larger governments as those that have total governmental fund revenues greater than the median value ($57 million) and those below as smaller governments. Tables 9 and 10 present the going concern justifications for these two size groups of governments respectively. For larger governments, the most cited reason for a going concern is "Deficiency in Funds," followed by "Losses or Revenue Declines," and "Going Concern Given to Part of the Organization." This is consistent with the overall sample. For the top three reasons, the majority of the observations disclose in the current year MD&A, while over 90% disclose in the notes. There is a noticeable drop off in note disclosure in the prior year AFR for both "Deficiency in Funds" as well as "Losses or Revenue Declines." The single largest drop occurs in "Losses or Revenue Declines" which goes from 95% to 65%.

In contrast with larger governments, the most cited reason for a going concern opinion for smaller governments is "Losses or Revenue Declines," while "State Oversight" and "Deficiency in Funds" tie for the second most cited reason for a going concern opinion. The chi-square test demonstrates that the differences between large and small governments are statistically significant for both "State Oversight" ($p<0.05$) and "Cash Shortage" ($p<0.05$). Similar to larger governments, small governments have considerably less disclosure in the year prior to receiving a going concern opinion. For example, while all but one reason, "Going Concern Given to Part of the Organization," have notable disclosure rates of at least 75% during the year when a going concern opinion was issued, in the prior year all note disclosure rates are 70% or below. "Losses or Revenue Declines" have the largest decrease, going from 77.27% to 40.91%.

The descriptive data suggest that going concern disclosure patterns seem to vary by government size. Future research incorporating additional data are needed to investigate the reasons behind these differences.

Table 9. Reasons for Going Concern, Government with Total Revenues Greater than $57,401,013

Going Concern Reason	N	MD&A	PY_MD&A	Notes	PY_Notes	PY_AFR	Had PY_MD&A	GASB 34	Going Concern	χ^2 Test of Large & Small Governments
Debt Issues	5	40.0%	20.0%	100.0 %	80.0%	60.0%	60.0%	60.0%	0.00%	0.80
State Oversight	9	33.33 %	0.00%	100.0 %	55.56%	100.0%	66.67%	66.67%	22.22%	5.93**
Legal	5	100.0 %	80.0%	100.0 %	80.0%	100.0%	100.0%	100.0%	20.0%	0.12
Going Concern Given to Part of the Organization	13	53.85 %	46.15%	92.31 %	92.31%	100.0%	100.0%	100.0%	30.77%	0.22
Losses or Revenue Declines	20	65.0%	60.0%	95.0%	65.0%	90.0%	65.0%	65.0%	35.0%	0.17
Deficiency in Funds	24	66.67 %	58.33%	95.83 %	79.17%	91.67%	58.33%	66.67%	20.83%	0.66
Cash Shortage	1	100.0 %	0.00%	100.0 %	0.0%	100.0%	100.0%	100.0%	100.0%	3.84**

*,**,*** significant at the p<0.1, p<0.05, and p<0.01 respectively.

Table 10. Reasons for Going Concern, Governments with Total Revenues Less Than or Equal to $57,401,013

Going Concern Reason	N	MD&A	PY_MD&A	Notes	PY_Notes	PY_AFR	Had PY_MD&A	GASB 34	Going Concern
Debt Issues	8	25.0%	25.0%	75.0%	62.50%	75.0%	37.50%	50.0%	100.0%
State Oversight	20	70.0%	50.0%	100.0%	70.0%	90.0%	70.0%	80.0%	15.0%
Legal	4	100.0%	50.0%	100.0%	50.0%	75.0%	75.0%	100.0%	100.0%
Going Concern Given to Part of the Organization	11	27.27%	18.18%	54.55%	54.55%	63.64%	27.27%	54.55%	81.82%
Losses or Revenue Declines	22	45.45%	27.27%	77.27%	40.91%	72.73%	45.45%	68.18%	59.09%
Deficiency in Funds	20	70.0%	45.0%	95.0%	55.0%	75.0%	50.0%	70.0%	55.0%
Cash Shortage	6	83.33%	16.67%	100.0%	66.67%	83.33%	66.67%	83.33%	50.0%

Auditors' Justifications for Issuing Going Concern Opinions by Government Type

In our third supplementary analysis, we compared the going concern justifications of 80 cities and 18 counties in the sample because the operations in cities and counties are very different and thus may receive going concerns for different reasons. Tables 11 and 12 present the going concern justifications for cities and counties, respectively. In contrast with the overall sample, the top two reasons cited for a going concern opinion for cities are "Losses or Revenue Declines" and "Deficiency in Funds," and the third most cited reason is "State Oversight." Consistent with the overall sample, reasons for going concern opinions were uniformly more likely to be disclosed in the notes versus the MD&A. Disclosure rates in the current AFR are quite high, with all reasons except "Going Concern Given to Part of the Organization" in excess of 80%. There is a noticeable drop off in prior year disclosure with all reasons except for "Debt Issues" and "Going Concern Given to Part of the Organization" suffering drops in disclosure rate in excess of 30%.

The counties findings conform to the overall sample, with "Deficiency in Funds" cited the most often and "Going Concern Given to Part of the Organization" and "Losses or Revenue Declines" tie for second. Disclosure rates for "Deficiency in Funds" are notably greater than for the rest of the county sample. The chi-square test demonstrates that the differences between cities and counties are statistically significant for "State Oversight" ($p<0.10$). Factoring in whether a prior year AFR or prior MD&A was obtained for the government, we document disclosure rates of 90% or greater for both the notes and MD&A in the current year and prior year. All other reasons with the exception of "Cash Shortage" see disclosure rates of 50% or below.

Auditors' Justifications for Issuing Going Concern Opinions Before and After GASB 56

In our final supplementary analysis, we compared the going concern justifications given in the 53 auditor reports before GASB 56 (audit reports covering 2008 or earlier) and the 45 auditor reports since the enactment of GASB 56 (audit reports since 2009). As previously discussed, GASB 56 codified going concern guidance which may potentially alter the frequency, reasons, and disclosure of going concern opinions. Tables 13 and 14 present the going concern justifications for pre-GASB 56 and post-GASB 56, respectively. Consistent with the overall sample, the top three reasons cited for a going concern opinion pre- and post-GASB 56 are "Deficiency in Funds," "Losses or Revenue Declines," and "State Oversight." In fact, the chi-square test shows that "Legal" is the only cited reason that is statistically different ($p<0.10$) between the pre- and post-GASB 56 samples. Additionally, consistent with the overall sample, reasons for going concern opinions are uniformly more likely to be disclosed in the notes versus in the MD&A section. Interestingly, disclosure rates in the AFR are consistently higher post-GASB 56, suggesting an improved disclosure. Overall, while the reasons for giving a going concern opinion are largely consistent between the two time periods, disclosure rates improved post-GASB 56.

Summary and Conclusions

In this study, we have analyzed the reasons governments receive going concern opinions and the level of disclosure surrounding these reasons in the current year AFR and prior year AFR. In our sample of 98 going concern observations, we find that auditors most often cite "Deficiency in Funds" or "Losses or Revenue Declines" as reasons for giving a going concern opinion. Within "Deficiency in Funds," we find that auditors most often cite negative fund balances in the general fund and enterprise fund as a reason to give a going concern opinion. Interestingly,

Table 11. Reasons for Going Concern, Cities (N=80)

Going Concern Reason	N	MD&A	PY_MD&A	Notes	PY_Notes	PY_AFR	Had PY_MD&A	GASB 34	Going Concern	χ^2 Test of Cities & Counties
Debt Issues	11	36.36%	27.27%	81.82%	72.73%	81.82%	54.55%	63.64%	72.73%	0.09
State Oversight	27	55.56%	33.33%	100.0%	66.67%	92.59%	66.67%	74.07%	18.52%	3.61*
Legal	9	100.0%	66.67%	100.0%	66.67%	88.89%	88.89%	100.0%	55.56%	2.23
Going Concern Given to Part of the Organization	18	50.0%	38.89%	72.22%	83.33%	88.89%	77.78%	83.33%	44.44%	0.93
Losses or Revenue Declines	36	61.11%	55.56%	91.67%	58.33%	83.33%	55.56%	66.67%	50.0%	0.82
Deficiency in Funds	34	61.76%	47.06%	97.06%	64.71%	85.29%	50.00%	61.76%	41.18%	1.01
Cash Shortage	6	83.33%	16.67%	100.0%	50.0%	83.33%	66.67%	83.33%	66.67%	0.08

*,**,*** significant at the $p<0.1$, $p<0.05$, and $p<0.01$ respectively.

Table 12. Reasons for Going Concern, Counties (N=18)

Going Concern Reason	N	MD&A	PY_MD&A	Notes	PY_Notes	PY_AFR	Had PY_MD&A	GASB 34	Going Concern
Debt Issues	2	0.0%	0.0%	100.0%	50.0%	0.0%	0.0%	0.0%	0.0%
State Oversight	2	100.0%	50.0%	100.0%	50.0%	100.0%	100.0%	100.0%	0.0%
Legal	0	0.00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Going Concern Given to Part of the Organization	6	16.67%	16.67%	83.33%	50.0%	66.67%	33.33%	66.67%	83.33%
Losses or Revenue Declines	6	16.67%	0.0%	50.0%	16.67%	66.67%	50.0%	66.67%	33.33%
Deficiency in Funds	10	90.0%	70.0%	90.0%	80.0%	80.0%	70.0%	90.0%	20.0%
Cash Shortage	1	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%

Table 13. Reasons for Going Concern, Pre GASB 56 (N=53)

Going Concern Reason	N	MD&A	PY_MD&A	Notes	PY_Notes	PY_AFR	Had PY_MD&A	GASB 34	Going Concern	χ^2 Test of Pre & Post GASB 56
Debt Issues	5	0.0%	0.0%	60.0%	40.0%	60.0%	0.0%	20.0%	100.0%	1.47
State Oversight	13	61.54%	38.46%	100.0%	61.54%	84.62%	46.15%	61.54%	76.92%	1.42
Legal	2	100.0%	50.0%	100.0%	50.0%	100.0%	100.0%	100.0%	50.0%	4.05**
Going Concern Given to Part of the Organization	12	8.33%	8.33%	66.67%	66.67%	83.33%	50.0%	58.33%	58.33%	0.21
Losses or Revenue Declines	22	40.91%	36.36%	72.73%	40.91%	72.73%	45.45%	59.09%	59.09%	0.09
Deficiency in Funds	24	62.5%	50.0%	91.67%	70.83%	83.33%	54.17%	66.67%	37.5%	0.01
Cash Shortage	2	100.0%	0.0%	100.0%	50.0%	100.0%	100.0%	100.0%	50.0%	1.98

*,**,*** significant at the p<0.1, p<0.05, and p<0.01 respectively.

Table 14. Reasons for Going Concern, Post GASB 56 (N=45)

Going Concern Reason	N	MD&A	PY_MD&A	Notes	PY_Notes	PY_AFR	Had PY_MD&A	GASB 34	Going Concern
Debt Issues	8	50.0%	37.50%	100.0%	87.50%	75.0%	75.0%	75.0%	37.50%
State Oversight	16	56.25%	31.25%	100.0%	68.75%	100.0%	87.50%	87.50%	25.0%
Legal	7	100.0%	71.43%	100.0%	71.43%	85.71%	85.71%	100.0%	57.14%
Going Concern Given to Part of the Organization	12	75.0%	58.33%	83.33%	83.33%	83.33%	83.33%	100.0%	50.0%
Losses or Revenue Declines	20	70.0%	50.0%	100.0%	65.0%	90.0%	65.0%	75.0%	35.0%
Deficiency in Funds	20	75.0%	55.0%	100.0%	65.0%	85.0%	55.0%	70.0%	35.0%
Cash Shortage	5	80.0%	20.0%	100.0%	60.0%	80.0%	60.0%	80.0%	60.0%

while the media often details the pension woes of local governments, "unfunded pension liabilities" is cited in only two cases. Within "Losses or Revenue Declines," the two most often cited reasons are recurring losses in the general fund, and recurring losses in an enterprise fund. Overall, our findings suggest the two funds most responsible for a going concern opinion are the general fund and the enterprise fund.

In reviewing the disclosures governments made concerning the reasons for the going concern opinion, we find that governments are more likely to disclosure the reasons in the notes rather than in the MD&A. Governments are less likely to disclose the going concern reasons in their prior year AFR than in the current year AFR. In reviewing the note disclosures in the year a government receives a going concern opinion, we find that around half of the sample have a note disclosure specifically labeled as "Going Concern," while the other half does not use this heading. Overall, we find most organizations are disclosing the reasons for receiving a going concern opinion in their AFRs with the most likely location being in the notes to the financial statements. We also find that going concern reporting varies by auditor type (state auditor vs. public accounting firm), government size (large vs. small government), and government type (city vs. county). In addition, we identify evidence that going concern disclosure rates improve after the enactment of GASB No. 56. One reason that disclosure of going concern factors is more frequent in the notes than in the MD&A is possibly due to not all of the sample having an MD&A (see footnote 1). Another plausible reason could be that management has a tendency to window dress performance in the MD&A and thus prefers to discuss financial distress in a footnote rather than in the MD&A.

Our study is not without limitations. As previously noted, we were unable to obtain AFRs for over half of the original sample. In addition, we were challenged in getting consecutive AFRs for sample governments. The data collection problems were particularly acute in the earlier sample periods. It also should be noted that the going concern assessment is particularly challenging in the government setting. A systematic way of identifying which governments should have received a going concern opinion does not currently exist. Our research is exploratory in nature focusing on descriptive analysis. Future research with sufficient data to conduct multivariate analyses is needed in order to address the causality of the disclosure patterns that are documented in this study.

The findings from this study should be informative to the GASB, as they consider future guidance regarding going concern opinions for local governments. A challenge will be to consider what triggers should exist before issuing a going concern opinion to a government. Unlike for--profit companies, few governments file for bankruptcy. As noted in this study, the reasons for receiving a going concern opinion are diverse (32 distinct reasons classified into seven broad categories are given for the sample of 98 going concern opinions), and future guidance will hopefully clarify when a going concern opinion is appropriate in the local government context.

Disclosure Statement

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Author Biographies

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Appendix

Table A1. Going Concern Category Definitions

Category Name	Category Definition
Deficiency in Funds	Includes all going concern reasons pertaining to an insufficiently low level of funds.
Losses or Revenue Declines	Includes all going concern reasons pertaining to a reduction in funds.
State Oversight	Includes all going concern reasons resulting from direct state actions.
Going Concern Given to Part of the Organization	Includes all going concern reasons where the going concern opinion covers only part of the government (e.g.: component unit).
Debt Issues	Includes all going concern reasons citing failure to meet debt obligations.
Legal	Includes all going concern reasons involving court actions (e.g.: filing for bankruptcy).
Cash Shortage	Includes all going concern reasons that explicitly mention a lack of cash.

Survey Article

Surveying the Effects of Limitations on Taxes and Expenditures: What Do/Don't We Know?

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The literature on tax and expenditure limitations (TELs) is extensive and continues to grow, as the impact of these institutional constraints on fiscal and economic outcomes continues to develop. In this survey, we review the literature of state- and local-level TELs, in an attempt to provide an overview of their theoretical, operational, and empirical contexts. The study concludes with a discussion of future TEL research needs.

Keywords: Tax and Expenditure Limitations (TELs), State and Local Finance, TEL Index

We are now nearly a decade removed from the Great Recession of 2008–2009, and yet many local and state governments still struggle financially. One of the challenges is the inability of these entities to raise revenues. Part of that inability is lack of political will, but it is also the case that most local and many state governments operate under revenue and/or expenditure limitations. In this era of sustained state and local government fiscal retrenchment, scholars and policymakers need to fully understand the structure and fiscal impact of these limitations, known as tax and expenditure limitations (TELs). For this review of our current understanding, TELs are defined as constitutional and/or statutory restrictions on government taxing and spending authority (Mullins & Wallin, 2004). The survey of the TEL research presented here contributes to a better understanding of institutional settings that shape state and local fiscal administrations.

The study of institutional rules that limit the flexibility of state and local governments, specifically TELs, has grown rapidly in the academic literature over the few decades. For example, the 2016 Association for Budgeting and Financial Managers Association conference had two panels (eight papers) on issues related to tax and expenditure limits. This topic is not new – it dates back to the work of Ratchford (1936) – but received renewed attention in the 1970s, following California's passage of Proposition 13 in 1978, and more focus by academics following the Great Recession. Between 1978 and 1980, over 100 TEL studies were published (Lowery & Sigelman, 1981). Since then, there has been increased interest in policies around tax caps or, more broadly, tax and expenditure limitations and a corresponding increase in the research on the topic. As of July 2017, a simple Google Scholar search of "tax and expenditure limitations" yielded 1,950 results with the literature spread across several branches of economics, political science, public administration, law and psychology. In the past five years (2013 to 2017) there have been 458 results.

This study provides a review of our current understanding of TELs through the available literature with the intent of providing an historical context for the evolution of TELs, identifying patterns in TEL effects that may help policymakers, and offering suggestions for future research. We suggest that a pause to take inventory of the TEL literature is warranted because 1.) previous studies have been somewhat selective in reviewing the existing discussion of the structure and effects of TELs; 2.) there has been no comprehensive and handy guide for policymakers who

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design or redesign TELs for intended fiscal outcomes; and, 3.) if future research agendas are to be clearly articulated, it is necessary to review and synthesize what we know and do not know about TELs.

Today, the Leviathan–Niskanen–Buchanan view of government and lack of fiscal discipline justifying the need for constraints has become *a priori* fact in some circles. Cabasés, Pascual, and Vallés (2007) note that "[t]he need for restrictions on borrowing by subnational governments is a generally accepted notion that is justified both by public choice theory and by the fact that such restrictions are in force in the majority of decentralized countries" (p.293). Their research finds that TELs have been effective in constraining borrowing behaviors of local governments in Spain. At the state level, Merrifield and Monson (2011), while not nearly as explicit in their call for a TEL, contended that, had the TEL been in place, the state's fiscal and economic picture would be much brighter. This study neither agrees nor disagrees with these findings but intends to extend them by contending that the design of TELs affects fiscal and policy outcomes. Thus, a review of state and local TELs offers scholars and practitioners the opportunity to understand how TEL designs have evolved over time and the effects of those changes on policy outcomes. It may further help policymakers to devise fiscal tools that fit with their budgetary circumstances and/or policy objectives.

The review of the TEL literature is structured as follows: the next section reviews the history of TELs. This is followed by a discussion of the theoretical approaches to TELs. The operationalization of TELs and the key findings of prior TEL studies are then covered. The final section summarizes the discussion of the present study and suggests future research agendas.

History of TELs

The U.S. has a long tradition of fighting against taxes: the Boston Tea Party was a tax protest. Shays' Rebellion in Massachusetts, the Whisky Rebellion, and Fries Rebellion in Pennsylvania, all between 1786 and 1799, were aimed at rejecting taxes to pay for the Revolutionary War (Kornhauser, 2002). While not as dramatic, tax and expenditure limitations represent another form of tax revolt, and they have been in existence since the 1800s; for example, Missouri placed its first limit on property tax rates in 1875; West Virginia placed a local property tax rate limit in 1939; Florida adopted limits on corporate income taxes in 1971. It was not until 1934 that Arkansas adopted the first state-level TEL (Kioko & Martell, 2012). While New Jersey passed a TEL in 1976 (Kioko, 2011), the beginning of the recent tax limitation movement is generally attributed to Howard Jarvis and the "People's Initiative to Limit Property Taxation," or Proposition 13 in California (Mullins & Wallin, 2004). This initiative was closely followed by Michigan's Headlee Amendment, Massachusetts' Proposition 2½, Missouri's Hancock Amendment, and others (Atchison, 1992; Deller, Stallmann, & Amiel, 2012; Fino, 2003; McGuire & Rueben, 2006; Mullins & Wallin, 2004; Waisanen, 2008; Wallin, 2004). In the 1980s, 18 states implemented state TELs, and, as of 2015, 28 states have some form of state-level TEL (National Association of State Budget Officers [NASBO], 2015).

In addition to the early uprisings against taxes, another factor likely drove early concerns about public spending. In 1841 and 1842, eight states and the territory of Florida defaulted on their interest payments, often related to borrowing for transportation projects (Oates, 2008; Wallis, 2005). Three other states narrowly avoided default. As a result, 11 states rewrote their constitutions and included restrictions on debt limits and/or on how debt can be assumed (Wallis, 2005). Thus, constitutional limits on state debt are the oldest form of an explicit TEL dating from the nineteenth century (Advisory Commission on Intergovernmental Relations

[ACIR], 1987). In response to the Great Depression of 1929, limits on local government debt were continuously proposed because of local government defaults in many states (Ratchford, 1936).

One of the basic difficulties in assessing the impacts of TELs is that the laws vary not only across states but also within each law or constitutional amendment, between state and local governments and across local governments within a state. It is generally accepted that the most restrictive state- and local-level TEL in the United States is Colorado's Taxpayer's Bill of Rights ("TABOR") (Amiel, Deller, & Stallmann, 2009; Bell Policy Center, 2003; Poulson, 2005). TABOR requires voter approval for any tax increase and voter approval for new taxes, restricts expenditure growth – even stipulating expenditures priorities, such as K12 – and requires the return of revenues in excess of budget estimates (Amiel et al., 2009). The academic work to date is aimed at trying to better understand the consequences, both positive and negative, of TELs overall and also different elements of TELs.

Theory of TELs

Lowery and Sigelman (1981) offer a range of potential reasons why tax revolts, particularly against the property tax, have been so popular in the U.S. While the authors admit to overlap in their reasons, these reasons can be classified into two broad areas. First, for reasons ranging from the lack of competitive market forces to self-interested bureaucratic behavior, governments tend to be inefficient and bloated with unnecessarily high taxes. Within the literature, this is referred to as Leviathan–Niskanen–Buchanan hypothesis and is widely examined within public choice theory (e.g., Moesen & Van Cauwenberge, 2000). One could reasonably argue that this line of thinking is a foundational piece of the modern "Tea Party" movement.

Within public administration and political science, the tax level, tax efficiency, tax distribution, and political disaffection reasons listed by Lowery and Sigelman (1981) are related to political structure and seem to fall into the Leviathan–Niskanen–Buchanan hypothesis. As outlined by Santerre (1991), higher government spending provides bureaucrats with greater amounts of the five P's: power, prestige, pay, prerequisites, and ability to award patronage. In essence, bureaucrats, and, to a lesser extent, elected officials who face little or no opposition in the election cycles, have strong incentives to follow policies that reinforce their personal position within government.

One reason that allows Leviathan–Niskanen–Buchanan-type behavior is that the public sector does not face competitive market forces but rather acts as a monopoly in its jurisdiction; thus bureaucrats, and to some lesser extent policymakers, have little incentive to keep costs, and hence taxes, low. Further, agency theory suggests that bureaucrats have jobs with high levels of discretion, making it difficult to impose fiscal discipline (Cutler, Elmendorf, & Zeckhauser, 1999). Thus, they may seek to maximize their budgets as a way to increase their self-importance. Bureaucrats looking to maximize their importance also can inflate budgets only to return unused funds at the end of the fiscal year to garner political capital (Deller, 2006). Another potential reason for inflated budgets centers on interest groups, which provide not only votes but also campaign contributions to elected officials, who, in turn, have incentives to support specific budget items for the benefit of the interest group (Cutler et al., 1999). A related argument is that budgets increase when there is an economic or social shock but do not return to previous levels when the shock recedes (Kheng, 2001).

Lowery and Sigelman's (1981) second broad classification for why tax and expenditure limitations are imposed hinges on economic growth and development. This topic area, however, has received much less attention in the literature (e.g., McGuire & Rueben, 2006; Poterba & Rueben, 1995). The arguments for using TELs as a means to foster economic growth and development could be argued along three lines. The first line builds off Due's (1961) work on the role of taxation and firm location activity and include the landmark studies of Bartik (1991), Newman and Sullivan (1988), Oakland (1978), and Wasylenko (1980, 1981), as outlined by Ladd (1998). While these classic studies, along with more contemporary work such as that from Conroy, Deller and Tsvetkova (2016), generally argue that taxes play a very small role in business location activity, and hence economic performance, policymakers remain convinced that high taxes are detrimental to economic growth. As a result, tax and expenditure limitations must be imposed to focus fiscal discipline and keep taxes low.

A second line of work relates to TELs and economic growth and development talks in broader terms of fostering a positive businesses climate (Deller & Stallmann, 2007; Stallmann & Deller, 2010; 2011). Here the notion of a positive business climate is embedded in the *first wave of economic development policy* (e.g., Deller, 2014; Deller & Goetz, 2009), which can be traced back to the Mississippi Balancing Agriculture with Industry Program of the 1930s. A positive business climate is defined as low taxes, limited regulations, and inexpensive labor and land. Another component is the signals policymakers send to businesses through their actions to promote a positive business climate. The implementation of a tax and expenditure limitation may not only limit tax burdens but also send a strong signal to the business community. Arguments are made in the economic development literature that such a view of business climate is outdated and does not reflect the modern economy.

One area of agreement can be traced back to an earlier study by Ladd and Wilson (1982) who find that voters are more concerned with government efficiency than with the level of government services or with the level of the property tax. Thus, perceptions of government waste and inefficiencies are detrimental to both individuals and businesses. Within the framework of the Leviathan–Niskanen–Buchanan hypothesis, this interpretation of the relationship between government and economic performance is intuitive. It is argued that TELs are needed because public officials, for a variety of reasons, lack the fiscal discipline to rein in taxes and spending, and the government is inefficient and harms economic growth (Fraser, 2005).

There are, however, alternative arguments or hypotheses. It should be noted that most public services are normal goods; as incomes increase, citizens demand more and/or better quality public services (Stiglitz, 1989). This does not mean that demand rises at the same rate as income. For some goods, demand may rise more slowly than does income, while for others, it may rise more rapidly. Thus, an increasing public budget is not *prima facie* evidence that the budget is inefficient or bloated (Reschovsky, 2004; Skidmore, 1999).

It also has been argued that TELS can lead to government inefficiency rather than correcting it because they may affect the budget processes of governments (Mullins, 2004). If the TEL is binding, governments may look for ways to relieve their fiscal constraints by increasing alternative taxes (such as sales taxes if the TEL is a limit on property taxes) and fees and charges. For instance, Missouri's Hancock amendment was made stricter in 1996 (Hembree, 2004), and fee revenues for Missouri local governments increased 238% in real terms between 1992 and 2002 (U.S. Census Bureau, 1992, 2002). Second-best solutions, adopted because of the constraints imposed by TELs, lead to inefficiencies because of the time and effort put into devising and using an alternative rather than determining the best way to achieve the goal

(Mullins, 2004). For example, increasing reliance on sales tax revenues results in governments competing for firms that increase the sales tax base, particularly malls and big box stores. As incentives expire, firms leap frog from one jurisdiction to the next for new incentives, which increases sprawl and which, in turn, increases the costs of providing public services (Brookings Institute, 2002).

States may allow the creation of special districts for funding of services or for economic development (Mullins, 2004). Special purpose districts may be efficient because they are specialized and meet a particular demand of local voters (Tiebout, 1956). At the same time, there is the possibility that they are too small to achieve the economies of scale necessary to provide low-cost services. The literature on whether special districts are created as a way to circumvent TELs is inconclusive (Bell Policy Center, 2005; Bowler & Donovan, 2004; Carr, 2006; Mullins, 2004).

An additional change in fiscal processes can happen if TELs that apply to local governments pass power from the local government to the state. California's Proposition 13 basically passed control of property tax revenues to the state. The flow of their taxes to the state and the flow from the state back to local governments confuses voters; local taxpayers are not sure where their tax dollars are going (Douglas, 2003). Because people have paid their property tax, they become confused when local services are not up to their expectations. The use of special districts can confuse local voters also, as they no longer understand which government controls what and who is responsible for which services (Mullins, 2004). The diffusion of authority in the mind of the voter may lead to less voter oversight, and budgets may become larger and less well managed, which is a version of *fiscal illusion* (Deller, 2014).

Operationalization of TELs

One of the greatest challenges in TELs' research is measurement with the compounding effect that no two TELs are identical. Earlier literature uses a cross section of state or municipal observations and employs simple descriptive analysis such as that by Howard (1989). The second is a case-study approach using a variation on the with-and-without quasi-experimental design to examine fiscal policy in a state pre- and post-imposition of the particular TEL (Dye, McGuire, & McMillen, 2005; Dye, McMillen, & Merriman, 2006; Fisher & Gade, 1991; Maher, Deller, & Amiel, 2011; Skidmore, Ballard, & Hodge, 2010; Springer, Lusby, Leatherman, & Featherstone, 2009). Within the case-study approach literature, the two TELs that have been examined the most are Massachusetts's Proposition 2½ (e.g., Bradbury, Mayer, & Case, 2001; Cutler et al., 1999; Lang & Jain, 2004) and California's Proposition 13 (e.g., Downes, 1996; Wasi & White, 2010). The third approach uses panel data at either the state or local level within a quasi-experimental with-and-without framework. A metric to capture the presence of a particular type of TEL, traditionally a simple dummy variable (taking on a value of one if a particular TEL is present, the treatment, zero otherwise, or untreated), is regressed on a metric of government revenues and/or expenditures or economic performance (e.g., Deller & Stallmann, 2007; Mullins, 2004; Preston & Ichniowski, 1991).

The heterogeneity of TELs across states and the complexity of each one (see Appendix) are major reasons why researchers often take a case study approach, focusing only on a particular state. To address this heterogeneity, some researchers focus on specific type TELs, such as McCubbins and Moule (2010) who used a dummy variable to indicate limitations that target property tax. Primo (2006) used a dummy variable if there is a spending-limit TEL. Others focus on TELs that constrain the whole of taxing and spending, not single segments, such as property tax limits (Kousser, McCubbins, & Moule, 2008; Poterba & Rueben, 1999a, 1999b). But again, only a dummy variable is used to capture the presence of the TEL. Others that focus on fiscal responses to TELs and use dummy variables include Abrams and Dougan (1986), Bowler and Donovan (2004), Dye et al. (2005), New (2001), Preston and Ichniowski (1991), Shadbegian (1998, 1999), and Skidmore (1999).

State TEL Index Construction

The problem with the dummy variable approach is that it masks important differences in restrictiveness across states and even within states over time. No two states are exactly alike, and states often alter TELs over time. In fact, from the information theory perspective, it is pointed out that compressing the complexity of how TELs are structured into a dummy variable loses important information and masks the impact of TELs on policy and fiscal outcomes (Amiel, Deller, Stallmann, & Maher, 2014). Several studies have taken a different approach by constructing indices to reflect the strength or restrictiveness of a state's tax and expenditure limit.

Recognizing the heterogeneity of TELs, several subcategories of TELs – ranging from simple full disclosure/truth in taxation rules to strict general revenue or expenditure increases – are often employed to understand TEL structures (Joyce & Mullins, 1991). Full disclosure rules generally require some type of public discussion and a specific legislative vote prior to enactment of tax rate increases or to increase taxes and spending. These types of tax and expenditure limitations generally are not fiscally binding (that is, it is usually possible to work around the limit). The most restrictive tax and expenditure limitations limit the amount or the percentage by which revenues and/or expenditures can increase from the previous year and are codified in the state constitution. Often tied to inflation rates, population growth rates, or growth in per capita income, depending on the state, these types of tax and expenditure limitations are the most binding for governments (Poulson, 2005).

Several studies construct indices to reflect the strength or restrictiveness of a state's tax and expenditure limit. Bae and Gais (2007) built an index that ranges from zero for no TEL to three for the strongest TEL. Modeled on the work of Poulson (2005), Amiel, Deller, and Stallmann (2009) constructed an annual TEL index that ranks the severity or restrictiveness of the TEL of individual states for both state and on local governments from 1969 to 2005. [1] The Amiel, Deller, and Stallmann (ADS) (2009) TEL index is based on the premise that these constructs vary by state and over time (also see Poterba & Rueben, 1999a). For instance, municipalities in Illinois are limited to annual property tax rate increases not to exceed 0.25% and property tax levies not to exceed 5% annually. If the Illinois municipality, however, has home-rule powers (either by meeting the population threshold, or voter approval), the TEL is void, and, interestingly, revenue authority is expanded (Hendrick & Crawford, 2014).

Another complicating factor for research is the time frame over which tax and expenditure limitations have been in place. For example, Kansas imposed a limit on local government, removed it (Springer et al., 2009) and in 2016 re-imposed a limit. Colorado voters suspended TABOR for five years. Minnesota's local TELs are statutory, which means that the structure and existence of a TEL continuously changes. Currently, there is no municipal TEL in Minnesota, but, in 2009–2011, the legislature limited municipal levies. It is therefore important that

[1] For a detailed discussion of the indices used here see Amiel, Deller, and Stallmann (2009). The indices themselves and the data used to construct the indices can be downloaded at: http://www.aae.wisc.edu/pubs/sps/ under staff paper no. 536.

Table 1. Annual Index of Tax and Expenditure Limitations Restrictiveness

Characteristics or Dimensions of Tax and Expenditure Limitations	Revenue Index Points	Expenditure Index Points	Both Revenue and Expenditure Index Points
Revenue Index			
Revenue (all)	3	0	0
Tax Revenues (only)	2	0	0
State Property Tax	1	0	0
Expenditure Index			
Expenditures (All)	0	4	0
Appropriations	0	3	0
Appropriations of Tax Revenue (only)	0	2	0
General Fund Expenditures	0	1	0
Proposed Expenditures	0	1	0
Both Revenue and Expenditure Index			
Revenue and Expenditure	0	0	1
Statutory/Constitutional			
Constitutional=1	1	1	1
Growth Restriction (Growth in Revenues or Expenditures Limit)			
Less than or equal to the rate of Inflation and/ the population growth rate	6	6	6
Less than or equal to the rate of personal income growth	5	5	5
Rate of growth in the state economy	4	4	4
Percentage of per capita personal income	3	3	3
Equal to a share of total revenue or expenditures	2	2	2
No new taxes or fees	1		1
Method of Approval			
Constitutional Convention	4	4	4
Legislative referendum	3	3	3
Citizen Initiative	2	2	2
Legislative vote	1	1	1
Override Provisions			
No override allowed	7	7	7
Override Requires Approval by:			
Supermajority of Voters	6	6	6
Supermajority of Legislature	5	5	5
Majority voters	5	5	5
Majority Legislature	4	4	4
Declaration of and Emergency Funds with:			
Supermajority legislature and voter approval	3	3	3
Supermajority legislature	2	2	2
Majority Legislature	1	1	1
Exemptions			
Budget reserves	-1	-1	-1
Grants	-1	-1	-1
Capital Projects	-1	-1	-1
Debt Service	-1	-1	-1
Court Mandates	-1	-1	-1
Non-recurring general fund appropriations	-1	-1	-1
Other	-1	-1	-1

municipal finance researchers interested in studying these institutional effects capture their associated nuances and evolution over time.

Poulson (2005) developed an index based on characteristics of state TELs, but it was only for one year. Amiel et al. (2009) develop annual indices (state and local) based on six characteristics, each of which affects how strict or binding a TEL is: 1.) the type of TEL; 2.) if the TEL is statutory or constitutional; 3.) growth restrictions; 4.) method of TEL approval; 5.) override provisions; and, 6.) exemptions (see table 1). Higher point values in each category correspond to stricter limitations, while lower point values correspond to more lenient limitations. The rankings in each category are ordinal and do not reflect magnitude. The index has been used in a number of studies suggesting a certain level of acceptance by academics (e.g., Bae & Jung, 2011; Cummings, 2013; Greer & Dension 2016; Jimenez, 2017a, 2017b; Nicholson–Crotty & Theobald, 2011; Staley, 2015, 2017; Yakovlev, Tosun, & Lewis, 2012). While the ADS TEL index has been used for state-level research, until recently, the local ADS index received less attention. The challenge with using the ADS local-government index is that it includes all units of local government–county, municipality, and school district, any of which can vary within a state. Recently, the index was recalibrated to reflect the more significant nature of overall revenue and expenditure limitations over property rate limits (Maher, Park, & Harrold, 2016).

Municipal TEL Index Construction

While not unexpected, local TELs tend to focus more on property taxes than on general revenues or expenditures. Efforts to control property taxes consist of overall property tax limits for all forms of local government, including municipalities, municipal property tax rate limits, property tax revenue limits, and assessment increase limits. Similar to state-level TELs, municipal TELs can include overall revenue limits, expenditure limits, full disclosure requirements, and exemptions (see table 2).[2]

Property Tax Rate Limits. Municipalities in 12 states are currently subject to overall property tax rate limits: AL, AZ, CA, ID, IN, NV, NM, OH, OK, OR, WA, and WV. This means that the combined property tax rate for counties, municipalities, school districts, etc. are limited in some form by the state. The majority of state constitutions or statutes provide a set rate or revenue growth limit: Arizona limits annual growth to 1% of property value (Arizona Constitution, Article IX, Section 18), whereas levies in California may not to exceed 1% of full value (California Constitution, Article XIII A, Section 1). Idaho and Ohio have a 10 mill rate limit (Idaho Constitution, Article VII, Section 9; Ohio Constitution, Article XII, Section 2). New Mexico limits property tax rates at $3.64 per $1,000 of property value (New Mexico Statutes, 7-37-7), and the maximum rates in Oklahoma and Washington are 1.5% and 1.0% of property value, respectively (Oklahoma Constitution, Article X, Section 9; Washington Constitution, Article VII, Section 2. Interestingly, Nevada's constitution caps the property tax rate at $5 per $100 of assessed value (Nevada Constitution, Article X, Section 2); however, state statutes further cap rates at $3.64 per $100 of assessed value, plus $.02 for the protection and preservation of natural resources (Nevada Statutes, 32-361.543) for a maximum rate of $3.66 per $100 of assessed value. In the cases of Alabama and West Virginia, rates are limited by property class (Alabama Constitution, Article XI, Section 217; West Virginia Statutes, 11-8-6). Oregon, on the other hand, varies the rate limits annually (Oregon Constitution, Article XI, Section 11b). On top of overall property tax rate limits, many states impose property tax limits on municipalities. In fact, these specific rate limits are the most common form of TEL and currently exist in 25 states. Of 25 states, six states (AL, ID, NM, OR, WA, and WV) have both overall and specific rate limits.

General Levy Limits. As tax levies are a function of property valuation and tax rates, a limit on levies is most restrictive, but there is a breadth of variation in these limits across states. Arizona

[2] The authors are happy to share the municipal TEL index. Please contact Craig Maher at csmaher@unomaha.edu

Table 2. Municipal TEL Index Scoring Matrix and TEL Index

Type of TEL and Restrictions	Possible Point Values	
	Revised Municipal Index	Amiel, Deller and Stallmann Local Index (2009)
Overall Property Tax Rate Limit	2	7
Limited to less than or equal to 2.5%	2	2
Limited to more than 2.5 percent	1	1
Limits by Property Class	1	-
Assessment Ratio Less 50 Pct	1	-
Assessment Ratio Less 35 Pct	2	-
Specific Property Tax Rate Limit	2	6
5 mills or less	1	-
Property Tax Revenue (Levy) Limit	5	5
Limit less than or equal to inflation or 5% whichever is less	3	3
Limit less than or equal to 5%	2	2
Limit more than 5%	1	1
Base Growth	2	-
Fixed Amount	2	-
Limited to Reassessment Rollback [a]	3	-
Assessment Increase	2	4
Lower of 5% or CPI	2	3
Limit less than or equal to 5%	1	2
Limit to Specific Properties	2	-
Limit more than 5%	1	1
General Revenue Limit	8	3
No new tax or rate increase	4	4
Limit equal to inflation and or population growth	3	3
Limit is less than or equal to five percent	2	2
Limit is between five and ten percent	1	1
General Expenditure Limit	8	2
Limit equal to inflation and or population growth	4	4
Limit is equal to the change in per capita income	3	3
Limit is less than or equal to five percent	2	2
Limit is between five and ten percent	1	1
Full Disclosure	1	1
Constitutional	1	1
Overrides/Exemptions		
Home Rule	-1	-1
Other taxes	-1	-1
Debt Service	-1	-1
Special Levies	-1	-1
Capital Improvements	-1	-1
Emergency	-1	-1
Construction	-1	-1
Other	-1	-1
Method of override		
Super majority	2	2
Simple Majority	1	1
Voter Approval	1	1
Appeal to State Board	1	1

limits city levies from growing more than 2% annually (Arizona Constitution, Article IX, Section 19). Colorado's levy limit has three components: 1.) levies may not increase more than 5.5% from the previous year; 2.) voter approval is necessary for a levy increase; and, 3.) property taxes are limited to inflation (CPI for Boulder/Denver area) plus annual local growth (Colorado Statutes, 39-1-301). Maine's levy limit allows a municipality to increase property taxes but only by an amount equal to the growth of statewide personal income plus local property development within the municipality (Maine Statutes, 5721-A). The limit is adjusted downward if a municipality receives extra money from the state that it can used instead of property taxes. West Virginia, on the other hand, allows a levy increase not to exceed 10% over the prior year (West Virginia Statutes, 11-8-6).

Assessment Limits. Limiting the growth in property value assessments is another means of limiting municipal property tax growth, particularly because nearly each of these states also imposes a property tax rate limit. The remaining states, AZ, CA, FL, IA, MI, NM, NY, OK, and OR impose varying limits on both assessments and property tax rates. California's limits annual assessments to the rate of inflation but not to exceed 2% for any given year (California Constitution, Article XIII A, Section 2). Interestingly, once property is sold in California, the sale price is reflected in the new assessed valuation. The one state with an assessment limit without a rate limit is Maryland, which limits the three-year assessment cycle for counties and municipalities to no more than a 10% increase in value (Maryland Statutes, 9-105). Maryland also has a credit for property owners whose property tax bills exceed an income threshold.

Revenue Limits and Expenditure Limits. While the primary focus of municipal TELs is on property taxes, several states also limit overall revenues and/or expenditures. On the revenue side, for example, Colorado limits municipal general taxes: new or increased transfer tax rates on real property are prohibited; no new state real property tax or local district income tax shall be imposed; neither an income tax rate increase nor a new state definition of taxable income shall apply before the next tax year. Any income tax law change also requires all taxable net income to be taxed at one rate, excluding refund tax credits or voter-approved tax credits, *with no added tax or surcharge* (Colorado Constitute, Article X, Section 20).

On the spending side, four states impose expenditure limits: AZ, CA, CO, and NJ. In general, these expenditure limits are tethered to rates of inflation. Colorado is the only state that limits both revenues and expenditures. The other states limit expenditures and not revenues. For example, New Jersey limits municipalities and counties to increasing their final appropriations to 2.5% or the cost-of-living adjustment, whichever is less, over the previous year (New Jersey Statutes, 40A-4-45.2).

Full Disclosure. While perhaps one of the least-restrictive form of TELs, full disclosure requirements are growing in popularity. Today, 12 of the states with municipal TELs include a full disclosure provision. There are also six states with full disclosure provisions that impose no tax or expenditure limits (GA, KS, MN, TN, UT, and VA). In Utah, TEL provisions were recently removed in favor of full disclosure provisions (Utah Statutes, 59-2-919). Kansas required adoption of a resolution or ordinance for any appropriation or budget, which may be funded by revenue exceeding the prior year (Kansas Statutes, SB45-21). In 2016, Kansas re-imposed a local limit.

Exemptions. As can already be discerned, municipal TELs vary substantially from state to state. In addition to the described restrictions, there are an array of exemptions. These include home-rule status, emergencies, and capital improvements. The most common exemption is for debt and debt financing, which exists in most states. Home-rule cities in Illinois, for instance, are not only exempt from any TEL but have additional revenue-raising powers (Hendrick, 2011). Another prominent means by which a local government can seek exemption from TELs is via referendum. Going to referendum is permitted in most states, but, even here, the requirements can vary.

Changes Over Time. The mid-1800s marks the first era of local TEL adoption. This was in response to the growth of home-rule charters and the state's efforts to reign in local government taxes and spending. The states that adopted local TELs between 1850 and 1990 are

- AL, tax rate limits on counties and municipalities (1875);
- AR, tax rate limits on counties and municipalities (1883);
- FL, tax rate limits on school districts (1855);
- MO, tax rate limits on all local governments (1875);
- NY, tax rate limits on all local governments (1894);
- WY, tax rate limits on counties and municipalities (1890); and,
- TX, tax rate limits on counties and municipalities (1876) and school districts (1883).

Effects of TELs

Given both the political and academic interest in TELs, there is now an extensive body of literature focused on understanding their effects. Our attempt at highlighting this research focuses on two elements: 1) fiscal-related policy effects and; 2) distinguishing between state- and local-level research.

State-Level Research

Empirical studies on the effects of TELs on state finances are extensive. Scholars have linked TELs to some fiscal outcomes (infrastructure, debt, and credit ratings) and are divided on other effects (overall expenditures). Studies have found that state-level TELs can restrain the size and growth of state revenues and/or expenditures (Bails & Tieslau, 2000; Elder, 1992; New, 2001; Shadbegian, 1996). Bae and Gais (2007) tested to see if TELs influence state government per capita expenditures and find that more restrictive TELs produce modestly lower levels of expenditures per capita. On the other hand, studies have demonstrated that state-level TELs are not effective in restraining state revenues and/or expenditures (Bails, 1982, 1990; Howard, 1989; Joyce & Mullins, 1991; Kenyon & Benker, 1984; Mullins & Joyce, 1996). Kousser et al. (2008) used panel data from 1969 to 2000 to look at the impact of TELs on state spending and found that, other than in a small number of states, such as Colorado and Missouri, TELs have not curtailed state spending.

Hendrick and Garand (1991) examined changes in the distribution of state government expenditures across several expenditure categories, measured in relative shares of total expenditure. The authors found that identifying clear explanations for trade-offs is "somewhat elusive" and concluded that their "inferences are not as reliable as they might be" (p.314). Amiel and colleagues (2014) found that state TELs result in a shift from taxes and intergovernmental aid to reliance on miscellaneous sources of revenues. The TEL does not affect the allocation of expenditures to education, health, and natural resources but does affect the allocation to other expenditures, such as highways and income maintenance.

The research examining the relationship between debt and TELs has been more consistent. Bahl and Duncombe (1993) studied debt patterns through the 1980s to determine the extent to which the types of borrowing instruments changed under an era of high borrowing costs and increased public pressure for tax relief (principally personal income and property taxes). The authors found evidence that states substitute non-guaranteed debt in the face of general obligation debt limitations, but that total use of debt does not change. Nice (1991) also found that states with balanced budget amendments and constitutional limits on debt were associated with less guaranteed debt but not total debt. Clingermayer and Wood (1995) focus on the relationship between political and institutional variables and the annual percentage change in per capita real state long-term debt between 1961 and 1989. This includes both guaranteed and non-guaranteed debt. The authors used dummy variables to capture whether or not a state has either a revenue or a spending TEL and whether or not the state has a debt limit. The authors found no relationship between debt limitations and state debt growth but a positive relationship between existence of a TEL and growth in debt. Thus, in states with TELs, the growth in debt exceeds that of states with no TEL. Ellis and Schansberg (1999) tested a similar hypothesis and found that only the prohibition on guaranteed debt was negatively associated with the state's accumulation of total debt. Deller, Maher, Amiel, and Stallmann (2013) found that more restrictive revenue or expenditure TELs increase the use of debt, but TELs that limit both revenues and expenditures, and the most restrictive TELs reduce the use of debt.

Fiscal institutions, such as TELs, that limit fiscal flexibility can affect credit risk and hence borrowing costs (Kioko, 2010; Lowry, 2001). There are two hypotheses concerning the connection among TELs, credit ratings, and bond yields (Poterba & Rueben 1999b; Wagner 2004). Expenditure TELs may introduce a degree of certainty into the budgeting process, which should reduce the level of risk, improve the credit ratings of governments, and in turn reduce the cost of borrowing. On the other hand, revenue TELs can create barriers to fiscal flexibility. They may inhibit the ability of governments to raise sufficient revenues for future debt obligations, thus increasing the risk of default and leading to lower credit ratings and higher credit costs. Furthermore, if governments' ability to raise taxes is limited, they may be forced to assume higher levels of short-term debt during periods of fiscal stress, further increasing their exposure.

To test this relationship, researchers have focused on estimated yields of individual bonds, (Benson, 1980; Poterba & Rueben, 1999b; Wagner, 2004) as well as government credit ratings as determined by Standard and Poor's and Moody's. Poterba and Rueben (1999a) argue that credit ratings affect the costs of borrowing because they are the predominate means by which investors determine risk of default and repayment. Johnson and Kris (2005, p.103) concluded that "modeling of credit ratings is vital in understanding the impact of fiscal institutions." Johnson and Kriz (2005) examined the effects on state borrowing, measured as interest costs using Poterba and Rueben's (1997) TEL indicators. The authors found that only revenue limits were directly associated with borrowing costs. Stallmann, Deller, Amiel, and Maher (2012) found that more restrictive revenue TELs are associated with lower credit ratings, while expenditure TELs are generally associated with higher credit ratings. These results are consistent with those of Poterba and Rueben (1999a, 1999b) and Wagner (2004).

If TELs affect fiscal decisions, we also should see a relationship between institutional constraints and policy outcomes. Nicholson–Crotty and Theobald (2010) examined the role of TELs on public infrastructure expenditures and found that, as the restrictiveness of TELs increase, the own-source funding contributed by states for public infrastructure in response to federal grants decreases. In other words, as TELs become more restrictive, states are less likely to match federal infrastructure funds, thus resulting in lower total resources going toward infrastructure. Deller at el. (2013) analyzed how TELs are directly related to infrastructure conditions, finding bridge quality to be affected by TELs; more restrictive TELs have a weak negative impact on the percentage of bridges deemed structurally deficient but a positive impact on the percent of bridges deemed functionally obsolete. Because infrastructure investments tend to be expensive, more restrictive TELs appear to discourage those investments.

A limited number of studies directly test the relationship among tax and expenditure limitations and economic performance, and the available research provides no evidence supporting the premise that TELs enhance economic performance. Stallmann and Deller (2011), for example, used a series of non-parametric tests to test for relationships between quartiles of Poulson's (2005) index of TEL restrictiveness and 84 measures of economic "preparedness" and economic and fiscal performance as measured by the Corporation for Enterprise Development (2007). Results suggest no positive relationship between TELs and economic performance but found some evidence that more restrictive TELs actually hinder economic performance. Deller et al. (2012) found that more restrictive TELs have a dampening effect on economic growth. Taking the research a step farther, Amiel, Deller, and Stallman (2012) used a panel of annual data for the 50 states from 1990 to 2010, with a variable parameter specification coupled with a dynamic generalized method of moments (GMM) panel estimator. In general, more restrictive tax and expenditure limitations are positively related with higher rates of income growth in lower income states; however, the opposite relationship is observed in higher income states. Thus, the limited empirical evidence cannot support the central premise that TELs enhance economic performance but rather the evidence suggests they may hinder the economy.

Local-Level Research

Effects on Revenues. Many local-level TELs studies have been case studies or cross-sectional and panel analyses that have relied on dummy variables for TEL measurement. The local-level (municipal, school district, and county) research on TELs has consistently demonstrated that TELs reduce reliance on property taxes (Dye & McGuire, 1997; Shadbegian, 1998; Sun, 2014) (see table 3 for a summary of more recent local-level TELs research). A recent analysis of the effects of a uniform TEL in Denmark reveals findings that are consistent with U.S.-based research: TELs cause revenue-shifting strategies away from those taxes that are constrained to greater reliance on intergovernmental aid and, thus, have little effect on expenditures (Blom-Hansen, Bækgaard, & Serritzlew, 2014).

Circumventing TELs can come in many forms, including alternative revenue sources such as state aid. Kioko and Martell (2012) found that stricter TELs were associated with higher state aid. Kioko (2011) found that TELs with general fund limits transfer more state funds to local governments because, she argued, the general fund limits are set so high that they are not binding. When there are both a state and local TEL, state aid to local governments is higher. Skidmore (1999) found that binding local TELs are associated with increases in state aid to local governments. States with procedural limits for approving revenues and expenditures have lower state tax revenues and lower transfers to local government (Kioko & Martell, 2012).

In addition to state aid, local governments under TELs have shifted to other tax sources and fees; however, the extent to which these alternative revenues offset lost property taxes is not clear. Cities under Proposition 13 have become less reliant on property taxes and more reliant on fees/charges, miscellaneous revenues, and tax sources other than levies and sales (Hoene, 2004). Following TABOR, Colorado cities increased their reliance on user charges and permits (James & Wallis, 2004). Analysis of Oregon's evolution in TELs found an unprecedented level of reliance on user fees and a tax revenue structure that has become more income elastic (Thompson & Green, 2004). Shadbegian's (1999) county-level analysis found that TEL stringency was associated with the degree to which property tax reliance decreased. As property taxes decreased, the fall in county property tax revenues were only partially offset by

Table 3. Overview of Local TELs Research

Study	Focus (The impacts of...)	Key findings: IVs	Key findings: Relation*	Key findings: DVs
Dye & McGuire (1997)	Local TELs on local revenues and Expenditures	Years local TELs in effect	- -	Property tax Expenditures
Shadbegian (1998)	Local TELs on municipal revenues and Expenditures	Existence of local TELs	- - -	Total revenues Total expenditures Property tax
O'Toole & Stipak (1998)	Property tax rate limit on local public services	Adoption of local TELs	-	Service level
Downes & Figlio (1999)	Local TELs on local public services	Existence of local TELs	-	Education performance
Figlio & O'Sullivan (2001)	Local TELs on municipal public services	Existence of local TELs	-	The level of police, fire and education service provisions relative to general administration
Hoene (2004)	Local TELs on municipal revenues	Years local TELs in effect	- + 0	Reliance upon property tax Reliance upon charges and fees Reliance upon sales tax
Plummer & Pavur (2009)	Property tax rate limit on school districts revenues and expenditures	Existence of local TELs	- - - - - -	Tax revenues Non-tax revenues Total revenues Operating expenditures Instructional expenditures Total Expenditures
Chapman & Gorina (2012)	Local TELs on municipal revenues	Existence of local TELs	-	Own source revenues
Clair (2012)	Local TELs on local revenue volatility	Existence of local TELs	+	The standard deviation of the annual percent change of real per capita revenues
Kioko & Martell (2012)	Local TELs on state aid to local	State with a local property tax limit	+	State aid to local
Maher & Deller (2013)	Local TELs on municipal fiscal health	Index of TELs restrictiveness	- - + - - +	Own source revenues GF expenditures Unreserved fund Debt service GO debt Pension assets
Blom-Hansen, Bækgaard & Serritzlew (2014)	Local TELs on (Demark) municipal revenues and expenditures	Years local TELs in effect	+ + - - - 0	Budgeted expenditures Grant Property tax rate Income tax rate Capital income Charges/Loans

Connolly & Bell (2014)	Assessment limit on county fiscal structure	Adoption of assessment limits	-	Property tax base
			-	Property tax
			-	The uniformity of assessments
			-	Distributional balance of the tax burden
Sun (2014)	Local TELs on municipal revenues	Existence of local TELs	+	Own-source revenues
			-	Property tax
			+	Sales tax, Income tax
			0	Other tax
			+	User charges
			0	Miscellaneous
Maher, Park & Harrold (2016)	Restrictiveness of municipal TELs	Municipal TEL index	+/- (depending on form of government)	Pension funding
			-	OPEB funding
Maher, Deller, Stallmann & Park (2016)	Restrictiveness of municipal TELs	Municipal TEL index	-	Municipal credit ratings
Park, Park & Maher (Forthcoming)	Restrictiveness of municipal TELs	Municipal TEL index		Annual % change of
			+	IG aid
			0	Charges/fees
			0	Property tax
			0	General expense
			-	Capital investment
			0	GO debt
			+	Debt services

Note: +, -, and 0 indicate positive, negative and no relationship, respectively

miscellaneous revenues. Skidmore found similar results: local TELs on property taxes are only partially offset by shifting to unrestrained sources, and Chapman and Gorina (2012) found that property tax limits restrict local own-source revenues. In one of the more robust analyses of TELs, Sun (2014) conducted a panel analysis of cities from 1970–2006 and found that, as property taxes were reduced, sales tax reliance grew, as did income tax collections and per capita user charges. Contrary to other findings, according to Sun, these revenue increases more than offset the reductions in property taxes.

Effects on Expenditures. Dye and McGuire’s (1997) analysis of Illinois local governments found that including the effect of home-rule powers, the levy cap affected growth in levies and that overall spending was reduced, but not instructional spending, suggesting a prioritization of spending. Figlio and O’Sullivan (2001) also suggested that spending is affected by TELs, but their study revealed a strategic pattern: cities have a propensity to manipulate their expenditures to get voters to override limits. Maher and Deller (2013) found that stricter TELs were associated with lower general fund expenditures as a percentage of property valuation. A recent analysis of cities during the Great Recession years, 2008–2011, found no relationship between TEL stringency and general expenditures (Park, Park, & Maher, Forthcoming).

Fiscal Condition. Following the Great Recession of 2008–2009, a few attempts have been made to study the effects of TELs on local fiscal condition. Maher and Deller (2013) found that TELs are positively associated with key measures of fiscal condition: higher fund balances, better-funded pensions, and lower debt. According to the authors, “[i]t could be that TELs force communities to more effectively manage their resources by building their reserves, funding future obligations better, and controlling debt" (p. 423). In a study of municipal cutback strategies during the recession, differences in fiscal outcomes were found based on the severity of the municipal TELs (Park et al., Forthcoming). Municipalities constrained by more stringent TELs received more intergovernmental aid, incurred higher debt service expenditures, and experienced less net capital investment during the most recent recessionary period.

A study of pension and other post-employment benefit (OPEB) obligations found that TEL stringency is positively associated with municipal pension funding ratios and is negatively associated with other post-employment benefit funding (OPEB) ratios (Maher, Park, & Harrold, 2016). Interestingly, when the authors interacted TEL stringency with a form of government, they found negative effects on both pension and OPEB funding ratios. They concluded that, during periods of fiscal distress, the political consequences of underfunding these liabilities may be much greater for mayors than administrators/managers.

Local Policy Outcomes. Much of the research on the impacts of local TELs focuses on the impacts on schools and school performance. Figlio (1997) found that TELs are associated with higher student teacher ratios (see also Shadbegian, 2003), lower starting teacher salaries, and lower performance in mathematics, science, reading, and social studies examinations, but administrative spending is not reduced. Figlio (1998) reported similar findings for Oregon. Figlio and Reuben (2001) found that the TELs affect the quality of new teachers. In a review of the literature, Downes and Figlio (1999) found that TELs have a negative impact on long-term school performance. When investigating the impacts of Massachusetts's Proposition 2½, Bradbury, Mayer, and Case (2001) found that, in communities where school spending was constrained by the law, there was a willingness to pay for increased school spending.

Bradbury et al. (2001) found that in Massachusetts "... house prices performed worse in communities that had slower increases in spending, suggesting that Proposition 2½ led communities to spend 'too little' on services" (p.289). Cheung (2008) found that private home owners' associations became more common in the most fiscally constrained cities in California. These associations had the ability to provide services to their residents beyond those provided by the constrained city.

Summary and Conclusion

About four decades ago, Shannon, Bell, and Fisher (1976) argued that "despite their longstanding character...fiscal controls on...governments are again an issue of controversy in need of careful and complete analysis" (p.276). Since passage of California's Proposition 13, there has been a significant amount of research on TELs at both the state and local level. We now know that TEL design has an effect on fiscal outcomes and that fiscal outcomes range from changes in revenue structures to long-term investments, including pensions and other post-employment benefits and infrastructure. The methodology also has evolved in recent years from single-state analyses to multi-state and overtime analyses. The operationalization of TELs also has evolved from binary measures capturing the existence/nonexistence of TELs to measures of the structure and nuances of TEL design. The TEL literature has made significant efforts to respond to Shannon, Bell, and Fisher's challenge and continues to grow and evolve.

In this study, we attempted to synthesize previous studies on TELs in a comprehensive manner. Based on our discussion, several suggestions can be made for practice and policy. First, the leverage of TELs is significant at both state and local levels, and such influences can be not only positive but also negative, depending on budgetary components or policy issues. Because TELs are not a one-size-fits-all solution for a variety of issues, policymakers who aim to achieve certain outcomes need to be careful in adopting and implementing limitations. With an elaborate understanding of varying types and forms of TELs, policymakers may be able to find some structures of limitations, which are appropriate for their budgetary and/or policy issues. Last, previous studies have shown that even TELs of similar design can differ greatly in their consequences depending on the time and context. Policymakers in a state can learn how TELs work with varying environments from other states' experiences described in this study.

One strong take-away point from the literature is that local context matters, and lessons learned from one state must be carefully applied to another state because subtle institutional differences make each state unique. What may appear to be subtle statutory or constitutional differences on the surface can have large influences on how a TEL plays out in a particular state. For example, in some states, local governments that face property-tax-focused TELs can easily shift to user fees and chargers or the sales tax. Other states have statutory rules outside of the TEL than can limit flexibility. For example, in Wisconsin, a non-home-rule state, revenues from fees and charges can only be used for the specific service and cannot flow to the general fund. Thus, a TEL on local governments in Wisconsin will have a different impact than the identical TEL imposed in Illinois, which is a home-rule state and has no restrictions on user fees and charges.

Another take-away from the literature is that TELs seldom have the intended outcome their proponents promise. Many TELs, it turns out, are easily circumvented, thus neither limiting expenditures nor revenues because governments shift to other revenue streams to maintain services. If the goal of the TEL is to reduce property tax burdens, they do tend to have that effect, but it raises the question of paying with another form of tax (or fee/charge) rather than the property tax. What is gained by shifting from one form of tax to another if the overall tax burden remains the same? The limited evidence also suggests that TELs do not foster economic growth and development and may, indeed, hinder economic performance. The literature also indicates unintended consequences such as lower credit ratings and less robust infrastructure.

The work on TELs is far from complete. TELs research has primarily focused on revenues, and much less is known about the impact on expenditures (see Deller et al., 2013). Yet to be determined is the extent to which TELs affect the prioritization of expenditures; thus, are core services emphasized at the expense of perceived less "essential" services similar to what has been found in research on changes in intergovernmental aids (Deller & Maher, 2005)? More fundamental, do short-term costs savings in the name of the TEL result in higher costs in the long-term (e.g., deferred infrastructure maintenance)? Given that local TELs affect revenue structures by decreasing reliance on historically more stable property taxes and shifting to more volatile revenues such as sales or income taxes, should we expect to find TELs affecting expenditure categories?

Furthermore, research on TELs would benefit greatly by better understanding within state variation. Many studies have focused on the impact of TELs on state fiscal outcomes or have examined the role of local TELs using aggregate local fiscal data. It was only in recent years that studies have analyzed the particular influence of TELs on municipal governments (city, town, and equivalence) (Chapman & Gorina, 2012; Dye, McGuire, & McMillen, 2005; Maher, Deller, Stallmann, & Park, 2016; Sun, 2014). Because states in general have different TEL structures for their counties, municipalities, and school districts (ACIR, 1995), separate efforts to understand the role of TELs by units of local government may be needed. This approach also encourages consideration of other factors that can generate within-state variations, such as home-rule charters and self-imposed local TELs. It has to be noted that only a few studies have been interested in TELs placed by a local government on its own fiscal behavior (e.g., Brooks, Halberstam, & Phillips, 2012; Hoene & Pagano, 2010).

Another area that could use further development is the inclusion and analysis of the interactive and collective effects of all institutional constraints on fiscal behavior. The tendency is to focus the research scope to specific types of institutions, such as TELs or balanced-budget requirements or debt limits at the expense of systematic analysis of all institutions. From the institutionalism standpoint, all budgetary institutions may work together in shaping government fiscal outcomes (Poterba, 1995). This idea has been consistently emphasized since Inman's (1979) suggestion of a correct "policy mix" for local finance (p.159). Nevertheless, few studies have directly addressed the interaction between fiscal institutions and between fiscal rules and other institutional settings (except for Maher, Park & Harrold, 2016). To have a robust understanding of TELs and to make TELs work better, we need to be informed of whether or now TELs generate surprising results when they are coupled with other institutions. These are all fruitful agendas for future research.

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Appendix

Table A1. The Structure of TELs by State (as of 2015)

State	State-Level TELs		State-Imposed Municipal TELs					
	Revenue Limit	Expenditure Limit	Property Tax Rate Limit	Property Assessment Limit	Property Tax Levy Limit	General Revenue Limit	General Expenditure Limit	Full Disclosure
Alabama			∨					
Alaska		∨	∨		∨			
Arizona	∨	∨	∨	∨	∨		∨	
Arkansas	∨		∨	∨	∨			
California	∨	∨	∨	∨			∨	
Colorado	∨	∨	∨		∨	∨	∨	∨
Connecticut		∨						
Delaware	∨	∨						
Florida	∨		∨	∨				∨
Georgia								∨
Hawaii		∨						
Idaho		∨	∨		∨			
Illinois			∨		∨			∨
Indiana		∨	∨		∨			
Iowa		∨	∨	∨				
Kansas								∨
Kentucky	∨		∨		∨			∨
Louisiana	∨	∨	∨		∨			
Maine		∨			∨			
Maryland		∨		∨				∨
Massachusetts	∨		∨		∨			
Michigan	∨		∨	∨	∨			∨
Minnesota								∨
Mississippi		∨			∨			
Missouri	∨	∨	∨		∨			
Montana					∨			∨
Nebraska			∨			∨		
Nevada	∨	∨	∨		∨			∨
New Hampshire								
New Jersey		∨					∨	
New Mexico			∨	∨	∨			
New York			∨	∨	∨			
North Carolina		∨	∨					
North Dakota			∨		∨			
Ohio		∨	∨		∨			
Oklahoma	∨	∨	∨	∨				
Oregon	∨	∨	∨	∨				
Pennsylvania			∨					
Rhode Island		∨			∨			∨
South Carolina		∨						
South Dakota	∨		∨					
Tennessee		∨						∨
Texas		∨	∨		∨			∨
Utah		∨						∨
Vermont								
Virginia								∨
Washington		∨	∨		∨			∨
West Virginia			∨		∨			∨
Wisconsin					∨			
Wyoming			∨					

Source: Amiel et al. (2009); Maher, Deller, Stallmann, & Park (2016); Maher, Park, & Harrold (2016); NASBO (2015)

Serving Our Homeless Veterans: Patient Perpetrated Violence as a Barrier to Health Care Access

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In 2009, the Department of Veterans Affairs (VA) set a goal to end veteran homelessness by 2015. Since then there has been a 36% reduction in homelessness due, in part, to the VA Supportive Housing (HUD-VASH) program. These services include the receipt of home-based services to the veterans' home. However, safety concerns and the threat of violence toward health care workers remain problematic in non-institutional care settings. This article discusses the concept of access to care and how safety concerns act as a barrier to services and optimal patient outcomes. Our study provides information on the prevalence of patient violence toward health care workers in the HUD-VASH program in a large veterans' health system. Results suggest 70% of home-based service providers were exposed to violence and aggression. Providing services to veterans outside of institutional care settings, and the goal of eradicating homelessness among veterans, warrants further examination of access barriers.

Keywords: Homeless Veterans, Access, HUD-VASH, Patient Perpetrated Violence

The United States Department of Veterans Affairs (VA) has made great strides toward decreasing homelessness among veterans, but the problem has not yet been eradicated. In 2009, the VA set a goal to end homelessness among veterans by 2015. From 2009 to 2015, the percentage of homeless veterans decreased by 36%. This reduction was accomplished in part through a partnership with the U.S. Department of Housing and Urban Development through a program better known as VA Supportive Housing (HUD-VASH) in which housing vouchers are furnished to qualifying veterans (Office of Housing Choice Vouchers, 2017). Currently, the HUD-VASH program serves approximately 10,000 veterans per year, serving more than 100,000 veterans since 2008 (Crone, 2016). Because homeless veterans often face negative circumstances or conditions that have an impact on eligibility for and the retention of permanent housing, the program also provides health care and case management services. Encompassed in these services is the critical element of receiving home-based health services outside of the traditional institutional care setting to improve health care access. The affiliated medical facility sends interdisciplinary teams comprised of nurses, social workers, psychologists, psychiatrists, occupational therapists, and dieticians to the veteran's home.

While access to health and case management services remains a necessary component to ensure success of this program, offering home-based health care to HUD-VASH recipients greatly improves the multifaceted domains of access (Levesque, Harris & Russell, 2013; Penchansky & Thomas, 1981). Being able to receive quality care in the home for those who are unable to go to a facility and community setting is essential to reintegration. However, concerns of safety or the threat of violence toward health care workers visiting veterans' homes can present significant barriers to access (Barling, Rogers & Kelloway, 2001; Bussing & Hodge, 2004; Campbell, 2016; Campbell, McCoy, Burg & Hoffman, 2013; Hutchings, Lundrigan, Mathews, Lynch & Goosney, 2011; Janocha & Smith, 2010). Reports show frequent incidents of veteran clients engaging in

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violent attacks against health care workers (Beech & Leather, 2006; Blow, Barry, Copeland, McCormick, Lehmann & Ulman, 1999; Campbell, Burg, & Gammonley, 2015; Hodgson et al., 2008; Silver, Keefer & Rosenfeld, 2011). To highlight this issue, in 2016, the U.S. Government Accountability Office (GAO) released a report detailing the prevalence of violence and aggression against health care workers by patients in the workplace. The types of incidents reported were both sexual and nonsexual in nature (GAO, 2016).

The VA has the oldest violence prevention program to be applied in a hospital setting. Entitled the Veterans Health Administration (VHA) Workplace Violence Prevention Program, it addresses issues of violence in the workplace by using a “flagging” system to identify patients who have exhibited disruptive or dangerous behaviors (GAO, 2016). Veterans who have demonstrated such behaviors toward their health care providers are referred to the Disruptive Behavior Committee, which creates a specific plan to reduce the risk of further violence (GAO, 2016). In addition to this flagging system, the VA also trains staff in various techniques to promote staff safety through online and in person training. Recognizing that home-based care is expanding, the VHA has begun to address staff safety in non-institutional settings because these settings may have different safety needs and concerns. In 2016, the VA Central Office implemented a community risk-assessment checklist as a new protocol, which, among other things, requires staff members who have been away from the VA Medical Center for more than two consecutive hours to communicate with their local facility through phone, email, or text to confirm their safety status. Additionally, it calls for mandatory trainings on the prevention of disruptive behavior for all health care workers who work outside the facility.

Despite these efforts to promote staff and patient safety, research specifically examining this topic in relation to HUD/VASH clients or providers remains scarce. A recent database search of PubMed, EBSCO, Academic Search Premier, ProQuest, and Google Scholar yielded no articles that provide information on violence prevention or incidences against providers servicing the needs of HUD/VASH recipients. A study by Campbell (2016) suggests that almost 70% of 236 health care employee respondents, surveyed from September 2015 to January 2016, who provide homebased services, experienced verbal, physical, or sexual patient perpetrated violence and aggression. Even with prevention mechanisms in place, violence in home health care settings remains a challenge and often goes under-reported (Campbell et al., 2013; Campbell, 2016). Studies have reported on the negative impact that these types of incidents have on personnel productivity, employee turnover, and the organizational costs, thus creating a financial loss and a decrease in the quality of care received by the patient (Kelloway & Day, 2005; Campbell et al., 2015). Therefore, this important topic is worthy of attention.

Purpose

The aims of this article are twofold. First, this article will briefly discuss the concept of access and how safety concerns can serve as a barrier to health care services access and patient outcomes. Second, it will report on findings from a pilot study that provides information on the prevalence of patient violence toward health care workers in the HUD-VASH program at the second largest veterans’ health system in the United States.

Safety Concerns as a Barrier to Access

The literature shows that the impact of violence or aggression against health care professionals is a barrier to health care access and adequate delivery of care. Penchansky (1977) defined "access" as a multidimensional concept composed of five essential elements: (1) *availability*, which is the number of health care personnel or services present or on call to service the needs of the patients; (2) *accessibility*, the spatial or geographic association between the providers and consumers of health care; (3) *accommodation*, explains the institution and/or content of the health care system as it pertains to the ease in which patients can encounter and/or utilize services through the facilitation of adequate hours of operation, timely delivery of care, and the length of time to be seen by a professional; (4) *affordability*, the financial ability of the population served to utilize the services delivered by the system and their opinion on the value of the services available; and (5) *acceptability*, which exemplifies the attitudes of the consumers of health services toward the professional supplying services and vice versa. In a later article, Penchansky and Thomas (1981) added the consideration of consumer satisfaction as an important measure and component with which to assess access. Consumer satisfaction considers whether services meet expected quality standards and the evaluation of whether the health care system is responsive to the needs of consumers. Fortney and colleagues (2011) also conceptualized access as a multidimensional concept. For a health care system to deliver and increase the possibility of utilization of services in the 21st century, the system must observe its geographical, temporal, financial, cultural, and digital dimensions, to increase access (Fortney, Burgess, Bosworth, Booth, & Kaboli, 2011).

Violent or aggressive incidents against health care professionals affect different aspects of health care professionals' employment life, directly having an impact on *availability*, *accommodation*, *acceptability*, and *customer satisfaction*. These have been described as dimensions of access by other researchers (Roghmann, Hengst & Zastowny, 1979; Tessler & Mechanic, 1975). Violence also has a negative impact on personnel productivity, personal health, and organizational efficiency, often causing financial loss in the form of employee compensation claims (Campbell, 2016; DiMartino, 2003; Hesketh et al., 2003; Kelloway & Day, 2005).

Studies have reported the association between workplace violence and employee absenteeism, intentions to quit, and turnover (Beech & Leather, 2006; Campbell, 2016; Heponiemi et al., 2008; Jackson, Clare, & Mannix, 2002; Kelloway & Day, 2005; McGovern et al., 2000; Sherman et al., 2008). Staff shortages caused by workplace violence have a direct impact on the provision of health care (Blegan, Goode, & Reed, 1998; Brewer, 2005; Heponiemi et al., 2008). A 2016 study by the Joint Commission reporting on the Special Focused Surveys on VA health care facilities found that poor staffing was a barrier to providing access to timely care to veterans and/or the increase of wait times to obtain an appointment (Office of Public and Intergovernmental Affairs, 2016). Timely care in turn may have an impact on community reintegration and health. The topic of patient perpetrated violence should be considered among the multidimensional topics needing further research and interdisciplinary policy analysis to inform policies supporting positive reintegration outcomes for veterans and their families (Lazier, Gawne, & Williamson, 2016).

Reduced personnel productivity due to the resulting increased job stress and emotional distress has led to declines in job performance, all of which threatens an organization's ability to provide and/or maintain quality of care to patients (Barling et al., 2001; Beech & Leather, 2006; Hesketh et al., 200; Kelloway & Day, 2005; Sherman et al., 2008). A study by Hanson, Perrin, Moss, Laharnar, and Glass (2015) of 1,214 homecare workers who experienced aggression and violence revealed that exposure to such incidences was related to increased depression ($p<0.001$), sleep problems ($p<0.001$), burnout ($p<0.001$), and stress ($p<0.001$).

Research regarding nurses who encountered increased levels of burnout due to violence reported that those employees were more likely to transfer out of their profession and leave their institution (Gerberich et al., 2004; Leiter & Harvie, 1996; Raquepaw & Miller, 1989; Sherman et al., 2008). The need to hire and train new staff as a result of staff turnover and the organizational memory loss resulting from seasoned staff departures are financially and operationally detrimental to an organization's ability to remain effective and efficient, which, in turn, can have an impact on health outcomes (Jones, 2005, 2008; Misra-Hebert, Kay, & Stoller, 2004; Temkin-Greener & Winchell, 1991; Waldman, Kelly, Arora, & Smith, 2004). Vacancy costs, that is, the expenditures associated with the replacement of new nurses, are the largest expense during staff turnover (Jones, 2005, 2008). The turnover cost is much higher when the vacancies are filled by registered nurses (RNs) who have very little experience, with the turnover costs ranging from $82,000 to $88,000 (Jones, 2008). The fact that new RNs receive a lower salary than experienced nurses does not compensate for the cost of decreased efficiency due to turnover rates (Tiaki, 2012). Nursing directors have explained that, on an average, it takes 14 weeks to reach 90% productivity when hiring nurses with less than a year of experience. In addition, nurse turnover can influence the quality of care when facilities have higher nurse-to-patient ratios and an increase in inexperienced nurse graduates (Jones, 2008; Tiaki, 2012). Thus, employee safety concerns create major obstacles in improving health care access.

Safety Concerns Involving HUD-VASH Recipients

Homeless and previously homeless population is highly stigmatized, often stereotyped by an association with violence (Fisher, Mayberry, Shinn, & Khadduri, 2014; Sard & Rice 2014; Cunningham, Gillespie & Anderson, 2015). In addition to safety concerns for the health care workers delivering patient care, other environmental factors can exacerbate this concern. In their efforts to secure permanent housing, homeless individuals are more likely to find housing in neighborhoods experiencing social ills involving violence and illegal drug use (Cunningham, Gillespie & Anderson, 2015; Fisher et al., 2014; Sard & Rice 2014). This, in turn, can have an impact on health care workers' sense of security, and some staff may refuse to provide services in high crime areas or require an escort.

To assess whether being homeless was associated with displaying violent or aggressive behaviors, the authors conducted a literature search to answer the question. The following search terms guided the search: "homeless" or "homelessness" and "violence" or "aggression" excluding domestic violence, family violence, youth, and adolescents. Databases used were ProQuest, Academic Search Premier, and PubMed. The searches yielded 47,435 results, and the four articles selected were considered the most relevant. This was determined by first reading the article titles; if they appeared to pertain to violence perpetrated by homeless individuals, we proceeded by reading the abstracts followed by the review of the full article to make a final determination on whether they contained relevant information. We eliminated articles on domestic violence leading to homelessness among women, violence toward the homeless, and violence among homeless youths, among other topics.

The literature suggests that, although being homeless in itself is not the cause of aggressive behavior or violence, some common characteristics, (e.g., drug use, substance abuse, mental illness) among homeless individuals make them more susceptible to displaying violent and aggressive behaviors (Swanson et al., 2002). These conditions are seen in higher rates among the homeless population, which influence violent behaviors. Substance abuse is known to be associated with aggressive outbursts or violent behavior (North, Smith, & Spitznagel, 1994). In a quantitative study by Delisi (2000) of 100 formerly homeless inmates and 100 domiciled inmates, the formerly homeless inmates were more likely to be dangerous and more likely to use weapons than the domiciled inmates. They also had significantly more prior arrests than the

Table 1. HUD/VASH Provider Demographics

		Frequency	Percent	Valid Percent
Discipline	Nursing (LPN, RN, ARNP)	18	52.9	54.5
	Auxiliary (SW, OT, Diet, Pharm, Psych)	15	44.1	45.5
	Total	33	97.1	100.0
Missing		1	2.9	
Total		34	100.0	
Age Range	20-29	1	2.9	2.9
	30-39	5	14.7	14.7
	40-49	3	8.8	8.8
	50-59	17	50.0	50.0
	60-69	8	23.5	23.5
	Total	34	100.0	100.0
Education Level	Bachelor's Degree	1	2.9	2.9
	Master's Degree	30	88.2	88.2
	Doctoral Degree	3	8.8	8.8
	Total	34	100.0	100.0
Years of Experience	6-10 yrs	2	5.9	5.9
	11-15 yrs	6	17.6	17.6
	16-20 yrs	2	5.9	5.9
	21+ yrs	24	70.6	70.6
	Total	34	100.0	100.0

other inmates. Per the author, this may have been because of survival instincts acquired while living on the streets, which required them to use weapons to defend themselves (Delisi, 2000). Violent behavior also could be attributed to the need to adapt to an environment where they feel that violence is a means of survival (Anderson, 1996). Nonetheless, this violent behavior is not uncommon.

If home health care workers do not feel safe, they will limit the amount of time spent completing the patient assessment, education, and visit(s) or lessen the frequency of visits, which may have a negative impact on patient outcomes (Brillhart, Kruse, & Heard, 2004; Campbell et al., 2013; Campbell et al., 2015; Kendra, Weiker, Simon, Grant, & Shullick, 1996). A study by Kendra and colleagues (1996) found that 68% of homecare workers would cut short a visit with a consumer if they felt unsafe in the home (Kendra et al., 1996). Participants also stated that they wrapped up their visits "as soon as possible." Kendra and colleagues proposed that, when visits were wrapped up "as soon as possible," the quality of patient encounter and care was compromised (Arnetz & Arnetz, 2000; Galinsky et al., 2010).

Pilot Study

In 2015 through 2016, a pilot study was conducted within the North Florida/South Georgia Veterans Health System (NF/SGVHS) HUD/VASH program to assess the prevalence of patient perpetrated violence against federal health care providers serving the homeless or previously homeless population. This pilot was a cross-sectional study that surveyed HUD/VASH providers to develop a baseline understanding of the frequency and prevalence of patient perpetrated violence and reporting of such incidents in relationship to the form of violence and aggression in non-institutional setting. Through use of a systematic literature review, theoretical framework, and focus groups, the researchers developed a survey composed of 37 items. For survey develop-

Table 2. Most Recent Form of Abuse

		Frequency	Percent	Valid Percent
Valid	None of any kind	3	8.8	8.8
	Verbal	23	67.6	67.6
	Physical	1	2.9	2.9
	Sexual	7	20.6	20.6
	Total	34	100.0	100.0

ment and validation, please refer to Campbell et al. (2015). The survey requested quantitative responses regarding the most recent encounter of patient perpetrated violence and aggression. A qualitative question allowed respondents to expand upon any question within the survey. It also gathered information regarding provider demographics and professional information (see table 1).

The sample included all federal employee home care providers within the NF/SGVHS HUD/VASH program. Recruitment criteria for sampled staff within this group were (1) staff employed by the VHA whose job description included at least a .5 full-time equivalent (FTE) of routine non-institutional care services and (2) who were present at the mandatory all-staff meeting held on August 12, 2015. Before survey dissemination, an in-person five-minute introduction was conducted to explain the study and survey, privacy and anonymity assurances, and informed consent form. By completing the survey, participants agreed to the written informed consent distributed to them. The study received approval from the University of Florida affiliated Institutional Review Board and VA Research and Development Committees.

Out of an estimated sampling frame of 66 potential respondents, 35 completed surveys were returned. The response rate of this sample, estimated due to estimated sample frame, was 53%. Within this pilot study, descriptive statistics for the sample included 35 responses representing the disciplines of nursing and auxiliary services (see table 1). Provider characteristics of this sub-sample showed that the overwhelming majority of respondents had a master's degree (85.7%) with most respondents between the ages of 40–49 (31.4 %). Much of respondents had 6–10 years of work related experience.

Within this sub-sample, 88.5% of respondents (n=31) reported experiencing patient violence or aggression while providing clinical health care in a non-institutional care setting. The most frequent form of abuse *in the most recent episode* was verbal abuse (80.0%), followed by sexual abuse (8.6%). One respondent indicated experiencing physical abuse of a nonsexual nature as their most recent form of patient perpetrated violence (see table 2).

Four respondents of the total who experienced violence or aggression did not fully complete the survey to reveal if they had reported their most recently experienced incident. Of the 35 respondents who did complete this element of the survey, 34.3% indicated that they had reported this most recent incident, while 54.3% indicated that they did not. Most respondents had experienced verbal abuse (88.6%), and only four respondents (11.4%) had not experienced any episodes of verbal abuse over the past 12-month period. Of those who experienced verbal abuse, 19 did not report this occurrence, and 11 respondents did report the incident. Physical abuse, experienced by six respondents (17.1%), was reported by four respondents, whereas two did not report this incident. Sexual abuse or violence, experienced by 40% of respondents within this sub-sample (n=14) is closely split regarding reporting; six respondents did not report this form of abuse, and 7 respondents did report the abuse (see table 3).

Table 3. Report Made

		Frequency	Percent	Valid Percent
Valid	No	22	64.7	71.0
	Yes	9	26.5	29.0
	Total	31	91.2	100.0
Missing	System	3	8.8	
Total		34	100.0	

Discussion and Implications

While prior studies have identified a gap in the literature regarding the prevalence of patient perpetrated violence in non-institutional health care settings (Campbell, 2016), the results of this pilot study support the findings of existing literature that patient perpetrated violence remains largely unreported specifically in the field of providing health care services to homeless veterans. Filling the existing gap in the literature, this study supports the assertion that unreported workplace violence extends into non-institutional health care settings and offers information on the prevalence of this issue and demonstrates the impact on health care providers serving homeless or recently homeless veterans. This pilot study found a concerning 70% of federal providers have been exposed to at least one form of patient violence or aggression in the past 12 months. Furthermore, 54% of these incidents remain unreported.

With a greater focus on providing services to veterans outside traditional institutional care settings and with the goal of eradicating homelessness among veterans, focusing on barriers to access is indeed warranted. While workplace violence is a well explored phenomenon, exploration of patient perpetrated violence in other health care settings remains in its infancy. The study of patient perpetrated violence in non-institutional health care settings, among the homeless veteran population, is particularly nascent. The National Institute of Occupational Safety and Health (NIOSH) and the Occupational Safety and Health Administration (OSHA) have defined guidelines for workplace violence prevention and response protocols in health care organizations, with evidence that "an integrated organizational perspective" is required. They advise incorporating explicit workplace violence monitoring tools, differentiated training for staff, and a predetermined response protocol (Leather, Beale, Lawrence, Brady & Cox, 1999). The VHA is making great strides toward achieving the NIOSH and OSHA guidelines; however, the results of this review and pilot study suggest that more work is needed.

The direction of the VA to bring health care to the veteran in his/her home and community is likely to be an increasing trend. Thus, addressing the problem of keeping personnel safe is essential considering that home visits are not exclusive to clinical staff (e.g., RN, occupational therapy, or physical therapy). For example, the increasing reliance on telehealth as a form of health care delivery means other nonclinical staff or contractors (e.g., telehealth technicians, IT staff, etc.) who set up equipment at veterans' homes may not be equipped to handle violent incidents. Thus, the issue of safety is larger than a patient and health care provider relationship. Additionally, the issue extends to veterans who are dually eligible for Medicare Part B benefits because home health care agencies and providers are also at-risk for patient perpetrated violence and aggression. Future work is needed, with a focus on understanding the current prevention mechanisms and training available to keep employees safe and to identify unique requirements that employees servicing the health care needs of this particular veteran population may have.

Conclusion

Considering presidential and congressional efforts calling for health care access solutions and the eradication of homelessness by 2015, providing health services to previously homeless individuals has challenges. Results of this study are consistent with previous studies among other non-institutional health care providers and suggest that incident reporting of patient perpetrated violence among HUD/VASH providers is grossly under-reported. Additionally, with prevalence of patient perpetrated violence and abuse being greater than 88%, recent study results suggest further research is warranted. Future studies should focus on how serving the health care needs of previously homeless veterans may have an impact on the role that health care providers play as they travel to veterans' homes. This article helps us to consider the important question of remote workplace safety and the role that employee safety plays as a contributor or barrier to health care access, as described by Fortney and colleagues (2011). We need to consider what kinds of access solutions might be used to deliver care (e.g., telehealth) that can keep employees safe while serving the needs of previously homeless veterans. This topic and article are timely, as the Department of Labor through the Occupational Safety and Health Administration (OSHA) recently released proposed rules entitled "Prevention of Workplace Violence in Healthcare and Social Assistance" regarding potential standards needed to safeguard health care and social assistance employees. OSHA is seeking input on the magnitude and nature of workplace violence in the health care field, calling into question the effectiveness of interventions and mechanisms currently in place to stop such violence.

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Book Review

Philanthropy in Democratic Societies: History, Institutions, Values by Rob Reich, Chiara Cordelli, and Lucy Bernholz

Nancy Beaman Stutts – Virginia Commonwealth University

> *Reich, R., Cordelli, C., & Bernholz, L. (2016). Philanthropy in Democratic Societies: History, Institutions, Values. Chicago, IL: University of Chicago Press. $30.00 (paperback), ISBN: 978-022633-564-3.*

American philanthropy plays an integral role in public life. In 2015, individuals, estates, foundations, and corporations contributed a national record-setting $373 billion (Indiana University Lilly Family School of Philanthropy, 2016) to scouting, education, theaters, libraries, parks, religious and medical institutions, and much more. This trend has largely been hailed as a sign of American's generosity and a boon for the nonprofits that benefit, but critical dialogue about the nature of philanthropy's public role has been limited. Despite philanthropy's continued growth, its role in public policy and administration remains a marginal aspect of nonprofit scholarship and public debate.

The stated purpose for developing this ambitious edited volume is to inspire and expand academic discourse about philanthropy. Questions about the public impact of private giving, public and private power, and democratic values are at the heart of this work. Those familiar with lead editor Rob Reich's public scholarship will not be surprised to find that the focus is not on the household contributions that comprise the majority of giving. Instead, the authors converge on a broad definition of philanthropy to explore its corporate institutions, processes, and influences, and implications for democracy. Of key interest are foundations as well as the professionalization of the nonprofit workforce and evolving hybrid forms of for-profit philanthropic institutions. "The second golden age of American philanthropy puts the U.S. at further risk of further becoming a plutocracy of the rich," Reich (2013) warned a few years ago. This book explores how.

The editors highlight the significance of the interdisciplinary, dynamic learning process that generated the volume, though political science and economic theory figure prominently. With the support of a few large foundations, a group of emerging and established scholars from various disciplines in a handful of prestigious universities convened over an 18-month period. The group discussed and debated drafts to create a well-integrated collection around the three themes that form the basis for the book's sections: "Origins," "Institutional Forms," and "Moral Grounds and Limits."

"Origins" begins with historian Jonathan Levy, who traces the history of philanthropy through corporate law, making connections across time, culture, economics, and ideas to explain the rise of corporate power and influence in the last 150 years. Rich in historical detail, the chapter weaves together the influential ideas of key political philosophers to hone in on the book's central and recurring argument. That is, since the permanent introduction of the federal income tax in 1913, tax exemption renders philanthropy inseparable from the public interest, yet neither scholars nor the public are asking critical questions about the relationship between private power and the public good. Social historian Oliver Zunz questions his discipline, including both

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the lack of philanthropic historians and the omission of philanthropy in answering broader historical questions. Detailing the rich contribution of philanthropy in the telling of history until the mid-twentieth century, Zunz attributes the decline to historical scholarship's shift in focus to business, foreign policy, and policy history. Reich's contribution returns to the book's core argument, outlining critical, if not new, concerns regarding foundations' legal right to operate without regard to public oversight while at the same time existing based on public subsidies.

The second theme, "Institutional Forms," looks beyond traditional philanthropic organizational structures to examine the place of democracy amid emerging, cross-sector, and hybrid arrangements. Acknowledging that philanthropy's forms are cultural artifacts of societies at any given time, and that the market is the organizing principle today, the chapters raise questions about whether new forms can fulfill the basic assumption of philanthropy as private action for public benefit. Aaron Horvath and Walter Powell, both sociologists and nonprofit scholars, offer a novel comparison of philanthropic expansion in the gilded age and today, including the founders, forms, goods produced, relationships to government services, and the public's perception of philanthropists' legitimacy. The authors suggest that, either by design or as a consequence of their founders' notoriety, new forms of philanthropy disrupt public understanding of which social issues matter and why. Moreover, large-dollar donors make decisions that affect the public yet exclude public debate, including the perspectives of those affected by the problems the donors seek to address. Former foundation leader and legal and philanthropy scholar Paul Brest questions the moral limits of corporate responsibility from the perspective of the CEO, board of directors, and senior managers. Legal scholar Ray Madoff examines the time gap between when funds are set aside to benefit the donor in the form of a tax break and when they become available to fulfill their purpose of creating public good. Chiefly concerned with the lack of payout rules for donor-advised funds, community foundations and endowment funds, the author suggests that it is time for the public to revisit "the question of what the government is seeking to accomplish when it encourages charitable giving" (p. 177). The section closes with philanthropy scholar Lucy Bernholz's contribution, which stands apart in its hopefulness for philanthropy's potential. A case study of an emergent public–private effort parallels Shirky's (2008) theory of technology's power to enable collective action, which Bernholz points to as a form of civil society.

The book closes with a return to the normative tone of the first section through three well-conceived but less accessible contributions devoted to philanthropy's moral grounds and limits in light of democratic values. Political philosophy scholar Eric Beerbohm outlines the political price of passing along to philanthropy the responsibility to ensure the fundamental goods of a democratic society. Politics scholar Ryan Pevnick explores the tension between philanthropy and two core values of democracy: democratic equality and market philanthropy. Unlike others, Pevnick argues that philanthropic functions should be limited to the production of cultural goods, not social justice. Political theorist Chiara Cordelli's chapter closes the volume with another take on the philosophy of justice that should undergird philanthropy. The author questions the normative and practical implications of allowing donors, who gain through tax benefits, to further benefit by influencing the people, issues, or organizations that they alone decide are worthy.

Those who worked together to develop this volume succeeded where many edited volumes fall short. The book is a cohesive integration of consistently well-developed chapters that take different routes to varying conclusions. The questions explored are not new, but the approaches to answering them reflect the influential arguments of those who know the United States can do better as well as the fresh eyes of new and emerging scholars. Despite the weighty questions about U.S. philanthropy, each chapter concludes on a hopeful note, which left me wondering why. The most ambiguous closing came from Reich, who states that he hopes, “to have shown that foundations are certainly democratically permissible, and that it is possible to defend a role for foundations, in something like the form they exist today, that makes them supportive, rather than injurious to democracy” (p. 81).

The work will be of great value in the classroom, as the basis for core readings in philanthropic studies and offers promise for achieving the editors’ purpose of engaging imaginations to advance future philanthropy scholarship. A key challenge is whether and how the book’s important conversations will move beyond academia to foster change. Even foundation leaders question their capacity to serve their public purpose; just 25% of foundation CEOs believe that overall “a lot of progress” has been made on their foundations’ goals (Center for Effective Philanthropy, 2013). Perhaps because rising academic stars contribute much of the book, on occasion the narrative becomes so dense, narrow, and subdisciplinary that it may be inaccessible to all but the most resolute readers. The questions here likely haunt many of those who spend their lives engaged with the nonprofit sector. Perhaps the takeaway for those who would like to advance the ideas explored here is the continuing call to write for broad audiences, speak up as we see opportunities to illustrate the points the book raises, look for opportunities to clarify those not covered, and bring related conversations to the people and places we frequent.

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Book Review

Informed Decision-Making through Forecasting: A Practitioner's Guide to Government Revenue Analysis by Shayne C. Kavanagh and Daniel W. Williams

Joseph Vonasek – Auburn University

> *Kavanagh, S. C., & Williams, D. W. (2017). Informed Decision-Making through Forecasting: A Practitioner's Guide to Government Revenue Analysis. Chicago, IL: Government Finance Officers Association. $90.00 (paperback), ISBN: 978-0-89125-002-9.*

Kavanagh and Williams work should be on the bookshelf of every public budgeting director and finance officer. A comprehensive and rational guide to forecasting revenues, it takes the reader through each topic in step-by-step processes that can be understood and applied to the revenue sources of virtually any size government. While any application of statistical methodologies can be dense reading, the authors go to great lengths in explaining each formula to make them as easy to comprehend as possible.

The authors' selection of basic and advanced forecasting techniques is likely to improve the perspectives of almost every budgeting professional. Further, the examples are not dependent upon sophisticated specialized software. They use the data analysis tool in Microsoft Excel, which is commonly available in budget and finance offices. A reader may wish to start by reading the conclusion (Chapter 19). This may help them prepare for evaluating their organization's own forecasting processes in comparison with the suggested best management practices.

There is good news and bad news. The bad news is that anyone less than comfortable with statistical methods will still have to engage in their practice to successfully apply much of the knowledge in this work. The good news is that the authors augment their statistical methodologies with understandable plain language descriptions that explain the processes. Further good news is their emphasis on the fact that the simpler methodologies often produce results that are as good, or better, than the more complex methodologies. This is reinforced through a comprehensive test of the methods using Excel and some commonly available automatic forecasting software.

After being led through recommended forecasting processes, readers are treated to a discussion of the primary types of forecasting. The authors then address, in substantial depth, selection of an appropriate forecasting method and its implementation. They also aid the user in using and evaluating the forecasts that are generated by the processes that they advocate, along with recommendations on how to present the forecast results to policymakers. Kavanagh and Williams also follow-through on their proposals using applied examples of several well-documented case studies.

Basic Preparation for Producing Good Forecasts

Vonasek, J. (2017). Informed decision-making through forecasting: A practitioner's guide to government revenue analysis by Shayne C. Kavanagh and Daniel W. Williams. *Journal of Public and Nonprofit Affairs, 3*(2), 238-242. doi:10.20899/jpna.3.2.238-242

Every forecaster should deliver what his or her ultimate audience wants to know. To determine where effort is best spent, specific questions also must be answered. Determining the most important revenue sources, most volatile revenues, the potential for future growth, and which sources that may be impossible to forecast will likely influence where that effort is best focused.

The forecast's foundation is the database from which it is made. It's not only the historical data that are important. It is often the structure of how the forecaster thinks about the revenue source and how its causal forces affect the revenue source. The reader is led through processes that express these aspects. "Influence Diagrams," describing these perspectives, are often a good investment of time and are suggested. They force forecasters to determine the interplay between the revenue and other environmental influences such as statutes, general economic conditions, and specific economic sectors. The STEEP framework (the social, technological, economic, ecological, and political events and trends) is another structured approach that will introduce additional perspectives. This helps organize forecasting and assures all aspects of the process are accounted for.

A final step recommended in the initial preparation is exploratory analysis of the data. This process visualizes the data (graphing and charting to expose patterns and trends); establishes a set of descriptive statistics (to establish central tendency, distribution of data, variance, and rates of change in data); and accomplishes disaggregation (the deconstruction of large, complex, problems into smaller, easily analyzed issues). Exploratory analysis reveals business cycles and seasonality in the forecasts (which the authors provide techniques for correcting) and the correlation of the variables with their power of revenue prediction.

Types of Forecasts

Forecasting methods are described as being judgmental or quantitative. Judgmental forecasting depends primarily upon the knowledge of the forecaster and familiarity with the revenue source. Quantitative forecasting depends upon data describing the revenue source combined with statistical techniques.

Expert judgment can make positive contributions to forecasts. However, when there is too little reinforcement by source data, predictive power can suffer. Its dependence upon a "feel" for the revenue source limits transparency and is often impossible to replicate. However, under the appropriate circumstances, experts can apply knowledge from experience that is not available to quantitative models. This may produce greater forecast accuracy. It can be subject to a range of cognitive biases but techniques are presented that can reduce judgmental errors. Included are group processes, such as the Delphi method, and the construction of nonstatistical models to deconstruct the process.

Quantitative forecasting is divided into extrapolation and regression methodologies. Each type is covered individually with a number of methods. Those presented include moving average, moving average of the trend, exponential smoothing, Holt exponential smoothing, and damped trend exponential smoothing. It is suggested that extrapolation techniques will be most effective in predicting repetitive governmental revenue sources such as through sales and income taxes. Regression forecasting is limited to the modeling of economic data. Regression produces a line-of-best-fit of data-points created by the revenue and economic variables. Use of the equation for a straight line allows projections of future values. There is extensive discussion of preparation of data for use in regression forecasting and use of Excel in the process. Interpretation and comprehension of the output from the Excel Data Analysis Tool are described in sufficient detail; even a novice should be able to employ it.

Selecting a Forecasting Method

Kavanagh and Williams address which methods perform the best through a "Forecasting Competition." They utilize a number of revenue sources and apply the techniques using both Excel and automatic forecasting software. The tests are applied using periodic data and annual data. The most consistently accurate results (lowest mean absolute percentage error) came using periodic data with one of the automatic forecasting software packages. However, the test confirmed the simpler forecasting methods performed well and no one technique performed best in all situations. The authors suggest using several methods applied to your own data, holding out the most recent length of time representing the period that needs to be predicted. Then, results can be compared with the actuals and their relative accuracy and bias statistics compared.

Implementing a Method

There are additional steps that can improve forecast results. A three-phase implementation is suggested. Prior to submitting them to a decision process, results obtained from several different methods can be averaged together, often improving accuracy. A second phase is adjusting the forecast on a judgmental basis. While these adjustments can improve accuracy, it is also possible to make unwarranted adjustments. Adjustments should be made in accordance with a predetermined structure, not randomly. Further, each adjustment should be documented. The final phase is testing the forecast to ensure it produces nominally accurate results. Three testing options are discussed. The first is subjecting it to a group peer review. When controlled appropriately, its multiple perspectives can benefit the forecast, and the issues that arise from group deliberation can be avoided. A second option would be a comparison with the results of extrapolation forecasting on the same data. The third option is the comparison with other similar governments' results.

A significant issue in budgeting and finance is uncertainty. We are reminded that, although single-point forecasts are desired, a budget is a plan, and all plans are uncertain. For this reason, budget and finance officers make conservative estimates. Such facts need to be communicated to elected policymakers. The referencing of forecasts as "estimates" and the presentation of the assumptions on which forecasts are constructed can assist this. There are two basic types of uncertainty: routine uncertainty, from the basic inability to project exact outcomes like taxable sales; and event-related uncertainty, ranging from economic downturns to natural disasters. Constructing a prediction interval is suggested to present the upper and lower limits of the most likely outcomes.

Using and Evaluating Forecasts

The primary focus for using a forecast is the consistent recognition of their value in achieving goals and objectives. It is suggested that budgetary principles be established to guide managers and decision-makers. This can be approached through the establishment of financial policies. Beginning with the commonly practiced requirement of a balanced budget, governments can also implement policies stipulating minimum reserves, uses for one-time or inconsistent revenues, and use of long-term financial planning in guiding spending. For those considering major changes in organizational culture, techniques such as target-based budgeting, priority-based budgeting, and strategic planning and visioning are covered.

Probably the most critical event for a forecast is its presentation to its audience. A common error often made is expecting that, because the forecaster understands the issues, the audience also understands them. Key points needing to be made to the audience are offered to help focus presentations. The time factor also is emphasized. Most presentations are time-limited, and the forecaster must be certain to cover every important issue. This means focusing on the essential issues and keeping the audience's attention. Different ways of helping the audience to comprehend the results (usually stated in numerical form) are suggested. While graphical portrayals are also covered, the suggestions go beyond them. Some more powerful methods include making the numbers reflect personal scales (such as "per resident" costs/revenues or increases/decrease in property tax bills) and relating revenues through "street-level" examples that are related to the revenue source (a decrease in available developable property might affect future tax revenue growth). Another suggestion is the use of interactive forecasts that can be altered to reflect the effect of changes to key assumptions in the forecast. This can keep the audience engaged and improve their retention of the presentation.

In that economic events and forecasts are not always in perfect sync, it may be advantageous to monitor actual revenue inflows and periodically update forecasts throughout the year. Methods for monitoring actual inflows for comparison with forecasts are presented. Simple algorithms viewing the year as monthly percentages-of-total allow a comparison between actual receipts and forecasts. At times, contractual or statutory terms stipulate when payments must be made. In such cases, non-mathematical approaches can reflect periodic percentages-of-total. Another consideration addressed is how to deal with seasonalized revenues when trying to make relatively accurate percentage-of-total comparisons. A factor useful to monitoring forecasts also addressed is the determination of effective economic indicators that are precursors to revenues.

Evaluating Forecasts

Improvement in forecasting only comes from the forecaster's personal commitment to improve his or her own accuracy and revising one's assumptions, where warranted. To improve accuracy, suggestions include keeping the prior forecasts and the work documents indicating assumptions and how they were made. Along with this, the record of the actual revenues is necessary for comparison purposes. The construction of an ongoing forecast database also is recommended. It should contain a historical record of the original forecast values for each revenue source, the critical assumptions used, and the forecasting data from which they were constructed.

It is requisite that the forecaster takes stock of whether his or her work is meeting the requirements of the elected decision-makers. If the expectations of decision-makers are not being met, it is likely that either elected officials will view forecasts as having little use or the forecaster will overestimate the value of the work he or she is contributing to the decision process, or both. To avoid this situation, a suggested set of rules for evaluating forecasts' effective utilization in the decision process is provided.

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