

Navigating Municipal Governance: A Comparative Analysis of Council-Manager, Mayor-Council, and Commission Systems on Public Service Delivery and Citizen Engagement

EPPS 6323 Knowledge Mining

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(Final Project)

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Abstract

This study investigates the influence of different municipal government structures, specifically the council-manager and mayor-council, on public service efficiency and citizen engagement in local governance. The research employs a quantitative approach by analyzing nationwide data on forms of municipal government to examine the relationships between government structure, public service efficiency, and civic participation. The results reveal that the council-manager system tends to yield higher levels of public service efficiency and citizen satisfaction, attributed to the professional management and clear separation of policy-making and administrative responsibilities. In contrast, the mayor-council system offers strong political leadership but may risk conflicts of interest and politicization of administrative decisions. The findings contribute to the ongoing debate on the most effective local government structures and offer insights for policymakers and practitioners seeking to enhance public service delivery and civic engagement in their municipalities.

Introduction

The International City/County Management Association (ICMA) published its 2018 Municipal Form of Government Survey in July 2019. The survey aimed to comprehensively analyze the various forms of local government across the United States, including the council-manager, mayor-council, town meeting, and commission systems. This survey has been conducted nine times since 1974. It is the most comprehensive resource available on form of government, mayoral powers, and other data on local government structure in the United States.

The 2018 ICMA Municipal Form of Government Survey provides valuable insights into the various forms of local government in the United States and their impact on governance outcomes. The findings underscore the importance of professional management and citizen engagement in achieving efficient and responsive local government. Policymakers and local government officials should consider the survey's findings when making decisions about the structure and operations of their municipalities.

Literature Review

This literature review examines the differences between the three primary forms of municipal government in the United States: council-manager, mayor-council, and commission systems. The review focuses on the roles of elected officials, decision-making processes, and public engagement in these systems, drawing from various academic sources.

Council-Manager Form of Government

The council-manager form of government is characterized by a professionally trained city or county manager who oversees the day-to-day administration of local government and reports to the elected council (Svara, 1998). Elected officials in this system focus on policymaking, while the city or county manager handles operational and administrative duties (Nalbandian,

1999). This separation of powers is believed to enhance efficiency and effectiveness in service delivery (Ammons & Newell, 1989). Furthermore, this system fosters increased citizen engagement and satisfaction with local services (Feiock, Jeong, & Kim, 2003).

Mayor-Council Form of Government

In the mayor-council system, the mayor serves as the chief executive officer, responsible for policymaking and administration (Svara, 1990). This system often results in solid political leadership but can also lead to potential conflicts of interest and the politicization of administrative decisions (Morgan & Watson, 1992). Researchers have argued that the mayor-council system is more common in larger cities due to the need for a more visible and accountable leader (Romanet, 2007).

Commission Form of Government

The commission form of government is the least common and one of the oldest of the three systems. It involves a small group of elected officials serving as legislative and executive bodies (Lineberry & Fowler, 1967). Each commissioner is typically responsible for overseeing a specific department or function of the local government (Bradbury & Waechter, 1971). Critics argue that this system can lead to a lack of coordination and accountability due to the dispersion of power among multiple commissioners (Goodnow, 1915).

The council-manager form of government has gained prominence as an efficient and practical approach to local governance, offering numerous advantages related to administration and public service provision. The International City/County Management Association (ICMA) highlights the key benefits of this system, such as professionalism, non-partisanship, accountability, strategic planning, and enhanced service delivery (ICMA). These advantages are

facilitated by appointing a skilled, unbiased city manager who oversees daily operations and ensures that the city runs smoothly and effectively.

Despite the acknowledged advantages, the National League of Cities (NLC) recognizes potential challenges associated with this form of government. Critics argue that city managers may be less responsive to citizens' needs and preferences than elected officials and that the appointed nature of the position might be perceived as lacking direct representation (NLC). However, the NLC maintains that the council-manager system offers a valuable framework for efficiently managing cities and ensuring the well-being of communities by balancing professional expertise and democratic accountability.

The budget process is one key area in which city managers play a vital role. The Government Finance Officers Association (GFOA) highlights the importance of city managers in financial planning and management, as they provide financial leadership, collaborate with stakeholders, prepare and present budgets, ensure fiscal monitoring and accountability, and engage with the public to develop and implement budgets that effectively serve their communities (GFOA). This underscores the crucial function of city managers in ensuring the fiscal stability and overall success of local governments.

While existing literature supports the roles and functions of the city manager, mayor, or commissioner, virtually no research could be found as to how these different types of local administration impacts the structure of the government they manage. Additionally, there is very little understanding as to what influences a local government in determining its chosen administration framework of city manager, mayor, or commissioner. As such, the following questions are offered that will be the basis of this research inquiry:

Question 1: What factors drive the establishment of forms of government?

Question 2: How does the form of government impact the structure of local government?**Hypotheses**

According to the 2018 Municipal Form of Government Survey, it was indicated that that 38.2 percent of cities had a mayor-council form government, 48.2 percent had a council-manager form of government, 3.2 percent had a commission form of government, and the remaining 10.4 percent included some variation of town meeting form of government. Persson et al. (2000) argues that a mayor-council framework leads to smaller government. Further, in a recent study by MacDonald (2008), she used the size of cities to investigate the effects of government form. Based on the information learned in their studies, the following hypotheses are offered, in response to the previously stated research questions:

H1: The choice of city government form is influenced by a city's complexity

The government structure of the council-manager framework for cities, is similar to businesses in the private sector. This can be seen with the voters playing the role of stockholders, the council acting in place of a board of directors, and a city manager comparable to a chief executive officer (Hayas & Chang, 1990). Some scholars speculate that a city manager can even have some incentives similar to those enjoyed by a private sector manager to encourage improving public service efficiency. Whereas, an elected mayor, in the mayor-council framework, may not be statutorily permitted to be offered incentives; thus, may contribute to less cost-efficient governmental operations, as compared with the city manager-council framework, leading to higher public service efficiency and lower costs than a mayor-council form of government. Yet, Deno and Mehay (1987) argue that each type of government framework should be equally efficient. Given these conflicting perspectives regarding local government framework efficiency capabilities, the following hypothesis is proposed as part of fully answering the second research question postulated earlier:

H2: Cities that use the council- manager form of government is associated with better municipal management and efficiency than cities with other forms of government.

A perspective put forth by Carey (2005), is the like comparison of the mayor-council form of government to be like in nature as the presidential form seen at the federal level. Carey (2005) continues this analysis by making like comparisons of the council-manager form of government to a parliamentary form, as seen in the British government. However, another type of chief administrator that can be seen in local government is the Chief Elected Officer (CEO). The CEO can be regarded as the center of power due to several factors, such as their direct election by the people, their role as head of the executive branch, their visibility and influence as the public face of the government, and their ability to set the agenda for the local government. Considering these factors, a hypothesis is offered as part of answering Research Question 1:

H3: Chief elected officer (CEO) has a level of power comparable to officers/members in other forms of local government.

Methodology

Data Collection

The data used for this research was derived from the 2018 International City/County Management Association's (ICMA) Municipal Form of Government Survey. The survey was distributed by to approximately 12,761 local governments listed in the ICMA database. Respondents could submit their replies by postal mail or completing a similar online survey. About 4,109 responses were received, which constituted an approximate 32.2% response rate. The survey's main focus were questions relating to the structure and operations of local governments, particularly the roles of elected and appointed officials, administrative processes, and policy decision-making.

Data Description

Based on the hypotheses, Table 1 lists out the dependent variables and independent variables drawn from the survey questionnaire.

Table 1. Variable Descriptions for Hypotheses 1, 2 & 3

Variable Name	Research Hypothesis	Item on Survey
Independent Variable 1: Current form of government (UFOG)	Hypotheses 1: The choice of city government form is influenced by a city's size and complexity	See question: U18POPEst, UREGN, UID, UMETRO
Independent Variable 2: Council manager Efficiency (CM_efficiency)	Hypotheses 2: Cities that use the council- manager form of government is associated with better municipal efficiency than cities with other forms of government	See question: UFOG, U18POPEst, CAO, Head_Dep, UREGN,
Independent Variable 3: CEO_power	Hypotheses 3: Chief elected officer (CEO) has primary power comparing to officers/members in local government	See question: UFOG? U18POPEst, CEO, CEO_term, Recall_appr

Table 2: Descriptive Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
UFOG	4115	1.910814	0.8786714	1	5
UREGN	4115	2.307169	0.966344	1	4
UID	4115	1.906683	1.201418	1	9
UMETRO	4115	1.46853	0.7491163	1	3
CAO	4030	1.243176	0.4290538	1	2
CM_efficiency	3940	2.583249	1.231895	1	5
head_dep	3817	2.121299	0.4418011	1	3
CEO	3808	1.591387	0.7701752	1	3
CEO_term	3800	1.913421	0.2812541	1	2
Council_SMV	257	1	0	1	1
CEO_power	3686	1.705643	1.043377	1	5
Recall_appr	109	1.770642	0.4223617	1	2
Cmembers_form	3801	1.968166	0.2786944	1	3
male	3868	4.235781	1.62099	0	24
female	3436	1.782596	1.166565	0	16
Hispanic	443	1.455982	1.33343	0	7
Asian	158	0.518987	0.7377148	0	4
white	3609	5.299806	1.777976	0	29
African_American	750	1.772	1.451491	0	8
others	148	0.594595	1.111705	0	7

Data Visualization

Chart 1 indicates that mayor-council form and council-manager form are the most popular forms of government in the U.S. Commission from. Mayor-council form takes 38.2% and council-manager form takes 48.2% out of the total five forms of government. The rest 13.6%

includes commission form, town meeting form, and representative town meeting forms.

Chart 1: Distribution of forms of government across the nation

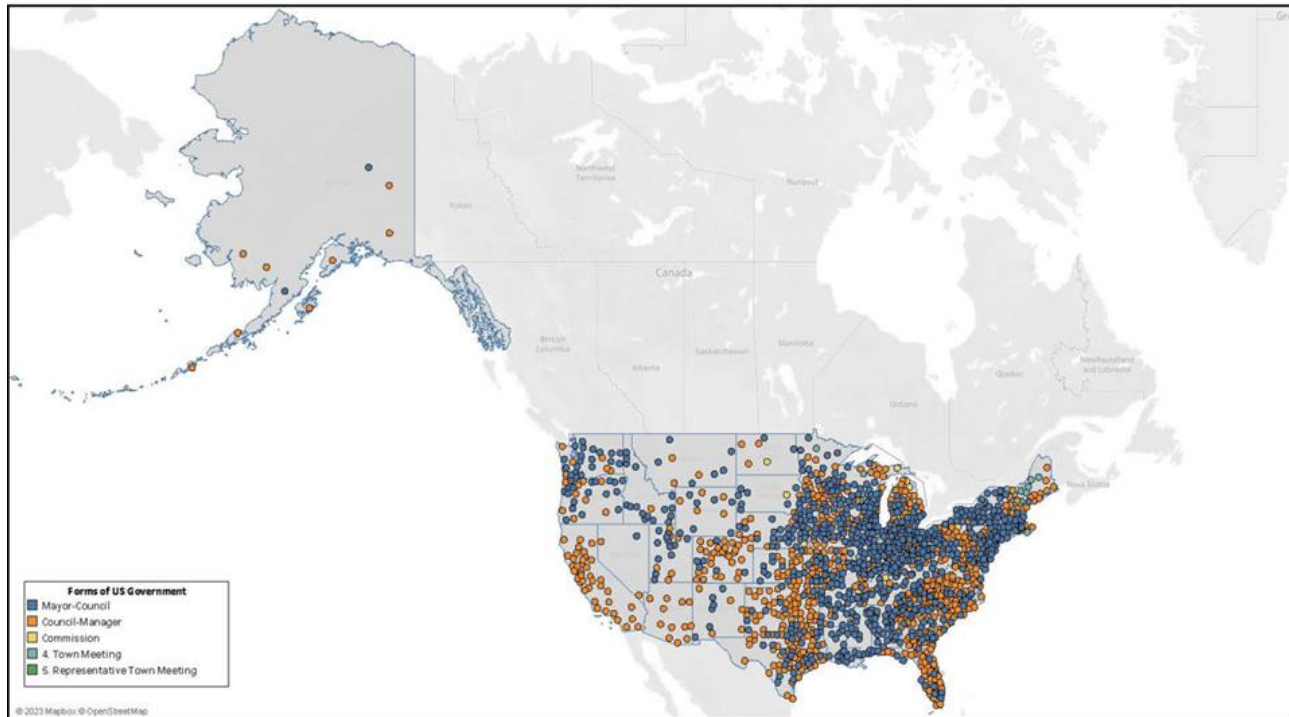
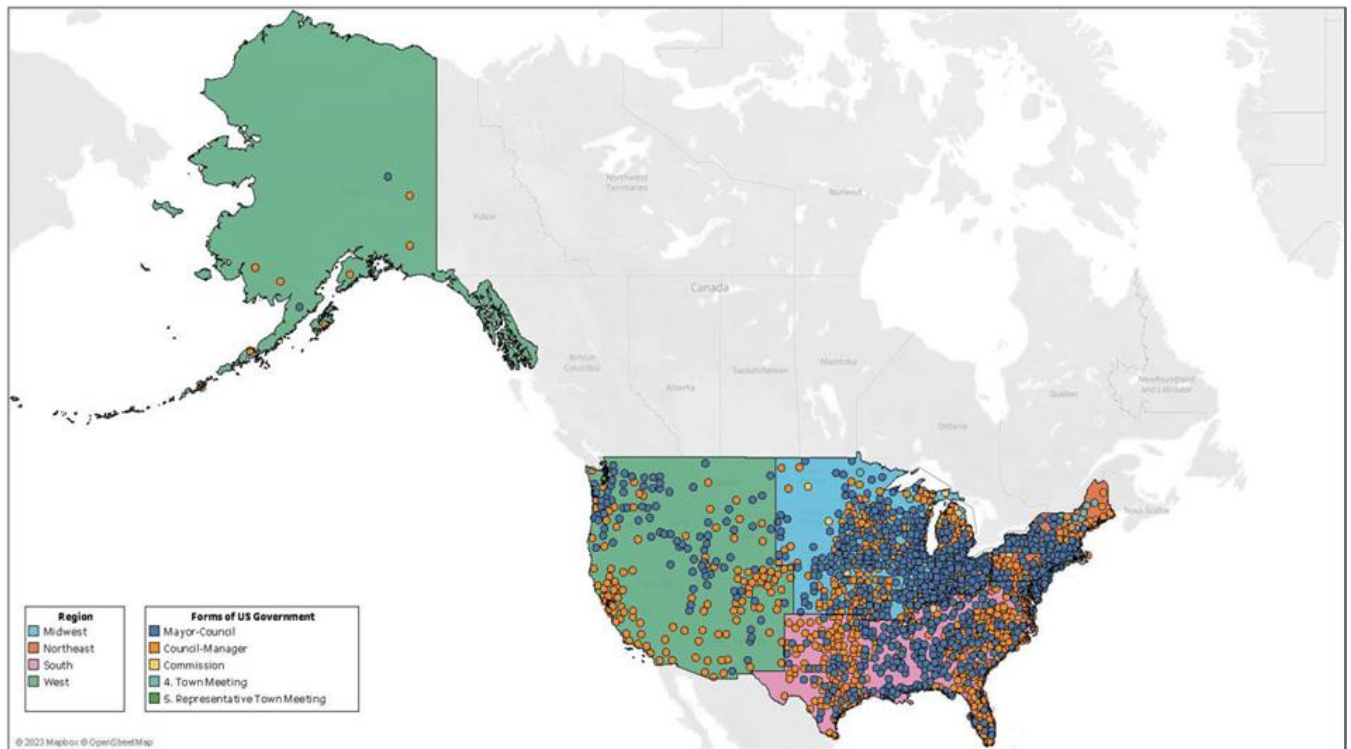


Chart 2 indicates that most municipal governments in Midwest are in mayor-council form. Municipal governments in the Northeast have a mix of both mayor-council form and council-manager forms with sporadic other forms. Municipal governments in the northern part of the west coast are mainly mayor-council form, while those in the southern part of the west coast are mainly council-manager form.

Chart 2: Distribution of forms of government based on region across the nation



Logistic models

A logistic regression model was employed on these three hypotheses to explore the relationship between independent variables and dependent variables. Below are three logistic regression models to test the three hypotheses respectively.

$$\text{Model 1: UFOG} = \beta_0 + \beta_2 \text{UREGN} + \beta_3 \text{UID} + \beta_4 \text{UMETRO} + \epsilon$$

$$\text{Model 2: CM_efficiency} = \beta_0 + \beta_1 \text{CAO} + \beta_2 \text{Head_Dep} + \beta_3 \text{UREGN} + \beta_6 \text{UFOG} + \epsilon$$

$$\text{Model 3: CEO_power} = \beta_0 + \beta_1 \text{CEO} + \beta_2 \text{CEO_term} + \beta_3 \text{Recall_appr} + \beta_8 \text{UFOG} + \epsilon$$

Table 3:

Exploratory analysis of Forms of Government

Dependent variable:

	UFOG (1)	CM_efficiency (2)	CEO_power (3)
CAO		2.983*** (0.115)	
Head_Dep		-0.083 (0.099)	
UREGN	1.177*** (0.076)	0.091** (0.044)	
UID	-0.409*** (0.040)		
UMETRO	-0.387*** (0.067)		
CEO			-1.425*** (0.479)
CEO_term			0.627 (0.737)
Recall_appr			-1.568** (0.693)
UFOG		0.331** (0.132)	-2.958*** (0.778)
Constant	1.051*** (0.216)	-2.232*** (0.280)	6.370*** (1.984)
Observations	4,115	3,667	100
Log Likelihood	-1,346.468	-1,898.509	-50.643
Akaike Inf. Crit.	2,700.937	3,807.017	111.286

Note: *p<0.1; **p<0.05; ***p<0.01

In Table 3, Model 1 suggests that geographic region (UREGN), administrative geographic area (UID) and metro status (UMETRO) are all significantly associated with the forms of government (UFOG). Regions have a positive relationship with forms of government, while administrative, geographic area, and metro status have a negative relationship with forms of government. It indicates that municipal governments in bigger cities with a population of more than 50,000 are less likely to have either a council-manager form or a mayor-council form.

Model 2 suggests that the appointment of a chief appointed official (CAO), geographic region (UREGN), and forms of government (UFOG) all have a positive relationship with the city manager (CAO)’s appointment in municipal government with council-manager form and thus the city management efficiency.

Model 3 presents whether a mayor or chief elected officer (CEO) has significant power in a municipal government. The result indicates that the mayor’s voting power on all issues has a negative relationship with the appointment of the mayor, recall, and approval due to the mayor’s performance and forms of government. The finding proves that the council-manager form of government is currently the fastest-growing form of government in the United States. The reason is it frees up the elected body (mayor) to establish policy, which is instead carried out by an appointed manager and an administrative staff (ICMA, 2009). According to ICMA (2009), many of the nation’s most successful cities and towns have adopted council-manager government rather than the “strong-mayor” form.

Chart 3: Coefficient plot

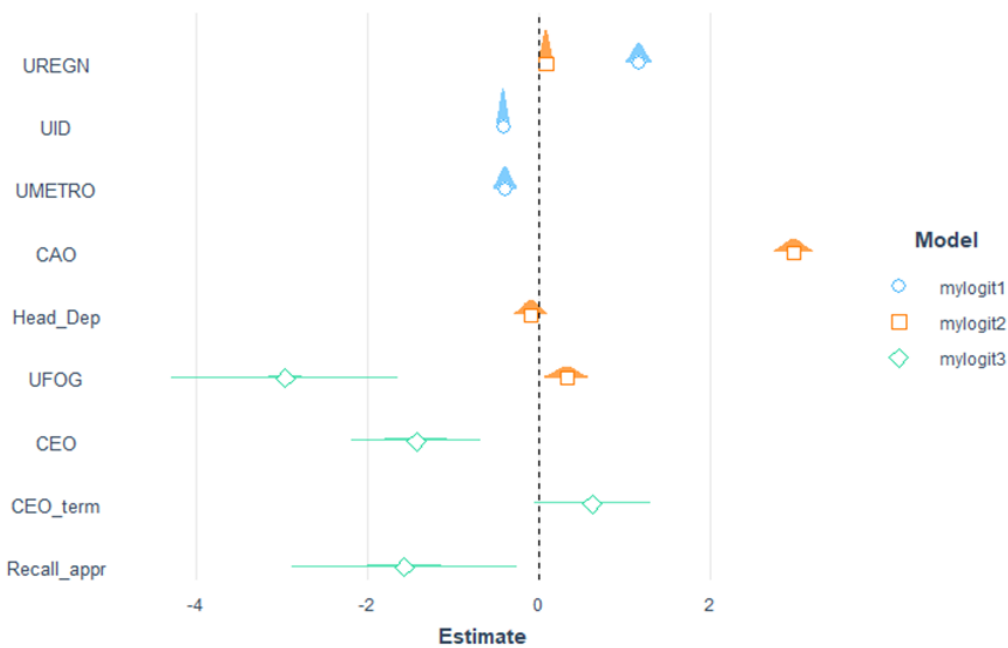
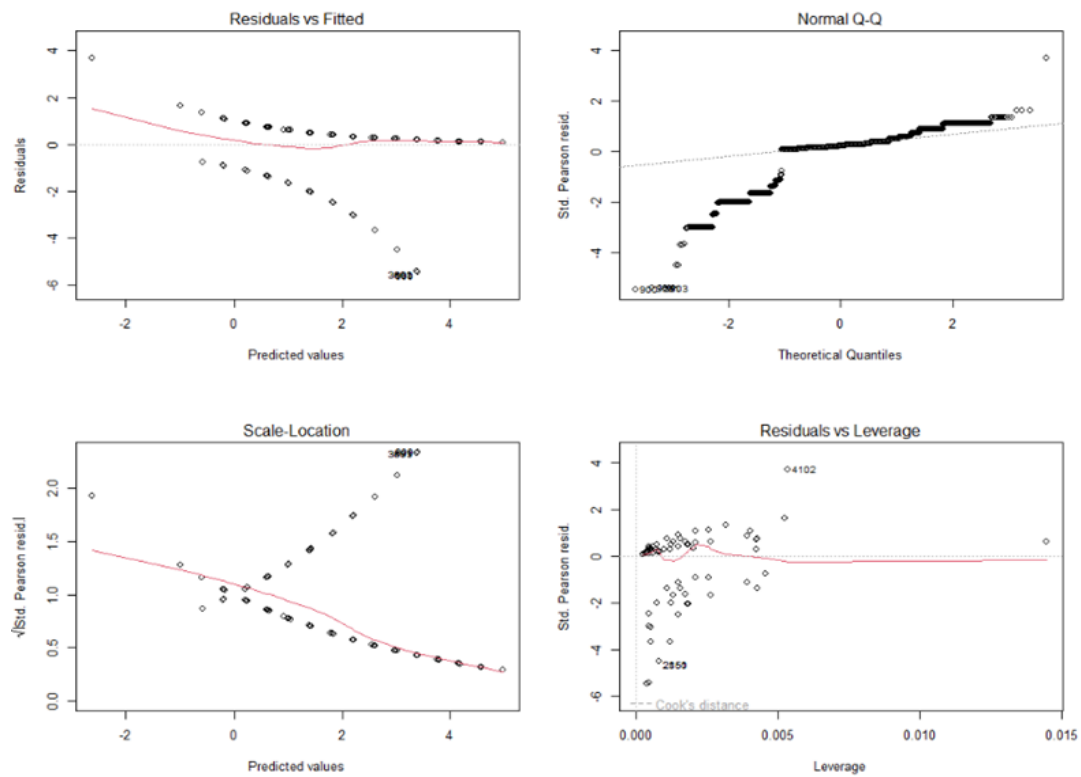


Chart 3 illustrates the regression results well for this study. Model 1(mylogit1) shows that UREGN, UID, and UMETRO all have significant correlations with UFOG as the DV. Model 2 (mylogit2) shows Head_Dep having no significant correlation with DV CM_efficiency, UFOG and UREGN have a small, significant correlative relationship with the DV CM_efficiency. However, CAO has a significant and large correlative relationship with the DV. Finally, Model 3 (mylogit3) evaluating DV CEO_power shows a negative and significant correlative relationship with IVs: Recall_appr, CEO, and UFOG. The previously displayed regression table and this chart illustration displayed the results well for this study.

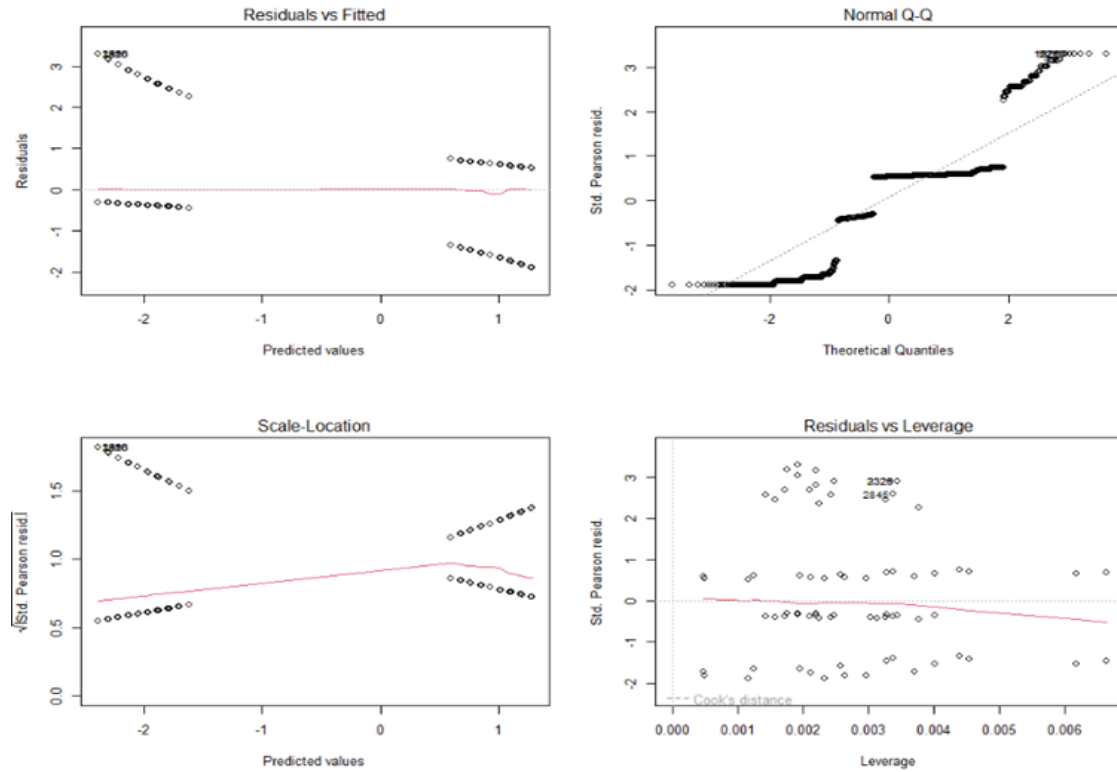
Chart 4: Plot for Model 1



Residuals vs. Fitted plot is a common tool used to assess the fit of a linear regression model, and it can also be used to assess the fit of a logistic regression model. Chart 4: Plot for Model 1, The Residuals vs Fitted plot shows a funnel shape distribution, indicating that

heteroscedasticity supports a revision of this model for future study. The Normal Q-Q plot is a graphical tool used to assess the normality assumption of the residuals in the logistic regression model, which can further provide insight into the quality of the model's fit. In this plot, we can see the departure of the outliers from the first half of the dashed line, which indicates that we need to investigate them further to determine whether they should be included or excluded from the model. The Scale-location plot is used to check the homoscedasticity of residuals. The funnel shape suggests that the variability of the residuals is not constant and heteroscedasticity exists. Therefore, future adjustment of the model is needed. Residuals vs. Leverage, also known as Cook's distance plot, is used to identify any influential value in the dataset. Influential values are extreme values that might influence the regression results when included or excluded from the analysis. The outliers, observations with high leverage, and high standardized residues in this plot indicate that further investigation will be needed and maybe potentially removed from the analysis if they are found to be influential. In summary, based on the Plot for Model 1, we can say that the assumption for Model 1 to test the relationship between forms of government and city size and other complexity is partially fulfilled. But further study is needed.

Chart 5: Plot for Model 2



In Chart 5: Plot for Model 2, we can see that although residuals mainly spread along the horizontal dashed line, outliers exist in each of the plots. The model will need to be improved upon before further investigation can be conducted using this method for this type of study.

Chart 6: Plot for Model 3

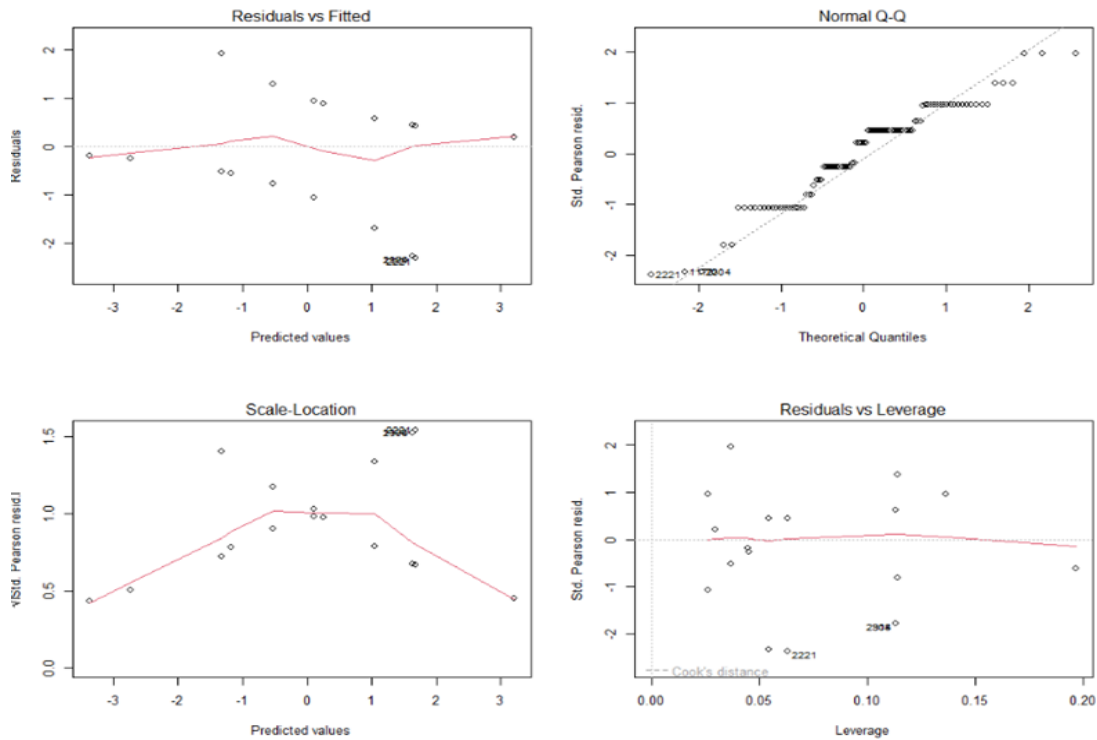
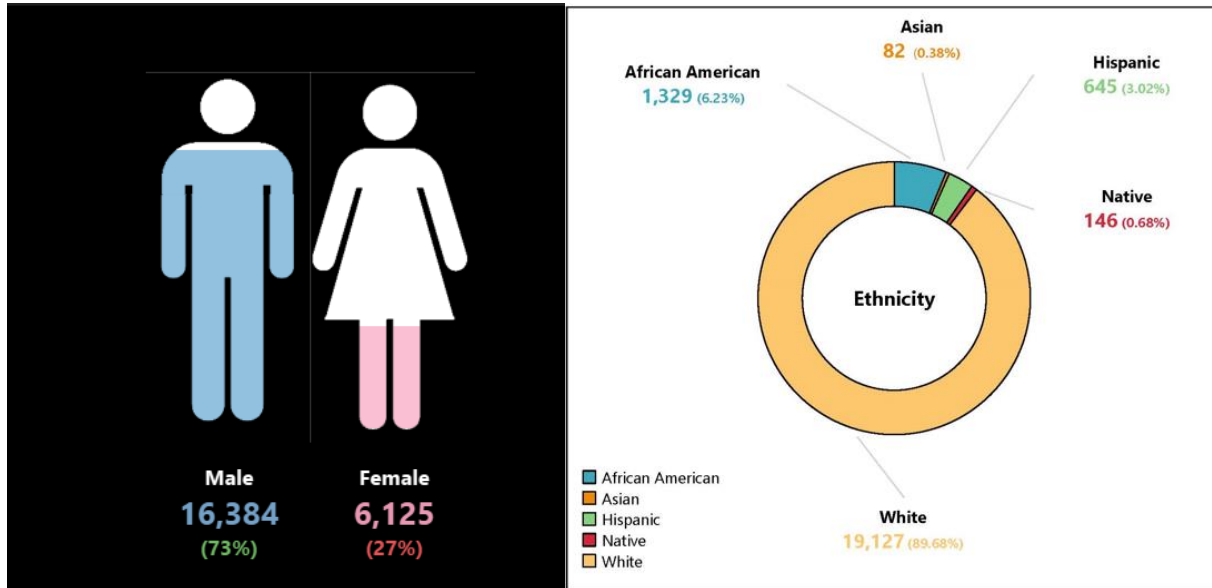


Chart 6: Plot for Model 3, outliers exist in all of the plots, although most residuals are spread along the dashed line. The same assumptions are fulfilled, but outliers continue to exist as an issue. Chart illustrations 4, 5, 6 were not the optimal means of assessment for the current data state in this study. While it was mentioned that heteroskedasticity is a significant factor with these plots, only some can be done to correct for them unless the researcher has a significant degree of skill and sensitivity to overcome this issue effectively (Williams, 2009). In most cases it is acknowledged that a redesign of the regression model be attempted first to minimize or even eliminate the hetero- or homoscedasticity issue (Buis, 2010).

We can also see that the council members in all forms of government need more diversity, as is clearly illustrated in Chart 7. This chart clearly illustrates that the composition of most local government councils (or other similar governing boards of elected officials) is primarily male versus female, and racial diversity is similarly lacking, with most councils being

comprised of almost 90% white officials. The remaining racial percentages are less than 10% each, with African-Americans holding the highest percentage at just slightly over 6%.

Chart 7: Average Diversity Composition in Local Governments



Discussion

The data collected by the ICMA survey provided a wealth of information to help explore the research questions proposed in this study. Yet, some issues were also identified based on the results of the data analysis. However, despite the issues encountered, sufficient information was learned that allowed for the determination of support or nonsupport of the proposed hypothesis in this paper.

With regards to *Hypothesis 1: The choice of city government form is influenced by a city’s complexity*; this proposal was partially sustained and partially non-supported. During the initial exploratory phase of regression model development, the population as an IV was utilized to determine its influence in any of the proposed models for this study. In all cases, the population had no significant correlation with DV in any model assessed. IVs used for complexity assessment (UID, UMETRO) for forms of government (UFOG) were found to have a

significant, negative correlative relationship. Unfortunately, the limitations of this study did not allow for a more in-depth exploration into how this negatively correlative relationship affected changes in the form of government. Lastly, for model 1, a positive, significant correlation was found between the form of government and the regional area of the United States in which that form of government was located. While this does suggest that people in different regions of the United States tend to prefer different forms of government, the limitations of the study did not explore what shape those government forms took for the various regions of the nation.

As for *Hypothesis 2: Cities that uses the council- manager form of government is associated with better municipal management and efficiency than cities with other forms of government*, this assumption was generally supported by the data. The DV of CM_efficiency was analyzed with the reported different forms of government from the survey data. While all, but one (Head_dep) of the IVs showed significant correlative relationships with the DV, the form of government showing the highest degree of correlation was the Chief Administrative Officer (CAO), which is the title used by ICMA to indicate city managers. This indicated that while other forms of local government forms appear to experience efficiency, the council-manager form of government appears to correlate with highest degree of efficiency over other forms.

Finally, although the data analysis for *Hypothesis 3: The CEO has a level of power comparable to officers/members in other forms of local government* shows statistically significant, the assumption appears to need to be more supported by the result. This is primarily explained by the correlational relationship between the DV, CEO_power and the IV, UFOG, forms of government. This relationship is significantly more negative than other IVs in the model. This correlation supports that the power of a CEO tends to be less than other officials in other forms of government. Since the council-manager form of government becomes

increasingly popular, the mayor (CEO)'s power of special interests is getting diffused. Given other IVs, CEO tenure, and approval of recall due to CEP's performance, their values in the regression table also show a negative, significantly correlative relationship. It can be interpreted as the more prominent the CEO becomes in the local government, the less power the CEO tends to experience or wield. However, this is mere speculation and certainly would require further, more focused study to ascertain the dynamics of this relationship completely. Now that a more complete understanding has been presented in how the analysis results coincide with the proposed hypotheses, our attention should turn to addressing how the learned information answers the two research questions proposed at the beginning of this paper.

What we have learned from Question 1: *What factors drive the establishment of forms of government*, Is that the local population has little or no influence as to the establishment of the forms of government. While different types of complexity appear to have an influence on the forms of government, how they influence the government forms and to what degree still need further investigation. However, we do know that at least geographic region and administrative division are the two of the main factors that influence the forms of government.

As previously discussed, different forms of government have different structures that support their strengths and performance. To address the Questions 2: *How does the form of government impact the structure of local government*, after examining government forms from the perspective of efficiency, the data strongly correlates with the council-manager form of government above all others. Meanwhile, compared to the efficiency enforced by council managers (CAO) under the council-manager form under, the mayor (CEO)'s power seems to be becoming more and more symbolic. As the data results will be continually examined, our future study will address a more concrete answer to this question.

Limitations and Future Research

This study specifically focused on validating its proposed hypotheses by trying to answer the research questions proposed previously. In doing so, the answers resulted in more questions that need to be asked in relation to this study that were mentioned throughout the paper, but seem to address primarily “WHY;” this is a perspective that was not pursued in this particular study.

Additionally, while logistical regression did provide some interesting and important data findings, it also presented this research with some obstacles that could not be corrected for within the limited scope of time for this study. Most notably were the issues relating to heteroskedasticity and homoskedasticity because of the skewness of the data. This can best be compensated for by changing the model of inquiry for the data in future studies.

Instead of logistic regression that we combined both council-manager form and mayor-council form as 1, and the rest as 0, we can consider use multinomial regression for future study to increase the accuracy and robustness of the models. When adopting multinomial regression, we can define the variable of forms of government as: 1. mayor-council, 2. council-manager, 3. Commission and other forms of government to optimize the operationalization of the model.

Conclusion

Generally, governments are grouped largely based on geographic context and who holds most of the power. Although each of the government forms has its own strengths and weakness, now a days, an increasing number of municipal governments have changed their original form to the council-manager form. While some council-manager cities retain the position of mayor, the role is typically largely ceremonial (Coate and Knight, 2011). The results of model 3, echoing Coate and Knight (2011)’s statement, also prove that a mayor's power is less likely to be increased along with their appointment, tenure length, and approved recall due to their

performance. Clearly, it may take years to diffuse the power entrenched in city political machines and special interests. However, along with the council-manager form becoming more prevalent, citizens throughout the U.S. have increasingly resumed control in their community.

With the growing number of council-manager form of government being established, professional training and accountability are undoubtedly demanded for council managers. Thus, the questions on under what circumstance a municipal government should change it form to council-manager form, how to sustain the efficiency and accountability of council-manager form, and who (CAO or CEO) holds the majority of the power and by what way are still calling for scholars to conduct further study. Our study definitely shed some light in this area; nevertheless, further well-designed research method and in-depth data mining are definitely need for future study.

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