

Is All Politics Local? National Factors in Taiwan's Local Elections^{*}

Kah-yew Lim (林啟耀)[†]
Huang-sheng Wu (吳皇昇)[‡]
Eric Chen-hua Yu (俞振華)[§]

Abstract

This paper analyzes the extent to which performances of the national and local governments could shape local election outcomes. Specifically, we use two waves of the survey data of Taiwan's Elections and Democratization Studies (TEDS) to explore whether one's assessments of the local and central governments' performances affect his/her choice between county magistrate/city mayor candidates. Our findings verifies three hypotheses suggested by the previous literature: first, voters with positive assessment of the local government's performance are more likely to vote for incumbent; second, local elections can be regarded as referenda on the central government; and third, in local elections, the impacts of local/central government approval ratings on vote choice depend on whether the elections are open seat contests or incumbent races.

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[†] Ph. D. Student, Department of Political Science, National Chengchi University, Taiwan

[‡] Graduate student, Department of Political Science, National Chengchi University, Taiwan

[§] Assistant Research Fellow, Election Study Center, National Chengchi University, Taiwan

Introduction

On December 2009, Taiwan held its so-called “three-in-one” election, which was the first nationwide, regularly scheduled election since the ruling party changed in 2008 with the victories of the Kuomintang (KMT) in presidential election. Thus, we can view it as a ‘mid-term exam’ to the Ma’s government. The comparative evidences suggest that voters will often punish the incumbents in what are viewed as second order elections (Erikson, 1988; Tufte, 1975).

In the local executive elections held in 2005, KMT use a campaign equation of $DPP = \text{poor government ability} + \text{economic mismanagement} + \text{corruption}$. We can see how damaging the election was to the DPP, winning only 6 out of a possible 23, while KMT and its ally won the remains. In 2009 local election, KMT managed to maintain its hold on a majority of the 17 counties and cities in winning the magistrate and mayoral positions in this election, but lost Yilan County to the Democratic Progressive Party (DPP), and failing to secure Hualien County from the pan-blue split. DPP has won one more county than it before and more important, DPP won 45.32% of all votes, up significantly from 41.95% it had in the last local-level elections held four years ago. This election results were mostly interpreted as being the result of voters’ dissatisfaction with the Ma’s government rather than expressing satisfaction with the DPP performance. The atmosphere of the 2009 local elections was actually similar to that in 2005, the national wave seems like become a hard burden for the government in local elections.

Among the Taiwan’s wider public, the election result in 2009 were seen as a setback for the ruling KMT. Factors that may have hurt KMT’s performance include the global recession, Typhoon Morakot, lifting the ban on US beef imports, and to some extent fears over the Economic Cooperation Framework Agreement (ECFA) that Ma’s government planning to sign with mainland China. For the opposite party, DPP interpret this result as the voters had now cast a vote of non-confidence on President Ma-Ying-jeou. Anyway, President Ma refused to view this result as an electoral setback and think that it was impossible to identify the national factor as a single cause for the result.

This main purpose of this paper is to analysis the extent to which national factors affect local elections. If national level variables do not override local politics in this election, we can expect that voter satisfaction with incumbents to be highly influential. By using two waves of the survey data of Taiwan’s Elections and Democratization Studies (TEDS), we explore the determinants of magistrate/city mayoral election outcomes at the national level, or in other words, whether local or national variables

are decisive.

National vs. Local Factors in Local Election

Over the past decades, numerous studies have utilize empirical data to test the theory of retrospective voting theory—that is, rather than choosing among candidates on the basis of specific issues of public policy, voters may rely more on assessments of the government performance. As the theories of retrospective voting posit “the citizen looks at the results”, retrospective evaluations of government performance are important determinant of voting behavior (Fiorina 1978). On election days, voter are said to use the following calculation: If the performance of the incumbent party is ‘satisfactory’..., the voters will retain the incumbent governing party in office with their votes, while the voter votes against the incumbent when they evaluate the performance of the incumbent party as ‘not satisfactory’ (Key 1966). Invariably, most studies have showed a strong economy as a boon for an incumbent’s re-election hopes and a weak economy as a curse on them. This belief gets numerous supports from studies that demonstrate a connection between national macroeconomic conditions in United States and aggregate national election results (Erikson 1988; Kramer 1971; Rosenstone 1983). Furthermore, it is common to assume a causal link: people who previously voted for the government stay away from the poll in midterm election when they feel unsatisfied with their party performance in office (Campbell 1966). For the voter that were not strong supporters of government in the first place and simply cannot be bothered to turn out for vote when the encouragement is weak or the political stakes is low (Campbell 1966).

Researchers have hotly debated about the question whether it is valid to interpret second-order election as barometers of national public opinion towards the incumbent government. There are several theories speaking to this divergence of opinion. According to the *referendum theory*, the midterm electorate will punish the president’s party when the government performs poorly. Tufte’s (1975) notable effort has married macroeconomic variables and opinion poll ratings in the explanation of the presidential party’s congressional election performance. A similar explanation, ‘negative voting’ showed that citizens are more likely to vote in the midterm elections when they hold a negative views on president or government. When the electorate vote in the midterm elections, they respond more to negative cues than to positive cues regarding president performance. There are also several studies of aggregate gubernatorial election result from the 1940s to the early 1980s find strong support for the notion that national economic conditions affect gubernatorial candidates’ electoral result (Chubb 1988; Kenney 1983). The national effect is almost tied to the president:

the gubernatorial candidate who is of the same party with the president will get benefit when the national economy is strong and suffer when it is weak, while the candidates from the opposite parties experience the reverse.

In short, some studies have shown that governors can insulate themselves from national political conflict than can senators (Brown and Jacobson 2007; Jacobson 2006). Using a unique set of state-level monthly survey data, Brown and Jacobson's analysis shown that both national and local conditions affected the strength of challenges to senators and governors, but the effect were generally more pronounced among senator challengers. Their explanation for this difference is intuitive: that is, governors are executives who cannot avoid the responsibility for the unpopular actions of the state government, and the senators, as national politicians, were more strongly affected by national political forces. Additionally, James D. King (2001) shows that most studies of gubernatorial elections have found vote choice to be a function of party identification, evaluation of economic conditions, and the president government performance, but without a referendum test on incumbent governor. He used a state polling data to demonstrate that the image or the result from the incumbent governor have greater effect when he is seeks reelection, and is present in open seat contests as well. It is quite difficult to accept that the voters focus on the president when they making choice for their state's chief executive. This should not be surprising, given that voter possess different information and incentives in different political context. Another model proposed by Alesina and Rosenthal (1989, 1995, 1996), the electoral balancing models, explaining midterm could be a result of electorate's rational calculation instead of balancing voting. A midterm loss is most likely to arise from the behavior of moderate, who could conceive of transferring their votes from the one party to the other one in order to strike a balance. They showed that strong midterm losses happened under unified government, when state elections are used by voters to balance against government; however, under divided government, voter have little electoral incentive to do that.

In Taiwan, there are two levels of government (henceforth 'local' and 'central') have authority over certain aspects of governances; electoral expectations should be shape by both local and national conditions. From the previous studies, both the local and national conditions have significance effect in Taiwan's mayoral elections (Hsiao and Yu 2008; Wu and Lee 2004). But the puzzle is still here, how do local and national circumstances combine to shape electoral expectations? This paper will try to examine how the nature of the elections affects the voters to take accountability when they vote in Taiwan's mayoral election, a "referenda" on local or central government performance.

Data and Measurement

In order to understand which factors influence voters' decision to elect their county magistrate/city mayor, we utilize the data of "Taiwan's Election and Democratization Study, 2005 and 2009: The Magistrate Elections" (TEDS2005M and TEDS2009M) to test our hypotheses and to explore voting behavior in local elections. While TEDS2005M surveyed respondents in four counties/cities, TEDS2009M covered elections in two counties. As previous literature on retrospective voting suggests that assessments of government's performance have different impacts on vote choice between open seat contests and incumbent races, we then divide our cases into two different groups as follows:

1. Open seat contests: the 2005 Taipei County election, the 2009 Taoyuan County election, and the 2005 Yunlin County election.
2. Incumbent races: the 2005 Kaohsiung County election, the 2005 Taichung City election, and the 2009 Yunlin County election

Our dependent variable in the following analyses is vote choice, a dummy variable coded by the following rules: If the magistrate candidate's party is local government party, we recode the candidate as incumbent party candidate (vote for local incumbent party candidate = 1), if the magistrate candidate's party is not local government party, then we recode the candidate as a challenger party candidate (vote for local challenger party candidate = 0).

As we are interested in explaining vote choice from a perspective of referendum model, we need independent variables to test referendum hypothesis with respect to both central and local levels (Piereson 1975; Simon 1989, King 2001)—namely, assessment of local government's performance (or local government approval rating) and assessment of central government's performance (or central government approval rating). We utilize the following questionnaires to construct proxies for both assessment measures:

1. Assessment of local government's performance:
 - a. *General speaking, how satisfied are you with the infrastructure of [interviewee's household] County in the past four years? Very satisfied, satisfied, somewhat dissatisfied, or very dissatisfied?*
 - b. *How about social welfare?*
 - c. *How about law and order?*
 - d. *How about environment and health?*
 - e. *How about transportation?*

2. Assessment of central government's performance:

How satisfied are you with the overall performance of the central government under the KMT/DPP over the last two years/ last four years? Very satisfied, satisfied, somewhat dissatisfied, or very dissatisfied?

We utilize five questions to construct local government approval rating (i.e., infrastructure, social welfare, law and order, environment and health, and transportation; very satisfied = 4, satisfied = 3, somewhat dissatisfied = 2, very dissatisfied = 1). These five items are indispensable and conformable to uncover voter's assessment of local government's performance.¹ Hence, we combine these five questions to compute local government performance score and transform it to a 1-to-4 scale, which is comparable with the measure of the central government approval rating. (i.e., very satisfied = 4, satisfied = 3, somewhat dissatisfied = 2, very dissatisfied = 1).

Additionally, we incorporate candidate thermometer rating and party identification as control variables. Both of them can be regarded as "classic variables" that have been included in almost every vote choice equation. To construct candidate thermometer rating, we use the thermometer score of the local incumbent party candidate (i.e., a 0-10 scale) minus the thermometer score of the challenger party candidate. Thus, the maximum value of the measure becomes +10 while the minimum value becomes -10.

Regarding party identification, we coded the respondents into three categories: 1. identifier with the local incumbent party; 2. identifier with the local challenger party; and 3. independent voters. And in the following regression analyses, independent voters always serve as a base category.

In short, we hypothesize that one's vote for the incumbent party candidate (or for the incumbent) can be regarded as a function of local government approval rating, central government approval rating, (difference of) candidate thermometer rating, and party identification. Because our dependent variable is dichotomous, we use logistic regression model in the following analyses.

¹ The Cronbach alpha of these five items in the open seat contests data is 0.720; The Cronbach alpha of these five items in the incumbent races data is 0.711.

Findings

Table 1 shows the results of logistic regression analyses for the three open seat contests, respectively. While the coefficients for the local government approval rating are not statistically significant in all the equations (or elections), the coefficients for the central government approval rating is significant with the expected positive sign in two of the three equations (i.e., 2005 Taipei county magistrate election and 2009 Taoyuan county magistrate elections). Specifically, a voter's assessment of the local government's performance is not associated with her vote choice in any of the three open seat contests examined here. Yet, the findings of Equation (I) and (II) suggest that when the central and local governments were of the same party, a voter's assessment of the central government performance is an important cue for her to vote for the local incumbent party candidate.

Regarding the control variables, the coefficients for candidate thermometer rating are statistically significant with the expected positive signs in all equations. That is, voters with favorable ratings of the incumbent party candidate have a higher probability of voting for him/her. The impacts of party identification on vote choice are strong in the 2005 Taipei and 2009 Taoyuan elections (Equation (I) and (II)) but ambiguous in the 2005 Yunlin election. In Equation (III), the coefficient for party identification with the challenger party is not significant. Overall, candidate thermometer rating and party identification play significant roles in determining one's vote choice in an open seat county magistrate election.

Table 1: Logistic Regression of County Magistrate Vote Choice: Open Races

	Taipei County 2005 Equation (I)	Tauyuan County 2009 Equation (II)	Yunlin County 2005 Equation (III)
President's Party (Central Government)	DPP	KMT	DPP
Incumbent Party	DPP	KMT	KMT
Assessment of Local Government Performance	-0.256 (0.591)	-0.321 (0.318)	0.493 (0.447)
Assessment of Central Government Performance	0.662* (0.347)	0.371* (0.225)	0.064 (0.311)
Difference of Candidate Thermometer	0.861** (0.167)	0.784** (0.103)	0.784** (0.137)
Party Identification: Local Incumbent Party	1.815** (0.611)	1.271** (0.351)	1.756** (0.487)
Party Identification: Local Challenger Party	-1.886** (0.615)	-1.841** (0.346)	-0.291 (0.555)
Constant	-0.989 (1.394)	0.59 (0.804)	-2.037* (1.23)
# of observations	310	621	255
Log likelihood	-55.672	-162.187	-80.058
Pseudo R-squared	0.733	0.611	0.508

* $p < 0.10$; ** $p < 0.05$

Comparing with the open seat contests, the incumbent races seem to have a different dynamic with respect to the impacts of local and central governments' performances on vote choice. Table 2 summarizes the logistical analyses of the three incumbent races. In the 2009 Yunlin election (i.e., Equation (IV)), the coefficients for assessments of both local and central governments' performances are statistically significant with expected signs. Specifically, voters with positive assessments of the Yunlin government's performance are more likely to vote for the DPP incumbent Su Chih-fen. As the central government has been controlled by the KMT since 2008, positive assessment of the central government's performance decreases the probability of voting for Su Chih-fen.

Yet, the patterns found in the 2009 Yunlin election do not hold when we examine the 2005 Kaohsiung and Taichun elections. In Equation (V), only the coefficient for assessment of the central government's performance is statistically significant with

the expected positive sign; in Equation (VI), neither of the coefficients for assessments of the local and central governments' performances is statistically different from zero. Thus, in the 2005 Kaohsiung and Taichun elections, it is not clear if voters casted their votes for incumbent on the basis of their assessments of the local and central governments' performances. Regarding the control variables, Table 2 shows that candidate thermometer ratings and party identification with the challenger party have strong impacts on vote choice in all three elections. Yet, the coefficients for party identification with the incumbent party are not statistically significant in Equation (V) and (VI).

Table 2: Logistic Regression of County Magistrate/City Mayor Vote Choice: Incumbent Races

	Yunlin County 2009 Equation (IV)	Kaohsiung County 2005 Equation (V)	Taichun City 2005 (Equation VI)
President's Party (Central Government)	KMT	DPP	KMT
Incumbent Party	DPP	DPP	KMT
Assessment of Local Government Performance	0.739** (0.387)	0.501 (0.627)	0.548 (0.644)
Assessment of Central Government Performance	-0.517** (0.224)	0.837** (0.315)	-0.563 (0.451)
Difference of Candidate Thermometer	0.624** (0.09)	0.622** (0.148)	1.017** (0.198)
Party Identification: Local Incumbent Party	0.848** (0.471)	0.985 (0.901)	0.392 (0.631)
Party Identification: Local Challenger Party	-1.525** (0.324)	-2.223** (0.506)	-1.944** (0.652)
Constant	-1.525** (0.324)	-2.125 (1.537)	0.147 (1.694)
# of observations	502	248	277
Log likelihood	-147.351	-59.607	-50.801
Pseudo R-squared	0.467	0.591	0.720

* $p < 0.10$; ** $p < 0.05$

The mixed results regarding the impact of local government rating on voting for incumbent could be the consequences of multicollinearity—namely, some of the regression coefficients are indeterminate and their standard errors are not defined. Given the fact that comparing the model fits and coefficients across the three equations, the Equation (V) and (VI)'s pseudo R-squared values are relatively high but less of their coefficients are statistically significant. In the 2005 Taichun election, the correlation coefficient between the local government rating and candidate thermometer rating is about 0.53.² In the 2005 Kaohsiung election, the correlation coefficient between the two variables is relatively low but still about 0.25. Additionally, small sample sizes of Kaoshiung's and Taichun's datasets may worsen the collinearity problem.

Yet, there is not much we can do about multicollinearity problem unless we drop the correlated variable or increase the sample size. Since “candidate” as a factor has been a long-term significant variable in determining vote choice, we tend to not drop the variable but to increase the sample sizes in order to further test our hypotheses. We utilize the pooled data and construct two equations for the open-seat contests (Equation VII) and incumbent races (Equation VIII), respectively. To specify county differences, we add county intercepts (dummy variables) in both equations. Additionally, we re-coded the central government approval ratings by using the identical coding (e.g., 1 if “very dissatisfied” and 4 if “very satisfied”) when the central and local governments were of the same party but invert it when the two executives were of opposing parties (e.g., -1 if “very dissatisfied” and -4 if “very satisfied”). Table 3 summarizes the results of logistic regression analyses with the pooled data.

² To test for the collinearity between local government approval rating and candidate thermometer rating, in Taichun election, the former variable was regressed on candidate thermometer rating, central government approval rating, and party identification. The result indicates that collinearity between the two variables could be a major issue—the coefficient for the candidate thermometer rating is statistically significant and the model's overall performance is moderate (i.e., R-squared = 0.32).

Table 3: Logistic Regression of County Magistrate/City Mayor Vote Choice: Open Seat Contests vs. Incumbent Races

	Open Seat Contests Equation (VII)	Incumbent Races Equation (VIII)
Evaluation of Local Government Performance	-0.007 (0.225)	0.737** (0.287)
Assessment of Local Government Performance	0.309** (0.152)	0.664** (0.165)
Assessment of Central Government Performance	0.779** (0.071)	0.702** (0.071)
Difference of Candidate Thermometer	1.415** (0.248)	0.639** (0.331)
Party Identification: Local Incumbent Party	-1.613** (0.261)	-1.817** (0.252)
Party Identification: Local Challenger Party	-0.822 (0.614)	-0.083 (0.793)
Coefficients for County Variable Omitted		
# of observations	1186	1027
Log likelihood	-304.22	-261.43
Pseudo R-squared	0.630	0.571

*p<0.10; **p<0.05

Table 3 indicates that the coefficient for the local government approval rating is not statistically significant in the open seat equation (Equation VII) but significant with the expected positive sign in the incumbent race equation. This finding verifies the hypothesis that an incumbent magistrate's reelection prospect is positively related to his/her performance. Yet, in the open seat contests, vote for the incumbent party candidate is not associated with the performance of the previous local government. On the other hand, the coefficient for the central government approval rating is significant in both equations. That is, the central government's performance has strong impact on vote choice in local elections, regardless of the participation of incumbent magistrate. All the coefficients for other variables in both equations, including candidate thermometer rating and party identification, are significantly different from zero with the expected signs.

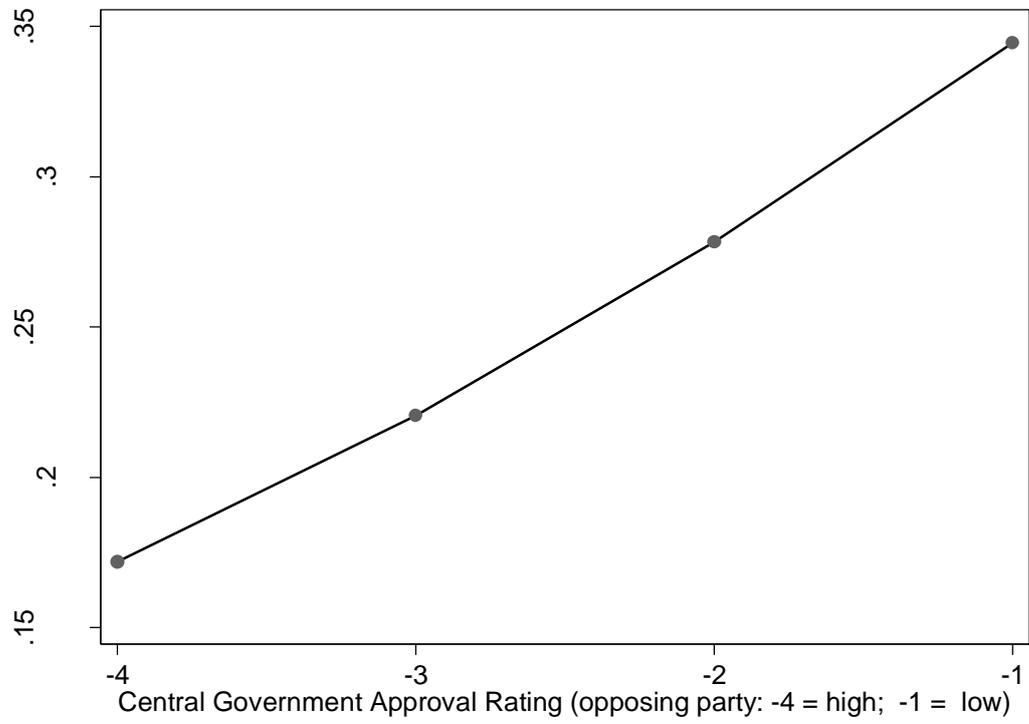
In addition to explain the coefficient estimates of our logit regression analyses, we also interpret our findings in a substantial way by using the coefficient estimates to

calculate predicted probably changes with respect to various levels of central government approval rating for both open seat contests and incumbent races, holding all other variables constant (i.e., Figure 1 and Figure 2). Due to the insignificant coefficient for the local government approval rating in the open seat equation, we only calculate predicted probability changes with respect to various levels of local government approval rating for incumbent races, holding all other variables constant (i.e., Figure 3).

Figure 1(a) suggests that when the central and local governments are of opposing parties and voters are “very satisfied” (i.e., rating = -4) with the central government’s performance, the probability that they will vote for the local incumbent party candidate in an open seat contest is about 0.17. On the other hand, if voters are “very dissatisfied” (i.e., rating = -1) with the central government’s performance, the probability that they will vote for the local incumbent party candidate in an open seat contest is about 0.34. Thus, the probability of voting for the local incumbent party candidate increases by 17 percentage points as the central government approval rating changes from one extreme to the other. As a similar pattern, Figure 1(b) suggests that when the central and local governments are of the same party, the probability of voting for the local incumbent party candidate in an open seat contest increases by 22 percentage points (from 0.49 to 0.71) as the central government approval rating changes from the lowest level to the highest level.

Figure 1:
Changes in Predicted Probability of Voting for Incumbent Party Candidate by
Changes of Central Government Approval Rating, Open Seat Contests

(a)



(b)

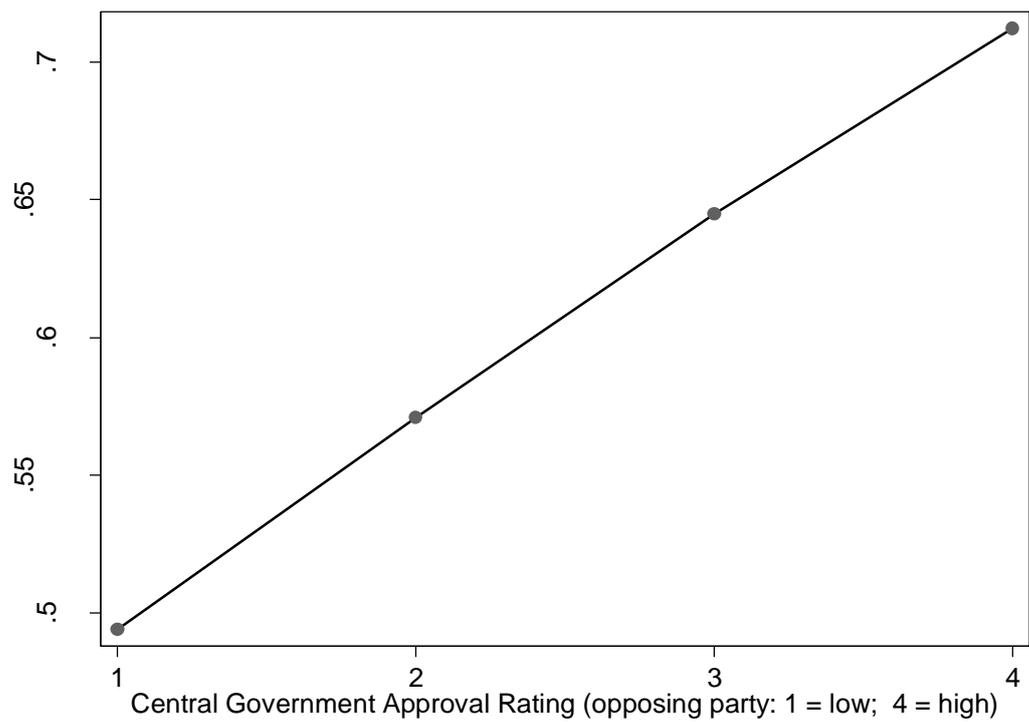
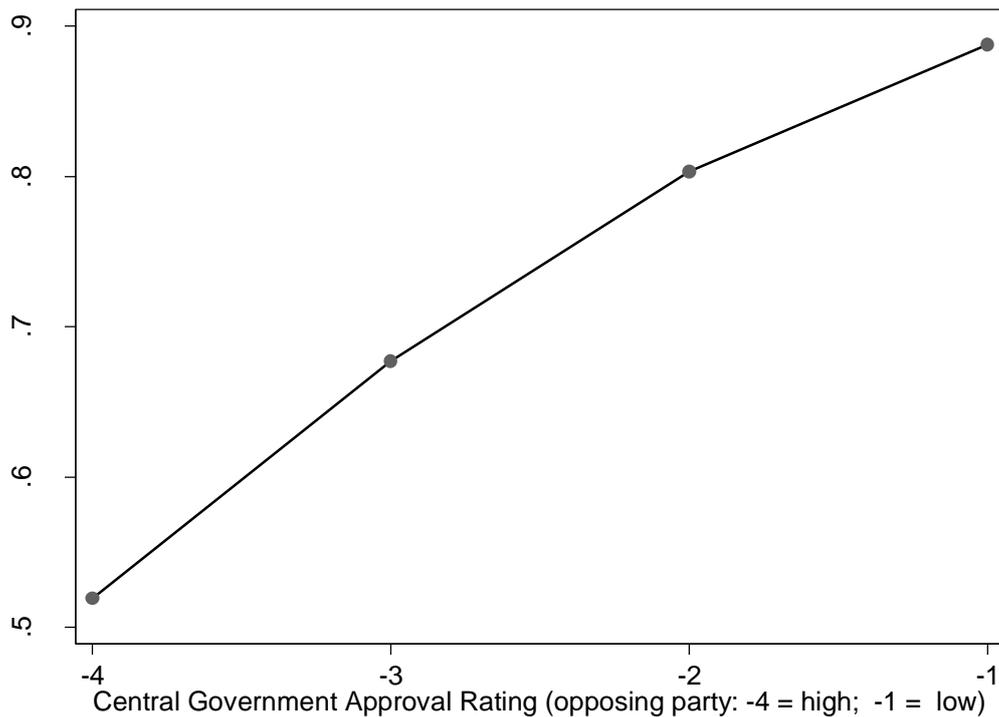


Figure 2 (a) & (b) illustrate probability changes of voting for incumbent in incumbent races with respect to the changes of central government approval rating. When the central and local governments are of opposing parties, the magnitude of the probability changes is considerable (i.e., from 0.52 to 0.89—27 percentage points) as the central government approval rating changes between the two extreme levels. Yet, when the central and local governments are of the same party, changes of central government approval rating do not seem to have any substantial impact on probability changes of voting for incumbent—specifically, the magnitude of the probability changes of voting for incumbent is only two percentage points (i.e., from 0.97 to 0.99) as the central government approval rating changes between the two extremes.

Figure 2:
Changes in Predicted Probability of Voting for Incumbent by Changes of Central Government Approval Rating, Incumbent Races

(a)



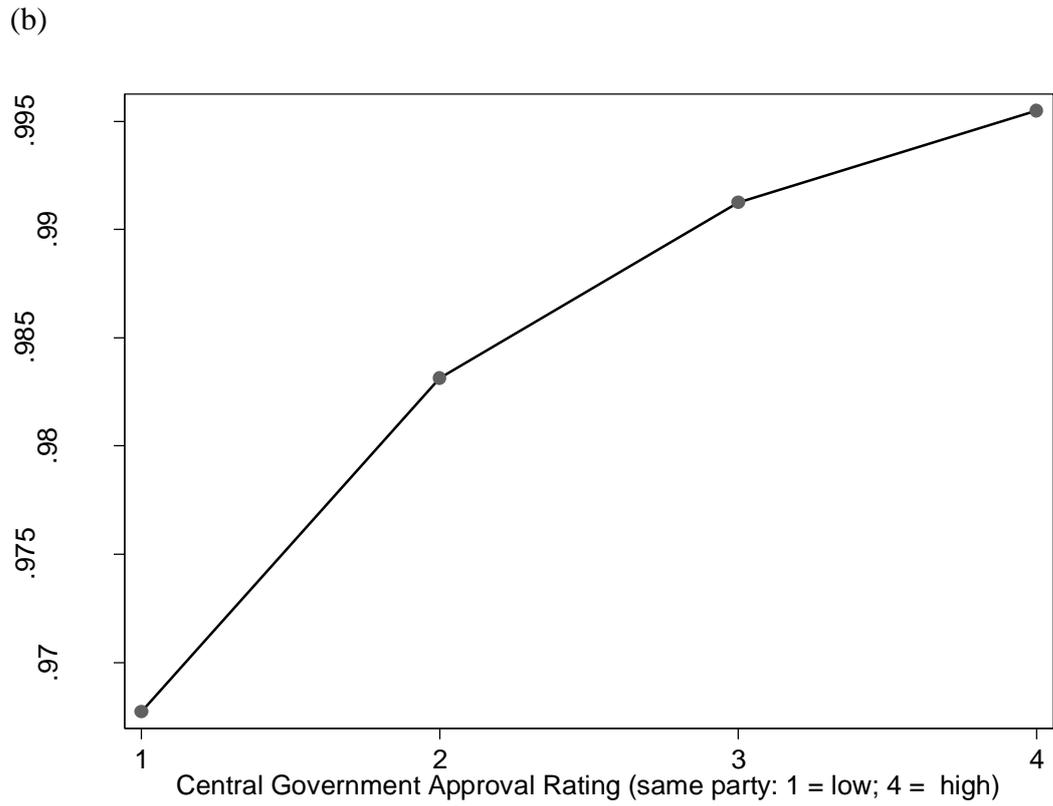


Figure 3:
Changes in Predicted Probability of Voting for Incumbent by Changes of Central Government Approval Rating, Incumbent Races

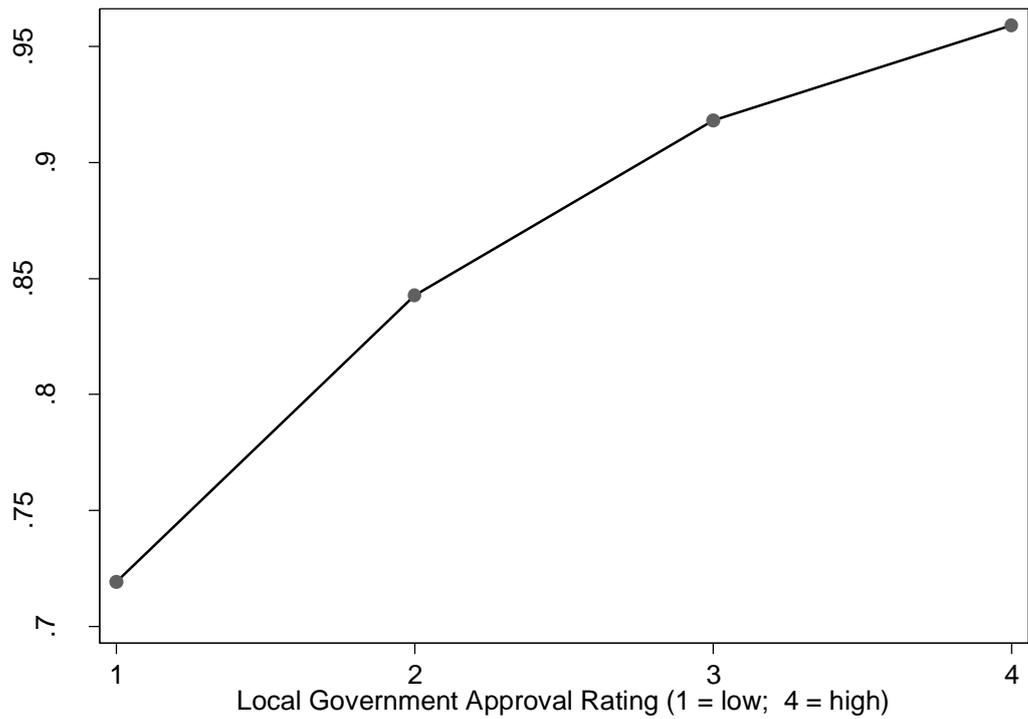


Figure 3 illustrates the probability changes of voting for incumbents in incumbent races with respect to the changes of local government approval rating. As the local government rating changes from the lowest to the highest level (i.e., from 1 to 4), the probability of voting for incumbents in incumbent races changes from 0.71 to 0.95—an increase of 24 percentage points.

Conclusion

This paper utilizes Taiwan's survey data to analyze the extent to which one's assessments of local and central governments' performances affect his/her voting behavior. Our findings are threefold:

First, when there is an incumbent seeking reelection in a county magistrate/city mayor election, voters do take into account his/her job performance before casting their votes. Although our analyses based on individual county/city datasets show mixed results, the overall pattern supports our hypothesis that voters with positive assessment of the local government's performance are more likely to vote for incumbent.

Second, even in local elections, assessment of the central government's performance is not only a significant cue for voters to cast their votes in open seat contests but also in incumbent races. This result verifies the previous findings that local elections can be regarded as referenda on the central government.

Third, although assessments of different government performances have substantial impacts on the choice between county magistrate/city mayor candidates in Taiwan, traditional explanatory variables for a vote choice equation, including candidate evaluation and party identification, still play the most important, if not the only roles in determining one's vote choice.

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