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Politics, Competence, and Performance: Evidence from the US State Budget Agencies

Research Article

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Abstract: *The relationship between administrative competence and political responsiveness is central to public administration theories. This study examines the conditional effects of competence on performance as moderated by politics. Synthesizing the theories of neutral competence and responsive competence, we propose a model of contingent competence. We argue that the impact of competence on performance is conditional on both the preferences of political principals and the degree of political control as indicated by agency politicization. With multiple indicators of state fiscal performance, the empirical test uses data on US state budget agencies between 1986 and 2008. The results support the proposition. When budget agencies are highly politicized, competence of budget agencies influences state fiscal performance in accordance with the preferences of Democratic and Republican elected officials when one or the other party controls state governments. The findings enhance the understanding of how institutional designs shape bureaucratic politics and agency performance.*

Evidence for Practice

- Agency competence matters to government performance, as shown in the case of US state budget agencies.
- The impact of agency competence on government performance depends on both policy preferences of elected officials and the level of political control.
- Agency competence has a greater impact on performance when a high level of agency politicization allows two-way interactions between elected officials and administrative staffs.

Politics, Competence, and Performance: Evidence from the US State Budget Agencies

The relationship between politics and administration is central to the theoretical debates of American public administration (Moynihan and Ingraham 2010; Svara 2001, 2008). The well-known doctrine of the "politics–administration dichotomy" holds that politics and administration should be separated (Wilson 1887); public administrators are expected to maintain neutral competence. Thus, the more competence is insulated from politics, the greater the impact competence has on performance (Krause and Douglas 2005). The "politics–administration dichotomy" was questioned subsequently (Hollibaugh Jr 2014). Opponents argue that politics and administration are intertwined; public administrators are expected to maintain responsive competence (Moe 1985). It follows that, the more closely competence is integrated with politics, the greater its impact on performance. The two models of neutral competence and responsive competence make contradictory predictions on the impact of competence on performance as moderated by politics.

We examine the impact of politics and competence on performance by introducing the direction and the degree of political control of administrative agencies. Responsive competence implies that competence can be used as a tool to achieve policy goals set by political principals. But who are the political principals? How much political control is possible? These questions remain unanswered. There can be multiple political principals. The degree of political control can vary across administrative agencies. As Aberbach and Rockman (1988, 609) argue, "the real issue often is not politics versus neutral competence but clarifying the principals (and their underlying principles) in the principal–agent relationship."

To answer this call, we propose a third model of contingent competence by arguing that competence can have differential impacts on performance depending on the policy preferences of political principals and the politicization level of administrative agencies. We use the US state budget agencies as an empirical setting to test the contingent competence model. Budgeting has been long recognized as both political and technical (Thurmaier and Willoughby 2002; Wildavsky 1964), where politics

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and competence can influence performance. To measure fiscal performance, we use four indicators of financial condition (Wang, Dennis, and Yuan Sen 2007) and credit ratings (e.g., Lewis 2012).

We find that the impact of budget agency competence on state fiscal performance is conditional on government partisan control and the level of politicization. When the budget agencies are highly politicized, budget agency competence increases general fund balance and credit ratings when the Republican Party has unified control of state governments; it decreases budget balance and credit ratings when the Democratic Party holds unified government control. Furthermore, the competence of highly politicized budget agencies shows a larger, positive effect on debt level and total expenditure under Democratic than Republican control. The empirical findings provide limited support for the neutral competence model and revise the responsive competence model. They support a model of contingent competence where politics is framed in two dimensions—both the direction and the degree of political control of administrative agents.

The findings suggest that budget agency competence is effective in shaping government fiscal performance. To understand the exact impact of the competence, however, one needs to account for the policy preferences of elected officials and the level of agency politicization. The policy preferences can determine whether budget agency competence contributes to conservative or liberal fiscal performance, as preferred by the Republican Party and the Democratic Party, respectively. The policy preferences have larger impacts as agency politicization increases because it allows stronger political control and more communication between elected officials and administrative staffs. This echoes Thurmaier and Willoughby's (2002) finding that state budget staffs show greater policy influences when they feel a shorter "policy distance" and get well informed of governors' policy priorities.

This study makes three contributions. First, it adds to the literature on the effects of administrative competence on government performance. It shows that competence and politics combine to influence performance. This refutes the conventional view of a politics–administration dichotomy and enhances our understanding of the effectiveness of public administration in general. Second, it contributes to the literature on political control of administrative agencies. It shows that one may better understand the role of political control by distinguishing the preferences of political principals and the degree of control that they have over administrative agents. Third, the empirical tests contribute to the fiscal performance literature by demonstrating the critical roles played by budget agencies and the importance of the interactive effects between politics and management factors.

Previous Studies

Originated from the doctrine of the politics–administration dichotomy, neutral competence is the conventional model on the relationship between administrative competence and political responsiveness. Neutral competence indicates that administrative competence should be impartial or nonpartisan (Kaufman 1956). Empirical studies generally show that administrative competence improves organizational performance (Carpenter 2001). For instance, Krause and Douglas (2005) find that agency performance is shaped by reputational considerations but not political influences, a finding consistent with neutral competence. Schelker (2012b) finds that auditor expertise as indicated by a Certified Public Accountant (CPA) requirement is associated with higher credit ratings, a proxy of government fiscal performance. Nevertheless, Demir and Nyhan (2008) find no empirical support for the politics–administration dichotomy in council-manager local governments.

An alternative to neutral competence, responsive competence implies that political responsiveness should be prioritized over administrative competence (Moe 1985). Responsive competence is mainly achieved via politicization. Many empirical studies find that politicization decreases organizational performance. Lewis (2007) and Gallo and Lewis (2012) find that federal agencies headed by political appointees show lower performance as measured by scores under the Program Assessment Rating Tool (PART). Wood and Lewis (2017) find that politicized federal agencies respond more slowly to public information requests, indicating poor management performance. Lapuente and Suzuki (2020) find that the politicization of bureaucracies is associated with lower pro-innovation attitudes. Nonetheless, Mikesell and Ross (2014) find that the politicization of state revenue forecasts contributes to forecast acceptance, implying one positive performance impact of politicization.

Scholars have identified a tradeoff between administrative competence and political responsiveness and argue for a balance as the recipe for better organizational performance (Moe 1985). Studies have shown that agency politicization crowds out neutral competence (Christiansen, Niklasson, and Öhberg 2016; Öhberg, Munk Christiansen, and Niklasson 2017) and policy expertise (Richardson 2019). In addition, Krause, Lewis, and Douglas (2006) propose a balance between the use of political appointments and civil service systems in the recruitment of budget directors and budget staff to maximize budget agency performance. They find empirical support for this proposition. Bourdeaux (2008) finds a tradeoff between politics and neutral competence in two cases of solid waste policies of New York State. She further identifies a case where a balance between politics and competence seems practical.

In the case of state budget agencies, both administrative competence and political responsiveness seem to matter. Thurmaier and Willoughby (2002) characterize state budget offices on a continuum from control orientation to policy orientation. In control-oriented budget offices, budget staff find it easier to maintain neutral competence. In policy-oriented budget offices, budget staff strive to balance neutral competence with political responsiveness to governors. In addition, Thurmaier and Willoughby (2002) find that budget staff have greater policy influence when maintaining a closer relationship with governors. A shorter "policy distance" (Thurmaier and Willoughby 2002) helps the budget staff keep abreast of governors' policy priorities and increases the level of governors' trust in the budget staff. To the extent that a shorter policy distance indicates stronger gubernatorial control of budget agencies, this suggests that politicization may increase the impact of state budget agencies on government fiscal performance.

We examine the impact of competence of budget agencies on state fiscal performance, extending the studies on the performance impact of administrative competence. Building upon Thurmaier and Willoughby (2002), who uncover the decision-making processes of state budget agencies, we further examine how the competence and politicization of state budget agencies affect government fiscal performance. In addition, while the literature on responsive competence indicates that the impact of competence on performance depends on the level of politicization, we provide an empirical test of the conditional effect.

A Model of Contingent Competence

Neutral competence is rooted in the doctrine of the "politics–administration dichotomy," which assumes that administration is purely technical and should be kept out of politics. Neutral competence is defined as the "ability to do the work of government expertly, and to do it according to explicit, objective standards rather than to personal or party or other obligations and loyalties" (Herbert Kaufman 1956, 1,060). One way to achieve neutral competence is to insulate administrative agents from political influence, as manifested in the design of modern civil service systems. Other ways of realizing neutral competence include building capacity-based reputations, developing diverse political networks, and initiating policy innovations (Carpenter 2001).

There is inherent tension, however, between administrative competence and political responsiveness (Bourdeaux 2008; Moe 1985; Rourke 1992). The proponents of neutral competence seek to maximize competence. Heclo (1975) contends that administrative agents can serve any political principals with the same competence. To the contrary, West (2005, 147) argues that "it may not be realistic to expect that civil servants can be nonpartisan and still satisfy the president's need for responsiveness." The latter view has received some empirical support (Bourdeaux 2008; Thurmaier and Gosling 1997). If a tradeoff must be made, neutral competence suggests that competence should be maintained, even at the cost of responsiveness.

Others question neutral competence and propose responsive competence (Hollibaugh Jr 2014; Moe 1985, 1989). Moe (1985, 239) argues that a president "values organizational competence, to be sure, but what he seeks is 'responsive competence', not neutral competence." Neutral competence fails to meet the demand of responsiveness for effective political leadership. Presidents can pursue responsive competence through politicization of administrative agencies (Moe 1985). Politicization can be defined as "the injection of politics into otherwise neutral administration" (Wood and Lewis 2017, 582). Politicization is often achieved by political appointments based on ideology and loyalty (Moe 1985).

Proponents of responsive competence prioritize responsiveness over competence and call for a balance. There are "necessary trade-offs that presidents are forced to make in seeking a working balance between responsiveness and organizational competence" (Moe 1985, 268). While presidents value responsiveness more than competence, they may enhance the competence of political appointees "by emphasizing professionalism, expertise, and administrative experience" (Moe 1985, 245). Nonetheless, the balance may not always be attainable. Hollibaugh Jr (2014) argues that, due to barriers of legislative confirmation, it is often unrealistic for presidents to achieve both responsiveness and competence in making political appointments.

One question that remains unanswered, however, is who the political principals are. In the US system of separation of powers, scholars have long recognized the existence of multiple political principals (Waterman and Meier 1998). While Moe (1985) focuses on the president, Aberbach and Rockman (1988) critique that Moe (1985) underrates the Congress as a competing political principal. As Aberbach and Rockman (1988, 609) put it, "the issue is not whether responsiveness should be promoted, but rather how reflexively and to whom." In other words, to fully understand the relationship between responsiveness and competence, one must specify the political principals.

The responsive competence model suggests that politicization provides opportunities for political principals to shape organizational performance as they see fit. At the same time, politicization can provide channels for administrative agents to influence political principals with their expertise. Politicization by itself, however, does not indicate policy preferences of political principals. For state administrative agencies, as is the case at the federal level, there are multiple political principals with heterogeneous policy preferences. While policy preferences are generally unobservable, one indicator is the party affiliation of political principals.

On average, the Republican Party prefers conservative policies, while the Democratic Party prefers liberal policies. Erikson, Wright, and McIver (1989) propose that parties are responsive to public opinion in policymaking, leading to differential policies. The opinion–policy linkage has received empirical support in various contexts, including American states (Lax and Phillips 2009), the United Kingdom (Soroka and Wlezien 2005), and Canada (Soroka and Wlezien 2004). Moreover, the literature has shown partisan effects on state policies in a wide range of policy areas, such as welfare policy (Barrilleaux, Holbrook, and Langer 2002; Brown 1995; Dye 1984), criminal justice policy (Yates and Fording 2005), and general policy liberalism (Caughey, Xu, and Warshaw 2017). Therefore, party affiliations can indicate policy preferences of political principals.

While politicization defines the "production possibility frontier" within which political control may occur, government partisan control indicates the direction of the political control. When the Republican Party has unified control of state governments, the political principals may make conservative policies. When the Democratic Party has unified government control, the political principals may make liberal policies. In either case, to the degree that politicization allows, the political principals can make use of administrative competence to shape government performance as they prefer. Therefore, the impact of competence on performance depends on its interaction with government partisan control and the level of politicization.

As summarized in table 1, three models have emerged on the relationship between competence and responsiveness. Each has distinct views on the roles of competence, responsiveness, and politicization. They also generate different predictions on the

Table 1 Comparing Neutral, Responsive, and Contingent Competence

	Neutral competence	Responsive competence	Contingent competence
Administrative competence	Primary value	Secondary value	Indeterminate
Political responsiveness	Secondary value	Primary value	Indeterminate
Political principals	Homogeneous	Homogeneous	Heterogeneous
Impact of politicization on performance	None or negative effect	Negative effect	Contingent on political principals
Impact of competence on Performance	Large positive effect	Small positive effect	Contingent on political principals

impacts of politicization and competence on organizational performance.

First, neutral competence harks back to the doctrine of the "politics–administration dichotomy." Proponents of neutral competence view administrative competence as the primary value and a key means to improve performance. Responsiveness is downplayed. Politicization is deemed undesirable. According to neutral competence, it is competence, not responsiveness, that matters to organizational performance. To the extent that it may threaten neutrality, politicization may decrease performance.

Second, responsive competence suggests that the primary value should be political responsiveness. Administrative competence is valuable only to the extent that it can be guided by political principals. Politicization is the key means to achieve political responsiveness. When the balance between responsiveness and competence is not achievable, politicization may crowd out competence. To the degree that competence is preserved, it can have a positive effect on performance.

Third, while both neutral and responsive competence treat political principals as homogeneous, contingent competence explicitly recognizes the heterogeneity of political principals. The contingent competence model holds that a balance, wherever feasible, should be made between administrative competence and political responsiveness. The relative importance of the two values are thus indeterminate ex ante. Politicization has dual effects of crowding out competence and providing opportunities for administrative agents to influence political principals. The impact of politicization and competence on performance depends on how political principals make use of administrative competence.

To test the contingent competence model, we focus on US state budget agencies and government fiscal performance. From the perspective of contingent competence, the impact of competence on fiscal performance is conditional on the level of politicization and government partisan control. Competence captures the capacity of budget agencies to implement fiscal policies, politicization reflects the degree that political principals can control budget agencies, and government partisan control signifies the direction of that political control. Politicization and government partisan control interact to produce political control by conservative or liberal political principals.

In the fiscal policy arena, the Republican Party and the Democratic Party often have different policy orientations (Alt and Lowry 1994; Alt and Lowry 2000; Lowry, Alt, and Ferree 1998; Yu, Jennings Jr, and Butler 2019). Republicans on average prefer lower taxes, less government expenditure, and a smaller size of government. Democrats, on the other hand, on average prefer largely the opposite. When either the Republican Party or the Democratic Party controls state governments, it would have opportunities to shape state fiscal policies as they prefer, leading to differential impacts on state fiscal performance (Lowry and Alt 2001). Specifically, the Republican Party should lead state governments towards more "conservative" fiscal performance, which would result in higher levels of general fund balance, larger sizes of fiscal surplus, lower levels of debt and expenditure, or higher credit ratings. On the contrary, the Democratic Party may steer state governments towards more "liberal" fiscal performance, resulting in lower levels of general fund balance, smaller fiscal surplus, a higher debt level, a larger size of expenditure, and lower credit ratings.

When the Republican Party controls state governments, the competence of state budget agencies is combined with conservative fiscal policy preferences. This should result in conservative fiscal performance. As politicization increases, political control becomes easier, so also agencies influence political principals with their expertise. A higher level of politicization can intensify the extent to which competence influences fiscal performance. When the Democratic Party controls state governments, the competence of state budget agencies interacts with liberal fiscal preferences. Since Democratic partisan control may lead to liberal fiscal performance, politicization is likely to amplify this effect. Therefore, the contingent competence hypothesis follows.

Contingent Competence Hypothesis

As politicization increases, competence has a greater impact that strengthens conservative fiscal performance when the Republican Party controls state governments and a larger impact that reinforces liberal fiscal performance when the Democratic Party controls state governments.

Data and Measurement

Measuring Politicization and Competence

The data for measuring characteristics of state budget agencies are taken from the National Association of State Budget Officials (NASBO). NASBO conducted seven surveys of "Budget Processes in the States" in 1987, 1989, 1992, 1997, 1999, 2002, and 2008. We focus on the period between 1986 and 2008. Because the NASBO surveys are not annual, we fill in the gap years with observations of the most recent surveys in previous or following years. This approach has been used in previous studies (Krause and Melusky 2012). The assumption is that state budget agencies remain stable in the years when no NASBO surveys exist. This seems plausible since most of the questions on state budget agencies measure institutional characteristics that are unlikely to change dramatically over time.

We use the NASBO data on state budget directors and budget agencies to measure the politicization and competence of state budget agencies. While many existing studies on politicization focus on the use of political appointments (e.g., Moe 1985), politicization can be achieved in other ways. For instance, Wood and Lewis (2017) measure politicization with the type of federal agencies using such indicators as whether an agency is located in the Executive Office of the President. We adopt a similar approach to measuring politicization by focusing on the institutional design that allows potential political influences.

To measure politicization, we construct three variables using the NASBO data.[1] The variable *director appointment* indicates the various ways that budget directors are appointed. It is a categorical variable coded to reflect an increasing level of political influence over the appointments of budget directors. The variable *cabinet status* is a dummy indicating whether budget directors are members of gubernatorial cabinets. The variable *term limit* indicates the types of term limits of budget directors. It is a categorical variable coded to measure an increasing level of political control over the terms of budget directors, from the protection of civil service systems to serving at the pleasure of political principals. While *cabinet status* reflects gubernatorial political influences, *director appointment* and *term limit* can capture both executive and legislative political influences. For each variable, a larger value indicates a higher level of politicization, or more opportunities for political control.

In addition, we use two variables to measure competence of budget directors and budget staff.[2] The variable *director salary* measures the salaries of budget directors. Compensation has long been used to measure professionalism of state legislatures (King 2000; Mooney 1994; Squire 2007). Boushey and McGrath (2017) use compensation to measure the expertise of state legislatures and state agencies. They point out that "there is broad consensus that maintaining competitive salaries is essential for securing a professionalized and expert public workforce" (Boushey and McGrath 2017, 6), as reflected in the design of public employee compensation at both the federal level (OMB 2015) and the state level (Swasey 2014). In the same spirit, we use budget director salaries as a proxy for competence. Budget directors earning more have higher values of human capital and should have greater competence. Nonetheless, budget director salaries may also reflect varying costs of living across states or differential strengths of local economies. To account for such possibilities, we scale budget director salaries by state personal income per capita.

The variable *agency size* measures the size of staff in the budget function. Budget agencies of larger sizes can have greater competence. Empirical studies have shown positive effects of organizational size on organizational productivity (Gooding and Wagner III 1985) and organizational innovation (Camisón-Zornoza et al. 2004). As Lee and Whitford (2013), 7) put it, agencies of larger sizes "can absorb or recall more information about tasks, more critical judgments available to correct errors, and more possible solution strategies." Alternatively, larger budget personnel may result from the demand for managing a bigger budget. To control for the influences of budget size, we scale agency size by state total revenues and reverse code it. Thus, we assume that budget agencies show higher competence when it takes a smaller size of staff to manage a given size of budget. For each variable measuring competence, a larger value indicates a higher level of competence.

Next, we construct an index of politicization and an index of competence based on the five variables. The *politicization index* summarizes the information of the three variables measuring political control of state budget agencies, including *director appointment*, *term limit*, and *cabinet status*. These variables capture three key features of the budget director positions: how the budget directors are recruited, removed, and involved in budgeting process. When budget directors score higher in the three respects, politicization increases because there are more institutionalized opportunities for the political principals to control the agents. Thus, the higher the value of the *politicization index*, the greater the politicization of state budget agencies.

The *competence index* is based on the two variables of *director salary* and *agency size*. This index is similar to the well-known measure of state legislative professionalism—the Squire index (Squire 2007). The Squire index measures three aspects of state legislatures: pay, session length, and staff resources. In the same spirit, we measure the pay of budget directors and the size of budget staff. The higher the value of the *competence index*, the greater the competence state budget agencies may have.

Following the approach by Squire (2007) in constructing the Squire index, we construct each index in two steps. First, we standardize each variable to remove the variation in units of measurements. Second, we add up the standardized scores and divide them by the number of variables in each index. The resulting indexes, *politicization index* and *competence index*, show the number of standard deviations above or below the sample mean. The larger the values of the indexes, the higher the politicization or competence of state budget agencies. For example, if a state scores 0.5 in the *competence index* in a year, it means that the state has a competence level of half a standard deviation above the sample mean.

To test the validity of the two indexes, we conduct an exploratory factor analysis and a confirmatory factor analysis. As table 2 shows, the five variables fall on two dimensions as theorized. The goodness-of-fit statistics indicate good model fit for both factor analyses. In both factor analyses, *director appointment*, *cabinet status*, and *term limit* are highly correlated with the first factor, while *agency size* and *director salary* are highly correlated with the second factor. This is consistent with the proposition that the first factor indicates budget agency politicization and the second factor indicates budget agency competence.

Moreover, to test internal consistency of the two indexes, we calculate Cronbach's alpha. For the politicization index, the

Table 2 Factor Loadings of Exploratory and Confirmatory Factor Analyses of Budget Agency Characteristics

	Exploratory factor analysis		Confirmatory factor analysis	
Variable	Factor 1	Factor 2	Factor 1	Factor 2
Director appointment	0.8794	−0.0351	1	
Cabinet status	0.8339	−0.0182	1.9446	
Term limit	0.4851	0.2958	7.6498	
Agency size	−0.0703	0.8557		1
Director salary	0.0455	0.8573		0.7030
LR test	950.24***		4.267**	
RMSEA			0.053	
CFI			0.997	
SRMR			0.013	

Notes: Exploratory factor analysis uses principal-component factors, rotation method is orthogonal varimax (Kaiser off); ***$p<0.01$, ** $p<0.05$, *$p<0.1$.

Cronbach's alpha is approximately 0.60. The competence index has a Cronbach's alpha of about 0.68. Since a small number of indicators tends to reduce the values of Cronbach's alpha (Tavakol and Dennick 2011), the values of the Cronbach's alpha are acceptable. These values also fall in the range of the values of Cronbach's alpha reported in previous studies (DeHart-Davis and Pandey 2005; Vigoda-Gadot 2006). The values of the Cronbach's alpha suggest that the two indexes are reliable measures of politicization and competence of state budget agencies.

In the appendix, figure A1 shows the politicization scores of state budget agencies in 1989, 1999, and 2008.[3] Figure A2 shows the competence index in 1989, 1999, and 2008, respectively. As shown in both figures, between 1986 and 2008, compared with within-state variation, there is greater variation of politicization and competence of budget agencies across states.

Measuring Fiscal Performance

Scholars have developed various measures of government fiscal performance, fiscal health, or fiscal conditions. For example, Wang, Dennis, and Yuan Sen (2007) measure state fiscal condition in four dimensions, including cash solvency, budgetary solvency, long-run solvency, and service-level solvency. There seems to be, however, no consensus on the best measures of fiscal performance. Recent studies have converged to use multiple measures of fiscal performance (e.g., Jimenez 2019; Jimenez 2020; McDonald, Decker, and Johnson 2020). In addition, many of the financial performance indicators are built upon data from government Comprehensive Annual Financial Reports (CAFRs) (e.g., Jimenez 2019; Jimenez 2020). Nonetheless, state government CAFR data are not readily accessible for years prior to the early 2000s.[4] Given that the sample period of the present study ranges from 1986 to 2008, we construct five measures of fiscal performance using alternative data sources, including four indicators of financial condition and one indicator of fiscal management outcomes.

The four indicators of financial condition cover cash solvency, budgetary solvency, long-run solvency, and service solvency (Wang, Dennis, and Yuan Sen 2007). First, general fund balance is considered as an indicator of cash solvency (Gorina, Maher, and Joffe 2017) or budgetary solvency (Jimenez 2019). It has been widely used as a measure of fiscal performance (Poterba 1994; Cummins 2013; Jimenez 2017). The data on general fund balance are taken from NASBO's Fiscal Survey of the States. As reported by NASBO, *general fund balance* is defined as total general fund balance as a percentage of general fund expenditures. Total balance includes both general fund ending balance and balances in budget stabilization funds.

Second, total budget balance is often used as an indicator of budgetary solvency, or "the ability of a government to generate revenues to meet its service and financial obligations in a fiscal year" (Jimenez 2019, 2). While general fund balance captures fiscal slack that allows governments to buffer environmental shocks (Hendrick 2004), budget balance reflects fiscal discipline at the macro level. A rich literature in public finance has used budget balance to measure fiscal performance (e.g., Lis and Nickel 2010; Tujula and Wolswijk 2007). The data on budget balance are taken from the Annual Survey of State Government Finances by the Census Bureau. Specifically, *budget balance* is operationalized as budget balance per capita, calculated as total revenues minus total expenditures, scaled by state population.

Third, debt outstanding per capita has been used as an indicator of long-run solvency (Gorina, Maher, and Joffe 2017), or "a government's ability to pay existing long-term obligations" (Wang, Dennis, and Yuan Sen 2007, 14). A higher level of debt outstanding per capita indicates severer fiscal stress (Honadle, Costa, and Cigler 2004; Kloha, Weissert, and Kleine 2005) and lower long-run solvency. The data on debt outstanding are taken from the Annual Survey of State Government Finances by the Census Bureau. The variable *debt level* is defined as total debt outstanding scaled by state population. Fourth, total expenditure per capita indicates service-level solvency (Wang, Dennis, and Yuan Sen 2007). As Wang, Dennis, and Yuan Sen (2007, 9) put it, higher expenditures per capita "indicate a more expensive government and lower service-level solvency." The data on total expenditure are taken from the Annual Survey of State Government Finances by the Census Bureau. The variable *total expenditure* is operationalized as total expenditure scaled by state population.

In addition, following prior studies (Lewis 2012; Schelker 2012a; Schelker 2012b; Suyderhoud 1994), we use credit ratings of state governments as a proxy of state fiscal performance. As Krueger and Walker (2010, 48) put it, credit ratings "provide an overall evaluation of policies, processes, and outcomes of a government." Designed to capture debt default risks faced by bond investors, credit ratings can provide "a market evaluation of state fiscal performance" (Schelker 2012b, 433). While general fund balance and budget balance indicate the outputs of government financial management, credit ratings indicate the financial management outcomes as perceived by participants in the public capital market.

To measure credit ratings, we use data on state general obligation (GO) bond ratings from Standard & Poor's. Standard & Poor's (2020) has eight categories of long-term credit ratings (AAA, AA, A, BBB, BB, B, CCC, and CC) and three special ratings (R, SD or D, and NR). The ratings range from AA to CCC and may include a plus (+) or minus (–) sign to reflect relative standing in a major rating category. Except for five cases, all states had credit ratings above BBB+ between 1986 and 2008. We code the *credit ratings* of AAA, AA+, AA, AA–, A+, A, A–, BBB+, and BBB as 9, 8, 7, 6, 5, 4, 3, 2, and 1, respectively. Thus, a higher value indicates a better credit rating. Credit ratings are missing for nine states in various years, possibly because they did not issue GO bonds.

Econometric Model

To test the contingent competence model, we must include the interactive effects among government partisan control, politicization, and competence. With the two-way and three-way interaction effects, we specify the main model as follows:

$$\begin{aligned} Y_{i,t} &= \beta_1 P_{i,t-1} + \beta_2 E_{i,t-1} + \beta_3 D_{i,t-1} + \beta_4 P_{i,t-1} E_{i,t-1} + \beta_5 P_{i,t-1} D_{i,t-1} \\ &\quad + \beta_6 E_{i,t-1} D_{i,t-1} + \beta_7 P_{i,t-1} E_{i,t-1} D_{i,t-1} + \beta_8 X_{i,t-1} + \lambda_t + \gamma_i + \varepsilon_{i,t} \end{aligned}$$

In this model, the dependent variable $Y_{i,t}$ is an indicator of state fiscal performance. $P_{i,t-1}$ is an index indicating the degree of politicization of state budget agencies. $E_{i,t-1}$ is an index indicating the level of competence of state budget agencies. $D_{i,t-1}$ is a factor variable indicating partisan control of state governments. Specifically, it is coded 0 when there is unified Republican control, 1 when there is divided government or split partisan control, and 2 when there is unified Democratic control. The next four terms show the two-way and three-way interactions between the three variables $P_{i,t-1}$, $E_{i,t-1}$, and $D_{i,t-1}$. $X_{i,t-1}$ is a vector of control variables, λ_t is year fixed effects, capturing unmeasured factors influencing fiscal performance of all state governments in a year, γ_i is state fixed effects that absorb time-invariant, unobserved factors within states over time, and $\varepsilon_{i,t}$ is the error term. In the models of the four indicators of financial condition, a one-year lag of the debt variable and socioeconomic variables accounts for the time for state fiscal responses to such environmental factors. In the model of credit ratings, a one-year lag controls for the time for credit rating agencies to collect and act on information on credit risks of state governments.

The method of estimation is based on the indicators of fiscal performance. For the four measures of financial condition, *general fund balance*, *budget balance*, *debt level*, and *total expenditure*, the augmented Dickey–Fuller test shows that they are stationary, indicating suitability of the level measure. Following Tujula and Wolswijk (2007) and Lis and Nickel (2010), we estimate fixed-effects models with state and year fixed effects and heteroskedasticity robust standard errors. For the measure of *credit rating*, following extant studies (e.g., Moldogaziev and Guzman 2015), we estimate the model with ordered probit to account for the ordinal nature of bond ratings.

For the control variables, $X_{i,t-1}$ includes fiscal, institutional, and socioeconomic variables. First, we control for several fiscal variables to account for the fiscal environment of state governments. The variable *tax revenue growth* measures percentage increase in the proportion of tax revenues in state own source revenues.[5] Since a larger share of tax revenues indicates revenue stability, this variable should be correlated with stronger financial condition and credit ratings. The variable *federal aid growth* measures percentage increase in the ratio of federal aid to state GDP. Federal aid increases resource availability, which should result in stronger financial condition. On the other hand, federal aid may indicate fiscal dependency, which may contribute to higher debt default risks and lower credit ratings. In the models of budget balance, total expenditure, and credit ratings, we control for per capita *debt growth*, which measures percentage increase in debt outstanding per capita.[6] As states accumulate more debt, they should have more resources to spend, but the increased interest payments may result in lower budget balances and credit ratings.

Second, we include two institutional factors. The variable *TEL index* is a score indicating the stringency of state tax and expenditure limits (TEL). TELs can have mixed effects because the tax limits and the expenditure limits can have opposite effects on the revenue and expenditure sides of budgets. The variable *balanced budget requirement* is an index measuring the stringency of state balanced budget requirements. As balanced budget requirements become stronger, states should accumulate larger sizes of general fund balances, budget balances, or long-term debt. In addition, when balanced budget requirements are too loose or too strong, state governments can run into deficit spending or have limited fiscal flexibility, resulting in higher debt default risks. When balanced budget requirements are moderate, state governments can have appropriate fiscal discipline. To account for this nonlinearity, we control for a squared term of *balanced budget requirement* in the model of credit ratings.

Third, the model controls for three socioeconomic variables, including per capita *income growth*, *population growth*, and *unemployment growth*, which measure percentage increases in personal income per capita, population, and unemployment rates. Growing personal income and population sizes indicate both stronger revenue capacity and greater demand for public expenditures, which may generate indeterminate effects on financial condition and credit ratings. Higher unemployment rates indicate revenue shortfalls and increasing expenditure demands, which can decrease general fund balances, budget balances, and credit ratings, while increasing debt level and total expenditures.

All fiscal variables have been adjusted for inflation. Table A1 in appendix 2 summarizes the variable measurements and data sources. Table A2 in appendix 3 reports the summary statistics.

Results

Table 3 shows the results of the estimation. Columns (1) and (2) show the results where the dependent variable is general fund balance. Columns (3) and (4) report the results where the dependent variable is budget balance. Columns (5) and (6) show the results where the dependent variable is debt level. Columns (7) and (8) report the results for the dependent variable of total expenditure. The results for the dependent variable of credit ratings are presented in columns (9) and (10). For each dependent variable, the model is estimated without and with interaction terms. The models without interaction terms are presented as a baseline specification. To test the contingent competence hypothesis, the models with interaction terms are preferred.

General Fund Balance

Column (2) of table 3 shows the conditional effects of competence on general fund balance. To facilitate the interpretation of the results with interactions, we report the average marginal effects of *competence index* by the level of politicization and by government partisan control in figure 1. First, when the level of politicization of state budget agencies is relatively low, competence shows no statistically significant effects on general fund balance under either Republican or Democratic partisan control. This appears inconsistent with the neutral competence model that the competence of agencies may matter more to performance when insulated from political influences (Krause and Douglas 2005).

Second, when the level of politicization is relatively high, competence has a positive and statistically significant effect on general fund balance under unified Republican control of state governments. In contrast, competence shows a negative yet statistically insignificant effect on general fund balance under unified Democratic control. Under unified Republican control, the effect of competence reaches about 0.07 when holding the politicization level at one standard deviation above the sample mean. Thus, when state budget agencies are highly politicized, and when state governments are under unified Republican control, one standard deviation increase in the competence of budget agencies

Table 3 Impact of Politics and Competence on Fiscal Performance

Variable	(1) General fund balance	(2) General fund balance	(3) Budget balance	(4) Budget balance	(5) Debt level	(6) Debt Level	(7) Total expenditure	(8) Total expenditure	(9) Credit rating	(10) Credit rating
Key independent variables										
Divided government	–0.003	0.006	–0.121	–0.067	–0.020	–0.062	–0.023	–0.039	–0.601***	–0.364***
	(0.009)	(0.010)	(0.082)	(0.067)	(0.099)	(0.093)	(0.141)	(0.101)	(0.126)	(0.131)
Unified Democratic control	–0.003	0.004	–0.223**	–0.161*	0.161	0.142	–0.029	–0.035	–0.839***	–0.575***
	(0.010)	(0.011)	(0.099)	(0.081)	(0.129)	(0.119)	(0.163)	(0.124)	(0.182)	(0.182)
Politicization index	0.046***	0.057***	0.028	0.225***	–0.037	–0.203	0.051	0.264	–0.425**	–0.160
	(0.010)	(0.014)	(0.061)	(0.081)	(0.187)	(0.227)	(0.148)	(0.185)	(0.208)	(0.316)
Competence index	0.009***	0.047***	–0.154***	–0.105	0.380*	0.489***	0.767*	0.921***	0.370***	1.165***
	(0.003)	(0.013)	(0.057)	(0.066)	(0.198)	(0.090)	(0.406)	(0.122)	(0.116)	(0.300)
Divided government × Politicization index		–0.007		–0.246**		0.234*		–0.151		–0.445**
		(0.012)		(0.099)		(0.119)		(0.154)		(0.219)
Unified Democratic control × Politicization index		–0.021*		–0.164		0.270*		–0.175		–0.342
		(0.012)		(0.100)		(0.137)		(0.157)		(0.259)
Divided government × Competence index		–0.043***		–0.037		–0.084		–0.096		–0.824***
		(0.013)		(0.080)		(0.120)		(0.165)		(0.252)
Unified Democratic control × Competence index		–0.045***		–0.325**		0.429**		0.743***		–1.509***
		(0.015)		(0.128)		(0.203)		(0.170)		(0.361)
Politicization index × Competence index		0.033**		0.252*		–0.123		–0.037		0.893***
		(0.017)		(0.130)		(0.105)		(0.171)		(0.272)
Divided government × Politicization index × Competence index		–0.037**		–0.332**		0.481***		0.707***		–0.926***
		(0.018)		(0.145)		(0.138)		(0.229)		(0.301)
Unified Democratic control × Politicization index × Competence index		–0.043**		–0.353*		0.459***		0.208		–1.596***
		(0.019)		(0.182)		(0.170)		(0.199)		(0.377)
Fiscal characteristics										
Tax revenue growth	–0.001	–0.002	–0.018***	–0.017***	0.004***	0.003**	–0.011***	–0.010***	–0.002	–0.003
	(0.002)	(0.002)	(0.004)	(0.004)	(0.001)	(0.001)	(0.003)	(0.003)	(0.004)	(0.004)
Federal aid growth	0.001*	0.001*	–0.012**	–0.011**	–0.003	–0.003	–0.002	–0.003*	–0.007*	–0.007**
	(0.000)	(0.000)	(0.006)	(0.006)	(0.004)	(0.004)	(0.002)	(0.002)	(0.004)	(0.004)
Per capita debt growth			–0.000	0.000			0.007***	0.007***	–0.006	–0.006
			(0.004)	(0.004)			(0.002)	(0.002)	(0.005)	(0.005)
Institutional characteristics										
TEL index	–0.002**	–0.002**	0.005	0.006	0.021	0.017	0.049*	0.041**	–0.001	–0.020
	(0.001)	(0.001)	(0.006)	(0.005)	(0.019)	(0.017)	(0.027)	(0.016)	(0.016)	(0.017)
Balanced budget requirement	0.000	0.002	–0.074**	–0.073	0.158***	0.090	0.158	–0.028	1.184***	1.261***
	(0.007)	(0.007)	(0.033)	(0.044)	(0.052)	(0.061)	(0.114)	(0.073)	(0.279)	(0.317)
Balanced budget requirement, squared									–0.114***	–0.124***
									(0.027)	(0.031)
Socioeconomic characteristics										
Per capita income growth	0.004*	0.004*	–0.036***	–0.040***	–0.047***	–0.037**	0.001	0.015	0.098***	0.099***
	(0.002)	(0.002)	(0.008)	(0.009)	(0.015)	(0.015)	(0.011)	(0.014)	(0.029)	(0.032)
Unemployment growth	–0.101***	–0.098***	–1.269***	–1.257***	0.542***	0.450***	0.789***	0.726***	0.134	–0.021
	(0.025)	(0.025)	(0.176)	(0.180)	(0.147)	(0.137)	(0.204)	(0.127)	(0.416)	(0.418)
Population growth	0.535	0.508	1.738	1.211	–6.339**	–5.484**	4.087	5.866**	17.028**	13.395*
	(0.584)	(0.585)	(3.587)	(3.511)	(2.822)	(2.709)	(2.643)	(2.391)	(7.968)	(7.715)
Constant	0.014	–0.009	1.024***	0.967**	1.507***	2.042***	2.941***	4.320***		
	(0.069)	(0.073)	(0.325)	(0.365)	(0.439)	(0.489)	(0.945)	(0.545)		
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,078	1,078	1,029	1,029	1,078	1,078	1,029	1,029	930	930

Note: Robust standard errors in parentheses, $***p<0.01$, $**p<0.05$, $*p<0.1$.

is associated with about 5 percentage points increase in general fund balance. This effect amounts to about 37% of one standard deviation of general fund balance in the sample. This is consistent with the contingent competence hypothesis that competence is associated with conservative fiscal performance under unified Republican control.

Third, the difference in the effects of competence under unified Republican control and unified Democratic control becomes statistically significant when the level of politicization remains relatively high. This lends further empirical support to the contingent competence hypothesis by demonstrating a differential performance impact of competence by both the level of politicization and policy preferences of political principals.

Budget Balance

Column (4) of table 3 shows the conditional effects of competence on budget balance. To interpret the interaction effects, figure 2 presents the average marginal effects of competence on budget balance by the politicization level and by government partisan control.

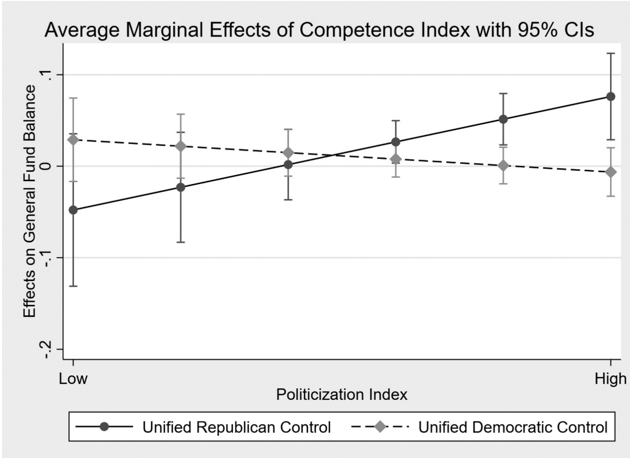

Figure 1 Average Marginal Effects of Competence on General Fund Balance by Level of Politicization and Democratic Control

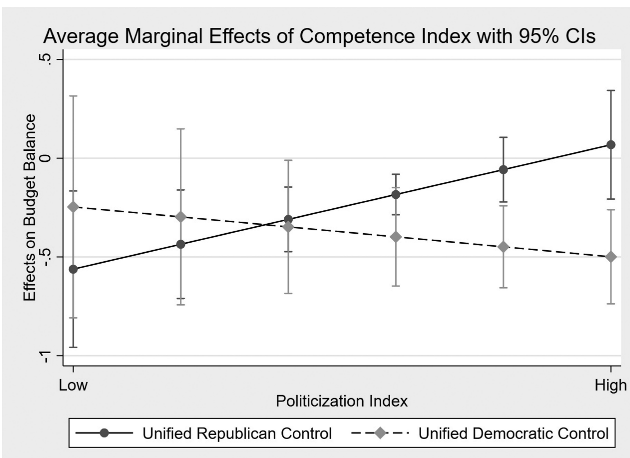

Figure 2 Average Marginal Effects of Competence on Budget Balance by Level of Politicization and Democratic Control

Overall, figure 2 shows a similar pattern of results as figure 1. When the level of politicization remains relatively low, there are no statistically significant differences in the effects of competence on budget balance under Republican and Democratic control. When the politicization level reaches a relatively high level, competence shows a positive but statistically insignificant effect under unified Republican control. In contrast, it shows a negative and statistically significant effect under unified Democratic control. In addition, as the level of politicization increases, the difference in the effects of competence on budget balance under Republican control and Democratic control becomes statistically significant. The pattern of effects is consistent with the contingent competence hypothesis in that competence is correlated with liberal fiscal performance under a higher level of politicization and unified Democratic control.

Under unified Democratic control, the effect of competence equals about −0.51 when holding politicization at one standard deviation above the sample average. This suggests that a one standard deviation increase in the competence of budget agencies is correlated with a lower budget balance by about 0.36, or about $360 per capita in 2005 dollars. This amounts to about 37% of one standard deviation of budget balance in the sample, suggesting that the effect is nontrivial.

Debt Level

Column (6) of table 3 shows the conditional effects of competence on debt level, as measured by debt outstanding per capita. Figure 3 presents the average marginal effects of competence on debt level by the politicization level and by government partisan control.

Figure 3 shows a similar pattern of results as figure 1 and figure 2. When the level of politicization is relatively low, the effects of competence on debt level show no statistically significant differences under Republican and Democratic control. The differences, however, become statistically significant as the level of politicization increases to a relatively high level. While competence shows positive and statistically significant effects under both Republican and Democratic control, the size of the effect is larger under Democratic control. Holding politicization at one standard deviation above the sample average, the sizes of the effects are about 0.40 under Republican control and 1.17 under Democratic control, indicating that one standard deviation increase in the competence of budget agencies is associated with an increase in debt outstanding per capita of about $280 and $830 in 2005 dollars under Republican and Democratic control, respectively. This is consistent with the contingent competence hypothesis in that competence is correlated with liberal fiscal performance as indicated by a higher debt level under a higher level of politicization and unified Democratic control.

Total Expenditure

Column (8) of table 3 shows the conditional effects of competence on total expenditure per capita. Figure 4 shows the average marginal effects of competence by politicization level and by government partisan control.

Again, figure 4 shows a pattern of results as expected. When the level of politicization is relatively low, the effect of competence on total expenditure under Republican control is not statistically significantly different from that under Democratic control. As the level of politicization increases, the differences become statistically significant and competence shows a larger effect under Democratic control than under Republican control. Fixing politicization at one standard deviation above the sample average, the sizes of the effects are about 0.89 under Republican control and 1.79 under Democratic control. This suggests that one standard deviation increase in the competence of budget agencies is associated with an increase in total expenditure per capita of about $630 under Republican control and $1,269 under Democratic control in 2005 dollars. Given that Democrats in general prefer larger sizes of government expenditure, this pattern of results is consistent with the contingent competence hypothesis in that competence is correlated with liberal fiscal performance under a higher level of politicization and unified Democratic control.

Credit Rating

Column (10) of table 3 shows the conditional effects of competence on credit ratings. Figure 5 reports the average marginal effects of *competence index* on the probability of an AAA rating by level of politicization and by government partisan control.[7] Figure 5 shows a

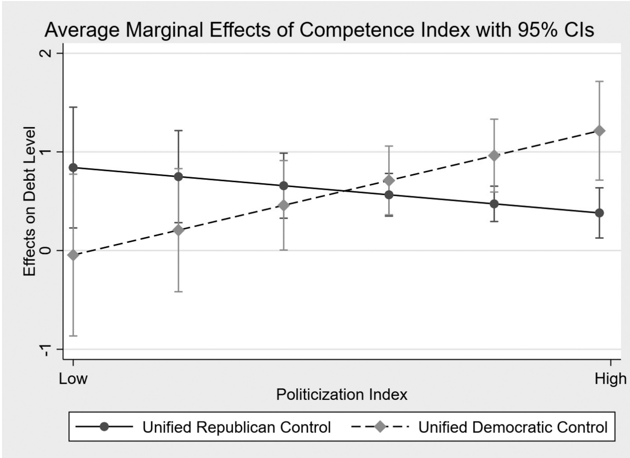

Figure 3 Average Marginal Effects of Competence on Debt Level by Level of Politicization and Democratic Control

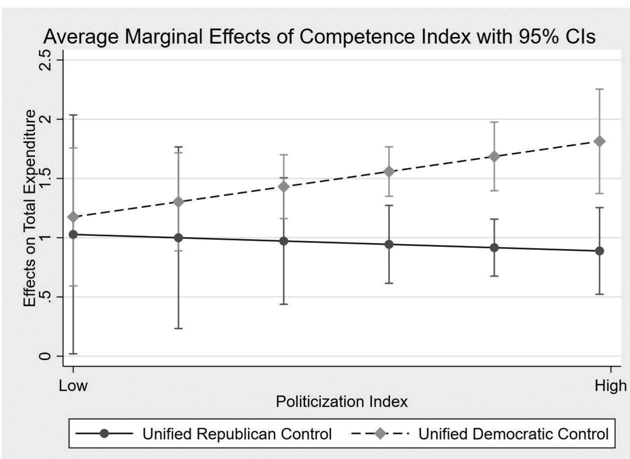

Figure 4 Average Marginal Effects of Competence on Total Expenditure by Level of Politicization and Democratic Control

similar pattern of results as that in figures 1, 2, 3, and 4. First, when the politicization level of state budget agencies is relatively low, competence has no statistically significant effects on credit ratings, regardless of the partisan control of state governments.

Second, when the politicization level of state budget agencies is relatively high, competence shows statistically significant effects on credit ratings. Under unified Republican control of state governments, as the politicization level increases, competence has a positive effect on the probability of obtaining an AAA rating. Holding the level of politicization at one standard deviation above the sample mean, this effect equals about 0.12. This indicates that, when the politicization level is high, one standard deviation increase in competence of state budget agencies is correlated with 8.5 percentage points higher probability of obtaining AAA ratings under Republican partisan control. The size of this effect is equivalent to 22% of one standard deviation of AAA credit ratings.

In contrast, under unified Democratic partisan control, the marginal effect of competence on credit ratings become negative and

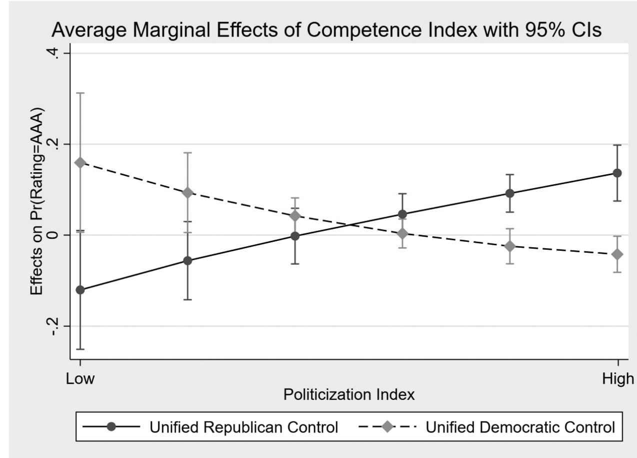

Figure 5 Average Marginal Effects of Competence on Probability of AAA Rating by Level of Politicization and Democratic Control

statistically significant. This effect equals about –0.04 when holding politicization at one standard deviation above the sample average. Thus, when the politicization is high, one standard deviation increase in competence of budget agencies is associated with 2.8 percentage points lower probability of AAA ratings for states under unified Democratic control. The size of this effect amounts to about 7% of one standard deviation of AAA rating in the sample.

Third, the difference in the marginal effects of competence by unified Republican control and unified Democratic control becomes statistically significant only when the level of politicization is relatively high. These findings are consistent with the contingent competence hypothesis.

Control Variables

As presented in columns (2), (4), (6), (8), and (10) of table 3, control variables largely show expected effects when reaching statistical significance. First, *tax revenue growth* shows negative effects on budget balance and total expenditure as well as a positive effect on debt level. This may reflect that increasing revenue stability allows states to keep lower budget balances, achieve higher service-level solvency, and afford more debt. *Federal aid growth* shows a positive effect on general fund balance, but negative effects on budget balance, total expenditure, and credit ratings. The negative effect on budget balances may result from additional expenditures associated with matching requirements of federal grants. The negative effect on total expenditure indicates that federal expenditure may be a substitute for state expenditures. Per capita *debt growth* shows a positive effect on total expenditure.

Second, the *TEL index* shows a negative effect on general fund balance and a positive effect on total expenditure. The positive effect on total expenditure may result from a higher debt level when states face tight tax limits. As expected, *balanced budget requirement* shows a nonlinear effect on credit ratings. Third, per capita *income growth* shows positive effects on general fund balance and credit ratings, and negative effects on budget balance and debt level. The negative effects may reflect that citizen demand for public services and their affordability increase with personal income (e.g., Crain and Crain 1998). *Unemployment growth* shows negative effects on both general fund balance and budget balance as well as positive effects on debt level and total expenditure. *Population growth* shows a negative effect on debt level and positive effects on total expenditure and credit ratings.

Robustness Checks

The main results are robust in two respects. First, the conditional effects of competence are robust across varying levels of credit ratings. When the dependent variable measures low credit ratings instead of such high credit rating as AAA, one should expect to see opposite effects of government partisan control. In the sample, relatively high credit ratings include AAA, AA+, and AA, while the rest represent relatively low credit ratings. Figure A3 in the appendix shows average marginal effects of competence on the probability of obtaining an AA– rating by politicization level and by government partisan control. As expected, figure A3 shows a pattern consistent with that in figure 3.

Second, the main findings are robust across alternative measures of key independent variables. The results are robust when we use the party of governors instead of government partisan control to capture the partisan differences of political principals. The argument for using gubernatorial party is that governors play a key role in the state budgeting processes (Krause and Melusky 2012). The counterargument is that governors rarely have unitary budgetary power; they must share the power with legislatures in passing budgets. Moreover, the impact of the governor can be stronger when the gubernatorial party also controls the legislative branch. While both arguments have their merits and government partisan control is preferred, the key findings are invariant to using either measure.

Discussion

We find that the impact of competence of state budget agencies on fiscal performance is conditional on *who* controls the budget agencies and the *degree* of control. When state budget agencies become highly politicized, competence increases general fund balance and credit ratings under Republican partisan control but decreases budget balance and credit ratings under Democratic control. Moreover, at a high level of politicization, competence of budget agencies increases debt level and total expenditure more under Democratic control than under Republican control.

The findings partly contradict the neutral competence model and the doctrine of a "politics–administration dichotomy." If neutral competence is true, regardless of government partisan control, competence of administrative agencies should have a larger impact on performance under lower politicization because it would be easier to stay politically "neutral" (Krause and Douglas 2005). However, we find that competence has a smaller impact on state fiscal performance when state budget agencies are less politicized, which seems inconsistent with this prediction. We provide an alternative explanation that emphasizes the dual functions of politicization. We argue that, in addition to a tool of political control, politicization also provides channels through which administrative agents could exert influence on political principals with their expertise. Therefore, competence matters more to performance when budget agencies become more politicized.

Nonetheless, the findings suggest that neutral competence may still matter. We find that, at a low level of politicization, the performance impacts of competence show no statistically significant differences between unified Republican and Democratic control. One interpretation is that the low level of politicization allows little communication and political control, and thus minimal influences from any political principals. Alternatively, budget agencies may be able to temper the will of political principals with their neutral competence so that the principals do not move to their extreme preferred policy positions. Perhaps, even with less principal–agent communication, the less politicized budget agencies are able to convince the political principals with their neutrality-based expertise and credibility (Thurmaier and Willoughby 2002). If so, neutral competence may work, though to a lesser extent than predicted by the political insulation thesis (Krause and Douglas 2005).

The findings suggest revisions of the responsive competence model. If responsive competence is true, at a minimum, competence and responsiveness would be compatible. In this sense, the findings support the responsive competence model. Responsive competence, however, is ambiguous about responsive to *whom*. Does it matter who are the political principals and how much control they have? The empirical findings show positive answers. The findings point to a model of "contingent competence" that the performance impact of competence is contingent on policy preferences of political principals and the level of politicization.

The findings have broader theoretical implications. First, while the fiscal performance literature has long identified politics and management as key influencing factors (e.g., Poterba 1994; Krueger and Walker 2010), the present study shows how politics may interact with management. Second, consistent with extant literature (e.g., Krause, Lewis, and Douglas 2006), the findings indicate that institutional designs matter to organizational performance. For example, institutional designs of budget agencies, such as cabinet status of budget directors, can result in varying levels of politicization and differential effects on state fiscal performance. Third, the findings add to the literature on the principal–agent model by highlighting the impact on performance of the preferences of principals, the degree of principal control, and the ability of agents.

The findings have important policy implications. To make a greater difference in performance, the competence of budget agencies must be closely integrated with the policy preferences of political principals and a high level of politicization. This suggests that both competence itself and the way it is used by political principals are important for organizational performance. For administrative competence to have a greater impact on performance, policymakers may consider increasing politicization that allows two-way interactions between political principals and administrative agents. Conversely, for politicization to shape government performance, policymakers can increase administrative competence.

The contingent competence model has both potentials and boundaries. In its present form, we have assumed that policies affect performance, policies reflect preferences of political principals, and that parties capture differences in the preferences. While we use party affiliations to capture the preferences of political principals, caution must be used in interpreting the findings to the extent that party labels may not always align with policy preferences. For instance, Shor and McCarty (2011) show that Democrats in one state (Louisiana) can be more conservative than Republicans in another (Massachusetts).

Meanwhile, with party affiliations as an indicator of policy preferences, the empirical analysis has some limits that result from the reliance on the assumption of the party–policy linkage. The empirical results support the model to the extent that party affiliations can capture policy differences among political principals. The results may underestimate the impact of policy preferences on performance if party affiliations fail to capture the variation in partisan preferences over time or across states, or if parties drift away from their preferred policies under the influences of public opinion or interest groups, or if parties move to the center in policymaking once in office (Erikson, Wright, and McIver 1989). Moreover, the literature has shown that the party–policy linkage is conditional on party constituency bases, with stronger effects when parties have class-based support (Brown 1995; Dye 1984; Jennings 1979). The availability of data on constituency bases of party support and ideological orientations of state parties over time would lead to a refined understanding of partisan effects, but such data are not available.

In addition, the contingent competence model may vary by policy area. We assume that there are multiple political principals who make different policies. While this may generally hold in the US system of separation of powers, it may not be generalizable to cases where political principals make homogenous policies. Furthermore, the model assumes that policies affect government performance, but the way of such influence may depend on policy areas. For instance, compared with operating budget, capital budgeting might be particularly vulnerable to political influences (Ermasova and Ebdon 2019; Liu and Mikesell 2014).

Conclusion

In this study, we examine how politics moderates the impact of competence on organizational performance. Synthesizing the two conventional models of neutral competence and responsive competence, we propose a third model of contingent competence. We argue that political principals can control administrative agents to make policies as they prefer, which in turn shapes organizational performance differently. The impact of administrative competence on performance is conditional on the policy preferences of political principals and the level of politicization. We find empirical support in the case of US state budget agencies, using multiple indicators of state fiscal performance.

This study opens up several avenues for future research. First, the contingent competence model can be extended by introducing other indicators of policy preferences. For example, the policy preferences could be measured by government ideology scores (Berry et al. 2010). Alternatively, governors and state legislators may prefer different policies because of the differences in constituencies (Barrilleaux and Berkman 2003). Second, future studies may explore how legislative budget agencies of varying levels of politicization and competence interact with executive budget agencies in affecting government fiscal performance. Third, future research may extend empirical tests of the contingent competence model to other policy areas or use alternative measures of agency competence or performance.

Notes

1. See appendix 1 for a detailed description of how the NASBO data are coded.
2. We acknowledge that the two measures of budget agency competence are imperfect. Had data been available, for example, one may measure the competence with indicators of average salaries of budget staff, average tenure in office, or educational backgrounds. In addition, one may interpret agency size as an indicator of capacity more than competence. While recognizing the differences between competence and capacity, for the present study, we use the two terms interchangeably.
3. Alaska and Hawaii are excluded to make the figure more readable.
4. Most state governments did not release electronic copies of CAFRs until the early 2000s. Moreover, the format of CAFRs was changed under GASB 34 issued in 1999, suggesting inconsistent standards of reporting over time.
5. In the model of general fund balance, tax revenues are scaled by own source general revenues.
6. The variable per capita *debt growth* is omitted in the model of debt level.
7. In an ordered probit model with nine categories of credit ratings, this procedure results in nine figures. Additional figures are available upon request.

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Appendix 1 NASBO Surveys and Variable Coding

In the NASBO surveys of "Budget Processes in the States," there are five variables measuring characteristics of state budget agencies.

First, NASBO asks state governments how the budget directors are appointed. The answers to this question are coded to reflect an increasing level of political influences from legislatures and governors on the appointment process. The variable *director appointment* is coded 1 when budget directors are appointed by department heads, budget boards, or through civil service systems.[1] While governors may still influence the appointments of budget directors by appointing a department head that they prefer, the gubernatorial influence is indirect in this case. When budget directors are appointed by a budgeting board or through a merit-based civil service system, governors will have further less political influence. The variable is coded 2 when budget directors are appointed by department heads with gubernatorial approval. This maintains gubernatorial influence while introducing the inputs from department heads. The variable is coded 3 when budget directors are appointed by governors alone. In this case, governors can exert their political influences exclusively. The variable *director appointment* is coded 4 when budget directors are appointed by governors with legislative consent. This represents a higher level of politicization than others because governors must negotiate with a different branch of government to appoint preferred budget directors. Therefore, as the value of *director appointment* increases, there are more opportunities for legislators, and especially governors, to exert political control.

Second, NASBO asks the term limits of state budget directors, or how budget directors can be removed from office. The answers to this question are coded to indicate an increasing level of political influence over the removal process. The variable *term limit* is coded 1 when state budget directors have tenure or are part of civil service systems. In these cases, there is minimal potential for political control over the term of budget directors. The variable is coded 2 when budget directors serve a fixed term of four years. While budget directors are protected from political control within the term, they can be removed after one term is finished. Thus, this represents a greater chance of political control. The variable is coded 3 when the term of budget directors is not specified. Without specifying the term limits of budget directors, this introduces some ambiguity in how much political control there will be over the removal of budget directors. The variable *term limit* is coded 4 when budget directors serve at the pleasure of appointing officials. In this case, the political control over the terms of budget directors are complete and explicit, and thus it indicates the highest level of politicization of the term limits of budget directors.

Third, NASBO asks state governments whether budget directors are members of the gubernatorial cabinet. The answers are coded as a binary variable *cabinet status*, with 1 indicating cabinet status of budget directors. If budget directors are cabinet members, governors would have more opportunities to exert political influences. Thurmaier and Gosling (1997) find that the frequency of interactions with the governor matter for agency budgeting performance because it influences the extent to which budget staffs are informed of policy priorities of governors. This implies that cabinet status increases the chance of two-way interactions between governors and budget staff. It provides a venue where politics meets expertise. At a minimum, cabinet status indicates a higher level of politicization of budget agencies by providing an institutionalized channel of gubernatorial political influence.

Fourth, NASBO asks state governments the level of salaries of budget directors. In most cases, the answers to this question are recorded as a range of salaries measured in US dollars. When applicable, we code the variable *director salary* using either the upper or the lower bound of the range. We test and confirm the robustness of the measurement by using either one in the model. In the main results, we use the upper bound of the range as the preferred measure of director salaries. The salaries of budget directors indicate the level of competence. Higher salaries are more likely to attract budget directors with greater expertise.

Nevertheless, some state governments may pay more to budget directors to compensate for higher costs of living. Alternatively, because of stronger local economy, some states may afford higher salaries. To remove the variation irrelevant to budget director competence, we normalize the variable *director salary* by state personal income per capita. Personal income per capita may indicate both the varying costs of living and the "ability to pay" in hiring budget directors. After the normalization, the variation in budget director salaries should better capture director competence.

Fifth, NASBO asks state governments the number of staff members in the budget function. We code the answers to this question as the variable *agency size*. As the number of staff members increases, the organizational capacity of budget agencies should increase. Nonetheless, a larger size of budget personnel may also reflect the demand of managing a larger budget. To account for this possibility, we scale the variable *agency size* with state total revenues. After the scaling, the variable measures the number of staff members in the budget function per 1 million dollars of state revenues. Everything else equal, it should take less people for a more competent budget agency to manage the same size of budget. To facilitate the interpretation, we reverse code this variable so that a larger value indicates a higher level of competence.

Notes for Appendix 1

1. There are only a few cases where budget directors are appointed by budget board or civil service systems. An alternative way is to code them as a separate category since there is much less chance for political control. The results are robust with this specification.

Appendix 2

Table A1 Variable Measurements and Data Sources

Variables	Measurements	Data sources
General fund balance	Total general fund balance as a percentage of general fund expenditure	NASBO
Budget balance	Total revenue minus total expenditure, scaled by state population and adjusted for inflation	US Census Bureau
Debt level	Total debt outstanding, scaled by state population and adjusted for inflation	US Census Bureau
Total expenditure	Total expenditure, scaled by state population and adjusted for inflation	US Census Bureau
Credit rating	An ordinal variable ranging from 1 to 9, indicating credit ratings from low to high, i.e., from BBB to AAA	Standard and Poor's
Government partisan control	A categorical variable, with 0 indicating unified Republican partisan control, 1 indicating divided government, and 2 indicating unified Democratic control	Klarner Politics
Politicization index	Average standardized scores of three variables, including budget director appointment, budget director cabinet status, and budget director term limits	NASBO
Competence index	Average standardized scores of two variables, including budget director salary per state personal income per capita and staff size of budget function per 1 million USD budget revenue, reversely coded	NASBO
Tax revenue growth	Percentage increase in proportion of tax revenues in state own source revenues	US Census Bureau
Federal aid growth	Percentage increase in federal aid to state GDP ratio	US Census Bureau
Per capita debt growth	Percentage increase in real debt outstanding per capita	US Census Bureau
TEL index	An index measuring the stringency of state tax and expenditure limits from low to high	Amiel, Deller, and Stallmann (2009)
Balanced budget requirement	An index measuring the stringency of state balanced budget requirements from low to high	The Advisory Commission on Intergovernmental Relations' (ACIR)
Per capita income growth	Percentage increase in state real personal income per capita	US Bureau of Economic Analysis
Unemployment growth	Percentage increase in state unemployment rate	US Bureau of Labor Statistics
Population growth	Percentage increase in state population	US Statistical Abstract

Appendix 3

Table A2 Summary Statistics

Variable	(1) Mean	(2) SD	(3) Min.	(4) Max.
Panel A: Dependent variable = general fund balance, debt level				
General fund balance	0.087	0.132	−0.185	1.471
Debt level	2.737	1.975	0.175	17.187
Divided government	0.578	0.494	0	1
Unified Democratic control	0.230	0.421	0	1
Politicization index	0.002	0.749	−2.865	0.961
Competence index	0.038	0.711	−1.183	6.135
Tax revenue growth	−2.073	9.309	−57.206	43.706
Federal aid growth	1.157	10.354	−146.591	149.632
TEL index	8.339	8.186	0	32
Balanced budget requirement	7.443	2.939	0	10
Per capita income growth	1.985	2.254	−13.089	26.342
Unemployment growth	−0.002	0.148	−0.418	0.633
Population growth	0.010	0.012	−0.056	0.116
N = 1,078				
Panel B: Dependent variable = budget balance, total expenditure				
Budget balance	0.314	0.983	−5.084	8.483
Total expenditure	4.646	1.627	2.128	16.073
Divided government	0.578	0.494	0	1
Unified Democratic control	0.226	0.419	0	1
Politicization index	−0.009	0.745	−1.812	0.961
Competence index	0.068	0.709	−1.043	6.135
Tax revenue growth	0.085	15.208	−62.275	109.787
Federal aid growth	1.782	10.081	−146.591	149.632
Per capita debt growth	2.617	8.562	−37.170	62.117
TEL index	8.446	8.232	0	32
Balanced budget requirement	7.444	2.939	0	10
Per capita income growth	1.924	2.271	−13.089	26.342
Unemployment growth	−0.001	0.149	−0.418	0.633
Population growth	0.011	0.012	−0.056	0.116
N = 1,029				
Panel C: Dependent variable = credit rating				
Credit rating	7.204	1.322	1	9
Divided government	0.582	0.494	0	1
Unified Democratic control	0.252	0.434	0	1
Politicization index	−0.025	0.765	−2.865	0.961
Competence index	0.039	0.711	−1.183	6.135
Tax revenue growth	−0.855	13.853	−62.275	109.787
Federal aid growth	0.986	10.742	−146.591	149.632
Per capita debt growth	2.700	8.283	−37.170	58.815
TEL index	8.185	8.027	0	32
Balanced budget requirement	7.457	2.849	0	10
Per capita income growth	1.913	2.286	−13.089	26.342
Unemployment growth	0.003	0.154	−0.418	0.633
Population growth	0.010	0.011	−0.056	0.116
N = 930				

Appendix 4

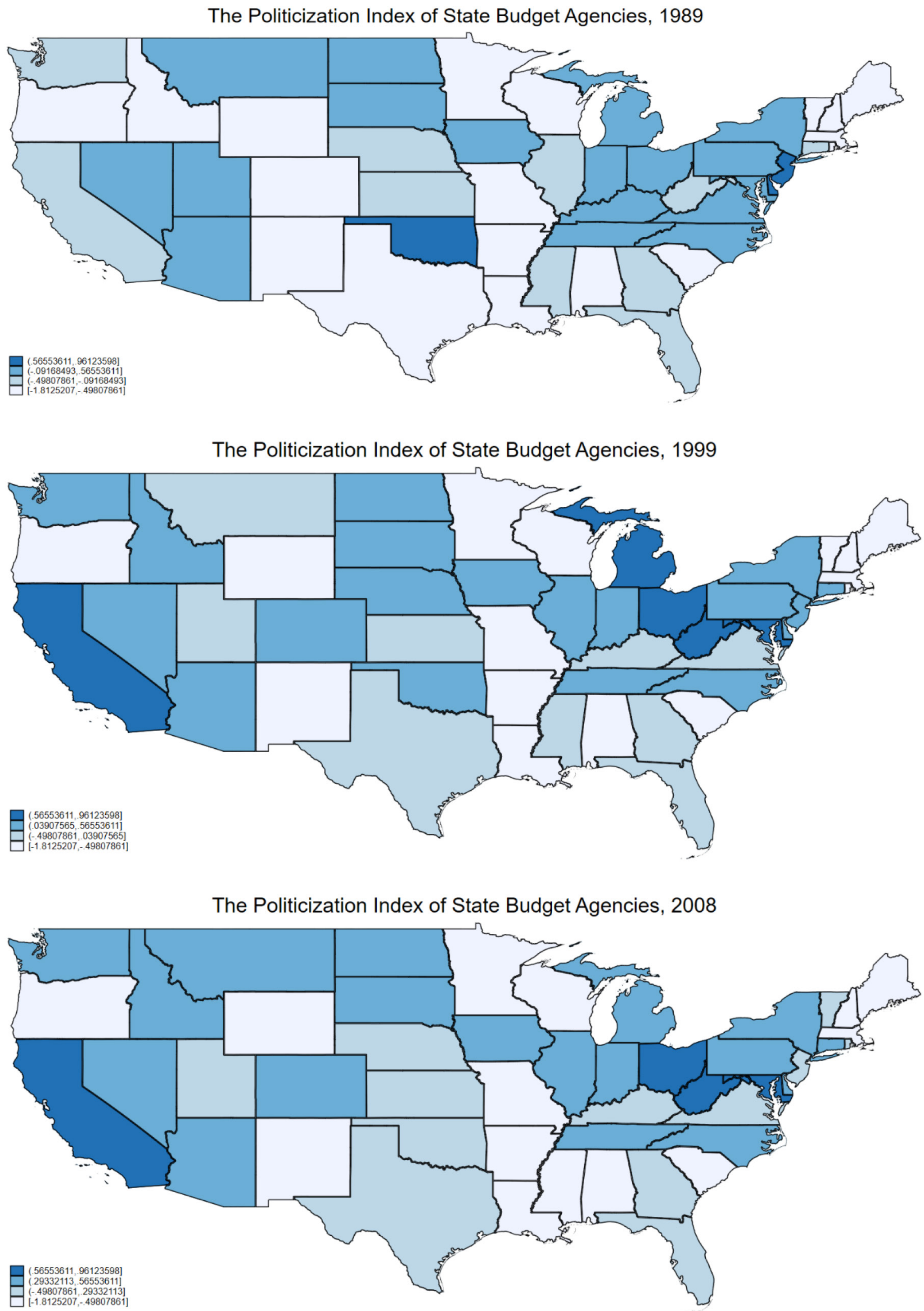

Figure A1 The Politicization Index of State Budget Agencies, 1989, 1999, and 2008

Appendix 5

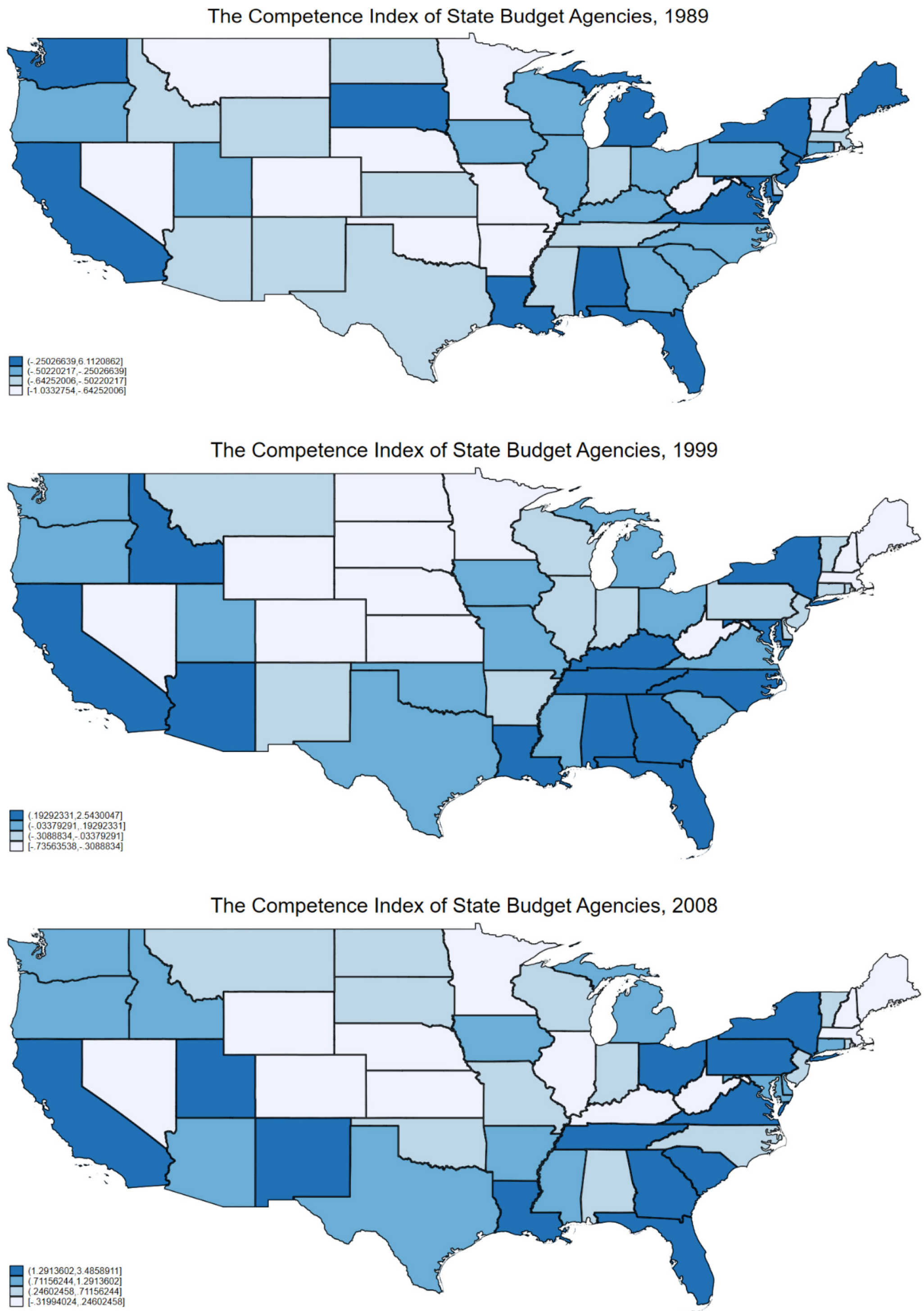

Figure A2 The Competence Index of State Budget Agencies, 1989, 1999, and 2008

Appendix 6

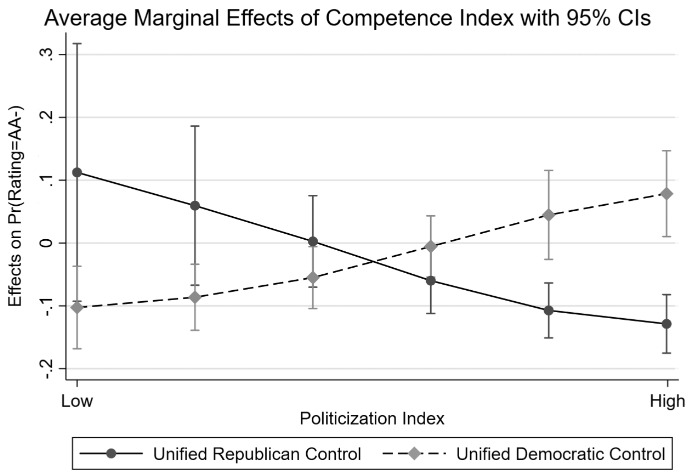

Figure A3 Average Marginal Effects of Competence on Probability of AA– Rating by Level of Politicization and Democratic Control