Bureaucracies and Budgets: Government Growth and Professionalism in U.S. State Legislatures

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ABSTRACT

This paper analyzes the determinants of professionalization in American state legislatures since the 1960s. I develop four hypotheses relating changes in professionalism to changes in two measures of government growth: bureaucracy size and expenditure levels. A panel analysis of state-level data reveals two major trends that occurred during the 1970s. First, increases in professionalism are inversely related to bureaucratic growth since agency expansion is most likely to occur in states where the legislature is unable to provide effective oversight. Second, professionalization is directly related to increases in social services spending since legislators need to devote more time to their jobs as their facilitation duties expand.
In his seminal article on the institutionalization of the U.S. House of Representatives, Polsby (1968, 164) links legislative development to the size of government: “As the responsibilities of the national government grew, as a larger proportion of the national economy was affected by decisions taken at the center, the agencies of the national government institutionalized.” In addition to begetting institutionalization, the growth of government also made Congress a more professional body.\textsuperscript{1} Salaries, session lengths, and legislative resources all dramatically increased after the Second World War. In order to deal with the increasing role of government in the economy, members of Congress needed to devote more time to their jobs and required more resources at their disposal. This paper attempts to determine if similar patterns existed at the subnational level after states gained more fiscal authority over budgets and taxation in the 1960s. I draw upon diverse theories from the Congress and federal bureaucracy literatures to answer the following question: Can changes in the professionalization of state legislatures since the 1960s be explained by measures of government growth such as bureaucracy size and expenditure levels?

Determining the causes of legislative professionalization in the states is an important research question given that professionalism has been used as an independent variable to explain myriad political outcomes including: divided government and partisan composition (Fiorina 1994; Squire 1997; Stonecash and Agathangelou 1997), interest group activity (Berkman 2001), membership diversity (Squire 1992), policy responsiveness (Maestas 2000), gubernatorial effectiveness (Dilger, Krause, and Moffett 1995), incumbent reelection (Berry, Berkman, and Schneiderman 2000), congressional candidacies (Berkman 1993; Berkman 1994; Berkman and Eisenstein 1999), and
membership stability (Squire 1988). There is a need to develop our understanding of why state legislatures have become more professional, a phenomenon that has had an impact on various aspects of state government ranging from public policy outputs to election results.

However, there exist only a few studies that have analyzed the determinants of professionalism. Previous research has attempted to explain the tendency towards professionalization from various methodological angles. Historians point to the pressure imposed by reform advocates who saw the state chambers as ineffectual and unable to deal with the needs of the citizenry. In contrast, legal scholars principally attribute the trend towards professionalism to the Supreme Court’s decisions in *Baker v. Carr* (1962) and *Reynolds v. Sims* (1964), which diminished malapportionment (and consequently the power of rural regions to keep legislatures unprofessionalized). However, more recent studies by political scientists (King 2000; Mooney 1995) argue that professionalization is a willful policy output. In other words, a legislature decides to professionalize in the same way it decides to pass health care, education, or economic policies. Consequently, these scholars look to the variables of the state policy literature in building their empirical models. According to this approach, economic factors, social and demographic trends, institutional structures, and the policies of neighboring states best explain the increase of professionalism since 1960 (Berry and Berry 1990; Gray 1973).

While professionalism may indeed be a strategic choice, there are two main deficiencies with previous empirical tests of the “willful policy” theory. First, simply borrowing the explanatory variables of state policy studies may be insufficient. While there may exist relationships between professionalization and broad socioeconomic
indicators (e.g. population, heterogeneity, wealth), they may be confounded by more subtle institutional features. As a result, the findings of previous studies of professionalization by political scientists may be spurious. Second, “willful policy” explanations fail to provide a political mechanism linking state characteristics to professionalism. If professionalism is truly a policy output, then it is necessary to consider the strategic decisions of the legislature as well as its interaction with other government branches. This study attempts to advance our understanding of professionalism in state legislatures by building and testing theories of institutional development based upon previous work on Congress and the American bureaucracy. By considering the legislature’s strategic response to changes in the bureaucracy and budgets, this paper strives to remedy the two main shortcomings of the “willful policy” approach. Underlying this analysis is Polsby’s fundamental tenet: as the government does more, the legislature must become more complex and its members more professional.

Using the population of American states, I empirically test four hypotheses of legislative professionalization using two-wave panel analyses. The first two hypotheses are based on the idea of deliberate discretion, developed by Huber and Shipan (2002) in their book of the same name. Legislatures that are unprofessionalized (i.e. have low capacities)[4] are unable to craft complex legislation, thereby ceding discretion to bureaucrats. Hypothesis One (H1) treats professionalization as a means by which legislatures can oversee the bureaucracy. As the size of the state bureaucracy becomes larger (via government expansion), the legislature should strategically increase its capacity (via professionalization) in order to provide oversight. Hypothesis Two (H2), which views a state’s level of professionalism as a given asset/handicap, predicts exactly
the opposite effect. *Autonomous bureaucracies* will be able to expand when the legislature is unable to provide effective oversight. Hence, the states where professionalism has decreased should be precisely those where the bureaucracy has become larger.

The next two hypotheses deal with the legislature’s strategic response to changes in state expenditure levels. Hypothesis Three (H3) is based upon Cox and McCubbins’s (1993, 3) concept of *legislative cartels*, which the authors define as an association of legislators able to “usurp the power…to make rules governing the structure and process of legislation.” One purpose of such cartels is to distribute pork-barrel projects to the districts of individual members. In order for cartels to develop and logrolling to take place, legislators need repeated interaction with one another so that trust can be built and defection prevented. One way to ensure repeated interaction is through professionalization. Thus, increases in capital expenditures for infrastructure projects should be associated with increases in legislative professionalism. Finally, Hypothesis Four (H4) builds on Fiorina and Noll’s (1978a, 1978b) argument that legislators serve as *ombudsmen to the bureaucracy* on behalf of their constituents. Congressmen are able to build a personal vote by performing various services such as tracing lost Social Security checks and misplaced disability claims. Consequently, as spending on social services increases, the legislature must professionalize so that members can devote enough time to effectively serve as ombudsmen.

These four hypotheses are tested via two sets of panel analyses of four legislative sessions across ten-year intervals: 1963-64, 1973-74, 1983-84, and 1993-94. The hypotheses are operationalized with historical state employment and expenditure data.
The regressions incorporate the variables of the “willful policy” approach as statistical controls, thereby checking the robustness of previous findings. The paper is organized as follows. In the first section, I develop the theoretical bases for the hypotheses to be tested. The following section describes the components of the empirical model and statistical methods. The results of the panel analysis are presented and analyzed in the third section. The final section concludes by discussing implications and possible extensions.

I. Professionalism and Government Growth: A Theory of Legislative Development

This section presents the four hypotheses in greater detail and the theoretical arguments underpinning them. In totality, the hypotheses present a model of professionalism that argues that legislative development is related to the increasing role of government in the economy and society.

Deliberate Discretion vs. Bureaucratic Autonomy

In their praised study of legislative-bureaucratic interaction, Huber and Shipan (2002, 16) argue that “low levels of legislative professionalism in the states…make it more difficult, all else equal, for legislative majorities to include policy details in legislation.” Consequently, it is difficult for states with unprofessionalized legislatures, or those with low capacities, to effectively oversee bureaucratic agencies. Due to the high costs of writing detailed legislation, they have no choice but to grant high discretion to bureaucrats. This argument produces two competing hypotheses of the relationship between professionalism and the size of the bureaucracy: deliberate discretion (H1) and bureaucratic autonomy (H2). According to H1, the legislature will strategically increase its capacity in response to a growing bureaucracy in order to reduce the costs of
oversight. In contrast, H2 views the level of professionalism as exogenous. Agencies will take advantage of states with low capacity legislatures and autonomously expand. Because the second hypothesis assumes that the capacity level is unresponsive, H2 predicts bureaucratic growth to be associated with low levels of professionalization.

In order to demonstrate the rationale behind these two hypotheses, I adapt the spatial model developed by Huber and Shipan (2002, 99). Figure 1a depicts a one-dimensional policy space with the ideal points of the legislature (\(L^*\)) and the bureaucratic agency (\(B^*\)). I assume that the legislature passes policies at its ideal point but that the bureaucracy has the ability to move policy outcomes towards its own ideal point via implementation (from \(L^*\) to \(B_i\)). This assumption is plausible given that bureaucrats benefit from high levels of information about their specific policy areas and significant control over how government agencies implement legislation. As the bureaucracy grows in size, it becomes difficult for the legislature to provide oversight and the agency is able to move the policy further from \(L^*\) and closer to \(B^*\) (from \(B_1\) to \(B_2\) in Figure 1a).\(^6\) The legislature prefers to minimize the distance between the final policy position and its ideal point; hence, its utility is represented by \(L^* - B_i\) and is maximized at 0 when \(B_i = L^*\). The legislature can achieve this outcome and prevent bureaucratic discretion by writing detailed legislation. The cost of such oversight is represented in the spatial model by \(c_i - L^*\) and is inversely related to a legislature’s level of professionalism. Therefore, a legislature with a cost basis at \(c_1\) has less capacity than one with a cost basis at \(c_2\). Accordingly, the legislature will provide low discretion only when oversight costs are less than its policy disagreement with the bureaucracy (i.e. \(B_i - L^* > c_i - L^*\)).

[FIGURE 1 ABOUT HERE]
For example, assume the bureaucracy is small and that it is only able to move policy from $L^*$ to $B_1$. Additionally, assume that the legislature’s cost level is at $c_1$. In this case, the legislature will decide to provide high discretion and not write detailed legislation given that $B_1 - L^* < c_1 - L^*$. The legislature’s resulting utility level is $L^* - B_1$.

Now suppose that the bureaucracy grows in size and it is able to move policy from $L^*$ to $B_2$. In this circumstance, the legislature will provide low discretion because the cost of writing detailed statutes is less than its policy differential with the bureaucracy ($B_2 - L^* > c_1 - L^*$). Notice that the legislature now has less resulting utility after bureaucratic growth ($L^* - c_1 < L^* - B_1$). However, the legislature can increase its utility by lowering its oversight cost basis from $c_1$ to $c_2$ (i.e. becoming more professional). If professionalization is assumed to be a strategic decision, then a legislature will professionalize in order to provide “cheaper” oversight over a growing bureaucracy. This leads to the statement of the first hypothesis:

Hypothesis One (Deliberate Discretion): As the size of the bureaucracy becomes larger, the legislature will increase its capacity to provide oversight by professionalizing. (H1)

Under H1, it was assumed that the legislature was able to adjust its level of professionalism in response to bureaucratic growth. However, it may be that the legislature does not exhibit such a high level of responsiveness. In fact, the bureaucracy may be able to take advantage of unprofessionalized legislatures in the short run by increasing its size through internal hiring and interest group coordination. Figure 1b
illustrates this argument. As in Figure 1a, the ideal points of the legislature and the bureaucracy are indicated by $L^*$ and $B^*$, respectively. In contrast to the previous model, assume that the legislature’s cost basis (and level of professionalism) is fixed at $c_1^*$. The legislature will allow a high amount of discretion if $B_i$ is between $L^*$ and $c^*$ since it is in this region where the costs of writing detailed legislation are greater than the policy differential. Consequently, the bureaucracy has the incentive to increase its size and move from $B_1$ to $B_3$, thereby reducing the distance between the policy outcome and its ideal point. It will not expand in size beyond $c_1^*$ because that will cause the legislature to write a detailed statute and move the policy back to $L^*$. In order to demonstrate the comparative statics, consider a more professionalized legislature whose cost basis is at $c_2^*$. In this case, the bureaucracy will only be able to grow enough to move the desired policy to $B_2$. This inverse relationship between professionalism and bureaucracy size is summarized in the second hypothesis:

**Hypothesis Two (Bureaucratic Autonomy): Bureaucratic growth will be most rapid in states where the legislature does not have the capacity to provide effective oversight.** (H2)

H1 and H2 have the exact opposite empirical implications. A positive/negative relationship between bureaucratic growth and professionalism provides support for H1/H2. In reality, the direction of the causal arrows is very difficult to determine in studies of political economy. It may be that H1 and H2 are not mutually exclusive; both the legislature and bureaucracy may be strategically responding to each other. However,
in order to make *ceteris paribus* conclusions, each hypothesis assumes that one branch is the initiator of change (i.e. is driving the public policy output). A strong empirical association in a particular direction may indicate that one of the effects (either deliberate discretion or bureaucratic autonomy) is much stronger than the other. The problem arises when there is a non-finding. An insignificant relationship between bureaucratic growth and professionalism could mean that neither H1 nor H2 is true or, alternatively, that both of them are true and simply offset each other.

**Cartel Builders and Ombudsmen to the Bureaucracy**

The next two hypotheses deal with the relationship between professionalism and two types of public spending: capital expenditures and social service programs. If changes in professionalism are associated with an increase in capital spending, it may indicate that professionalization is a means of building legislative cartels. Professionalization may also make it easier for legislators to serve as ombudsmen to the bureaucracy. In this instance, a positive relationship should also be found between increases in professionalism and growth in social services expenditures.

I will begin by introducing the idea of a *legislative cartel*, which Cox and McCubbins (1993) define as a group of legislators able to control the legislative process via structures and rules. They argue that majority parties can form such cartels and use committees to prevent cheating in the legislative market. Although their theoretical and empirical analyses primarily concern the House of Representatives, they are easily transferable to state legislatures. Two assumptions need to be added to Cox and McCubbins’ “cartel theory” in order to build the third hypothesis. First, cartels can be more easily built in professionalized legislatures. If members spend more time on the job,
then it provides party leaders with more opportunities to develop a committee structure and enforce rules. Moreover, professionalization increases the value of seats, making punishments by party leaders more effective. The second assumption presumes that cartels become more valuable as capital expenditures increase. Monopolizing legislative power allows the cartel to facilitate profitable activities such as logrolling. The greater availability of pork (through a growing state infrastructure) makes logrolling, and therefore cartel building, more attractive. Combining these two assumptions produces the third hypothesis. States with rapidly increasing capital expenditures (i.e. more valuable cartels) will professionalize in order to more easily build those cartels.

These ideas are illustrated in Figure 2. I assume a monotonically increasing relationship between capital expenditures \( e \) and optimal cartel size \( c^* \) \( (\partial c^*/\partial e > 0) \) as shown in Figure 2. This assumption is based on a legislature’s utility being a function of its cartel size \( c \). It is not unreasonable to presume that this utility function is quadratic and concave (i.e. it is costly to overbuild a cartel) and that the benefits of a given cartel size are multiplicative with the expenditure level:

\[
U_L(c) = ec - c^2
\]

It is trivial to demonstrate that \( c^* \) (where \( \partial U_L / \partial c = 0 \)) increases with \( e \). Returning to Figure 2, suppose there is an exogenous increase in capital expenditures from \( e_1 \) to \( e_2 \). This enlarges the size of the optimal cartel from \( c_1^* \) to \( c_2^* \) since the added pork increases the utility of building a larger cartel. Figure 2 also shows the level of professionalism required to develop a cartel of a certain size. In order to move from \( c_1^* \) to \( c_2^* \), the legislature must raise its level of professionalism from \( p_1 \) to \( p_2 \). As the size of the optimal cartel gets bigger in response to increases in capital expenditures, the legislature must
professionalize in order to achieve the optimal cartel size. Hence, the third hypothesis to be tested is:

Hypothesis Three (*Legislative Cartels*): *As the state develops its infrastructure through capital expenditure, the legislature will professionalize in order to form cartels designed to secure pork barrel spending for individual districts.* (H3)

The fourth and final hypothesis deals with the impact of the expansion of social services on professionalization and is rooted in Fiorina and Noll’s (1978a, 1978b) conception of legislators as *ombudsmen to the bureaucracy*. In addition to drafting and voting on public policies, legislators serve their home constituencies by providing facilitation services. For example, the legislator can help a constituent track down a lost Social Security check or provide information on applying for disability claims. Legislators have a near-monopoly on facilitation; there exist no other means by which citizens can expedite bureaucratic processes. If the amount of public assistance increases or if more bureaucratic agencies are created, then the ombudsman role expands. Legislators will be required to spend more time on the job in order to better serve their constituents as facilitators. Consequently, the legislature will need to professionalize in order to meet the demands of a rapidly increasing public service sector.

The reelection incentive also plays a role in a legislature’s responding to social service growth by professionalizing. Fiorina and Noll (1978a, 257) argue: “As the public bureaucracy grows larger, the importance of the performance of facilitation will grow,
and a legislator who is a good facilitator will be increasingly likely to be reelected.”

Because citizens will be unlikely to vote for challengers who have no facilitation experience, legislators will professionalize in order to become better ombudsmen. Fiorina and Noll’s argument is also related to H1 since an expansion of social services is associated with a growth in bureaucracy. As the number and size of agencies increase, legislators will be required to serve as more professional bureaucratic facilitators. However, the fourth hypothesis specifies the precise type of bureaucratic growth associated with the ombudsman role—that which is tied to expansion in social services and public assistance. Finally, a direct association between professionalization and social services growth may also be due to an increase in the demand for public goods. As citizens demand more from government, whether through exogenous demographic changes or transformations in policy preferences, a legislature will professionalize in order to better develop and manage public good programs.

Fiorina and Noll (1978b) formalize this logic and develop interesting comparative statics. As mentioned earlier, they find a positive relationship between facilitation services and the production of public goods. However, an exogenous shift in income or technical progress in producing public goods will result in a further expansion of the bureaucracy and facilitation activities. The authors conclude (245): “Growing bureaucracy and increasing provision of facilitation services, then, can be expected in a growing economy, even if it operates efficiently.” Thus, as the economy expands and the government performs a larger role in its management, a legislature should professionalize in order to meet the increasing demands of facilitation. The empirical analysis that follows tests whether economic expansion following the Second World War had such an
effect in the American states. Like the empirical implications of the previous theories, it is difficult to precisely determine the causal directions of the relationships at work. Nevertheless, the idea that legislators serve as ombudsmen to the bureaucracy serves as a convincing theoretical basis for the final hypothesis:

Hypothesis Four (Ombudsmen to the Bureaucracy): As the state provides more public assistance to its citizens, the legislature will professionalize so that members can serve as better ombudsmen to social service bureaucracies on behalf of their constituents. (H4)

II. Professionalism and Government Growth: An Empirical Test

In addition to developing a theory of state legislative professionalization, this paper tests an empirical model of the four hypotheses described in the previous section. Historical figures on state bureaucracy size are used to operationalize H1 and H2, while state expenditure data is used for H3 and H4. Control variables of the “willful policy” literature (King 2000; Mooney 1995) are also included in the regression analysis. In this section, I discuss the methodology of the statistical tests, the measurement of the dependent variable (professionalism), and the specification of the model. Measurement of the variables as well as sources of data are provided in the appendix.

Model

Following previous empirical studies of professionalization in state legislatures, two series of two-wave panels will be estimated via ordinary least squares (OLS) regression analysis. The first series (Series One) will analyze the change in
professionalism between 1963-64 (the first legislative session after the *Baker* decision) and three other legislative sessions: 1973-74, 1983-1984, and 1993-94. Ten-year intervals are long enough to allow for institutional change yet short enough to measure precise historical movements. The second series of panels (Series Two) will examine the change between the individual ten-year periods: 1963-64 to 1973-74, 1973-74 to 1983-84, and 1983-84 to 1993-94. Hence, the Series One and Two regressions will be exactly the same for the 1973-74 panel. Since the primary goal is to understand what caused the *change* in professionalism levels between two time periods (*t* and *t-1*), the independent variables are specified as the difference in the variable between two time periods (*X_t - X_{t-1}*). However, as noted by King (2000), the dependent variable cannot be specified as *Y_t - Y_{t-1}* (as in standard “difference-difference” models) since there is dependence between the change value and *Y_{t-1}* (Bohrnstedt 1969; Markus 1979, 45-48). Instead, the dependent variable is defined as *Y_t* and *Y_{t-1}* is included in the model as a lagged dependent variable. This allows us to determine how much the change in dependent variable from *t-1* to *t* is due to changes in the independent variables.

Hence, the empirical model for the Series One panel analysis is formally stated as:

\[ P_{it} = \beta_0 + \beta_1 P_{i0} + \beta_2 B_i + \beta_3 C_i + \beta_4 S_i + \gamma X_i + \varepsilon_i \]

where *P_{it}* represents the professionalism of state *i* in time period *t* (1973-74, 1983-84, or 1993-94), *P_{i0}* represents the professionalism of state *i* in 1963-64, *B_i* represents the change in the size of the bureaucracy of state *i* between 1963-64 and *t* (H1 and H2), *C_i* represents the change in the capital expenditures of state *i* between 1963-64 and *t* (H3), *S_i* represents the change in the social services expenditures of state *i* between 1963-64 and *t* (H4), *X_i* represents a vector of changes in economic, social, and institutional control.
variables between 1963-64 and $t$ (“willful policy” hypothesis),\textsuperscript{10} and $\varepsilon_i$ represents the error term. The Series Two model is specified as:

$$P_{it} = \beta_0 + \beta_1 P_{it-1} + \beta_2 B_i + \beta_3 C_i + \beta_4 S_i + \gamma X_i + \varepsilon_i$$

with the difference being that the lagged dependent variable is the professionalism level at time period $t-1$ (e.g. 1983-84 for the 1993-94 panel) and the independent variables are the changes in bureaucracy size, expenditures, and the controls between $t$ and $t-1$.

**Measuring Professionalism**

Measuring a legislature’s level of professionalism is difficult because there is no obvious or direct statistic that can quantify this qualitative property. Within the expansive literature mentioned earlier, legislative professionalism has been measured in a myriad different ways. However, most scholars agree that professionalism consists of three principal attributes: compensation, the amount of time spent on the job, and the amount of resources available to the member (e.g. staff, operating budgets, etc.) Given this foundation, there are several legitimate ways to proceed. Fiorina (1994), for instance, simply includes compensation and days in session as continuous explanatory variables. Bowman and Kearney (1988) utilize factor analysis to construct and index based upon the complexity of rules and committee systems.

According to Mooney (1994), Squire’s (1992) professionalism index is most appropriate for cross-time comparisons and consequently will be utilized in this analysis. Squire uses the United States Congress, the most professionalized body in the world, as a baseline against which to compare state legislatures. The index ($P_i$) is constructed as:

$$P_i = \left(\frac{C_i}{C_c}\right) + \left(\frac{S_i}{S_c}\right) + \left(\frac{R_i}{R_c}\right) * 100$$
where $C_i$, $S_i$, and $R_i$ represent the compensation, session lengths, and legislative expenditures per member\textsuperscript{11} for each state legislature $i$, respectively. $C_c$, $S_c$, and $R_c$ represent the same measures for Congress. Hence, the Squire index essentially measures the professionalism of each legislature as a percentage of Congress’ level of professionalism (out of 100) across three generally accepted characteristics.\textsuperscript{12} Unlike measures that employ factor analysis or use raw statistics, the Squire index utilizes a common standard by which to study changes across time. The state professionalism scores for the four legislative sessions to be analyzed have been computed by King (2000). As one might imagine, the various measurement techniques of professionalism are highly correlated with one another, providing comfort that the results are not solely an artifact of the index used.\textsuperscript{13}

**Dependent Variables: Operationalizing the Hypotheses**

The purpose of this empirical analysis is to test the theory that features of government growth (e.g. expansion of the bureaucracy and state budgets) are related to changes in legislative professionalism. Consequently, the explanatory variables of the four hypotheses must be operationalized. Both H1 and H2 argue that changes in the size of the state bureaucracy should be associated with professionalism. Consistent with previous studies (Mooney 1995), bureaucracy size is measured as the number of public sector employees working for the state and local governments.\textsuperscript{14} Including this statistic in the regression model will test for both H1 and H2, adjudicating between the two competing theories. State expenditure data is used to test H3 and H4, which contend that increases in government spending should be associated with professionalization. Capital expenditures (H3) are operationalized by summing the state’s natural resources and
highway expenditures since it is these line items that are most associated with pork-barrel projects. Social service expenditures (H4) are proxied by the state’s spending on education, public welfare, hospitals, health, and employment services since these programs are most associated with ombudsman activities. Thus, three variables are included in the regression model in order to test the four hypotheses presented in the first section. As explained in the next section and the appendix, state population is included as a control and all figures are adjusted for inflation.\textsuperscript{15}

**Control Variables: The “Willful Policy” Approach**

The aim of this paper is to compare an institutional theory of professionalization against the “willful policy” hypothesis, which contends that broad socioeconomic trends are responsible for changes in legislative professionalism. Therefore, the regression analyses will use the specifications of Mooney (1995) and King (2000) as control variables. The “willful policy” approach suggests three categories of variables that influence professionalism: socioeconomic factors, structural characteristics, and regional attributes.

Changes in three major socioeconomic variables are included in the panel analysis: population, heterogeneity, and wealth. As a state’s population grows over time, the complexity of its needs and issues also increases, thereby requiring a more professional legislature able to devote more time to governance. Similarly, as the citizenry becomes more diverse and heterogeneous, the legislature is required to serve many different groups, necessitating professionalization. Finally, as a state becomes wealthier, it has more resources to devote towards increasing the professionalism and complexity of its legislature. Moreover, an expansion of wealth also means that
government is able to engage in more economic activity, requiring legislators to devote more time to their jobs.\footnote{16}

Mooney (1995) and King (2000) also include various structural features of state government in their specifications that could theoretically have an impact on professionalization including: restrictions on session length, gubernatorial power, malapportionment, and opportunities to advance. The session lengths of some legislatures are restricted by statutory or constitutional provisions. In these states, professionalism levels are limited by law. If a restriction is lifted between $t-1$ and $t$, then the legislature has an opportunity to meet more often, opening a floodgate for professionalization. Additionally, an expansion of gubernatorial power could cause the legislature to become more professional in order to ensure that it can provide an effective check against the executive branch. Power can be expanded in a variety of areas including appointments, vetoes, budget making, and length of tenure. As explained earlier, the failure of many states to professionalize prior to the \textit{Baker} decision in 1962 may have been due to high levels of malapportionment. Malapportioned legislatures dominated by rural interests stymied professionalization in hopes of maintaining limited government intervention. Hence, the higher the amount of malapportionment prior to 1962, the greater the degree of professionalization post-\textit{Baker}.\footnote{17} Finally, professionalized legislatures should exist in states where there are many opportunities to advance to higher office. These statehouses serve as training grounds for career politicians hoping to move up the occupational ladder. Therefore, an increase in the number of higher offices should also be associated with professionalization.\footnote{18}
Regionalism may also affect a state’s path towards professionalization. According to studies of state policy (e.g. Berry and Berry 1990; Gray 1973), states often emulate their neighbors. One state may copy a successful policy of another state within its same region because it sees itself as having the same characteristics and interests. States with professionalism levels most different from their neighbors should eventually move towards the regional average. Consequently, there should be a positive relationship between a state’s regional professionalism difference in time period $t-1$ and its professionalism score in $t$. Lastly, previous studies have found that Southern states often display unique characteristics (King 2000; Mooney 1995; Morgan and Wilson 1990). As a result, a dummy variable for the twelve Southern states will be included in the regression model.

III. Results

The estimates of the panel analyses for Series One and Two are presented in Tables 1 and 2, respectively. Examining Series One first, none of the dependent variables (save the lagged professionalism score) have a significant effect on professionalism in 1973-74 although the signs of most of the coefficients are in their expected theoretical directions. Thus, the results from the 1973-74 panel lend little support to any of the four hypotheses discussed in the second section. As King (2000, 337) explains: “This may reflect a more general, across-the-board increase in legislative professionalism in the first decade of the reform movement.” Since all states were professionalizing uniformly, the effects of socioeconomic and institutional variables wash out.
By the 1983-84 legislative session, these variables begin to have an effect on professionalism. As shown in the second column of Table 1, strong empirical support is found for H2 (bureaucratic autonomy) and H4 (ombudsmen to the bureaucracy). The change in the size of the bureaucracy is found to be inversely associated with professionalism; an increase of 10,000 state and local employees between 1963-64 and 1983-84 decreases the index score by 1.39. In states that became less professionalized (as measured by the Squire index), the bureaucracy took advantage of low oversight and was able to expand. These findings dispute the prediction of H1 (deliberate discretion), which concluded that the legislature would respond to bureaucratic growth with professionalization. Thus, Huber and Shipan (2002) are correct to treat capacity as exogenous; it is difficult for the legislature to strategically respond to the bureaucracy.

Moreover, there is a large, positive relationship between the change in social services expenditures between 1963-64 and 1983-84 and the professionalism score. In fact, the coefficient estimate has a higher t-statistic than the one for the lagged dependent variable. A billion dollar increase in public assistance spending is associated with an increase of 3.78 of the professionalism index. These results confirm H4, which predicted that as spending on social services expanded (along with the ombudsman role of the legislator), the legislature would have to become more professional so that members could meet the needs of facilitation. Similar patterns are found for the predicted relationship between capital expenditures and professionalism (H3) but the estimate does not achieve conventional levels of statistical significance. Hence, the panel analysis for 1983-84 finds weak support for the legislative cartel theory, which argues that the expansion of pork barrel projects increases the incentive to professionalize.
Another interesting result of the Series One 1983-84 panel is that only one of the variables of the “willful policy” approach emerges as statistically significant predictor of professionalism. Socioeconomic factors (heterogeneity, wealth), structural features (session length restrictions, opportunities to advance, apportionment fairness, gubernatorial power), and regional characteristics are found to have no impact on professionalism. When controlling for bureaucracy and budgets, only the change in state population is found to have a significant impact on professionalism. This is not to say that the concept of the “willful policy” approach is incorrect. Professionalization may still be a conscious choice. However, if the legislature is indeed behaving strategically, then it is important to empirically and theoretically consider its responses to exogenous changes in government growth.

The results of the 1993-94 panel are consistent with those just discussed. As shown in the third column in Table 1, strong empirical support is found for H2 and H4. The estimated coefficient for the change in bureaucracy size is negative and significant, while the one for the change in social services expenditures is positive and significant. Similar to the 1983-84 panel, H1 is rejected and only weak support is found for H3. Finally, all but one of the control variables of the “willful policy” approach are found to be statistically insignificant. A positive relationship is found between an increase in opportunities for political advancement and professionalism.

Although the Series One panels provided support for H2 and H4, it would be helpful to determine during which ten-year intervals these effects were strongest. The Series Two panels analyses provide such answers by regressing the changes in the explanatory variables between $t-1$ and $t$ on professionalism in $t$. As mentioned earlier, the
specifications of the 1973-74 panel are the same for the two series. None of the variables were found to have a significant impact on professionalism due to the universal changes occurring in state legislatures in the 1960s. However, as shown in the second column of Table 2, changes in bureaucracy size and social services spending had a significant effect on professionalism between the 1973-74 and 1983-84 legislative sessions. As illustrated in the third column, these two variables have no significant impact on professionalism in the 1993-94 panel. In fact, three variables of the “willful policy” approach emerge as significant predictors of professionalism in 1993-94: changes in restrictions on session length, the regional professionalism differential, and changes in opportunities to advance.

Therefore, I conclude that the institutional behavior predicted by H2 and H4 most likely occurred between 1973-74 and 1983-84. During the sixties, broad institutional trends were primarily responsible for the professionalization of state legislatures. In contrast, structural and regional changes were the most important influences on professionalization in the eighties. By the 1993-94 session, the effects of the bureaucracy and budgets had already been incorporated into professionalism levels. As Rosenthal (1996, 173) argues, professionalization was “well underway or substantially achieved in the 1980s.” However, it was during the seventies that the impact of government growth on professionalism was most acute. The difference between states that implemented moderate reforms as opposed to those that rapidly professionalized was most likely due to the varying roles subnational governments played in the state economies.

The empirical analyses produce six major conclusions about the determinants of state legislative professionalism:
1. Historical data refute H1, which contends that the legislature professionalizes in order to provide oversight over a growing bureaucracy.

2. The data fail to reject H2, which predicts that growing bureaucracies are most likely to be found in states with less professional bodies where legislators do not have the capacity for oversight.

3. H3, which posits a positive relationship between capital expenditure growth and professionalization, is rejected due to weak empirical support. The attractiveness of legislative cartels does not seem to affect a legislature’s decision to professionalize.

4. The statistical evidence fails to reject H4, which argues that increases in public assistance should be associated with professionalization. The growing importance of ombudsmen/facilitation activities necessitates a higher level of professionalism.

5. The legislative behavior predicted by H2 and H4 are at work between the 1973-74 and 1983-84 sessions. Before 1973, the trend of across-the-board professionalization wipes out any specific institutional explanations. After 1983, the effects of government growth were already incorporated into professionalism levels.

6. Across time, broad socioeconomic indicators seem to be unrelated to professionalization trends. Previous research that found significant relationships may suffer from omitted variable bias.

IV. Conclusion

This paper argues that professionalism in American state legislatures is the byproduct of institutional features. Specifically, professionalism levels are the consequence of the government’s role in the economy, which is represented by metrics.
such as bureaucracy and budget sizes. Building on previous theories of the U.S. Congress and the federal bureaucracy, four hypotheses regarding legislative professionalization were constructed. Panel analyses found substantial empirical support for two: H2 and H4. First, increases in professionalism are found to be inversely related to bureaucratic growth since agency expansion is most likely to occur in states where the legislature is unable to provide effective oversight. Second, professionalization is directly related to increases in social services spending since legislators need to devote more time to their jobs as their facilitation duties expand.

With these findings as a starting point, there are several prospects for future research. While this analysis does present clear positive theories of political institutions, the empirical models are agnostic about the precise causal directions. Statistical relationships provide evidence for, yet do not definitively prove, the previously stated theories of legislative development. The four hypotheses treat government growth as exogenous. Yet, the legislature does play an important role in creating bureaucracies and passing budgets. Although it is correct to treat the rapid changes in government and the economy following World War II as external to the model, the phenomenon of professionalization is more likely a feedback process than a direct causal chain. Nevertheless, this paper does lay the groundwork for building a comprehensive theory of legislative professionalization, a literature that is underdeveloped despite the many studies dealing with the effects of professionalism.

One relationship that may resemble a feedback loop is the one between professionalism and spending. H3 and H4 argued that increases in expenditures created both the incentive and the need for professionalization. However, there are reasons to
believe that a potential consequence of increased professionalism is even more spending. Professional politicians have a greater reelection incentive since the monetary benefits and powers of their positions are much greater than those of citizen legislators. Moreover, because they are not employed outside of state government, professionals have more to lose when faced with the possibility of being defeated. Consequently, they are more likely to engage in pork barrel spending intended to secure electoral support from constituents (in the form of votes) and interest groups (in the form of campaign contributions) in their districts.

In conclusion, this study underscores the great potential of using the population of American states in developing and testing theories of political institutions. While Polsby (1968) was able to intuit the potential causes of Congress’ institutionalization, general hypotheses cannot be tested with single observations. However, comparatively analyzing fifty microcosms of the national legislature can provide insight not found by analyzing Congress in isolation. This analysis finds significant relationships between state legislative professionalization and two metrics of government growth: bureaucracy size and social services spending. Considering the similarities between the federal and subnational governments, it is possible that the change in Congress’ level of professionalism is affected by these variables as well. More broadly, the intent of this paper is to examine why institutions change. In the case of state legislatures, professionalization seems to be both a response to and a consequence of government’s changing role in society.
APPENDIX: Measurement of Variables and Sources of Data

**Dependent Variable.** The professionalism scores for the four cross-sections are taken from Table 1 of King (2000, 331). Due to the lack of accurate historical data, King replaces staff per member with mean annual expenditures for the legislative branch (excluding legislator compensation) per member in constructing the Squire (1992) index. Measurement techniques and data sources for the three components of the professionalism index can be found in the original article (338-339).

**Independent Variables.** *Bureaucracy size* is the number of state and local public employees in tens of thousands. Local figures are included because state governments often exert considerable control and influence over localities. *Capital expenditures* is the amount of money budgeted for highways and natural resources in billions of dollars. *Social services expenditures* is the amount of money budgeted for health, hospital, education, public welfare, and employment security in billions of dollars. All expenditures figures are adjusted for inflation using the Consumer Price Index (1964=100). All data is taken from *The Book of the States* for each of the four cross-sections: 1964, 1974, 1984, and 1994 (Council of State Governments, various years).

**Control Variables.** *Population level* is the natural log of state population in thousands for 1964, 1974, 1984, and 1994 and is taken from *The Book of the States* (Council of State Governments, various years). *Population heterogeneity* is the Sullivan index of diversity, which measures the probability that two randomly selected individuals from a state differ along various demographic characteristics. Index scores from 1960 and 1980 are taken from Morgan and Wilson (1990) while scores from 1970 and 1990 were generously provided by James D. King. *State wealth* is gross state product in billions of

Restrictions on session length is a dummy variable with 1 indicating the presence of a constitutional or statutory restriction on either days in session or compensation structures. The change variable equals 1 if a restriction was lifted, -1 if one was added, and 0 if there was no change. Data for the four legislative sessions is taken from The Book of the States (Council of State Governments, various years). Opportunities to advance is calculated by summing the number of statewide elected officials, members of Congress, and appellate and supreme court justices and dividing by the number of state legislators. Data for 1964, 1974, 1984, and 1994 is taken from The Book of the States (Council of State Governments, various years). Gubernatorial power is the Schlesinger index, which is based upon appointive, budget, and veto powers as well as tenure potential. For the four cross-sections, data is taken from: 1964 (Schlesinger 1965), 1974 (Schlesinger 1971), 1984 (Beyle 1983), and 1994 (Beyle 1999). Apportionment fairness is the Schubert and Press (1964) index for 1962 with higher scores representing lower levels of malapportionment.

Regional professionalism differential is the mean index score for a state’s Census region (excluding the state in question) minus that state’s score. South is a dummy variable with a 1 assigned to the twelve Southern states (as categorized by King 2000): AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, TX, VA.
Notes

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1. There is a key difference between institutionalization and professionalization. While Polsby (1968) noted that Congress had become increasingly bounded, complex, and universalistic, this analysis solely concerns the extent to which a legislative career is a full-time profession. Nevertheless, the two phenomena are related and occur concurrently.

2. See Keefe (1966) and Miller (1965) for critiques of professionalism levels in the 1960s.

3. In addition to the legal scholarship, social scientists (Bowman and Kearney 1986; Hickock 1992; Rosenthal 1990) have also claimed that these Supreme Court decisions were a harbinger of professionalization.

4. Huber and Shipan (2002) broadly define capacity as the ability to write detailed statutes. For example, parliamentary systems with high levels of cabinet instability have low legislative capacities. Since this analysis only concerns American states, professionalism and capacity are interchangeable terms.
5. Bureaucracies can expand through internal hiring or by coordinating with interest
groups and pressuring the legislature. See Stein and Bickers (1995).

6. The principle assumption underlying the argument is that size and power are directly
related. Although there may be certain exceptions, larger bureaucracies have the
resources to move policies closer to their ideal points. For analytical simplification, I (as
well as Huber and Shipan) do not endogenize bureaucratic preference in the model.

7. Bowman and Kearney’s (1988) professionalism index is constructed from measures of
institutional complexity such as committee structure. Not surprisingly, their index is
highly correlated with more traditional measures of professionalism (based on
compensation, session length, and legislative resources), meaning that professionalism
and committee development go hand in hand.

8. Carey, Niemi, and Powell (2000) find professionalism to be a significant predictor of
incumbency advantage and reelection potential in state legislative elections. One possible
explanation for this finding is that professional seats are worth retaining.

9. I do not make any assumptions about the concavity/convexity of the function as it is
irrelevant to the conclusion.

10. Regional professionalism difference and apportionment fairness are not change
variables. See appendix.

11. As explained in the appendix, due to the limitations of historical data, King (2000)
substitutes legislative resources per member for staff per member in building the $R_i$
component of the Squire index. Most recent data has shown an extremely high correlation
between these two measures (see note 2 of King).
12. The Squire index is multiplied by 100 to reflect state legislative professionalism as a percentage of congressional professionalism as well as for presentational purposes.


14. As explained in the appendix, local figures are included because states have substantial influence and control over localities. This is consistent with previous studies (Gilligan and Matsusaka 1995; New 2001).

15. Per capita figures are not used because the intent of the analysis is to determine the impact of expenditure levels, not scale effects.

16. The relationship could work in the reverse direction since the poorest states will have the highest demand for public goods.

17. As explained in the appendix, the index constructed by Schubert and Press (1964) measures the level of apportionment fairness. Hence, the coefficient estimate should be negative.

18. One potential opportunity for advancement is election to the United States Congress. Although the number of congressional seats is highly collinear with population, other positions are included in the Opportunities to Advance variable that are unrelated to population (e.g. number of statewide election officials and judicial posts). See appendix.

19. An F-test (ANOVA) for the 1983-84 panel comparing the full specification to a restricted model (excluding the bureaucracy and expenditure variables) finds a significant difference between the two specifications (F=6.86, p<.001). Similar results are found for the 1993-94 panel (F=5.89, p<.01).
References


Fiorina, Morris P., and Roger G. Noll. 1978a. “Voters, Legislators, and Bureaucracy:


*Legislative Studies Section Newsletter* June: 2-5.


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R²  | .859  | .856  | .896  |
Adjusted R² | .808  | .805  | .859  |
F    | 16.85*** | 16.51*** | 23.94*** |

†p < .10; *p < .05; **p < .01; ***p < .001 (two-tailed tests).
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*p < .10; *p < .05; **p < .01; ***p < .001 (two-tailed tests).
FIGURE 1: Deliberate Discretion vs. Bureaucratic Autonomy

\[ c_2 \quad c_1 \]
\[ L^* \quad B_1 \quad B_2 \quad B^* \]

Figure 1a: In order to reduce oversight costs, the legislature will increase its capacity from \( c_1 \) to \( c_2 \) as the bureaucracy expands and is able to move policy from \( B_1 \) to \( B_2 \).

\[ c_2^* \quad c_1^* \]
\[ L^* \quad B_1 \quad B_2 \quad B_3 \quad B^* \]

Figure 1b: The bureaucracy will only be able to expand to \( B_2 \) when the legislature has high capacity (\( c_2^* \)) but will be able to expand to \( B_3 \) when capacity is low (\( c_1^* \)).
Figure 2: As expenditures increase from $e_1$ to $e_2$, the optimal cartel size increases from $c_1^*$ to $c_2^*$. In order to achieve such an increase, the legislature must raise its professionalism level from $p_1$ to $p_2$. 