

State Governance and Higher Education Outcomes

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Much attention has been focused in recent years on the topic of state governance of higher education. Numerous journal articles, books, and reports have examined how states organize public higher education governance structures, how these structures are changing, and the impact of these structures and changes on higher education institutions, students, and the public at large.¹ The topic has not escaped attention from the popular press; newspapers and magazines regularly cover public higher education in general, and focus particularly on proposals for changing the governance of a state's higher education institutions.

While attention has been focused on *how* states organize the governance of their public higher education institutions and systems, there has been much less research on the *impact* of these decisions on the outcomes of higher education. This chapter reviews the literature on this topic by address the question, What impact does state governance have on the outcomes of higher education?

The chapter opens with a brief history of state support for and governance of higher education. It then presents an overview of the expected outcomes of public higher education in the states. This includes both social outcomes as well as private returns to individuals. Social outcomes include: higher education's contribution to general economic development; preparation of individuals for entry into specific careers and professions in the state; continuation of the

education of the citizenry begun in the K-12 sector; prestige maximization; and avoidance of negative social outcomes (such as unemployment, criminal behavior, etc.). Private outcomes for individuals has traditionally focused on preparation for entry into labor markets.

One of the issues dealt with by many researchers is the discordance between institutional interests and broader state goals. States generally try to establish governance and funding mechanisms that will promote statewide goals, however they are defined. Institutions, however, generally try to work within these constraints to maximize their own goals, which may be divergent from the broader state goals.

Having examined the outcomes of higher education, the chapter turns to the research on state governance structure and outcomes. The chapter concludes with some thoughts regarding future research on the topic.

State Support for and Governance of Higher Education

Higher education has existed in the United States longer than the nation itself.² Harvard College, founded in 1636, was the first higher education institution in the colonies. While the earliest colleges were private, state support of higher education began with public allocations to these largely church-chartered institutions.³ This support was often in the form of the granting of public lands, and authorization for the running of lotteries to benefit the institution. Many state governments in the late 18th and early 19th centuries began to provide direct financial support from general tax revenues to support a number of private colleges and universities.

The first truly “public” institutions of higher education were first chartered in the late 18th century, primarily in the South and Midwest. These institutions received direct state subsidy, though their control can best be described as “quasi-public” because of the degree of autonomy generally granted to their trustees. In some institutions, the trustees were self-perpetuating, thus putting the overall control of the institution beyond public reach. Brubacher and Rudy (1976) note that it was well into the 19th century before many state legislatures began asserting governance control over these public universities by reserving the right to appoint trustees. They designate the University of Virginia, founded by Thomas Jefferson in 1819, as the “first real state university” (p. 147) for the following reasons:

- The university had a board of visitors appointed by the governor of the state.
- The state provided initial capital and ongoing funds for the operation of the university.
- The university was founded to be free of “domination by any and all religious sects” (p. 149).
- Provisions were made for the provision of free tuition to selected poor students from throughout the state.

This mixing of state support for both public and private institutions of higher education continued into the early 19th century. A turning point, however, was the famous *Dartmouth College* case of 1819, in which the state of New Hampshire tried to assert control over Dartmouth College because of its chartering and support of the institution. The New Hampshire Superior Court found in favor of the state, ruling that Dartmouth was a public institution. Upon

appeal to the U.S. Supreme Court, the defense of the college and its independence from the state was passionately argued by Daniel Webster, in an oft-quoted speech before the Court:

This sir, is my case. It is the case, not merely of that humble institution, it is the case of every college in the land...for the question is simply this: Shall our state legislature be allowed to take that which is not their own, to turn it from its original use, and apply it to such ends or purposes as they, in their discretion shall see fit? Sir, you may destroy this little institution...but if you do...you must extinguish, one after another, all those great lights of science, which, for more than a century, have thrown their radiance over the land! (quoted in Rudolph, 1990, pp. 209-210).

The Supreme Court ruled in favor of Dartmouth, thus effectively closing the door on any further attempts by the states to gain control of private institutions. The *Dartmouth* case clarified the distinction between public and private colleges and universities in the United States. Following *Dartmouth*, states began to focus their financial support for higher education on the publicly-controlled and -supported institutions, and phased out most of the direct appropriations to private institutions.

Simultaneous with the focusing of financial support on those institutions deemed purely public, states – which had expanded public higher education largely through the support provided by the Morrill Land Grant Act of 1862 – turned their attention to the issue of how these institutions should be governed and controlled.⁴ During the 19th century some states, including Michigan, California, and Minnesota, granted constitutional autonomy to the flagship institution in the state in order to “remove the management of public universities from the reach of

‘meddlesome politicians’” (McLendon, forthcoming, p. 9). Most states, even those not providing constitutional protections for institutional autonomy, meddled little in the affairs of the public higher education institutions within their borders. Zumeta (2001) notes “political leaders tended to be somewhat in awe of highly educated men...they *trusted* academic leaders to lead the schools in the broad directions both parties wanted to go...Moreover, most state governments had little capacity for more than occasional, fairly limited involvement in academic affairs” (p. 161).

Through the late 19th and early 20th century, however, states began to assert more authority over many of their public higher education institutions through the development of statewide or systemwide governing boards, through the development of laws and regulations applying specifically to higher education, and in some cases, through the removal of the constitutional autonomy of the institutions.

The trend of assertion of state authority over higher education institutions grew through most of the 20th century until the last two decades of the century, when “the 1980s and 1990s witnessed a variegated array of state-level reform (sometimes referred as ‘restructuring’) initiatives representing several different patterns of activity, rather than one dominant movement” (McLendon, forthcoming, p. 29). These “different patterns of activity” included both a continuation of the trend toward more state authority over public institutions in some states, compared to in others, a movement towards the granting of more independence and autonomy to colleges and universities or individual public systems. McLendon describes this latter movement as one of

deregulation/decentralization...whereas, in the 1980s, this form of state activity primarily involved dispensation from state procedural controls, recently it has broadened to include substantive areas of campus functioning (greater campus authority over academic programs, for example) and, occasionally, has involved the restructuring of entire governing or coordinating systems (p. 34).

As McLendon notes, no matter what the nature of the structural change imposed by each state, “Rare is the governance initiative that does not claim to improve efficiency, promote competition or coordination, or reduce costs” (p. 31).

Thus, the beginning of the 21st century finds public higher education in a state of flux, with some states opting for improved quality and efficiency in higher education through assertion of more statewide authority, and others attempting to achieve the same goals through a devolution of power to individuals campuses or system boards. The next section will describe in more detail the outcomes expected of public higher education institutions and systems.

Outcomes of Higher Education

Going back to the early development and expansion of public institutions of higher education in the nation, there was often conflicting views of what the mission of these institutions should be and how that mission should be carried out. The focus on the Morrill Land Grant Act of 1862 was in the development of public universities “where the leading object shall be, without excluding other scientific or classical studies, to teach such branches of learning as are related to agriculture and the mechanic arts” (Rudolph, 1990, p. 252). While the legislation

appeared to establish a clear mission for these institutions, there was not uniformity in the interpretation of how it should be accomplished. Brubacher and Rudy (1976) note that

The National Grange and the Farmers' Alliance made constant complaint that the new colleges were too theoretical and classical in their curricular offerings and had little to offer the average farmer. Indeed, many of these new foundations did seem to go to great lengths to imitate eastern liberal-arts colleges in order, among other things, to attain what was then considered academic respectability (p. 63).

This example is emblematic of the tension that has existed since between how public colleges and universities interpret their role in serving the state, and how policymakers (and often, the public at large) see that role.

Over one hundred years later, some researchers have concluded that the mission of higher education is still poorly defined and articulated. Cohen and March (1986), in their study of the college presidency, argue that "The American college or university is a prototypic organized anarchy. It does not know what it is doing. Its goals are either vague or in dispute" (p. 3). They further describe an "organized anarchy" as an organization with

problematic goals. It is difficult to impute a set of goals to the organization that satisfies the standard consistency requirements of theories of choice. The organization appears to operate on a variety of inconsistent and ill-defined preferences. It can be described better as a loose collection of changing ideas than as a coherent structure. It discovers preferences through action more often than it acts on the basis of preferences (p. 3).

Others, however, argue that role of higher education in serving society can be more clearly defined and described. Bowen (1977) divided the goals of higher education into two categories: those for individual students and those for society as a whole. He further described these goals as follows (pp. 55-59):

Goals for Individual Students	Goals for Society
1) Cognitive learning	6) Advancement of knowledge
2) Emotional and moral development	7) Discovery and encouragement of talent
3) Practical competence	8) Advancement of social welfare
4) Direct satisfactions and enjoyments from college education	9) Avoidance of negative outcomes for society
5) Avoidance of negative outcomes for individual students	

He further describes 33 different outcomes within these nine broad categories. Bowen warns, however that “Not all of the goals are achieved in practice, and some of them may not even be achievable...Many are shared goals pursued jointly with the family, the school, the church, the media, governmental agencies, and the workplace” (p. 54).

The Institute for Higher Education Policy (1998) created a similar taxonomy of the benefits of higher education, dividing these outcomes into two types, economic and social, and accruing to two realms, the individual or the public. Included in the public economic benefits were such outcomes as “increased tax revenues, greater productivity, and increased workforce flexibility.” Private economic outcomes included “higher salaries and benefits, higher savings levels, and improved working conditions.” Public social outcomes included “reduced crime

rates, increased charitable giving/community service, and increased quality of civic life.” Private social outcomes included “improved health/life expectancy, better consumer decision making, and increased personal status” (p. 20).

Two notions – Cohen and March’s of the ambiguity of preferences of institutions, and Bowen’s of the inachievability of particular goals – are crucial to understanding the role of higher education institutions in American society. For if Cohen and March are correct that higher education institutions themselves cannot articulate a clear set of goals and objectives (and other researchers have agreed with their conclusion), then it is difficult to expect an external entity, namely a state bureaucratic agency, to be able to clarify and identify a set of goals for the institutions. And if Bowen is correct that although a set of goals can be identified for colleges and universities, it is difficult to achieve many of them and impossible for higher education to achieve some of them by itself, then it is even harder for external entities to hold the institutions accountable for the accomplishment of those goals and production of the outcomes.

States have struggled with implementing mechanisms for assessing how well higher education institutions are producing these outcomes, generally choosing to use a “carrot” rather than a “stick” approach. Many states have opted to implement “performance funding” or “performance budgeting” programs, where some portion of base or incremental appropriations are awarded to institutions based on how well they performed on specific criteria established by the states.

The Rockefeller Institute of the State University of New York at Albany has conducted a survey of state practices in the areas of performance funding and budgeting (Burke & Modarresi, 1999). The Rockefeller Institute defines the two practices as

Performance Funding: state funding tied directly to the *achievements* of public colleges and universities on specific performance indicators (money awarded after performance achieved). Performance Budgeting: state governments use indirectly reports of system or institutional achievements on performance indicators as a context in shaping the total budget for public higher education and/or its institutions (indirect influence on budget levels) (p. 16).

Under these definitions, performance funding mechanisms more tightly couple the awarding of funds with institutional performance, while performance budgeting more loosely couples the two by using performance indicators as one criterion in what otherwise may be largely a political, incremental, or formulaic budgeting process.

The Rockefeller Institute survey found that by 1999, 16 states had implemented some form of performance funding for public institutions (up from 10 states in the survey conducted two years earlier), and 23 states had implemented performance budgeting (up from 16 in the earlier survey). The study found that the earliest implementation of performance funding was in 1979 (Tennessee), while performance budgeting was first implemented in 1975 (Hawaii). Another interesting aspect of the study was an examination of the source of the performance funding or budgeting processes. The researchers identified these parties as having initiated the programs in one or more states: higher education coordinating board; governor; legislature; and system office.

Zumeta (2001) reviewed a number of state efforts at increasing the accountability of higher education institutions, and concluded that the impetus for these efforts included

- private sector management ideas permeat[ing] the public sector
- extreme financial pressures on states during the economic slowdown of the early 1990s...followed closely by the mid-decade tax revolt and Republican electoral ascendancy
- the discretionary nature of spending on higher education, in contrast to program areas driven by federal or judicial mandates
- the large increases in public sector tuition prices and resulting public concern over the affordability of college (pp. 157-158)

Perhaps the most ambitious foray into performance funding was made by the state of South Carolina. In 1996, the General Assembly passed legislation mandating the use of 37 performance indicators for allocating appropriations to the 33 public higher education institutions in the state (Schmidt, 1997). The legislation's chief sponsor, State Senator Nikki G. Setzler, justified the change by stating "To make higher education more accountable, we must first define what we expect from the system. [The plan] will bring us a system of excellence rather than a system that support mediocrity" (Schmidt, 1996, p. A26). By 1999, 100 percent of the state's appropriations were to be based on such measures as quality of faculty, instructional quality, administrative efficiency, and the user-friendliness of the institution. The "all or nothing" nature of the program was in contrast to that of most other states, where generally less than five percent of appropriations were tied to performance indicators.

The ambitions of the South Carolina legislature were never realized, however. A legislatively-mandated review of the state's performance funding system was conducted in 2001 by the South Carolina Legislative Audit Council. The Audit Council's report (South Carolina

Legislative Audit Council, 2001) indicated “In FY 99-00 and FY 00-01, the years in which funding was to be based *entirely* on performance, the [appropriation] amount affected by performance scores was 3% each year” (p. v). The study found that while the state’s Commission on Higher Education complied with the 1996 by developing the specific indicators and collecting the data on institutional performance, the indicators

do not provide a comprehensive assessment of institutional quality. Reasons that the performance measurement system should not be used as the sole determinant of institutional funding include: changes and volatility of the system, problems in measurement, the narrow focus of the indicators, and the use of some indicators that may be inappropriate for some institutions...performance funding has had little effect on the elimination of waste and duplication in higher education (p. vi).

In its response to the audit report, the Commission noted that it was “substantially in agreement with the Council’s recommendations” (p. 33). The Commission also agreed to revise the indicators and how they were collected. Even with the Audit Council’s conclusions, the state has continued the performance funding program, though all parties appear comfortable with the fact that the state has not fulfilled the initial legislation’s obligation to put 100 percent of the appropriation for each institution at risk.

Research on Governance Structures and Higher Education Outcomes

McLendon (forthcoming) in his analysis of some of the recent trends in state governance and coordination, points to “the new accountability demands of the states...A ‘new thinking’

about accountability emerged in which concerns about performance ‘outputs’ replaced the older emphasis upon resource ‘inputs’ ” (p. 30). South Carolina’s performance funding program, described in the previous section of this chapter, is an example of one state’s interests in using state authority to promote institutional accountability. As McLendon notes, this focus on the outputs to the higher education production process has replaced the measures traditionally used to evaluate higher education – how money has been spent, how many students have been enrolled, how many faculty were employed, etc. But these *outputs* are distinct from the type of *outcomes* described by Bowen (1997) or the Institute for Higher Education Policy (1998). In addition, a focus on outcomes has to embody an agreement on and understanding of what those outcomes should be, and equally importantly, how they should be measured and evaluated.

Bowen’s nine goals for higher education, also described in the previous section, while relatively easy to conceptualize and understand, are very difficult to measure consistently given the wide range of higher education institutions in the country, the varying types of students served by those institutions, and the differing needs of individual states. For example, it is reasonable to expect that all institutions that have at least in part a mission to teach students (which includes almost all of the over 3,600 colleges and universities in the nation) would be expected to promote some forms of Bowen’s goal of cognitive learning, in which he includes such outcomes as “verbal skills”, “quantitative skills”, “intellectual tolerance”, “wisdom”, and “esthetic sensibility” (pp. 55-56). But what about the goal of promoting emotional and moral development in students, under which Bowen includes “personal self-discovery”, “values and morals”, and “refinement of taste” (pp. 56-57)? The focus on these types of outcomes is likely to be very different for those institutions whose missions are to serve primarily traditional-aged,

full-time residential students, than for a community college that serves largely a part-time, adult learner student body.

Bowen's goals for society include such outcomes as "direct satisfactions and enjoyments received by the population from living in a world of advancing knowledge, technology, ideas, and arts", "enhancement of national prestige and power", and " 'improvement' in the motives, values, aspirations, attitudes, and behavior of members of the general population" (pp. 58-59) – all outcomes that may be expected of some higher education institutions but not others, but all extremely difficult to measure and assess.

Thus, any attempts at assessing the relationship between aspects of state governance and control, and higher education outcomes, are hindered by the inherent ambiguity, imprecision, and vagaries of defining what institutions are supposed to be doing. The somewhat sparse literature relating these two reflects this difficulty. My review of the literature from the key disciplines – higher education, political science, policy studies, and economics – discovered no studies that directly addressed this relationship between statewide governance structure and higher education outcomes. The few related studies can best be described by a single, common feature: the use of proxies for higher education outcomes, rather than the direct measurement of the outcomes themselves (as described by Bowen or the Institute for Higher Education Policy, for example), or as one researcher described the problem, "Education is a good in which the inputs are often used as measures of output, because of the difficulty in doing the latter" (Toma, 1990, n. 3).⁵

These proxies tend to be the inputs to and/or outputs from the higher education production function as shown in Figure 1. Some studies focus on the relationship shown by the solid arrows, attempting to trace the effect of governance structure through the production

process to outcomes. Others bypass the input portion of the process, relating governance structure directly to outputs, denoted by the dashed arrows.

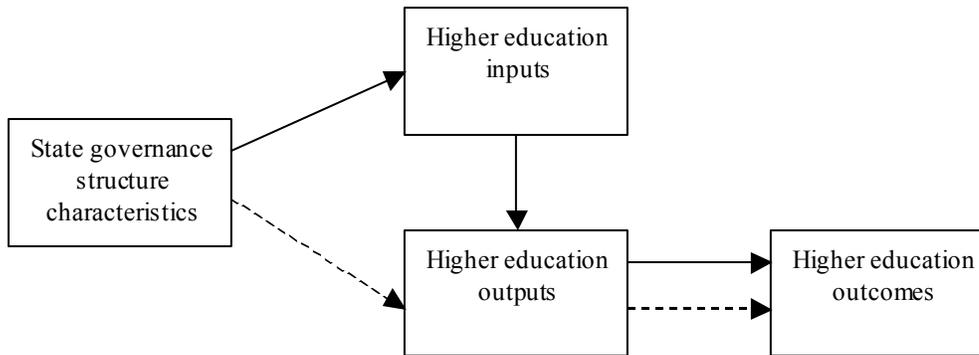


Figure 1: Model of research on higher education governance structures and outcomes

Volkwein and Malik (1997) examined predictors of the degree of flexibility enjoyed by the higher education institutions in a state. Flexibility was measured in two dimensions: financial/personnel flexibility and academic flexibility. The predictors included state economic, social and demographic, and political attributes (including higher education governance structure), along with characteristics of the higher education institutions themselves. As the authors noted “Most organizational behaviorists believe that an increase in monitoring activities increases operating costs, both for those doing the monitoring and for those being monitored” (p. 18, or, as they quote another higher education leader, “Most of us believe that the great colleges and universities have been those that were the least [externally] managed” (p. 19).

In this cross-sectional study using 1995 data, the authors found no relationship between governing board structure and either academic flexibility or financial/personnel flexibility. In

fact, none of the state-level characteristics were found to be predictive of the degree of academic flexibility enjoyed by the campuses, and only one – the state’s population – was found to be modestly related to financial/personnel flexibility (with campuses in larger states enjoying less flexibility).

In a second analysis in the same study, Volkwein and Malik used many of the same variables to predict the quality of the public higher education institutions in the state in two realms: faculty quality (as measured by data from the National Research Council survey of doctoral programs and a study conducted by researchers Hugh Graham and Nancy Diamond), and undergraduate student quality (as measured by student selectivity data from college guidebooks and rankings). The researchers found that the state’s higher education governance structure (in 1995) was not related to the measures of either faculty or undergraduate quality, controlling for the other statewide and institutional characteristics. The most influential factor (for both quality measures) was a factor of campus “wealth” created by the researchers. This wealth variable included measures of both per-student revenues and expenditures in a number of categories. Another interesting finding in the study was that neither academic nor financial/personnel flexibility were related to either faculty or student quality, thus belying the conventional wisdom that “the less regulation the better.”

In a later study, Volkwein, Malik, and Napierski-Pranci (1998) took this analysis one step further to examine if many of the same predictors from their earlier study were related to the level of satisfaction enjoyed by administrators in public colleges and universities, because “regulatory activity may reduce managerial job satisfaction, which in turn increases turnover and lowers organizational productivity and adaptation” (p. 45).⁶ Using data from a survey of 12

managers in 144 public institutions across the country, they measured satisfaction in five realms they labeled “overall satisfaction”, “intrinsic satisfaction”, “extrinsic satisfaction”, “work conditions”, and “relationships with others” (p. 52). While they did not explicitly include a measure of the state governing board structure, they did include as predictors the same academic and financial/personnel flexibility measures from the earlier study. The two flexibility measures were not found to be related to any of the five types of satisfaction, leading the researchers to conclude that there was “little direct relationship between administrator satisfaction and most state and campus characteristics, including the regulatory climate” (p. 59).

The Volkwein et al. measures of institutional administrative and academic flexibility were used in another study as predictors of the supply of public higher education in the states (Berger & Kostal, 2002). The authors of this study divide each flexibility measure into three categories, low, medium, and high, and use these measures along with other covariates to predict the supply of public higher education in each state from 1990 to 1995. They find that states where the public institutions enjoy greater levels of both administrative and academic flexibility tend to have lower public enrollment rates, confirming their hypothesis that “a college or university with relatively loose regulations can devote more resources to activities for which there is weak demand but which, nonetheless, are important to its staff (e.g., nonfunded research or providing spaces for relatively high cost graduate and professional students)” (p. 107).

Lowry (2001a) used cross-sectional data to examine the effects of a number of predictors on institutional revenues and expenditures. His four outcomes include institutional revenues from the state (appropriations, grants, and contracts), revenue from tuition and fees (net of institutional financial aid), and expenditures on research and public service (all four variables are

measured per 100,000 voting-age residents in the state). His predictors include: state economic data (tax revenue and per capital income), demographic data (educational attainment and age distribution), and the number of higher education governing boards in the state; and campus attributes (enrollment, quality rating, revenues and expenditures in other categories). He describes his rationale for including the number of governing boards as a predictor:

Most states have multiple campuses, and attempts by individual campuses to obtain more state government funding may undercut the efforts of other campuses. Some states, however, have consolidated statewide boards of trustees that allow individual campuses to present a unified position to state government officials...Coordination problems experienced by public universities should increase with the number of governing boards. Public universities in states that have fewer governing boards should be able to lobby more effectively, and thus obtain more state government funding (p. 108).

Among the four outcomes in his study, Lowry found the number of governing boards to be related only to the level of state funds received by the institution. He noted that the “Coefficient for the number of governing boards is negative...consistent with my expectation that a large number of boards makes it more difficult for public universities to engage in effective lobbying [of the state]” (p. 113).

In a related study Lowry (2001b) broadened his measures of state governance structure to include: 1) whether the statewide had a statewide coordinating board; 2) the number of campuses governed by the board; 3) the percentage of trustees who are state government officials or who are selected by the governor, legislature, or voters (what he labels “external trustees”); and 4) his

earlier measure of the number of governing boards in the state. His outcomes in this study included net tuition and fee revenue (again after deducting institutional aid), along with the level of expenditures in five categories: instruction, student services, academic support, institutional support, and plant operations and maintenance. Lowry's analysis found that the presence of a statewide coordinating board was negatively related to spending on instruction, student services, and academic support, while spending on instruction increased in relation to the number of governing boards in the state. He also found that larger numbers of external trustees is related to lower levels of expenditure on instruction, student services, and institutional support.

As in his other study the reader may wish to conclude that more spending in these categories of expenditures is positive in terms of the presumed outcomes of higher education, and therefore the relationship between his governance variables and these outcomes has important implications for states. Yet the author is more circumspect in his interpretation of these results:

it cannot be said from these results that there is one best model for public university governance for two reasons. First, it is not clear that public universities subject to more or less political control are unambiguously better or worse... Since I do not analyze educational outcomes I cannot say what students in high-tuition states get for their money, but increased spending on activities such as instruction, student services, and academic support may lead to benefits for many students. Second, different combinations of institutions can lead to very similar results (p. 859).

Zumeta (1996) examined statewide higher education governance structures in the late 1980s to determine whether states fell into one of three “policy postures toward private higher education”: “laissez-faire”, “central planning”, or “market-competitive” (pp. 367-368). He simplified and reduced state higher education governance structures into two types: 1) regulatory coordinating boards; and 2) consolidated governing boards, the latter being a stronger form of statewide control over the public higher education system. He then used the structure measure along with a number of other state-level variables – including per capita income, tax effort, population growth, and college participation rates – as predictors to determine which of the three policy postures the states took toward private higher education. The key finding with respect to governance structure was that the existence of a consolidated governing board, a “stronger” form of governance, was a predictor of states adopting the laissez-faire approach, which included policies such as

low student aid spending, no direct fiscal linkages to private institutions, low public sector tuition, low involvement of the private sector in state planning, little concern for public/private programmatic competition, few mandates or regulations affecting the private sector (p. 414).

A key issue regarding Zumeta’s approach, however, is the direction of the effects he finds. While he includes the type of governance structure as a predictor of the type of policies, or posture, toward private higher education in the state, it is entirely plausible to question whether the relationship works equally in the opposite direction. In other words, rather than the existence of a consolidated governing being the cause of this set of “laissez-faire” policies, it may be this general attitude toward the private sector of higher education which causes states to

adopt a stronger, more active approach toward the management of the public higher education sector. Many of these laissez-faire policies would in most states be considered outside the purview of a statewide governance board, and would instead be the responsibility of a state legislature – the body generally responsible for the assignment of authority to any statewide governing or coordinating board for higher education.

Another interesting approach to the issue of analyzing the relationship between governance structure and public higher education outcomes is that taken by Toma (1990). She posits that a beneficial outcome of public higher education would be an input-out mix that mimics that of private colleges and universities, because “private universities must be relatively responsive to consumer demands in order to survive...private universities enroll fewer students per faculty, have higher admission standards, and...are more successful at producing students with earned degrees” (pp. 3-4). She uses data on public governing board structure along with state demographic and financial data in 1982 to predict three outcomes across all public institutions in the state: 1) the ratio of tuition revenue to state appropriations (a higher ratio would be a more “private” financing model); 2) the pupil-teacher ratio (a lower ratio is more akin to private institutions; and 3) the percentage of faculty that are tenured (a lower proportion being more indicative of private institutions, as “One effect of tenure on faculty members is to decrease their responsiveness to student demands and to enable them to focus more on their own research agenda or on leisure activity”) (p. 6).⁷ Her measure of governance structure is the number of public universities in the state divided by the number of governing boards – a larger number indicating a more centralized approach to governance.

Toma notes an important methodological concern with her models, that the measure of board structure may not be exogenous. In an earlier study (Toma, 1986) she tested this premise and concluded that board structure is in fact not exogenous, for “educators (or other high demand groups) would be expected to lobby for centralized board structures as a means of securing an input-output mix closer to that which they desire” (Toma, 1990, p. 4). To overcome this problem, she ran two sets of models, one with each state’s actual measure of board centralization, and one with a centralization measure predicted on the basis of a series of statewide demographic and financial variables.⁸

Her results in both sets of models were consistent, that a *more* centralized board structure was related to outcomes that were *less* indicative of a private model of higher education: less reliance on tuition revenues, higher pupil-teacher ratios, and a higher proportion of tenured faculty. In the models using the actual board structure, the coefficients were smaller for all three outcomes than in the models using the predicted board structure, confirming her hypothesis that “educators in states that rely heavily on tuition as a source of revenue or that have small percentages of tenured faculty, will lobby for the centralization of the governing boards” (p. 6).

Hearn and Griswold (1994) examined the factors that predicted whether states were likely to enact postsecondary education policy innovations. These innovations included whether states:

- 1) required assessment of undergraduate students
- 2) required tests for teaching assistants
- 3) offered a tax-exempt college savings bond
- 4) offered a prepaid college tuition plan

- 5) restricted or taxed college businesses
- 6) made vandalism of animal-research facilities a crime
- 7) allowed nontraditional paths for certification of K-12 teachers
- 8) required that high school teachers not be education majors (p. 171)

The authors hypothesized that states with more centralized governance structures would be those more likely to enact one or more of these innovations. As covariates they included measures of state population, educational attainment, and the region of the country in which the state was located.

The results from this study were mixed. The authors' hypothesis concerning the effects of structure were confirmed for innovations in academic policy (numbers 1, 2, and 6 above) – states with more centralized structures were more likely to have enacted one or more of these innovations. Also confirmed was that states with more centralized structures were more likely to restrict or tax college businesses. However, the authors found that these same states were *less* likely to enact alternative certification programs for K-12 teachers.

These authors concluded that centralized governance structures were most influential on what they labeled the “core *educational* activities” (p. 183) of public colleges and universities. They note the limitations of their research in attempting to apply their findings in a summative fashion: “Because our focus was on innovation alone and because even there we made no attempt to judge ‘good’ versus ‘bad’ innovations, we cannot definitively address the larger questions involved in the choice of one or the other of the more centralized governing arrangements” (p. 183).

While the Hearn and Griswold study used a single-year cross section of state data to examine the determinants of policy innovation, McLendon, Heller, and Young (2001) used a pooled time-series analysis of state-level data from 1981 to 1998 to examine the relationship between governance structure, state political and demographic measures, and the probability that states would enact higher education policy innovations. They also added to the list of predictors a measure of “policy innovation diffusion” (p. 27), to determine whether adoption of policy innovations in one state influenced the adoption of innovations in neighboring states. The authors grouped states into two governance structure categories: 1) a planning agency or weak coordinating board; and 2) a regulatory or consolidated board. The study examined six higher education policy innovations also grouped into two categories: 1) regulatory innovations (performance budgeting, performance funding, and mandated assessment of undergraduates); and 2) financing innovations (merit scholarships, prepaid tuition plans, and college savings plans).

The results of this study partially confirmed the earlier Hearn and Griswold findings. While the authors found few determinants of whether states would enact regulatory innovations, they did find that governance structure was moderately related to whether states would enact financing innovations, “states with planning agencies or weak coordinating boards were 6.8% less likely to innovate in the area of postsecondary financing than were states with more centralized boards” (p. 30).⁹ The study found, however, that policy diffusion was a much stronger predictor of innovation in the higher education financing realm than were other variables

The present investigation has revealed a curious pattern of postsecondary innovation diffusion, where, for example, states tend to adopt the policy ideas of their innovative neighbors. This finding suggests that...greater attention should be paid to the interstate migration of postsecondary policy ideas, in addition to that paid to the internal, state-level (economic and political) determinants of innovation (p. 35).

Conclusions

This review covered a broad range of studies. These researchers used similar measures of the public higher education governance structure in states, generally revolving around some assessment of the degree of control that the statewide bureaucracy enjoyed over the colleges and universities in the state. However, the dependent variables modeled in these studies were quite diverse, and were only indirectly related to the type of higher education outcomes articulated by Bowen (1977) and the Institute for Higher Education Policy (1998). To assess whether governance structure can influence these outcomes requires the reader to accept certain assumptions about the relationships among the four realms shown in Figure 1.

Even accepting the use of inputs, and in some cases, outputs, to the higher education production process as a proxy for outcomes, the evidence regarding the effect of higher education governance structures is mixed. Lowry (2001a), in his study of the relationship between governance structure, and institutional revenues and expenditures, found that more centralized structures were related to higher levels of state funding for public institutions, but found no relationship to levels of spending. If one accepts the model shown in Figure 1

indicating that the outputs of the higher education production process (i.e., spending levels, credit hours, bachelor's degrees) are more closely related to outcomes, than a discovered relationship between governance structure and inputs is less informative than one between structure and outputs. Lowry's other study (2001b) did find more of a relationship between governance structure and spending in certain categories, but he notes the limitations of relating increased spending to improved outcomes (as shown in his quote on page 19 of this chapter).

The two studies conducted by Volkwein and colleagues (1997, 1998) found no relationship between statewide governance structure and the academic and administrative flexibility enjoyed by the state's higher education institutions, an attribute best described as an input to the higher education production process. Toma's (1990) research related governance structure directly to outputs, and found what is perhaps the strongest and most consistent results among the studies reviewed here, that more centralized governance structures were less indicative of an output mix akin to that of private institutions (and therefore judged to lead to better outcomes).

Perhaps the largest area of agreement in all these studies is the inherent limitation of this type of research. A recounting of some of the caveats expressed by these authors includes:

- Education is a good in which the inputs are often used as measures of output, because of the difficulty in doing the latter (Toma, 1990, n. 3).
- Because our focus was on innovation alone and because even there we made no attempt to judge 'good' versus 'bad' innovations, we cannot definitely address the larger questions involved in the choice of one or the other of the more centralized governing arrangements (Hearn & Griswold, 1994, p. 183).

- Since I do not analyze educational outcomes I cannot say what students in high-tuition states get for their money, but increased spending on activities such as instruction, student services, and academic support may lead to benefits for many students (Lowry, 2001b, p. 859).

The implications for further research on the topic of governance structure is quite clear. There is little disagreement in the literature regarding the acceptance of the outcomes offered by authors such as Bowen and the Institute for Higher Education Policy. Different parties may place varying weights on the values of each of these outcomes for individuals or society, but there is broad consensus on the examples offered by these authors.

Researchers need to examine ways to effectively measure these higher education outcomes, and to do so in a manner that is methodologically sound. The task is not a simple one, however, and is complicated by the inherent difficulty with conducting experimental or even quasi-experimental research in the social sciences. For example, measuring the increase in wages enjoyed by college graduates compared to those not attending college – a key outcome in today’s policy debates regarding who should pay for the cost of higher education – is confounded by the fact that college graduates have been found to generally possess many other attributes (academic ability, work ethic, and other skills) that are valued in labor markets. Similarly, some studies have attempted to analyze how public colleges and universities have contributed to a state’s economic growth and development through their tripartite missions of teaching, research, and service. But measuring this contribution in the absence of knowing how the public investment in these institutions would otherwise be directed (if they did not exist) is inherently flawed.

While this task is not impossible, it does pose challenges for researchers. Until methods are found for overcoming these limitations, it will be hard for policymakers to judge how, or even if, the higher education governance structure in their states should be changed.

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Notes

- ¹ See Heller (2001), MacTaggart (1996, 1998), and Richardson, Bracco, Callan, and Finney (1999) for recent books on aspects of public higher education governance.
- ² Parts of this section have been adapted from Heller (2002).
- ³ Brubacher and Rudy (1976) and Rudolph (1990) provide good summaries of the early history of state support for private institutions.
- ⁴ McLendon (forthcoming) provides an excellent overview of the history of state coordination and governance of higher education.
- ⁵ The small literature base was noted in one study: “The empirical literature on state regulation and its impact on campuses is sparse” (Volkwein, Malik, & Napierski-Pranci, 1998, p. 58).
- ⁶ Or, to put it more colloquially, “A happy administrator is a productive administrator.”
- ⁷ The author does not present a theoretical or empirical basis in the literature for this presumption regarding the responsiveness of tenure versus non-tenured faculty. The differences in tenure rates between public and private institutions are actually small. In the 1980-1981 academic year, 65.7 percent of all faculty at public 4-year institutions were tenured, while 56.0 percent of their private college counterparts were tenured (National Center for Education Statistics, 2001, Table 244)
- ⁸ While the authors addresses the potential endogeneity problem of the board structure, she does not mention in the article the possibility of the collinearity between her predicted measure of board centralization and the other covariates in her models, some of which were used to predict the board structure.
- ⁹ This relationship was only marginally statistically significant, however ($p \leq .10$).