Is Hierarchical Governance In Decline?
Evidence from Empirical Research

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Abstract

The growing acceptance of “governance” as an organizing concept for public management reform reflects a widespread, though not universal, belief that the focus of administrative practice is shifting from hierarchical government toward greater reliance on horizontal, hybridized, and associational forms of governance. Recent arguments to this effect, however, make limited recourse to the body of empirical evidence that might shed light on the actual extent of this transformation. In this article, we report on our review of over eight hundred individual research studies in order to assess what we know about governance based on available empirical evidence across a range of disciplines and substantive fields. We find that hierarchical investigations of the nature and consequences of governmental action predominate in the literature. We supplement this primary finding with additional analyses of research on performance and on public management. We then discuss possible reasons for the observed hierarchical orientation of research. While we cannot rule out the possibility that our findings reflect researchers’ biases rather actual governance, we infer that the shifts away from hierarchical government toward horizontal governing reflects instead a gradual addition of new administrative forms which facilitate governance within a system of Constitutional authority that is necessarily hierarchical. In conclusion, we propose additional research that might confirm or refute this inference, and that could fill the gaps of our understanding of public governance.
Is Hierarchical Governance In Decline? 
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“Governance” fever is catching: Many of public administration’s leading scholars have embraced the concept of governance to frame the ongoing discourse on public management reform (Garvey 1997; Kettl 2000, 2002; Peters and Pierre 1998; Salamon 2002). A group of scholars at Harvard’s Kennedy School of Government are engaged in a multi-year, multi-publication project, “Visions of Governance in the 21st Century,” and the Brookings Institution recently changed the name of its “Governmental Studies” program to “Governance Studies.” The momentum behind this idea is sufficiently strong for Frederickson and Smith to suggest that governance has become “a virtual synonym for public management and public administration” (2003, p. 225).

For many scholars, the movement toward governance as an organizing concept for public administration and management is associated with the belief that the focus of administrative practice has been shifting from the bureaucratic state and direct government to the hollow state and “third-party government” (Milward 1994; Milward and Provan 1993; Salamon 1981; Frederickson 1997). Frederickson and Smith (2003, p. 208) argue that “[t]he administrative state is now less bureaucratic, less hierarchical, and less reliant on central authority to mandate action. Accountability for conducting the public’s business is increasingly about performance rather than discharging a specific policy goal.
within the confines of the law.” Governance theories that incorporate ideas about the role of “conjunctions” or “associations” among organizational entities, they argue, are especially promising in overcoming the centrifugal forces that are fragmenting administrative practice. This emphasis on the horizontal, hybridized, and networked aspects of governance is prominent in recent analyses of various “new public managements” (Kettl 2002; Salamon 2002).

But what of the Constitutional scheme in which public governance is embedded? What of legislatures and courts, of politics and the rule of law, of accountability to citizens through representation and electoral processes, all of which tend to impose hierarchy and agency on public administration? Kettl (2002) notes that transformations in governance have “made government both horizontal — in search of service coordination and integration with nongovernmental partners in service provision — and vertical — through both traditional, hierarchical bureaucracies and multi-layered federalism. It is not so much that the horizontal relationships have supplanted the vertical ones, but rather that the horizontal links have been added to the vertical ones (p. 128).”

But how do these horizontal and vertical components interact? Much recent discussion of governance is relatively silent on how the tensions between centrifugal and centripetal forces that impinge on public management (that is, between constitutional institutions and administrative practice) might be
understood theoretically and evaluated empirically.\textsuperscript{1,2} There is only selective recourse, moreover, to the body of evidence that might shed light on the relative importance of vertical and horizontal aspects of governance. Our purpose here is to report on our effort to marshal evidence from hundreds of individual research studies in a systematic way in order to gain insights into the question, “What do we know about governance based on the empirical evidence?”

This effort at meta-analysis revealed a striking tendency toward hierarchical explanations of public service delivery and of the consequences of public policies and programs — a finding at variance with the view of governance as increasingly networked and associational. We first describe how we reached this finding and then discuss its validity and the implications of our analysis for governance research and practice.

\begin{itemize}
\item[1] Heinrich, Hill, and Lynn (forthcoming) discuss this issue in greater detail.
\item[2] In response to movement toward increased networked relationships, Behn (2001) proposes replacing traditional accountability concepts with a “compact of mutual, collective responsibility.”
\end{itemize}
The Study of Governance

Research bearing on issues of public sector governance is found in literatures that encompass comparative, national, and sub-national research on public management reform (Pollitt 2000) as well as on international governance and management (for example, Gerri 2001). Comparative work has been one of the most active areas of public governance research (Peters and Savoie 1995, 1998; Kettl 2000; OECD 1995; Michalski et al. 2001; Pollitt and Bouckaert 2000). National and comparative studies of public governance, however, have “thus far largely been preoccupied with describing the new measures, comparing measures from various countries and assessing the impact on accountability” and have devoted relatively little effort to empirically verifying claimed results or to identifying causal relationships (Peters and Savoie 1998, p. 7). A relatively large body of empirical evidence bears on governance in the U.S. administrative state, but, as we document below, much of it is virtually invisible to practitioners and scholars who may consult only familiar sources.

Empirical research on governance and public management tends to follow one of three basic research strategies. The first strategy tends to adopt a historical, descriptive, and institutional orientation. Insights and conclusions are based on systematic reviews and assessments of official documents, including
surveys of reform activity; interviews and other forms of field observation; and secondary research by academics, consultants, and practitioners. The analysis of such materials often takes the form of descriptive classifications in which reforms or their characteristic features are associated with contextual and other factors (see for example Peters 1996; Pollitt and Bouckaert 2000; Hood 2002).

A second research strategy attempts to identify “best practices” through the collection of detailed case studies of actual management problems and strategies. The accumulation and perusal of cases aims to reveal “what works” and what doesn’t, congealing insights into principles and recipes for effective practice that resonate with the real world as practitioners experience it. Examples of this strategy include books by Light (1998) on innovations in nonprofits and governments, by Bardach (1998) on organizational cooperation, and by Haass (1999) on public sector management and leadership.

A third strategy for studying public governance and management, and the focus of the present study, uses the formal theories, models, methods, and data of the social and behavioral sciences to study governmental processes and to develop a body of empirical knowledge concerning that works and why. This strategy, which depends on reductive abstraction, sacrifices verisimilitude and nuance but gains in transparency and replicability. An important component of this endeavor is the use of formal theories to develop falsifiable hypotheses: doing so helps
clarify suppositions and findings about governance regimes, managerial
processes, and their consequences.

The body of empirical scholarship that employs the third strategy is large
and growing (see, for example, Boyne, Powell, and Ashworth 2001; Boyne 2003).
Individual studies of this kind are regularly published in scores of academic
journals across numerous disciplines, fields, and subspecialties. Because
individual research communities rarely communicate with one another, though, it
is difficult to know whether the results of these dispersed efforts are cumulating to
more general insights of theoretical and practical importance. For this reason, we
conducted the “meta-analysis” we describe here, utilizing a unifying analytic
framework. This framework — a “logic of governance” — can assist in creating
broader, more robust insights than can be derived from any particular study or
vein of literature.

A Logic of Governance

Public sector governance has been defined as “regimes of laws, rules,
judicial decisions, and administrative practices that constrain, prescribe, and
enable the provision of publicly supported goods and services” through formal
and informal relationships with agents in the public and private sectors (Lynn,
Heinrich, and Hill 2000, 2001 p. 7). Underlying this definition is recognition that
the rule of law — including lawmaking, its adjudication, and its institutional expression — is a useful starting point for analyzing governance and interpreting relevant empirical research. From this perspective, governance involves constitutionally legitimate means, both vertical and horizontal, for achieving direction, control, and coordination of individuals or organizational units on behalf of their common interests (Vickers 1983; Wamsley 1990; Lynn, Heinrich, and Hill 2001).

Any U.S. public governance regime is the outcome of a dynamic process that can be summarized in terms of a core logic (Lynn, Heinrich, and Hill 2000, 2001). This process links several levels of collective action and may be expressed in the following set of hierarchical interactions (Appendix A):

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3 In their study of public management reforms in the United Kingdom, Boyne et al. (2003) also use an analytic framework based on public choice theory, although they do not specify the intervening levels between management reforms and service outcomes. Researchers have employed other logics of governance that employ socialized (rather than rational) choice and resource dependence theories to analyze interactions among levels of governance; see, for example, Laumann and Knoke (1987), Provan and Sebastian (1998), and D'Aunno, Sutton, and Price (1991).
between (a) citizen preferences and interests expressed politically and (b) public choice expressed in enacted legislation or executive policies;

between (b) public choice and (c) formal structures and processes of public agencies;

between (c) the structures of formal authority and (d) discretionary organization, management, and administration;

between (d) discretionary organization, management, and administration and (e) core technologies, primary work, and service transactions overseen by public agencies;

between (e) primary work and (f) consequences, outputs, outcomes, or results;

between (f) consequences, outputs, outcomes, or results and (g) stakeholder assessments of agency or program performance; and, to close the circuit,

between (g) stakeholder assessments and (a) public interests and preferences.

Reference to a logic of governance such as this one is useful for at least two reasons. First, it enables researchers and readers of their analyses to locate individual research projects in a framework that identifies potentially influential factors beyond the proximate scope of the study. It serves as a reminder of the endogeneity of complex governance processes, and encourages transparent
consideration of how findings might be influenced by limitations of the models, methods, and data used, as well as consideration of competing explanations for empirical findings. Second, this type of framework may facilitate integration and comparison of the findings of dispersed but potentially complementary bodies of literature. Scholars in particular disciplines or subfields may be focused on a specific stage or aspect of this logic. By looking across these areas, we may discover that a rich set of governance relationships is being investigated using a number of different theoretical lenses, albeit not in any single intellectual community or investigation.

While practitioners and researchers in specific fields and policy areas may be concerned with relatively narrow sets of questions, patterns in findings across levels of governance are the purview of those concerned with governance more broadly. Integrating the contributions of diverse research communities may enable governance and management scholars to determine whether the “big questions” are being answered: What forms of governance matter to governmental operations and performance? Is the conjecture that horizontal forms of governance play a significant role in government performance supported by the evidence? Are there substantive and robust findings concerning how the logic of governance operates in practice? What are the implications of available evidence for administrative practice, theory building, and public management research agendas?
Analyzing Governance Literatures

To begin to address these kinds of questions, we collected over 800 articles published in over 70 academic journals covering the twelve-year period from 1990 to 2001 (inclusive). (Appendix B lists the journals and the number of studies from each. A full bibliography is available from the authors). Articles were chosen if they explicitly specified causal or reduced form relationships between variables from two or more levels of the logic of governance. Thus each

4 The journals include ten core journals (in boldface in Appendix B) that we expected to be prominent sources of empirical studies on public sector governance. (Approximately one third of the total is from these journals.) For these journals, we systematically scanned every issue over the twelve-year period. We also conducted key word searches (e.g., “impacts” and “effects”) in abstracts and titles of numerous field journals in which we expected to find studies concerned with public sector governance in particular substantive domains. Finally, we included a few empirical studies from other sources, such as working papers and articles prior to 1990, drawn from a previous research project. Our strategy did not involve following up on all cited sources in each of the articles we identified using the above steps.
study identified dependent variables as being causally associated with
independent variables at either higher or lower levels in the logic whose values
were assumed by the investigator(s) to be determined by actors at that level.\(^5\)
While this particular selection criterion might seem to bias the analysis toward
hierarchical rather than associational governance, its main effect is to ensure that
selected studies that examine associational or hybrid forms of governance either
model the determinates of this form of governance, or model the consequences for
how services are delivered or for client outcomes. Studies confined to a single
level of governance (including studies of associational governance that do not

\(^5\) We also selected studies in which the independent variables represented at
least partial disaggregation of larger structures (for example, of organizations,
programs, policies, or strategies). Included, for example, are studies of
privatization that distinguish organizations by ownership; studies of bureaucratic
performance that distinguish federal and state policy and management decisions;
studies that disaggregate treatment into its constituent elements or that compare
different ways to organize treatment. Excluded is most experimental impact
research on programs or policies such as “welfare reform” that do not identify
specific elements of the program. Also excluded are studies that involve single
cases or small numbers of observations unless the study intended to permit
disconfirmation of \textit{a priori} notions.
frame it as an independent or dependent variable in a multi-level analysis) are excluded from our review.

Next, in order to facilitate a “meta-analysis” of this large body of literature, we used the analytic scheme summarized in Appendix A to code, for each study, the dependent and independent variables whose causal relations were under investigation. Thus each study was characterized by its location within the logic of governance. Information about each study was entered into a spreadsheet that included identifiers (author, date, journal), the governance relationships examined, the logic-of-governance codes, and the primary research method. We refer to this spreadsheet as the governance research database.

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6 We did not code the control variables in each study, such as characteristics of the economy or socio-economic characteristics of individuals. A study’s use of such controls, and their consequences for the validity of the study’s findings, can and should be taken into account in more in-depth analyses of particular groups of studies.

7 The coding was done primarily by the authors, with occasional assistance by advanced graduate students. To ensure consistency, the coders conferred where there was any ambiguity and on subsequent discovery of any anomalies in coding.
Several caveats must be noted concerning this database. First, individual studies meet the standards of quality established by the various journals; these may vary across journals and over time. Second, our strategy for selecting publications introduces three kinds of possible bias: the tendency of academic journals to publish positive findings, our own bias in favor of articles that featured a verbally or formally transparent causal model, and limitations on the journals we included and on years of publication. Finally, the “correct” way to characterize a study’s variables and logic can be ambiguous: does “coordination of care” refer to efforts by treatment personnel or the strategies of their supervisors and managers? To the extent possible, we coded these according to the stated or implied definitions employed in each study.

Our confidence that our selection and coding methods were consistent and appropriate to the questions we are addressing was steadily strengthened by the fact that, as the number of studies grew beyond two hundred or so, basic patterns of findings remained quite stable, no matter which additional journals or years were added. This implies to us that the studies in the database approximate a random sample from the population of “governance studies” across disciplines and policy domains. It is possible that readers will disagree with the inclusion or exclusion of particular articles, or the coding of particular variables in a particular study. However, based on the steady aggregation of studies in this database, and
the stable pattern of findings, we are confident that our selection and coding methods are not biased by such anomalies.

This study is an attempt, then, to characterize broad patterns of research strategies and findings relating to governance within our analytic framework. Our intention is to provide a synoptic view of governance research and to draw out the implications of this view for practice and for research. Through canvassing public governance research across a wide range of disciplines and subfields, we hope to illuminate relationships among governance levels and discover whether there are cumulative insights into factors or variables that have demonstrable effects. This perspective can be useful for guiding empirical research in governance and for answering the big questions of governance.

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8 Our analyses are thus broader in scope than meta-analyses that examine particular policies, elements, or constructs (e.g., Boyne’s 2003 analysis of studies related to public service improvement; Meyers’ 1993 analyses of organizational factors that influence coordination among human services; Wolf’s 1999 meta-analysis of case studies of leadership; and Lee, Bryk and Smith’s 1993 review of factors associated with effective schools).
What is Being Studied?

Some of the most striking findings of our review concern the uneven allocation of research effort across levels of governance.

**Governance as a Dependent Variable**

Notably more research effort is devoted to explaining frontline work and consequences than to explaining higher levels of governance (Table 1). Over one-third of the studies (n = 298) sought to explain consequences of public sector decisions or activities, and over one-quarter (n = 232) sought to explain the nature of frontline work itself. Much less research effort seeks to explain citizen preferences, formal authority, and stakeholder assessments (n = 64, 40, and 23, respectively). This pattern is not particularly surprising. Frontline work and its primary “treatment effects” have the most immediate impacts on those who are served and groups who represent their interests and, as a result of their fire alarms, on political representatives. Thus investigators across a wide spectrum of substantive domains have sought to understand them.

A second finding of even greater interest is that the vast majority of studies adopt a top-down perspective on governance: most studies lie below and to the left of the principal diagonal in Table 1. Influence is modeled as flowing downward from legislation and management toward treatments and consequences, and this general pattern is evident for virtually every level of
governance being modeled (except for citizen preferences). For example, of the 232 studies that examine a primary work or treatment dependent variable, over half model it using formal authority or structures.\(^9\) Less than five percent of the studies modeled primary work as the resultant of consequences or of stakeholders’ assessments of performance.\(^{10}\)

**Governance as an Independent Variable**

Given the top-down orientation of governance research, one would expect to find relatively greater use of independent variables near the top of the governance framework, that is, at the public choice and structural levels. Table 2 generally confirms this expectation. This table, which contains the same cell

\(^9\) For example, certificate-of-need licenses are used to explain the internal subsidization of indigent care (Campbell and Fournier 1993); or changes in welfare policies are used to explain the instrumental transactions of welfare workers with clients (Meyers et al. 1998).

\(^{10}\) To examine whether these patterns are driven by studies in journals most often represented in the database (*Journal of Policy Analysis, Journal of Public Administration Research and Theory*, and *Public Choice*), we re-ran the analysis without the 243 studies from these journals. The patterns are practically identical to the ones we report for the full sample.
frequencies as Table 1, shows column (rather than row) percentages in order to refocus the analysis on independent variables. The column totals show that researchers are examining a rich array of explanatory factors from all but the final two levels (consequences and stakeholder assessments).

The most frequently used independent variable represents some kind of formal structure or authority: just under half of the studies (n = 372) used such a variable. (It is interesting to note that this category was relatively under-studied as a dependent variable: structures explain; they are not explained.) An approximately equal percentage (about 30 percent) of studies use an independent variable at the citizen preference level (n = 220) or at the discretionary management level (n = 244). Public choice and primary work variables are most often used to study consequences (40 percent and 56 percent of the total studies, respectively, that use each variable).11, 12

11 These patterns, too, are robust to the exclusion of studies from *JPAM*, *JPART*, and *Public Choice*.

12 For example, state and federal tobacco taxes are used to explain cigarette consumption (Meier and Licari 1997); or tracking of students and class size are used to explain student performance on math achievement tests (Argys et al. 1996).
Does Governance Matter?

If the findings of the studies in the governance database can be believed, there are significant patterns of influence across levels of governance. Variables at virtually every level of the governance hierarchy both influence and are influenced by variables at other levels, and these relationships can be (but are not always) statistically and substantively significant. Of particular interest are constructs at governance levels over which public managers and their agents have influence: formal organizational structure, public management, and primary work.

Formal governance encompasses legislated policy design elements, the hierarchical level and composition of administrative units, and mandated administrative procedures. Frequently examined constructs at this level are organizational type (profit status), the form of government of local jurisdictions (e.g., mayor-council or council-manager), and state discretionary choices.\(^{13}\) As noted, structures of formal authority are thought to explain a broad range of

\(^{13}\) Federal legislation or authorities may permit states to make discretionary decisions (e.g., concerning benefit levels or block grant allocations for social welfare programs). We consider the federal authority permitting such discretion to be a (b) variable; we classify the state decisions of whether to exercise discretionary authority in the structure of programs as (c) variables.
dependent variables, and many studies reported statistically significant
relationships, suggesting that formal governance does influence governmental
processes and outcomes. For example, Koenig and Kise (1996) found that
legislative rules and actions and regulatory requirements influenced city
managers’ responsibilities for budgeting, organizational authority, motivation and
morale, and the local representative process. Attewell and Gerstein (1979) found
that federal policies, which reflected multiple stakeholder goals, influenced local
practices concerning methadone maintenance for heroin addiction. Boschken
(1998) found that agency autonomy of urban public transit agencies, particularly
fiscal autonomy, was related to various policy outcomes.

Public management, too, is a predominant explanation for primary work
and its consequences, and many studies of managerial influence show
demonstrable effects. As discussed in greater detail in the next section, variables
at the discretionary management level include administrative structures, use of
managerial tools, and management values or strategies. Quite numerous are
studies that examine local hiring practices and preferences, leadership, and
administrative policies (e.g., features of school teacher leave policies).

To continue the example of federal and state policies described in the
previous footnote, we would classify local managerial discretion concerning how
to carry out a program as a (d) variable.
example, Miranda and Lerner (1995) found a negative relationship between the percentage of services that a local government contracts out and local government expenditure levels. Kakalik (1997) found that alternative dispute resolution was not related to time to disposition of legal cases. And Bowditch (1993) found relationships between school policies and procedures and the use of suspensions, transfers, and involuntary drops to get rid of students labeled as troublemakers.

As with formal structures and discretionary management, the findings for treatment variables — program design features, field worker discretionary activity, field worker beliefs and values, and administrative processes — suggest that field-level interventions can influence outcomes. Findings regarding primary work include, for example, that shared knowledge and collective beliefs of frontline workers lead to better client outcomes (Sandfort 2000), or that the use of discretion by black teachers leads to higher rates of high school graduation (Meier et al. 1991). The great majority of studies at this level are concerned with the organization of treatment in social programs, however, so the range of substantive findings is relatively narrow. Primary work variables lend themselves relatively more easily to analysis through experiments, and in this category we see most of the experimental methods in the database.

A unique aspect of primary work research is the extent to which it is designed to evaluate particular normative theories of intervention. Case management, continuity of care, and integrating specialists into an intervention
team are often favored by treatment professionals over so-called traditional approaches to intervention, and studies often are designed to confirm their intuitions. The actual findings appear to be mixed, however, which may reflect both actual effectiveness and the difficulties of statistically identifying the effects of particular features of treatment.

**How Does Governance Matter?**

Our review thus far finds support for the supposition that presumably underlies the work of most governance researchers and practitioners (but may be in greater doubt outside these circles): Governance—in particular, structures, management, and treatment—matters. In what ways does governance make a difference?

**How Does Governance Influence Performance?**

The most common type of dependent variable in governance research is a measure of performance for one of three types of entities: for other governments or the public sector; for markets, firms, or the private sector; or for individuals, groups, or society. Each of these categories can be further subdivided into outputs (measures of what is done, or levels of activity) and outcomes (measures
of effectiveness or change).\textsuperscript{15} As shown in Table 3, within the broad category of performance the bulk of research attention is focused on individual or societal outputs ($n=137$ studies), such as cigarette consumption, child support payments, injury rates, and infant birthweight. Less often studied are outputs or outcomes of the public and private sectors.\textsuperscript{16}

In studies that attempt to model individual and societal outputs, explanatory factors include public choice, formal authority, discretionary management, and primary work variables. Relatively unexplored are the influences on outputs of citizen preferences and interests and stakeholder

\textsuperscript{15} An example of a public sector output is the number of stolen motor vehicles recovered by local police, while an example of a public sector outcome is the effectiveness of local mental health services in improving patient functioning. Other examples in the general category of performance include stock prices of firms, welfare-to-work client earnings, student achievement scores, deaths from motor vehicle accidents, and drug and alcohol recidivism.

\textsuperscript{16} We have coded some measures that might be considered public sector outputs — such as costs, number of arrests, and treatment practices — as primary work variables. The basic findings regarding explanatory factors would not change if these variables were reclassified (given the top-down tendencies toward explanation described earlier).
assessments of the consequences of governance. This pattern is mirrored in explanations of individual or social outcomes \((n = 67\) studies), as well. For the studies of public and private sector outputs and outcomes, it appears that relatively more emphasis is placed on formal authority and structures. Especially for market and private sector outputs, this makes sense as many laws and mandates that apply to private firms do not pass through interim layers of public sector actors or their agents, as is the case, for example, for human services programs.

How Does Public Management Matter?

Within the logic of governance, the study of public management is concerned with action itself: the discretionary behavior of actors in managerial roles subject to the constraints of formal authority. The need for management arises under three conditions: (1) when an enacting coalition has explicitly delegated the “figuring out” of appropriate action to executive agencies, (2) when there is ambiguity in the mandate, providing opportunity (intended or unintended) for managers to figure things out, and (3) when fulfilling legislative or administrative objectives requires judgment in applying rules and standards in particular cases. Because explicit or implicit delegations are inevitable, there is virtually always a role for management and therefore, managerial behavior is
almost always a factor in government performance. But how much of a factor, under what circumstances, and compared to what?

In defining public management, Lynn (2003) distinguishes its structural, craft, and institutional aspects. Here, we seek an inductive understanding of public management by analyzing how it is conceptualized and operationalized across a range of disciplines and domains.

In the 334 studies in our database that used public management as either a dependent or an independent variable, we can identify three broad types of constructs:

1. **Administrative structures.** This category includes variables such as red tape, organizational and inter-organizational structures (such as partnership arrangements), or formalization of authority intended to constrain the behavior of subordinate and other actors. While administrative structures may not be wholly determined by managerial actors, such structures may be classified as a management variable to the extent that public managers’

17 One hundred ninety-six studies used public management only as an independent variable, 90 studies used public management only as a dependent variable, and 48 studies used public management as both an independent and dependent variable.
discretionary actions either create structures or infuse an existing structure with distinction and meaning (e.g., by creating “organizational effects” at national, state, or local office levels of administration).

(2) **Managerial tools.** Within a given structural setting, managers may employ a number of different administrative mechanisms to design, implement, and evaluate policies and programs. The use of performance incentives, coordination and networking techniques, and contracting mechanisms are examples of managerial tools represented in this category.

(3) **Management values and strategies.** In contrast to structures and tools, managerial values and strategies reflect managerial choices with respect to goals, missions, priorities and adaptation to the institutional environment. Leadership, employee empowerment, inter-organizational cooperation (e.g., cooperative enforcement) and services integration, and the allocation of resources across programs and activities are all included in this category.

Table 4 shows how public management variables — subdivided into the categories described above — are distributed among studies that use public management as either an independent or a dependent variable. The ratio of studies focused on public management as an explanatory variable rather than as a
variable to be explained is just under 2:1. For both types of studies, however, a similar emphasis is evident: the focus is on administrative structures, secondarily on values and strategies. Relatively less studied are the tools at managers’ disposal.

The determinants of public management are relatively similar across the three subcategories (Table 5). Formal organizations and structures are most often invoked to model public management, represented in at least 70 percent of the studies for each type of dependent variable. Organizational type (i.e., for-profit, nonprofit, government) and legislated rules or acts are most often used to explain the administrative structures and strategy preferences of public managers, whereas internal structures (e.g., city manager or council form of government) or budgetary resources and guidelines are invoked most often to explain managerial use of tools and structures. This pattern of findings implies that investigators often expect the institutional environment to shape organizational structures under the managers’ discretionary control and to shape managerial values and strategies, but that specific managerial practices are influenced by proximate resource and organizational constraints. In fact, Table 5 also shows that other managerial
variables are used more often to explain the use of managerial tools than they are to explain structural or strategic aspects. 18

While values and strategies are used about twice as often as are tools variables to explain other levels of governance, the patterns of their deployment are almost identical (Table 6). They are most heavily used to model primary work or consequences. Administrative structures—the most numerous of studies using public management as an independent variable—tend to be used slightly more often to explain the use of tools and strategies by managers.

This set of findings has consequences for the extent and depth of our knowledge about public management in the context of governance. We are learning relatively more about how management influences subordinate levels of governance than about how governance influences the practice of public management. Together with the findings reported earlier regarding the top-down orientation of governance research, this finding also implies that we are learning more about how managers influence activity below them than about how managers are influenced by activities above them. Further, we are learning relatively more about structural aspects and managerial values and strategies—both how and what they influence—than about tools at managers’ discretion.

18 This finding should be interpreted with caution due to the small sample size of studies in this category (n= 33 studies).
How Do Particular Aspects of Governance Matter?

Among the over 800 studies in the governance database are clusters of studies that address particular aspects or policy domains of governance, such as interest group power, legislator voting behavior, mandates of federal agencies, interorganizational cooperation, case management, and school performance. In this section, we demonstrate how studies extracted from the database for two different governance issues might provide insight into their study and findings. Such extracts from the database do not constitute literature reviews on each topic; instead, they may be seen as representative samples from the broader governance literature than might be gleaned by a researcher working in a narrowly-focused substantive area.

*Studies of Ownership.* Bradley (2003) examined almost 50 studies in the governance database that examined the influence of ownership — public, for-profit, or nonprofit status — on governance. She found that most studies measured the effects of ownership using regression analysis and secondary data sources. Sample sizes in these studies ranged from 13 to 67,000, and sources span the range of those in the governance database, including core journals such as *Journal of Public Administration Research and Theory, Public Administration Review,* and *Journal of Policy Analysis and Management,* as well as subject area
journals such as *Journal of Health and Social Behavior*, *Journal of Accounting and Public Policy*, *Nonprofit and Voluntary Sector Quarterly*, and *Public Finance Quarterly*. The studies examined a number of dimensions, including cost efficiency, clientele served, type and quality of services provided, and contracting activity.

Findings from the studies reviewed were suggestive but not conclusive, due primarily to the lack of a critical mass of studies on any particular issue or question. For example, Bradley found that about 15 studies examine correlates of public versus private ownership, but these studies are spread thinly across investigations of accountability, red tape, clientele, organizational change, leadership, norms and standards, risk, production costs, and quality of services.

In answering the question “what do we know about ownership,” then, Bradley’s review of the public/for-profit/nonprofit studies from the governance database found that the limited evidence available suggests that “the private sector is the most efficient in terms of production costs but not consumer cost”; that findings differ regarding the types of clientele served by organizations in the different sectors; and that quality differences are seen in some policy areas but not others.

*Studies of Contracting and Performance Incentives.* Sixteen studies in the governance database examine contracting out, the design of performance
measures, and the incentives and effects that such activities can have. All except for two studies use regression analysis with control variables, and many develop hypotheses through the specification of formal models. Units of analysis across these studies include individual clients, residential care homes, contracts, providers, municipalities, and federal bureaus. Sample sizes range from 2 to over 75,000. As with the ownership studies, sources are diverse: both core journals and specialty journals such as *Urban Affairs Quarterly, Journal of Health Economics, and Social Problems* are represented.

Three types of findings emerge from this set of studies. First, contractors and service providers respond to incentives that are implicitly or explicitly provided in contracts and performance standards.¹⁹ These responses are manifested in creamskimming (selecting clients who are likely to be successful because of personal characteristics rather than treatment effects); in misrepresentation of information to the principal; in reallocating resources across inputs, and in enhancing productivity toward the measured goals.

Second, cost savings were possible, but their realization was contingent on factors such as whether there was a formal contract review process, whether

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¹⁹ While rational choice theories (in particular) predict that contractors will respond to incentives, whether and how much they respond are empirical questions.
prices were negotiated with a majority of providers, the provider organization’s size, local market conditions, and whether penalty provisions were included in the contract. Quality enhancements were either unmeasured or were found to be negative.

Third, the decision to contract out is influenced a set of internal and external factors, including cost considerations, political influences, and formal and informal pressures (both positive and negative). Once contracting-out occurs, changes can occur both within the organization that is contracting out (if it can submit an in-house bid, it may be more efficient), and within the contractor (pressures on existing organizational culture and administrative practices).

Though stated broadly, these findings are contingent and their interpretation depends on the other factors that are held constant in their regression models or research designs. To complicate matters, their findings may not generalize to other types of policies, organizations, locations, or times. Nevertheless, they provide examples of the kinds of findings that empirical governance researchers are producing across a number of different sources.

**Implications for the Study and Practice of Governance**

In 2003, President George W. Bush announced a competitive sourcing initiative, along with revisions to OMB Circular A-76. Does the evidence
available in the governance database offer useful information for such an endeavor? While available studies are hardly definitive on how and with what consequences privatization might best be done, they are nonetheless relevant to the effort. Among other things, they suggest that “creamskimming” and cost savings are only a few of the many aspects of contracting and performance measurement that should be considered.

That such evidence is qualified and contingent is not a drawback; it is a virtue. Universal principles derived from best practices research are seductive, but findings that employ models and methods to explicitly account for intervening factors are of greater value to practitioners who, after all, are operating in particular contexts. The causal logic of governance is complex and difficult to study, yet that is the intellectual challenge facing the governance research community: to produce the kind of “strong causal insights” that have a plausible claim to validity in various contexts (Mohr 1996, pp. 144-145).

Contingency can strengthen internal validity while at the same time limit external validity (generalizability). A theory-based, quantitative study may share this limitation with best practices or other opportunistic collections of cases. To achieve the kind of generalizable insights that can be most useful for practitioners across a range of settings, more and better data sets with measured constructs of interest for public governance are needed (Gill and Meier 2000; Lynn, Heinrich, and Hill 2000). To support data collection beyond archiving existing sources, the
organized efforts of institutional actors such as governments and foundations are needed. The best studies of governance integrate quantitative analysis with knowledge and insights gained from qualitative research and practitioner insights (Lynn, Heinrich, and Hill 2001), and the development of data that produce findings with greater generalizability and opportunities for replicability can, at the same time, provide opportunities for qualitative research.20

A particularly interesting substantive challenge is raised by our findings. How can the clear tendency toward hierarchical explanations of primary work and the consequences of government action be reconciled with the view of governance, popular in the literature cited earlier, as increasingly networked and associational? A number of possible explanations emerge, each partially illuminating the disjunction between our findings about how governance is studied and emerging characterizations of public governance.

One possibility is that the studies we examined, published from 1990 to 2001, are uncovering older forms of governance, gleaned from data gathered in previous periods. If this is the case, the emergence of networked relationships in practice is yet to be reflected in empirical research. Studies in our database that do reflect horizontal governance are not clustered at recent publication dates.

20 “Welfare, Children, and Families: A Three-City Study” is an example of such a multi-method study: http://www.jhu.edu/~welfare.
Given the robustness of the basic findings across time, the possibility that the studies we reviewed reflect an outdated reality, however, does not provide a satisfactory explanation for our findings regarding the top-down nature of empirical public governance research.

Another possibility is that public governance researchers are looking under bright streetlights where it is “easiest” to create the data and models needed for quantitative empirical work. To the extent that this is true, realities about the practice of public governance and management reside in the less well-illuminated areas beyond the transparent glare of data and methods used in these studies. This possible explanation suggests that the practice of governance is not really top-down; that’s just how we study it given the incentives associated with academic appointment, promotion, and publication. Once again, given the robustness of our findings across time, data sources, publication outlets, and policy realms, this explanation does not fully explain our findings.

A related possibility is that investigations of horizontal relationships are either being excluded from the database (if, as noted earlier, they examine only “single-level” relationships, they do not meet the criteria for inclusion in our study), or being redefined (to be consistent with the organizing logic of governance). It is unlikely these studies are being excluded because the organizing logic is a framework that accommodates many kinds of theories and models, including networked relationships (Lynn, Heinrich, and Hill 2000, 2001).
It is true that a single-level study documenting the extent of interorganizational networks (for example) would not be included in our database; neither would a study that merely documented the extent of hierarchical levels in governmental organizations. A study would be included if it examined determinants of network development or implications of network integration for managerial strategies, treatments, or outcomes. Further, it is unlikely that associational relationships are being redefined because the database, in fact, includes over 30 studies involving horizontal forms of governance — partnership arrangements, networking, coordination strategies, cooperative management, and services integration. These studies met our criteria and are included in the database. That there are not more reflects investigator priorities, not selection bias. Thus, this explanation does not satisfactorily explain our findings.

Yet another possibility is that the seemingly “paradigmatic” shift away from hierarchical government and toward horizontal governing (hence the increasing preference for “governance” as an organizing concept) is less fundamental than it is tactical: new tools or administrative technologies are being added that facilitate public governance within a hierarchical system. Shedding the strictures of hierarchy may seem refreshing (in a normative, positive, or symbolic sense), but Constitutional authority (manifested in hierarchy) and the “fiscal spine” of appropriated funds remain the structures within which relational and networked forms are enabled to flourish. As Frederickson and Smith (2003, p.
224) note, “hierarchy is necessary for conjunction to exist” because the American political scheme remains hierarchical and jurisdictional.

The fact that relatively few studies examined more complex patterns of causality may reflect the paucity of data, but it suggests something more revealing: conjectures by hundreds of investigators in specialized domains that the interesting questions of administration and management concern the effects of hierarchical interactions more than of horizontality. When it comes to answering multi-level “why” questions, the evidence suggests that hierarchy preoccupies field researchers. While we cannot rule out that researchers are looking under streetlights rather than lighting lamps in the darkness, the consistency of research agendas across policy domains and intellectual subfields is suggestive of the kinds of questions, and answers, that are of interest to the audiences for empirical research.

Through the meta-analysis we present here, we have aimed to illuminate research on relationships among governance levels across a wide range of disciplines and subspecialties, and discover whether there are cumulative insights into factors or variables that have demonstrable effects. Furthermore, we have attempted to establish an empirical, baseline characterization of research on the centrifugal and centripetal forces on governance.
Among the issues raised by our findings are the following questions that have received relatively little attention, and that empirical governance researchers should investigate:

- How do governance factors influence citizen preferences, the structures of formal authority, or stakeholder assessments?
- Are cross-level, feedback, and configurational aspects of governance empirically significant? And, how might a convincing body of evidence regarding whether and how these effects exist be created?
- How do governance factors influence the practice of public management (administrative structures, managerial tools, or values and strategies)?
- How does governance influence the choice or use of managerial tools? How does the choice and use of tools influence other governance factors?
- How do network relationships interact with, or circumvent, hierarchical structures of governance? How have these relationships changed over time, in different policy domains?

We do not suppose that the laissez-faire character of the research enterprise reflected in our governance research database will or should change.
For those who are self-consciously engaged in governance research, however, such questions deserve greater attention than they have received.
REFERENCES


Michalski, Wolfgang; Miller, Riel; and Stevens, Barrie. 2001. Governance in the 21st century: Power in the global knowledge economy and society. In


Table 1
How Studies Model Dependent Variables at Each Governance Level
(Each cell shows the number of studies, followed by the *row percent* in italics and parentheses)

<table>
<thead>
<tr>
<th>Level of Dependent Variable</th>
<th>Level of Independent Variable Used to Model the Dependent Variable</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Citizen Preferences &amp; Interests</td>
<td>(a) 32 (50) (b) 21 (33) (c) 17 (27) (d) 11 (17) (e) 3 (5) (f) 1 (2) (g) 7 (11)</td>
<td>64</td>
</tr>
<tr>
<td>(b) Public Choice (Executive, Legislative, Judicial)</td>
<td>(a) 75 (74) (b) 24 (24) (c) 31 (30) (d) 12 (12) (e) 2 (2) (f) 1 (1) (g) 3 (3)</td>
<td>102</td>
</tr>
<tr>
<td>(c) Structures of Formal Authority</td>
<td>(a) 23 (58) (b) 20 (50) (c) 16 (40) (d) 9 (23) (e) 6 (15) (f) 0 (0) (g) 1 (3)</td>
<td>40</td>
</tr>
<tr>
<td>(d) Discretionary Management, Organization, &amp; Administration</td>
<td>(a) 35 (25) (b) 23 (17) (c) 103 (75) (d) 48 (35) (e) 14 (10) (f) 6 (4) (g) 7 (5)</td>
<td>138</td>
</tr>
<tr>
<td>(e) Primary Work &amp; Core Technologies</td>
<td>(a) 40 (17) (b) 35 (15) (c) 125 (54) (d) 100 (43) (e) 56 (24) (f) 7 (3) (g) 2 (1)</td>
<td>232</td>
</tr>
<tr>
<td>(f) Consequences, Outcomes, Outputs, Results</td>
<td>(a) 20 (7) (b) 76 (26) (c) 111 (37) (d) 91 (31) (e) 85 (29) (f) 7 (2) (g) 1 (&lt;1)</td>
<td>298</td>
</tr>
<tr>
<td>(g) Stakeholder Assessments of Performance</td>
<td>(a) 9 (39) (b) 0 (0) (c) 7 (30) (d) 3 (13) (e) 4 (17) (f) 7 (30) (g) 2 (9)</td>
<td>23</td>
</tr>
</tbody>
</table>

Notes:

1. Each cell of the table shows the number (followed by the *row percent*) of studies that used at least one independent variable at the indicated level to explain a dependent variable in that row. For example, 64 studies in the database examined a dependent variable at the citizen preferences & interests (a) level. Of these 64 studies, 11 (or about 17 percent) included at least one independent variable at the discretionary management (d) level.

2. Because some studies modeled more than one type of dependent variable, the total number of studies in the last column is greater than the 823 studies in the database.
<table>
<thead>
<tr>
<th>Level of Dependent Variable</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
<th>(f)</th>
<th>(g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Citizen Preferences &amp; Interests</td>
<td>32 (15)</td>
<td>21 (11)</td>
<td>17 (5)</td>
<td>11 (5)</td>
<td>3 (2)</td>
<td>1 (4)</td>
<td>7 (33)</td>
</tr>
<tr>
<td>(b) Public Choice (Executive, Legislative, Judicial)</td>
<td>75 (34)</td>
<td>24 (13)</td>
<td>31 (8)</td>
<td>12 (5)</td>
<td>2 (1)</td>
<td>1 (4)</td>
<td>3 (14)</td>
</tr>
<tr>
<td>(c) Structures of Formal Authority</td>
<td>23 (10)</td>
<td>20 (11)</td>
<td>16 (4)</td>
<td>9 (4)</td>
<td>6 (4)</td>
<td>0 (0)</td>
<td>1 (5)</td>
</tr>
<tr>
<td>(d) Discretionary Management, Organization, &amp; Administration</td>
<td>35 (16)</td>
<td>23 (12)</td>
<td>103 (28)</td>
<td>48 (20)</td>
<td>14 (9)</td>
<td>6 (25)</td>
<td>7 (33)</td>
</tr>
<tr>
<td>(e) Primary Work &amp; Core Technologies</td>
<td>40 (18)</td>
<td>35 (19)</td>
<td>125 (34)</td>
<td>100 (41)</td>
<td>56 (37)</td>
<td>7 (29)</td>
<td>2 (10)</td>
</tr>
<tr>
<td>(f) Consequences, Outcomes, Outputs, Results</td>
<td>20 (9)</td>
<td>76 (40)</td>
<td>111 (30)</td>
<td>91 (37)</td>
<td>85 (56)</td>
<td>7 (29)</td>
<td>1 (5)</td>
</tr>
<tr>
<td>(g) Stakeholder Assessments of Performance</td>
<td>9 (4)</td>
<td>0 (0)</td>
<td>7 (2)</td>
<td>3 (1)</td>
<td>4 (3)</td>
<td>7 (29)</td>
<td>2 (10)</td>
</tr>
<tr>
<td>Totals</td>
<td>220</td>
<td>188</td>
<td>372</td>
<td>244</td>
<td>152</td>
<td>24</td>
<td>21</td>
</tr>
</tbody>
</table>

Notes:
1. Each cell of the table shows the number (followed by the column percent) of studies that modeled the dependent variable at the indicated level, using an independent variable indicated in that column. For example, 220 studies in the database used an independent variable at the citizen preferences & interests (a) level. Of these 220 studies, 35 (or about 16 percent) modeled a dependent variable at the discretionary management (d) level.

2. Because some studies modeled multiple dependent variables, and because a particular model may have used more than one independent variable, the total number of studies in the final row of the table is greater than the 823 studies in the database.
Table 3
How Does Governance Influence Performance?
(Each cell shows the number of studies, followed by the row percent in italics and parentheses)

<table>
<thead>
<tr>
<th>Type of Dependent Variable (Consequences)</th>
<th>Level of Independent Variable Used to Model the Dependent Variable</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
<th>(f)</th>
<th>(g)</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outputs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government or Public Sector</td>
<td></td>
<td>3 (16)</td>
<td>1 (5)</td>
<td>9 (47)</td>
<td>8 (42)</td>
<td>5 (26)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>19</td>
</tr>
<tr>
<td>Market, Firm, or Private Sector</td>
<td></td>
<td>4 (8)</td>
<td>16 (33)</td>
<td>25 (52)</td>
<td>16 (33)</td>
<td>4 (8)</td>
<td>2 (4)</td>
<td>0 (0)</td>
<td>48</td>
</tr>
<tr>
<td>Individual or Society</td>
<td></td>
<td>8 (6)</td>
<td>38 (28)</td>
<td>44 (32)</td>
<td>27 (20)</td>
<td>45 (33)</td>
<td>2 (1)</td>
<td>0 (0)</td>
<td>137</td>
</tr>
<tr>
<td>Outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government or Public Sector</td>
<td></td>
<td>2 (9)</td>
<td>3 (13)</td>
<td>9 (39)</td>
<td>11 (48)</td>
<td>5 (22)</td>
<td>1 (4)</td>
<td>0 (0)</td>
<td>23</td>
</tr>
<tr>
<td>Market, Firm, or Private Sector</td>
<td></td>
<td>0 (0)</td>
<td>4 (22)</td>
<td>11 (61)</td>
<td>4 (22)</td>
<td>1 (6)</td>
<td>0 (0)</td>
<td>1 (6)</td>
<td>18</td>
</tr>
<tr>
<td>Individual or Society</td>
<td></td>
<td>5 (7)</td>
<td>17 (25)</td>
<td>19 (28)</td>
<td>28 (42)</td>
<td>28 (42)</td>
<td>2 (3)</td>
<td>0 (0)</td>
<td>67</td>
</tr>
</tbody>
</table>

Notes:

1. Each cell of the table shows the number (followed by the row percent) of studies that used at least one independent variable at the indicated level to explain a dependent variable of each category (f) subtype. For example, 137 studies in the database examined a dependent variable that we classified as an individual or societal output. Of these 137 studies, 45 (or about 33 percent) included at least one independent variable at the primary work (e) level.

2. Because some studies modeled more than one type of performance dependent variable, the total number of studies in the last column is greater than the 298 studies in the database that examine an (f) level dependent variable.
Table 4
Public Management as an Independent and Dependent Variable in Governance Research
(Each cell shows the number of studies, followed by the column percent in italics and parentheses)

<table>
<thead>
<tr>
<th>Type of Variable (Discretionary Public Management, Organization, and Administration)</th>
<th>Studies that use Public Management as…</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>an Independent Variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Structures</td>
<td>127 (52)</td>
<td>59 (43)</td>
<td></td>
</tr>
<tr>
<td>Managerial Tools</td>
<td>53 (22)</td>
<td>33 (24)</td>
<td></td>
</tr>
<tr>
<td>Management Values and Strategies</td>
<td>104 (43)</td>
<td>52 (38)</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>244</td>
<td>138</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

1. Each cell of the table shows the number (followed by the column percent) of studies that used a particular type of public management variable as either an independent or dependent variable. For example, 244 studies in the database used an independent variable at the level of discretionary management, organization, or administration (d) level. Of these 244 studies, 127 (or 52 percent) used a type of public management variable that could be classified as “administrative structures.”

2. Column percentages add to greater than 100 percent because some studies included more than one type of management variable.
Table 5
How Does Governance Influence Public Management?
(Each cell shows the number of studies, followed by the row percent in italics and parentheses)

<table>
<thead>
<tr>
<th>Type of Dependent Variable (Discretionary Public Management, Organization, and Administration)</th>
<th>Level of Independent Variable Used to Model the Dependent Variable</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Structures</td>
<td>(a)</td>
<td>(b)</td>
</tr>
<tr>
<td></td>
<td>15 (25)</td>
<td>14 (24)</td>
</tr>
<tr>
<td>Tools</td>
<td>11 (33)</td>
<td>4 (12)</td>
</tr>
<tr>
<td>Values &amp; Strategies</td>
<td>9 (17)</td>
<td>7 (13)</td>
</tr>
</tbody>
</table>

Notes:

1. Each cell of the table shows the number (followed by the row percent) of studies that used at least one independent variable at the indicated level to explain a dependent variable of the subtype for category (d), discretionary organization and management. For example, 59 studies in the database examined a dependent variable that we classified as an administrative structure (d) variable. Of these 59 studies, 42 (or about 71 percent) included at least one independent variable at the formal authority (c) level.

2. Because some studies modeled more than one type of management dependent variable, the total number of studies in the last column is greater than the 138 studies in the database that examine (d) level dependent variable.
Table 6
How Does Public Management Influence Governance?
(Each cell shows the number of studies, followed by the column percent in italics and parentheses)

<table>
<thead>
<tr>
<th>Level of Dependent Variable</th>
<th>Type of Independent Variable (Discretionary Public Management, Organization, and Administration)</th>
<th>Administrative Structures</th>
<th>Tools</th>
<th>Values &amp; Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Citizen Preferences &amp; Interests</td>
<td></td>
<td>5 (4)</td>
<td>2 (4)</td>
<td>4 (4)</td>
</tr>
<tr>
<td>(b) Public Choice (Executive, Legislative, Judicial)</td>
<td></td>
<td>8 (6)</td>
<td>1 (2)</td>
<td>6 (6)</td>
</tr>
<tr>
<td>(c) Structures of Formal Authority</td>
<td></td>
<td>6 (5)</td>
<td>1 (2)</td>
<td>5 (5)</td>
</tr>
<tr>
<td>(d) Discretionary Management, Organization, &amp; Administration</td>
<td></td>
<td>32 (25)</td>
<td>9 (17)</td>
<td>18 (17)</td>
</tr>
<tr>
<td>(e) Primary Work &amp; Core Technologies</td>
<td></td>
<td>45 (35)</td>
<td>24 (45)</td>
<td>44 (42)</td>
</tr>
<tr>
<td>(f) Consequences, Outcomes, Outputs, Results</td>
<td></td>
<td>43 (34)</td>
<td>20 (38)</td>
<td>39 (38)</td>
</tr>
<tr>
<td>(g) Stakeholder Assessments of Performance</td>
<td></td>
<td>0 (0)</td>
<td>2 (4)</td>
<td>2 (2)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>127</strong></td>
<td><strong>53</strong></td>
<td><strong>104</strong></td>
</tr>
</tbody>
</table>

Notes:

1. Each cell of the table shows the number (followed by the column percent) of studies that modeled the dependent variable at the indicated level, using an independent variable of each discretionary management type listed in the column. For example, 104 studies in the database used an independent variable classified as managerial values or strategies. Of these 104 studies, 44 (or about 42 percent) modeled a dependent variable at the primary work level.

2. Because some studies used more than one type of managerial independent variable, the total number of studies across the last row is greater than the 244 studies in the database that examine (d) level independent variable.
Appendix A
A Logic of Governance Identifies Relationships…

between (a) citizen preferences and interests expressed politically, further disaggregated into:
(a1): primordial citizen preferences and interests;
(a2): private firms, organizations, behavior, participation, etc.; and
(a3): interest groups

and

(b) public sector decisions, activity, and influence, which may be further disaggregated into
(b1): legislator preferences expressed in action or in enacted legislation;
(b2): executive policies and, in a federal system, federal-level policies and influence; and
(b3): court decisions;

between (b) public sector influence, activity, and choice

and

(c) formally authorized structures and processes of public agencies at federal or state level, including regulatory authority, disaggregated into

(c1): hierarchy/structure
   (c11) type of ownership
   (c12) level/type of government
   (c13) internal government entities
   (c14) political atmosphere
(c2): mandated behavior
(c3): policy design and elements
(c4): fiscal situation
(c5): other

(continued on next page)
between (c) the structure of formal authority

and

(d) the *de facto* or discretionary organization and management of the executive branch or of executive agencies, programs, and administrative activities, disaggregated into

(d1): administrative structures;
(d2): tools;
(d3): values and strategies;

between (d) discretionary organization, management, and administration

and

(e) primary work or service transactions of public agencies (the availability, type, quality, and cost of publicly sponsored goods and services); which may be disaggregated into:

(e1): program design features
(e2): field worker/office beliefs and values
(e3): administrative processes and policies
(e4): work/treatment/intervention
(e5): client influence, behavior, and/or preference
(e6): use of resources and/or performance (i.e., efficiency, costs, quality, etc.)

*(continued on next page)*
between (e) primary work activities/transactions

and

(f) consequences, outputs, outcomes, or results, which may be further disaggregated into:

(f1): outputs
  (f11): government/public sector
  (f12): market/firm/private sector
  (f13): individual/society

(f2): outcomes
  (f21): government/public sector
  (f22): market/firm/private sector
  (f23): individual/society

between (f) consequences, outputs, outcomes, or results

and

(g) stakeholder assessments of agency or program performance (i.e., judgments about whether government is “working” that motivate them to political action);

between (g) performance assessments expressed politically

and

(a) public and private interests and preferences.
Appendix B
Sources of Studies in Governance Research Database

<table>
<thead>
<tr>
<th>Journal</th>
<th>Number of Articles Included in Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Medicine</td>
<td>1</td>
</tr>
<tr>
<td>Academy of Management Journal</td>
<td>2</td>
</tr>
<tr>
<td>Administration and Policy in Mental Health</td>
<td>18</td>
</tr>
<tr>
<td>Administration and Society</td>
<td>16</td>
</tr>
<tr>
<td>Administrative Science Quarterly</td>
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Note: 1. Core journals are bolded (see “Analyzing Governance Literatures” section of paper).