Conditioning State Responses to External Influences:

The Role of Internal Moderators in State Adoption of Public Policy Change

by

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Abstract

This study proposes that the extent to which external factors influence state policy decisions depends, in part, on internal state characteristics. This insight is grounded in the study of program implementation, which suggests that policy necessarily evolves and adapts to local conditions, and the study of institutions in sociology, which suggests that intra-organizational factors condition organizational responses to institutional pressures. The relevance of this insight for comparative state policy research is examined by applying mixed modeling techniques to data describing adoption of annual percentage reductions in Medicaid nursing facility per diem rates from 1981-1998. External factors include three federal initiatives shown to constrain state policy adoption in this area: Boren Amendment litigation, Medicare's prospective payment system for hospitals, and the Omnibus Reconciliation Act of 1987. They also include two state-level activities shown to promote adoption: neighboring state litigation and prior adoptions of payment reductions in neighboring states. Internal factors include 12 variables describing state socioeconomic, political, and programmatic conditions. Analysis begins with a baseline model that evaluates the basic relationship between the independent variables and outcome of interest. Moderating relationships are then examined by estimating a series of 12 models that add interaction terms to baseline characteristics. Each set of interaction terms examines the interactive effects between one internal factor and the five external factors hypothesized. Results indicate that as a group addition of external-internal interactions improve overall model fit relative to the baseline model in 3 of the 12 equations. Of the 75 individual interaction terms evaluated, 21, or 28.0 percent, were found to be statistically significant. Of the significant findings identified, all but one, or 95.2 percent, fell as expected. Thus, when internal conditions were favorable, and state policymakers more willing and/or able to act, federally imposed limits on what states could do were more likely to become engaged, while when internal conditions were unfavorable, and state policymakers less willing and/or able to act, federally imposed limits diminished in importance, as state policymakers were unlikely to adopt the changes affected by those constraints anyway. There is also a similar dynamic with regard to neighboring state activities. Thus, when internal conditions were favorable, and policy change more likely, state policymakers were much more likely to look to neighboring states for policy guidance, while when internal conditions were unfavorable, and policy change less likely, other states' actions diminished in importance, as state policymakers were unlikely to make changes that could be informed by neighboring states anyway. Future research should clarify how internal factors diminish or enhance the impact of external factors in other contexts.

Most comparative state policy research examines the influence of internal state characteristics on state policy adoption (Berry and Berry 1999; Blomquist 1999; Miller 2004, 2005d). These typically include political variables such as interest group strength, gubernatorial power, legislative professionalism, administrative capacity, public and elite opinion, political party control, and interparty competition. They also typically include socioeconomic variables such as unemployment, urbanization, population size and composition, and state fiscal capacity. External influences deriving from other states' activities have been described as well (Miller and Banaszak-Holl 2005; Peterson and Rom 1990; Walker 1969). Less well studied are influences emanating from the behavior of national authorities, though several studies demonstrate an association between state policy making and federal laws, regulations, court decisions, fiscal incentives, and other, less formal methods of influence (Allen, Pettus, and Haider-Markel 2004; Cline 2003; Grogan 1999; Miller 2006a 2006b; Welch and Thompson 1980).

But while there has long been a tradition of using fifty-state statistical techniques to study the determinants of state policymaking, there is little research examining the way in which internal and external factors interact to influence adoption. That such interaction may be important is reflected in Berry and Berry's (1990, 1999) use of Mohr's (1969) theory of organizational innovation. This theory argues that innovation is "directly related to the motivation to innovate, inversely related to the strength of obstacles to innovation, and directly related to the availability of resources for overcoming such obstacles." It also argues that the motivation to innovate interacts with both strength of obstacles and availability of resources to influence the likelihood of innovation. When the motivation to adopt a new policy is low, for example, the strength of obstacles and amount of resources should make little difference in the likelihood of adoption, as without sufficient motivation the probability of adoption should be uniformly low. As the level of motivation to adopt grows, however, the impact of strength of obstacles and amount of resources on the chances of adoption should become more apparent. Alternatively, when obstacles are comparatively large and resources small, even a high degree of motivation should not produce an innovation. As the strength of obstacles diminishes and the amount of resources grows, however, the effect of motivation on the chances of innovation should rise. Berry and Berry (1990)

evaluate Mohr's expectations in the context of state lotteries. They find that the effect of previously adopting neighboring states in overcoming obstacles to lottery adoption is greater when motivation is strong (i.e., when fiscal health is poor, during an election year) than when motivation is weak (i.e., when fiscal health is strong, after an election year). The moderating effects of internal obstacles and resources on neighboring state influence, however, remains unexamined.

That interaction between internal and external influences may be important is also reflected in the work of implementation scholars who have long recognized that policy necessarily evolves and adapts to local conditions, and that state and local governments possess discretion and autonomy in how they react to federal mandates. Perhaps this is best considered in light of the top-down/bottom-up debate in this subfield. Researchers in the top-down tradition highlight the primacy of federal officials in determining implementation and policy outcomes (Mazmanian and Sabatier 1989); researchers in the bottom-up tradition highlight sub-national discretion and autonomy in interpreting, implementing, and resisting federal mandates (Elmore 1979-80). Thus, whereas the former focuses on the attainment of statutory goals and whether implementing officials follow the directions of elected officials, the latter focuses on how stated objectives are interpreted and how they necessarily evolve during the course of administration.

Top-down scholars might argue that simply being a mandate from a higher level of government gives that mandate a certain degree of legitimacy, which automatically creates a bias toward acceptance. Such a bias is reinforced to the extent that higher level officials are unlikely to promulgate policies that violate deeply held societal norms, not only because it is in their political interests not to do so but also because they too hold deeply rooted values. While some actions may be accepted because they are viewed as more legitimate than others, others may be accepted because of state and local government exposure to the incentives and sanctions that go along with implementation or lack thereof. That federal policies influence state policy making, however, does not mean that resistance does not take place or that policy is always adopted willingly or as intended. There are far too many examples to the contrary (Bardach 1977; Elmore 1979-80; Lipsky 1980; Peterson, Rabe, and Wong 1986; Pressman and Wildavsky 1980). Furthermore, if Strange and Meyer (1993) are correct in suggesting that organizations tend to adopt

general models that are "neither complete nor unbiased depictions of existing practices," implementation should invariably fall short, even for those who prescribe to the very letter of the law.

Because policy and administration are intimately intertwined, the interests, values and resources of state and local officials necessarily moderate the actions of federal actors, and it is the result of this interaction that determines the extent to which federal policy enables or constrains state behavior in particular contexts. Despite the potential importance of this dynamic for understanding intergovernmental relations in the comparative state policy field, there is little acknowledgement in comparative state policy research to date that the influence of federal policies on state policy adoption may vary cross-nationally. This is also true of neighboring state activities, which although routinely shown to influence state policy adoption, remain to be examined in light of the moderating influences of varying political, economic, and programmatic contexts.

In this article, I explore the extent to which the influence of external factors on state policy adoption depends, in part, on internal state characteristics. The relevance of this insight is examined by applying mixed modeling techniques to data describing annual percentage reductions in Medicaid nursing facility per diem rates from 1981-1998. External factors include three federal initiatives shown to constrain state reductions in Medicaid reimbursement, and two state activities shown to promote it. Internal factors consist of 12 variables describing state socioeconomic, political, and programmatic conditions thought to influence state policymaking in this area. In general, results indicate that the effects of external factors on state policymaking tend to be stronger when internal conditions favor adoption. This is likely because external factors that promote or inhibit adoption are unlikely to come into play when internal characteristics do not favor adoption anyway.

The Moderating Effects of Internal Factors on External Influences: A Conceptual Grounding

In addition to the direct effects of internal and external determinants on state policymaking, I expect that the influence of the latter to depend, in part, on characteristics of the former. This insight is

grounded in the work of Berry and Berry (1990) as well as in the observations of implementation researchers. More broadly, however, it is grounded in the study of institutions in sociology, which suggests that intra-organizational factors (e.g., internal political, economic, and programmatic circumstances) condition organizational responses to institutional pressures (e.g., policy adoptions by other states and the federal government).

The sociological institutionalism recognizes that all organizations are "open systems" embedded in larger socio-political and economic contexts (Scott 1998). Thus, what it emphasizes above all else is the relationship of organizations with their wider environments, the effects of social expectations on organizational behavior, and the incorporation of these expectations into organizational structures and practices (Dancin 1997). In organization theory, these culturally-based models seek to explain why organizations adopt certain procedures, routines, beliefs, and structures and how such practices diffuse across culturally interconnected entities over time. Indeed, sociological institutionalists posit a process of "institutional isomorphism" where organizations become increasingly similar because they "adopt emergent, socially defined elements and legitimated practices" promoted by the wider institutional environment (Dacin 1997). The institutional environment promotes homogeneity, in particular, because it consists of cognitive paradigms and normative frameworks which limit the range of alternatives that organizational decision makers are likely to perceive as legitimate and appropriate. Whereas cognitive paradigms are "taken-for-granted descriptions and theoretical analyses that specify cause and effect relationships," normative frameworks are "taken-for-granted assumptions about values, attitudes, identities, and other 'collectively shared expectations'" (Campbell 2002). Organizations adopt institutionally favored characteristics because they would like to be judged legitimate and appropriate themselves.

DiMaggio and Powell (1991a) argue that organizations (which could be states) adopt similar structures, procedures, and practices in three ways: mimetic, normative, and coercive isomorphism. In mimemtic isomorphism, organizations copy prominent organizations considered to be legitimate and successful (e.g., other states). In normative isomorphism, organizations acquiesce to normative standards

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promoted by professionals (e.g., public administrators, accountants, and consultants). In coercive

isomorphism, organizations submit to formal rules and informal pressures promulgated by various

"authorities" (e.g., the federal government). The relevance of these processes for comparative state policy

research was illustrated in one recent study which found that not only do states react rationally and

predictably to economic and political incentives associated with Medicaid nursing facility reimbursement,

but that prior adoptions by other states and the federal government create cognitive and normative

pressures that influence adoption as well (Miller and Banaszak-Holl 2005).

The recognition that intra-organizational factors moderate inter-organizational influences derives

from recent scholarship in the sociology of institutions, which grew out of criticism of early

institutionalists who de-emphasized the role of interest and agency in organizational decision making

(DiMaggio 1988). Because institutional theorists traditionally focused on passive acquiescence to societal

myths and prescriptions rather than strategic adaptation and efficiency, they tended to highlight processes

of structural conformity while neglecting the role of interest and agency in organization-environment

relations (Oliver 1991). As a corrective, scholars have increasingly recognized that intra-organizational

factors condition organizational responses to institutional pressures.

Part of this recognition stems from a melding of the 'old' institutionalism first described by

Selznick (1949) with the 'new' institutionalism described here. Although both agree that

institutionalization constrains organizational rationality, they differ in the sources of that constraint, with

the old "emphasizing the vesting of interests within organizations as a result of political tradeoffs and

alliances, and the new stressing the relationship between stability and legitimacy and the power of

common understandings" (DiMaggio and Powell 1991b). Whereas the old institutionalism describes

organizations embedded in local communities and views organizations as both the objects and loci of

institutionalization, the new institutionalism focuses on non-local environments and regards

institutionalization as taking place inter-organizationally. Because the old institutionalization focuses on

organization-level processes, it takes the view that institutionalization promotes inter-organizational

diversity as dominant coalitions of competing interests infuse particular values within individual

organizations. Because the new institutionalism focuses on inter-organizational processes, by contrast, it takes the view that institutionalization promotes homogeneity across organizations by overriding diversity in local environments through the isomorphic processes described above. Reconciliation between these two perspectives has involved efforts to understand how intra-organizational factors identified by the old institutionalism—agency, interests, values, power, and resources—condition organization responses to the inter-organizational imperatives identified by the new institutionalism.

Oliver (1991), for example, suggests that organizations may enact a variety of strategic behaviors in response to pressures toward conformity within the institutional environment, including acquiescence, compromise, avoidance, defiance, and manipulation. This initial formulation has been extended by many others, including: Guthrie and Roth (1999) who suggest that organizational actors strategically respond to maternity leave mandates in ways that reflect their goals and needs; Goodstein (1994) who also proposes that organizations strategically respond to institutional pressures in the area of work and family issues; Lawrence (1999) who drew on a study of the Canadian forensic accounting industry to develop the concept of "institutional strategy"; Suchman (1995) who examines strategies for gaining, maintaining and repairing organizational legitimacy; Goodrick and Salancik (1996) who use cesarean section surgeries in hospitals to illustrate that institutional standards predominate except where they are uncertain, in which case particularistic interests influence practice; and Alexander and D'Aunno (2002) who propose that "how institutions and markets relate to each other in the health care field" depends on "the agency of actors; their values and interests; and the distribution of power and resources among them."

What all of the aforementioned studies have in common is recognition that internal factors condition organizational responses to institutional pressures. Translating this insight to the context studied here, I propose that:

Proposition: The influence of external factors on state policy adoption is moderated by internal state

characteristics, with external factors consisting of other states and the federal government, and

internal factors consisting of a particular state's political, economic, and programmatic

circumstances.

It is my contention that a fully specified model of state policy adoption needs to account for the possibility of such interactions. Consequently, the primary purpose of the present study is to illustrate the relevance of this insight for comparative state policy research (see Figure I).

[Figure I About Here]

What follows are specific hypotheses regarding one policy area in particular, Medicaid nursing facility reimbursement. This is because the particular way in which two or more determinants interact will depend, in part, on what is being modeled. While it may make sense to hypothesize that a given factor such as unemployment is likely to enhance the impact of a certain federal policy in one context, it may also make sense to hypothesize the opposite in the context of another. This is an extension of Berry and Berry's (1999, p. 120) observation that "explaining the adoption of any specific policy is likely to require attention to a set of variables that are ad hoc from the point of view of innovation theory but critical given the character of the politics surrounding the issue area in question." The problem with developing specific hypotheses before presenting the case within which they are going to be tested is that the general direction and effects will depend, ultimately, on the unique characteristics of the particular case being examined.

Modeling the Moderating Effects of Internal Factors on External Influences:

The Case of Medicaid Nursing Facility Reimbursement

Medicaid is the national government's main health insurance program for the poor, but it is run by the states. The national government grants states significant discretion in designing and administering this program, resulting in considerable cross-state variation. Medicaid is of singular importance for state government today. Between 1989 and 2005, Medicaid's share of states' general fund expenditures grew from 9.0 to 16.9 percent, with expenditures in 2005 ranging from less than $200 million in Vermont, North Dakota, Montana, and Wyoming to more than $5 billion in New York, Pennsylvania, Ohio, Texas, and California (National Association of State Budget Officers 2006).

Medicaid represents a significant portion of the revenue stream of nursing homes, which serve elderly and disabled individuals requiring long-term care. Although about one third of nursing home expenditures are paid out-of-pocket by residents and their families and by private insurers, almost half of nursing facility care is paid for by Medicaid (Centers for Medicare and Medicaid Services 2006). In 2006, Medicaid long-term care reached $94.5 billion, or 31.5 percent of total Medicaid outlays, with approximately 63.0 percent devoted to institutional services (Burwell, Sredl, and Eiken 2006). State officials rank long-term care among the most significant factors contributing to the rapid growth in Medicaid spending (Smith et al. 2004).

Because Medicaid nursing home expenditures consume such a large portion of state budgets, reform in this area is a common budget reduction strategy pursued by state policymakers. On a year-to-year basis these typically consist of incremental adjustments to state reimbursement rates, including changes in how inflation is factored in, whether efficiency bonuses should be offered, what ancillary services should be paid for, and how frequently cost report data should be updated (Miller 2005c). Whereas 22 states either froze or reduced Medicaid provider payments in 2002, 50 did so in 2003, 2004, and 2005; 50 also planned to do so again in 2005 (Smith, et al. 2005).

In addition to cost containment, Medicaid nursing facility reimbursement systems can serve a variety of other public purposes, including promoting beneficiary access, equitable provider payment, and quality of care. Balancing these goals can be difficult. For example, while reducing reimbursement may help reduce overall state spending, it may affect how willing nursing facilities are to accept Medicaid patients. Adopting lower payments may also adversely affect nursing home processes (e.g., staffing) and even outcomes (e.g., mortality and functional status) (Miller 2005c). Because nearly three-quarters of nursing home patients rely on Medicaid to pay for all or part of their care, and nearly all nursing home beds are Medicaid certified, it is difficult to understate the importance of Medicaid and state Medicaid policy for long-term care beneficiaries and providers.

Medicaid nursing home reimbursement represents an ideal area with which to examine the extent to which internal determinants moderate the influence of external factors on state policymaking. Not only is this policy area highly salient for state policymakers, but at over $300 billion in 2005, it is the largest federal grant-in-aid program, with federal contributions ranging from 50.0 percent in states with the highest per capita incomes, such as California, Connecticut, Illinois, and New York, to more than 70.0 percent in states with the lowest, such as Arkansas, Mississippi, New Mexico, and West Virginia. Due, in part, to the high financial stakes, Medicaid nursing facility reimbursement stimulates considerable interaction, both among federal and state policymakers and state officials themselves. This is reflected in almost constant communication between state Medicaid program administrators and their federal overseers. It is also reflected in regular attendance at annual meetings held by the National Association of Sate Medicaid Directors, National Conference of State Legislatures, and National Governors' Association. Evidence suggests that state policymakers react to economic and political incentives associated with Medicaid nursing facility reimbursement, in addition to cognitive and normative pressures associated with prior federal and state policy adoptions (Miller and Banaszak-Holl 2005). I assess Medicaid nursing facility reimbursement by modeling annual percentage reductions in Medicaid nursing facility per diem rates.

<center>**Hypotheses**</center>

For purposes of this study, policymaking determinants are organized according to: (1) whether they arise from a state's external or internal environment, with external factors consisting of other states and the federal government, and internal factors consisting of a particular state's economic, political and programmatic circumstances, and (2) whether they provide a source of motivation for policy adoption, an obstacle to policy adoption, or a resource for overcoming obstacles to policy adoption. Categorizing determinants as motivators, resources, or obstacles provides a helpful way of thinking systematically about what factors influence policymaking (Berry and Berry 1990, 1999). Categorizing determinants as external and internal factors highlights both other states' policies, a source of influence frequently neglected in comparative health policy research (Miller 2005d), and the influence of the federal regulatory environment, a source of influence often neglected in comparative state policy research more generally (Blomquist 1999; Miller 2004; Miller 2005a). This section introduces the external and internal determinants of Medicaid nursing facility reimbursement before describing hypothesized relationships among them.

External Determinants

Previous research identifies three federal-level factors which served to constrain the extent to which states reduced Medicaid nursing facility reimbursement: Boren Amendment litigation, Medicare's prospective payment system (PPS) for hospitals, and the Omnibus Budget Reconciliation Act (OBRA) of 1987. Between 1980 and 1997, the Boren Amendment represented the federal government's main foray into regulating state payment levels for nursing homes and other institutional providers under Medicaid. Though enacted to limit federal review of state Medicaid plans for reimbursing nursing homes (Senate Finance Committee 1980), the way Boren was implemented served to transfer federal oversight from the executive to the judiciary. This is because under Boren numerous providers challenged the adequacy of

state rates and rate setting procedures in the courts, including a Supreme Court decision in 1990, <u>Wilder</u>

<u>v. Virginia Hospital Association</u>, which found that providers had enforceable rights to invoke judicial

oversight of state compliance with Boren's requirements. In all, there were at least 84 nursing facility

lawsuits in 34 states under Boren, with the pace of litigation increasing from an average of 3.2 to 9.3

cases decided per year between 1981-1990 and 1991-1994, before declining to 2.1 during 1995-2001

(Miller 2005b). Three years after the Boren Amendment was passed the federal government implemented

Medicare's prospective payment system (PPS) for hospitals, which resulted in "quicker and sicker"

discharges of hospital patients to nursing homes and other non-hospital settings, thereby increasing

pressure on state Medicaid programs to pay higher rates for nursing facility services. Four years later

Congress amended the Boren Amendment with the Omnibus Budget Reconciliation Act (OBRA) of

1987, which mandated that by 1990, states account for the costs that providers would incur as a result of

meeting new quality standards also promulgated by that Act. Through the Boren Amendment, OBRA

1987, and Medicare PPS the federal government provided states with both formal requirements and

indirect incentives to spend more money on nursing homes.

In contrast to federal policy effects which served as obstacles to state adoption of lower

reimbursement rates, previous research indicates that two state-level factors served as resources for

overcoming obstacles to reducing payments: neighboring state adoptions and neighboring state litigation

(Miller 2006b). Because of bounded rationality and imperfect information, state officials are often

uncertain about the consequences of adopting a specific policy. Examining the effects of a policy adopted

by a neighboring state is one way of making those means-end connections clearer (Walker 1969). Not

only do other states' adoptions reduce uncertainty about what are politically or economically effective

policies, but they also reduce uncertainty about what is considered "state-of-the-art" or the "right thing to

do," regardless of outcomes (Miller and Banaszak-Holl 2005). Furthermore, states may be in competition

with one another, following the lead of their neighbors because they wish to avoid the influx of needy

citizens or emigration of their own taxpayers (Peterson and Rom 1990). Together, these mutually

reinforcing reasons help to explain why states were more likely to adopt reductions in Medicaid nursing facility per diem rates if their neighbors had already done so.

Previous research also indicates that states were more likely to adopt reductions in Medicaid nursing facility reimbursement as the number of neighboring states having lost at least one Boren Amendment lawsuit to nursing homes increased (Miller 2006b). This implies that state policymakers learned from the experiences of their peers and instead of maintaining or increasing reimbursement rates due to fear that they themselves might be sued, reacted by developing more effective and legal strategies with which to lower reimbursement. Indeed, there is evidence to suggest that states learned to better satisfy the courts over time by developing "an explicit findings process, with documents prepared by consultants specializing in such matters," whereas courts became increasingly amendable to state claims that although they had not performed specific studies or analyses, the definition of an efficiently and economically operated facility was, as recognized by federal regulations, nonetheless implicit in their methodologies (Manard 1997). States also devoted increasingly larger sums of money to defending their cases, in addition to hiring outside lawyers who had developed extensive experience litigating cases under Boren, in particular (Miller 2007).

Internal Determinants

Previous research indicates that short-term fiscal crises that make it more difficult for states to fund Medicaid nursing facility services at existing levels should serve to motivate the adoption of reductions in Medicaid nursing facility per diem rates (worse fiscal health) (Berry and Berry 1990, 1992; Miller 2006b). It also indicates that states with more generous standards for qualifying for Medicaid nursing home coverage should experience greater pressure to control spending by implementing cost containment in other areas, i.e., reimbursement (Medicaid program eligibility) (Harrington et al. 2000; Miller 2006; Swan, Harrington, and Pickard 2001). How effective these motivations are in sustaining cost containment, however, hinges, in part, on the obstacles to implementing those policies. Obstacles that

might impede reimbursement reductions include: (1) states with sufficient financial resources with which to support nursing facility spending (fiscal capacity) (Berry and Berry 1990; Harrington, et al. 2000; Miller, et al. 2001; Miller 2006b; Walker 1969), (2) nursing home industry representatives opposed to reductions in nursing facility spending (nursing home industry activity) (Barrilleaux and Miller 1988; Grogan 1994, 1999), (3) advocacy groups for the elderly opposed to excessive spending reductions (elderly advocacy) (Harrington, et al. 2000; Miller, et al. 2001; Miller 2006b), (4) liberal political ideologies that favor spending on nursing facility services (liberal ideology) (Barrilleaux and Miller 1988; Harrington, et al. 2000; Schneider 1991), and (5) availability of alternatives measures with which to restrain nursing home expenditures, including increased utilization of home- and community-based services (home care availability) and nursing home supply controls (nursing home supply restrictions) (Harrington, et al. 2000; Miller, et al. 2001).

Resources are political system characteristics that enable state governments to overcome obstacles to sustaining desired policies. Indeed, a state's ability to undertake major endeavors is reflected in its governing capacity, which has been defined as the "ability to formulate coherent, creative, plausible policy and carry it out efficiently, effectively, and accountably" (Thompson 1998). But while several studies identify a direct relationship between governing capacity and non-incremental change (Berry and Berry 1990, 1999; Miller 2004, 2005d, 2006b), previous research reveals a negative association between governing capacity and year-to-year reductions in Medicaid nursing facility spending (Miller 2006b). Perhaps one reason is that the fall back position for states with relatively weak capacity is to declare no or little growth in expenditures, as stronger capacity is needed to develop and implement the complex formulas necessary to ensure adequate payment increases and to overcome budgetary and political factors that often favor restraining spending on nursing homes. Not only do these factors include the disproportionate share of state budgets devoted to Medicaid funded nursing home care but they also include generally unfavorable portrayals of the nursing home industry in the media and preference for alternative service options in the home and community. This suggests that states with weaker governing capacity (i.e., lower resources) are more likely to reduce reimbursement, whereas states with stronger

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governing capacity (i.e., high resources) are more likely to maintain or increase reimbursement. The following are four commonly used indicators of governing capacity: (1) legislative bodies with longer sessions, greater resources and higher salaries (legislative professionalism) (Berry, Berkman, and Schneiderman 2000; Huber, Shipan, and Pfahler 2001), (2) governors with greater statutory and constitutional authority (gubernatorial power) (Beyle 1999), (3) agencies with greater financial, intellectual and other resources (administrative capacity) (Barrilleaux and Miller 1988; Derthick 1970; Schneider and Jacoby 1996); and unified party control over the governorship and both chambers of the legislature (unified government) (Berry and Berry 1990; Huber, Shipan, and Pfahler 2001).

Federal Policies and Internal Moderators

In the case of Medicaid nursing facility reimbursement, federal action served to restrict state discretion. But the above suggests that the extent to which states succumbed to such constraints depended on the degree to which internal characteristics: (1) served to motivate state officials to reduce Medicaid nursing facility reimbursement in the first place, as indicated by worse fiscal health and Medicaid program eligibility, (2) served as obstacles impeding the adoption of such changes, as indicated by fiscal capacity, nursing home industry activity, elder advocacy, liberal ideology, home care availability, and nursing home supply restrictions, and (3) served as resources that helped overcome obstacles to maintaining or increasing reimbursement, as indicated by legislative professionalism, gubernatorial power, administrative capacity, and unified government. Thus, holding all else constant, I posit that:

> *Hypothesis 1: The effects of losing a Boren Amendment lawsuit on constraining state adoption of reductions in Medicaid nursing facility per diem rates should have depended, in part, on internal state characteristics, with impact being stronger when internal motivation was high (hypothesis 1.a) and obstacles and resources low (hypotheses 1.b and 1.c, respectively).*

Hypothesis 2: The effects of Medicare PPS on constraining state adoption of reductions in

   Medicaid nursing facility per diem rates should have depended, in part, on internal state

   characteristics, with impact being stronger when internal motivation was high (hypothesis

   2.a) and obstacles and resources low (hypotheses 2.b and 2.c, respectively).

Hypothesis 3: The effects of OBRA 1987 on constraining state adoption of reductions in Medicaid

   nursing facility per diem rates should have depended, in part, on internal state

   characteristics, with impact being stronger when internal motivation was high (hypothesis

   3.a) and obstacles and resources low (hypotheses 3.b and 3.c, respectively).

Figure II illustrate *hypotheses 1, 2,* and *3* graphically. It shows that prior to experiencing the loss of discretion imposed by a Boren Amendment lawsuit, or during Medicare PPS or OBRA 1987 implementation, the probability of a state adopting a reduction in Medicaid nursing facility reimbursement should have depended on the extent to which state officials were motivated to make such changes, the strength of obstacles impeding their adoption, and the availability of resources with which to overcome obstacles to maintaining or increasing reimbursement. Consequently, states officials should have been much more likely to reduce reimbursement when fiscal health was poor and Medicaid program demands were greater than when fiscal health was strong and demands on Medicaid were less. They should also have been much more likely to reduce payment when interests groups were less active, fiscal capacity was weak, conservative ideologies prevailed, and alternative cost control measures were not being used, in addition to being more likely when governing capacity provided state officials with fewer resources with which to overcome impediments to maintaining or increasing reimbursement.

[Figure II about Here]

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Following the loss of discretion imposed by litigation, Medicare PPS, and OBRAs '87, however, the probability of a state adopting a reduction in Medicaid nursing facility reimbursement should have decreased, no matter whether the motivation, resources, and obstacles to such changes were high or low. But the decrease should have been less dramatic when motivation was low and obstacles and resources high than when motivation was high and obstacles and resources low. This is because federal constraints are unlikely to impact state behavior when internal state characteristics that influence the adoption of the policies affected by those constraints do not favor their adoption anyway. As internal state characteristics become more favorable, however, federal constraints should be much more likely to come into play.

Neighboring State Policies and Internal Moderators

In the case of Medicaid nursing facility reimbursement, neighboring state activity promoted state adoption of reductions in per diem rates. But the above suggests that the extent to which such actions facilitated adoption should have depended on the degree to which internal characteristics: (1) served to motivate state officials to reduce Medicaid nursing facility reimbursement in the first place, (2) served as obstacles impeding the adoption of such changes, and (3) served as resources that helped to them overcome obstacles to maintaining or increasing reimbursement. Thus, holding all else constant, I posit that:

> *Hypothesis 4: The effects of neighboring state litigation on facilitating state adoption of*
>
> *reductions in Medicaid nursing facility per diem rates should have depended, in part, on*
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> *internal state characteristics, with impact being stronger when internal motivation was high*
>
> *(hypothesis 4.a) and obstacles and resources low (hypotheses 4.b and 4.c, respectively).*

Hypothesis 5: The effects of prior neighboring state adoptions on facilitating state adoption of

reductions in Medicaid nursing facility per diem rates should have depended, in part, on

internal state characteristics, with impact being stronger when internal motivation was high

(hypothesis 5.a) and obstacles and resources low (hypotheses 5.b and 5.c, respectively).

Figure III illustrates *hypotheses 4* and *5* graphically. It shows that when neighboring state activity

is low, the probability of a state adopting a reduction in Medicaid nursing facility reimbursement should

have been small. As the number of adopting neighbors increased, however, or the rate of litigation among

neighboring states grew, the probability that a state adopted a reimbursement rate reduction should have

increased. But it should have done so much more rapidly and dramatically when motivation was high and

obstacles and resources low than when motivation was low and obstacles and resources high. When the

motivation to make a change is low, for example, such as occurs when the budgetary outlook is good and

Medicaid program demands manageable, state policymakers should be less likely to look to other states

for policy guidance. When motivation is high, however, such as occurs when the budgetary outlook is not

so good and Medicaid program demands rise, state policymakers should be much more likely to inquire

about what other states are doing, either to reduce uncertainty about what is politically or economically

efficient, or to reduce uncertainty about what are appropriate and legitimate nursing facility

reimbursement policy choices. When the obstacles to change are high, by contrast, such as occurs when

interest groups are active, fiscal capacity is strong, liberal ideologies prevail, and alternative cost control

measures are being used, fewer opportunities should exist to lower reimbursement rates and therefore to

take advantage of information provided by other states' activities. When obstacles are low, however,

more opportunities should exist to make such changes and therefore to pattern one's actions on those of

other states. Finally, when resources are high, such as occurs when governing capacity is strong, state

policymakers should be better able to maintain or increase reimbursement, regardless of what other states

are doing. When resources are low, however, such as occurs when governing capacity is weak, state

officials should be more likely to look for outside expertise such as that reflected in the actions of their

neighbors and therefore be much more likely to reduce reimbursement if their neighbors have already done so.

[Figure III about Here]

Data and Methods

In this section, I describe my measure of annual percentage reductions in Medicaid nursing facility reimbursement, in addition to my measures of the independent variables and the analytical technique used to test my hypotheses.

Dependent Variable

To varying degrees, all states adopt changes in reimbursement methodologies that affect per diem nursing home reimbursement annually. As mentioned previously, these include inflation factors, efficiency bonuses, ancillary service inclusions, and cost report updates (Miller 2005c). Here, I model incremental reductions in Medicaid nursing facility reimbursement by examining year-to-year differences in nursing facility per diem rates using data gathered from telephone interviews and mail surveys conducted by researchers at the University of California, San Francisco and Wichita State University (UCSF-WSU) (Harrington and Swan, 1983-1999). Because this article focuses on state policy changes to reduce Medicaid nursing home costs, I multiplied percentage year-to-year changes in average weighted Medicaid nursing facility per diem rates by negative one, so that they reflected cost reductions. These per diem rates were converted to 1998 dollars using the consumer price index (CPI) for hospital and related services. States adopted 632 decreases and 326 increases in average inflation-adjusted per diem rates between 1980 and 1998.

Explanatory Variables and Expectations

I organize my discussion of my explanatory variables according to whether they are external or internal factors, or serve as motivators, obstacles, or resources to policymaking in the area studied (see Figure IV). Five external policymaking determinants are examined—three federal policy constraints (Boren Amendment Litigation, OBRA 1987, Medicare PPS) and two neighboring state policies (neighboring state adoptions (t-1), neighboring state litigation). Twelve internal policymaking determinants are examined—two motivators (worse fiscal health, Medicaid program eligibility), six obstacles (fiscal capacity, nursing home industry activity, elder advocacy, liberal ideology, home care availability, and supply restrictions), and four resources (legislative professionalism, gubernatorial power, unified government, and administrative capacity). In addition to the independent variables described, I include a linear time trend to account for omitted intertemporal influences.

[Figure IV about Here]

Federal Policy Constraints: Each of the federal policy changes examined—the Boren Amendment, OBRA 1987 and Medicare PPS—limited the extent to which state policymakers could reduce Medicaid nursing home spending. Since states with Boren Amendment lawsuits were probably more constrained than states without and states where nursing homes prevailed more constrained than states where nursing homes did not, I expect states which lost their cases to be more limited in adopting cost containing change than states which were not sued or were sued and won. Consequently, I follow Wade and Berg (1995) in coding Boren Amendment litigation as a one in the year of the first court case to reach a final disposition in favor of nursing homes and as a one every year thereafter, zero otherwise. Data derive from content analysis of case decisions under the Boren Amendment (Miller 2005b).

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OBRA 1987 required that by 1990 states had to meet the costs of nursing home quality reform. Chief among OBRA 1987's requirements was a provision requiring intermediate care facilities (ICFs) to meet the higher care standards of skilled nursing facilities (SNFs), including higher nursing staff levels. Because the costs associated with the 1990 implementation of OBRA 1987 was essentially a function of the number of ICF beds in a state during the year prior to implementation, I measure the degree to which OBRA 1987 implementation served as an obstacle to adopting more cost containing change using the percentage of nursing homes beds in ICFs in 1989, zero otherwise (Wade and Berg, 1995). Data derive from Harrington and Swan (1983-89) and the Health Care Financing Administration (HCFA) (1979-1998).

By spurring the discharge of more resource intensive patients from hospitals to post-acute settings, Medicare PPS limited the extent to which states could reduce Medicaid nursing home spending. Unlike OBRA '87, which was implemented in one year (1990), Medicare PPS was phased in over several years (1984-1987). Following Conover and Sloan (1998), therefore, I measure the extent to which Medicare PPS implementation served as a constraint to adopting cost containing change using the percentage of total hospital revenue deriving from Medicare during 1984-1987, zero otherwise. Data derive from the American Hospital Association (1985-1988) and HCFA (1985-1988).

Neighboring State Policies: Both measures of neighboring state policies—as indicated by prior neighboring state adoptions and neighboring state litigation—facilitated state adoption of reimbursement methods that helped them reduce Medicaid nursing home spending. Neighboring state adoption (t-1) is equal to the average change in Medicaid nursing home per diem rates across contiguous states during the previous year. Neighboring state litigation is equal to the number of contiguous states having previously lost at least one Boren Amendment lawsuit to nursing homes. Data derive from the UCSF-WSU surveys and content analysis of Boren Amendment case decisions, respectively (Harrington and Swan 1989-1999; Miller 2005b).

Internal Motivators: Two measures capture internal policymaking pressures that motivate reductions in Medicaid nursing facility per diem rates: worse fiscal health and Medicaid program

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eligibility. The unemployment rate during the previous year is an appropriate measure of fiscal health because higher rates tend to exacerbate state budget difficulties both by reducing tax revenues and increasing the demand for government services (U.S. Bureau of Labor Statistics 2001).[1] The presence of a medically needy program for Supplemental Security Income recipients is an appropriate measure of Medicaid program eligibility because it is the primary means through which state governments broaden eligibility for Medicaid nursing home applicants. Medicaid program eligibility (t-1) is coded as a 0 if during the previous year a state did not have a medically needy program and the income eligibility threshold in thousands of dollars for states that did have such programs, under the assumption that states with higher thresholds have more generous programs (Harrington, et al. 2000). Data derive from the *Green Book* released by the House Committee on Ways and Means (1981-2001). The hypotheses suggest that both unemployment (t-1) and Medicaid program eligibility (t-1) should magnify the effects of Boren Amendment litigation, Medicare PPS, and OBRA 1987 as constraints and neighboring state litigation and neighboring state adoptions (t-1) as facilitators of state adoption of less generous reimbursement rates. Consequently, the coefficients on the interaction terms between unemployment (t-1) and each of the three federal constraints in Model 1 and Medicaid program eligibility (t-1) and each of the three federal constraints in Model 2 should be negative (*hypotheses 1.a, 2.a,* and *3.a*), whereas the coefficients on the interaction terms between unemployment (t-1) and both neighboring state policies in Model 1 and Medicaid program eligibility (t-1) and both neighboring state policies in Model 2 should be positive (*hypotheses 4.a* and *5.a*) (see Analytical Techniques below for a discussion of the 12 models estimated).

Internal Obstacles: Six measures capture internal policymaking determinants that serve as obstacles to reducing Medicaid nursing facility per diem rates: fiscal capacity, nursing home industry activity, elder advocacy, liberal ideology, home care availability, and nursing home supply restrictions. Liberal ideology is operationalized using a measure developed by Wright, McIver and Erikson (2001) based on CBS News/*New York Times* national telephone polls. Fiscal capacity (t-1) is measured using the natural log of per capita gross state product during the previous year, as reported by the U.S. Bureau of Economic Analysis (2001), converted to 1998 dollars using the CPI. Whereas home care availability (t-1)

is measured using the number of certified home health agencies per 100,000 population during the

previous year (HCFA 1979-1998), nursing home supply restrictions (t-1) is measured using a dummy

variable, where a one indicates the presence of a certificate-of-need program and/or moratorium on

nursing home construction during the previous year and a zero its absence (Harrington and Swan 1983-

1999). To measure nursing home industry power and elder advocacy power, I conceptualized interest

group power as a function of perceived interest group strength and size. In doing so, I coded nursing

home and elderly advocacy power as strong if, in a given year, a state ranked high on both strength and

size; weak if, in a given year, a state ranked low on both strength and size; and moderate for all other

strength-size combinations.[2] Moderate and strong interest group indicators appear on the right hand side

of the equations, with weak serving as the reference category. The hypotheses suggest that all five

obstacles should dampen the effects of Boren Amendment litigation, Medicare PPS, and OBRA 1987 as

constraints and neighboring state litigation and neighboring state adoptions (t-1) as facilitators of state

adoption of less generous reimbursement rates. Consequently, the coefficients on the interaction terms

between gross state product (t-1), moderate elder advocacy, strong elder advocacy, moderate nursing

home industry, strong nursing home industry, liberal ideology, home health agencies (per 100,000) (t-1),

and certificate-of-need program (t-1) and each of the three federal constraints in Models 3, 4, 4, 5, 5, 6, 7,

and 8, respectively, should be positive (*hypotheses 1.b, 2.b,* and *3.b*), whereas the coefficients on the

interaction terms between gross state product (t-1), moderate elder advocacy, strong elder advocacy,

moderate nursing home industry, strong nursing home industry, liberal ideology, home health agencies

(per 100,000) (t-1), and certificate-of-need program (t-1) and both neighboring state policies in Models 3,

4, 4, 5, 5, 6, 7, and 8, respectively, should be negative (*hypotheses 4.b* and *5.b*).

Internal Resources: Four measures capture internal policymaking determinants that serve as

resources to maintaining or increasing Medicaid nursing home per diem rates: legislative professionalism,

gubernatorial power, unified government, and administrative capacity. Legislative professionalism is

measured using an index based on factor analysis of the natural log of calendar days, and per member

operating expenditures, compensation, and staff, with operating expenses and compensation being

converted to 1998 dollars using the CPI.[3] Gubernatorial power is measured using an index based on factor analysis of indicators developed by Beyle (1999), including appointment power, budgetary power, and separately elected officials.[4] Administrative capacity is measured using the number of full time equivalent non-education public employees per 1,000 population. Data derive from the Annual Survey of Governments undertaken by the U.S. Bureau of the Census (1979-1998), which includes the only detailed state and local government employment data available over time. Unified government is measured using two indicator variables: divided legislature (one if the governor's party controls only one legislative chamber, zero otherwise) and unified legislature (one if the governor's party controls neither legislative chamber, zero otherwise). Unified government (one if the governor's party controls both chambers, zero otherwise) serves as the reference category. Data derive from the National Conference of State Legislatures (2001). The hypotheses suggest that all five resources should dampen the effects of Boren Amendment litigation, Medicare PPS, and OBRA 1987 as constraints and neighboring state litigation and neighboring state adoptions (t-1) as facilitators of state adoption of less generous reimbursement rates. Consequently, the coefficients on the interaction terms between legislative professionalism, gubernatorial power, and administrative capacity and each of the three federal constraints in Models 9, 10, and 12, respectively, should be positive, whereas the coefficients on the interaction terms between divided legislature and unified legislature and each of the three federal constraints in Model 11 should be negative (since states with the greatest governing capacity are indicated by the reference category, unified government) (*hypotheses 1.c, 2.c,* and *3.c*). This is contrast to the coefficients on the interaction terms between legislative professionalism, gubernatorial power, and administrative capacity and both neighboring state litigation and neighboring state policies in Models 9, 10, and 12, respectively, which should be negative, and the coefficients between divided legislature and unified legislature and both neighboring state litigation and neighboring state policies in Model 11, which should be positive (again, because states with the greatest governing capacity are indicated by the reference category, unified government) (*hypotheses 4.c* and *5.c*).

Analytical Techniques

The state is the unit of analysis. Because of the use of lagged independent variables, the study period extends from 1981 to 1998 and includes 828 observations over 46 states.[5] To model yearly changes in Medicaid nursing facility per diem rates, I used PROC MIXED in SAS 8.2, which allows users to account for random variation in longitudinal data, including random effects (between-subject variation) and serial correlation (within-subject variation).[6] I began by estimating a baseline model that evaluates the basic relationship between percent reductions in per diem rates and each of the external and internal factors posited. Results from this analysis have been reported previously (Miller 2006b). Next, I compared the results of this model to a series of equations that add interaction terms to the internal and external characteristics examined.[7] This is illustrated by the following:

$$\text{Percent Reduction in Per Deim Rates} = \alpha + \beta_1(\text{Linear Time Trend}) + \beta_2(\text{Unemployment Rate})$$

$$+ \beta_3(\text{Medically Need Program}) + \beta_4(\text{Gross State Product})$$

$$+ \beta_5(\text{Moderate Elder Advocacy}) + \beta_6(\text{Strong Elderly Advocacy})$$

$$+ \beta_7(\text{Moderate Nursing Home Industry}) + \beta_8(\text{Strong Nursing Home Industry})$$

$$+ \beta_9(\text{Liberal Ideology}) + \beta_{10}(\text{Home Health Agencies}) + \beta_{11}(\text{Certificate-of-Need})$$

$$+ \beta_{12}(\text{Legislative Professionalism}) + \beta_{13}(\text{Gubernatorial Power})$$

$$+ \beta_{14}(\text{Divided Legislature}) + \beta_{15}(\text{Unified Legislature}) + \beta_{16}(\text{Administrative Capacity})$$

$$+ \beta_{17}(\text{Boren Amendment Litigation}) + \beta_{18}(\text{Medicare PPS}) + \beta_{19}(\text{OBRA 1987})$$

$$+ \beta_{19}(\text{Neighboring State Litigation}) + \beta_{20}(\text{Neighboring State Adoptions})$$

$$\mathbf{+ \beta_{21}(Boren\ Amendment\ Litigation*Moderator_X)}$$

$$\mathbf{+ \beta_{22}(Medicare\ PPS*Moderator_X)}$$

$$\mathbf{+ \beta_{23}(OBRA\ 1987*Moderator_X)}$$

$$\mathbf{+ \beta_{24}(Neighboring\ State\ Litigation*Moderator_X)}$$

$$\mathbf{+ \beta_{25}(Neighboring\ State\ Adoption*Moderator_X)}$$

Twelve interaction models were estimated, one for each of the 12 internal moderators examined: unemployment rate (t-1) (Model 1), medically needy program (t-1) (Model 2), gross state product (t-1) (logged) (Model 3), elder advocacy (Model 4), nursing home industry (Model 5), liberal ideology (Model 6), home health agencies (per 100,000) (t-1) (Model 7), certificate-of-need program (Model 8), legislative professionalism (Model 9), gubernatorial power (Model 10), unified government (Model 11), and

administrative capacity (Model 12). Because elder advocacy, nursing home industry activity, and unified

government were measured using two indicator variables (see discussion above), two interaction terms

were used to measure the moderating effects of these determinants on each of the five external factors

examined. The moderating effects of all other internal determinants were measured using one interaction

term. While p-values were used to assess the statistical significance of individual coefficients, likelihood

ratio tests were used to compare the –2 log likelihoods of models with different subsets of parameters.

The latter indicates whether or not, as a group, interactions between the external and internal factors

examined significantly improved overall model fit.

Results

The main effects only and 12 interaction models predicting annual percentage reductions in

Medicaid nursing facility per diem rates are reported in the Appendix. Each of the overall models fit the

data very well as indicated highly significant -2 log likelihoods exceeding 5,030.2 ($p<.01$). Likelihood

ratio tests were used to compare the change in model fit between the main effects only model and each of

the interaction models estimated. Results are reported in Figure V. Of the 12 comparisons made, 3, or

25.0%, support the expectation that, as a group, interaction between each external factor and an internal

moderator—unemployment (t-1), elder advocacy, and home health agencies (per 100,000) (t-1), would

improve overall model fit. Interactions between each external factor and the remaining 8 internal factors,

however, failed to increase overall fit beyond that of the baseline model without interactions.

[Figure V about Here]

Figure VI reports both expected signs and significant interactions drawn from the 12 models

analyzed. Blank cells indicate non-significant findings ($p>.10$), while shaded cells indicate significant

findings that fell in the directions expected based on the measurement strategies used. Of the 75

individual interaction terms evaluated, 21, or 28.0 percent, are statistically significant, thereby strongly

supporting the proposition that the influence of external factors depend, in part, on internal state

characteristics. Though the percentage of significant interactions did not vary much across the internal

motivators (30.0 percent), obstacles (32.5 percent), and resources (20.0 percent) analyzed, it did vary

somewhat across the specific internal factors being considered, with the percentage involving nursing

home industry (66.7 percent), unemployment (t-1) (60.0 percent), and elder advocacy (50.0 percent)

exceeding the percentage involving all other determinants, including medically needy program (t-1) and

gross state product (t-1) for which no significant interactions could be identified (see Figure VII).

Furthermore, the percentage of interactions varied across the specific external factors being considered,

with the percentage involving Medicare PPS (46.7 percent) exceeding the percentage involving

neighboring state adoptions (t-1) (33.0 percent), Boren Amendment litigation (20.0 percent), OBRA 1987

(20.0 percent), and neighboring state litigation (20.0 percent) (see Figure VIII). Of the significant findings

identified, all but one, or 95.2 percent, fell as expected. Thus, findings provide strong support both for the

general proposition that interactions between external and internal factors matter, in addition for the

specific hypotheses that followed based on the particular variables posited to influence state policy

adoption in the area studied. Results pertinent to *hypotheses 1, 2, 3, 4,* and *5* are discussed in turn.

[Figures VI, VII, and VIII about Here]

Hypothesis 1 suggests that the impact of losing a Boren Amendment lawsuit on reducing the

likelihood of adopting a reduction in Medicaid nursing facility reimbursement should have been greater

when internal motivation was high (*1.a*) and obstacles and resources were low (*1.b* and *1.c*, respectively)

than when motivation was low and obstacles and resources high. Of the 15 interaction terms analyzed, 3

were statistically significant; all fell in the directions hypothesized. Thus, consistent with expectations, the

influence of the Boren Amendment as a policymaking constraint tended to increase (i.e., become more

negative) with rising unemployment and to decline (i.e., become less negative) with rising interest group

activity on behalf of the elderly and nursing home industry. Although results provide some support for expectations regarding internal motivators and obstacles (*hypothesis 1.a* and *1.b*, respectively), no statistically significant interactions could be identified with any of the policymaking resources examined (*hypothesis 1.c.*).

Hypothesis 2 suggests that the impact of Medicare PPS implementation on reducing the likelihood of adopting a reduction in Medicaid nursing facility reimbursement should have been greater when internal motivation was high (*2.a*) and obstacles and resources were low (*2.b* and *2.c*, respectively) than when motivation was low and obstacles and resources were high. Of the 15 interaction terms analyzed, 7 were statistically significant; all fell in the directions hypothesized. Unlike with Boren Amendment litigation, moreover, results provide support for all three sub-hypotheses regarding motivators (*2.a*), obstacles (*2.b*), and resources (*2.c*). Thus, consistent with expectations, the influence of Medicare PPS as a policymaking constraint tended to increase (i.e., become more negative) with rising unemployment and to decline (i.e., become less negative) with rising interest group activity on behalf of the elderly, greater governing capacity (unified party control, more extensive bureaucracies), and the adoption of alternative methods for controlling Medicaid program spending (home care, restrictions on nursing home supply).

Hypothesis 3 suggests that the impact of OBRA 1987 on reducing the likelihood of adopting a reduction in Medicaid nursing facility reimbursement should have been greater when internal motivation was high (*3.a*) and obstacles and resources were low (*3.b* and *3.c*, respectively) than when motivation was low and obstacles and resources high. Of the 15 interaction terms analyzed, 3 were statistically significant; two of which fell in the directions hypothesized. As expected, the influence of OBRA 1987 as a policymaking constraint tended to decline (i.e., become less negative) with greater legislative professionalism and interest group activity on behalf of the elderly. Contrary to expectations, however, the effects of OBRA 1987 tended to become stronger (i.e., become more negative) in states with more powerful nursing home lobbies. Although results provide some support for expectations regarding internal resources (*hypothesis 3.c*) and mixed support for expectations regarding obstacles (*hypothesis*

3.b), no statistically significant interactions could be identified with regard to either of the internal

motivators analyzed (*hypothesis 3.a*)

      Hypothesis 4 suggests that the impact of neighboring state litigation on increasing the likelihood

of adopting a reduction in Medicaid nursing facility reimbursement should have been greater when

internal motivation was high (*4.a*) and obstacles and resources were low (*4.b* and *4.c*, respectively) than

when motivation was low and obstacles and resources high. Of the 15 interaction terms analyzed, 3 were

statistically significant; all fell in the directions hypothesized. Thus, consistent with expectations, the

influence of neighboring state litigation as a policymaking facilitator tended to increase (i.e., become

more positive) with rising unemployment and to decline (i.e., become less positive) in states with more

ideologically liberal electorates and alternative methods for controlling nursing home spending (i.e., home

care). Although results provide some support for expectations regarding internal motivators and obstacles

(*hypothesis 4.a* and *4.b*, respectively), no statistically significant interactions could be identified with any

of the policymaking resources examined (*hypothesis 4.c*).

      Finally, *hypothesis 5* suggests that the impact of prior neighboring state adoptions on increasing

the likelihood of adopting a reduction in Medicaid nursing facility reimbursement should have been

greater when internal motivation was high (*5.a*) and obstacles and resources were low (*5.b* and *5.c*,

respectively) than when motivation was low and obstacles and resources high. Of the 15 interaction terms

analyzed, 5 were statistically significant; all fell in the directions hypothesized. Thus, consistent with

expectations, the influence of prior neighboring state adoptions as a policymaking facilitator tended to

decline (i.e., become less positive) in ideologically liberal states with more active elder lobbies. It also

tended to decline in states with more powerful governors and unified party control of the governorship

and both legislative chambers. Although results provide some support for expectations regarding internal

obstacles and resources (*hypothesis 5.b* and *5.c*, respectively), no statistically significant interactions

could be identified with any of the internal motivators examined (*hypothesis 5.a*).

Discussion

The comparative state policy field has traditionally been dominated by two disparate streams: internal determinant models, which identify political, socioeconomic, and programmatic factors that facilitate or inhibit policy adoption, and diffusion models, which identify processes whereby states imitate external entities—typically other, neighboring states, when faced with policy problems. Over the last twenty years, increasing numbers of studies have sought to reconcile these two streams by examining the effects of internal determinants and neighboring state adoptions within the same longitudinal model. Growing numbers are also accounting for national-level considerations, a heretofore neglected aspect of the state policymaking milieu. Thus, increasingly there are examples of studies that account for policymaking determinants that derive not only from a states internal environment or its immediate interstate neighborhood but from the actions of other important actors from around the country (Allen, Pettus, and Haider-Markel 2004; Miller 2006b). This has been an important development in the growth of the field. Yet it begs the question as to whether the policymaking determinants examined only have direct effects on the outcomes studied, or whether they interact in some way to differentially influence the rate at which policy adoption takes place. This is especially true in light of findings from the implementation and sociological literatures, which imply that a certain degree of interaction likely occurs. Whereas implementation researchers recognize that policy necessarily evolves and adapts to local conditions, and that state and local governments possess discretion and autonomy in how they react to federal mandates, sociological institutionalists recognize that organizations (e.g., states) do not passively acquiesce to institutional pressures, but that intra-organizational factors—agency, interests, values, power, and resources (e.g., internal political, economic, and programmatic circumstances)—condition organizations' responses to the broader environments within which they are situated (e.g., policy adoptions by other states and the federal government). The purpose of the present study, therefore, has been to explore the way in which internal and external factors interact in one area in particular, Medicaid nursing facility reimbursement. Results provide evidence that such interaction does indeed occur.

To examine the extent to which the influence of external factors depends, in part, on internal state characteristics, I examined contingent relationships between the external and internal factors hypothesized and state reductions in Medicaid nursing facility per diem rates. Previous research findings indicated that external factors served both to (1) impede the adoption of per diem rate reductions, as occurred with individual Boren Amendment lawsuits, Medicare PPS, and OBRA 1987, and (2) facilitate the adoption of such reductions, as occurred with neighboring state litigation and prior reductions in neighboring states (Miller 2006b). But the present paper proposed that the extent to which states succumbed to the former and took advantage of the latter likely depended on the degree to which internal characteristics: (1) served to motivate state officials to adoption lower provider payments in the first place, as reflected in declining fiscal health and increasing program demands, (2) served as obstacles impeding the adoption of such changes, as reflected in fiscal capacity, interest group activity, liberal ideology, and the availability of alternative cost control methods, and (3) served as resources that helped to overcome obstacles to maintaining or increasing reimbursement, as reflected in states' capacities to govern. In essence, internal motivators, resources, and obstacles were posited to enhance or diminish the impact of federal policy initiatives and other states' actions on state policymaking.

Findings indicate that, on the one hand, internal conditions that imply weaker motivation, greater obstacles, and stronger resources attenuate the effects of the external factors analyzed; as such factors were less likely to come into play when internal circumstances did not favor adoption anyway. On the other hand, internal conditions that implied stronger motivation, fewer obstacles, and weaker resources strengthened the effects of the external factors evaluated; as such factors were more likely to matter when internal circumstances did, in fact, favor the particular policy change studied. Thus, while the impact of federal actions believed to constrain state policymaking, such as individual Boren Amendment lawsuits, Medicare PPS, and OBRA 1987 were stronger, *or more negative*, when internal motivation was high and obstacles and resources low, the impact of those constraints were weaker, *or less negative*, when internal motivation was low and obstacles and resources were high. This is in contrast to the impact of the external factors believed to facilitate state action, such as neighboring state litigation and prior

neighboring state adoptions, which were stronger, *or more positive*, when internal motivation was high and obstacles and resources low, and weaker, *or less positive*, by contrast, when internal motivation was low and obstacles and resources were high. Not only do findings support the general proposition that internal factors moderate the influence of external characteristics on policy adoption, therefore, but they provide general support for the hypotheses developed to test this proposition in this particular context.

Considering the moderating effects of internal factors, empirical findings reported reflect comments made more than 35 years ago by Martha Derthick (1970) who sought to understand whether the intergovernmental grant system led to federal control at the state and local level, and if so, what actions are controlled for and how. Examining implementation of public assistance in Massachusetts between 1936 and 1967 Derthick (1970) observed that "state actions do respond in a general way to federal influence," but that:

> If federal influence were more extensive and more effective, state and local programs that benefit from grant-in-aid would everywhere be alike. Because of the limits on the federal government's capacity to define and enforce grant in aid conditions, few results of state action have conformed precisely to federal intentions…The attainment of federal objectives depend upon certain features of state political systems-the prevalence of values consistent with federal actions, the presence of federal allies, the power of those allies in state politics, and the prevailing ideology….

Or, in other words, the extent to which federal grant-in-aid programs influence state and local behavior depends, in part, on the specific political environments within which state and local administrators are located.

Though the literature rarely mentions the modifying effects of internal factors on the influence of other states' actions, interviews undertaken with federal and state policymakers involved or interested in Medicaid nursing facility reimbursement indicate that such may indeed be the case.[8] This is reflected in the comments of a former Michigan Medicaid official:

Well, when you are putting something together, people always are uncertain about the

consequences, and if you can say, well, state X or Y or Z did it and they saw this happening and

didn't see this bad thing happening, then that helps your argument. But the thing of it is, I think

very few states have exactly the same policies. The tradition among states, as far as Medicaid is

concerned, is that one state will adopt a particular policy going in a particular direction, which is

incrementally building on the policy which they already had…But I in another state look over and

see if they did something and if there's something I can take out of that, that I can adapt for

Michigan, and maybe add something else to it in our situation, I will develop something which is

unique and specific to Michigan. Then someone in another state will see what we did and then the

process will repeat itself…

Thus, although state officials look to other states for policymaking guidance, they adapt what they have

learned based on the exigencies of their own particular circumstances in an ongoing game of

intergovernmental given-and-take.

Conclusion

I have found that the susceptibility of state policymaking to federal policies and initiatives differs

depending on internal political, economic, and programmatic conditions. I also found that the

receptiveness of state officials to influences deriving from other states' actions varies with intra-state

circumstances as well. However, because I explored the contingent effects of internal moderators on

external influences only for reductions in Medicaid nursing facility per diem rates, my findings may be of

limited generalizability. This is because, on the one hand, the relationship between internal and external

factors may vary depending on whether one is modeling an incremental versus non-incremental policy

change. Most comparative state policy studies focus on explaining either state adoption of discrete public

policies or state variation in program expenditures or other policy outputs. Relatively few examine

incremental, year-to-year adjustments in program outcomes, though there are more susceptible to

policymakers' control than the absolute levels of spending and other program characteristics traditionally examined. Consequently, future research should examine the applicability of the relationships identified here, not only to other policy contexts but also to non-incremental policy adoptions, which have been the predominant focus of the policy diffusion and innovation literature so far. It should also seek to clarify the ways in which internal factors diminish or enhance the impact of external influences on states' policy choices. This should include examination of a broader array of federal laws, regulations, court decisions, and other signals that not only constrain state action but promote it. It should also include a more thorough examination of interstate dynamics that impede and hinder adoption. Ultimately, further examination of the proposition that the effects of external influences depend, in part, on internal state characteristics should lead to a more complete understanding of why state governments choose the public policies that they do.

Notes

[1]Since legislative sessions usually begin in January, state officials "often make policy based on prior year's fiscal and economic data" (Berry and Berry 1990). Consequently, I lag the measures the fiscal health and fiscal capacity one year. I also lag the measures of Medicaid program eligibility, home care availability, and nursing home supply restrictions under the assumption that policymakers base present reimbursement policy decisions, in part, on knowledge of what alternative policies have been available to constrain spending in the past.

[2]The measure of interest group strength derives from the Hrebenar-Thomas study, which categorized interest groups in a state into one of two categories: (1) those that have been among the most consistently effective, and (2) those that have been rising or declining in power, been regularly active but just not among the most effective groups, or been occasionally active (Hrebenar and Thomas 1990-1998). Based on these rankings nursing home and senior citizen strength were coded a 2 if they appeared in a state's first category of the Hrebenar and Thomas list; a 1 if they appeared in the second; and a 0 if they did not appear at all. In addition, for each year, I divided states into 3 categories of elderly advocacy and nursing home industry size based on the percentage of the population aged 65 and older and the number of licensed nursing home beds per 1,000 population aged 65 and older (Harrington and Swan 1983-1989; U.S. Bureau of the Census, 2001). They were coded a 2 if in the highest quartile (above 75 percent); coded a 1 if in the middle two quartiles (between 25 percent and 75 percent); and coded a 0 if in the lowest quartile (below 25 percent). Subsequently, for each year, I categorized each state into one of three categories: strong (if coded a 2 in both strength and size), weak (if coded a 0 in both strength and size),

and moderate (all other combinations of strength and size). Indicators for strong and moderate interest group power were included on the right hand side, with weak serving as the reference category.

[3]Factor analysis was used to develop the legislative professionalism Index used. Factor loadings for calendar days (.950) and per member operating expenses (.884), compensation (.615), and staff (.889) indicated that each was positively related to the concept I was measuring. Consequently, I used these loadings to weight each indicator, which were then summed to create the professionalism index employed in my study. At .83, the Croenbach alpha for assessing the index's reliability was more than acceptable. Data derive from the Council of State Governments (1978-2002), National Conference of State Legislatures (1997), and U.S. Bureau of the Census (2001, 2002).

[4]Factor analysis was used to develop the gubernatorial power index used. Two distinct factors were identified upon initial analysis of indicators proposed by Beyle (1999), with separately elected officials, appointment power, and budgetary power constituting one, and tenure potential and veto power constituting the other. Because states exhibit very little variation in tenure potential and veto power, and because of the importance of a governor's budgetary making authority, I developed an index using components of the first factor. Loadings from a second factor analysis were used to weight separately elected officials (.725), appointment power (.842), and budgetary power (.725), which were then summed to create the power index employed in my study. At .63, the Croenbach alpha for this index was adequate. Data derive from the Council of State Governments (1978-2002).

[5]All analyses excluded Alaska and Hawaii because they do not have neighboring states, Nebraska because it has a non-partisan, unicameral legislature, and Arizona because of missing data and its unique Medicaid system.

[6]To model existing serial correlation resulting from repeated measurement within states over time, I compared different structures for the error covariance matrix. These comparisons indicated that the heterogeneous autoregressive (1) process, which assumes heterogeneous variances and correlations that decline exponentially over time, fit the data considerably better than any other covariance structure. These analyses also indicated that variation resulting from serial correlation dominated variation produced by

random effects and that I therefore need not account for random effects in my models. Including both would have overparameterized the covariance structure (Patetta 2002). I also use robust standard errors (Diggle, Liang, and Zeger 1994), which both account for clustering and are asymptotically consistent.

[7]Interaction models were also estimated after centering continuous explanatory variables around their means. Doing so sometimes facilitates interpretation of interaction terms while reducing multicollinearity. Results were the same no matter whether centering was used or not.

[8]Interviews were performed with 101 national- and state-level experts in Medicaid nursing facility reimbursement, including at least one Medicaid official and one nursing home industry representative in each of 26 states. These interviews were conducted between September 9, 2000, and March 1, 2001.

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Figure I. Modified Model of State Policy Adoption
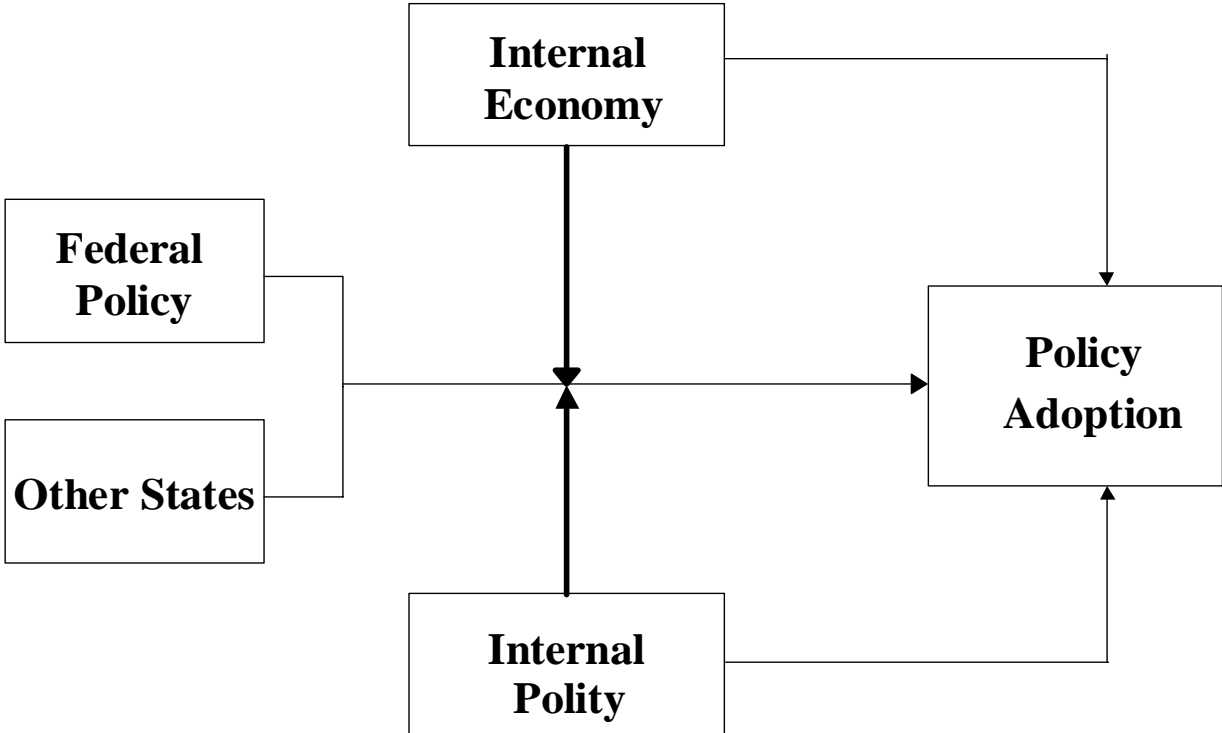
Figure II. The Relationship between Federal Constraints, Internal State Characteristics, and State Adoption of Reductions in Medicaid Nursing Facility Per Diem Rates
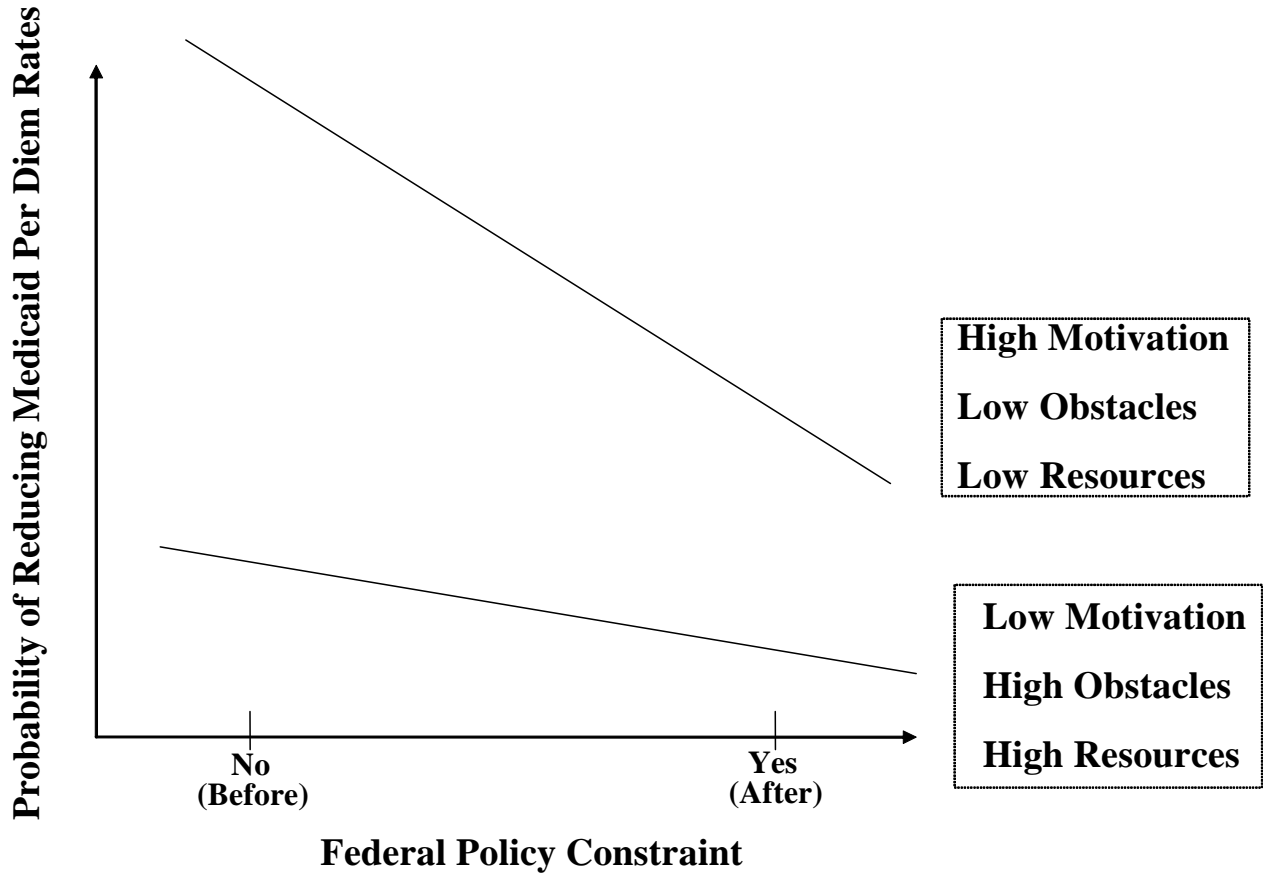
Figure III. The Relationship between Neighboring State Policy Making, Internal State

Characteristics, and State Adoption of Reductions in Medicaid Nursing Facility Per Diem Rates
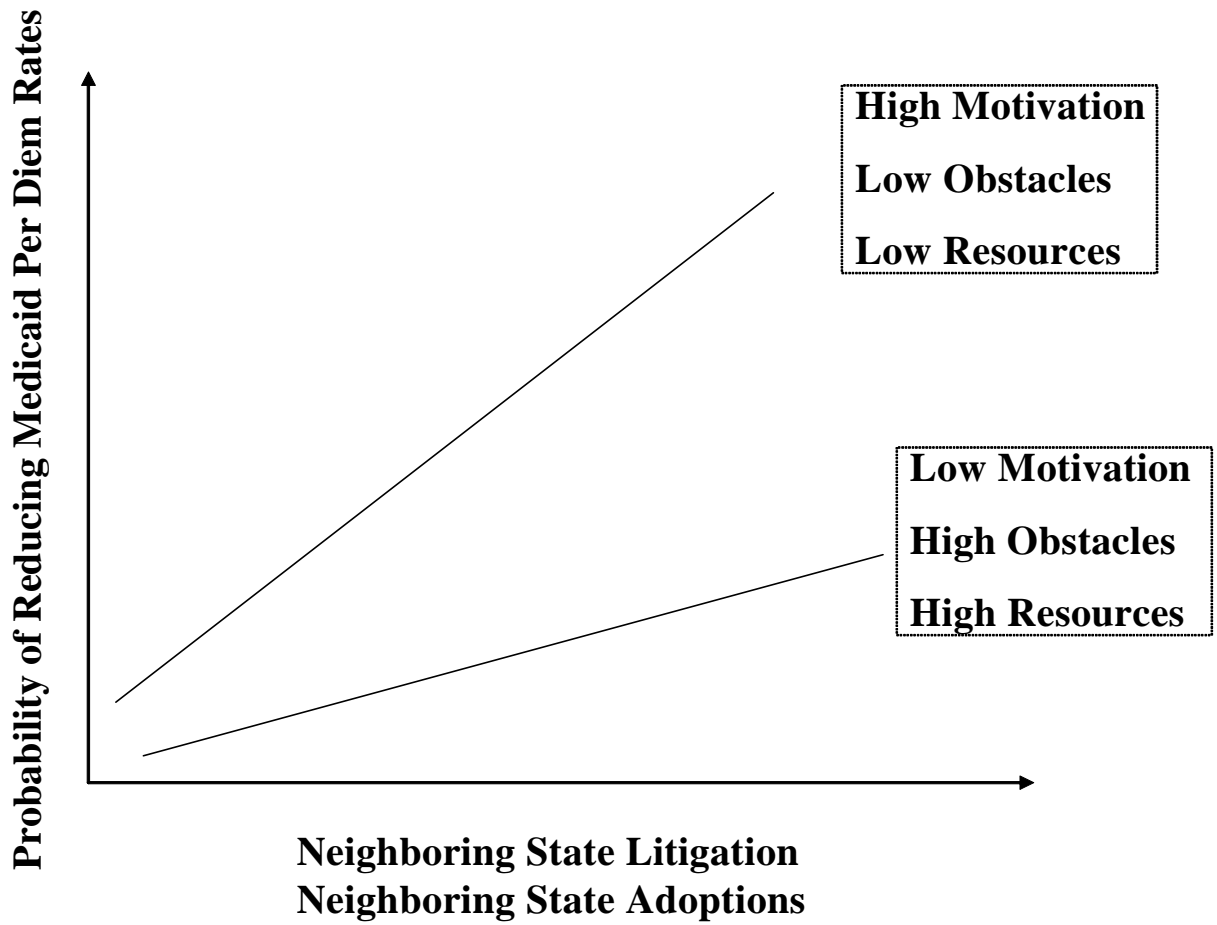
Figure IV. Explanatory Variables

	External Environment	**Internal Environment**
Motivation		Unemployment (t-1) Medically Needy Program (t-1)

Obstacles	Boren Amendment Litigation
	Medicare PPS
	OBRA 1987
		Gross State Product (t-1) (logged)
		Elder Advocacy
		  -Moderate
		  -Strong
		Nursing Home Industry
		  -Moderate
		  -Strong
		Liberal Ideology Index
		Home Health Agencies/100,000 (t-1)
		Certificate-of-Need Program (t-1)

Resources	Neighboring State Litigation
	Neighboring State Adoptions (t-1)
		Legislative Professionalism Index
		Gubernatorial Power Index
		Unified Government
		  -Divided Legislature
		  -Unified Legislature
		Non-Educational FTE's/1,000

Figure V. Assessing the Significance of Interactions as a Group: Change in -2 Log Likelihood between the Main Effects Only Model and Twelve Interaction Models

Model #	Moderator	Type of Moderator	
Model 1	Unemployment Rate (t-1)	Motivator	10.9 (5)[1]**
Model 2	Medically Needy Program (t-1)	Motivator	3.2 (5)
Model 3	Gross State Product (t-1) (logged)	Obstacle	1.2 (5)
Model 4	Moderate/Strong Elder Advocacy	Obstacle	17.9 (10)**
Model 5	Moderate/Strong Nursing Home Industry	Obstacle	11.6 (10)
Model 6	Liberal Ideology	Obstacle	4.4 (5)
Model 7	Home Health Agencies (per 100,000) (t-1)	Obstacle	9.2 (5)*
Model 8	Certificate-of-Need Program (t-1)	Obstacle	3.0 (5)
Model 9	Legislative Professionalism	Resource	6.3 (5)
Model 10	Gubernatorial Power	Resource	3.2 (5)
Model 11	Divided/Unified Legislature	Resource	8.8 (10)
Model 12	Administrative Capacity	Resource	4.6 (5)

[1]Δ vs. Main Effects Only Model (d.f.)

*p<.1, ** p<.05, ***p<.01

Figure VI: Expected Signs and Significant Results for Interactions between External Factors and Internal Moderators

Sub-Hypothesis	Model	Interaction Term	Type of Moderator	Sign Expected	Result (Coefficient)
Hypothesis 1: Boren Amendment Litigation*Moderator					
1.a	1	Boren Amendment Litigation*Unemployment Rate (t-1)	Motivation	—	-.442*
1.a	2	Boren Amendment Litigation*Medically Needy Program (t-1)	Motivation	—	
1.b	3	Boren Amendment Litigation*Gross State Product (t-1) (logged)	Obstacle	+	
1.b	4	Boren Amendment Litigation*Moderate Elder Advocacy[1]	Obstacle	+	1.225*
1.b	4	Boren Amendment Litigation*Strong Elder Advocacy[1]	Obstacle	+	
1.b	5	Boren Amendment Litigation*Moderate Nursing Home Industry[2]	Obstacle	+	
1.b	5	Boren Amendment Litigation*Strong Nursing Home Industry[2]	Obstacle	+	1.782*
1.b	6	Boren Amendment Litigation*Liberal Ideology	Obstacle	+	
1.b	7	Boren Amendment Litigation*Home Health Agencies/100,000 (t-1)	Obstacle	+	
1.b	8	Boren Amendment Litigation*Certificate-of-Need Program (t-1)	Obstacle	+	
1.c	9	Boren Amendment Litigation*Legislative Professionalism	Resource	+	
1.c	10	Boren Amendment Litigation*Gubernatorial Power	Resource	+	
1.c	11	Boren Amendment Litigation*Divided Legislature[3]	Resource	—	
1.c	11	Boren Amendment Litigation*Unified Legislature[3]	Resource	—	
1.c	12	Boren Amendment Litigation*Administrative Capacity	Resource	+	

Figure VI: Expected Signs and Significant Results-Continued

Sub-Hypothesis	Model	Interaction Term	Type of Moderator	Sign Expected	Result (Coefficient)
Hypothesis 2: Medicare Prospective Payment System*Moderator					
2.a	1	Medicare Prospective Payment System*Unemployment Rate (t-1)	Motivation	—	-.017***
2.a	2	Medicare Prospective Payment System*Medically Needy Program (t-1)	Motivation	—	
2.b	3	Medicare Prospective Payment System*Gross State Product (t-1) (logged)	Obstacle	+	
2.b	4	Medicare Prospective Payment System*Moderate Elder Advoacy[1]	Obstacle	+	.070***
2.b	4	Medicare Prospective Payment System*Strong Elder Advoacy[1]	Obstacle	+	
2.b	5	Medicare Prospective Payment System*Moderate Nursing Home Industry[2]	Obstacle	+	.046*
2.b	5	Medicare Prospective Payment System*Strong Nursing Home Industry[2]	Obstacle	+	
2.b	6	Medicare Prospective Payment System*Liberal Ideology	Obstacle	+	
2.b	7	Medicare Prospective Payment System*Home Health Agencies/100,000 (t-1)	Obstacle	+	.010*
2.b	8	Medicare Prospective Payment System*Certificate-of-Need Program (t-1)	Obstacle	+	.108**
2.c	9	Medicare Prospective Payment System*Legislative Professionalism	Resource	+	
2.c	10	Medicare Prospective Payment System*Gubernatorial Power	Resource	+	
2.c	11	Medicare Prospective Payment System*Divided Legislature[3]	Resource	—	-.059*
2.c	11	Medicare Prospective Payment System*Unified Legislature[3]	Resource	—	
2.c	12	Boren Amendment Litigation*Administrative Capacity	Resource	+	.007*

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Figure VI: Expected Signs and Significant Results-Continued

Hypothesis 3: Omnibus Budget Reconciliation Act of 1987*Moderator					
Sub-Hypothesis	Model	Interaction Term	Type of Moderator	Sign Expected	Result (Coefficient)
3.a	1	Omnibus Budget Reconciliation Act '87*Unemployment Rate (t-1)	Motivation	—	
3.a	2	Omnibus Budget Reconciliation Act '87*Medically Needy Program (t-1)	Motivation	—	
3.b	3	Omnibus Budget Reconciliation Act '87*Gross State Product (t-1) (logged)	Obstacle	+	
3.b	4	Omnibus Budget Reconciliation Act '87*Moderate Elder Advoacy[1]	Obstacle	+	
3.b	4	Omnibus Budget Reconciliation Act '87*Strong Elder Advoacy[1]	Obstacle	+	.084**
3.b	5	Omnibus Budget Reconciliation Act '87*Moderate Nursing Home Industry[2]	Obstacle	+	-.094**
3.b	5	Omnibus Budget Reconciliation Act '87*Strong Nursing Home Industry[2]	Obstacle	+	
3.b	6	Omnibus Budget Reconciliation Act '87*Liberal Ideology	Obstacle	+	
3.b	7	Omnibus Budget Reconciliation Act '87*Home Health Agencies/per 100,000 (t-1)	Obstacle	+	
3.b	8	Omnibus Budget Reconciliation Act '87*Certificate-of-Need Program (t-1)	Obstacle	+	
3.c	9	Omnibus Budget Reconciliation Act '87*Legislative Professionalism	Resource	+	.021***
3.c	10	Omnibus Budget Reconciliation Act '87*Gubernatorial Power	Resource	+	
3.c	11	Omnibus Budget Reconciliation Act '87*Divided Legislature[3]	Resource	—	
3.c	11	Omnibus Budget Reconciliation Act '87*Unified Legislature[3]	Resource	—	
3.c	12	Omnibus Budget Reconciliation Act '87*Administrative Capacity	Resource	+	

Figure VI: Expected Signs and Significant Results-Continued

Sub-Hypothesis	Model	Interaction Term	Type of Moderator	Sign Expected	Result (Coefficient)
Hypothesis 4: Neighboring State Litigation*Moderator					
4.a	1	Neighboring State Litigation*Unemployment Rate (t-1)	Motivation	+	.143**
4.a	2	Neighboring State Litigation*Medically Needy Program (t-1)	Motivation	+	
4.b	3	Neighboring State Litigation*Gross State Product (t-1) (logged)	Obstacle	—	
4.b	4	Neighboring State Litigation*Moderate Elder Advocacy[1]	Obstacle	—	
4.b	4	Neighboring State Litigation*Strong Elder Advoacy[1]	Obstacle	—	
4.b	5	Neighboring State Litigation*Moderate Nursing Home Industry[2]	Obstacle	—	
4.b	5	Neighboring State Litigation*Strong Nursing Home Industry[2]	Obstacle	—	
4.b	6	Neighboring State Litigation*Liberal Ideology	Obstacle	—	-1.331*
4.b	7	Neighboring State Litigation*Home Health Agencies/100,000 (t-1)	Obstacle	—	-.076**
4.b	8	Neighboring State Litigation*Certificate-of-Need Program (t-1)	Obstacle	—	
4.c	9	Neighboring State Litigation*Legislative Professionalism	Resource	—	
4.c	10	Neighboring State Litigation*Gubernatorial Power	Resource	—	
4.c	11	Neighboring State Litigation*Divided Legislature[3]	Resource	+	
4.c	11	Neighboring State Litigation*Unified Legislature[3]	Resource	+	
4.c	12	Neighboring State Litigation*Administrative Capacity	Resource	—	

Figure VI: Expected Signs and Significant Results-Continued

Sub Hypothesis	Model	Interaction Term	Type of Moderator	Sign Expected	Result (Coefficient)
Hypothesis 5: Neighboring State Adoptions (t-1)					
5.a	1	Neighboring State Adoptions (t-1)*Unemployment Rate (t-1)	Motivation	+	
5.a	2	Neighboring State Adoptions*Medically Needy Program (t-1)	Motivation	+	
5.b	3	Neighboring State Adoptions (t-1)*Gross State Product (t-1) (logged)	Obstacle	▬	
5.b	4	Neighboring State Adoptions (t-1)*Moderate Elderly Advocacy[1]	Obstacle	▬	-.219**
5.b	4	Neighboring State Adoptions (t-1)*Strong Elder Advocacy[1]	Obstacle	▬	-.272***
5.b	5	Neighboring State Adoptions (t-1)*Moderate Nursing Home Industry[2]	Obstacle	▬	
5.b	5	Neighboring State Adoptions (t-1)*Strong Nursing Home Industry[2]	Obstacle	▬	
5.b	6	Neighboring State Adoptions (t-1)*Liberal Ideology	Obstacle	▬	-.552**
5.b	7	Neighboring State Adoptions (t-1)*Home Health Agencies/1000,000 (t-1)	Obstacle	▬	
5.b	8	Neighboring State Adoptions (t-1)*Certificate-of-Need Program (t-1)	Obstacle	▬	
5.c	9	Neighboring State Adoptions (t-1)*Legislative Professionalism	Resource	▬	
5.c	10	Neighboring State Adoptions (t-1)*Gubernatorial Power	Resource	▬	-.037**
5.c	11	Neighboring State Adoption (t-1)*Divided Legislature[3]	Resource	+	0.175*
5.c	11	Neighboring State Adoption (t-1)*Unified Legislature[3]	Resource	+	
5.c	12	Neighboring State Adoptions (t-1)*Administrative Capacity	Resource	▬	

[1]Reference: Weak Elder Advocacy

[2]Reference: Weak Nursing Home Industry

[3]Reference: Unified Government

Indicates significant findings that fell in the direction hypothesized.
Blank cells indicate non-significant results

*p<.1, ** p<.05, ***p<.01, ****p<.001 (All significant tests reported are one-tailed)

Figure VII: Summary of Results by Type of Internal Moderator

1. Motivator: Unemployment (t-1)	
Total Number of Findings	5.0
Percentage of Findings Significant	60.0%
Percentage of Significant Findings in Direction Expected	100.0%

2. Motivator: Medically Needy Program (t-1)	
Total Number of Findings	5.0
Percentage of Findings Significant	0.0%
Percentage of Significant Findings in Direction Expected	-----

3. Obstacle: Gross State Product (t-1) (logged)	
Total Number of Findings	5.0
Percentage of Findings Significant	0.0%
Percentage of Significant Findings in Direction Expected	-----

4. Obstacle: Moderate/Strong Elder Advocacy	
Total Number of Findings	10.0
Percentage of Findings Significant	50.0%
Percentage of Significant Findings in Direction Expected	100.0%

5. Obstacle: Moderate/Strong Nursing Home Industry	
Total Number of Findings	10.0
Percentage of Findings Significant	30.0%
Percentage of Significant Findings in Direction Expected	66.7%

6. Obstacle: Liberal Ideology	
Total Number of Findings	5.0
Percentage of Findings Significant	40.0%
Percentage of Significant Findings in Direction Expected	100.0%

7. Obstacle: Home Health Agencies (per 100,000) (t-1)	
Total Number of Findings	5.0
Percentage of Findings Significant	40.0%
Percentage of Significant Findings in Direction Expected	100.0%

8. Obstacle: Certificate-of-Need Program (t-1)	
Total Number of Findings	5.0
Percentage of Findings Significant	20.0%
Percentage of Significant Findings in Direction Expected	100.0%

9. Resource: Legislative Professionalism	
Total Number of Findings	5.0
Percentage of Findings Significant	20.0%
Percentage of Significant Findings in Direction Expected	100.0%

10. Resource: Gubernatorial Power	
Total Number of Findings	5.0
Percentage of Findings Significant	20.0%
Percentage of Significant Findings in Direction Expected	100.0%

11. Resource: Divided/Unified Legislature	
Total Number of Findings	10.0
Percentage of Findings Significant	20.0%
Percentage of Significant Findings in Direction Expected	100.0%

12. Resource: Administrative Capacity	
Total Number of Findings	5.0
Percentage of Findings Significant	20.0%
Percentage of Significant Findings in Direction Expected	100.0%

Figure VII: Summary of Results by Type of Internal Moderator-Continued

TOTAL MOTIVATORS (1, 2)	
Total Number of Findings	10.0
Percentage of Findings Significant	30.0%
Percentage of Significant Findings in Direction Expected	100.0%
TOTAL OBSTACLES (3,4,5,6,7,8)	
Total Number of Findings	40.0
Percentage of Findings Significant	32.5%
Percentage of Significant Findings in Direction Expected	92.3%
TOTAL RESOURCES (9,10,11,12)	
Total Number of Findings	25.0
Percentage of Findings Significant	20.0%
Percentage of Significant Findings in Direction Expected	100.0%
TOTAL (All)	
Total Number of Findings	75.0
Percentage of Findings Significant	28.0%
Percentage of Significant Findings in Direction Expected	95.2%

Indicates percentages greater than 50 percent

Figure VIII: Summary of Results by General Hypothesis

Hypothesis 1. Boren Amendment Litigation*Moderator	
Total Number of Findings	15
Percentage of Findings Significant	20.0%
Percentage of Significant Findings in Direction Expected	100.0%
Hypothesis 2. Medicare Prospective Payment System*Moderator	
Total Number of Findings	15
Percentage of Findings Significant	46.7%
Percentage of Significant Findings in Direction Expected	100.0%
Hypothesis 3. Omnibus Budget Reconciliation Act 1987*Moderator	
Total Number of Findings	15
Percentage of Findings Significant	20.0%
Percentage of Significant Findings in Direction Expected	66.7%
Hypothesis 4. Neighboring State Litigation*Moderator	
Total Number of Findings	15
Percentage of Findings Significant	20.0%
Percentage of Significant Findings in Direction Expected	100.0%
Hypothesis 5. Neighboring State Adoptions (t-1)*Moderator	
Total Number of Findings	15
Percentage of Findings Significant	33.3%
Percentage of Significant Findings in Direction Expected	100.0%
TOTAL	
Total Number of Findings	75
Percentage of Findings Significant	28.0%
Percentage of Significant Findings in Direction Expected	95.2%

☐ Indicates percentages greater than 50 percent

Appendix: Contingent Effects of Internal Moderators on the Relationship between External Factors and the Adoption of Percentage Reductions in Medicaid Nursing Facility Per Diem Rates, Models 1, 2, and 3

Predictors	Main Effects		MODEL 1 Unemployment		MODEL 2 Medically Needy		MODEL 3 Gross State Product	
	b	S.E.	b	S.E.	b	S.E.	b	S.E.
Intercept	17.087 ***	9.15	14.742		17.299 *	9.425	15.986	14.920
Linear Time Trend	-0.257 ***	0.042	0.23 ***	0.041	-0.238 ***	0.042	-0.246 ***	0.044
Unemployment Rate (t-1)	0.197 **	0.088	0.348 ***	0.129	0.201 **	0.909	0.209 **	0.092
Medically Needy Program (t-1)	1.422 ***	0.605	1.455 **	0.614	0.598	1.003	1.380 **	0.590
Gross State Product (t-1) (logged)	-1.319 *	0.982	-1.210	1.025	-1.338	1.020	-1.204	1.486
Moderate Elder Advocacy[1]	-0.467 *	0.349	-0.565	0.357	-0.490	0.365	-0.470	0.346
Strong Elder Advocacy[1]	-1.010 **	0.492	-1.120 **	0.507	-1.019 **	0.508	-1.022 **	0.486
Moderate Nursing Home Industry[2]	0.322		0.472	0.326	0.337	0.337	0.301	0.344
Strong Nursing Home Industry[2]	0.002	0.415	0.017	0.416	0.043	0.407	-0.031	0.430
Liberal Ideology	2.820 **	1.410	2.550 *	1.449	2.883 *	1.488	2.924 **	1.431
Home Health Agencies (per 100,000) (t-1)	-0.020	0.093	0.002	0.094	-0.021	0.087	-0.012	0.100
Certificate-of-Need Program (t-1)	0.132	0.132	0.217	0.798	0.158	0.773	0.165	0.776
Legislative Professionalism	0.015	0.060	0.019	0.060	0.016	0.067	0.008	0.059
Gubernatorial Power	-0.195 **	0.118	-0.208 *	0.121	-0.175	0.118	-0.199 *	0.119
Divided Legislature[3]	0.714	0.437	0.780 *	0.457	0.642	0.444	0.749 *	0.437
Unified Legislature[3]	0.280	0.466	0.275	0.464	0.311	0.472	0.282	0.472
Administrative Capacity	0.011	0.054	0.004	0.056	0.002	0.054	0.014	0.054
Boren Amendment Litigation	-0.898 **	0.386	1.748	1.750	-1.424 **	-1.424	-11.599	33.140
Medicare PPS	-0.059 ***	0.014	0.062	0.045	-0.077 ***	-0.077	-0.261	0.817
OBRA 1987 Implementation	-0.109 ***	0.023	0.060	0.075	-0.128 ***	-0.128	-1.874	1.669
Neighboring State Litigation	0.238 *	0.152	-0.567	0.495	0.224	0.224	5.895	7.946
Neighboring Adoption (t-1)	0.150 ***	0.041	0.252 *	0.149	0.213 ***	0.213	-0.612	1.947
Boren Amendment Litigation*Moderator			-0.442 *	0.313	1.523	1.523	1.050	3.245
Medicare PPS*Moderator			-0.017 ***	0.006	0.071	0.071	0.020	0.081
OBRA 1987*Moderator			-0.009	0.013	0.048	0.048	0.174	0.164
Neighboring State Litigation*Moderator			0.143 **	0.073	0.146	0.146	-0.554	-0.554
Neighboring State Adoption (t-1)*Moderator			-0.017	0.023	-0.178	-0.178	0.075	0.192
-2 Log Likelihood (d.f.):	5049.1 (21)***		5038.2 (26)***		5045.9 (26)***		5047.9 (26)***	

N=828, 46 States, 1981-1998

			Δ vs. Main (d.f.):		Δ vs. Main (d.f.):		Δ vs. Main (d.f.):	
			10.9 (5)**		3.2 (5)		1.2 (5)	

[1]Reference: Weak Elder Advocacy

[2]Reference: Weak Nursing Home Industry

[3]Reference: Unified Government

*p<.1, ** p<.05, ***p<.01 (Main effects model and interaction terms one-tailed; all else two-tailed)

Appendix: Contingent Effects of Internal Moderators on the Relationship between External Factors and the Adoption of Percentage Reductions in Medicaid Nursing Facility Per Diem Rates, Models 6, 7, and 8

Predictors	Main Effects		MODEL 6 Liberal Ideology		MODEL 7 Home Health		MODEL 8 Certificate-of-Need	
	b	S.E.	b	S.E.	b	S.E.	b	S.E.
Intercept	17.087 ***	9.15	18.507 **	9.164	16.834 *	10.180	18.890 **	9.068
Linear Time Trend	-0.257 ***	0.04	-0.234 ***	0.043	-0.266 ***	0.043	-0.250 ***	0.043
Unemployment Rate (t-1)	0.197 **	0.088	0.194 **	0.096	0.166 *	0.987	0.192 **	0.090
Medically Needy Program (t-1)	1.422 ***	0.605	1.240 **	0.623	1.408 **	0.596	1.446 **	0.611
Gross State Product (t-1) (logged)	-1.319 *	0.982	-1.483	0.983	-1.266	1.102	-1.371	0.976
Moderate Elder Advocacy[1]	-0.467 *	0.349	-0.507	0.347	-0.478	0.370	-0.466	0.346
Strong Elder Advocacy[1]	-1.010 **	0.492	-1.027 **	0.486	-0.863 *	0.513	-0.967 **	0.489
Moderate Nursing Home Industry[2]	0.322		0.300	0.338	0.194	0.328	0.315	0.338
Strong Nursing Home Industry[2]	0.002	0.415	0.000	0.441	0.021	0.442	-0.004	0.407
Liberal Ideology	2.820 **	1.410	3.798 *	2.074	2.950 **	1.368	2.736 *	1.407
Home Health Agencies (per 100,000) (t-1)	-0.020	0.093	-0.013	0.094	0.107	0.087	-0.017	0.095
Certificate-of-Need Program (t-1)	0.132	0.132	0.180	0.793	0.116	0.801	-0.818	1.310
Legislative Professionalism	0.015	0.060	0.030	0.060	0.024	0.064	0.003	0.062
Gubernatorial Power	-0.195 **	0.118	-0.195 *	0.116	-0.239 **	0.120	-0.196 *	0.116
Divided Legislature[3]	0.714	0.437	0.656	0.441	0.651	0.430	0.760 *	0.426
Unified Legislature[3]	0.280	0.466	0.320	0.461	0.311	0.463	0.279	0.470
Administrative Capacity	0.011	0.054	0.001	0.056	0.006	0.058	0.005	0.055
Boren Amendment Litigation	-0.898 **	0.386	-0.368	0.633	-0.889 **	0.381	-1.140	0.343
Medicare PPS	-0.059 ***	0.014	0.067 **	0.023	-0.063 ***	0.014	-0.162 ***	0.055
OBRA 1987 Implementation	-0.109 ***	0.023	-0.026 **	0.045	-0.110 ***	0.025	-0.127 ***	0.034
Neighboring State Litigation	0.238 *	0.152	-1.331	0.209	0.322 **	0.161	-0.012	0.343
Neighboring Adoption (t-1)	0.150 ***	0.041	-0.552	0.054	0.161 ***	0.041	0.195	0.177
Boren Amendment Litigation*Moderator			4.389	4.003	-0.090	0.199	0.193	1.560
Medicare PPS*Moderator			0.067	0.149	0.010 *	0.008	0.108 **	0.057
OBRA 1987*Moderator			-0.026	0.245	-0.017	0.016	0.020	0.042
Neighboring State Litigation*Moderator			-1.331 *	1.035	-0.076 **	0.043	0.283	0.363
Neighboring State Adoption (t-1)*Moderator			-0.552 **	0.312	0.042	0.027	-0.046	0.182
-2 Log Likelihood (d.f.):	5049.1 (21)***		5044.7 (26)***		5039.9 (26)***		5046.1 (26)***	

N=828, 46 States, 1981-1998

Δ vs. Main (d.f.):   4.4 (5)

Δ vs. Main (d.f.):   9.2 (5)*

Δ vs. Main (d.f.):   3.0 (5)

[1]Reference: Weak Elder Advocacy

[2]Reference: Weak Nursing Home Industry

[3]Reference: Unified Government

*p<.1, ** p<.05, ***p<.01 (Main effects model and interaction terms one-tailed; all else two-tailed)

Appendix: Contingent Effects of Internal Moderators on the Relationship between External Factors and the Adoption of Percentage Reductions in Medicaid Nursing Facility Per Diem Rates, Models 9, 10, and 12

	Main Effects		MODEL 9 Legislative Profess.		MODEL 10 Gubernatorial Power		MODEL 12 Admin. Capacity	
Predictors	b	S.E.	b	S.E.	b	S.E.	b	S.E.
Intercept	17.087 ***	9.15	17.672 *	9.598	17.128 *	9.050	16.669 *	9.670
Linear Time Trend	-0.257 ***	0.04	-0.243 ***	0.041	-0.245 ***	0.042	-0.258 ***	0.048
Unemployment Rate (t-1)	0.197 **	0.088	0.198 **	0.087	0.196 **	0.089	0.210 **	0.084
Medically Needy Program (t-1)	1.422 ***	0.605	1.475 **	0.608	1.476 **	0.597	1.407 **	0.638
Gross State Product (t-1) (logged)	-1.319 *	0.982	-1.379	1.028	-1.325	0.953	-1.249	1.030
Moderate Elder Advocacy[1]	-0.467 *	0.349	-0.492	0.352	-0.442	0.350	-0.452	0.347
Strong Elder Advocacy[1]	-1.010 **	0.492	-1.018 **	0.492	-1.010 **	0.486	-0.887 *	0.505
Moderate Nursing Home Industry[2]	0.322		0.316	0.341	0.312	0.332	0.359	0.337
Strong Nursing Home Industry[2]	0.002	0.415	0.020	0.428	0.077	0.454	0.049	0.445
Liberal Ideology	2.820 **	1.410	2.869 **	1.400	2.748 *	1.447	3.057 **	1.384
Home Health Agencies (per 100,000) (t-1)	-0.020	0.093	-0.039	0.098	0.001	0.091	0.003	0.085
Certificate-of-Need Program (t-1)	0.132	0.132	0.185	0.752	0.103	0.791	0.074	0.742
Legislative Professionalism	0.015	0.060	0.011	0.103	0.010	0.060	0.024	0.058
Gubernatorial Power	-0.195 **	0.118	-0.183	0.119	-0.185	0.156	-0.202	0.123
Divided Legislature[3]	0.714	0.437	0.745 *	0.438	0.731 *	0.440	0.677	0.430
Unified Legislature[3]	0.280	0.466	0.265	0.468	0.309	0.481	0.302	0.451
Administrative Capacity	0.011	0.054	0.010	0.056	0.008	0.059	-0.025	0.079
Boren Amendment Litigation	-0.898 **	0.386	-2.503	2.993	-1.673	1.812	-1.174	1.166
Medicare PPS	-0.059 ***	0.014	-0.044	0.140	-0.074	0.046	-0.137 **	0.054
OBRA 1987 Implementation	-0.109 ***	0.023	-0.589 ***	0.163	-0.077	0.085	-0.104	0.097
Neighboring State Litigation	0.238 *	0.152	1.353	1.592	0.107	0.839	0.503	0.692
Neighboring Adoption (t-1)	0.150 ***	0.041	0.012	0.329	0.390 ***	0.132	-0.149	0.199
Boren Amendment Litigation*Moderator			-0.070	0.124	0.120	0.258	0.019	0.111
Medicare PPS*Moderator			-0.001	0.006	0.003	0.008	0.007 *	0.005
OBRA 1987*Moderator			0.021 ***	0.008	-0.005	0.014	0.000	0.009
Neighboring State Litigation*Moderator			-0.048	0.069	0.016	0.129	-0.027	0.062
Neighboring State Adoption (t-1)*Moderator			0.006	0.014	-0.037 **	0.019	0.027	0.017
-2 Log Likelihood (d.f.):	5049.1 (21)***		5042.9 (26)***		5045.9 (26)***		5044.5 (26)***	

N=828, 46 States, 1981-1998

[1]Reference: Weak Elder Advocacy

[2]Reference: Weak Nursing Home Industry

[3]Reference: Unified Government

	Δ vs. Main (d.f.):	Δ vs. Main (d.f.):	Δ vs. Main (d.f.):
	6.3 (5)	3.2 (5)	4.6 (5)

*p<.1, ** p<.05, ***p<.01 (Main effects model and interaction terms one-tailed; all else two-tailed)

Appendix: Contingent Effects of Internal Moderators on the Relationship between External Factors and Medicaid Nursing Facility Per Diem Rates, Models 4 and 5

	Main Effects		MODEL 4 Elder Advocacy		MODEL 5 Nursing Home	
Predictors	b	S.E.	b	S.E.	b	S.E.
Intercept	17.087 ***	9.15	15.082 *	9.102	15.647	9.316
Linear Time Trend	-0.257 ***	0.04	-0.221 ***	0.040	-0.234 ***	0.041
Unemployment Rate (t-1)	0.197 **	0.088	0.210 **	0.080	0.212 **	0.086
Medically Needy Program (t-1)	1.422 ***	0.605	1.313 **	0.621	1.495 **	0.592
Gross State Product (t-1) (logged)	-1.319 *	0.982	-1.159	0.974	-1.143	0.999
Moderate Elder Advocacy[1]	-0.467 *	0.349	-1.067 **	0.492	-0.477	0.342
Strong Elder Advocacy[1]	-1.010 **	0.492	-1.286 **	0.706	-0.966 *	0.496
Moderate Nursing Home Industry[2]	0.322		0.285	0.320	-0.110	0.520
Strong Nursing Home Industry[2]	0.002	0.415	-0.154	0.368	-0.767	0.700
Liberal Ideology	2.820 **	1.410	2.717 **	1.382	2.945 **	1.419
Home Health (per 100,000) (t-1)	-0.020	0.093	-0.033	0.095	-0.027	0.105
Certificate-of-Need Program (t-1)	0.132	0.132	0.019	0.687	-0.007	0.798
Legislative Professionalism	0.015	0.060	0.013	0.058	0.013	0.059
Gubernatorial Power	-0.195 **	0.118	-0.149	0.119	-0.191 *	0.108
Divided Legislature[3]	0.714	0.437	0.709 *	0.415	0.802 *	0.443
Unified Legislature[3]	0.280	0.466	0.238	0.470	0.254	0.472
Administrative Capacity	0.011	0.054	-0.004	0.050	0.002	0.054
Boren Amendment Litigation	-0.898 **	0.386	-1.603 *	0.903	-1.537 *	0.822
Medicare PPS	-0.059 ***	0.014	-0.087 ***	0.021	-0.083 ****	0.023
OBRA 1987 Implementation	-0.109 ***	0.023	-0.151 ***	0.026	-0.048	0.053
Neighboring State Litigation	0.238 *	0.152	-0.202	0.429	-0.039	0.353
Neighboring Adoption (t-1)	0.150 ***	0.041	0.315 ***	0.069	0.197	0.072
Boren Litigation *Moderator A[4]			1.225 *	0.936	0.742	0.942
Boren Litigation *Moderator B[5]			-0.080	1.088	1.782 *	1.345
Medicare PPS*Moderator A			0.070 ***	0.028	0.046 *	0.028
Medicare PPS*Moderator B			0.002	0.064	0.037	0.054
OBRA 1987*Moderator A			0.053	0.049	-0.094 **	0.056
OBRA 1987*Moderator B			0.084 **	0.050	-0.070	0.078
Neighbor Litigation*Moderator A			0.448	0.478	0.335	0.045
Neighbor Litigation*Moderator B			0.588	0.506	0.333	0.684
Neighbor Adopt (t-1)*Moderator A			-0.219 **	0.094	-0.110	0.098
Neighbor Adopt (t-1)*Moderator B			-0.272 ***	0.104	0.132	0.156

-2 Log Likelihood (d.f.):   5049.1 (21)***   5031.2 (31)***   5038.5 (31)***

N=828, 46 States, 1981-1998   Δ vs. Main (d.f.):   Δ vs. Main (d.f.):

[1]Reference: Weak Elder Advocacy   17.9 (10)**   11.6 (10)

[2]Reference: Weak Nursing Home Industry

[3]Reference: Unified Government

[4]Moderator A: Moderate Elder Advocacy, Moderate Nursing Home Industry, Divided Legislature

[5]Moderator B: Strong Elder Advocacy, Strong Nursing Home Industry, Unified Legislature

 *p<.1, ** p<.05, ***p<.01 (Main effects model and interaction terms one-tailed; all else two-tailed)

Appendix: Contingent Effects of Internal Moderators on the Relationship between External Factors and Medicaid Nursing Facility Per Diem Rates, Model 11

	Main Effects		MODEL 11 Unified Government	
Predictors	**b**	**S.E.**	**b**	**S.E.**
Intercept	17.087 ***	9.15	15.458 *	9.133
Linear Time Trend	-0.257 ***	0.04	-0.259 ***	0.042
Unemployment Rate (t-1)	0.197 **	0.088	0.196 **	0.683
Medically Needy Program (t-1)	1.422 ***	0.605	1.390 **	0.683
Gross State Product (t-1) (logged)	-1.319 *	0.982	-1.212	0.976
Moderate Elder Advocacy[1]	-0.467 *	0.349	-0.412	0.358
Strong Elder Advocacy[1]	-1.010 **	0.492	-1.062 **	0.471
Moderate Nursing Home Industry[2]	0.322		0.260	0.341
Strong Nursing Home Industry[2]	0.002	0.415	0.003	0.403
Liberal Ideology	2.820 **	1.410	2.928 **	1.442
Home Health (per 100,000) (t-1)	-0.020	0.093	0.011	0.085
Certificate-of-Need Program (t-1)	0.132	0.132	0.188	0.787
Legislative Professionalism	0.015	0.060	0.024	0.058
Gubernatorial Power	-0.195 **	0.118	-0.184	0.123
Divided Legislature[3]	0.714	0.437	0.477	0.809
Unified Legislature[3]	0.280	0.466	0.678	0.565
Administrative Capacity	0.011	0.054	0.028	0.051
Boren Amendment Litigation	-0.898 **	0.386	-0.918	0.757
Medicare PPS	-0.059 ***	0.014	-0.043 *	0.023
OBRA 1987 Implementation	-0.109 ***	0.023	-0.098 ***	0.034
Neighboring State Litigation	0.238 *	0.152	0.263	0.240
Neighboring Adoption (t-1)	0.150 ***	0.041	0.139 **	0.068
Boren Litigation*Moderator A[4]			0.133	0.931
Boren Litigation*Moderator B[5]			0.223	1.189
Medicare PPS*Moderator A			-0.059 *	0.045
Medicare PPS*Moderator B			-0.008	0.033
OBRA 1987*Moderator A			0.000	0.071
OBRA 1987*Moderator B			-0.026	0.051
Neighbor Litigation*Moderator A			-0.399	0.360
Neighbor Litigation*Moderator B			-0.359	0.455
Neighbor Adopt (t-1)*Moderator A			0.175 *	0.112
Neighbor Adopt (t-1)*Moderator B			-0.042	0.092

-2 Log Likelihood (d.f.):   5049.1 (21)***   5040.3 (31)***

N=828, 46 States, 1981-1998   Δ vs. Main (d.f.):

[1]Reference: Weak Elder Advocacy   8.8 (10)

[2]Reference: Weak Nursing Home Industry

[3]Reference: Unified Government

[4]Moderator A: Moderate Elder Advocacy, Moderate Nursing Home Industry, Divided Legislature

[5]Moderator B: Strong Elder Advocacy, Strong Nursing Home Industry, Unified Legislature

*p<.1, ** p<.05, ***p<.01 (Main effects model and interaction terms one-tailed; all else two-tailed)