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# Goal Conflict and Fund Diversion in Federal Grants to the States

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*Researchers using fiscal choice models have had limited success predicting fund diversion in federal grant programs. The application of a principal-agent framework to questions of fiscal federalism offered a potentially valuable alternative approach, but the traditional model employed by Chubb (1985) neglected potential variability in the degree of goal conflict between principals and agents. This article proposes an expanded framework, which incorporates the possibility of variation in goal conflict between participants in intergovernmental aid programs. The theory suggests that the level of policy congruence between recipient jurisdictions and the national government will determine the amount of grant funding diverted away from targeted policy areas. Findings from analyses of grant programs in two distinct policy areas support the hypothesis that grant effectiveness is partially a function of goal congruence. The relationship between intergovernmental partners is interactive, with the degree of policy agreement determining fund diversion in subnational jurisdictions, as well as the effectiveness of federal oversight activities. The findings have important theoretical implications for understanding both fiscal federalism and principal-agent relationships more generally.*

The importance of federal grants to the American states has increased significantly over the past 50 years. In 1950, federal grants totaled \$2.2 billion, representing less than 15% of state and local revenue. By 1980, Washington distributed over \$82.9 billion to other levels of government, which supported 26% of total subnational expenditures (Advisory Council on Intergovernmental Relations 1982; Rich 1989). Despite Reagan administration cuts in many programs, grants in certain policy areas—particularly those concerned with law enforcement and narcotics—saw unprecedented growth in the 1980s and continued to increase throughout the Bush and Clinton presidencies (Beckett 1997). Massive federal spending for the “war on drugs” serves as a reminder that fiscal federalism remains an important tool for exerting national pressure on state and local policies.

Because of the numerous attempts to influence subnational governments through grants and revenue sharing, political scientists and economists once devoted considerable attention to the effectiveness of these programs. These studies were primarily concerned with the diversion of federal monies away from targeted policy areas by recipient jurisdictions. Scholars have employed a number

of theoretical approaches in an attempt to gain leverage on this question, but their analyses have produced largely inconsistent findings. It is, in fact, difficult to draw from these studies any firm conclusions about the conditions under which a grant recipient might be more likely to divert money away from federal policy targets. Despite this unfortunate fact, there has been relatively little research in this area for over a decade.

In an attempt to reinvigorate the debate on grants and fund diversion, this essay proposes a theory of fiscal federalism that focuses on the level of congruence between the policy goals of a grant program and the state-level recipients of federal grants. I will argue that the degree of goal conflict varies across jurisdictions and that a measure of that dissimilarity is necessary in order to accurately assess federal influences on subnational expenditures. The vast majority of federal grant programs are designed to stimulate state and local spending in specific policy areas (Nice 1987). Therefore, when federal money is received but no subsequent increase in targeted jurisdictional spending occurs, the assumption is that the money has been diverted to another expenditure category. Theoretically then, a grant program is successful when it

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stimulates subnational spending at an almost one-to-one ratio, or when diversion is reduced to almost zero.<sup>1</sup> This analysis tests whether the distance between the goals of the recipient and the grant program help to determine the stimulative effect of federal grants.

This article departs from previous work because it implies that the federal government cannot always solve problems of fund diversion through oversight and other control mechanisms. In addition, an investigation of the differing goals held by various agents should be interesting to those who study intergovernmental relations of any sort, as well as researchers interested in the dynamics of the principal-agent relationship in other contexts. Finally, recognizing that the goals of the recipient might be the most crucial determinant of how federal money is spent has important implications for those outside the academy. National actors, the principals in the grant making process, must consider different criteria when awarding grants to other governments, as well as when making oversight decisions.

The article will test the relationship between goal conflict and grant effectiveness in two analyses of grant programs in different policy areas, with different matching restrictions and different degrees of federal monitoring. These include narcotics enforcement and Medicaid grants provided to the states.

## Grant Effectiveness in the Literature

Most theoretically driven analyses of fiscal federalism have begun with a fiscal choice model and the assumption that grant effectiveness is a function of the number of restrictions placed upon the grantee. Wilde (1968), using a model of individual choice, originally proffered the theory that more conditional matching or project type grants would induce a greater expansion in recipient spending than unconditional lump-sum or formula grants. Gramlich (1977) expanded upon Wilde's theory and created perhaps the most widely used typology of intergovernmental grants. Gramlich predicted that conditional "Type A" grants would be more stimulating of subnational spending than unconditional "Type B" grants, with "Type C" or mixed funds falling somewhere in between. Economists and political scientists have found considerable support for fiscal choice theories of grant effectiveness (Craig and Inman 1982; Derthick 1975; Ingram

1977; McFarlane and Meier 1998; Oberg 1997; Posner and Wrightson 1996).

Despite the support for Gramlich's theory and its widespread acceptance in the literature, however, numerous studies utilizing a fiscal choice model have also produced contrary theoretical and empirical evidence regarding grant effectiveness. Several economists have formally demonstrated that restrictions placed upon recipient jurisdictions are not necessarily the best predictor of grant effectiveness. Using complex models of collective choice they predicted that, with certain group preference orderings, formula or lump-sum funds can lead to a greater increase in jurisdictional spending than more restrictive grants (Bradford and Oates 1972; Goetz and McKnew 1973).

Chubb (1985), noting the inconsistent findings in past research, suggested that grant effectiveness was better modeled as principal-agent problem. Chubb proposed that studying the hierarchical relationship between different levels of government in the grants process could explain more about grant effectiveness than earlier models from economics, which had examined only price and income effects (Craig and Inman 1982; Gramlich 1977). Chubb's analysis rested on the assumption that the grantor-grantee relationship is "characterized by three elements: 1) a conflict of interest between subordinates interested in their goals and a superior with goals of his own (or of the organization), 2) asymmetric information between subordinates . . . and superiors, and 3) shirking or non performance by subordinates when they can get away with it" (1985, 998). Chubb hypothesized that federal government strategies designed to limit jurisdictional discretion could overcome problems of adverse selection and moral hazard, which he argued were inherent in the grant-making process. In an analysis of federal grants to school districts, the author demonstrated that the Title I program, which was the focus of considerable congressional oversight, had a greater impact on district expenditures than did the vocational grant program, which was subject to little or no monitoring.<sup>2</sup>

## An Expanded Theory of Grant Effectiveness

Though Chubb's model is undeniably an accurate representation of some fiscal federalism relationships, it is

<sup>1</sup>In reality, the stimulative effect of grants is never one-to-one due to administrative costs, matching requirements, and other factors that legitimately reduce own-source recipient spending in the targeted area (See U.S. GAO 1996).

<sup>2</sup>For other applications of the principal-agent model to questions of intergovernmental policy see Scholz and Wei (1986) and Wood (1991, 1992).

limited by the assumption that the degree of conflict between the national government and all grant recipients is constant across all jurisdictions.<sup>3</sup> As such, it ignores the possibility that grant effectiveness may be a product of shared policy goals between different levels of government. I will argue that the principal-agent model can incorporate variation in the degree of goal conflict regarding a policy and that a modified framework may provide more leverage for questions of fiscal federalism.

Two distinct bodies of literature offer important critiques of the goal conflict assumption and suggest the need for an improved theory of grant effectiveness. First among these is the scholarship on distributive politics and the allocation of federal grants. Stein (1979) made an important contribution to the study of grant allocation when he demonstrated that subnational governments were not equally desirous of national funding and that the level of recipient demand had a significant impact on the distribution of federal grants. Previous studies had focused exclusively on supply-side determinants such as partisanship, committee appointments, and congressional preferences, which Stein argued had led them to misinterpret the allocation process. Rich (1989) similarly argued for the importance of a demand-side approach to the study of distribution politics. He insisted that jurisdictional characteristics had a significant impact on the quantity and the quality of federal allocations. Together these authors demonstrate that jurisdictional preferences differ and that those differences are vital for an accurate understanding of grant allocation.

In a more general critique, political scientists have begun to question the validity of principal-agent models that assume fixed-goal conflict. Waterman and Meier (1998) argue that, in a bureaucratic setting, agents may or may not disagree with elected principals over policy goals. We should also expect this to be the case when federal agencies are the principals and state or local jurisdictions are the agents. The authors suggest that "if we treat preferences between principals and agents, or what we call goal conflict/consensus, as a variable rather than a constant, different types of relationships between principals and agents should become apparent" (1998, 185). Meier, Wrinkle, and Polinard (1995) find evidence of such goal congruence in the farm credit program and argue that the relationship is defined by the expertise of the agent rather than conflict between that agent and the principal. Meier (1994) similarly argues that policy areas such as crime

control, where neither agencies nor elected officials have good information, are often marked by goal consensus. Finally, research on multiple-principal/multiple-agent relationships suggests that the level of goal conflict between actors often varies when the principal-agent relationship becomes multidimensional (Gill and Waterman 2002).

In many ways, the assertion that the goals of bureaucratic agents are important determinants of outcomes is reminiscent of the "human relations" school of management—so influential in the study of bureaucracy in the 1940's and 1950's (see Shafritz and Ott 2001 for a comprehensive review of this literature). Recognizing that delegation was unavoidable in complex organizations and governments, these scholars suggested that desirable outcomes could best be achieved through reliance on the values and professionalism of bureaucrats rather than on electoral oversight or other coercive means (Barnard 1939; Simon 1948). More recent scholarship has also begun to emphasize the crucial role that bureaucratic values play in determining performance and to call for the inclusion of behavioral influences in the principal-agent frameworks used to study bureaucracy (Bendor and Moe 1985; Moe 1990). Brehm and Gates (1997) suggest that positive predispositions among agents are significantly more likely to produce compliance than even a credible threat of sanctions. By relaxing the assumptions of the traditional agency model, these authors demonstrate formally and empirically that the agent's decision to work, shirk, or sabotage is predominantly determined by her predispositions toward a policy (See also Lipsky 1980).

The goal conflict theory of grant effectiveness proposed in this article borrows heavily from the insights of the aforementioned literature. Because of the massive scale of fiscal federalism and the constraints imposed by the separation of powers in a federalist system, the delegation of responsibility for the expenditure of grant funds to subnational governments is unavoidable. Undeniably, that act of delegation creates the potential for agency-related problems emphasized in previous literature on grant effectiveness.<sup>4</sup> The theory suggested here also recognizes, however, that grant making is a multiple agent relationship and that the values of recipients regarding the policy in question will differ from one jurisdiction to another. Consequently, the degree of goal conflict regarding the policy will also vary and the literature cited above suggests that the level of conflict should be a powerful predictor of agent behavior. The principal-agent framework

<sup>3</sup>Some fiscal choice models, particularly those that consider the preference orderings of different actors, do theoretically acknowledge that goal conflict is a potential determinant of grant effectiveness.

<sup>4</sup>See Keiwiet and McCubbins (1991) and Perrow (1972) for general reviews of Adverse Selection, Moral Hazard, and other agency problems.

is an appropriate analytical tool for studying fiscal federalism, but it must be expanded in order to accommodate different priorities among numerous recipient jurisdictions. This will allow us to model grant effectiveness not only as a product of the strategies of the principal, but also as a function of agent specific characteristics.

Acknowledging a variable level of goal conflict in the grant-making process produces a different set of expectations concerning the determinants of fund diversion than does traditional agency theory. Explicitly, the inclusion of goal conflict in the principal-agent framework used to study fiscal federalism suggests three testable hypotheses. First, increased congruence between the ideological orientation of the recipient jurisdiction and the policy goals of a grant should result in reduced fund diversion into other expenditure categories (Hypothesis 1). Grants provided to recipients with high levels of goal conflict should be largely ineffective in stimulating jurisdictional spending. Alternatively, those funds provided to jurisdictions who share the grant program's policy predispositions should result in higher targeted spending. Second, goal conflict should be an important predictor of fund diversion even when controlling for overhead monitoring (Hypothesis 2). According to the traditional principal-agent model, the level of such monitoring will be the primary determinant of state-level fund-diversion decisions. Distinguishing the impact of recipient preferences from this alternative source of influence is crucial in distinguishing the goal conflict approach to fiscal federalism from previous principal-agent models.

Recognizing that the goals of recipients help to determine grant expenditures, it is logical to assume that the goals of agents will also help to determine the effectiveness of oversight activities. Brehm and Gates (1997) suggest that the impact of oversight on policy outcomes may be contingent on the predispositions of the agents closest to those outcomes. Additionally, though there is certainly evidence of Congressional overseers directly coercing or even dismantling an agency that deviates from their preferences, oversight often takes the more passive form of hearings (See Aberbach 1990). Rather than directly influencing agent behavior, oversight hearings give committees, or more likely subcommittees, the opportunity to send signals concerning their preferences (Scher 1960). Carpenter (1996) provides evidence that there is the potential for such signals to become altered as they are interpreted within an organization. Similarly, there is evidence that such signals may simply be ignored if they are different from the perceived mission of an agent, at least until such time as the principal imposes more coercive sanctions (See Wood and Waterman 1994). Thus, though it has not been directly tested in past research, the

literature suggests that the effectiveness of oversight, at least in the form of hearings, may be contingent on the goals of the agent (Hypothesis 3).

## Law Enforcement and Health Care: Two Empirical Tests

In an attempt to ensure that any findings regarding the impact of goal conflict on fund diversion are not contextual, I propose two tests in distinct policy areas. This section will analyze federal grants for narcotics enforcement, as well as those for the Medicaid program, in order to determine if a principal-agent model that incorporates the values of the recipient can successfully predict effectiveness in different grant programs. In concert, these two programs provide a good test of the goal conflict hypothesis for a number of reasons. First, Medicaid is a very large grant program making up a substantial percentage of health expenditures in all states. The Byrne program, on the other hand, is a relatively small program, which does not contribute more than 4% to any state law-enforcement budget. This variability should help to ensure that the impact of goal conflict on fund diversion is not contingent on program size. Second, these categories of grant funding encompass both of the primary predictors of fund diversion suggested by past research—matching requirements and oversight. This will allow for a test of whether goal conflict provides leverage on the question of fund diversion beyond that provided by previous theories.

### Antinarcotics Grants

Between 1990 and 1996, the Department of Justice provided over \$20 billion to state and local governments for activities related to criminal justice (United States Bureau of Census 1990–1996). The largest single category of funds was designated to help subnational agencies enhance their narcotics enforcement capacity. The Bureau of Justice Assistance (BJA) distributes federal narcotics control grants through the Edward Byrne Memorial State and Local Law Enforcement Assistance Grant Program. Established in 1968 by the Omnibus Crime Control and Safe Streets Act, the Byrne Program makes grants to states, with an emphasis on enforcement of laws and establishment of penalties similar to those in the Federal Controlled Substances Act. Under the Byrne Formula Grant Program, BJA determines each state's annual grant entitlement by applying a modified population-based formula to the total amount of the appropriation. This funding is formulaic

and comes with a limited number of restrictions on recipients, requiring only that states “develop a multi-year drug control strategy to demonstrate that funds will be used in accordance with the purposes of the law” (BJA 2001). The state-level bureaucracies that administer these grants can impose reporting requirements on state agencies that receive funding, but there is essentially no monitoring of individual states by the Justice Department. Additionally, there were no Congressional hearings concerning the program during the period under study.

Because of this lack of oversight, Chubb’s principal-agent model would predict a uniformly high degree of fund diversion in Byrne grants. In addition, traditional fiscal choice models would also predict high supplantation in this program due to the absence of matching requirements. Because of the traditionally conservative nature of federal drug programs (see Tonry 1995; Zimring and Hawkins 1991), liberal states that sit to the left of grant’s position on the ideological continuum should have higher goal conflict regarding the *Byrne* program. As a result, Hypothesis 1 predicts that fund diversion will be higher in these states.

## Medicaid

The Medicaid program began in 1965 as a component of the Johnson administration’s war on poverty. Medicaid is a matching grant program, which requires states to fund a significant portion of the cost (Thompson and Diulio 1998). Federal dollars are administered by the Health Care Finance Administration (HCFA), which sets broad guidelines for the states, but allocation decisions are ultimately the responsibility of state agencies (Randall and Holohan 1982). States have always had a good deal of discretion in determining program eligibility standards and benefit levels for recipients (Coughlin, Ku, and Holohan 1994). In an attempt to help states contain rising costs, however, Congress passed legislation in 1981 that substantially increased the level of subnational discretion in the administration of Medicaid (Randall and Holohan 1982).

In 1993, the Subcommittee on Oversight and Investigations of the House Committee on Energy and Commerce became concerned about rising federal costs for the Medicaid program. The Chairman commissioned the General Accounting Office (GAO) to conduct an investigation in order to determine if states were transferring an undue portion of program costs to the federal government. The GAO issued its report in August, 1994, and concluded that states had been using their increased discretion, along with a number of “illusory accounting practices,” to inflate the federal share of Medicaid program expenditures. They also concluded that the states were using

their federal matching funds to supplant, rather than supplement, state-level funds. Investigators determined that, through an improper relationship between state administering agencies and state-run care providers, states were able to use federal dollars for almost all care provided while spending little or none of their own money. Committee members learned that the state of Michigan made over \$271 million in just one such impropriety (GAO 1994).

According to Chubb’s theory, this federal investigation of the Medicaid program, as well as the mounting concern that led to the GAO inquiry, should have produced low fund diversion in Medicaid grants. Though the evidence seems contrary to such a conclusion, a fiscal choice model would also predict limited diversion of Medicaid funds due to the program’s restrictive matching requirements. Because of the historically liberal frame of Medicaid and other social welfare entitlement programs, goal conflict regarding this program should be highest in conservative states. Hypothesis 1 would predict higher levels of fund diversion in these states.

## Data and Methods

The above-mentioned hypotheses are tested in three analyses of state-level law enforcement and healthcare spending. The first hypothesis suggests that fund diversion in both grant programs should be reduced in jurisdictions that sit close to the grant program on the ideological continuum. The second proposes that the impact of goal conflict should persist, even when controlling for the influence of oversight on fund diversion decisions. Finally, the third hypothesis suggests that the effectiveness of oversight should be contingent on the level of conflict within a jurisdiction.

For the dependent variables, the models in this analysis use state-level direct expenditures on law enforcement (Model 1) and healthcare (Models 2, 3). These measures are free from any federal monies and include only state-level own source expenditures. This represents an improvement over previous studies, which have used total or general spending (Chubb 1985; Craig and Inman 1983). Theoretically, total spending is an acceptable measure, but it makes interpretation very difficult. The aggregate measure has forced past researchers to use a complex set of budgeting equations borrowed from economics in order to estimate the actual amount of jurisdictional revenue being diverted into other programs. Because the purpose of both Byrne and Medicaid grants is to augment rather than supplant local expenditures, analyzing direct

spending is a more straightforward way to determine grant effectiveness.<sup>5</sup>

Each model includes two primary independent variables measuring federal grants and the degree of goal conflict regarding the policy goals of the grant. The model of state-level law enforcement expenditures includes the total annual award of Byrne antinarcotics grant dollars, as reported in the *Consolidated Federal Funds Report* (1990–1996). The model of health expenditures includes Medicaid grant totals reported in the *Statistical Abstract of the United States* (1992–1998). Both grant measures are lagged one year in order to account for the fact that state budget projections often rely on expected reimbursements, based on previous grant amounts.<sup>6</sup> Even with a certain degree of supplantation and existent administrative costs, each grant measure should positively correlate with the appropriate category of state expenditure.

In order to capture the level of conflict between the policy goals of a particular grant program and those of recipient jurisdictions, I utilize the measure of state citizen liberalism developed by Berry et al. (1998). In previous studies and replications, the indicator has proven to be a consistent predictor of state policy outputs, including: Medicaid eligibility, welfare expenditures, incarceration rates, judicial decisions, and general policy priorities (see replications in Berry et al. 1998; see also Jacoby and Schneider 2001; Sorensen and Stemens 2002; Whitford 2002).<sup>7</sup>

The measure of ideology provides a suitable indicator of goal conflict in this analysis because both programs are clearly ideological in nature, and we can assume that,

<sup>5</sup>Because this analysis assumes variation in the degree of goal conflict, the potential for a censored dependent variable exists. Those jurisdictions with extremely divergent preferences relative to a grant program might refuse all federal funding, resulting in a biased sample. Fortunately for this analysis, every state received both types of grants between 1990 and 1996.

<sup>6</sup>A contemporaneous grant measure was also used in preliminary models. The results do not change appreciably, and the lagged measure is more theoretically appropriate.

<sup>7</sup>I chose to use the citizen, rather than the government ideology indicator because I feel that it has greater content validity and is, therefore, a superior measure. The citizen liberalism score is constructed using the ideology scores (ADA) of members of congress from a state and the ideology of unsuccessful challengers to those members, weighted by an estimate of the margin of victory. Thus the preferences of voters in the minority, as well as the majority, are included in the measure. Alternatively, the government ideology measure is constructed from the *unweighted* ideology of members of a state's congressional delegation. Thus, there is no way for the preferences of voters in the minority in each district to enter into this calculation. I am unconvinced that aggregating to the state-level, or controlling for party strength and divided government, eliminates the error introduced by ignoring so many individual voters.

during the short period under study, the goals of the programs themselves did not change. Theoretically, conservative states should be more opposed to the redistributive goals of Medicaid than are their liberal counterparts. Similarly, the rehabilitative goals of liberal states should conflict with the punitive approach to narcotics policy championed by the Reagan administration and embodied in the Byrne antinarcotics program. In policy or grant areas where the researcher can clearly identify an ideological schism, the assertion that ideology is an accurate proxy for goals regarding outcomes is defensible. In policy areas, however, where preferences cannot be clearly identified as ideological, such as in the case of transportation or sanitation, an alternative measure of goal conflict would be preferable. Therefore, the conclusions drawn from the analyses presented below are most likely generalizable to the former and not the latter.

In subsequent analyses, the measure of ideology has been rescaled so that it ranges between 0 and 79.04.<sup>8</sup> It has a mean of 38.56 and a standard deviation of 13.37. Because the two grants under study have opposite ideological orientations, I have linearly transformed the state ideology measure in the first model so that it serves as a measure of *goal congruence* for each program. In the model of antinarcotics grants, the measure has been transformed so that the most liberal state has a value of 0 with higher values connoting greater conservatism. In the analyses of Medicaid grants (Models 2 and 3), the value of 0 represents the most conservative state and increasing values indicate more liberal states.<sup>9</sup> Thus, in each model, a value of 0 represents the highest degree of goal conflict between the policy goals of the recipient jurisdiction and the grant program. In all models, increasing values represent an increase in the congruity between the preferences of the state and the position of the grant program on an ideological continuum. The measure is coded as such so that the traditional principal-agent assumption of absolute goal conflict can serve as the baseline for comparison.

In order to test the hypothesis that the effectiveness of federal grants in stimulating state spending depends on the level of goal conflict, or more accurately congruence, Models 1 and 2 include measures of the interaction between goal congruence and federal grants. The interaction is simply the product of federal antinarcotics grants

<sup>8</sup>The measure, as it is available from the *Inter-University Consortium for Political and Social Research* at the University of Michigan, theoretically ranges from 0 to 100. In the sample of years included in this analysis, the original measure had a minimum value of 9.93 and a maximum of 88.83.

<sup>9</sup>This is the same coding as the original measure.

and the goal congruence measure for Model 1 and Medicaid grants and the ideology variable in subsequent models. This is, of course, the most important variable for the purposes of hypothesis testing and theory development. If the traditional principal-agent model employed by Chubb (1985) with its assumption that goal conflict is fixed, is correct, then the interaction between a constant and the measure of federal grants should be perfectly collinear and thus not estimable. If conflict is a constant across all jurisdictions, it cannot have a discernable impact on the stimulative effect of federal grants. If the measure is positive and significant, however, it indicates that as the congruity between goals grows, the level of grant funds expended in the targeted area also increases.

A test of the second hypothesis requires a program that has been the subject of federal monitoring efforts. The *Byrne* program was not the target of oversight during the period under study. Thus, Model 1 cannot include a measure of hearings because it would have a constant value of 0 and drop out of the analysis. Alternatively, the Medicaid program has been perpetually on the federal agenda, if we assume that Congressional hearings are an indicator of monitoring activity.<sup>10</sup> Between 1990 and 1996, the House and Senate held hearings on Medicaid grants to the states or Medicaid-related expenditures every year. The minimum number was 8, while Congress held the maximum of 36 hearings in 1995, following the release of the GAO report on fraudulent practices in the states.<sup>11</sup> Thus, Model 2 includes a measure of the number of Medicaid-related hearings, as well as a multiplicative interaction between oversight activity and federal Medicaid grants. The traditional principal-agent approach would suggest that this interaction should be positive and significant, with more hearings producing increased expenditure of grant monies in the targeted area. According to Hypothesis 2, however, regardless of the impact that hearings may have on the stimulative effect of Medicaid grants, the interaction between the goal measure and grants should remain positive and significant.

Finally, testing the hypothesis that the effectiveness of oversight is contingent upon the degree of goal conflict requires an additional specification. Model 3 includes the same measure of federal Medicaid grants, indicator of goal congruence, and variable capturing the number of annual Congressional hearings on Medicaid expenditures as Model 2. The third model also includes, however,

<sup>10</sup>See Aberbach (1990) and McCubbins and Schwartz (1984) for arguments concerning the use of Congressional hearings as a means of bureaucratic control.

<sup>11</sup>Number of Congressional hearings was gathered from the *Policy Agendas Project* data set available at <http://depts.washington.edu/ampol/navResearch/agendasproject.shtml>.

a three-way multiplicative interaction between state liberalism, the number of hearings, and Medicaid grants. A significant coefficient for the interaction term will suggest that, in the case of Medicaid grants, the effectiveness of oversight is dependent on the preferences of the recipient jurisdiction.

In addition to the predictor variables discussed above, Models 1, 2, and 3 each include a set of variables to control for other possible influences on state expenditures. The first of these is Gross State Product per capita as reported in the *Statistical Abstract of the United States* (1992–1998), in order to ensure that state capacity is not driving the results of the analysis. Both models include a measure of need for the relevant type of expenditure in order to ensure that spending decisions within a state are not simply a response to an increased demand for services. For the model of law enforcement expenditures, the control for need is the number of index crimes reported by the Federal Bureau of Investigation in the annual *Uniform Crime Report* (1990–1996). The model of state health expenditures includes the average daily census of hospital beds as reported in the *Statistical Abstract* (1992–1998) in order to capture the demands put on a state's health resources by its citizens.<sup>12</sup> All monetary variables, both dependent and independent, are measured in millions of constant 1990 dollars.

The models were applied to a set of pooled data including all 50 states for the years 1990 through 1996. All models are estimated as cross-sectional time series regressions. A Prais-Winsten (1954) procedure was employed in order to correct for residual autocorrelation.<sup>13</sup> All models also report panels-corrected standard errors in order to deal with existent heteroskedasticity across panels.<sup>14</sup> These techniques ensure that reported standard errors are not biased even in the presence of auto-correlation or heteroskedasticity and are the appropriate procedures

<sup>12</sup>These measures also serve as a proxy for population, which has often been included in previous studies as a control. These measures correlate with population at .94 and .89, respectively, and, thus, represent a suitable proxy for the impact of state size on expenditures. Additionally, I think that they are theoretically preferable to a general measure of population because they are more specific indicators of need for each category of spending.

<sup>13</sup>A modified Durbin's *h* suggested by Whistler et al. (2001) suggests that the models are free from remaining autocorrelation. The statistic is asymptotically normally distributed and, for all three models, produces a value substantially below 1.96, which suggests that we cannot reject the null.

<sup>14</sup>Though the use of the panel specific AR correction and the panels-corrected standard errors are most theoretically appropriate, the models are robust to different estimation techniques. Estimating each model with fixed effects for both state and year did not substantively change the findings.



**TABLE 1** The Effect of Federal Grants on State-Level Direct Expenditures for Law Enforcement and Healthcare, 1990–1996

Independent Variables	Model 1 (Law Enforcement)	Model 2 (Health)	Model 3 (Health)
Federal Grants	.14095 (2.32)	.21872 (2.81)	.25401 (6.63)
Goal Congruence	4.83642 (1.69)	1.91844 (2.48)	.49252 (.76)
Goal Congruence X Grants	.00312 (2.48)	.00294 (1.91)	—
Oversight	—	−4.91242 (3.46)	−5.35449 (3.40)
Oversight X Grants	—	.00644 (3.00)	—
Three-Way Interaction	—	—	.00022 (5.18)
Need	7.03542 (0.72)	20.26757 (2.19)	22.43147 (7.73)
State Wealth	3050.06073 (3.57)	2745.43878 (1.93)	7034.81227 (3.56)
Intercept	67.96514 (2.24)	31.87960 (.75)	−23.58996 (.31)
	$R^2 = .87$	$R^2 = .88$	$R^2 = .89$
	$P > \chi^2 = .0000$	$P > \chi^2 = .0000$	$P > \chi^2 = .0000$
	N = 350	N = 350	N = 350

A Prais-Winsten procedure was used to correct for residual autocorrelation. Standard errors were panel corrected and robust to heteroskedasticity and unit correlation. The numbers in parentheses are Z statistics.

when the number of time points is significantly smaller than the number of panels (Beck and Katz 1995).<sup>15</sup>

## Findings and Discussion

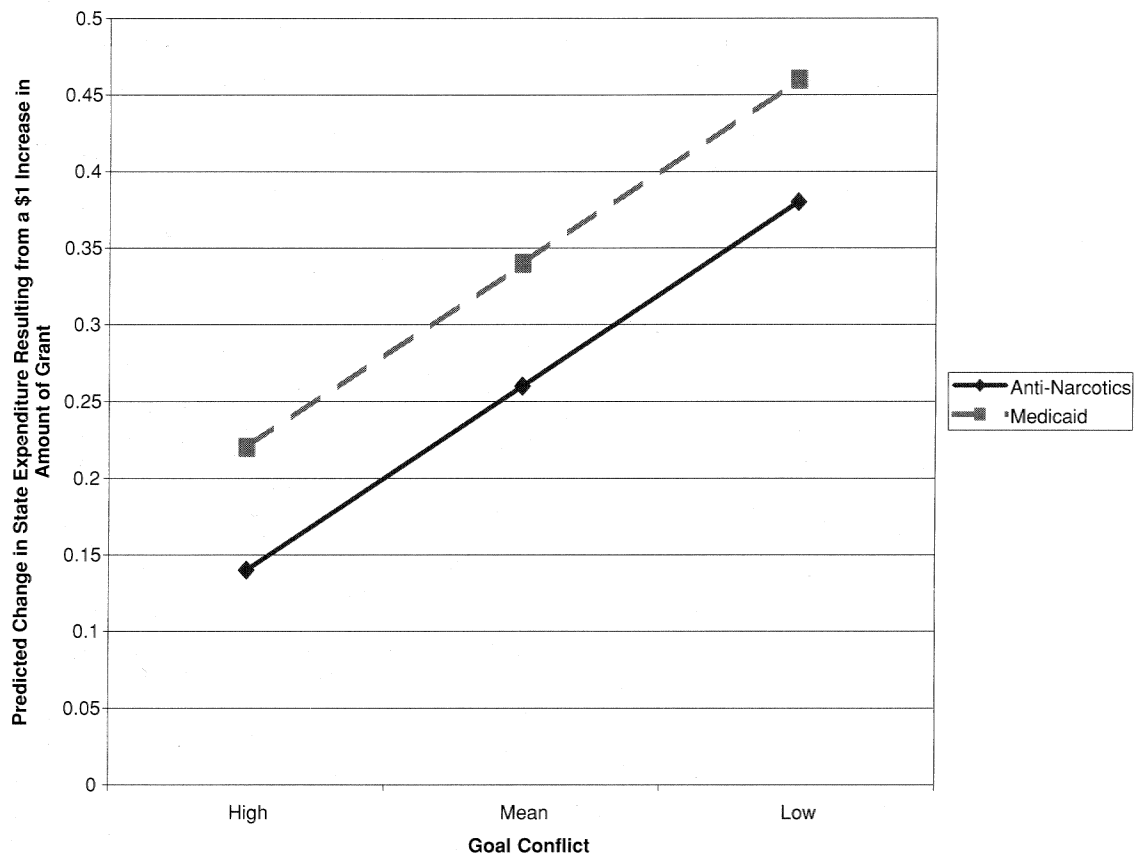
Table 1 presents the findings from all three models, and, in the interest of brevity, I will restrict the discussion to the primary variables of interest. Beginning with the model of law enforcement expenditures, the measure of federal antinarcotics grants is positive and significant. Because the goal congruence measure has a value of 0 in the highest conflict state and is included in the interaction term, the coefficient for the grant measure can be interpreted as the stimulative effect of one federal dollar in the state with the highest goal conflict. The coefficient of .14 indicates that, in that state, a \$1 increase in grant funding results in a \$0.14 rise in direct state expenditures on law enforcement. Though the substantive interpretation is a bit more complex, the positive and significant coefficient

for the interaction initially indicates that federal antinarcotics grants have a larger stimulative effect in states whose conservative goals are more congruent with those of the grant program. Model 2, investigating the determinants of state healthcare expenditures, produced very similar findings. The positive and significant coefficient for Medicaid grants indicates that, in the highest conflict state, a \$1 increase in grant funding produces a \$0.22 increase in direct health expenditures. The coefficient for the interaction is again positive and significant, indicating that federal dollars produce more direct spending in states that are more liberal and, thus, have lower goal conflict regarding Medicaid.

The results from Models 1 and 2 provide significant evidence for the first hypothesis. In both grant programs, the congruity between the recipient jurisdiction and the position of the grant program on an ideological continuum is an important predictor of the supplantation of federal funds. In order to facilitate the interpretation of the interactive effect in each program, Figure 1 presents the stimulative effect of federal antinarcotics and Medicaid grants across the range of the conflict variable.<sup>16</sup> The lower series represents the impact of *Byrne* grants. As noted above, in the states with the highest conflict regarding punitive narcotics enforcement, a dollar of additional antinarcotics grants produces an increase of \$0.14 in direct spending. In a state assumed to have an average level

<sup>15</sup>The analysis was conducted in Stata v.7. The program command necessary to replicate the estimation technique is `xtpcse, corr() het`. The estimator corrects for unit heteroskedasticity by replacing the covariance matrix used to estimate the variances of the coefficients with one which explicitly accounts for the correlation between errors in panels *i* and *j* at time *t*. The estimator also corrects for autocorrelation by applying a Cochran-Orcutt procedure to eliminate correlation of errors across years by subtracting a portion of the variable in the previous time period equal to  $\rho$  from the value of the variable in the current time period. In order to avoid the loss of the first observation, the program estimates that observation via a Prais-Winsten procedure.

<sup>16</sup>Because there is no oversight activity of *Byrne* grants, setting the hearings variable to zero in the analysis of Medicaid grants renders the relative impact of goal conflict in the two programs comparable.

**FIGURE 1** Stimulative Effect of Federal Grants

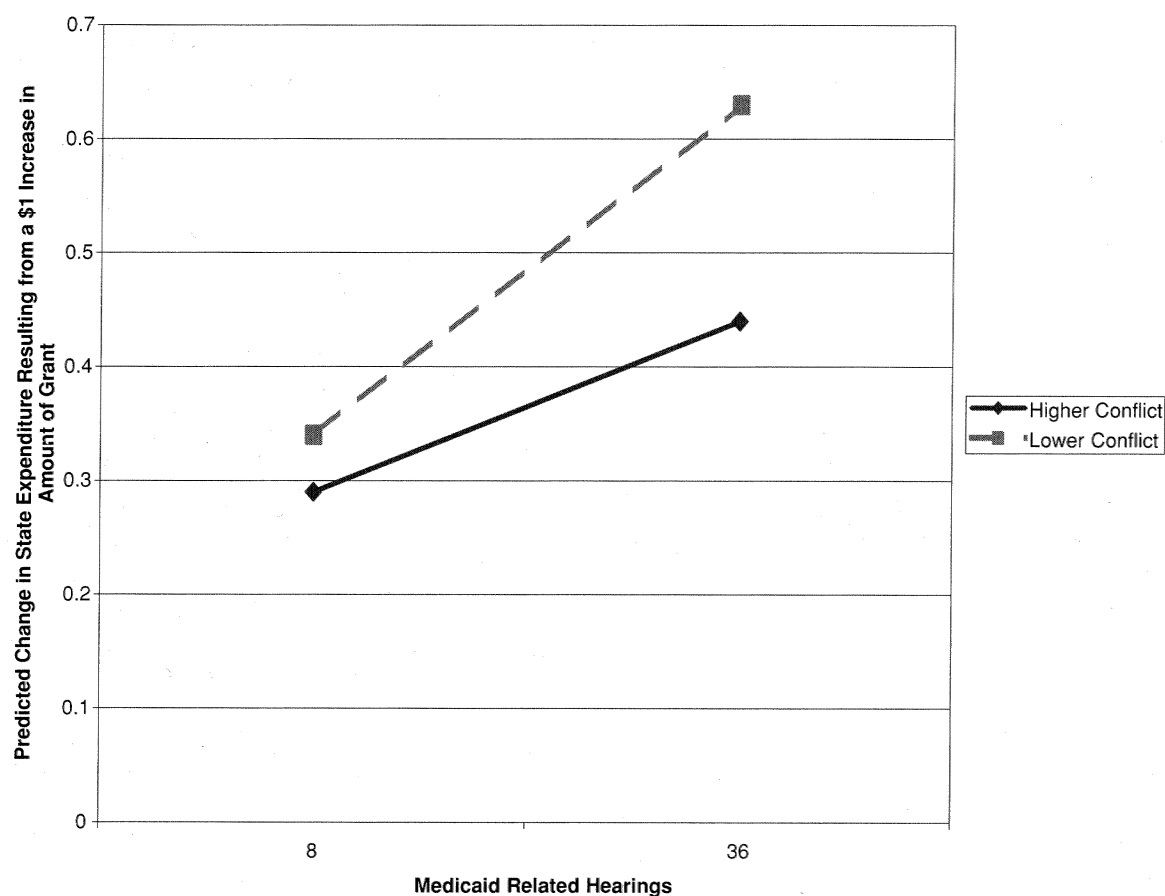
of conflict regarding the program's goals, however, the same dollar produces a sizably larger \$0.26 increase in own-source expenditure. Finally, in states whose policy preferences most closely accord with those of the *Byrne* program, one federal dollar stimulates law enforcement expenditures by \$0.38.

The upper series represents Medicaid grants and displays a similar trend. In the highest conflict jurisdiction, a \$1 increase in federal grant money produces \$0.22 in direct state health expenditures. In the state with a mean level of conflict, one additional dollar of federal money produces \$0.34 in additional state spending. Finally, in the most liberal state, assumed to have the highest level of agreement regarding the goals of the Medicaid program, an increase in federal grant monies stimulates \$0.46 in own-source health expenditures.

We can also assess the merit of the second hypothesis with the findings from Model 2. In the analysis, the interaction of hearings and federal grants is positive and significant, indicating that federal oversight activity does, in fact, reduce fund diversion in Medicaid. As the number of hearings increases, grant dollars induce more state-

level expenditure on healthcare. As noted above, however, the coefficient for the goal congruence interaction is also significant, indicating that the level of policy agreement between the recipient jurisdiction and the goals of the grant program has an effect on fund diversion even when controlling for the effect of oversight on grant effectiveness. Thus, the findings provide considerable support for the second hypothesis. While oversight can reduce fund diversion, it does not preclude the impact of jurisdictional goals. The finding does not necessarily indicate the need for a new analytical framework for the study of fiscal federalism. Rather, the results simply suggest that an expanded principal-agent framework, which incorporates the possibility of goal congruence, is an improvement over a traditional model that holds the degree of conflict as a constant.

The third column of Table 1 presents the findings from the final analysis of the determinants of state-level healthcare spending. As the results from Model 3 indicate, the three-way interaction of hearings, goal congruence, and Medicaid grants is significant and positive. Initially, the significant coefficient provides evidence for the

**FIGURE 2** Goal Conflict and the Impact of Oversight Activity

hypothesis that the effectiveness of oversight is contingent upon the level of goal conflict in a recipient jurisdiction. In order to facilitate the substantive interpretation of the finding, we can illustrate the nature of the interaction by computing coefficients using actual values of goal conflict for particular states in a given year and hypothetical values for oversight.

Figure 2 graphically presents the results of these computations. The first series represents a hypothetical state, which is one standard deviation more conservative than the mean and could, therefore, be considered a low congruence or high conflict state. The second series represents a hypothetical high congruence or low conflict state, which sits one standard deviation left of the mean on the ideological continuum. The X axis represents the number of oversight hearings, ranging from the minimum of eight to the maximum of 36. The Y axis represents the effect of \$1 federal money on state-level expenditures. In the higher conflict state, increasing the level of oversight from the minimum to the maximum would produce a 51% increase in the stimulative effect of federal grants

when controlling for other factors. In the lower conflict state, on the other hand, that same increase could potentially decrease fund diversion by 85%. The findings suggest, therefore, that in the case of Medicaid, oversight has a substantially larger potential effect in recipient jurisdictions that sit close to the goals of the policy on the ideological continuum.<sup>17</sup>

<sup>17</sup> An anonymous reviewer offered a plausible alternative hypothesis concerning the impact of oversight, which suggested that such activity should be more effective in high conflict, rather than low conflict states. I believe that the empirical results support the opposite expectation offered earlier in the text for a variety of reasons. These include the documented ineffectiveness of congressional oversight in very resistant agencies (see Wood and Waterman 1994), the electoral motivations of actors in conservative states to continue diverting funds despite the threat of sanctions (see Boyd 1998 for evidence of the close match between citizen preferences and state Medicaid policies), and bureaucratic inertia that may make it difficult for legislators to rapidly increase rolls or benefits in response to oversight (see Schneider and Jacoby 1996 on the power of state Medicaid agencies). Despite these justifications, the presence of a theoretically plausible alternative hypothesis suggests the need to view the empirical findings with caution and to conduct more research in order to determine if they are generalizable.

## Conclusion

This article proposed that the degree of conflict between the policy goals embodied in a grant program and those of recipient jurisdictions should be an important predictor of the level of fund diversion. Tests in two distinct grant areas, health and law enforcement, confirm that the level of congruence between states and the position of a grant program on the ideological continuum has a substantive impact on the effectiveness of grants in both programs. Medicaid and Byrne antinarcotics funds were more effective in stimulating targeted jurisdictional spending in states that share the grant program's goals. These findings invite a set of two distinct but interrelated conclusions.

First, this analysis suggests that researchers must incorporate the goals of grantors and recipients, along with older explanations of grant effectiveness, in order to construct a complete picture of the fiscal federalism relationship. Perhaps the most interesting thing about the findings of this study is that they could have served as confirmation of either a fiscal choice or traditional principal-agent theory of grant effectiveness. As a fiscal choice theorist would have predicted, fund diversion was somewhat lower in more restrictive Type A Medicaid grants, relative to the largely unconditional Type B Byrne funds in the average state (Gramlich 1977; see Figure 1). Similarly, as agency theory would suggest, the level of federal oversight had a substantive impact on agents' decisions to divert grant money away from the targeted area (Chubb 1985). Either conclusion, however, would neglect the fact that goal conflict had an independent effect on fund diversion and that the impact of both matching requirements and oversight was contingent upon the degree of goal conflict. These findings suggest that all three theories of grant effectiveness have something important to add to the study of fiscal federalism. They also confirm the propositions in this essay, however, which stated that determining the level of conflict between the national government and grant recipients is crucial to understanding not only the effectiveness of grants themselves, but also the effectiveness of federal strategies to reduce fund diversion.

The second conclusion that can be drawn from this research speaks more generally to the role of agency theory in the study of American political institutions. The relaxed goal-conflict assumption in this analysis allowed for insights about the fiscal federalism relationship that traditional agency theory might have obscured. The findings add to a growing body of scholarship reaching similar conclusions about the limitations of traditional principal-agent models (Brehm and Gates 1997; Krause 2001; Waterman and Meier 1998). In addition to highlighting the

potential for goal conflict, these authors have convincingly demonstrated that information asymmetry, maximizing behavior, and other key concepts are more accurately represented by continua rather than constants. All of this is not to say that agency theory does not offer a potentially powerful tool for studying the fundamental question of delegation in a separated powers system such as ours. The insights from the literature cited above, as well as this study, simply suggest that scholars may enjoy real theoretical gains if they are willing to relax some of the assumptions that underlay their principal-agent models.

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