

# EMPIRICAL RELATIONSHIPS BETWEEN STATE SPENDING PRIORITIES AND OTHER POLITICAL CHARACTERISTICS

A report to accompany “A New Measure of Policy  
Spending Priorities in the American States”

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Our goal in “A New Measure of Policy Spending Priorities in the American States” is to develop an empirical measure of state policy spending priorities. The unfolded scale obtained from the spatial proximity model accomplishes this objective very nicely. We plan to leave analysis of the determinants and consequences of state spending priorities for future work. However, in presenting our measure to the research community, it is useful to demonstrate that the unfolded state scores are, in fact, related to other theoretically-relevant variables.

In this report, we will consider very briefly the relationship between state policy priorities and several measures of state and national characteristics. Three variables represent sources and amounts of state revenue: Federal transfers to state governments; local transfers to state governments; and gross state product. All of these variables are measured yearly and expressed in per capita figures.

Three variables measure state public opinion: Erikson, Wright, and McIver’s (1993) index of state electorate partisanship; their index of state electorate ideology; and Berry, Ringquist, Fording, and Hanson’s (1998) citizen government ideology variable. All of these variables are measured on a yearly basis. Three more variables measure elite political orientations in the states: Berry et al.’s measure of government ideology; Poole’s first-dimension optimal classification (OC) scores for each state’s delegation to the U.S. House of Representatives; and first-dimension OC scores for each state’s U.S. Senators (Poole 2004). The Berry et al. measure is available yearly, from 1982 through 2004. For the OC scores, we take the mean value for each state, and we assign the same mean scores to both years in each Congress, from the second session of the 97th Congress in 1982 through the first session of the 109th Congress in 2005. Public opinion at the national level is operationalized using the first dimension of Stimson’s (1999) yearly public mood variable. Note that the values of all the preceding political variables are transformed, where necessary, so that larger values always correspond to more Republican or conservative states.

Table 1 shows the bivariate correlations between each of the preceding measures and our unfolded state scores.<sup>1</sup> Looking first at the revenue variables, the coefficients for federal

and local transfers are both negative. This shows that states which receive funds from other sources are more likely to spend money on policies that provide particularized benefits to needy groups. Similarly, the negative correlation with gross state product shows that wealthier states also allocate more resources to particularized benefits. These results are very reasonable, and consistent with prior research (Sharkansky and Hofferbert 1969; Peterson 1995; Hanson 2004).

Turning to state political characteristics, the empirical patterns are clear and consistent across the different variables: Regardless of the specific measure, citizens' and elites' political orientations are related to state policy priorities. States with more Democratic or liberal electorates, as well as more liberal public officials and congressional delegations, spend larger amounts on particularized benefits. Conversely, states with more Republican or conservative electorates, more conservative governments, and more conservative congressional delegations, spend more on collective goods. Of course, these are precisely the kinds of policies that are typically associated with the respective partisan or ideological positions (Garand 1985; Erikson, Wright, McIver 1993; Rom 2004).

There is an important caveat to any conclusion regarding the relationship between state spending priorities and state political characteristics. Despite the *consistency* in the pattern of correlations, the *magnitudes* of the relationships are all quite weak in absolute terms. Each of the public opinion and elite orientation variables shares less than 20% of its variance with the unfolded state scores (and, most of the squared correlations are considerably smaller than that). This provides direct evidence for the theoretical separation of state spending priorities and more general political orientations, such as state ideology or partisanship.

Finally, the last entry in Table 1 shows the correlation between the mean state score in each year and the public mood variable. This coefficient is positive, showing that there is a tendency for state spending on particularized benefits to parallel liberal policy orientations in the national electorate, and vice versa. Thus, trends in state policy priorities over time correspond to movement in national-level public opinion.

The results presented in this report certainly do not constitute definitive or complete analyses. However, they do show both the substantive utility and conceptual distinctiveness of the state policy priorities measure obtained from the unfolding analysis. At the very least, the findings provide further evidence for the economic and political foundations of public policies within the American states.

## NOTES

1. The numbers of observations used to calculate the correlations in Table 1 vary from one measure to the next. The three revenue variables are available for all states in all years, so  $n = 1,200$  for those correlations. The two public opinion variables obtained from Erikson et al. are available only for the 48 contiguous states from 1982 through 2003. So, the correlations with these variables are based on 1,056 observations. The Berry et al. variables are available for all 50 states from 1982 through 2004, resulting in 1,150 observations. The OC scores cover the entire time period (and, again, identical scores are used for both years of each Congress), so  $n = 1,200$  for those correlations. Finally, the public mood variable is available for 1982 through 2004, so its correlation with the yearly mean state scores is based on 23 observations.

## REFERENCES

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**Table 1:** Correlations between unfolded state scores and other variables.

	Correlation (Pearson's $r$ )
<i>State Revenue:</i>	
Federal transfers to states	-0.225
Local transfers to states	-0.436
Gross state product	-0.272
<i>State public opinion:</i>	
State electorate partisanship (Erikson et al.)	0.220
State electorate ideology (Erikson et al.)	0.309
Citizen ideology (Berry et al.)	0.427
<i>Elite political orientations:</i>	
Government ideology (Berry et al.)	0.215
Mean DW-NOMINATE score, Senators (Poole)	0.295
Mean DW-NOMINATE score, Representatives (Poole)	0.303
<i>National-level public opinion:</i>	
Public mood (Stimson)	0.395

**Note:** Data for state revenue variables are obtained from the *Statistical Abstract of the United States*. These variables are all measured in thousands of dollars per capita. Data for state public opinion, elite political orientations, and national public opinion variables are obtained from the respective authors' web sites. Where necessary, the latter are reflected so that larger values indicate more liberal or Democratic states.