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U.S. State and Local Public Policies in 2006: A New Database

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ABSTRACT

This article introduces a new, public database of U.S. state and local public policies, now available at www.statepolicyindex.com. The database covers more than 170 different state or local policies, coded at the state level as of December 31, 2006, in most cases. We use principal components analysis and derive two orthogonal measures of state policy ideology, which we label *policy liberalism* and *policy urbanism*. Our policy liberalism measure passes several reliability and validity checks, while policy urbanism is strongly predicted by urbanization rate, percentage of African Americans in the population, and percentage of Christian adherents in the population.

WE INTRODUCE A NEW DATABASE of U.S. state and local public policies that covers a variety of policy areas of interest to researchers in the field. In this article, we describe the collected data, note their advantages, discuss the coding and structure of the dataset, and report some interesting substantive findings from their analysis. Using principal components analysis, we find two significant dimensions underlying state policies: the state policy liberalism dimension, which is standard in the literature on state politics, and an urban-rural divide, which loads particularly on crime policies.

One of the difficulties in researching state policy is that it usually requires a time-consuming search and analysis of state statutes or collation of data from disparate and not always strictly comparable sources. Our dataset solves this problem and makes this data freely available to researchers at www. statepolicyindex.com. By doing this, we hope to reduce reduplication of scholarly effort. The dataset is also particularly user-friendly. The policy data are broken down into individual Excel spreadsheets by issue area, and each

file contains a separate tab with a description of sources consulted for each variable, making it easy for researchers to consult primary sources if they wish to investigate a particular policy area more deeply.

The study of the institutional and public opinion determinants of state policy variation is a rapidly developing area of American politics research. One particular topic of interest has been the link between state public opinion ideology and state policy ideology. With this new database, we create an updated index of state policy liberalism, which we find to be reliable and equally or more valid than existing measures of state policy ideology. One of the primary advantages of this database is its breadth, comprising more than 170 different "top-level" state and local public policies with approximately 500 variables in total. Another benefit is its recent vintage; where possible, we coded the data as of December 31, 2006. By including recent policy activity, such as smoking bans, eminent domain reform, same-sex marriage, civil unions, and domestic partnership policies, we are also able to discover something new about the content of state policy ideology. However, the database does not yet extend back in time and is, thus, less useful for analyzing the dynamics of policy change, except as a first stop for looking up potential sources for policy data, clarifying variable operationalization, and so on. Another improvement on prior measures of state policy variation is our use of new methods of measuring size of state governments' fiscal impact that more accurately track the political tradeoffs that underlie policy decisions.

This database yields another significant finding that should be of interest to researchers in the field. The received wisdom is that only a single dimension or factor underlies variation in state policies (Wright, Erikson, and McIver 1987; Gray et al. 2004), but our exploratory principal components analysis finds two. The first and strongest component is the state policy liberalism dimension standard in the literature. The second, we believe, principally reflects an urban-rural divide, particularly on crime-control policies. Of course, many aspects of state policy are sui generis and cannot be reduced to underlying ideological dispositions. Nonetheless, the fact that our database generates a policy liberalism measure that tracks well with previous measures of policy ideology and with other measures of state opinion ideology should increase confidence in the reliability of our codings and in the validity of the state policy ideology concept. The finding of a new dimension of policy ideology that seems to reflect urban, racial, and religious factors might help to explain policy conflicts that cut across the liberal-conservative divide and seem to have gained salience recently, such as on gun control and incarceration and arrest policies.

In the next section, we describe the coding and structure of the dataset.

The following section reviews some of the state policy literature to suggest uses for the data. The fourth section describes our construction of the two state policy ideology indices. The fifth section concludes, and the Appendix offers a listing of the top-level policy variables in the dataset with their factor loadings on the policy liberalism and urbanism indices.

STRUCTURE AND CODING OF THE DATA

Our database codes a wide range of public policies for all 50 states, coded largely as of December 31, 2006. We omit the District of Columbia, Puerto Rico, and other federal territories. The database covers fiscal policy, gun control, alcohol regulation, marijuana policies, tobacco and smoking laws, automobile regulations, law enforcement data, education policies, land-use and environmental laws, labor market regulations, health insurance policies, utilities deregulation, occupational licensing, asset forfeiture rules, eminent domain reform, court systems, abortion laws, the death penalty, marriage and civil union laws, campaign finance laws, and sundry mala prohibita. In many cases, we directly code statutes with dichotomous or simple ordinal variables. In some cases, we code continuous statistical variables that capture both the relevant statutory framework and the manner in which legislated policies are administered (e.g., expenditure and revenue levels, incarceration rates, etc.). While for many of our variables we went directly to the statutes and 2006 legislative session data, now available online for all 50 states, we also collected fiscal data from the Census Bureau and Bureau of Economic Analysis (BEA); law enforcement data from the FBI; health insurance policies data from the Henry J. Kaiser Family Foundation; labor market regulations data from the Department of Labor, OSHA, and National Academy of Social Insurance; abortion policy data from the Guttmacher Institute; and other sources. We have no missing data on any variable except state government land ownership, which is erratically available at different time periods from different sources. In general, the statutory variables are coded as of December 31, 2006 and are binary or ordinal in form, while the fiscal and law enforcement data are coded as of 2004, the latest available date as of this writing, and are continuous ratio-scale variables. 1 As a result, the database is designed for cross-sectional analysis only; if resources are available, we hope to code the database backward in time for at least some variables to permit analysis of policy change (Walker 1969).

Because Microsoft Office file formats have become almost universal among quantitative researchers, we present our data files in Microsoft Excel 97–2003 format. This choice allows us to incorporate information that would normally

be relegated to the codebook directly into the data file for rapid access. Each broad policy area comprises a different file. Each file contains two worksheets. One sheet contains the data, with states in the first column, year in the second column, and individual policy variables occupying one column each thereafter. The other sheet mirrors the column structure of the first, but instead of listing each state's policy attributes, it references the sources consulted for each variable under the appropriate column heading. In the data sheet, the first row contains a detailed description of each variable, including coding rules. The second row contains a variable name appropriate for use in statistical software, eight characters maximum. Each file name starts with a different letter of the alphabet, and every variable name other than state and year also starts with that letter. This *naming convention* made it easier to ensure that no variable name other than *state* and *year* is repeated in the entire database. We have also included a summary file that contains every top-level individual policy variable in the database, along with measures of state ideology on the two dimensions that we identify. By top-level, we mean that the summary file excludes those policy variables that we use as components to construct ordinal policy scales, to avoid duplication (examples of such scales are concealed carry regulation, open carry regulation, alcohol distribution regulation, and eminent domain reform). We use all these top-level policy variables to construct the state ideology indicators described below.

We performed all the coding of the variables found in the database. Because of the sheer size of the database, we decided not to code the entire database independently and then conduct tests of inter-coder reliability. The principal investigator performed much of the coding and also checked the coding of the other authors. We believe that the creation of separate variables for each distinct policy variation of interest will allow researchers to develop their own ordinal scales for broader policy aggregates, should they disagree with our proposed summary indices. Our extensive use of binary and simple ordinal variables reduces the risk of measurement error by requiring the coder to identify simply whether a particular policy feature exists or not, rather than to make more complex judgments about a putative spectrum of policy options.

Our general coding strategy is to present disaggregated and dichotomous or simple ordinal data for each policy element, wherever possible. As a result, there are no purely multinomial variables in the dataset, i.e., variables with multiple categories that lack an ordinal interpretation. Instead we have created binary or simple ordinal variables for each relevant element of statutory law. In some cases, more complex ordinal scales are created from the simpler variables, but the disaggregated data are available for researchers to create their own scales. For instance, we create an index of eminent domain reform

by taking into account four dimensions of reform: (1) whether any reform has been enacted (binary yes/no variable); (2) standards for private takings (simple ordinal variable, coded 1 if all takings for private use are prohibited, 0.5 if only certain private-to-private transfers are prohibited, and 0 if there are no effective restrictions on this type of eminent domain use); (3) blight definitions (simple ordinal variable, coded 1 if a stricter definition of blight has been implemented either implicitly or explicitly, 0.5 if a vague definition of blight has been retained but the standard of proof for proving blight has been raised, and 0 otherwise); and (4) whether the constitution enshrines additional restrictions on eminent domain (simple ordinal variable, coded 1 if all additional restrictions have been thus enshrined, 0.5 if only some have, and 0 if none have). Another example is our creation of an index of difficulty of asset forfeiture from two variables: incidence of the burden of proof, owner or government (dichotomous), and owner liability standard (trichotomous). The construction of each complex scale is described within each data file, and we have left the Microsoft Excel formulas intact wherever possible so that researchers can readily adjust the construction of these variables to their liking.

In very few cases, policies could not be coded quantitatively without discarding or simplifying some information, and we chose to deal with the problem by including a raw variable with text descriptors and a processed variable offering a quantitative interpretation. For instance, the gun control file contains a variable for the initial cost of a concealed carry permit. But some states do not offer concealed carry permits, either because concealed carry of handguns is prohibited (Hawaii, Illinois, Wisconsin) or because a permit is not required for concealed carry (Alaska², Vermont). The raw variable thus codes Hawaii, Illinois, and Wisconsin as N/A, Alaska and Vermont as 0, and all other states as the number of dollars required to purchase a permit. The processed variable adjusts Hawaii, Illinois, and Wisconsin to make their permit cost equivalent to twice the permit cost of the most expensive state (New York). This quantitative interpretation preserves the notion that higher values on this variable capture stricter regulation of concealed carry and make it possible to include the variable linearly in a summary scale of concealed carry regulation.

Where we have coded local policies, we have always done so at the state level. For instance, we code state pre-emption of local concealed and open carry ordinances (yes as 1, limited as 0.5, no as 0) at the state level. In the gun control file, the existence of assault weapons bans, large capacity ammunition magazines bans, non-powder guns' use or possession regulations, licensing or regulation of gun dealers, background check requirements for

private sales or guns shows, specific gun show regulations, registration of firearms, child access prevention laws, retention of firearms sales records, and restrictions on multiple purchases or sales of firearms are all coded so that state-level regulations are scored 1, the existence of regulations in some localities is scored 0.5, and the lack of any regulation is scored 0. We also have a dichotomous variable for whether any total handgun ban is in place in any locality (only for Illinois is this true: Chicago and several other municipalities prohibit possession of handguns). Similarly, smoking bans are coded at the state level, usually with a three-point scale from no ban to local option to statewide ban. Since we do not code any variables at the local level, these variable codings are not very informative for researchers who wish to study why particular localities adopt firearm or smoking regulations (e.g., Shipan and Volden 2006), but the variables are useful for researchers who simply want to know the overall stringency of firearm or smoking regulation in each state. Researchers who want to go into greater depth could also consult our dataset in an early phase of their research to figure out which sorts of policies states or localities could enact and which sources are available for data.

We do not wish to claim that this database is fully comprehensive in terms of policy coverage. In a few cases, we found that coding state law directly would have been an exceedingly complex endeavor resulting in abstruse measures unlikely to illuminate the issue. Tort reform is the most important example. States have implemented a wide variety of measures to counteract abuse of the tort system, and many of these highly technical and frequently idiosyncratic reforms are not strictly comparable across states. The relative importance of these features was also unclear to us, making the construction of a summary index of tort reform virtually impossible. Furthermore, a fundamental problem with this approach to coding tort reform would be that the states with the most flawed tort systems, from a business perspective, have implemented the most reforms. Perhaps, more talented researchers will find ways to circumvent these problems, but we have instead chosen to present a single variable capturing the business-friendliness of states' tort systems: the percentage of respondents in the 2006 U.S. Chamber of Commerce survey indicating satisfaction with that state's liability system. This continuous variable seems to capture the concept quite well: West Virginia, Louisiana, and Mississippi come out at the bottom, while Delaware scores first.

The database also does not include purely institutional features of states, such as size of the legislature, electoral cycle, term limits, and initiative and referendum. Some policies that we do code can be viewed as having institutional force, such as fiscal decentralization and campaign finance policies. We plan to add variables of this nature to future versions of the database,

especially to make cross-sectional inferential analysis of institutional effects on policies easier. Additionally, we code some aspects of state constitutions when they provide special status or protection to particular policies. For instance, the file on eminent domain policies codes whether some or all special restrictions on the use of eminent domain have been written into the constitution.

Finally, the database does not include any policies for which there was no state variation in 2006. For example, because all states license medical doctors, licensing of medical doctors was not included in the file on occupational and professional licensing.

Our database introduces new ways to measure certain state policies in order to reduce measurement error. Fiscal policies are measured in several different ways in the literature. While one common approach is to use spending or tax revenue per capita, this approach does not capture the tradeoffs inherent in fiscal policy: new government spending in a particular area requires removing resources from the private sector via taxation or debt. Thus, states with lower per capita incomes will generally tend to have lower spending, revenue, and debt per capita simply because they have smaller private sectors. A common strategy in a regression framework is to control for per capita income when predicting per capita spending, taxation, or debt, but to save a degree of freedom,³ it makes more sense simply to use spending, taxation, or debt as a percentage of income, however defined, as the dependent variable.

Another common approach in the literature is to use gross state product (GSP) in the denominator instead of population, but this approach suffers from a problem in the way that the BEA calculates GSP. For the purpose of calculating GSP, the BEA attributes business income to the state in which the business is headquartered. Thus, states that are attractive locations for incorporation will see inflated GSP figures compared to those states' actual economic activity. This bias is particularly evident in the case of Delaware, which enjoys by far the largest GSP per capita among the 50 states, despite its per capita personal income being roughly on par with states such as New Jersey, Connecticut, and New Hampshire. Personal income is another candidate for the denominator of fiscal policy measures, but it suffers from the problem that residents of one state can earn an income in another state. Commuter states such as Maryland, Virginia, and New Hampshire appear to have overly large economies when total personal income is used.⁴

While we report figures using GSP as well, the measure of state economy size that we prefer is state earnings by place of work, also from the BEA. This variable measures gross wages and salaries, both private- and public-sector, earned within a state. This variable should correlate strongly with the actual

size of a state's economy. While this variable fails as a literal measurement of a state's economy because it ignores income to capital and land, it should be an almost unbiased proxy of economy size.

Therefore, to measure state and local government spending, taxation, and debt in various categories, we divide each category of spending, revenue, and debt by total in-state earnings.⁵ (All the unadjusted variables are also available in the dataset for researchers to process as they wish.) Once we do this, we find that many states typically considered conservative spend more in most areas than many liberal states. For instance, the state with by far the highest social spending as a percentage of in-state earnings is Mississippi (12.7%). The reason is that Mississippi benefits disproportionately as a poor, small state from federal grants for social programs.

Erikson, Wright, and McIver (1993) deal with this problem by using statutory requirements for welfare and Medicaid eligibility instead of fiscal data, but our solution is to adjust spending figures in every category by regressing the raw spending as a percentage of earnings variable on federal grants as a percentage of earnings and then taking the residuals. In every case, federal grants are a significant, positive determinant of spending.⁶ Additionally, we include school-age percentage of state population as a regressor in the education spending equation, state poverty rate as a regressor in the social spending equation, and state population density and the log of population density in the transportation and natural resources spending equations.⁷ Once we perform these adjustments, a relationship between state policy ideology and fiscal size of government becomes clear. For instance, the state with the highest adjusted social spending is now Minnesota. Our measure of state policy liberalism, described below, loads positively onto other spending, natural resources and environmental spending, administrative spending, public safety spending, and social services spending. Education spending and transportation spending are essentially unrelated to state policy ideology. This solution is superior to using selected statutory criteria for spending because the adjusted spending variables effectively take into account the entire relevant statutory and administrative environment.

It is important to note that these adjustments are theoretically motivated. We consider the fact that Montana has more spending on highways and natural resources than Rhode Island to be irrelevant to the relative policy ideologies of Montana and Rhode Island; those policy choices are automatic given the states' geographic situations. One reason that we do not find a highways-natural resources dimension of state policy, unlike Sharkansky and Hofferbert (1969) and Hopkins and Weber (1976), is that we have adjusted transportation and natural resources spending for the log of state population

density before including them in the PCA, thus allowing adjusted spending rates to reflect citizen and legislator attitudes toward road-building and environmental protection as such.⁸ By contrast, we consider the fact that more rural states have less strict gun control laws than more urban states, even given the same left-right ideological orientation, to be highly relevant to policy ideology (see discussion of our urbanism dimension below) because, in this case, the conditions of rural life affect, but do not automatically dictate, citizen and legislator attitudes toward gun policy. Therefore, we do not adjust gun control policies for urbanization rates or population densities before including them in the PCA.

We perform adjustments of a similar kind on law enforcement data. We have figures on incarceration rates and police (full-time equivalents) per capita from the FBI. However, a high incarceration rate does not necessarily mean that a state has "lock 'em up and throw away the key" sentencing rules; it could simply mean that the state has more violent crime. Thus, we regress incarceration rates on violent and property crime rates from the FBI and take the residuals. High-scoring states have higher incarceration rates than we would expect given their crime rates. We do the same with police per capita and find, interestingly, that violent crime is positively associated with police presence, but property crime is not. The adjusted incarceration rate variable loads strongly and negatively onto the state policy liberalism index, meaning that conservative states tend to have more aggressive "law and order" policies, particularly with respect to sentencing. Interestingly, the adjusted police per capita variable loads positively onto policy liberalism, indicating perhaps that liberal states generally opt to increase the probability of punishment rather than the severity of punishment in order to reduce the expected utility of crime, while conservative states tend to do the reverse (Stigler 1974).

With this new database we also hope to make a more significant theoretical contribution. Recent studies of state policy have used only a few variables, and the most recent have discovered only one underlying dimension, reflecting liberalism versus conservatism (Wright, Erikson, and McIver 1987; Gray et al. 2004). Our exploratory principal components analysis finds two dimensions to state policy. The first, and by far the strongest, dimension is state policy liberalism, but the second reflects in part an urban-rural divide.

RELEVANT LITERATURE

In this section, we canvass a very small part of the state policy literature to suggest some ways in which our database could be used. Studies of the determinants of state policies in various areas constitute a vast and growing field within American politics. They include works that focus on an array of subjects from state minimum wage statutes (Waltman and Pittman 2002), to state environmental policies (Johnson, Brace, and Arceneaux 2005), to state health care policies (Miller 2005), smoking bans (Shipan and Volden 2006) and much more.

Another fertile research agenda has been the study of opinion-policy linkages. Traits of state political institutions, such as legislative professionalism and direct democracy, have been posited as key intervening variables that mediate the link between public ideology, reflected in partisanship, and policy outcomes (Jackson 1992; Hill and Hinton-Andersson 1995; Shipan and Volden 2006). To measure policy outcomes for the purpose of studies of this kind, political scientists have examined correlations among different types of policies and found that some of their common variance can be explained by a single left-right dimension, policy liberalism (Sharkansky and Hofferbert 1969; Hopkins and Weber 1976; Klingman and Lammers 1984; Wright, Erikson, and McIver 1987; Erikson, Wright, and McIver 1993; Gray et al. 2004). Thus, for instance, states with the death penalty tend to have more regulation of abortion than states without the death penalty, a correlation that presumably reflects a strong role for legislators' ideological commitments in setting both types of policies. The strong correlation between opinion liberalism and policy liberalism supports the notion that existing measures of policy liberalism tap into a valid underlying concept.

However, existing measures of policy liberalism suffer limitations. The pioneering studies in the area, Sharkansky and Hofferbert (1969) and Hopkins and Weber (1976), risk confounding policy outputs and policy outcomes (Easton 1966) by including outcome measures, such as infant mortality rates, high school graduation rates, highway deaths, and visits to state parks as measures of state policies. They also suffer from an inflated eigenvalues problem resulting from the large number of variables, which we discuss below. To avoid that problem, the oft-used Erikson, Wright, and McIver (1993) (EWM for short) measure includes only a few individual policy variables in its construction of the policy liberalism index, and a subsequent update by Gray et al. (2004) does the same. However, as Jacoby and Schneider (2001) point out, these measures of state policy liberalism have incorporated policies from rather wide time spans, between seven and 15 years. Our database codes all statutes as of December 31, 2006 and fiscal and law enforcement data from 2004, allowing us to construct a measure of policy liberalism that reflects current political conditions. We also include more than 170 policy variables but correct for inflated eigenvalues, which yields an index of state policy liberalism that is both more reliable (because it draws on redundant measures of the same concepts) and more valid (because it draws on a wider range of policies) than existing indices. Our database's strength and value are that its scope allows us to meet these ends. It is also important to recognize that most policy variation in the states is not a reflection of mere ideological differences. By including a wide range of state policies, we can discover just how much of that variation can be reduced to policy ideology.

CONSTRUCTION OF THE POLICY INDICES

Factor analysis has elements of art and science. For our purposes, exploratory principal components analysis (PCA) makes sense because we have no theoretical expectations about the underlying dimensionality of state and local public policies. ¹⁰ The usual standard for retention of components is an eigenvalue greater than 1, although this is an extremely weak standard, requiring only that the retained component explain as much of the common variance as one of the included variables on its own. Moreover, with over 170 variables included, random correlations among variables will generate wildly inflated eigenvalues, since even theoretically unrelated variables will often have correlations that differ from absolute zero. This problem apparently affects, for instance, the Hopkins and Weber (1976) study of state policies, which finds fourteen dimensions of state policy (factors) with eigenvalues greater than 1, some of which do not seem to cohere theoretically (for instance, capital punishment loads onto a public employee unionization factor).

To avoid this problem, we have used Horn's Parallel Analysis (Horn 1965) to adjust the eigenvalues. Horn's Parallel Analysis generates a sequence of random datasets with the same number of variables and observations as the original dataset and subtracts the average eigenvalues from principal factor analyses on these datasets, minus 1, from the equivalent eigenvalues derived from analysis of the original dataset. When this procedure is done, we find that three components surpass the generous eigenvalue-greater-than-1 threshold.¹¹ Of these, the lowest-order component has an adjusted eigenvalue around 13 (unadjusted 20.8), the second component has an adjusted eigenvalue over 3.5 (unadjusted 10.9), and the third has an adjusted eigenvalue around 1.3 (unadjusted 8.3). A scree plot of the unadjusted eigenvalues shows that the first two components seem to be much more significant than the third (see Figure 1 on the SPPQ data website, www.ipsr.ku.edu/SPPQ/sppq.shtml). Additionally, the third component does not seem to make sense theoretically when both variable loadings and state scores are examined. Therefore, we conclude that there are only two identifiable dimensions to state policy.

Our first component, state policy liberalism, correlates with the traditional EWM measure at 0.81 and with the more recent Gray et al. (2004) measure of state policy conservatism at -0.76. These strong correlations are encouraging in a sense because they indicate that all three measures enjoy a certain degree of reliability. Table 1 on the SPPQ data website presents a correlation table with all three measures of state policy ideology, the Berry et al. (1998, 2004) measures of citizen and government opinion liberalism, and Democratic share of the presidential vote in 2004. These latter correlations suggest that our measure of policy ideology also enjoys equal or superior validity to other measures of policy ideology because ours generally correlates equally or more tightly with a concept we know to be causally related, public opinion liberalism.

Of course, some policies load more strongly onto policy liberalism and our second component, policy urbanism (see our rationale for this term below), than others (see Table 4 on the SPPQ data website). Gun control policies are important for both components, with our assault weapons ban variable loading strongly positive onto both liberalism and urbanism, gaining a commonality score of 0.77, extraordinarily high for a binary variable. Ammunition magazine regulations, gun locks requirements, licensing of gun dealers, retention of gun sales records, gun registration, gun design regulations, licensing of gun owners, and indices of laws regulating concealed and open carry of handguns are all strongly related to both liberalism and urbanism. After gun control, labor market policies are strongly related to liberalism but not urbanism. Liberal states generally have higher minimum wage requirements, are more likely to require employers to provide short-term disability insurance, are more likely to have prevailing wage laws, and are less likely to have right-to-work legislation.

Other policy areas where liberalism has strong predictive value include civil union and same-sex marriage statutes and constitutional amendments, abortion laws, adjusted incarceration rates, revenue from current charges and fees (liberal states derive less), fireworks bans, cell phone driving bans, bicycle helmet laws, health insurance rate regulation, smoking bans and tobacco taxes (liberal states are more restrictive), wetlands preservation statutes, individual income tax revenues (higher in liberal states), state and local debt (higher in liberal states), and electricity deregulation (liberal states are more likely to deregulate). Interestingly, one key aspect of state policy liberalism is apparently a willingness to experiment with new policy tools to address social and economic problems, whether it's deregulation of public utilities or bans on fireworks, cell phone driving, and smoking in restaurants and bars. Perhaps liberalism at the state level has less to do now

with old-fashioned labor activism than it once did, and it is now connecting more to middle-class soccer mom concerns about unhealthful or anti-social behaviors

Besides gun control policies, state policy urbanism strongly predicts drug, gambling, and weapons offense arrest rates (higher in urbanist states), fiscal decentralization (urbanist states are more decentralized), death penalty (more likely in urbanist states), strictness of seat belt laws, laxity of campaign finance laws (urbanist states generally have higher contribution limits), per capita police (higher in urbanist states), lower tobacco taxes, less state role in alcohol distribution, lack of medical marijuana laws, lower wages for public employees, lower corporate income taxes, and a laissez-faire environment for private schools (fewer registration and approval requirements).

Policy urbanism captures interventionist anti-crime policies that transcend the liberal-conservative divide: tough gun control, high arrest rates, high incarceration rates, high police per capita, etc. In addition, more urbanist states tend to have larger legislative districts, more expensive elections, and thus lax campaign contribution limits. To some degree, these policy decisions could reflect residual machine politics in urban areas. For instance, urbanist states also have lower corporate income taxes, perhaps as a result of corporations' greater influence through campaign contributions. Finally, urbanized states are more fiscally decentralized because metropolitan jurisdictions enjoy economies of scale that allow public services to be provided efficiently at the local rather than state level.

Some policies seem not to relate much, if at all, to either dimension of state ideology: legalization of charitable gaming, beer keg registration, number of occupations requiring a state license, public financing of elections, asset forfeiture rules, motorcycle helmet laws, etc. The first two components together explain only 18 percent of the common variance of the 176 policy variables. This low figure does not mean that the components we derive from the dataset are not valid; it simply means that most of the variation in state policies cannot be captured by underlying dimensions running through most policies in different areas that reflect aspects of state ideology. The residual variance can be put down to idiosyncratic differences in state policies, presumably deriving from different historical legacies, policy solutions to unique problems, and the conditional effect of different institutions on policy.

Table 3 on the SPPQ data website gives the state policy liberalism and urbanism scores for each state, and Figure 2 below plots those scores on two dimensions. While Illinois is an extreme outlier on the urbanism dimension, due to its extremely high reported arrest rates, this component is roughly

just as strong when Illinois is dropped from the dataset. Vermont is the least urbanist state in the dataset, although Illinois and Vermont are almost equally liberal. Texas, Virginia, Maryland, and California are all fairly high on the urbanist scale as well, while Alaska, Maine, Montana, New Hampshire, Washington, and West Virginia are low on the scale. The correlation between this component and the urbanization rate from the 2000 Census is 0.41. We must stress that urban*ist* states are not necessarily urban*ized* states. For instance, Pennsylvania, Michigan, and Ohio are slightly less urbanist than average, even though these states are slightly above the national average for percentage of the population living in urban areas. Our decision to label this dimension urbanism is somewhat tentative, but it seems to fit better than alternative explanations.

For instance, the urbanist dimension might seem to capture differences between large states and small states, but small states Mississippi, Oklahoma, and Connecticut are all relatively urbanist, while large states Michigan, Pennsylvania, and Ohio fall slightly more toward the ruralist end of the spectrum. Other possible interpretations are that the dimension captures civil libertarianism, with law-and-order states at the top and libertarian states at the bottom. The difficulty with this interpretation is that the supposedly civillibertarian states would have tougher regulation of alcohol and tobacco, more regulation of private schools, and tighter campaign finance limits. Another interpretation is that the dimension reflects social capital (Putnam 2000). There does seem to be a correlation, with ruralist states Vermont, Alaska, New Hampshire, Maine, Montana, and Washington scoring high on Putnam's social capital measure, and urbanist states Texas, Virginia, Maryland, and Illinois scoring rather low. But West Virginia is low in social capital but also low on the urbanist dimension, while California and Rhode Island are quite different on urbanism but are roughly equal on social capital.

Using ordinary least squares (OLS), we regressed our urbanism variable on state urbanization rate (0–1 scale), estimated African-American percentage of the population (0–100), percentage of the population who describe themselves as Christians (0–100), total state population in thousands, population density in thousands per square mile, and Putnam's comprehensive index of social capital. Alaska and Hawaii are unavailable on Putnam's index and thus excluded. The results are displayed in Table 2 on the SPPQ data website. Urbanization rate, black percentage of the population, and Christian percentage of the population are all highly significant, positive predictors of policy urbanism, while total population and population density reach lower levels of statistical significance. Social capital is totally insignificant. The effect of black population raises the disturbing possibility that racial bias strongly

motivates the "tough on crime" policies that make up so much of the urbanism index. The negative result on population density means that dense states with low urbanization tend to score particularly low on policy urbanism. Examples include relatively rural eastern states, such as Vermont and New Hampshire. Western states often score low on population density but high on urbanization; they are likely to score quite high on policy urbanism. On the liberalism dimension, the results are hardly surprising, with New York and New Jersey at one end and Mississippi, Alabama, and North Dakota on the other.

CONCLUSION

In conclusion, we hope that our database of state and local public policies will prove useful to researchers in the field. In future years, we plan to add annual updates and possibly even extend the series back in time. Of course, we know, both from prior research and from the strong correlation of our 2006 policy liberalism measure with the 1980 policy liberalism measure from Erikson, Wright, and McIver (1993), that overall policy orientation changes slowly over time. However, certain policy areas, from eminent domain reform to cell phone driving bans, have seen significant change in the past few years and likely will continue to evolve in the future. Furthermore, extension of

Score variables (pca)

Figure 2. Plot of State Policy Liberalism and Urbanism Scores

9 2 · MD CA Policy Urbanism ·CT · N.I MA · RI · NH ιņ · AK 9 -5 0 5 10 Policy Liberalism

the dataset backward in time would allow public policies to be used as independent variables in analyses of state growth, unemployment, inequality, or other outcomes. Another planned extension is the incorporation of state institutional features, such as initiative and referendum, local home rule, and so on. While these data are available elsewhere, inclusion within this database would render analysis of institutional effects on policy change easier.

We particularly invite debate on the second dimension of state policy we have uncovered, relating principally to law enforcement activities, criminal law, and campaign finance limits. While this component appears to capture an urban-rural divide, as well as racial and religious politics, we have also discussed the possibility that it reflects big state-small state differences or civil libertarian ideology. There may be other possibilities that we have not considered.

ENDNOTES

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- 1. Some law enforcement data are coded as of mid-2005 (incarceration rates) or late-2006 (police per capita).
- 2. Alaska does offer a concealed carry permit for the purpose of reciprocity with other states, but it is not required.
- 3. A reason to keep per capita income as a regressor would be to control for "Wagner's law."
- 4. The Tax Foundation's measures of state and local tax burdens (2007) use total personal income in the denominator, but they try to adjust for the commuter problem by including taxes paid out of state in the numerator for any state. This solution is obviously unsatisfactory for any measure of a state's policies because it makes tax burden partly dependent on the policies of other states.
- 5. Jacoby and Schneider (2001) essentially divide expenditures in different categories by total expenditures to reflect spending priorities, a procedure that can also be done with our data, although our expenditure categories are somewhat different from theirs.
- 6. We adjust state and local government employment as a percentage of total employment by the same procedure.
- 7. We also tried using the dependency ratio (percentage of the population under 18 or over 65) as a predictor of social spending, but it was not significant.
- 8. Both of these studies compound the problem by including variables such as road miles per capita, which should correlate very strongly indeed with population density.
- 9. For Sharkansky and Hofferbert (1969) and Hopkins and Weber (1976), the first dimension of state policy has to do with welfare and education policies. This dimension seems to correlate quite well with what later studies have called policy liberalism, a consistency that suggests state policy regimes change only gradually over time.

- 10. Since a large proportion of our variables are non-continuous (binary or ordinal), PCA will do a comparatively poor job of reducing the common variance. Nevertheless, the large number of our variables entails an extraordinarily high reliability for whatever components are extracted.
 - 11. All statistical analysis was generated with Intercooled Stata 9.
- 12. Our dataset actually reports the results of two different PCAs: with and without a unionization rate variable. Unionization might reflect policy choices not otherwise coded, but it might also be a determinant of other policy choices. The results presented in this article are for the liberalism and urbanism indices with unionization rate excluded.
- 13. A principal factor analysis of all three measures of policy ideology gives a slightly higher loading for our measure than for the other two—another indicator of superior coding reliability.
- $14. \ Election\ data\ come\ from\ David\ Leip's\ Atlas\ of\ U.S.\ Presidential\ Elections\ (2007), www.uselectionatlas.org.$
- 15. Given the vast scope of our database, it is not surprising that PCA would yield slightly more valid indicators. In a sense, what is more surprising is how accurate prior indicators derived from just a handful of policies are.
- 16. This unexplained variance is particularly unsurprising when one considers the number of binary and ordinal variables in the dataset.

REFERENCES

- Berry, William D., Evan J. Ringquist, Richard C. Fording, and Russell L. Hanson. 1998. "Measuring Citizen and Government Ideology in the American States, 1960–93." American Journal of Political Science 42:327–48.
- Berry, William D., Evan J. Ringquist, Richard C. Fording, and Russell L. Hanson. 2004. *Measuring Citizen and Government Ideology in the United States*, ICPSR Publication Related Archive. www.icpsr.umich.edu/pra/index.html (November 30, 2007).
- Easton, David. 1966. A Framework for Political Analysis. New York, NY: Prentice-Hall.
- Erikson, Robert S., Gerald C. Wright, Jr., and John P. McIver. 1993. *Statehouse Democracy*. Cambridge, UK: Cambridge University Press.
- Gray, Virginia, David Lowery, Matthew Fellowes, and Andrea McAtee. 2004. "Public Opinion, Public Policy, and Organized Interests in the American States." *Political Research Quarterly* 57:411–20.
- Hill, Kim Quaile, and Angela Hinton-Andersson. 1995. "Pathways of Representation: A Causal Analysis of Public Opinion-Public Policy Linkages." *American Journal of Political Science* 39:924–35.
- Hopkins, Anne H., and Ronald E. Weber. 1976. "Dimensions of Public Policies in the American States." *Polity* 8:475–89.
- Horn, John L. 1965. "A Rationale and Test for the Number of Factors in Factor Analysis." *Psychometrica* 30:179–85.
- Jackson, Robert A. 1992. "Effects of Public Opinion and Political System Characteristics on State Policy Outputs." Publius 22:31–46.
- Jacoby, William G., and Saundra K. Schneider. 2001. "Variability in State Policy Priorities: An Empirical Analysis." *The Journal of Politics* 63:544–68.
- Johnson, Martin, Paul Brace, and Kevin Arceneaux. 2005. "Public Opinion and Dynamic

- Representation in the American States: The Case of Environmental Attitudes." *Social Science Quarterly* 86:87–102.
- Klingman, David, and William W. Lammers. 1984. "The 'General Policy Liberalism' Factor in American State Politics." *American Journal of Political Science* 28:598–610.
- Leip, Dave. 2007. *Dave Leip's Atlas of U.S. Presidential Elections*. www.uselectionatlas.org/(November 30, 2007).
- Miller, Edward Alan. 2005. "State Health Policy Making Determinants, Theory, and Methods: A Synthesis." *Social Science and Medicine* 61:2639–57.
- Putnam, Robert D. 2000. Bowling Alone: The Collapse and Revival of American Community. New York, NY: Simon & Schuster.
- Sharkansky, Ira, and Richard I. Hofferbert. 1969. "Dimensions of State Politics, Economics, and Public Policy." *American Political Science Review* 63:867–79.
- Shipan, Charles R., and Craig Volden. 2006. "Bottom-Up Federalism: The Diffusion of Antismoking Policies from U.S. Cities to States." *American Journal of Political Science* 50:825–43.
- Stigler, George J. 1974. "The Optimum Enforcement of Laws." In *Essays in the Economics of Crime and Punishment*, eds. Gary S. Becker and William M. Landes. New York, NY: NBER; Columbia University Press.
- Tax Foundation. 2007. *Facts & Figures: How Does Your State Compare?* www.taxfoundation.org/files/ffhandbk-20070129.pdf (March 4, 2008).
- Walker, Jack L. 1969. "The Diffusion of Innovations among the American States." *American Political Science Review* 63:880–99.
- Waltman, Jerold, and Sarah Pittman. 2002. "The Determinants of State Minimum Wage Rates: A Public Approach." *Journal of Labor Research* 23:51–7.
- Wright, Gerald C., Jr., Robert S. Erikson, and John P. McIver. 1987. "Public Opinion and Policy Liberalism in the American States." *American Journal of Political Science* 31:980–1001.