

Protectionism among the States

How Preference Policies Undermine Competition

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Abstract

Many, but not all, US state governments have adopted "preference policies" that give an advantage to in-state businesses (vendors) that submit bid proposals for state projects. Most preference policies are specified in a specific percentage advantage, which means that an in-state vendor will be chosen even if it submits a higher bid than a lower-cost, out-of-state vendor submits. Although some states have broad policies that apply to all or virtually all state contracts, other states selectively apply such policies to only one or to a few specific goods and services. In this paper, we estimate the effects of these policies on the costs of government. We find that preference policies are associated with a \$148 increase per person in state construction costs and with a \$158 increase per capita in capital expenditures.

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Adam J. Hoffer and Russell S. Sobel

I. Introduction

Competition between businesses is the means by which lower prices, higher quality, and new innovations are encouraged. In open and competitive markets, prices are driven down to the opportunity costs of production, excess profits are eliminated, and entrepreneurs have incentives to create new and better products that will please customers and create wealth. Firms wishing to escape constraints imposed by market competition often turn to governments to enact policies that limit competition or create barriers to entry. Policies that give in-state firms preferences or advantages when bidding on government contracts are a prime example, and although such policies benefit certain firms, they also harm taxpayers through higher costs—and thus higher taxes.

Despite the fact that protecting in-state firms often negatively affects consumers and voters with higher-priced and reduced-quality goods and services, politicians often grant states such favors because of the special interests that these policies serve. A large body of literature contains economic models of this strategy, in which inefficient policies that create concentrated benefits with widespread (disbursed) costs are favored in the political process.¹ Even in the area of regulatory policy, a large body of literature examines how regulatory agencies that exist to protect consumers end up being captured by the industries they regulate and eventually work to the advantage of firms—not consumers.²

¹ For a summary and review of this literature, see Ekelund and Tollison (2001) and Mitchell (2012).

² See Stigler (1971) and Peltzman (1976) for examples.

² See Stigler (1971) and Peltzman (1976) for examples.

Preference policies uniquely fit the model of political decision-making outlined in Weingast, Shepsle, and Johnsen (1981). As the authors show, the incentive for such inefficient policies grows larger when the benefits accrue to firms that are within a politician's specific political district. From a purely economic standpoint, a cost-benefit analysis of the project would count the project's resource costs and wage costs as real costs, but Weingast, Shepsle, and Johnsen posit that, in the political process, these are often incorrectly counted as "benefits of policy" rather than as costs. That is, whereas the wage costs of a construction project should enter negatively into the decision to begin that project, an elected official may view such costs instead as a positive factor, as the costs will benefit his or her constituency. For example, building a new road has economic benefits that are measured by gains to the road's users in decreased travel time. The economic costs of the road—the costs of labor, capital, and other resources necessary to build it—would be weighed against these benefits. However, a politician may view the wage payments to local laborers and the resource purchases to local firms as benefits rather than as the true costs they represent. These "pecuniary gains" to factor owners are then mistakenly counted as benefits rather than as costs in the political process.

Weingast, Shepsle, and Johnsen (1981) argue that this phenomenon helps explain the reasoning behind government projects that seem to have little real benefit. For example, in the debate over military base closings, local politicians often cite the potential lost income of resource suppliers and base workers as justification for not closing a base. The same local politicians do not mention anything related to the true benefit side of the base closing: the closing of the base would negate the need for tax revenue to fund its operations or the existing tax revenue could be used for other purposes, such as funding education. Thus, Weingast, Shepsle,

and Johnsen explain how even projects with little true benefit to taxpayers and voters may be adopted if those projects create enough costs in wages and income.

Although preference policies may be politically attractive to adopt, they result in higher costs for state governments as the state overlooks lower-cost bidders in favor of selecting in-state suppliers. The magnitude of these increased costs depends on the breadth of the state preference policy. Some states have broad policies that apply to all or virtually all state contracts, and other states selectively apply such policies to only one or a few specific goods and services (such as Illinois, which has a preference for coal mined in state). Table 1 (page 14) describes the preference policies in place for each US state.

II. Literature Summary

Preference policies seem to fall squarely in line with Weingast, Shepsle, and Johnsen's (1981) theory. The costs of these policies through higher costs for government projects—and subsequently higher tax costs—are viewed as benefits in the political process because they generate income for a subset of district voters that is well organized and well represented politically.

In addition to illustrating that well-informed, active interest groups have an upper hand over rationally less-informed voters and consumers, the literature on preference policies also explores cases in which elected officials shirk responsibility outright or engage in corrupt activities that benefit themselves personally.³ One area of significant concern is potential corruption in the selection of private firms to provide goods and services for government

³ See Kalt and Zupan (1984) and Lott and Reed (1989) for good summaries of the literature on shirking, and Leeson and Sobel (2008); Alesina, Baqir, and Easterly (2000); Treisman (2000); and Glaeser and Saks (2006) for good summaries of the literature on corruption.

contracts. Because of the potential for corruption, and in order to reduce corrupt selection practices, governments require a bidding process for most procurement opportunities.

These bidding procedures, however, are vulnerable to influence by the special interest politics discussed previously. That is, interest groups may push to have policies enacted that give them special treatment during the bidding process. Rent-seeking drastically increases the size of the deadweight loss resulting from the distortionary policy (Tullock 1967).

Experiments exploring Tullock's rent-seeking theory conclude that the combined rent-seeking activities of multiple entities for a single rent often results in *over*-dissipation of rents that significantly exceed the Cournot-Nash predicted level of dissipation (Millner and Pratt 1989; Millner and Pratt 1991; Shogren and Baik 1991; and Davis and Reilly 1998).⁴

Some states have successfully enacted preference policies that give in-state firms preference over out-of-state firms in the bidding process for state government procurement and contracts. Owners and employees of out-of-state firms are politically disadvantaged because they are outside the voting district and thus have no standing either in the political process or in the political "calculus" of elected officials. In-state firms, however, have a sizable advantage that they can exploit to incentivize politicians to adopt these preference policies.⁵

Vagstad (1995) uses a three-layer hierarchical model to predict the effects of preference policies. He concludes that as long as state governments care about local firms' profits, but not for those of firms outside the state, out-of-state firms will be discriminated against when competing for state government procurement contracts. Therefore, allowing local governments to run their own procurement auctions may *not* be the optimal strategy.

⁴ Following the terminology of this literature, the total deadweight loss created by preference policies is the sum of the Harberger triangle, the Tullock trapezoid, and potentially over-dissipated rents.

⁵ In-state taxpayers are ultimately disadvantaged by paying for higher-cost projects.

Marion (2007) and Krasnokutskaya and Seim (2011) explore the effects of California's small-business preference policy on highway procurement bids. Marion (2007) finds that California's preference policy is associated with a 3.5 percent increase in procurement costs as a result of decreased participation by low-cost large firms. Further, Krasnokutskaya and Seim (2011) find that the preference policy actually fails to achieve the policymakers' intended redistribution of state procurements to smaller firms while causing overall procurement costs to increase.

Although several studies have explored the effects of a single targeted preference policy, such as California's small-business preference, the earlier empirical literature on broad preference policies is scarce. In this paper, we expand on Chang's (2012) summary analysis of preference and reciprocal policies in the United States.

This paper provides the first empirical estimates to quantify the effects of preference policies on the costs of government. We collected the statutes from each state, coding each statute according to its degree of applicability (from narrow to broad). The empirical results suggest that broad preference policies are associated with a \$158 increase per person in state construction costs and with a \$148 increase per capita in capital expenditures.

III. Data and Methods

We theorize that preference policies will exert the greatest influence on capital expenditures and on construction projects. By providing a preference to local firms, those firms can extract a rent up to the size of the percentage preference. We hypothesize that rent will be quantitatively manifest in greater capital expenditures and construction projects. To test our hypotheses, we perform ordinary least squares (OLS) cross-section regressions using two separate dependent variables: per capita capital expenditures and per capita construction expenditures.

We integrate data from three sources—the National Association of State Procurement Officials, the Texas Procurement Office, and the Oregon Procurement Office—to quantify state-level preference policies.⁶ Following this, we place each state into one of three mutually exclusive categories according to the breadth of the state’s preference policies. These categories are (0) *No Policy* for states either without a preference policy or with only a tie-bid preference;⁷ (1) *Selective/Weak Preference Policy* for states with preference policies applicable to only a small subset of the state’s population or a small subset of the state’s expenditures; and (2) *Broad/Strict Preference Policy* for states with blanket or wide-ranging preference policies or policies that are wide-ranging. In our regressions, we include separate dummy variables for the selective/weak and broad/strict categories (omitting the category of those states with no preference policy).⁸

In our regressions, we also include state-specific control variables for (a) the percentage of a population that lives in an urban area, (b) the percentage of the population that is white, (c) the percentage of a state’s population that is under the age of 15, and (d) the number of road miles per capita. Each variable is chosen to capture a demographic or other factor that may independently affect the costs of capital and construction. The youth population variable helps to control for the demand for schools and educational establishments, and the urban population and road miles per capita variables attempt to control for economies of scale and density effects.

Table 2 (page 18) shows the descriptive statistics for the variables.

⁶ We are particularly thankful to Vicki Simonsen and the Oregon Procurement Services team for their help obtaining data on all 50 states.

⁷ A “tie-bid” preference only applies in the case of a tie for the lowest bid, and it requires selecting the in-state firm in the case of a tie.

⁸ As we discuss later, we also divide the selective/weak preference policies into three subgroups, but the results are identical.

The equations we initially estimate using OLS are as follows:

$$Y_i = \alpha + \beta_1 \times \text{Weak or Selective Preference}_i + \beta_2 \times \text{Broad Preference}_i + \gamma \times \theta_i + \varepsilon_i,$$

where Y_i represents the dependent variable of interest (either per capita capital expenditures or per capita construction expenditures) for state i , β_1 and β_2 represent the coefficients of interest for the selective/weak and broad/strict preference policies, γ represents our control variables, and ε represents a normally distributed error term.

Our main hypotheses are that states with preference policies should have significantly higher costs (measured by either of the expenditure variables) and that broad policies should have higher costs than narrow policies.

IV. Empirical Results

Table 3 (page 19) reports the results from the OLS regressions. The first and third columns represent our baseline regressions. In these regressions, although both preference policy coefficients are positive and display the increasing magnitude we hypothesize, only the variable reflecting broad/strict policies is statistically different from zero. Because of the insignificance of the selective/weak preference variable, we ran the regressions again, excluding the selective/weak variable for robustness. Those regressions that include only a broad/strict preference dummy variable are shown in the second and fourth columns, and they confirm our findings.

Broad/strict preference policies are applicable to a greater percentage of a state's expenditures than are selective/weak preference policies, and the effect they have on the cost of government projects is statistically and economically much larger. Because the omitted category is states with no preference policy, the coefficient can be interpreted as the dollar change in the per capita costs of government capital or of construction expenditures.

The capital expenditure regressions indicate that states with broad preference policies spend \$158 more per capita on capital projects than do states without any preference policy. According to the US Census Bureau, an average of 2.58 persons resided in each household in the United States in 2010. Thus the average household in a state with a broad/strict preference policy pays \$408 more a year for government services than does the average household in a state with no preference policy. With the median state population at 4.2 million, the results further suggest that broad/strict preference policies are associated with \$664 million more in capital expenditures in the median state.

We observe similar results for construction expenditures. States with broad/strict preference policies spend an extra \$148 per person (or \$382 per household, or \$622 million in the median state) on construction projects than do states without preference policies. The coefficient for selective/weak preference policies is again positive but not statistically significant. The regressions omitting the selective/weak policies again yield virtually identical results (a difference of \$4).

Therefore we conclude that broad-based preference policies significantly increase the costs of government. Weaker, selective policies, which do vary significantly across states—from those policies that apply to a single item to those that apply to many items—are estimated to have a smaller, positive effect, but this effect is not statistically different from zero. We even differentiated among the selective/weak states, dividing them into three categories and including them in the regressions individually. However, as with the coefficient above, these variables are still insignificant. Broad-based policies are more damaging, evidenced by the fact that only the broad/strict preference policy variable was statistically significant.

V. Conclusion

Despite the negative effects on consumers and voters in higher-priced caused by reduced-quality goods and services from in-state firms, politicians often grant in-state firms special preferences in the state bid process. The incentive for such inefficient policies is obvious when one considers the benefits accrue to firms that can, in turn, promise political support through votes and rent-seeking. The costs of these policies are spread to taxpayers and business owners in other political districts who cannot vote against the politicians who impose the policies.

In addition, viewed in light of the theory of political decision-making outlined by Weingast, Shepsle, and Johnsen (1981), the wage and resource costs of a construction project should enter negatively into the decision to begin that project, but an elected official may view these costs instead as *benefits*. That is, a politician may view the higher costs for government projects, and subsequently higher tax costs, as benefits in the political process because they generate income for a subset of district voters that is well organized and well represented politically.

The magnitude of the increased taxpayer burden depends on the breadth of the state preference policy. New Mexico, for example, applies its 5 percent preference policy to every state project. Pennsylvania merely mandates that Pennsylvania-mined coal be use to heat Pennsylvania state government buildings.

We estimate the quantitative relationship between preference policies and the costs of government. Our empirical results suggest that broad preference policies are associated with a \$148 increase per person in state construction costs and with a \$158 increase per capita in capital expenditures. These translate into taxes for capital expenditures that are \$408 higher a year for the average household in a state with broad preference policies, as well as \$664 million in greater expenditure costs for the median state.

References

- Alesina, Alberto, Reza Baqir, and William Easterly. 2000. "Redistributive Public Employment." *Journal of Urban Economics* 48 (2): 219–41.
- Chang, Semoon. 2012. "Considering Local Business Preference Policies in Bids and Purchases." *Government Finance Review* 28 (3): 38–41.
- Davis, Douglas D., and Robert J. Reilly. 1998. "Do Too Many Cooks Always Spoil the Stew? An Experimental Analysis of Rent-Seeking and the Role of a Strategic Buyer." *Public Choice* 95 (1–2): 89–115.
- Ekelund, Robert B., and Robert D. Tollison. 2001. "The Interest-Group Theory of Government." In *The Elgar Companion to Public Choice*, edited by William F. Shughart II and Laura Razzolini, 357–78. Cheltenham, UK: Edward Elgar.
- Glaeser, Edward L., and Raven E. Saks. 2006. "Corruption in America." *Journal of Public Economics* 90 (6): 1053–72.
- Kalt, Joseph P., and Mark A. Zupan. 1984. "Capture and Ideology in the Economic Theory of Politics." *The American Economic Review* 74 (3): 279–300.
- Krasnokutskaya, Elena, and Katja Seim. 2011. "Bid Preference Programs and Participation in Highway Procurement Auctions." *The American Economic Review* 101 (6): 2653–86.
- Leeson, Peter T., and Russell S. Sobel. 2008. "Weathering Corruption," *Journal of Law and Economics* 51 (4): 667–81
- Lott, John R. Jr., and W. Robert Reed. 1989. "Shirking and Sorting in a Political Market with Finite-Lived Politicians," *Public Choice* 61 (1): 75–96.
- Marion, Justin. 2007. "Are Bid Preferences Benign? The Effect of Small Business Subsidies in Highway Procurement Auctions." *Journal of Public Economics* 91 (7): 1591–624.
- Millner, Edward L., and Michael D. Pratt. 1989. "An Experimental Investigation of Efficient Rent-Seeking." *Public Choice* 62 (2): 139–51.
- . 1991. "Risk Aversion and Rent-Seeking: An Extension and Some Experimental Evidence." *Public Choice* 69 (1): 81–92.
- Mitchell, Matthew. 2012. "The Pathology of Privilege: The Economic Consequences of Government Favoritism." Mercatus Center Working Paper, Mercatus Center, Arlington, VA. <http://mercatus.org/publication/pathology-privilege-economic-consequences-government-favoritism>.
- Peltzman, Sam. 1976. "Toward a More General Theory of Regulation." *Journal of Law and Economics* 19 (2): 211–40.

- Shogren, Jason F., and Kyung H. Baik. 1991. "Reexamining Efficient Rent-Seeking in Laboratory Markets." *Public Choice* 69 (1): 69–79.
- Stigler, George J. 1971. "The Theory of Economic Regulation." *Bell Journal of Economics and Management Science* 2 (1): 3–21.
- Treisman, Daniel. 2000. "The Causes of Corruption: A Cross-National Study." *Journal of Public Economics* 76 (3): 399–457.
- Tullock, Gordon. 1967. "The Welfare Costs of Tariffs, Monopolies, and Theft." *Economic Inquiry* 5 (3): 224–32.
- Vagstad, Steinar. 1995. "Promoting Fair Competition in Public Procurement." *Journal of Public Economics* 58 (2): 283–307.
- Weingast, Barry R., Kenneth A. Shepsle, and Christopher Johnsen. 1981. "The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics." *Journal of Political Economy* 89 (40): 642–64.

Table 1. Preference Policies of US States as of 2006

State	Preference policy	Empirical category
Alabama	<ul style="list-style-type: none"> • Up to 5% for “preferred bidders” • Tie-bid preference 	2
Alaska	<ul style="list-style-type: none"> • A 5% reduction in the bid price or offer applies to all vendors who qualify as Alaska bidders • A 7% preference is applied to agricultural or fisheries products (agricultural products include dairy products, timber, lumber, and products manufactured in the state from timber and lumber) • A 3%, 5%, or 7% reduction applies to the qualifying products’ value in a bid price or offer that designates the use of Alaska products: the applicable discount is dependent on what percentage of the product being offered was produced or manufactured in the state • A 15% preference is applied for bidders offering services through a qualified employment program • Bidders for whom persons with disabilities comprise at least half their staff receive a 10% preference 	2
Arizona	Small-business preference: \$1,000–\$25,000	0
Arkansas	A 15% preference against out-of-state prison industry bids	0
California	<ul style="list-style-type: none"> • 5% for small businesses (goods, services, construction, and IT) and non-small business subcontractors; the maximum preference is \$50,000 and when combined with other preferences cannot exceed \$100,000 • Target Area Contract Preference Act (TACPA) (applies to goods and IT only): 5% of the lowest responsive responsible net bid price for worksite in distressed area; an additional 1–4% for hiring high-risk unemployed people (HRUP) as a percentage of workforce during contract performance using the following scale: 1% for 5–9% (HRUP), 2% for 10–14% (HRUP), 3% for 15–19% (HRUP), 4% for 20% or more (HRUP); the maximum preference is \$50,000 and when combined with other preferences cannot exceed either 15% of the net bid price or \$100,000—whichever is lower • Economic Zone Act (goods and IT only): works the same as the TACPA preference; it is the same as TACPA, except it applies to worksites in enterprise zones and to hiring persons living in targeted employment areas or persons who are eligible for enterprise zones • Local Agency Military Base Recovery Area (goods and IT only): works the same as the TACPA preference; it is the same as TACPA, except it applies to worksites in local agency military base recovery areas and to hiring people living in such areas • Tie-bid preference 	1

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State	Preference policy	Empirical category
Colorado	Tie-bid preference	0
Connecticut	Tie-bid preference	0
Delaware	No preference given	0
Florida	Tie-bid preference	0
Georgia	Tie-bid preference	0
Hawaii	<ul style="list-style-type: none"> • 10% preference applies to commodities produced manufactured, grown, mined, or excavated in Hawaii in value as follows: <ul style="list-style-type: none"> ○ 5% recycled-products preference on basis of recycled content as a percentage of total weight ○ 4.5% tax preference to ensure fair competition for bidders paying the Hawaii general excise and applicable use tax ○ 5% Qualified Community Rehabilitation Programs preference (preference for qualified community rehabilitation programs located in Hawaii) ○ 10% software development businesses principally located in Hawaii • Tie-bid preference 	1
Idaho	Tie-bid preference	0
Illinois	<ul style="list-style-type: none"> • 10% preference is given for use of Illinois coal. • Tie-bid preference 	0
Indiana	No preference given	0
Iowa	Tie-bid preference	0
Kansas	Tie-bid preference	0
Kentucky	<ul style="list-style-type: none"> • Preference is given to products made by Kentucky prisoners, industries for the blind, and those with severe disabilities • Tie-bid preference 	0
Louisiana	<ul style="list-style-type: none"> • Product preference only: 10% preference for steel, agricultural or forestry products, meat, seafood, produce, eggs, wood, or paper • Tie-bid preference 	1
Maine	Tie-bid preference	0
Maryland	<ul style="list-style-type: none"> • Boilers must be able to burn Maryland coal • Tie-bid preference 	1
Massachusetts	Tie-bid preference	0
Michigan	Tie-bid preference	0

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State	Preference policy	Empirical category
Minnesota	<ul style="list-style-type: none"> • 6% preference to small targeted group businesses; for construction contracts, may award up to 4% preference to small businesses located in economically disadvantaged areas • All all-terrain vehicles purchased by the commissioner of natural resources must be manufactured in the state of Minnesota • Tie-bid preference 	1
Mississippi	<ul style="list-style-type: none"> • 3% for vehicle purchases • Tie-bid preference 	1
Missouri	Tie-bid preference	0
Montana	No preference given	0
Nebraska	Tie-bid preference	0
Nevada	<ul style="list-style-type: none"> • 5% bidding preference is given to a contractor with a State of Nevada Certificate of Eligibility for bids estimated to be over \$250,000 • Tie-bid preference 	2
New Hampshire	No preference given	0
New Jersey	No preference given	0
New Mexico	<ul style="list-style-type: none"> • 5% for bids from resident businesses and resident manufacturers • New York businesses are also granted a 5% preference • Tie-bid preference 	2
New York	<ul style="list-style-type: none"> • Preference applies to the state for purchase of food products: the percentage is determined by the commissioner of general services, who is assisted by the commissioner of agriculture and markets • 10% preference is applied for recycled-content products; an additional 5% preference may be granted if at least 50% of the secondary materials used in the manufacture of that product are generated from the waste stream in New York State • Tie-bid preference 	1
North Carolina	Tie-bid preference	0
North Dakota	<ul style="list-style-type: none"> • Mandated minimum purchases of location-specific manufactured goods, including coal, food, recycled paper, printing, soybean-based ink, American flags, and motor vehicles • Tie-bid preference 	1

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State	Preference policy	Empirical category
Ohio	<ul style="list-style-type: none"> • 5% preference for bidders located in Ohio • Mined products must be mined in Ohio or in qualifying bordering states; currently Indiana (except mined products), Pennsylvania, Kentucky, Michigan, and New York are recognized as border states 	2
Oklahoma	No preference given	0
Oregon	Tie-bid preference	0
Pennsylvania	<ul style="list-style-type: none"> • Pennsylvania coal is mandated for heating state buildings. • Tie-bid preference 	1
Rhode Island	Tie-bid preference	0
South Carolina	<ul style="list-style-type: none"> • 7% in-state preference for in-state bidders (not applicable to construction, to single items more expensive than \$30,000, or to awards less than \$10,000) • 7% made-in-state preference for end-products made, manufactured, or grown in South Carolina • Tie-bid preference 	2
South Dakota	<ul style="list-style-type: none"> • 5% to grade-A milk processors • Motor vehicles shall be purchased or leased only from authorized dealers licensed by the state of South Dakota • Tie-bid preference 	1
Tennessee	Tie-bid preference	0
Texas	Tie-bid preference	0
Utah	No preference given	0
Vermont	Tie-bid preference	0
Virginia	<ul style="list-style-type: none"> • 4% preference for coal mined in Virginia • Tie-bid preference 	1
Washington	No preference given	0
West Virginia	2.5% small, women-owned, minority-owned businesses (SWOM) preference; this preference is also applied to bidders from other states	1
Wisconsin	No preference given	0
Wyoming	<ul style="list-style-type: none"> • 5% for all commodities manufactured or produced in Wyoming • 10% printing preference • Tie-bid preference 	2

Source: Authors' calculations using data supplied by the Oregon state procurement office.

Table 2. Descriptive Statistics

Variable	Year	Observations	Mean	Standard deviation	Minimum	Maximum
Per capita capital expenditures	2006	50	401.01	183.73	199.55	1,303.38
Per capita construction expenditures	2006	50	336.73	158.42	177.23	1,111.68
Broad preference policy	2006	50	0.14	0.35	0	1
Weak preference policy	2006	50	0.28	0.45	0	1
Percentage urban population	2006	50	72.34	15.34	36.77	94.96
Percentage white population	2006	50	82.11	12.01	29.26	96.49
Percentage young population	2006	50	20.21	1.69	17.1	26.7
Per capita road mileage	2006	50	23.65	25.16	3.43	136.55
Political ideology	2006	50	60.29	28.75	5.36	95.12
Percentage with a bachelor's degree	2006	50	28.28	4.63	21.81	43.02
Average state income	2006	50	4.18	1.14	1.6	7.0
State unemployment rate	2006	50	48,271	7,781	34,733	68,059
Size of state legislature	2006	50	147.66	60.20	49	424

Table 3. OLS Regression Results

	Per capita capital expenditures (US\$)	Per capita capital expenditures (US\$)	Per capita constructi expenditures (US\$)	Per capita construction expenditures (US\$)
Broad preference policy	153.8* (80.5)	157.8** (76.5)	144.8** (65.8)	147.7** (62.5)
Weak preference policy	-11.0 (59.8)		-8.17 (48.8)	
Percentage urban population	-0.35 (1.79)	-0.35 (1.77)	-0.36 (1.46)	-0.36 (1.44)
Percentage white population	-0.31 (2.36)	-0.22 (2.27)	0.18 (1.93)	0.25 (1.85)
Percentage young population	-12.7 (20.0)	-12.6 (19.7)	-13.6 (16.3)	-13.5 (16.1)
Per capita road miles	2.46** (1.10)	2.44** (1.08)	2.64*** (0.90)	2.62*** (0.88)
Political ideology	-0.47 (1.19)	-0.49 (1.17)	-0.42 (0.97)	-0.44 (0.95)
Percentage with a bachelor's degree	-1.09 (8.77)	-1.19 (8.64)	-3.13 (7.17)	-3.21 (7.06)
Average state income	0.0048 (0.00)	0.0049 (0.00)	0.0045 (0.00)	0.0046 (0.00)
State unemployment rate	33.9 (25.3)	32.6 (23.9)	27.5 (20.7)	26.5 (19.5)
Size of state legislature	-0.69 (0.45)	-0.69 (0.44)	-0.46 (0.36)	-0.46 (0.36)
Constant	419.8 (562.7)	411.4 (553.9)	391.8 (459.7)	385.6 (452.4)
<i>N</i>	50	50	50	50
<i>R</i> ²	0.359	0.359	0.425	0.425
adj. <i>R</i> ²	0.174	0.194	0.259	0.277

Notes: Robust standard errors in parentheses; *** indicates statistical significance at the 1% level, ** indicates statistical significance at the 5% level, and * indicates statistical significance at the 10% level.