

# Asymmetry in State Grant Distribution: Why Proximity to the State Capital Matters

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## Abstract

New Federalism and its subsequent policies have led to an increase in the size and amount of grants the federal government gives to the states. These grants have little if any strings attached to them. Because legislators and bureaucrats have different incentives, policy outcomes sought by either set of actors often contradict each other. This paper shows that the distribution of grants is asymmetric to the populations of the counties in the state, with a disproportionate amount staying in the counties nearest the state capitol.

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# 1 Introduction

The increased power of the states to allocate funds has coincided with a decline in legislative power. The states are given increased power to distribute money to local areas yet have less capacity to carry out the tasks. A vacuum is thus created. A full time executive and their subsequent bureaucratic “fourth branch” are then tasked with bridging the gap left. This paper looks at one implication of the shift of power from the legislature to the bureaucracy. I present findings that show that counties that are adjacent geographically to the state capital receive asymmetrical shares of the grants compared to the less proximate counties.

In this paper I present a model which sets up a theoretical explanation for how federal grants might be distributed asymmetrically based on proximity to the state capital. All things being equal, a uniform and symmetrical distribution occurs when counties receive an equal share of the funds as a function of their population. In cases where funds are not distributed under this expectation, controlling for other mediating factors, citizens should be concerned that their tax-money is being allocated in ways not consistent with democratic practice.

The allocation and redistribution of taxes has been central to much of the political debate in American history. In the federalist papers, the founders debated how much governmental power should be allocated to the central government. Federalist, who favored a strong central government, were forced to compromise and ratify the tenth amendment, giving states more influence than they otherwise would have preferred. The Civil War, and eventually World War II, led to an increasingly stronger central government, with power mostly increasing in the executive branch. While James Madison wrote that the legislature is where the people’s voice would be the loudest, it has become clear that executive authority at both the federal and state level has captured an immense amount of power.

Presidents can issue executive orders, can unilaterally send troops overseas, and can control the debate using the bully pulpit. Governors hold office and perform duties full-time, while most state legislatures are only in session part time. Executive salaries far outweigh those of the legislators. The amount of staffing allocated to legislators is inadequate in most states for the legislature to compete with the power of the governor. Reforms over the past couple decades, such as term limits, have continued to weaken state legislatures. Simultaneously, reforms implemented after the Reagan election of 1980 and continuing through the next few decades have resulted in the federal government giving back to the states the power to allocate funds as they see fit.

The size and influence both of federal and state government in the United States has expanded greatly in the 20th century (Garrett and Rhine 2006). Likewise, conservative governments of the 1980s and 1990s has shifted the governing burdens towards the states. Power to allocate funding to governmental programs have increasingly moved from the federal government to the American states (Walker 1995). The additional role of state governments in allocating funds has caused the size and scope of state governments to likewise increase (Garand and Boudoin 2004). Responsibility for programs have shifted towards the state (Conlan 1998). Specifically, grants from the federal government have exploded in the post-war era (Milakovich and Gordon 2010). According to the White House's 2015 budget, federal outlays to state and local governments will surpass \$640 million (Budget 2015). At 3.5% of GDP, it is down from the record of 4.1% in 2011.

#### FIGURE 1 ABOUT HERE

This study starts with the simple yet parsimonious theory; legislators and bureaucrats maximize their utility by delivering their constituencies high shares of total spending.

## 2 Literature Review

Niskanen's (1971) theory of bureaucracy shows how a bureaucrat can influence the size of their agencies budgets. In addition to other incentives, they seek to maximize their own personal welfare. Often these benefits include the desire for prestige, influence, and high salaries. This can lead to budgets that exceed what is required to meet the demands of the population. The public is rationally ignorant (Downs 1957), and that leads citizens to have limited abilities to monitor public employees (Mueller 2003).

The capacity of state legislatures varies greatly among the many states. The amount of time the legislature meets is written in state law. The capacity of a legislature is closely related to the level of professionalism the body holds (Squire 2007). Functionally speaking, state legislatures are institutionally similar to the US Congress. They differ in terms of the amount of influence on public policy they have. The capacity for the legislature to control the actions of the bureaucracy is affected by the resources available to them (Bawn 1995). The bureaucracy's ability to influence lawmaking is systematically different across the many states (Barrilleaux 1999). States that have highly institutionalized legislatures are less likely to delegate policy authority to the governor than those states with less institutionalized legislatures (Huber and Shipan 2002). Despite efforts to professionalize state legislatures (King 2000), Boushey and McGrath (2015) show that the executive/legislative imbalance of power has increased over time. Policies enacted to supposedly "reign in" politicians such as term limits often have the opposite affect than there intended goal. Term limits have been shown to weaken the legislature vis a vis other branches (Baker and Hedge 2013). These populous reforms instead may have led to weaken institutional power for legislatures and coincidentally strengthened unelected bureaucrats (Volden 2002, Rosenthal 2009).

Institutionalization of state legislatures is often measured using a professionalization index (Squire 2007). Professionalization has been measured empirically as a function of the amount of time the legislature spends in session, the size of the staff provided to a legislator,

and the amount of compensation. The size of the staff and resources available to a legislator is of particular importance when dealing with issues of spending. The scarce time and resources available to a legislator to devote to ensuring high funding levels to their district. Career politicians have incentives to generate benefits for their constituents; staff can help subsidize the opportunity costs of securing funds (Grossbeck and Peterson 2004). Woods and Baranowski (2006) show that careerism reduces legislative influence on the bureaucracy, while resources help to increase it. In a similar vein, professionalism can entice legislators to increase funding to their constituents in order to enhance their career objectives while providing them the resources to do so (Woods and Baranowski 2006, Krause and Woods 2014). Term limits can also work in concert with professionalism of the state legislature to move power from the legislative to the executive branch. Institutional knowledge, expertise, and continuity is lost as term limits increase the turnover (Squire 2007).

The literature on political control through agency design has resulted in mixed findings about whether the legislature uses design as a tactic to maintain influence over the bureaucracy (Reenock and Poggione 2004, Potoski 1999). Bureaucratic capture of power thus exists where legislative bodies are weak, unprofessional, or understaffed. When this happens, individual legislators lose the ability to influence how funds are distributed. This results in power shifting from the legislature to the bureaucracy, and ostensibly, to the Governor. Because both the Governor and members of the bureaucracy respond to their own preferences, their incentive is to allocate funds to places that maximize their benefit.

FIGURE 2 ABOUT HERE

The state capital houses the bureaucracy's central functions. The absence of a legislature would mean that the bureaucratic powers, which reside in the capital, would have full power to distribute state funds to local governments and award grants to those areas. A bureaucracy that is unaccountable to the public or a legislative body would have no incentive to distribute funds anywhere where they would not benefit. The geographic diversity

of members of the legislature restricts their ability to do so, ensuring funds follow a more equitable distribution. To be sure, some literature has demonstrated that political influence can affect the amount of funds that a county attracts. Using court-ordered redistricting as a natural experiment, Ansolabehere et al (2002) found that federal funds flowed at higher rates to counties that had greater representation in the US House of Representatives before redistricting. Additionally, a large literature suggests that spending by neighboring states increases spending in a state (Case et al 1993, Boarnet and Glazer 2002). The relative power of the legislature acts as a check on the bureaucracy. In the margins, however, it can be expected that the bureaucracy will can achieve their ends. That leads us to our first hypothesis:

*H1: The relative share of state funds a county receives will be greater in the proximate counties to a state capital than in more distant geographical locations.*

State capitals themselves all have one important characteristic they share with each other; they were all selected over a century ago. The location of the capital is an institutional choice, and the selection of a location might not be distinct from the distribution of the population. In a recent article, Campante and Do (2014) demonstrate that isolated state capitals are more prone to corruption and that they are associated with lower levels of accountability. If in fact isolated state capitals are not held to account, evidence would be found in the distribution of federal grants to the different counties. The theory is that isolated state capitals are also isolated and distant from the public mind, and that without attention by the media, which typically happens in local newspapers, they are more able to accomplish goals that don't reflect the preferences of the people. This leads to hypothesis two:

*H2: States with isolated state capitals will distribute grants more asymmetrically.*

### 3 Empirical Strategy

Testing these propositions will rest upon the results of three tests. First, I will demonstrate that proximity to the state capital affects the amount of federal funds a county receives. Second, I will show that isolated state capitals do a poor job at distributing grants proportionate to the population. Lastly, I will use an instrument to demonstrate that the state capital is in fact itself exogenous from theoretical world where states choose their state capitals in order to distribute these grants in an asymmetric way.

In testing our theoretical propositions, I will look at federal grants that are distributed by states. Federal grants often have few constraints from the federal government as to how they must spend them. Often times the federal government allocates money in block grants. This money holds little or no rules and are given to the states to distribute how they please. I test whether these grants are spent evenly among the counties on a per capita basis. Grant data from 2010 are used to test our propositions.

Data on grants is collected from the now-defunct Consolidated Federal Funds Report. In this data, all federal transfers to states and counties are listed including retirement funds, procurements, military and non-military salaries, and other direct transfers. I am only concerned with grants, reasoning that they are the source of funds that bureaucrats can have the most influence over how they are distributed around the state. Whereas retirement funds will be concentrated in places where the population is older, military spending in places that have bases, there is no a priori reason to believe that grants would be spent more in one place than another on a per capita basis. The large amount of data allows us to systematically determine the patterns of asymmetry in the distribution of these revenues.

County receipts from state funds are also generated from the Consolidated Federal Funds Report.

To account for the wide variation in amount of funds counties receive I must measure them as per-capita dollars. It is then necessary to create a dependent variable that relates

all counties across states, such that the share of per capita dollars divided by the share of the state population. The resultant dependent variable is a ratio. The formula is as follows:

$$countyshare_{i,t} = \ln\left(\frac{\left(\frac{countyrevenue_{i,t}}{staterrevenue_{i,t}}\right)}{\left(\frac{countypopulation_{i,t}}{statepopulation_{i,t}}\right)}\right)$$

where i is the county and t is the year. <sup>1</sup>

As a county's share of revenue increases significantly above its share of the population, the ratio of the share of revenue and the share of the population can get quite large. For counties that receive lots of state support but contain relatively few people, their scores can reach upwards of 50. Likewise, this ratio is constrained to greater than 0 for all places. So, while those that get significantly less than their share move slowly towards 0, those with larger shares go up exponentially. This becomes especially problematic if a county has a population close to zero, but gets any amount of funds, even if just a small percentage of the whole. <sup>2</sup> I therefore take the natural log of this fraction to account for those counties that exhibit this trend. I then reconstruct the dependent variable to range from 0 to 1 <sup>3</sup> for

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<sup>1</sup>A county that scores a one on this scale is one that receives funds that are equal to their per capita share of the population. This measure unfortunately biases the estimates for those counties that receive a higher proportion than their populations would otherwise dictate. For instance, if a county has 10% of the state population and gets 10% of the revenue, they have a score of 1

$$\frac{ShareRevenue}{SharePopulation} = \frac{0.10}{0.10} = 1$$

If they get less of a share than they should, say they are 10% of the population but get just 5% of the revenue, their score is

$$\frac{0.05}{0.10} = 0.5$$

On the other hand, if a county accounts for 10% of the population but get 20% of the revenue

$$\frac{0.2}{0.1} = 2$$

<sup>2</sup>

$$\frac{0.01}{0.0001} = 100$$

<sup>3</sup>A value of zero indicates the lowest ratio, 1 indicates the highest ratio.



easy interpretation.<sup>4</sup>

## 4 Distance

Distance can conceptually mean multiple things. For instance, I can measure distance from one point to another in some metric such as miles. This distance can be from the center point of some legal boundary, from the closest point between two locations, the furthest point between two, the largest population base in the unit, or some combination of these. There are also scenarios where absolute distance matters less than ease of navigation. For instance, maybe only whether two places are reachable via an automobile in some arbitrary time is important. The presence or absence of an airport and the availability of flights between places could also provide some information about social distance.

For the purposes of this paper, distance is measured in miles between the centroid point of a county and the center of the urban area of the capital. I chose this metric for two reasons: 1, I believe theoretically that distance in absolute terms helps to differentiate the counties from one another. Although a place that is six hours away via car and one that is eight miles would likely not differ in any great respect for our purposes, I do believe that locations that are two hours are different than those that are six or eight. I have also selected this metric for its convenience. Some counties don't have large cities that could be used as a central feature. Others may have multiple cities or sprawling metropolises. Counties particularly on the east side of the Mississippi are small in square miles and have cities that span multiple counties. By keeping our measures simple, I can still get at our theoretical

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<sup>4</sup>As a robustness check, I will alternatively run a regression that only include counties with populations greater than 25,000. The median population for counties is right around 25,000 in 2010, while the mean population is almost 100,000. While I lose half our observations, I also diminish the chances of biased estimates. This only excludes a fragment of the observations, and there is no reason to believe those counties excluded are endogenous to the independent variable of distance. As it is, if every county received a perfect share of the revenues, all values would be one. The theory presented in this paper suggests that counties should not be equal. Institutional incentives create geographical differences in county shares of revenue. In an additional robust check, I will eliminate the bottom and top 5% of all counties by state and run the regression. This eliminates any possible outliers.

construct. I expect that the geographical distance will have diminishing returns. A place that is 200 miles from the capital will have very little difference to a place 400 miles. For this reason, distance will be modeled with a quadratic fit. Transforming the distance with a natural log will enable linear estimation in the face of distances that could reach nearly 500 miles in some states.<sup>5</sup> Additionally, distance will be rescaled so that the closest distance is 0 and the furthest distance is 1.<sup>6</sup>

Several controls are used to account for the vast differences between the counties and the fact that counties exist within states that themselves differ in their size, density, and political ideologies. The data on revenues and grants from states to counties is transformed for the dependent variable and can be interpreted as the ratio of the grants the county receives in a given year divided by its share of population the county has of the total state. Controlling for the population of a county is necessary because I do not expect a large county such as Los Angeles County to get the same percentage of funds as a small population county such as Sierra County. Additionally, places that have national parks where urban development is restricted a subject to the sort of large ratio explained in the previous sections. I account for density of the population in the county, and in other models the density of the entire state. There is reason to believe that density at both levels might affect the amount of grants a county gets. A county that is rural might still have needs for services such as court houses, police stations, or forest rangers. This would work to increase the share they get as a proportion. On the other hand, the overall density of a state might affect the distribution of grants. If only a small number of counties are rural, all the power in the bureaucracy and legislature might come from urban interests and ignore their rural counterparts. Multiple specifications of the model will include different configurations of density controls.

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<sup>5</sup>Using Google Maps, any user can easily measure the distance between two points. Pennsylvania is approximately 315 miles from the two furthest points. Texas is 800 miles between some points. California is 825 miles North to South.

<sup>6</sup>This is done for ease of interpretation and does not in any way affect the statistical results of the model. Both the independent and the dependent variable are coded 0 to 1.

### FIGURE 3 ABOUT HERE

Further extension of the controls of geography need to account for counties that have large geographical footprints. These counties might require a higher than average share of revenue, especially if they contain expensive public goods such as interstate freeways. There are good theoretical reasons to believe that population growth could either increase the funds a county receives or reduces them.<sup>7</sup> If a state had foresight to growth patterns, it might allocate more funds to support infrastructure projects and other spending that a stable area might not need. On the other hand, expenditures where there is explosive growth might have lagged behind as legislatures are not full time and can not continuously allocate those funds. Other reasons include that places that have high growth will be under-represented in the legislature until redistricting fixes any malapportionment problems.

I also control for median income.<sup>8</sup> As with population size, there is not particular reason to expect a dollar to go as far in Sierra County as it might in Los Angeles County. Controls for how urban/rural a county is are also included. Rural counties are distinctly unique from urban areas. Rural areas need less infrastructure and likely less need for government services generally. Large tracts of land, especially in the west, are owned by the federal government. There is no need for states to spend any of their federal grants in these areas. For this reason, in addition to its massive size, I eliminate Alaska. Alaska is a geo-spatially large state and has very few residents. It does have valuable natural resources, however, and in many ways is different from other states.<sup>9</sup> For these reason, I need to account for it in our models.

### TABLE 1 ABOUT HERE

Additional statistical controls are included to ensure our distance measure isn't biased in it's coefficient. Regulation index indicates the amount of economic freedom a state has.

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<sup>7</sup>I ran the regressions with actual growth percentage and the the coefficient was significant but did not affect the other coefficients and only marginally affected the R-Squared

<sup>8</sup>In thousands of dollars.

<sup>9</sup>Hawaii is also excluded from the analysis for unrelated reasons, mostly due to that lack of data.

Racial dissimilarity is the amount of racial dissimilarity in a state.<sup>10</sup> The share of total employed in a state that are government employees, a dummy if the capital city is the largest city in the state, and regional dummies round out the statistical controls.

The regression equation will follow the form:

$$\begin{aligned}
 \text{countyshare}_{i,t} = & \alpha + \beta_1 \text{distance}_i \\
 & + \beta_2 \text{distancesqr}_i \\
 & + \beta_3 \text{income}_{i,t} \\
 & + \beta_4 \text{capitalcity}_{i,t} \\
 & + \beta_5 \text{density}_{i,t} \\
 & + \beta_6 \text{sovshareofemployees}_{i,t} \\
 & + \beta_7 \text{regulationindex}_{i,t} \\
 & + \beta_9 \text{racialdissimilarity}_i \\
 & + \beta_{10} \text{regiondummies}_i \\
 & + \beta_{11} \text{rural}_i \\
 & + \epsilon
 \end{aligned}$$

## 5 Discussion/Results

Our main explanatory variable that describes the differences between counties in terms of proximity to the state capital is statistically significant in all years measured. The coefficient is negative, indicating that counties close to the state capital receive a higher than expected share of grants from the federal government, controlling for their population size and growth. Even through multiple specifications of the model, Distance from the capital,

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<sup>10</sup>How heterogeneity a state's demographics are.

along with income, density, and percent rural are statistically significant at the .01 level. The south regional dummy is also significant in these models, although the coefficient size is not substantially large. These models control for state fixed effects and the standard errors are robust to control of heteroskedasticity.

It should also be noted that the size of the grants and revenues also drastically increased over this time, so differences in 1990 are less in constant dollars than in 2010. The construction of the dependent variable makes it difficult to interpret what sums of money is affected. It appears to make more sense to consider the impact of a county that is as far as possible away from the capital but also with a very large population. Take Clark County, NV for instance, the 2010 revenues from the state were nearly \$1.5 billion. Receiving one percent less revenue would be \$15 million. Clark County contains nearly three-quarters of the population of Nevada, so other counties would benefit greatly from any tax money redistributed from Clark County.

#### TABLE 2 ABOUT HERE

The second hypothesis this paper test is whether states that have isolated state capitals do a poor job of equally distributing grants. These states with isolated capitals would ostensibly free the bureaucracy from the checks and balances of a well informed public. Places that have part-time legislatures mean that newspapers don't have full time bureau to cover state government. This in turn might give bureaucrats more power to direct funds towards projects they prefer. The dependent variable here is a gini score of inequality in the distribution of grants in 2010. The main independent variable of interest is Average Logged Distance of a state. This measure is adopted from Campante and Do (2010), and it reflects how much a state's population is centered spatially around the state capital. This measure maintains monotonicity; in a state where the population is completely in the state capital the measure will be 0. When the entire population lives the furthest possible distance from

the capital, the state will have a 1 on the index. The intuition is actually quite simple: “spatial proximity to power increases political influence” (Ades and Glaeser 1995). A number of specifications will be reported to show the consistent strength of average logged distance as a predictor of how a state distributes funds.

FIGURE 4 ABOUT HERE

TABLE 3 ABOUT HERE

In all the different specifications of the model, the Average logged distance variable remains significant. This gives us more evidence that isolated state capitals do a poor job of equally distributing grants. This has the additional feature of further enhancing our confidence that distance might play a factor in how money is distributed. States that have populations that are more centered on the seat of government can more easily maintain a check on the power of bureaucrats. The percent of the state that is in urban areas is also highly significant and positive. This suggests that as a state becomes more urban, they have a harder time equally dividing grants. The concentration measure, however, is the single largest predictor of how in-equal a state is in distributing grants.

TABLE 5 ABOUT HERE

## 6 Instrument Verification

Endogeneity is always a problem social scientists must worry about. While I find it hard to believe that the distribution of grants can affect where the location of the state capital is, there is still a possibility that this is the case. To test that another source of county funds isn't subject to the same effect of proximate, I substitute the dependent variable for a source of revenue that is fixed by law. In this test, we use the county share of retirement and disability. While it is technically feasible that people who collect these funds choose to

live very close in proximity to the state capital, there is not prima facia reason to think that patterns of geography related to state capital affect where people retire.

#### TABLE 6 ABOUT HERE

In fact it appears that, unlike federal grants, retirement and disability spending is unrelated to proximity to the state capital. This further enhances our already strong inclination to believe that bureaucrats can, at least in the margins, steer federal grants towards the areas they live in.

## 7 Conclusion

There are many valid reasons why there might be variation in allocation of taxpayer funds. Among the ones that seem most appropriate is where there is most need, perhaps for infrastructure, to spur economic growth, or to relieve poverty. Not among the reasons acceptable to democratic theorist are things outside the citizenry's ability to control such as geographic proximity to the state capital or bureaucratic capture of power from the elected body. The results from this paper indicate that there is an asymmetry between areas drivable from the capital and those further away in regards to grants. For the other years where I measure all revenues from the state, the coefficients are insignificant. The geographic locations of a state capitals are unlikely to change and most have been stable for most of American history. These locations were chosen long before shifting populations and explosive growth increased populations across the US. State capitals all differ in their characteristics such as demographics, size, and proximity to major cities (some are the largest in their state, such as Boston, Phoenix, and Denver, while others are small and rural like Carson City and Montpelier). They all hold one thing consistent, and that is that they house the state bureaucratic apparatus, which has increasingly become vested with power to distribute taxpayer money. The findings in this paper represent some evidence that legislative power

can be dominated by an increasingly strong bureaucracy. The results do not make claim that some mechanism specifically has driven this trend, just that there seems to exist some power imbalances that result in an asymmetric distribution of federal grants. If these results hold in other circumstances, the public should be concerned with its ability to check government through regular elections.

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Figure 1: Federal Outlays to State and Local Governments: 1940 - 2019

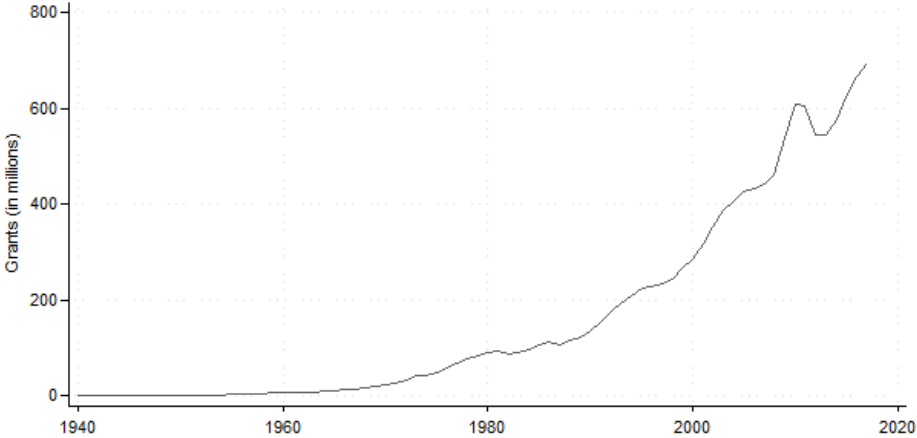


Figure 2: Theoretical Distribution of Power over Government

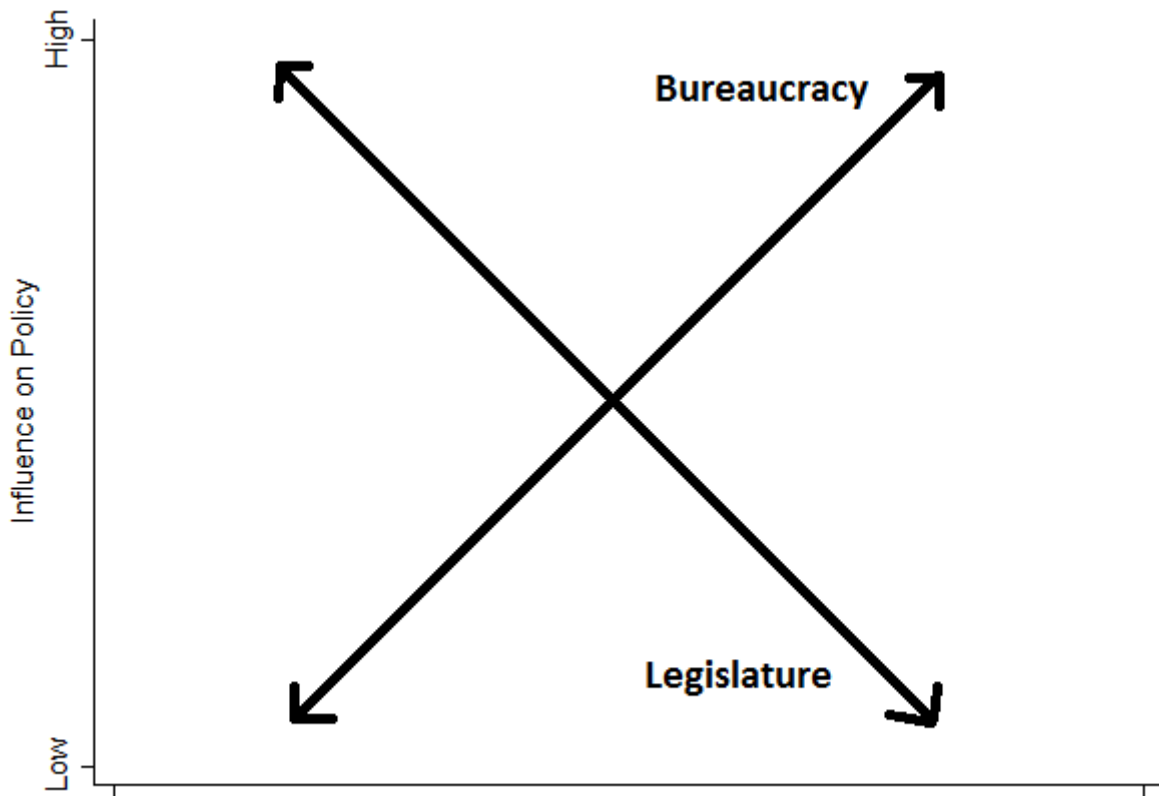


Table 1: Descriptive Statistics

Variable	mean	sd	min	max
Grants (in 1000s)	153,771	873,018	0	34,530,000
Income (median)	426.5	110.7	188.6	1,142
Distance (10s Miles)	119.2	77.30	0.778	506.1
Professionalization Score	0.185	0.109	0.0270	0.626
Density	142.2	148.6	6	1,210
Regulation Index	6.065	0.486	5.047	7.377
Racial dissimilarity	0.262	0.132	0.0251	0.473
North East	0.0672	0.250	0	1
Midwest	0.344	0.475	0	1
South	0.457	0.498	0	1
West	0.132	0.339	0	1

Regional Dummy variables can be read as percentage of counties in that region.

Figure 3: 2010 Share of Revenues by Share of Population

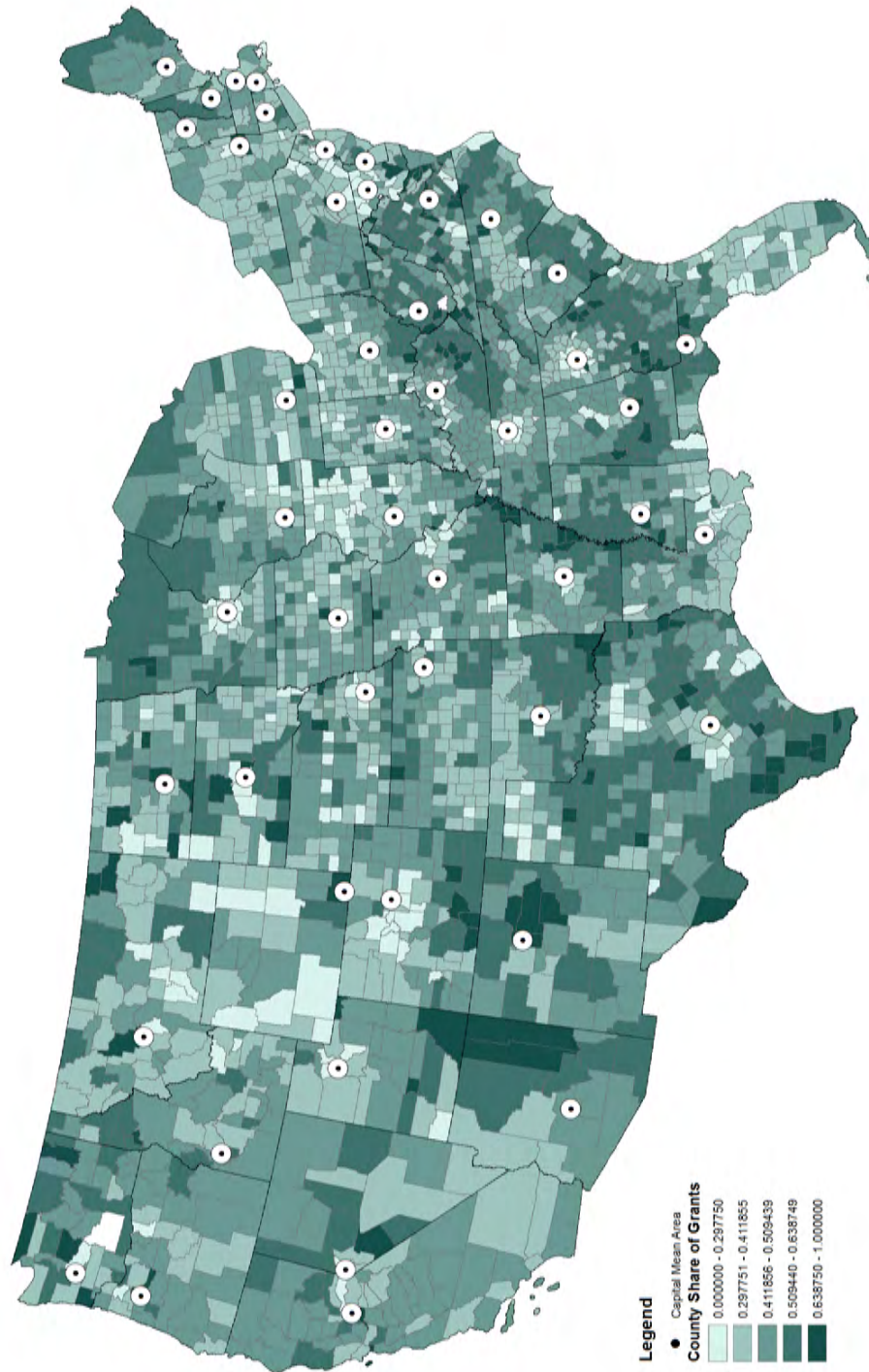


Table 2: Robust Weighted Least Squares Regression, County Share of Federal Grants

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
<b>Distance</b>	-0.269*	-0.341**	-0.271*	-0.335**	-0.323**	-0.335**
	[0.130]	[0.124]	[0.129]	[0.096]	[0.118]	[0.096]
<b>Distance Squared</b>	0.257*	0.235*	0.158	0.206*	0.195	0.206*
	[0.104]	[0.089]	[0.105]	[0.080]	[0.100]	[0.080]
<b>Median Income</b>		-0.000***	-0.002***	-0.002***	-0.002***	-0.002***
		[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
<b>Median Income Squared</b>			0.000***	0.000***	0.000***	0.000***
			[0.000]	[0.000]	[0.000]	[0.000]
<b>Capital Largest City</b>		-0.025	-0.023*	-0.025*	-0.027**	-0.025*
		[0.013]	[0.010]	[0.011]	[0.009]	[0.011]
<b>Density</b>		0.015*	0.026***	0.023***	0.026***	0.023***
		[0.008]	[0.006]	[0.005]	[0.004]	[0.005]
<b>Gov. Share Employees</b>			1.347**	1.051*	1.126***	1.051*
			[0.434]	[0.426]	[0.266]	[0.426]
<b>Regulation Index</b>			0.020	0.027*	0.026**	0.027*
			[0.014]	[0.013]	[0.009]	[0.013]
<b>Racial dissimilarity</b>			-0.162	-0.072	-0.090	-0.072
			[0.087]	[0.075]	[0.054]	[0.075]
<b>South Dummy</b>			-0.078***	-0.096***	-0.101***	-0.096***
			[0.019]	[0.015]	[0.013]	[0.015]
<b>Northeast Dummy</b>			-0.019	-0.022	-0.027	-0.022
			[0.021]	[0.020]	[0.017]	[0.020]
<b>Midwest Dummy</b>			-0.041*	-0.054**	-0.058**	-0.054**
			[0.020]	[0.019]	[0.018]	[0.019]
<b>County Percent Rural</b>				-0.000***	-0.000*	-0.000***
				[0.000]	[0.000]	[0.000]
<b>Observations</b>	3,034	3,034	3,034	3,034	1,534	3,034
<b>R-squared</b>	0.019	0.229	0.412	0.425	0.428	0.425
<b>State FE</b>	YES	YES	YES	YES	YES	YES

Robust standard errors in brackets

\*\*\* p&lt;0.001, \*\* p&lt;0.01, \* p&lt;0.05

Models 1-4 are all counties. Model 5 is only those with populations over 25,000. Model 6 doesn't include any county that is smaller than 5 percentile or larger than the 95 percentile (Trimmed Model) State Urban Percent not reported

Table 3: Gini Index of Equality of Dispersion of Federal Grants

State	Gini Index	State	Gini Index	State	Gini Index
RI	0.2347	ID	0.3139	PA	0.3891
IA	0.2682	NC	0.3181	WY	0.3905
TN	0.2688	AL	0.3185	AZ	0.3954
OR	0.2708	MI	0.3196	KY	0.4073
CT	0.2735	KS	0.3233	MO	0.4287
MS	0.2742	NM	0.3281	VA	0.4326
DE	0.2792	AR	0.3281	IL	0.4460
SC	0.2851	NE	0.3348	MD	0.4565
IN	0.2883	LA	0.3359	CO	0.4565
WV	0.2933	NH	0.3378	NJ	0.4692
CA	0.2964	GA	0.3454	UT	0.4696
WI	0.3022	TX	0.3470	FL	0.4958
ME	0.3044	VT	0.3506	MT	0.5000
MN	0.3080	NY	0.3587	SD	0.5212
OK	0.3090	WA	0.3725	ND	0.5661
OH	0.3110	MA	0.3850	NV	0.5983

Gini scores calculated for each state. Inequality measured as percent of grants divided by percent of population, by county. High scores indicate asymmetric distribution of funds.



Table 4: Descriptive Statistics for Gini Index Regressions

<b>VARIABLES</b>	<b>mean</b>	<b>sd</b>	<b>min</b>	<b>max</b>
Gini Index	0.362	0.082	0.235	0.598
Average Logged Distance	0.670	0.122	0.437	0.876
Median Income	50864	9764	32685	68385
Regulation Index	6.289	0.581	5.047	7.377
Racial dissimilarity	0.273	0.121	0.025	0.473
Share of value added in mining	0.021	0.059	0.000	0.718
State Area (Logged)	10.286	1.409	6.952	12.475
Maximum Distance State (Logged)	5.635	0.816	3.756	6.715
Population (Logged)	15.396	1.042	13.016	17.104
Income (Logged)	9.536	0.136	9.143	9.760
State Percent Urban	0.729	0.143	0.264	0.890
Legislature Professionalism	0.259	0.160	0.027	0.626
Gov. Share of Total Employees	0.156	0.025	0.124	0.238
Percent of Population in State Capital	0.076	0.114	0.004	0.466
Capital Largest City (dummt)	0.286	0.457	0.000	1.000

Figure 4: Gini Index Score and Average Log Distance by State

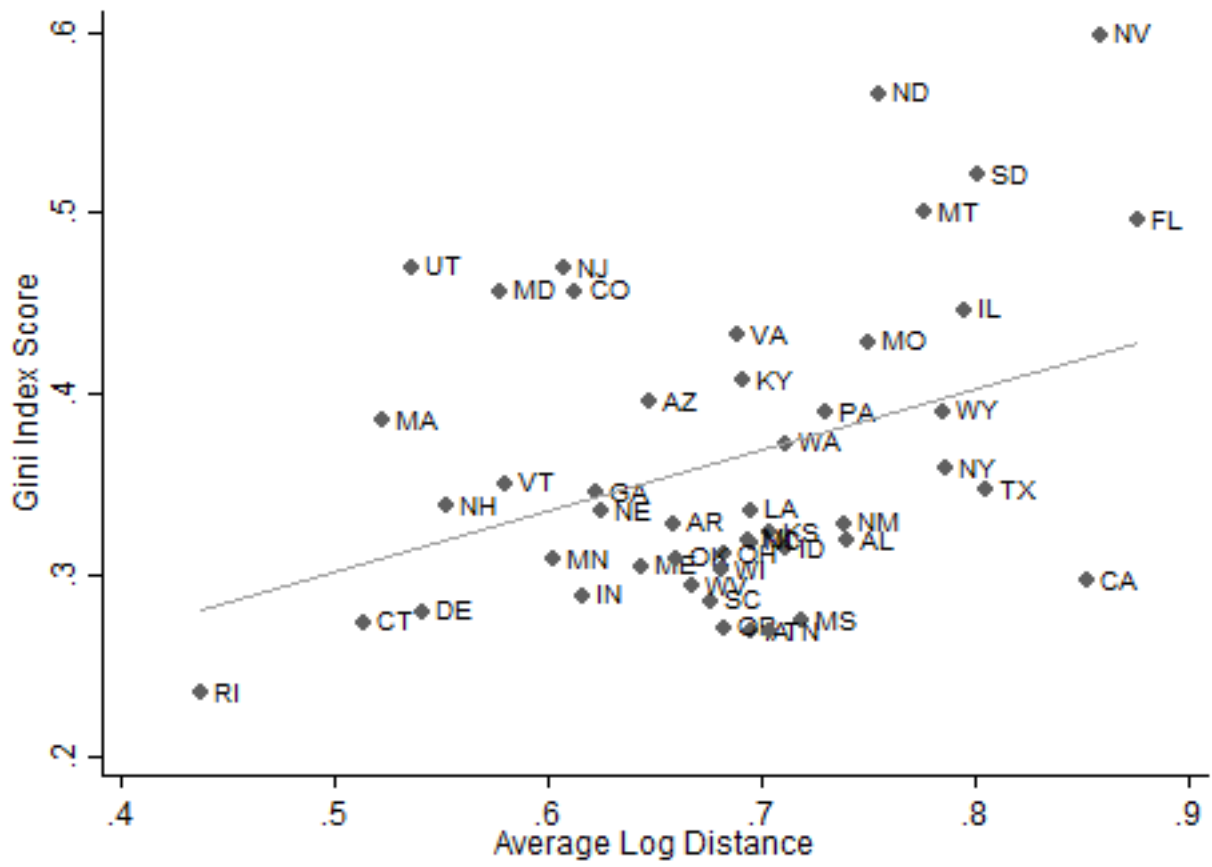


Table 5: OLS Regression, Gini Index Score for Inequality in Distribution of Federal Grants to counties by State

VARIABLES	(1)	(2)	(3)	(4)
Average Logged Distance	0.3630 [0.184]	0.4517* [0.196]	0.4268* [0.209]	0.6140** [0.213]
State Area (Logged)	0.0107 [0.027]	0.0123 [0.028]	0.0346 [0.036]	0.0381 [0.038]
Maximum Distance State (Logged)	-0.0247 [0.048]	-0.0146 [0.045]	-0.0058 [0.050]	-0.0250 [0.053]
Income (Logged)		0.1494 [0.152]	0.0717 [0.217]	0.1746 [0.212]
Population (Logged)		-0.0267 [0.014]	-0.0611** [0.021]	-0.0280 [0.027]
Proportion of Population with College Degree		0.6164 [0.673]	0.5822 [0.854]	0.1185 [0.848]
Government Share of Total Employed			0.2225 [0.632]	1.1711 [0.730]
State Percent Urban			0.2883* [0.136]	0.3818** [0.133]
Racial dissimilarity				-0.3282 [0.170]
Regulation Index				-0.0464* [0.022]
Share of value added in mining				-0.1863 [0.112]
Legislature Professionalism				-0.1692 [0.155]
Regional Dummies			X	X
Observations	48	48	48	48
R-squared	<i>0.145</i>	<i>0.327</i>	<i>0.427</i>	<i>0.572</i>

Standard errors in brackets

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Table 6: (Instrument) County Share of Retirement and Disability

VARIABLES	(1)	(2)	(3)	(4)
Distance	0.241 [0.151]	0.150 [0.125]	0.173 [0.092]	0.107 [0.070]
Distance Squared	-0.176 [0.131]	-0.123 [0.111]	-0.116 [0.070]	-0.062 [0.061]
Median Income		-0.000* [0.000]	-0.000* [0.000]	-0.000 [0.000]
Median Income Squared			0.000 [0.000]	0.000 [0.000]
Capital Largest City		-0.011 [0.010]	-0.015 [0.011]	-0.018 [0.010]
Density		-0.010*** [0.003]	-0.008*** [0.001]	-0.008*** [0.002]
State Percent Urban			0.195** [0.056]	
Government Share Employees			0.253 [0.362]	-0.056 [0.423]
Regulation Index			-0.032** [0.010]	-0.017* [0.008]
Racial dissimilarity			-0.213** [0.064]	-0.095 [0.054]
South Dummy			0.061*** [0.016]	0.034* [0.015]
Northeast Dummy			-0.005 [0.018]	-0.010 [0.019]
Midwest Dummy			0.013 [0.014]	0.002 [0.015]
County Percent Rural				-0.000 [0.000]
Observations	3,037	3,034	3,034	3,034
R-squared	0.018	0.229	0.424	0.351
State FE	YES	YES	YES	YES

Robust standard errors in brackets

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05