Analysis of Economic Demographics on State Party Affiliation

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Abstract

The United States follows a two-party political system for its elections. These elections are decided by voters who often vote according to their political, social, and economic backgrounds. Understanding why these voters align themselves with a specific party is a deeply intricate and complicated question. Several organizations have conducted surveys attempting to find the relationship between a voter's economic status and their party affiliation. This paper uses state-level demographic data alongside a fixed effects model to estimate the influence economic measurements have on party affiliation. Party affiliation is measured through the proportion of Democrat representatives, and the data spans from 2002 to 2016.

Keywords: Election, Party Affiliation, GDP, Consumption, Income
JEL Codes: D72, E10, E20, J10

I. Introduction

The political landscape of the United States is fundamentally shaped by the electoral system which determines who will represent American's interests at the state and federal level. Due to the significance of the voting process on governmental outcomes, analyzing what influences voters when determining their preferred candidate is important. There are many factors that can influence which party constituents will vote for – education level, population density, and income to name a few. Social scientists argue that economic, social, and political identities contribute towards an individual's party affiliation. This model attempts to determine whether the economic statistics of a state have a significant effect on the party affiliation of that state.

Economic status is an important indicator that is significant in shaping a population's political views. Therefore, analyzing economic identities of populations provides insight into election outcomes. Predicting the outcome of Representative elections allows for analysis into potential policy that will be passed in a state and what the Electoral College's votes will be for a state. Since Electoral College votes are decided by the number of state Representatives and Senators, this model would also allow prediction of presidential elections. To do this, you would need to compare the electoral vote totals of Democrat-leaning states to Republican-leaning states. Because most states use all their electoral votes on the most popular party in their state, adding up the votes provides a prediction of which party will win.

The model will help social scientists better understand what factors lead certain groups of people into political beliefs. This is incredibly useful to politicians since they must appeal to voters in order to join or stay in office. Politicians can use the information provided by the model

to formulate policies that appeal to populations that don't already support them. Incumbents could use this information to determine what aspects of their political platform should change in order to gain the support of more voters. This information is also generally beneficial for social scientists as it will provide insight on why populations might support certain parties. Understanding the perspectives of different populations will provide benefits to society and support the democratic process.

The United States is politically made up of two primary parties: Democrat and Republican. Candidates running for political positions at any level often align themselves with one of these parties to help voters identify their platform of political ideas. Positions are awarded by elections in which the designated population vote for the candidate they want, most often the one who aligns with their beliefs. Since the political representatives are voted in by majority, they are supposed to represent the ideology of the population that voted them in. This is why the politicians of a state are often used to categorize the political affiliation of the state and therefore the political affiliation of the majority population.

This paper is made up of four sections following this introduction. The next section will be the literature review which will be made up of a discussion about other research related to the topic of party affiliation prediction. Several papers are economics-based, but others related to sociology and political science will also be included as a way to help inform decisions made during creation of this paper's empirical model. Following the literature review is section 3. This section will dive into the data. It will explain the origins of the data and any data cleaning that took place. The data section will also provide a brief look at summary statistics. Section 4 will explain the empirical model. It will explain decisions made during the modelling process, control

variables, and concerns of the model. Section 5 contains the results of the model and explanations on its significance. This section will also talk about any interesting side observations and the relation between the results and the research question. Section 6 ends the paper with conclusions, policy implications, and this paper's relationship to the papers discussed in the literature review.

II. Literature Review

The econometric literature regarding political affiliation is mostly oriented towards presidential election predictions. Social scientists have been interested in correctly predicting the outcomes of elections for decades. Kristen Monroe (1976) has done extensive work collecting and organizing the ideas central to this topic in the pre-1970s period. A lot of the work from this period was described as "ad hoc empiricism without developed theoretical work presented to support it" (Monroe, 1976). Topics covered the range of discovering if economic boom or prosperity would lead to increased votes for the conservative party (Kerr, 1944) to the relationship between depressions and incumbent votes (Bean, 1940). Gerald Kramer brought a renaissance-like advancement to the subject in 1971, introducing theoretical framework and a reliance on econometric methods using aggregate data. This work served as the basis for several other economist's models.

Ray Fair (2008) has released many papers that are a natural extension to Kramer's model. These models rely heavily on the assumptions that votes for candidates of the same party as the incumbent will be influenced by economic factor changes that occur during that incumbent's term. Other scholars have adjusted this model to ask questions about the influence and importance of other variables on election outcomes. For example, Fair has released multiple

models showing that a change in the time period of data collection will produce different results. One model uses economic data from the exact term in which the election occurs with the assumption that voters base their decisions on the most recent events and will vote for policy that benefits them in the present. Others take into account the previous term or a combination of both. Adjustments to the models allow researchers to ask various questions about the determinants of voter decisions.

The model has also evolved to predict House elections. Fair began modeling this relationship in 2008, whereas others such as Erikson (1990), Jacobson (1990), and Lynch (2002), began doing so earlier. Even with the output variable being changed from presidential election vote share to House seating vote share, these models have continued to focus on the effect that economic factors have on the results of elections. The questions discussed by these papers also differs greatly. Some papers challenge the theoretical framework made by Kramer (Grier and McGarrity, 2002) or the role institutional power plays in the model (Lynch, 2002), yet nearly all still attempt to predict election winners in the end. They follow the strict assumption that voters act in rational ways to vote for the party that will provide economic growth. The model created in this paper challenges this assumption by attempting to predict party affiliation through economic population statistics.

While this paper's main goal is the analysis of state economic variable influence on party affiliation, it is interesting to note that the model creates a new perspective on how populations choose party affiliation. The papers mentioned before all rely on voters being entirely rational actors who choose a party based on past economic success. Since this paper is modelling party affiliation by population demographic statistics, the model is using a different way of thinking

about party affiliation relying more on the background of the population. Statistics such as income per capita and consumption per capita indicate more towards the economic class of the population of a state. Carol Cassel (1982) attempted to predict individual party identification through variables like education, social class, and family income. By controlling for these other factors that influence a population's party affiliation, the model can help determine whether we should be looking at population data rather than the paradigm setup by Kramer.

It is important to recognize that the model described in this paper does differ greatly from prior work on this subject. The question this model seeks to answer would in no way change the usefulness of prior models related to predicting election results. This model is merely attempting to find a new perspective of looking at voter party affiliation prediction methods and the role economic variables play in determining party affiliation. Its goal is to analyze economic factor influence on party affiliation while expanding the perspective of the framework setup by prior papers.

III. Data

All economic data used in this model was taken from the Bureau of Economic Analysis (BEA). This includes GDP, consumption per capita, and income per capita. Demographic data such as population density, educational attainment, and ethnic composition come from the U.S. Census Bureau. Unemployment data was taken from the Bureau of Labor Statistics (BLS). Each of these organizations collects its data through a mix of federal and state government administrations and surveys of both businesses and people. The political affiliation output variable was collected from data by the MIT Election Data and Science Lab. The dataset is a collection of U.S. House of Representatives election data.

Data was collected for the years 2002 to 2016. Since Representative elections only occur every two years, the years used by the model follow the same pattern of every two years. The data was also split into two different groups: years where there was a presidential election and years where there was not. This is because an active presidential election might increase voter and political activity. If one party tended to vote more during election years, measurement bias may be introduced. Presidential election years are used separately as a robustness check later in the paper.

There were also outliers caused by candidates aligned with an independent party. Likewise, Minnesota also has an additional party alongside Republican and Democrat parties: the Minnesota Democratic-Farmer-Labor Party. The DFL identifies as a center-left leaning party. Including it in the analysis would cause measurement problems since it would be hard to assign it a value of Democrat-leaning. Therefore, years in which a state elected a candidate of a party that isn't Republican or Democrat were dropped from the analysis.

Summary statistics are provided in Figure 1. Consumption per capita had the lowest mean value of the three target independent variables with a value of $33,054. Income per capita had the second highest with $40,761. GDP per capita had the highest with $49,600. This relationship is predictable since most people will only consume a portion of their income, which in turn is a portion of the GDP of the state. The summary statistics do explain the some of the heterogeneity of the states. While the states are mostly homogenous when it comes to demographic data, they have a wide range when it comes to economic data. GDP per capita has a minimum of $30,827 and a max of $78,957. Consumption per capita has a minimum of $18,598 and a max of $51,373. Families consuming the minimum likely live vastly different lives than those around the max.

IV. Empirical Model

The empirical model of this paper is below:

$$Y = \beta_0 + \beta_1 G + \beta_2 C + \beta_3 I + \beta_4 P + \beta_5 E + \beta_6 R + \beta_7 Inc + +\beta_8 U + \alpha_i + \alpha_t + \gamma_i$$

Table of Variables

Variable	Description
Y	Democratic leaning of the state. Value is between 0 – 1. Represents the percentage of Democrat Representatives in the state administration.
G	GDP per capita (real 2012).
C	Consumption per capita (real 2012).
I	Income per capita (real 2012).
P	Population density in population per square mile.
E	Educational Attainment. Measured through the percentage of the population that holds bachelor's or higher degrees.
R	Race. Measured through the percentage of white identifying population.
Inc	Dummy variable representing if the incumbent party was Democrat. If incumbent party was Democrat, then Inc is equal to 1.
U	Unemployment rate of the state.
α_i	Fixed effect on entity (state).
α_t	Fixed effect on time (year).
γ_i	Error term.

The output variable of the model is party affiliation measured by the percentage of Democrats in a state's pool of Representatives. This is a measure of how Democrat-leaning the state is. Values above .5 have a larger share of Democrats and below .5 have a larger share of

Republicans. The variables this model is specifically testing for influence on party affiliation are GDP per capita, consumption per capita, and income per capita (G, C, and I respectively). These three variables are heavily correlated with each other (see Figure 2). Theoretically this makes sense: if a person's income increases, they will likely spend more money. This will induce a consumption increase. Due to the correlation, the model will undergo several regressions in which the economic variable in the model will be switched out for another. All three are tested as they describe different behaviors within the population, so each are valuable. For example, finding that high consumption causes a lean towards one party has a much different interpretation than finding that high income causes the same leaning. Switching out the variables and re-running the regression will help the model avoid issues with multicollinearity. This will provide more accurate results for interpretation and statistical significance.

Many variables can influence a person's party affiliation and as such must be controlled for to avoid omitted variable bias. The control variables are listed inside the Table of Variables above. Several background attributes influence a person's party affiliation. Race is one control included. To control for race at a state-wide level, the percentage of white population is included in the model. Including the percentage of white population allows us control for the effect that a large white or non-white population will have on the state's party affiliation. This means that the model assumes that all non-white ethnicities have a similar affiliation leaning. While this may seem unrealistic, it can be argued that the Democratic Party appeals more towards minority groups that make up the non-white population.

The model also controls for party incumbency. Incumbency can affect party affiliation as voters will be influenced to vote for the same party again. Incumbents will have greater publicity

and marketing as well as an established history with voters. It is expected that this is often a positive benefit. In some cases, being incumbent could be bad. For example, if the incumbents pass haphazard, inefficient, and disliked policies, the population will be influenced to vote for the non-incumbent party. This variable is represented by a dummy variable. If the incumbent party is a Democrat, they are valued as 1. Otherwise, they are 0.

Unemployment rates and educational attainment are two more control variables. Each party has different policy views on how to handle wealth and welfare benefits. It is in the best interest of the unemployed to align themselves with the political party that will provide them with the best wellbeing. If a state has a larger population of unemployed, they may see larger alignment towards one party due to this population. Political parties may also align their views with populations of different educations. Populations with high school diplomas could tend to have very different political views than those with bachelors and above. This variable does, however, raise some multicollinearity concerns. Increases in education often go hand-in-hand with increases in income. A population with more highly educated people likely has a greater income per capita than other populations.

Population density also has an effect on the output variable. Urban and rural populations can live vastly different lives and therefore prefer different political policies. Populations living in large urban areas likely have a preference towards which political party they affiliate themselves with. If the state has a large population density, it would indicate that a larger portion of the population is living in these urban environments. The model must take into account this population if it is to accurately predict party affiliation without omitted variable bias.

The fixed effects of state and year will control for all state invariant and year invariant omitted variables. They are the reason that variables such as what party the current president belongs to cannot be included in the model. Since the current president varies by year but not by state, it would by omitted due to perfect multicollinearity. The dummy variables generated by the year fixed effect would control for the current president variable's influence on party affiliation as well as any other effects that vary by year alone. The fixed effects do not account for variables that vary by both state and year. The fixed effects will also help solve issues of heterogeneity between the states. They work to help absorb the effect that unobserved heterogeneity will have on the other variables

Religious data was not available for the years used in this analysis. Including the incomplete data would cause multicollinearity due to the fixed effects. This is due to the data being invariant by time (year) but not by state. In reality, the religiosity of a population should vary by both state and by time. Different states experience different levels of religiosity over time, which means not including this variable will introduce omitted variable bias in the model. It is hard to sign this bias. Christian religiosity likely causes a lean towards the Republican Party because the party's platform has a strong base of Christian ideals. Other religions' effect on party affiliation is less predictable but can be assumed to cause a lean towards the Democratic Party. This implies that a state that has a larger population of Christians will be biased lower higher in our outcome variable than would be expected, while those with smaller populations of Christians will be lower. Since religiosity varies very little over time, the state fixed effect will capture most of this effect.

Reverse causation is also a concern of the model but is solved due to the lag between policy effects and elections as well as the incumbent control variable. The inclusion of the incumbent control variable tracks the effect that would occur if, for example, one party was better for the economy. If one party was better for the economy, voters are assumed to be more likely to vote for them again. This implies they are voting for the incumbent party, which means that the effect is attributed to the incumbent variable. Since policies passed by the Representatives often take long periods of time to affect the measurements of the model, there is also a lag present that will help alleviate problems with reverse causation.

V. Results

The results of the regression are shown in Figure 3 of the appendix. All regressions are ran using clustering by state (50 clusters). Out of the three economic variables ran with the regressions, only one was statistically significant. GDP per capita had a P-value of 0.033 for non-presidential election years. The results in Figure 3 have been scaled to provide easier interpretation. Interpreting the coefficient of GDP per capita is relatively simple: a $1,000 increase in real 2012 dollars causes a -1.33% change in the proportion of Democrats. In this data alone, only using every 4 years from 2002 to 2014, the average GDP per capita increased from $45,701.98 to $50779.76. The GDP per capita could decrease in the future, particularly in the case of recessions. This information, alongside the assumption that growth in GDP per capita will continue to be positive into the future, would indicate towards a gradual decrease in Democrat Party affiliation by states if all other variables remained constant.

The other two economic variables, income per capita and consumption per capita, were both insignificant. These two variables were heavily correlated with each other (0.9465).

Interestingly, the correlation between these variables and GDP per capita wasn't as high as it was between consumption and income per capita. This can be explained by the level of measurement. Consumption and income per capita are both people-centric. That is, they measure the direct amount of money the population earns and spends. GDP per capita is a more abstract way of measuring the wealth of the population since it depends on production and sale of goods. GDP serves more as a measurement of the wealth of the state. With this interpretation in mind, running the regression with GDP (real 2012; not per capita) produces a more statistically significant measure that indicates that the wealth of the state is more significant than income and consumption of the population. This is shown in Model 4 of Figure 3.

One other statistically significant variable includes the incumbent party. It is significant at the 5% level with a P-value of 0.002. States in which the Democrat party is incumbent see a 13.91% increase in their percentage of Representative Democrats. The true meaning of this coefficient is hard to analyze. It could mean that populations that elect Democrat candidates tend to like the policies and actions of those candidates and therefore continue to elect Democrats. It could also mean that the population is so fervently loyal to the party that even if they do not favor the policies of the incumbent, they will still vote for a Democrat to not allow a Republican the seat. Regardless, this does indicate that states don't tend to switch party affiliation very often since a simple change in the incumbent party brings a full 13.91% change in average party affiliation.

Unemployment rate is also a statistically significant variable, though it does not have the expected relationship to party affiliation. The effect to party affiliation is negative. This means that increases in unemployment rate decrease the states proportion of Democrat Representatives.

Since the Democratic Party platform often includes welfare benefits that would be appealing to the unemployed population, this result is surprising. One possible explanation is that the unemployed population blames minority groups and illegal immigration as the cause of their job loss. This would lead them towards supporting Republican policies and therefore the party overall. However, the overall effect of unemployment rate, though statistically significant, is small. A 1% increase will lead to a -0.03% decrease in Democrat-leaning. With this in mind, the magnitude of unemployment rate's effect on party affiliation is not very significant.

To check the validity of the findings, a robustness check was used with presidential election years (2008, 2012, and 2016) and for a combination of all years gathered. These results are shown in Figure 4 and 5. Income per capita and consumption per capita remain insignificant while GDP per capita maintains its significance. In the model ran with all years, GDP per capita became even more significant with a P-value of 0.004. Interestingly, while GDP was significant for non-presidential election years, it lost significance when including presidential election years. Another interesting observation when including those years is that population density becomes significant. One possibility is that during presidential election years, the voter turnout of the urban Democrat population increases. Overall, the coefficients maintained roughly the same relationship to the outcome variable through all versions of the model, albeit small changes in statistical significance.

VI. Conclusion

This model's purpose was to find the significance of economic variables on party affiliation. Doing so would provide insight into the value of economic indicators to politicians and allow for rough predictions of election outcomes. The model found economic measurements

of income and consumption per capita insignificant. GDP per capita was found significant with all years of data used, while GDP was only found significant for non-presidential election years. This led to the interpretation that overall state wealth determined through GDP per capita – and to some extent GDP – was the best economic indicator of the party leanings of a state. This result supports the measurements used by many other scholars who have attempted to model party affiliation and voting behavior since most use GDP over other economic variables.

Comparing the results of the regression to the summary statistics of GDP per capita for the states separated by party affiliation provides some more insight into the relationship between GDP per capita and party affiliation. Figure 6 helps explain the differences between Democrat, Republican, and neutral states when measured by GDP per capita. While the model indicates that higher GDP per capita will drag down the Democrat-leaning value for a state, the summary statistics show that Democrat leaning states have a higher average GDP. This helps explain the magnitude of the effect that GDP per capita has. It is influencing the party affiliation, but the other demographic statistics of the state seem to be influencing party affiliation more.

It is important to state that understanding what causes an individual to align themselves with a political party is a hard question that relies on the social, political, and economic identities that a person has. Politicians using this model to inform their policy should recognize that the factors that can determine party affiliation are nearly limitless and very complex. GDP per capita alone cannot encapsulate all about a person's economic situation. While this paper's result determined that greater GDP and GDP per capita leads to a more Republican leaning state, it did not discover why this is the case. Democratic candidates should not take away that policies they pass that promote GDP growth will result in a loss of seats. Further research could investigate

how this relationship happens. It's possible that greater GDP per capita introduces wealth inequalities which tend to cause a population to lean towards a certain party. Another possibility is that there is a relationship between state GDP and the percentage of the population within specific economic classes. This could affect party affiliation as specific wealth classes may lean towards one party. For example, the middle class could tend to favor a different party than the lower or upper classes. One possible step forward would be investigating how income or wealth inequalities of a state population – or how different proportions of people in certain wealth classes – effect party affiliation.

This model's weakness comes from the sheer number of variables that should be included about each state's population. Omitted variable bias is a concern, and while the fixed effects model helped control for variables constant through state and year, it does not help with variables that vary by both. Also, the question answered by this paper was broad. Its finding that GDP per capita negatively influences Democrat-leaning of a state does not explain the intricacies of the relationship. Continued research with more narrow questions would be beneficial in understanding the relationship fully. Overall, the model has indicated that though economic variables have a relationship with party affiliation, they are not the sole determinant of it. Many economic measurements have deeper relationships with the socio-political backgrounds of voters. These relationships likely influence party affiliation and must be accounted for.

Appendix

Figure 1: Summary Statistics

	mean	sd	min	max
Consumption per capita (thousands $)	33.05433	6.240011	18.598	51.373
Income per capita (thousands $)	40.76127	8.436446	23.136	69.741
GDP per capita (thousands $)	49.60081	9.705072	30.827	78.957
GDP (100 thousands $)	3.145553	3.865485	.263703	24.9884
Unemployment Rate	7.20	23.21	2.6	13.5
Education (% pop with Bachelor or more)	27.7814	5.00992	15.9	42.7
Population	196.7891	260.6686	1.125641	1206.724
Proportion White Pop.	75.24	15.21	21	98
N	344			

Figure 2: Correlation Matrix

	(1)							
	Y	G	I	C	P	E	R	Inc	U
Y	1								
G	0.109	1							
I	0.172*	0.729***	1						
C	0.231**	0.637***	0.946***	1					
P	0.446***	0.376***	0.444***	0.389***	1				
E	0.345***	0.554***	0.702***	0.699***	0.501***	1			
R	-0.152*	-0.175*	-0.291***	-0.224**	-0.179*	-0.157*	1		
Inc	0.619***	0.0858	0.195**	0.246***	0.317***	0.236***	-0.164*	1	
U	-0.0939	-0.00525	0.0775	0.0319	-0.0351	0.0567	-0.0269	-0.0394	1
Observations	200								

Figure 3: Non-Presidential Election Regression

Outcome Variable Y: Democrat Leaning (Proportion of Dem. Representatives)				
	Income per Capita	Consumption per Capita	GDP per Capita	GDP
I (thousands $)	-0.00919			
	(-0.66)			
C (thousands $)		-0.00479		
		(-0.22)		
G (thousands $)			-0.0134*	
			(-2.20)	
GDP (100 thousand million $)				-0.0642*
				(-2.17)
P	0.00659	0.00679	0.00607	0.00742
	(1.86)	(1.79)	(1.74)	(1.98)
E	0.00706	0.00348	0.00658	0.00456
	(0.49)	(0.23)	(0.49)	(0.33)
R	-0.00649*	-0.00653**	-0.00607*	-0.00874***
	(-2.62)	(-2.70)	(-2.45)	(-3.61)
Inc	0.154***	0.158***	0.139**	0.148**
	(3.65)	(3.59)	(3.35)	(3.30)
U	-0.000259*	-0.000307***	-0.000270**	-0.000317***
	(-2.24)	(-3.74)	(-3.41)	(-4.07)
Constant	-0.226	-0.332	0.185	-0.235
	(-0.31)	(-0.40)	(0.26)	(-0.35)
N	196	196	196	196
r2	0.316	0.309	0.341	0.323

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Figure 4: Presidential Election Regression

Outcome Variable Y: Democrat Leaning (Proportion of Dem. Representatives)				
	Income per Capita	Consumption per Capita	GDP per Capita	GDP
I (thousands $)	-0.00706			
	(-0.42)			
C (thousands $)		-0.0308		
		(-1.22)		
G (thousands $)			-0.0154*	
			(-2.16)	
GDP (100 thousand million $)				-0.0101
				(-0.36)
P	0.00958**	0.00930**	0.00950**	0.00948**
	(2.82)	(2.87)	(2.93)	(2.71)
E	0.0402	0.0435	0.0477	0.0379
	(1.11)	(1.31)	(1.58)	(1.13)
R	-0.00133	-0.00174	-0.00220	-0.00124
	(-0.44)	(-0.61)	(-0.73)	(-0.40)
Inc	0.282**	0.274**	0.268**	0.287**
	(3.28)	(3.27)	(3.15)	(3.22)
U	-0.000555	-0.00156	-0.0110	0.00478
	(-0.04)	(-0.16)	(-0.84)	(0.40)
Constant	-2.117	-1.396	-1.689	-2.325
	(-1.71)	(-1.08)	(-1.36)	(-1.72)
N	148	148	148	148
r2	0.549	0.563	0.577	0.548

t statistics in parentheses

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

Figure 5: All Election Regression

Outcome Variable Y: Democrat Leaning (Proportion of Dem. Representatives)				
	Income per Capita	Consumption per Capita	GDP per Capita	GDP
I (thousands $)	-0.0111			
	(-0.95)			
C (thousands $)		-0.00973		
		(-0.44)		
G (thousands $)			-0.0148**	
			(-3.01)	
GDP (100 thousand million $)				-0.0423
				(-1.73)
P	0.00617*	0.00622*	0.00569*	0.00675*
	(2.23)	(2.11)	(2.10)	(2.29)
E	0.0149	0.0107	0.0158	0.00961
	(0.89)	(0.65)	(1.07)	(0.65)
R	-0.00566**	-0.00552*	-0.00562**	-0.00694***
	(-2.74)	(-2.57)	(-2.83)	(-3.51)
Inc	0.176***	0.179***	0.162***	0.177***
	(3.89)	(3.92)	(3.70)	(3.63)
U	-0.000103	-0.000142*	-0.000131*	-0.000138*
	(-1.43)	(-2.36)	(-2.46)	(-2.33)
Constant	-0.366	-0.376	0.0405	-0.458
	(-0.57)	(-0.49)	(0.06)	(-0.72)
N	344	344	344	344
r2	0.341	0.334	0.369	0.338

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Figure 6: Summary Stats GDP per Capita by Party Leaning (2002, 2006, 2010, 2014)

Political Leaning of State	Mean	Median	Std. Error	Range	Observations
Republican	47,654.34	45,795.5	9,420.749	43,110	122
Democrat	51,645.17	50,002	9,108.189	37,198	69
Neutral	45,164.44	45,991	9,249.982	28,385	9

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