The Impact of Democratic and Republican Governors on Personal Freedom in the U.S.

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**Abstract:** Personal freedom is seen to have multiple effects on outcomes for individuals in economic literature. Emphasizing personal freedom-related policies can be an effective strategy for a campaigning governor, as it is an important issue for many American voters. Using data from the Cato Institute’s 2023 Personal Freedom Index along with gubernatorial election data from 1996 to 2022, this paper attempts to estimate the effect of a governor’s party affiliation on the levels of personal freedom in a state. This paper finds no significant effect of gubernatorial party affiliation on personal freedom as well as on the selected categories of the personal freedom index. A likely reason for the lack of significance is that both parties have policies that positively and negatively affect personal freedom, causing these policies to compete with each other in the governor’s effect on personal freedom, along with lack of statistical power.

**JEL Codes:** D72, H70, K38

**Keywords:** gubernatorial elections; personal freedom; individual rights

**I. Introduction**

In this study, I attempt to identify whether Democratic or Republican governors protect and promote personal freedoms through policy in their respective states after being elected. The goal of this study is to examine how personal freedom changes when gubernatorial elections occur in a state to see how governors of either Democratic or Republican affiliation affect personal freedom. To answer this question, I employ a regression discontinuity design (RDD) to estimate the causal effect of party affiliation of the elected governor on personal freedom within a state by looking at closely contested elections. I chose this methodology to control for many unobservable characteristics of states that affect both election outcomes and party affiliation of the elected governor that would be difficult to account for using other methodologies. I utilize different data sources, including the Cato Institute’s most recent Freedom in the 50 States report which I merge with historical state-based gubernatorial election results data from Michigan University’s Inter-University Consortium for Political and Social Research. The data spans from gubernatorial election cycles beginning in 1996 to 2022 and is collected on a yearly basis as the personal freedom index is recorded by year.

Personal freedom is an important issue for many American voters, as their preference on candidates may be swayed on who they believe to be protecting these freedoms. There are many topical issues that dominate political discourse that fall under the category of personal freedoms including concealed carry, legality of certain firearms, same-sex marriage, decriminalization and legality of both recreational and medicinal marijuana, criminal sentencing length, affirmative action, and flavored vape ban, amongst others. Additionally, voters may have strong moral or philosophical viewpoints based on protecting and promoting personal freedom, as libertarianism is a popular American political belief that is on the polar end of protecting personal freedoms and individual rights while reducing paternalism. As the governor is the most influential elected official from a policy perspective in each individual state, I examine specifically at how governors affect personal freedom. The governor has the authority to propose and veto bills, influence the legislative agenda and state budget, and make political appointments, among other powers, giving them a significant ability to impact issues related to personal freedom within their state.

It is also possible that personal freedoms can impact different economic outcomes for individuals within a state, rather than only aligning with moral stances or opinions of voters within a state. Kwatia, et al. (2024) find that in Sub-Saharan Africa and Western European regions, personal freedom is a determinant of income inequality in both regions in the short run and long run. Cebula (2014) finds that immigrants prefer to move to states that have higher levels of personal freedom, which the study claims cause higher economic growth rates and population levels. Kabir and Alam (2021) find that a measure of personal freedom has a quadratic effect on economic growth in a country, where in countries with a higher level of freedom, an increase in personal freedom can spark growth, with the opposite effect in countries with low levels of freedom. The literature also shows that levels of personal freedom can be related to public health outcomes such as the spread of COVID-19 (Ang, et al., 2022) and unintentional injury mortality rate (Ackerson and Subramanian, 2010). Similarly, there is a plethora of existing research that indicates that economic freedom has significant effects on outcomes. Although the existing research on the outcomes of personal freedom is limited, it has shown that different measures of personal freedom can have relationships with different economic and social outcomes.

It can be difficult for individual voters to quantify the actual effect of elected official’s influence on personal freedoms, as it is a combination of many issues that can be difficult to accurately track and evaluate. Voters do not have perfect information to always correctly identify which candidates positively affect personal freedom, as well as the outcomes of these personal freedoms. It is also possible that candidates may make campaign promises or have certain goals that align with personal freedom, but these goals or promises are not always met due to the difficult and slow political process. An example of this is how Joshi (2022) finds that governors of both Democratic and Republican affiliation do not actually have a significant effect on reducing crime despite large amounts of campaign resources often being dedicated to criminal justice policy advertisements. These factors possibly cause issues assessing which candidate will truly lead to higher levels of personal freedoms in their state, which opens the possibility that individuals may be voting against their own interests if they have a strong stance on personal freedom.

To better quantify personal freedom, the Cato Institute (2023) has recorded a personal freedom index in each of the fifty states from the year 2000 to 2022. The Cato Institute’s “Freedom in the 50 States” report includes the following categories in the calculation of the personal freedom index value: incarcerations and arrests for victimless crimes, gambling freedom, gun rights, tobacco freedom, marriage freedom, educational freedom, cannabis and salvia freedom, alcohol freedom, asset forfeiture, mala prohibita and miscellaneous civil liberties, travel freedom, and campaign finance freedom. These different categories are weighted to create the personal freedom index value for each state to measure which states have more paternalistic policies versus those with higher levels of personal freedom. As this index value aggregates and gives value to many different individual aspects of freedom, it becomes more achievable to evaluate personal freedom in different states.

Additionally, I also use RDD methodology to investigate the effect of these gubernatorial elections on particularly relevant and topical political issues in mainstream American politics that are included as categories in the Cato Institute’s personal freedom index. These categories include gun rights, cannabis freedom, and tobacco freedom. Overall, I do not find a significant effect of gubernatorial party on the level of personal freedom within a state. Also, for all three categories of gun freedom, cannabis freedom, and tobacco freedom, I find no significant effect from gubernatorial party. This is likely to due to competing effects within the personal freedom index, as well as a limited number of possible observations in the data set.

**II. Literature Review**

In this paper, I employ RDD to analyze the effect that an elected candidate has on the level of personal freedom, as using RDD is the standard method of analyzing the effect of a two-party election. RDD can be used to establish causality while controlling for confounding effects in a very complex setting that would be very difficult to control for otherwise. There is a common approach in the literature of using RDD to evaluate the causal effect of electing a political leader in two-party elections and how their party affiliation impacts freedom index values or policy outcomes, which is relevant to this study. I look at similarly structured studies that attempt to capture the effect of elected officials taking office for developing the model for this study. Raff, et al. (2024) observe close state-level and mayoral elections and their effect on economic freedom within states and metro areas using RDD in their analysis. The paper employs RDD to observe the local average treatment effect of the party affiliation of elected legislative and gubernatorial candidates on economic freedom, and it is structured very similarly to this study. Although the findings of Raff, et al. (2024) may not directly apply to this study as economic and personal freedom are different measurements, the methodology is valuable for forming this paper.

Similar studies also use gubernatorial party as the variable of interest which helps establish that there are existing effects in the literature, providing precedent for using measuring the effect of a governor being elected. While not necessarily looking at personal freedom, Joshi (2024), Beland (2015), Hill and Jones (2017), and Do, et al. (2024) all look at gubernatorial elections using RDD. Joshi (2024) attempts to measure how effective governors are at carrying out their campaign promises related to crime during their term, and the author finds that crime related campaigns are not successful in the short run. Do, et al. (2024) examines how firms connected to elected governors increase in value when their connected candidate is elected. Beland (2015) looks at the effect of gubernatorial outcomes on labor market outcomes and finds that black people have higher productivity levels and labor market participation when a Democrat governor is elected. Hill and Jones (2017) find that state governments spend more on education when the governor is Democratic and that under Democratic governors often have larger transfers to schools with high shares of minority students. From the findings of these papers, it is evident that the elected governor has the capacity to have an effect on economic and social outcomes.

Baskaran and Hessami (2018) investigate the effect of a female mayor being elected on whether female council candidates receive more votes in all municipalities in the German state Hesse, where they find a positive effect on female council candidate votes if the mayor elect is also female. All of Joshi (2024), Beland (2015), Hill and Jones (2017), and Raff et al., (2024) use party of the elected official as the treatment variable and use vote share or house majority as the running variable to display the political condition of the state. Do, et al. (2024), on the other hand, uses political connection to elected governor as the treatment variable, and Baskaran and Hessami (2018) use gender of the mayoral candidate as the treatment variable. Margin of victory is used as the running variable as that is common practice in literature.

It is important to consider the theoretical validity of RDD as it is a quasi-experimental method that relies on assumptions to establish causal validity. One assumption that is crucial to RDD is that at the threshold, the treatment should be distributed equally, and that there should not be sorting at the threshold. It is possible that there is sorting present at the threshold leading to bias due to an imbalance in sorting because of a possible unobservable variable that can affect which side of the threshold an observation ends up on as well as affecting the outcome variable.

Concerns of imbalance in elections include Caughey and Sekhon (2011), where they establish that close house races are dictated by those who spend more campaign money, as well as Grimmer, et al. (2011), which also displays that house candidates that are of the same party affiliation as influential officials have an advantage in close elections. Snyder, et al. (2014) discuss a possible fix for this bias if imbalance is present in the RDD, where either a flexible polynomial or local linear control function of the forcing variable is used to account for the possible bias. However, this issue was resolved by Eggers, et al. (2014), as they found no evidence of systematic imbalances or sorting around the threshold from analyzing over 40,000 closely contested races over different electoral levels.

There is some existing research on the outcomes of personal freedom, but the current body of literature is much smaller compared to that on the outcomes of economic freedom. Kwatia, et al. (2024) observe how personal freedom affects income inequality in Sub-Saharan Africa and Western European regions. They find that in both regions personal freedom has a significant effect on income inequality. Interestingly, in Sub-Saharan Africa, it was observed that inequality increases with higher levels of personal freedom in the long run. However, the opposite effect occurs in Western Europe, where inequality decreases with higher levels of personal freedom. This suggests that in settings more similar to the United States, like Western Europe, levels of personal freedom could be an important determinant in levels of income inequality.

Kwatia, et al. (2024) use the Fraser Institute’s 2022 Human Freedom Index as the source for their personal freedom variable for each of the countries included in the study, which is constructed differently than the Cato Institute’s personal freedom index value I use. The Fraser Institute’s personal freedom index includes categories such as freedom of speech, freedom of expression, freedom of religion, freedom of assembly, and freedom of press. This is different from the construction of the Cato Institute’s personal freedom index value that looks at each of the fifty states, as a lot of these categories are included in the United States Bill of Rights and are not worth comparing between states as many are applied equally by law. A possible issue when comparing this study to other work within the existing body of work is that personal freedom is not always measuring the same thing, making comparisons more difficult.

Another relevant outcome of personal freedom is how it affects the income progression of individuals. Kabir and Alam (2021) find that personal freedom has a quadratic effect on economic growth using linear regression analysis on panel data across 115 countries from 2006 to 2018. Similar to Kwatia, et al. (2024), Kabir and Alam (2021) use the Human Freedom Index to measure personal freedom as their study is done more on a country-based level. The use of this specific personal freedom index makes it more difficult to directly apply the results of these studies to possible outcomes of varying levels of personal freedom in the United States due to differences in measurement.

Ruger and Sorens’ (2009) personal freedom index is the most similar personal freedom index in the literature to the Cato Institute’s (2023) personal freedom index, as Ruger and Sorens also worked on formulating the current personal freedom index calculation from the Cato Institute. The personal freedom variables are not the same, as additional categories have been added and weights have changed in the calculation, but they are more consistent in comparison to the Human Freedom Index’s personal freedom index allowing for more direct comparison for consideration of outcomes. This version of the personal freedom index can be used to observe economic and social effects from differing levels of personal freedom.

Cebula (2014) looks at the effect of personal freedom on net in-migration in different states using linear regression using standard migration modelling and finds that migration is higher for states that have higher levels of personal freedom. This outcome is relevant in evaluating the economic effects of personal freedom and could also be indicative of personal freedom being a relevant factor in sorting based on the preference of these migrants. Cebula found similar results in his 2021 study, where higher levels of personal freedom cause for higher levels of net-in migration and argues this could also positively affect economic growth. Hall, et al. (2012) also use Ruger and Sorens (2009) original personal freedom index value to measure the effect of economic and personal freedom on entrepreneurial activity. Using fixed effects estimation, they find a positive effect of economic and personal freedom on entrepreneurship, however, when personal freedom is disaggregated, it is seen to have no effect on entrepreneurship.

Ang, et al. (2022) and Ackerson and Subramanian (2010) look at how personal freedom could possibly affect public health outcomes. Ang, et al. (2022) examine the effect of personal freedom in various states and how that affected the spread of COVID-19 during the pandemic. This study found that higher levels of personal freedom led to higher rates of COVID-19 infection. Ackerson and Subramanian (2010) also use Ruger and Sorens’ (2009) personal freedom index to establish a strong positive correlation between personal freedom in individual states and unintentional injury mortality rate using simple linear regression and the Pearson correlation coefficient. Ackerson and Subramanian (2010) do not establish causality however, as they do not use a method to control for other variables in their regression analysis.

The literature overall on the current topic does seem to be somewhat inconclusive, as there has not been enough replication of studies to generate certainty on the outcomes caused by personal freedom and there is inconsistency in how personal freedom is recorded. While there is more varying research on other freedom index variables and their implications such as the human freedom index or economic freedom index, the personal freedom index values that are most similar to the one employed in this study, notably Ruger and Sorens’ (2009) PFI value, do not have a strong, conclusive base of work.

**III. Data and Methodology**

A combination of data sets are used in this study is a combination of sources that include gubernatorial election result data and state-based personal freedom data. The data set is panel data where the data is by state on a yearly interval, and the dataset begins at the election cycles from 1996 and after and ends in 2022. The state-based personal freedom variables are from the Cato Institute’s 2023 edition of “Freedom in the 50 States” that contains the personal freedom outcome variable. This data set contains index values for the personal freedom index by state and year, as well as index values for gun rights, cannabis and salvia freedom, and tobacco freedom.

The gubernatorial data set used is similar to the data file used in Almani and Algara (2021). They compiled country-level election data from Congressional Quarterly and the United States Historical Election Returns from the Inter-university Consortium for Political and Social Research. In my dataset, I aggregate the elections by state rather than county as gubernatorial elections take place at the state level.[[1]](#footnote-1) I include all elections where a Republican or Democrat win, as independents are not included in the final data set, and all governors serve four-year terms excluding New Hampshire and Vermont. I then merge the election data set with the personal freedom scores by matching a year’s personal freedom score with the most recent party-based gubernatorial election result in that state. Each observation contains a unique year and state combination, as well as the party of the governor in office and vote share of Republican versus Democrat and margin of victory in the most recent gubernatorial election.

I utilize a regression discontinuity design, which attempts to evaluate the causal effect of an intervention, which in this case is close gubernatorial elections, on personal freedom. I chose this methodology to account for the many unobservable characteristics of states that affect election outcomes and are also correlated with the party affiliation of the elected governor. As mentioned, the main outcome of interest is the level of personal freedom in each state, and the independent variable of interest, or treatment variable is a dummy variable indicating which party the elected governor is a part of. The margin of victory by candidate in the gubernatorial election acts as the running variable in this analysis, where the threshold is whether a state ends up electing the Republican or Democratic candidate. This assumes that the elections in states that are closely contested, and therefore included in analysis, have similar unobserved characteristics around the threshold. This assumption of continuity in potential outcomes around the threshold is what allows for causal inference.

Joshi (2022) and Baskaran and Hessami (2018) also used a similar method, as the running variable was referred to as margin of victory in their studies. The margin of victory shows how closely-contested the elections were, and in states where the vote was extremely close to the 50% cutoff between Republican and Democratic votes, or the margin of victory was small, the regression discontinuity design assumes that the characteristics of the states are continuous in all respects except for the treatment variable of the governor’s party. This assumption is the continuity assumption of RDD, which assumes that unobserved characteristics around the threshold should be similar among different observations. While there may be a difference in pre-treatment characteristics, this can exist while as long as there is no discontinuous jump at the threshold (Cuesta and Imai, 2016). If the treatment were not to be present, the outcome variable is expected to change continuously with the forcing variable. The local randomization assumption is not required for RDD to be valid as it is a very strong assumption, only the continuity assumption as RDD relies on the continuity of potential outcomes near the threshold (Cuesta and Imai, 2016).

The bandwidth I use is based on the running variable margin of victory, as the number of individual observations included is evaluated by their distance to the threshold. I utilize the optimal bandwidth level to evaluate the local average treatment effect. Equation 1 displays the RDD model for this specification where gubernatorial election data is used to predict personal freedom in each state across time periods:

In Equation 1, represents the outcomes variable personal freedom, where *st* refers to the specific state and year combination to identify each observation. is the independent variable of interest and the treatment variable, where a zero indicates a Democratic governor, and a one indicates a Republican governor. The running variable of margin of victory is represented by , as this represents the distance between how many Republican and Democratic votes there are for assigning treatment, and I interact it with . Margin of victory is calculated by adding the Democrat and Republican vote totals together to obtain the two-party vote total, then dividing the Democrat and Republican vote totals over the two-party vote total to get the vote share percentages. Once these vote share percentages are obtained, the Republican vote share is subtracted from the Democratic vote share to find the percentage difference in number of votes between the two, or the margin of victory variable. The variables and represent year and state fixed effects, and is the error term for the model. I am interested primarily in the effect of , which represents the effect of having a Democratic governor versus a Republican governor in a given state. I hypothesized that the effect of party affiliation is a negative effect, in other words, having a Democratic governor would cause a decrease in personal freedom as opposed to a Republican governor. This is because traditionally Republicans have placed a larger emphasis on protecting individual rights in their platform and campaigns.

As mentioned, I also look at other categories included in the calculation of the personal freedom index variable that are particularly pertinent in mainstream political discourse, and how these matters are affected by the party of the governor in office. These categories of personal freedom are gun rights, cannabis and salvia freedom, and tobacco freedom. The Cato Institute also includes index values for these three categories in their personal freedom index data set, and each of these index values are broken up into categories. The categories for each of these are included in the appendix in Table 1, where the different indexes or values used in the calculation for all three personal freedom index categories are included. The attributes that make up each individual category are also all weighted in the calculation of each of the three individual personal freedom variables.

I employ the same methodology for each of these categories, as I again utilize the RDD model, and I change the outcome variable depending on the category of personal freedom. An example would be that in Equation (1) would represent the gun freedom personal freedom index in each state and time, and all other variables in the equation remain the same. I hypothesized that the effect of having a democratic governor on gun freedom would be negative, as Republicans campaign on protecting gun rights while Democrats are generally more pro-gun regulation. For the coefficient of cannabis freedom, I hypothesized as a positive effect as a common Democratic platform is legalizing or decriminalizing recreational and medicinal marijuana. I hypothesized a negative coefficient for the effect of tobacco freedom, as Democrats are generally more in favor of vaping regulation or excise taxes on tobacco products in comparison to Republicans.

**Table 1. Summary Statistics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) |
| VARIABLES | N | mean | sd | min | max |
|  |  |  |  |  |  |
| Democratic Governor | 1,061 | 0.453 | 0.498 | 0 | 1 |
| Margin of Victory | 1,061 | -3.751 | 20.49 | -59.56 | 64.17 |
| Personal Freedom | 1,061 | -0.000277 | 0.0861 | -0.263 | 0.282 |
| Gun Freedom | 1,061 | 0.00107 | 0.0260 | -0.100 | 0.0358 |
| Cannabis Freedom | 1,061 | 0.000260 | 0.0211 | -0.0241 | 0.0760 |
| Tobacco Freedom | 1,061 | 0.000913 | 0.0485 | -0.120 | 0.161 |
|  |  |  |  |  |  |

**Table 2. Summary Statistics from Primary Estimation Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) |
| VARIABLES | N | mean | sd | min | max |
|  |  |  |  |  |  |
| Democratic Governor | 461 | 0.527 | 0.500 | 0 | 1 |
| Margin of Victory | 461 | 0.131 | 4.954 | -9.036 | 9.031 |
| Personal Freedom | 461 | 0.00596 | 0.0890 | -0.258 | 0.278 |
| Gun Freedom | 461 | -8.89e-05 | 0.0267 | -0.100 | 0.0358 |
| Cannabis Freedom | 461 | 0.000890 | 0.0213 | -0.0241 | 0.0613 |
| Tobacco Freedom | 461 | 0.00293 | 0.0502 | -0.120 | 0.138 |
|  |  |  |  |  |  |

The states that are generally higher in the personal freedom index tend to be northeastern or western, while those that are lower are often liberal or socially conservative (Ruger and Sorens, 2023). The three states that have performed the highest in the personal freedom index in recent years are Nevada, Arizona, and Maine: Western and Northeastern states, while the three lowest are Texas, Idaho, and Wyoming: three socially conservative states. The range of the personal freedom values are between entirely between -1 and 1 as the creators standardized the values in the creation of the index. The Democratic governor dummy variable has a mean of 0.453 in the overall data set, indicating that governors are Republicans a little more than half of the time across all observations. There are 1,061 observations in total, as some of the observations have governors who were independents, so I inserted a missing value for the Democratic governor dummy variable, meaning that they are dropped from analysis. Summary statistics for only the observations within the primary estimation sample are also provided in Table 2, as these values are within the optimal bandwidth of 9.037. The number of observations drops to 461 and the mean of the Democratic governor dummy variable is 0.527, indicating more democratic governors in the data set.

The personal freedom index value is a standardized value that can generally be interpreted as when personal freedom increases, the index value increases. Before standardization, the index is constructed where the value represents the dollar value to individuals from the affected freedom by the change in policy. The dollar value comparison allows for comparison between different index values. The dollar values, or the magnitude of the effect, of these freedoms changing are estimates determined by policy and economic research (Ruger and Sorens, 2023). This is the same for the index values for the three categories chosen for analysis. The values I use are the standardized values of the personal freedom index, which is reflected in the ranges in the summary statistics table. The authors admit that these are not perfect estimates due to lack of resources when collecting their data for estimations, but they use weights to try and adjust for this.

**IV. Results**

The bandwidth for the primary personal freedom index regression is selected using the rdbwselect command as first implemented from Calonico, et al. (2014) from the rdrobust package to select the optimal bandwidth for each estimation. As mentioned, each regression discontinuity is estimated using fixed effects for both state and year levels to control for unobserved heterogeneity. Figure 1 in the appendix displays how there is a smooth curve at the cutoff for the distribution of elections on the running variable, margin of victory, indicating that the elections are generally randomly distributed. This means that the continuity assumption is upheld as I fail to reject the null hypothesis that there is not sorting present as seen in figure 1 in the appendix. This helps to justify the use of RD analysis for this data set. The standard errors are clustered by state to attempt to control for within-state correlation among observations.

**Table 3. Regression Results**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
| VARIABLES | Personal Freedom | Gun Freedom | Cannabis Freedom | Tobacco Freedom |
|  |  |  |  |  |
| Democratic Governor | -0.00849 | -0.000944 | -0.000912 | -0.00322 |
|  | (0.00876) | (0.00387) | (0.00288) | (0.00289) |
| Optimal Bandwidth | 9.037 | 10.426 | 12.718 | 14.375 |
| Observations | 461 | 505 | 563 | 605 |
| R-squared | 0.920 | 0.812 | 0.805 | 0.947 |
| N | 461 | 505 | 563 | 605 |

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The primary regression for how a state having a democratic governor affects personal freedom (1) uses the optimal bandwidth of 9.037, using 461 observations total in the estimate. The personal freedom regression had a coefficient of -0.00849 for democratic governor, meaning that when a state has a democratic governor, the personal freedom index is 0.00849 lower. The negative coefficient was expected as Republicans are the party that platforms more on individual rights and personal freedoms, however the p-value is 0.337, making it largely insignificant and equal to zero. We fail to reject the null hypothesis that there is no effect of party affiliation of the elected governor on personal freedom levels across different states in the United States.

All three RDD estimates for the different categories of personal freedom are insignificant as well when estimating at the optimal bandwidth. The RDD estimate for gun freedom had an optimal bandwidth of 10.426 and a very small positive coefficient. While this was the expected direction of the coefficient, as Republicans campaign on trying to protect gun rights while democrats are more in favor of gun control, it is such a small magnitude and is very insignificant with a p value of 0.808, making the effect non-existent. The RDD estimate for cannabis freedom had an optimal bandwidth of 12.718 and a very small negative coefficient, which is not the expected direction of the of the effect. Democrats typically are more in favor of marijuana legalization and similar policies; however, it is very insignificant with a p-value of 0.753, making the effect of gubernatorial party affiliation equal to zero.

The only estimation that was marginally close to being significant was the RDD estimation for tobacco freedom. The optimal bandwidth for this estimation was 14.375, which was the largest of all four estimations, which could have to do with why it ended up being closer to significance as it had the most observations of 605. The coefficient was negative, which made sense given that Republicans are more likely to support personal freedoms and Democrats are more likely to support preventative policies such vaping regulation or an excise tax on tobacco products, but it was still statistically insignificant with a p value of 0.271.

The most probably reason for insignificance is the different categories of personal freedom index may not have similar directions in states. Because the personal freedom index is not inherently Democratic or Republican, some categories may align with Democrat, while some Republican. An example of this is how a Democratic elected governor may pursue Democratic-adjacent policies that increase personal freedom such cannabis freedom, while they would potentially pursue Democratic-adjacent policies such as universal background checks, which would decrease personal freedom, making the two competing effects cancel each other out. The same is true for Republicans, and because of this, the total effect of personal freedom may not be large as it measuring multiple competing effects when a Republican or Democrat is elected and enact policy changes. It is also possible that changes in party values over time may cause competing effects within parties, as when positions are reversed this would cause opposite effects in a party’s personal freedom value over time. It is also possible that as this index is largely based on estimations from the literature, that there can be inconsistencies with time as there could be a lag from the effect of a policy. As the estimations for the effects of personal freedom policies are found in economic literature, the measured effect of these policies may not be immediately available for the construction of the index.

Given that all three freedom categories were statistically insignificant, it makes sense that the overall personal freedom regression is statistically insignificant as well as it is constructed by these categories as well as a few others. It could be valuable to investigate some of the other categories, however, this would not change the significance of the overall personal freedom variable. Another likely reason that all category regressions were statistically insignificant is due to a lack of data points in each estimation. As the optimal bandwidth only included closely contested elections in analysis, all four regressions only had between 461 to 605 observations in total. It is possible that there is an effect on personal freedom or any of the freedom categories from the party affiliation of the governor, but the data set may be too small to prove that causality, and it is difficult to expand the data set as there are only so many gubernatorial elections. This indicates a possible lack of statistical power in the methodology of the study due to the sample size.

**V. Conclusion**

In this paper, I measure the effect of party affiliation of an elected governor on personal freedom and three categories of personal freedom within each state. The results suggested that there was no effect of being either a Republican or Democrat governor on personal freedom within a state. While there is no precedent for this relationship in the literature, the expected effect of Democratic governors negatively affecting personal freedom and Republican governors positively affecting personal freedom was not present. There was no significant effect present from the regression discontinuity for personal freedom, gun freedom, cannabis freedom, and tobacco freedom. As it would be difficult to add more data due to the limited number of gubernatorial elections and changing party preferences over time, it is likely not possible to get enough data to observe a statistically significant effect of personal freedom.

It could be valuable future research to investigate how different officials from the state legislature affect personal freedom, as there would be more elections to examine to find a more significant effect. While it would not capture the effect of the governor, it could still give important insight into the effects of the two parties on personal freedom. As the sample size could significantly increase from measuring state legislature this could potentially allow for more specific analysis for a shorter period, as parties change values over time. It is possible that due to party shifts in values across over two decades of gubernatorial elections, there are competing effects within different versions of the party at different points in time, and increasing the data set size to decrease the time frame could remedy this. Looking into other categories of the personal freedom index as well as other, similar index values could be also valuable, as it could allow for comparison within literature to try and establish the presence of similar effects.

**Appendix**

**Figure 1.** Density Plot****

**Table 4.** Categories Included in Different Personal Freedom Subcategories Indexes

|  |  |  |
| --- | --- | --- |
| Incarceration and Arrests Index | Gun Rights Index | Cannabis and Salvia Freedom Index |
| -Crime-adjusted incarceration rate  -Drug enforcement rate  -Arrests for nondrug victimless crimes, % of population  -Arrests for nondrug victimless crimes, % of all arrests  -Driver’s license suspensions for drug offenses  -Prison collect phone call rate  -Qualified immunity reform | -Concealed-carry index  -Initial permit cost  -Local gun ban  -Firearms licensing index  -Waiting period for purchases  -Initial permit term  -Open-carry index  -Training or testing requirement  -Stricter minimum age  -Assault weapons ban  -No duty to retreat  -Registration of firearms  -Dealer licensing  -Built-in locking devices  -Restrictions on multiple purchases  -Background checks for private sales  -Design safety standards  -Machine guns  -Ballistic identification  -Retention of sales records  -Short-barreled shotguns  -Short-barreled rifles  -Large-capacity magazine bans  -Sound suppressor  -.50 caliber ban | -Medical marijuana index  -Possession decriminalization/legalization  -Maximum marijuana penalty  -Sales legalization  -Marijuana misdemeanor index  -Mandatory minimums  -Salvia ban |

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1. This election data set was missing some data on certain gubernatorial elections within the range of the personal freedom index data set, specifically Alaska’s elections and later years including 2021 and 2022. To address this, I collected the missing state-based election data manually and appended it to Almani and Algara’s data set after adjusting it to be state-based rather than county-based. [↑](#footnote-ref-1)