Dissertation Synopsis

Part 1: Trade-offs Between Constituent Service and Legislation

It has been well established that the preferences of the affluent are disproportionately represented in policy Republicans create. Yet meaningful political representation comes not only from policy congruence but through constituent service. Socioeconomically privileged people are more engaged with policy, while the less privileged prefer constituent service. It is also clear that representatives from privileged areas respond more effectively to policy requests, while representatives from less privileged areas respond more effectively to constituent service. I propose that the actions of members of Congress should reflect these patterns. Representatives from privileged districts will engage in policy creation more than their counterparts from less privileged areas. Conversely, they will devote relatively more resources to constituent service when they represent less privileged areas. I demonstrate these trade-offs using evidence from three novel datasets covering 2013 and 2014: staffing resources, legislative activity, and Twitter. For Republicans, the majority party, this trade-off between constituent service and policy translates into a 23% increase in legislation by members' of Congress when they represent socioeconomically privileged districts. I also demonstrate that Democrats, who were in the minority and therefore unlikely to be legislatively successful, make a different trade-off between policy and constituent service. Democratic representatives of privileged districts disproportionately publicize policy related activities over constituent service.

Table 1. Estimated change between a privileged and a less privileged district

| | staffing | | tweets | |
	policy	*service*	*policy*	*service*
all	+$7,445	−$11,830*	+14**	−8**
Republican	+$15,453*	−$18,128*	+2	−4
Democrat	+$724	+$5,518	+18*	−12*

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

Table 2. Number of extra bills passed, by district privilege, party, and race

| | privileged district | | Black |
	Republican	Democrat	Democrat
yes	1.95	0.50	1.07
no	1.53	0.42	0.38
difference	0.42**	0.08	0.68**

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

Table 3. Estimated difference between Republicans and Democrats

| | staffing budget | | tweets | | |
	service	policy	service	policy	successfull bills
magnitude	-$1,246	$11,555	−20***	33***	1.29***
p-value	(0.738)	(0.210)	(0.027)	(0.020)	(0.000)

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

Part 2: An Examination and Visualization of Collinearity using the Effects of Education and Income in Politics

Multicollinearity can obscure the effect of variables in regression analyses because it inflates standard errors and reduces statistical significance. Yet the effect of multicollinearity does not only depend on the degree of collinearity present; it also depends on how each explanatory variable affects the dependent variable. I use the collinearity between education and income to demonstrate two cases. In Case 1, the independent effect of each variable is statistically significant despite high collinearity. This is the best case scenario for a scholar interested in understanding the impact of education and income, or any other collinear variables. In Case 2, a joint significance test rejects the null hypothesis that both coefficients are zero. Yet the independent impact of each is obscured because the model cannot reject the null hypothesis that either are differentiable from zero. I discuss two methods that respecify the model in a way that clarifies the joint effect of education and income. Both methods require an exploration of the impact of omitted variables in the models. I then present a decision rule for determining how to handle multicollinearity in each case, as well as a method to visualize the impact of multicollinearity and omitted variable bias.

The example used throughout is the effect of education and income on political outcomes, both at the aggregate and individual level. These two variables help clarify more than the mathematical issue with multicollinearity. They also highlight the different, and occasionally opposing, effects of education and income in politics. That is, the well educated do not always behave in the same way as those who have high incomes. For example, among strong partisans, the highly educated tend to be Democratic while those with high incomes tend to be Republican. This is reflected in aggregate political outcomes: districts with many highly educated constituents tend to elect Democrats, while districts with many high income constituents tend to elect Republicans. I hypothesize some reasons why these differences should appear in politics despite both income and education serving as benchmarks for similar category of cultural achievement.

Figure 1 depicts the two scenarios of multicollinearity. The y-axis represents the number of extra bills passed in a district that is in the upper quartile of districts according to the measure being used (either education, income, or a combined measure), relative to the lower quartile. Solid bars represent statistically significant findings. For example, the bright red bar on the left, which is calculated from the estimated coefficient for income on number of successful bills created, has a magnitude of -0.22 is statistically significant. The faded red bar on the right has a magnitude of 0.09 and is not statistically significant.

Red and yellow bars represent two measures of district income. Red is the best measure when multicollinearity does not inflate standard errors too much to reject

Figure 1: Effects of Collinearity
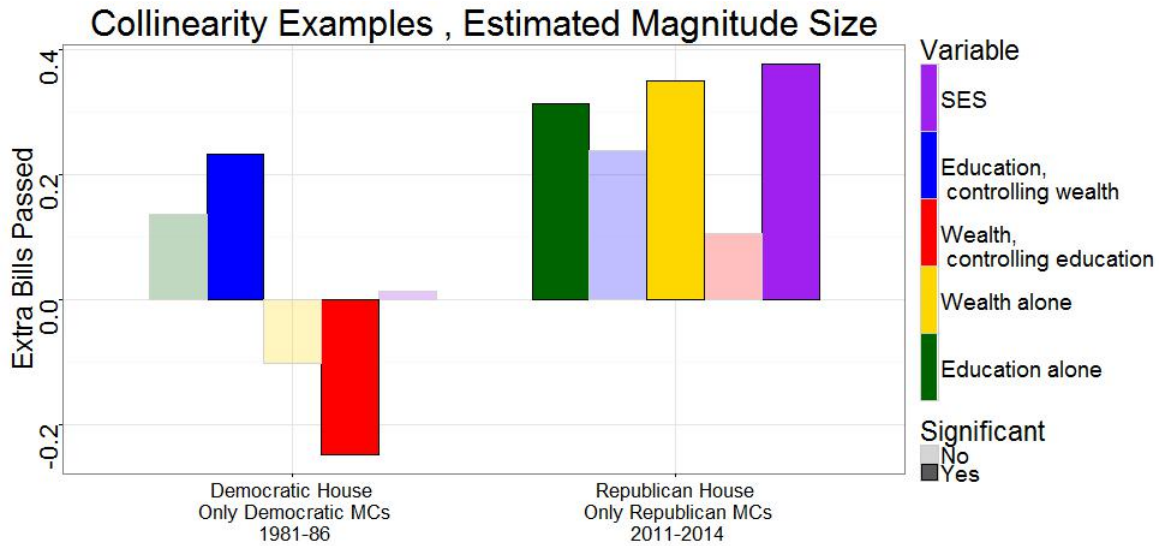
the null hypothesis, as it is calculated from the estimated coefficient of a model that includes both district income and education to explain the number of bills a member of Congress successfully sponsors. The yellow bars are estimated from a model that omits the effect of income, and therefore captures the effect of education on bill success as well.

Similarly, blue and green bars represent magnitude of two measures of district education. Blue is calculated from the estimated coefficient in a model that includes both district education and income. Green is calculated from a model that includes education but omits income, and therefore captures the effect of income on bill success as well.

The purple bar explicitly combines the impact of district education and income using principle component analysis. I call the measure represented by the purple bar socioeconomic status (SES). It is similar to what the coefficients for income (yellow) and education (green) represent in the omitted variable models. Any time collinear variables are omitted, the remaining variables capture part of the effect of the omitted variables. In addition to being explicit about combining the impacts of education and income, the SES measure also generally reduces the variation in the model when compared to the original components, and is therefore a stronger predictor.

The left hand scenario shows Case 1, when multicollinearity does not obscure the effects of income and education in a model that includes both. The red (income) and blue (education) bars are statistically significant and substantively meaningful. This scenario also depicts the effect of omitting a variable when both are meaningful, positively correlated, and have opposing effects on the dependent variable. Namely,

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the coefficients in the omitted variable models are pulled so far towards zero by the opposing effect of the omitted variable that they are no longer statistically different from zero. In this case, the full model that includes income and education provides the best interpretation of the independent effects of income and education. We can see that Democrats in a Democratic House between 1981 and 1986 produced more legislation when they represented highly educated districts (blue), yet produced less legislation when they represented districts with many high income constituents (red).

The right hand scenario shows Case 2, when multicollinearity obscures the effects of income and education in a model that includes both. The faded red (income) and faded blue (education) bars are not statistically significant because multicollinearity inflated the standard errors too much to determine whether income and education are statistically different from zero. Yet it is still meaningful to interpret either the principle component called socioeconomic status (purple) or the omitted variable models of income (yellow) or education (blue). All three measures represent a combined impact of education and income. Omitted variable bias would only occur is we thought of this variable as the impact of education while holding income constant. If we interpret the variable to mean the effect of both income and education, then omitted variable bias is not a concern. While it is impossible to distinguish the effect of income from the effect of education in these three models, it is possible to say that the combined impact of district income and education is correlated with increased legislative success by Republican representatives in the Republican controlled House between 2011 and 2014.

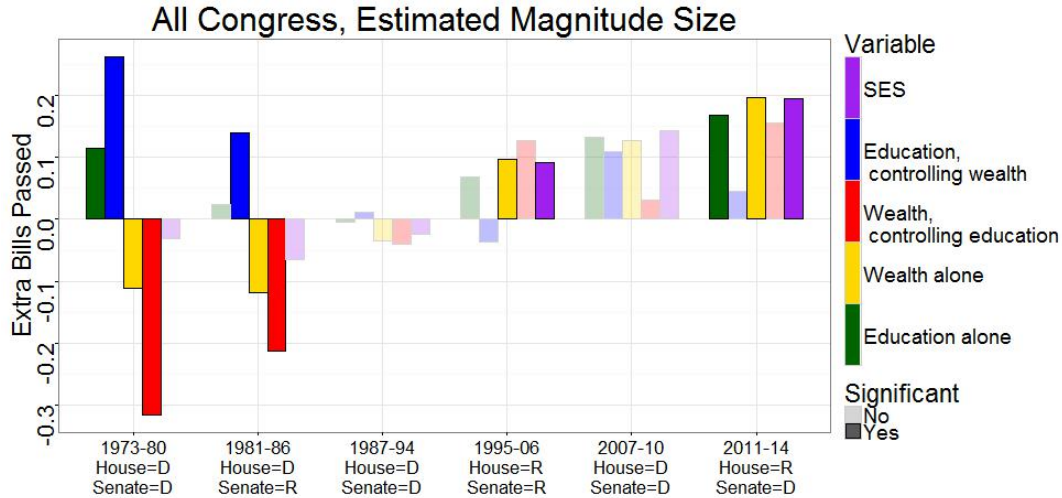# Part 3: Republicans and the Increasing Influence of Affluence Since 1972

In the first part of this dissertation I examined how representatives make trade-offs between constituent service and policy in ways that favor the policy interests of socioeconomically privileged constituents. The trade-offs they made translated into a 23% increase in legislation created by legislators who represent socioeconomically privileged districts. The trade-offs were clearest for Republicans, who were both in the majority party and more ideologically aligned with the interests of the wealthy than Democrats.

In the second part of this dissertation I presented a method for accounting for the collinearity between education and income in two contexts. This is critical to understanding the changing impact of district income on legislative success, as the method to account for the effect of multicollinearity changes over time and by party.

The legislative outcomes data provides a rare opportunity to discover whether the theory from Part 1 holds across time. In Part 3, I introduce a novel dataset that spans four decades and covers legislative outcomes, districts demographics, and personal characteristics of members of Congress. I show that Republican legislative behavior reflects outcomes that are congruent with the trade-off between policy and constituent service so long as they are in control of the House. That is, so long as Republicans are in control of the House, they produce more successful legislation when they represent districts with many high income and highly educated constituents.

This data also allows an examination of the history of the influence of affluent districts in legislative outcomes. Much attention has been placed on the phenomena of rising inequality in the United States. It has been well established that the rich enjoy an ever growing share of the country's wealth. High income individuals are increasingly Republican, and high income districts are increasingly conservative. A recent body of scholarship demonstrates that their influence currently extends into national political outcomes, particularly for Republicans. Yet few studies lift the veil on how much influence the affluent had over policy in prior decades. I propose that because of the increasing economic power of the wealthy, the increasing laxity of campaign finance laws, and the increasing association between the interests of the wealthy and the Republican party, the influence of the affluent has risen over the past forty years. Additionally, because of the ideological congruence between the wealthy and conservatism, Republicans should create more policy when they represent high income constituents. I provide empirical support for both a statistically significant and a substantively meaningful time trend for legislation success based on district income, as well as marked difference between Republicans and Democrats when they are in the majority party. I then examine a few more potential mechanisms for the increasing influence of affluence and the association between Republicans and the interests of the wealthy.

Figure 2: Members of Congress increasingly produce more legislation when they represent districts with many high income constituents, as seen in the red and yellow bars.

1. Is the increased influence of the affluent is a bipartisan trend or specific to a particular party? I find that Republicans increasingly produce more legislation when they represent high income districts, while Democrats have always produced more legislation when they represent more educated yet poorer districts. That is, there is a time trend for the influence of affluence for Republicans, but not for Democrats.

2. Is the increased influence of the affluent for Republicans due to the changing regional base of the party? I find that Southern Representatives have always tended to produce more legislation when they represent high income districts. As the Republican party became more conservative and gained power in the South and the nation, legislative success by representatives from high income districts has increased.

3. Finally, I explore whether the increased influence of the affluent is connected to ideology. I find that as Republican voters have become richer, the ideology of Republican representatives from wealthy and educated districts has become more conservative. Additionally, conservative representatives representing high income districts used to face a penalty in their legislative productivity caused by their conservativeness. That penalty no longer exists, so conservative legislators from wealthy districts are producing more legislation than they used to.