

DISSERTATION PART 3

Republicans and the Influence of Affluence: Evidence from 1972 to 2014

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Abstract

Much attention has been placed on the influence of the affluent in politics. The first part of this dissertation demonstrates that their influence extends into national political outcomes in 2013 and 2014, particularly for Republicans. Yet the importance of affluence for Democratic legislative behavior was not evident. This part of the dissertation introduces a theory to explain this pattern that highlights the importance of majority party control and the differences between Republicans and Democrats. I show that Democrats had minimal opportunities for legislative success because they were not in control of the House in 2013 and 2014. I propose that the influence of the affluent in legislative success should be stronger for Republicans than for Democrats. To test this theory, I introduce a novel dataset that covers forty-two years of legislative outcomes and district demographics. I find that Republicans produce more legislation when they represent high income, highly educated districts and are in control of Congress. Meanwhile Democrats produce more legislation when they are in control of Congress and represent highly educated yet poorer districts. Finally, I propose that the overall influence of the affluent has changed over time. Rich individuals are increasingly likely to be Republican, rich individuals control an ever growing share of the country's wealth, and Republicans have taken control of Congress. Due to these changes and more, I expect that the influence of the affluent has increased over time. I explore whether this increase is solely due to the increasing political power of Republicans. I suggest that these changes reflect not only the increasing power of Republicans, but the changing geographic base of each party. Southern Representatives have always tended to produce more legislation when they represent high income districts. As the Republican party gained power in the South and the nation, the influence of affluent districts on legislative success has increased.

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1 INTRODUCTION

For the past decade or more, economic privilege has translated directly to privilege in a wide variety of political outcomes, including policy, party platforms, and legislative activity. In the first part of this dissertation of this dissertation I demonstrate one mechanism for this political privilege: the socioeconomically advantaged are overrepresented in legislation because representatives, particularly Republicans, from socioeconomically underprivileged districts are disproportionately distracted by constituent service. Meanwhile, representatives from privileged districts disproportionately engage in legislation. The second part of this dissertation demonstrated that because income and education are strongly correlated, this implies that high income districts have representatives who disproportionately engage in legislative activity. Note, of course, that this effect cannot be disentangled from the effect of education. The finding from Part 1 focused on the 113th Congress: 2013-2014. Republicans were in control of the House at this time and are the party affiliated with the interests of high income constituents, so it is unclear whether this effect extends beyond Republicans. Since the economic power of the affluent has increased over the past fifty years, the Republican party has gained political power, and the affluent are increasingly Republican, I propose that this effect will be strongest for Republicans in the modern era.

I propose that Republicans are more sensitive than Democrats to the economic power of their core constituents. Republicans have historically been the party of business interests and the economic elite. Democrats have been the party of the ivory tower, the working man and minorities (Ansolabehere, Rodden, & Snyder, 2006; Gelman, Kenworthy, & Su, 2010; McCarty, Poole, & Rosenthal, 2006). Indeed, studies show that Republicans are responsive to the interests of high income

constituents, while Democrats are either more responsive to the interests of the lower classes or show no effect either way (Carnes, 2013; Ellis, 2016, 2013; Brunner, Ross, & Washington, 2013; Rhodes & Schaffner, 2017; Lax, Phillips, & Zelizer, 2018; Rigby & Maks-Solomon, 2018; Grossmann & Williams, 2018). The findings in the first part of this dissertation show similar results. Republicans are disproportionately invested in legislation when they represent districts with relatively more socioeconomically privileged constituents. Thus, it is plausible that Republican legislative behavior is more strongly tied to the economic characteristics of their constituents than it is for Democratic representatives.

This effect should be particularly evident after 1994, since Republicans did not control the House for the forty years prior to 1994 and thus lacked agenda control. The effect of the majority party for agenda setting and legislative success is substantial. The policy agenda of the party in control of the majority tends to be reflected in the content of bills created by the party in the minority as well as the majority (Ballard, 2018; Cox & McCubbins, 2005). I show in this part of the dissertation that the sheer number of successful bills created by the minority party sponsors is substantially reduced as well. With a reduced freedom on the kinds of bills they can create that are likely to be successful, the connection between the preferences of their constituents and the way they legislate will be mitigated. Thus, when Democrats are in control of the House, the connection between district affluence and Republican legislative success should be reduced.

Evidence for the effects of partisanship on the influence of the affluent comes from a novel dataset covering forty years of legislative history. It reflects the amount and success of legislative activity in Congress from 1972 through today, then connects it with socioeconomic characteristics of their constituents. This creates a his-

torical profile of how members of Congress have represented different constituencies. The dataset includes legislative, personal and professional information for members of Congress, and political and demographic characteristics. It associates the legislative activity of members of Congress with the affluence of their districts, as well as other demographic district characteristics such as education and race. While previous studies have used piecemeal evidence to look at the historical influence of high income constituents, this datasets covers forty-two years using a consistent measure and controls. The depth and breadth reveals not just the history of affluence, but also the differences between Republicans and Democrats. It allows the results to be analyzed by region, which reveals some interesting patterns within Southern representatives.

The strength of this dataset comes from the consistency of measures across 42 years, but this consistency comes at the expense of the direct links between constituent preferences and the content of bills. I rely on existing work to support this connection. There is a strong connection between legislative content and constituent preferences (Brunner et al., 2013; Erikson, Wright, & McIver, 1993; Highton & Rocca, 2005). The association is particularly strong for, and often appears driven by, Republican legislation on economic issues and the preferences of rich Republican constituents (Broockman & Skovron, 2018; Gilens, 2012a; Lax et al., 2018; Rhodes & Schaffner, 2017; Grossmann & Williams, 2018). Additionally, Republican legislators tend to vote in favor of bills that benefit the rich (Carnes, 2016). Thus, it is reasonable to infer that if Republican representatives of high income districts produce more legislation, that legislation reflects the preferences of the rich.

I find that Republicans are more legislatively than Democrats successful when the represent high income districts since the Republican revolution of 1994. This

effect is comes with several important caviats. First, there are important differences between Democratic and Republican controlled Houses. Second, while the independent effect of income is consistent with the joint effect of income and education, there are substantively meaningful nuances. As I showed in Part 2, most districts with high income are also highly educated and the independent effect of income can only describe a small portion of the total range of possible district income levels. Thus, it is important to consider the joint effect income and education as well as the independent effect of income.

Specifically, in Democratic Houses after 1994, Republican representatives from high income districts did produce more legislation relative to low income districts, but only when comparing districts with similar levels of education. Because Republican representatives from highly educated districts produced *less* legislation relative to Democrats, and because high income districts also tend to be highly educated, there is no statistically significant effect on legislative productivity for most Republican representatives from high income districts. This is because most high income districts are necessarily highly educated. The effect is different in Republican controlled Houses. Republicans representing high income districts tend to be more legislatively productive than Democratic representatives from high income districts, but the effect appears to be driven by district education, not income.

Throughout, the magnitudes of these effects are substantial. Republicans in a Republican controlled House who represented districts in the top socioeconomic quartile sponsored an additional 0.11 successful bills per Congressional session compared to those representing the bottom quartile. The expected number of bills passed per Congressional session for a Republican representing a district in the bottom quartile in this time period was 1.96. This is a 5.7% increase in legislative

success compared to representatives from less privileged districts. For Democrats in a Democratic controlled House, a representative of a district in the a highly educated district (top quartile) could expect to pass 0.24 more bills than an equivalent representative from a district at the bottom quartile of the education spectrum. This translates to 11.1% more legislative success. The differences between Republicans and Democrats are statistically significant.

These findings have implications for the historical influence of the affluent. Republicans have only been in control of the House in the following years: 1995-2002, 2003-2006, and 2011-present. Democrats controlled the House between 1955 and 1994. If it is only Republicans who favor the rich, then the influence of the affluent should have been diminished prior to 1994. There are other trends as well that should be associated with a reduced influence of the affluent in the past. One such trend is that the economic power of the rich has increased (Piketty & Saez, 2003) as campaign finance laws have become more lax (La Raja & Schaffner, 2015). Another is the fact that the rich are increasingly voting for Republicans (Gelman, 2009), and high income districts increasingly have Republican representatives (McCarty et al., 2006). Both indicate that the power of money and the association between the interests of the rich and the Republican party have increased.

While these trends indicate that legislation should increasingly favor those with high incomes, no study has been able to reveal this pattern on a yearly basis, with the ability to disambiguate partisan and regional differences. This part of the dissertation shows that representatives from high income districts produce more legislation relative to representatives from less high income districts than they did in the past. I show that the increase in legislative productivity by representatives of high income constituents is driven by the resurgence of Republican power.

Although it is well established that the preferences of high income constituents are more influential in policy (Rhodes & Schaffner, 2017; Lax et al., 2018; Grossmann & Williams, 2018) there is also a general sense that the socioeconomically elite have generally held more sway in politics. This is evident in legislative outcomes when elite status is measured according to educational attainment as well as income. While representatives of high income districts were not generally more legislatively successful prior to 1995, representatives of highly educated districts were. Thus, the socioeconomically elite were still favored but only in terms of education. Democratic produced more legislation when they represented highly educated districts. This result is somewhat surprising; while the Democratic party currently gets a disproportionate number of highly educated voters, this was not true prior to 1995.

The Declaration of Independence holds that “all men are created equal,” but does this mean that all men (and women) should be equal in political representation? One prominent theorist, Robert Dahl, encapsulated a common answer: yes, governments ought to be responsive to the interests of all citizens, considered as political equals (Dahl, 1972, p. 1). That is, citizens should be represented equally, regardless of socioeconomic status. This part of the dissertation demonstrates that social status has mattered for political representation, but in different ways for Republicans and Democrats. Republicans tend to be more effective when they represent constituents who are more likely to agree with the policy platform of their party: high income individuals. Democrats tend to be more effective when they represent districts with large numbers of highly educated individuals. Intriguingly, Democrats actually produced less successful legislation when they represented high income districts in the past.

2 BUILDING THEORIES of PARTY DEPENDENCE and TIME

For three decades, scholars studying the politics of class focused on political engagement. A wealth of evidence showed that, by and large, the rich were more engaged in the political process. They knew more, were more likely to contact their representatives, and were more likely to donate (McLeod & Perse, 1994; Verba & Nie, 1972; Schlozman, Verba, & Brady, 2012). But the policy impact of this participation remained obscure.

Then, over the course of the past decade, political science gained the tools necessary to manipulate and analyze larger datasets that could reveal the political impact of the rich. This was timely, because skyrocketing economic inequality and the increasingly power of the Republican party implied that the rich should also be gaining political power, as did the theory that politicians should be swayed most by their core circle, which is increasingly likely to be rich (Fenno, 1978; Carnes, 2013). These studies resulted in clear evidence of political bias towards the rich across a host of political outcomes. When the preferences of the poor and the rich diverge, policy reflects the preferences of the rich, particularly in safe districts with high inequality (Gilens, 2012a; Ellis, 2013). Senators are more responsive to the ideological and policy preferences of the rich (Bartels, 2008). On foreign policy, most branches of government do not respond to the will of all constituents, instead focusing on the preferences of experts, business, and labor leaders (Jacobs & Page, 2005). In that study, the exception was the House, which has a history of being the most responsive branch of government to the will of the people. Without question, the rich are better represented than the poor. Looking at policy promises instead

of policy outcomes, we can see the bias towards the rich in state party platforms (Rigby & Wright, 2013). From policy promises to policy outcomes, the influence of the affluent is evident.

The party in control of Congress will also have an effect on legislative success. Members of Congress in the majority party are better equipped to create successful legislation. More than that, the majority party serves as an agenda setter. The kind of legislation the members of the minority party create will often reflect the agenda preferences of the majority (Ballard, 2018; Cox & McCubbins, 2005; Ramey, 2015). The minority party should create less successful legislation, but also see a lot of the majority party's ideology in the content of the bills sponsored by the minority party.

The influence of the affluent is increasingly attributed to Republicans, not Democrats. Evidence indicates that Republicans represent the interests of the rich better than Democrats, particularly on economic issues. Republicans are more likely to match the ideologies of their constituents when their constituents are rich, whereas Democrats are more likely to match the overall ideological preferences of poorer constituents. On specific issues, Republicans matched the issues of the very high income better than poorer respondents (Rhodes & Schaffner, 2017; Rigby & Maks-Solomon, 2018; Lax et al., 2018; Grossmann & Williams, 2018). Republicans are more likely to vote in favor of bills that support the interests of the rich (Carnes, 2016; Brunner et al., 2013; Ellis, 2013). Both parties tend to overestimate the ideological conservatism of their constituents, but the effect is much stronger for Republicans (Broockman & Skovron, 2018). Republicans tend to nominate more extreme candidates (Broockman, Carnes, Crowder-Meyer, & Skovron, 2017), and are less open to compromises with liberals that might push policy away from the ideological right (Clinton, 2006; Glaser & Berry, 2018). Under the assumption

that extreme conservative policies are more likely to favor the economic interests of the rich, these biases will lead Republican legislators to favor the interests of the rich. Democrats also sometimes represent the preferences of the rich, but it is less frequent and tends to revolve around moral issues instead of economic issues (Rigby & Maks-Solomon, 2018). This does not indicate that Republican politicians do not generally match the preferences of their constituents, merely that the match to the preferences of their rich constituents is better.

These patterns match the ideological platform and demographic base of each party. While Republicans tend to win the votes of the rich, Democrats have become increasingly well educated (Gelman, 2009; McCarty et al., 2006). Republicans took on the interests of the business class starting in the 1920s, and Democrats shifted towards the working class under Franklin Roosevelt (Ansolabehere et al., 2006). Under Reagan, Republicans made an active effort to start producing policy that reflects the interests of the rich (Druckman & Jacobs, 2011).

Despite the differing levels of responsiveness to different socioeconomic demographics, this line of research generally validates the overall connection between preferences of constituents and the actions of their representatives. Whether the measure is policy preferences or overall ideology, the votes by legislators tend to reflect the preferences of their constituents, particularly in the House (Brunner et al., 2013; Erikson et al., 1993; Highton & Rocca, 2005). The connection is not always perfect as Dahl's ideals demand. These exceptions tend to generate interest, but even the studies that show that the rich are more influential in policy show that this is a matter of degree instead of kind. The preferences of people of all income levels are highly correlated with each other, and the preferences of the poor are reflected in policy even though the connection is stronger for the rich (Gilens & Page, 2014).

Legislators tend to be more extreme on issues than their constituents (Bafumi & Herron, 2010) but this can coexist with a correlation between the policy preferences of constituents and their representatives. On foreign policy, the House as a whole votes in a manner that is tied to the preferences of the public (Jacobs & Page, 2005). For the Senate, which tends to be less closely tied to constituents than the House, Senators reflect the preferences of registered voters, albeit worse than they reflect donor preferences (Barber, 2016). The tie between preferences of the poor or middle class and policy is the strongest for social policy (Gilens, 2012a). Overall, the predominance of evidence indicates that legislators tend to reflect the preferences of their constituents, although they are even better at reflecting the preferences of the rich.

The representation of the rich through policy has become increasingly relevant as economic inequality has risen. The past two decades have featured a clear and dramatic spike in the level of economic inequality. High income individuals, particularly the top 1%, are earning over 20% of the country's income for the first time since 1930. Between the end of World War II and the beginning of Reagan's administration, the top 1% earned on average around 11% of the country's income (Saez, 2015). Meanwhile the poor have sunk into deeper poverty (Schlozman et al., 2012, p. 73).¹ The level of income inequality today is equal to or worse than any time since the United States started tracking income in 1913. Yet the historical basis of the influence of the affluent has remained largely obscure.

At the same time as economic inequality has skyrocketed, the power of Republicans has been increasing (Gelman, 2009; Gelman et al., 2010; McCarty et al.,

¹This depth of poverty is obscured by the poverty line. Although the percent of the population below the poverty line has not increased dramatically, the number of those below the poverty line who live in deep poverty has increased.

2006). Gelman (2009) finds that although richer states tend to vote Democratic, richer individuals tend to vote Republican. This effect has increased over time, particularly since 1990. He shows compelling evidence that something changed around 1990 with respect to partisan voting patterns, a finding that is reflected throughout this part of the dissertation. Republicans should be increasingly tied to the interests of the rich. Republicans have taken control of not just Congress, but also increasing numbers of state legislatures. If it is Republicans who represent the interests of the rich, then prior to the Republican take over of Congress in 1994, the interests of the rich should be less reflected in legislation and policy.

There are many suggestions that the political power of the rich should have increased along with their economic power. Campaigns have become increasingly expensive, increasing the value of those who donate large sums. Since those who donate are generally rich, and the rich donate more, the relative value of rich donors increases along with the increase in campaign costs. The composition of the legislative body has switched from being plurality farmer to plurality lawyer over the past century (Carnes, 2013). This should increase the number of politicians whose inner circle is rich. As Fenno (1978) argued, politicians listen to their inner circle more than other constituents, so this trend will bias them towards the interests of the rich. There are suggestions that the rich have become increasingly insular (Putnam, 2000). Since the legislative body is primarily drawn from the rich, they may have reduced visibility into the lives and needs of others. Reagan made a concerted effort to pander to the preferences of the rich, a move that was unusual at the time (Druckman & Jacobs, 2011). From the comparative perspective, more economically unequal societies tend to also be less politically equal (Rosset, Giger, & Bernauer, 2013). Although the increased economic power of the rich should track

with increased political power, the empirical evidence has not yet been demonstrated systematically.

A few investigations have examined policy responsiveness from a historical perspective in the United States. There is mixed evidence regarding changes in the influence of the affluent over time. There is some evidence that responsiveness to the poor may have been stronger in the past. Gilens (2012a) covers four years of the 1960s, then almost all years between 1981 and 2006, showing that overall policy responsiveness has increased not just for the rich but also for the poor. There is also some indication that in the 1960s, policy responsiveness for the rich was dramatically reduced or nonexistent. This four year time period does not have statistically significant results, and there is no clear time trend in policy responsiveness to the rich (Gilens, 2012a).

Barker and Carman (2012) show changing legislative behavior that reflects changing ideologies. Over the past forty years, Republicans have started to behave as though their constituents prefer trusteeship representation. This style of representation prioritizes the best judgement of the elected official over the preferences of his or her constituents. In other words, the specific policy actions of Republican legislators do not necessarily need to reflect the interests of their constituents. Under trusteeship representation, a legislator merely needs to make the case that they agree with the broad values of their constituents and are acting with their best interests in mind. Because Republicans tend to side with the interests of the rich anyways (Carnes, 2016; Lax et al., 2018; Rhodes & Schaffner, 2017), poor constituents could expect to see Republican politicians support fewer and fewer of the policies they would prefer. Grossmann and Hopkins (2016) tend to agree that Republicans prefer ideology and character to specific policy interests, although they

do not find evidence that this has increased over time.

Finally, McCarty et al. (2006) trace the impact of district socioeconomic characteristics on legislator ideology back over the past forty years. They find that high income districts are increasingly likely to have legislators who are more conservative. In Part 2, I replicated and expanded on their findings. I found the same, but showed that this is because the effect of district socioeconomics has increased for Republicans, not Democrats. Republicans are now voting to support conservative bills more often when they represent high income districts. Under the theory that conservative bills protect the interests of the rich, this is yet another way in which Republicans have become a party that favor the rich. It also provides one cause for the increase in the number of bills that legislators from high income districts create: Republicans from high income districts are more likely to support said bills.

The dataset I introduce is well suited to testing the historical bias toward the rich for Democrats and Republicans alike. The measure used in this paper, legislative activity, is drawn from studies of African-American representation (Rocca & Sanchez, 2007; Keane & Griffin, 2009; Tate, 2003). It does not tie specific issues to constituent preferences, which reduces the amount of detail visible. Yet when specific issues are isolated, fewer bills are available to analyze. The additional observations available when we look at all bills lends substantial power to my analysis. It captures the repeated effect of trying to change policy in every bill that becomes law. Additionally, the historical detail and depth of the data used here lets me uncover patterns between education, income, and political outcomes, as well as find the power of using a combined socioeconomic measure that unites education and income.

Legislative activity will trace the historical trend of political bias for the rich.

But why would legislators from high income districts have more success in legislation in the first place?

The obvious answer is that legislators from high income districts have more financial resources to support policy creation. Yet there are a number of reasons to suspect this is not true once you get into the weeds of how policy is made. Members of Congress get a set budget for expenditures on activities related to their job. In 2014 this was around \$940,000 per year to spend on staff, and around \$250,000 to spend on material support. This amount does not vary by district income and there are strict rules against using outside funds to support legislation. Legislators who use outside funds to support legislation face the serious threat of lawsuits (Ballard, 2018). So financial resources are not a likely explanation for why legislators from high income districts create more successful legislation.

Outside of financial backing, district demographics can influence legislation due to constituent preferences over representation that are tied to demographic factors. For example, the previous part of the dissertation shows that Republican legislators from rich districts devote more staffing resources to policy instead of constituent services or communication. Additionally, politicians themselves tend to be high income and are likely to have policy preferences that reflect that background. We have seen that politicians tend to discount the opinions of those they disagree with (Butler, Volden, Dynes, & Shor, 2017), so politicians who represent high income districts may feel more comfortable creating legislation simply because their own internal preferences coincide with their constituents. Finally, the rich care more about policy (Schlozman et al., 2012), and politicians are more likely to seek to create policy when their constituents care about it (Sulkin, Testa, & Usry, 2015).

Both constituent preferences and the ideological biases towards the rich are

likely to be most evident for modern Republicans. As Grossmann and Hopkins (2016) show, Republicans are becoming a party less likely to reflect the concrete policy interests of all constituents. Yet they still represent the economic policy interests of the rich, which indicates that they have been freed from representing the preferences of the poor. I showed in part 1 of the dissertation that this is reflected in legislative outcomes: Republicans, but not Democrats, are more likely to create successful legislation when they represent high income and educated constituents in the modern era. In previous eras constituents who cared a lot about policy were less likely to be swayed by the ideological congruence of their member of Congress. Overall, there was a stronger preference for constituent service, which is more likely to increase bipartisan respect than is policy representation (Lapinski, Levendusky, Winneg, & Jamieson, 2016). Legislators from poor districts, at least in the modern era, should be less successful in legislation simply due to focusing on non-policy activities. Given that Republicans prefer trusteeship representation (Barker & Carman, 2012) and are more likely to value personal character (Jarvis & Jennings, 2017), this effect should be amplified for Republican legislators in the modern era.

3 DATA

I introduce a novel dataset that traces records of legislative activity and demographic data from 1973-2014. It uses the House of Representatives alone, which offers at least 435 observations per year of a wide variety of rich, poor, educated, and less educated districts.² Of the various branches, the House is also the most closely tied

²Nearly all years have slightly over 435 members of Congress because some members leave in the middle of a Congressional session and have to be replaced. In order to account for the members who only served a partial term, I weight the regressions by the percent of the term each representative served.

to the preferences of constituents. The connection between legislative behavior and constituent opinion tends to be the strongest in reelection years (Kuklinski, 1978; Canes-Wrone & Shotts, 2004), and the House offers the most frequent election cycles of the various branches of government. The House also has the smallest constituencies of the federal government, averaging around 750,000 people per district in the modern era. The goal is to tie legislative activity to constituent characteristics, both of which are tied to constituent preferences.

I collected data from multiple sources covering legislative activity, legislator characteristics, Congressional session information, district political characteristics, and district demographics. The variables included in this novel dataset are summarized in Table 1. The dataset is available from Harvard’s DataVerse (Foster-Molina, 2017). I summarize the variables available in the dataset in Table 1. Definitions of each variable listed are available from DataVerse. I provide explanations for those variables used in this analysis as they become relevant.

The unit of observation is one representative in one congressional session. This yields 9,194 observations across 42 years and 73 variables. The number of unique representatives in this dataset is 1,833.

Table 1. Dataset Variables

legislative activity	legislator characteristics	Congressional session characteristics	district political characteristics	district demographics
sponsored	DW-Nom 1	maj party	Cook scores	median income
passed house	DW-Nom 2	maj percent		mean income
enacted	partisan extremity	Dem seats		% over income \$x k
cosponsored	committees	Rep seats		Gini
% successful	party ID			socioeconomic
	# of committees			% unemployed
	powerful coms			% not employed
	committee chair			% BA degrees
	ranking member			% HS degrees
	days served			% white, black
	% days served			% asian, multi
	state and district			% not hispanic white
	ICPSR ID			% not hispanic white, black
	GovTrack ID			% old
	name			median age
	age			% ex aliens
	gender			% foreign
	hispanic			% recent arrival
	black			% abroad
				total populations

I drew this information from a variety of sources. Census data for the 1990s, 2000s,

and 2010s comes from a government website. Census data for the 1970s comes from the ICPSR, and the data for the 1980s comes from <https://www.nhgis.org/>. In total I collected all publicly available censuses: 93rd, 98th, 99th, 106th, 109th, 110th, 111th, 112th, and 113th Congresses.³ Thus, my analysis for the 1970s draws entirely upon data from the 1970 census. The data for the 1980s is similar. The natural consequence of this is that my estimates are less precise for later parts of each decade. The census data for the 2000s and 2010s are updated almost every year, and therefore all of my demographic estimates for each Congressional session should have the same level of precision for the last 13 years of my analysis.

The legislator activity and characteristics data come from govtrack.us, an open source website that scrapes the government legislation pages regularly and produces various .xml and .json files for every bill introduced and every member of Congress since the first Congress met in 1789. This also supplies committee membership for the 109th-113th Congress, which I supplement with committee information from the Legislative Effectiveness Project (Volden & Wiseman, 2014) for the 93rd-108th Congresses. I augment these data with nominate ideology scores from Keith Poole's website. I found district partisanship from Cook scores, available for the 109th to 113th Congresses, and calculated Cook scores from census district vote data for the 1970s. Legislator minority identification comes from people.house.gov, and is hand coded for each Congressional session.

I choose to focus on the number of bills a member of Congress sponsors that are approved by the entire House of Representatives. This captures a type of policy representation. Sponsoring successful bills requires effort from both the represen-

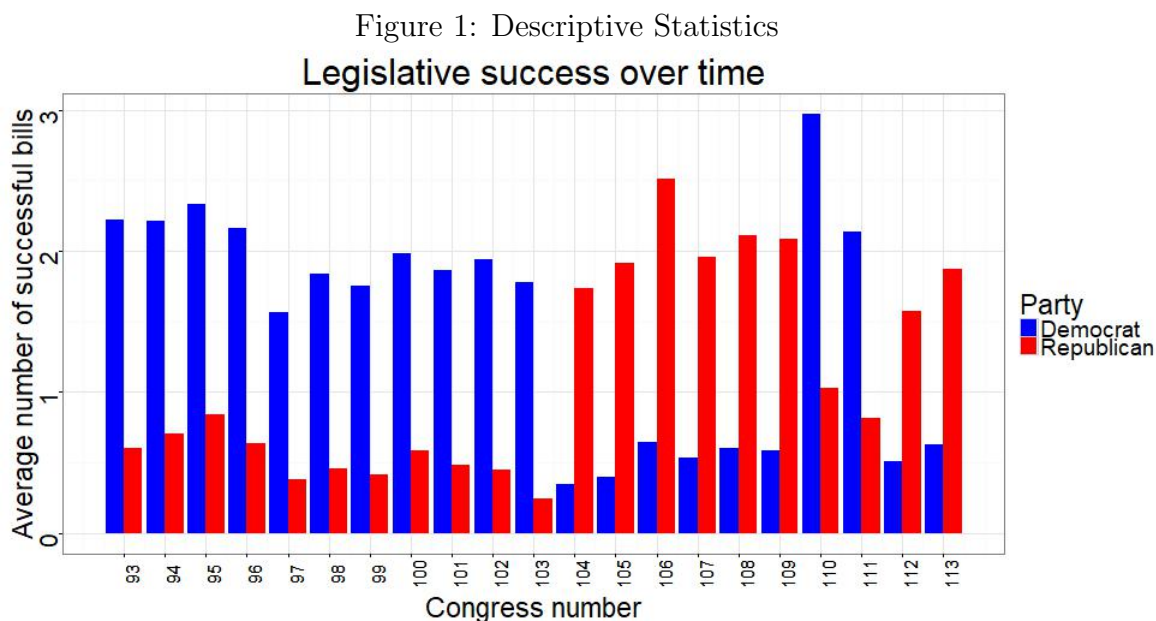
³The 99th Census data is used to update the district information for the following ten states that had court ordered redistricting between 1980 and 1984: California, Hawaii, Louisiana, Maine, Mississippi, Montana, New Jersey, New York, Texas, and Washington.

tative and their staffers. Few sponsored bills are ever reported out of committee, the first major hurdle in the legislative process. Of those, even fewer pass the first chamber. From 1973-2014 only 8.3% of all sponsored bills were approved by the House. Bill sponsorship does not necessarily capture the amount of effort a representative is putting into policy representation. All one has to do to sponsor a bill is tell the House clerk that you want to sponsor a bill. They are useful to claim credit for policy congruence without actually doing the work to deliver the policy,⁴ but the vast majority never make any progress at all through the legislative process. It is safe to say that many of these bills were never intended to make progress, but were simply cheap talk. Indeed, text analysis can clearly distinguish these cheap talk bills from their counterparts that get reported out of committee (Ballard, 2018). A bill that progresses through the House is likely to be more than cheap talk. The process of deciding the kind of bill that will likely be passed, then lobbying colleagues to ensure its passage, is much more involved than simply sponsoring a bill. There is also the danger that if a poorly thought out bill is enacted into law, an opponent will use it as leverage in a future campaign. Legislation that passes the House serves as a useful proxy for the time and effort a member of Congress devotes to policy representation.

Figure 1 shows the average number of bills each member of Congress sponsored that passed the House in a given Congressional session, from the 93rd House in 1973-74, through the 113th House from 2013-2014. The average number of bills passed ranges from a high of 2.97 bills per Democratic member of Congress in the 110th House (2007-2008) to a low of 0.24 bills per Republican member of Congress in

⁴Anecdotally, constituents contact regarding policy are often reassured by evidence of sponsored bills waiting to be voted on. They are less likely to track what happens to a bill, or to blame their representative for failure to progress. It is very easy for members of Congress to shift blame to the rest of Congress, and there are plenty of anecdotal reports of exactly this.

the 103rd House (1993-1995). Naturally, the party in the majority has much more successful legislation than does the party in the minority. On average, members of the majority party passed 2.026 bills per Congress, although the median number of bills passed was 1. Member of the minority party passed only 0.562 bills per Congress, although the median number was 0.



Legislation that passes the House is one way to influence policy outcomes. Any biases toward the rich in legislation will be reflected in policy. There is evidence that Republican legislators from high income areas vote for and sponsor bills that favor the interests of the rich (Carnes, 2016). If legislators from privileged areas are also more productive legislatively, then we can expect more overall policies that favor the interests of the privileged. This is exactly what happens. I show that the time periods in which legislators from socioeconomically privileged districts are more active in legislation are the same as those time periods that policy reflects the preferences of the rich in Gilens' data (Gilens, 2012a, 2012b). While it would be ideal

to only look at the number of bills a member of Congress sponsored that became law, there are two strong reasons not to. For one, a member of Congress can be expected to influence the legislative process much more within their own chamber. Two, the Senate is often controlled by a different party than the House. As I showed in the previous part of the dissertation, Democrats and Republicans behave differently with respect to how they represent the socioeconomically privileged and those who are not. For these reasons, the impact of district privilege will be obscured once a bill gets to a Senate controlled by the opposing party. Neither of these problems hold for how many bills pass the House, so I choose to focus on this measure.⁵

The primary independent variables are district income, district education, and a combined measure of district socioeconomic status. The second part of the dissertation discusses the ways I deal with the multicollinearity present between these measures. District income is measured as the percent of a legislator's district that earned over \$75,000 per household per year in 2016 dollars. This captures the percent of the district that is high income. The cutoff for this is not always perfectly \$75,000, as the value changes according to inflation and the income brackets used by the census. It is always in the range of \$65,000-\$75,000 in inflation adjusted 2016 dollars, and always falls above the median income of the nation at the time. The results are consistent across a variety of income measures. The secondary independent variable is district education, which is measured as the percent of the district with at least a bachelor's degree. All parts of the analyses separate Republicans from

⁵The results are consistent with a variety of other measures, including the percentage of sponsored legislation that was successful and the probability that any given bill passes based on who sponsored the bill. Results for the amount of legislation that was successfully enacted into law produces weaker results that are in the same direction as the results presented here, with larger standard errors. This is to be expected; I speculate that if the ideology of the Senate and president were included in the analysis, the results would be stronger. I also ran these models with a legislative effectiveness score (Volden & Wiseman, 2014). The results remain essentially the same.

Democrats because the ideologies of each party create different kinds of responses across district economic and educational levels. The socioeconomic variable is a linear combination of education and income based on factor analysis. This helps deal with the collinearity between district income and education, especially when they are both positively correlated with more successful legislators. The second part of this dissertation discusses the method for dealing with each variable when district income is negatively correlated with legislative success and district education is positively correlated. These opposing effects of education and income happen throughout the 1970s and 1980s.

I examine these variables not just for an individual congressional session, but to look at the changes over time and by party control of Congress. Therefore, I control for the year the Congressional session started, and the party in control of the House of Representatives in the models that incorporate the entire dataset. For the purpose of presentation, I also use the time periods and partisan control of Congress to create graphics depicting the changes over time.

I control for the following seven variables that are common used and thought to have independent effects on legislation. These are black population size, the party of the member of Congress, their ideology, seniority, racial identification, and two measures of committee membership. As I show, this dataset has many more measures than the ones I chose to include in this model. I chose the variables that were theoretically significant. A few proved to only add noise to the model, including the Cook scores, how far the member of Congress was from the ideological mean of their party, and the median age of the district. Because none of these three variables provided any independent explanatory power, I omitted them from the final model. Each of the controls I do include have strong effects on the legislative

activity. For example, a committee chairperson successfully sponsors an average of 2.68 bills. This is nearly a 100% increase over a someone who is not a committee chair, who sponsors an average of 1.36 bills.

In order to account for the changing impact of being black in Congress on legislative activity, I include an interaction term between Congressional Black Caucus membership and the year.⁶ Specifically, prior to 1988, black members of Congress were less legislatively successful than white members of Congress, controlling for district socioeconomics and partisanship. This magnitude of the effect was substantial. The average number of successful bills sponsored per congressional session is 1.4. Black members of Congress sponsored 0.61 fewer successful bills than other Democratic members of Congress with similar district demographics and institutional power. Their similar white counterparts sponsored 1.7 bills total per congressional session. This effect reverses after 1995. Black members of Congress sponsor an extra 0.60 successful bills than similar counterparts. Their white counterparts sponsored 1.21 total bills.⁷ This means that in the 1970s and 1980s they were 36% less legislatively successful than the average member of Congress, while after 1995 they were 50% more successful.

4 THEORY

The first part of this dissertation shows that Republicans, but not Democrats, devote more resources to policy when they represent high income and highly educated districts. Yet what this means for how Democrats behaved, or how representatives of either party behaved in the past is not immediately obvious. Two facts stand

⁶All black members of Congress belong to the Congressional Black Caucus

⁷Post-1995 Democrats sponsored fewer successful bills because they were less often in the majority than Democrats prior to 1988

out. First, Democrats were in the minority party and had fewer incentives to devote resources to policy because they were not expected to be legislatively successful. Thus, the concrete monetary trade-offs they made might have been obscured. Second, Republicans are more ideologically aligned with the interests of the wealthy, and so they may be more sensitive to the preferences of the wealthy. This section examines the reasons why legislators from high income and highly educated districts would create more legislation. I use this to develop two theories for differences between Republicans and Democrats and the historical influence of affluence.

There are a host of reasons why representatives from high income districts would prioritize policy more than those from low income districts. Many of them involve the perception that since the time of Roosevelt, crystallizing under Reagan (Druckman & Jacobs, 2011), the Republican party has been viewed as the party of the upper middle class and business interests. Democrats now represent the interests of the working class and ivory tower (Ansolabehere et al., 2006).

- As shown in the first part of this dissertation, those with high incomes care more about policy relative to other kinds of representation. Thus, representatives from high income districts will be incentivized to provide more policy.
- Again referring to the first part of the dissertation, representatives from high income districts will be less distracted by the demand for constituent service from their low income constituents, simply because they have fewer low income constituents.
- The wealthy contact their representatives more often, so representatives are more likely to be aware of the preferences of the wealthy. This is particularly strong for Republicans (Broockman & Skovron, 2018).

- The connection between the preferences of the affluent and the kinds of policies their representatives support is strong (Gilens, 2012a; Gilens & Page, 2014; Bartels, 2008). The link is particularly strong for Republicans (Rhodes & Schaffner, 2017; Grossmann & Williams, 2018; Carnes, 2016; Lax et al., 2018).
- Politicians are increasingly wealthy (Carnes, 2012), and therefore are more likely to be personally aligned with the interests of their wealthy constituents. This will be particularly strong for Republicans, as the ideological platform of the Republican party is also more strongly aligned with the interests of the wealthy. Democrats have been the party of the working poor, so this should be weaker for Democrats.

Although similar incentives for policy creation apply to representatives from highly educated districts, there are some key differences. On the one hand, there are severe limitations on the data that links the preferences of the well educated to the kinds of policies their members of Congress support. This is largely because scholars have not focused on education as an independent driver of legislative behavior, due to the difficulties with interpreting the joint and independent effects of strongly correlated variables, as well as an impression that education and income provide similar partisan incentives to both politicians and constituents. Yet there is some evidence that indicates there should be a link distinct from the link caused by income, and that it should be magnified for Democratic representatives because Democrats are the party of the educated.

- The highly educated know more about policy (McLeod & Perse, 1994), and should be more likely to approve of the performance of their representatives based on policy congruence. This is particularly strong for Democrats, as the Democratic party is the party that advocates policy congruence with the

interests of multiple communities in the United States. Republicans are more likely to defer to the wisdom of their representatives (Barker & Carman, 2012).

- The preferences of the highly educated and their representatives should be better aligned, as representatives overwhelmingly have college degrees (Carnes, 2013). Politicians are more likely to embrace the perspectives of their constituents when they agree with them (Butler et al., 2017). This should be particularly strong for Democrats, as they are the party of the Ivy League and highly educated.
- It is possible that representatives from highly educated districts are less distracted by constituent service. Yet the only study I am aware of on the preferences of constituents based on educational attainment is mine from the first part of this dissertation. There, I show that a driving force behind how Democrats tweet about policy is the educational attainment of their district, not district income. Other studies on the preferences between constituent service and policy omit education. Thus, the observed effect of income for these studies is better understood as the combined effect of income and education, which does not provide any clarity on which was a driving factor. Of course, it may be impossible to distinguish the two, as is true for the analysis of Republicans in Part 1.

These incentives provide some expectations for the differences between Republicans and Democrats when it comes to policy creation. After all, Republicans and Democrats are not merely mirror images of each other (Grossmann & Hopkins, 2016). Republican ideology, especially enhanced by the influence of Southern Republicans, tends to reflect the interests of the rich. They currently produce leg-

islation that favors the preferences of the rich. Democrats should be the party that favors highly educated constituents, while Republicans should be the party that favors constituents with high incomes.

HYPOTHESIS 1: Relative to Democrats, Republicans should produce more legislation when they represent high income districts.

The incentives listed above also lend themselves towards a theory of the changing influence of the affluent. Some caveats are in order when discussing the historical links between district income, educational attainment levels, and the legislative productivity of members of Congress. For the modern era, there is clear evidence for the kinds of policies that representatives of high income areas support and the policy preferences of their high income constituents. Republicans in the modern era support policies preferred by the wealthy, while Democrats tend to support policies preferred by the poor and middle class (Rhodes & Schaffner, 2017; Grossmann & Williams, 2018; Carnes, 2016; Lax et al., 2018). It is also true that the types of representation preferred by constituents is reflected by the actions of legislators. Thus, it is reasonable to infer that when representatives provide more policy to high income districts, it is at least in part caused by the preferences of high income constituents.

In prior decades, the evidence linking the preferences of constituents to the actions of representatives is less detailed. It is clear that the preferences of constituents are generally reflected by members of Congress, but this evidence was not tied to specific groups of constituents such as the rich or Republicans. It is possible that the mechanism that ties the preferences of rich constituents to the actions of Republican representatives was different in the 1970s and 1980s than it is in the 2000s and 2010s. This would be a fruitful area for future research.

A variety of indications support the idea that the influence of affluence has increased over time.

- The preferences of the rich are better reflected by Republicans, and Republicans did not control the House prior to 1994. They controlled the House for over 19 years of the subsequent 24 years.
- The rich are increasingly voting for Republicans (Gelman, 2009).
- Conservatism is increasingly associated with high income Republican districts as shown in Part 2 of this dissertation.
- The Republican party has generally become more powerful across all branches of government, including state governments.
- Campaign finance laws have become more lax, allowing the power of money to increasingly determine who is elected to Congress (La Raja & Schaffner, 2015). This may select for politicians who are sympathetic to the interests of the high income constituents.
- Politicians themselves are increasingly from business oriented backgrounds (Carnes, 2013), so may be more personally aligned with the interests of the rich (Fenno, 1978).
- High income individuals earn a higher share of the country's total income (Piketty & Saez, 2003). This increased economic power may contribute to the increasing power of the party that represents their interests.
- Republicans are increasingly behaving in a way that reflects a preference for trusteeship governance, which allows for a weaker tie between the constituent

preferences and the actions of their representatives (Barker & Carman, 2012). Since they clearly currently represent the interests of the rich, this implies that they can be less responsive to the interests of the poor.

None of these trends are associated with educational attainment because the influence of education separate from income is rarely discussed in its own right. As I describe in Part 2, education is a not-uncommon confounder and can be the driving force behind trends like higher turnout in high income counties.

Yet the increasing influence of affluence is not a foregone conclusion. While I expect that the forces described above dominate, other mechanisms may be relevant. It is regularly said that the economic preferences of Republicans prior to Reagan were more in line with economic preferences of modern Democrats than with modern Republicans. It is possible that the Democratic party reflects the interests of the rich when Democrats are in power, or that they used to be the party that reflected the interests of the rich. The existing evidence for the historic influence of the affluent is minimal. Gilens (2012a) finds no evident time trend. This analysis offers a number of improvements, including (1) a close examination of the confounding influence of education, majority party control, and partisanship (2) more comprehensive data across time and (3) a broad perspective on all legislation instead of a subset of policies.

HYPOTHESIS 2: The influence of affluence on legislative success increases over time.

I find that the legislators who represent affluent and educated districts are more likely to create successful legislation than they were prior to 1995. This effect is driven by the fact that Republicans favor the wealthy and have controlled the

House for most of the past 20 years. Yet the effect is not as simple as Republicans favoring the elite. Democrats also favor the elite, but it is rooted in their connection to the interests of the education. Democrats do produce more legislation when they represent district with more highly educated citizens. Because the tie between income and education is strong, this often means that when income is analyzed without accounting for education, it appears that Democrats favor the wealthy. Yet the clear reason that Democrats who represent high income districts produce more legislation is because Democrats favor the interests of highly educated people, who tend to have higher incomes.

The last sections of this part of the dissertation seek to explain why we have seen these changes. I examine changes within each party over time between geographic regions.

With regards to changes within each party over time, Barker and Carman (2012) make a compelling case that Republicans have turned towards an ideology that reduces the need to reflect the preferences of all constituents. They have also faced a more rapidly changing base of supporters (Gelman, 2009; Grossmann & Hopkins, 2016), including a larger evangelical base (Leege & Kellstedt, 2016). Thus, I expect to see that the increasing influence of the affluent is being channeled through changing Republican behavior.

I find that the increasing bias toward the affluent is, in part, driven by the changing geographic base for Republicans and Democrats (Gelman, 2009). I look to see if this is reflected in the ways Democrats and Republicans behave in four regions of the country: the Midwest, South, Northeast, and West. Democrats were powerful in the South prior to the 1980s, but they have been replaced by Republicans. Because Southern representatives always produced more legislation when

they represented high income districts, Republicans became more likely to behave in the same manner as they took power in the South. Yet it is also partially driven by the changing behavior of Midwestern Republicans. They did not produce more legislation when they represented high income districts prior to 1994, but they have ever since 1994. This is similar to the findings by Gelman (2009) that partisan affiliations starting changing after 1990. The changing influence of affluent districts in legislative outcomes is based on party power, regional influence, and time.

Overall, I show multiple facets of the increasing influence of the affluent in legislation. Their new influence has been caused by: (1) Republicans favoring the interests of high income constituents, (2) Republicans taking control of the House and the South, (3) Midwestern Republicans starting to create more successful legislation when they represent the affluent. Yet it is important to remember that Democrats also reflect the influence of the elite in legislative success. They produce more legislation when they represent districts with many highly educated constituents. The detail of this analysis not only support my initial theories, but help build a broader theory of the influence of the affluent.

5 REPUBLICAN LEGISLATIVE SUCCESS in RICH DISTRICTS

This section provides initial evidence for the first hypothesis: Republicans focus more than Democrats on legislative success when they represent high income districts. This results support two interpretations of the influence of affluence. The first is that Republicans from affluent districts devote more resources to legislation, as measured by legislative productivity. The second is that since Republicans produce

and support policies that are more likely to reflect the interests of the affluent, the additional legislation will serve to create more policies that represent the interests of the affluent. I demonstrate that Republicans produce more legislation when they represent highly educated districts with high incomes, while Democrats produce more legislation when they represent districts with similar income levels but higher education. The next section will validate the differences between Republicans and Democrats using a regression model with an interaction term.

In order to depict the evidence that supports Hypothesis 1, I group legislators according to their party and the party in control of the House they served in. As seen in Figure 1, minority party members are not particularly legislatively productive. Any relationship between district income and legislation will be hard to detect given the low levels of baseline productivity, so I focus on majority party members. I examine Democratic Houses separately from Republican Houses, since the agenda setting power of the party in control of the House substantially effects the relationship between district demographics and legislative productivity. These analyses focus on legislative behavior after the Republican revolution of 1994, since there is more evidence for differences in how Republicans and Democrats represent the affluent. Later sections will examine the overall time trends since 1972.

Table 2 shows the results for Republicans in Republican controlled Houses after 1994. Model 1 shows the results from the model that includes both income and education. Neither coefficient is statistically significant, yet a joint F-test on $H_0 : \beta_{income} = \beta_{education} = 0$ is resoundingly rejected. This indicates that multicollinearity bit, and the correlation between income and education is too high to discern the independent effect of either. Yet the very fact that the correlation is high also means that there are important limitations to what could be interpreted from an

Table 2. Republican Legislative Success in Republican Houses

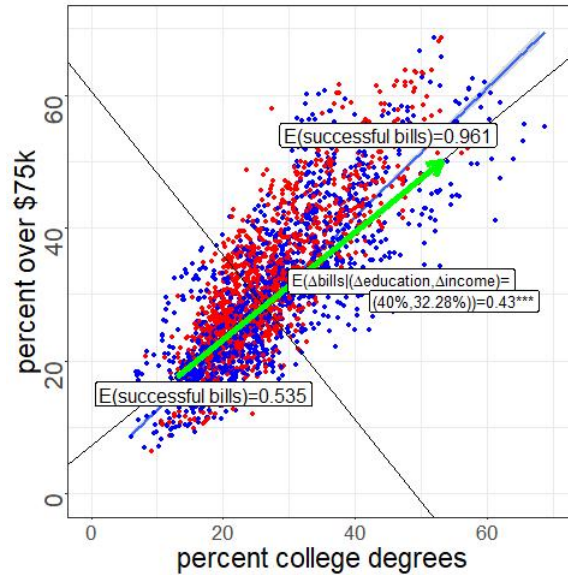
	Model 1	Model 2	Model 3	Model 4
income	0.004 (0.004)	0.009*** (0.002)		
education	0.007 (0.005)		0.012*** (0.003)	
SES				0.008*** (0.002)
orthogonal				-0.003 (0.006)
conservativeness	-0.624*** (0.129)	-0.646*** (0.128)	-0.596*** (0.126)	-0.624*** (0.129)
seniority	0.068*** (0.007)	0.068*** (0.007)	0.069*** (0.007)	0.068*** (0.007)
percent black	-0.132*** (0.026)	-0.134*** (0.026)	-0.130*** (0.026)	-0.132*** (0.026)
comm. chair	0.804*** (0.076)	0.802*** (0.076)	0.806*** (0.076)	0.804*** (0.076)
powerful comm.	-0.352*** (0.056)	-0.345*** (0.056)	-0.357*** (0.055)	-0.352*** (0.056)
Observations	1,869	1,869	1,869	1,869
Akaike Inf. Crit.	6,538.793	6,539.035	6,537.957	6,538.793

Note:

*p<0.05; **p<0.01; ***p<0.001

independent effect. These limitations are visible in Figure 2. The range of district income is over 50 percentage points. Yet the conditional range of district income for any given level of education is only around 25 percentage points. More importantly, there are no districts in the top quartile of district income that have an district with similar income levels yet are in the bottom quartile of education.

Figure 2: Republican Estimated Changes in Legislative Success



Although it is substantively meaningful to my theory that there is no discernible independent effect of district income on legislative productivity for Republicans, it is still possible to make a conclusion about how Republican representatives from high income districts behave relative to those from low income districts. Namely, the first principal component shows that Republicans from high income districts produce statistically significantly more legislation than those from low income districts, so long as education is allowed to change as dictated by the correlation between income and education. This effect is statistically significant, as shown in Model 4 of Table 2. It is also substantively large, as seen in Figure 2. A Republican

at the high end of district income (top of the green arrow), which will necessarily be a relatively highly educated district, produces 0.43 more successful bills than a Republican at the low end of district income and education (bottom of the green arrow). The number 0.43 is starred because it is calculated from a coefficient that is statistically significant at the $\alpha < 0.001$ level. This is over 80% more legislation than a Republican representative at the low end of district income and education.

Figure 3 graphs the independent effects of income and education, showing the estimated change in magnitude across the widest possible change in the data given the correlation between income and education. Although the predicted change in legislative success based on the independent effects of income and education is positive, neither is statistically significant. Thus, if one were to predict which kind of district would be represented by a legislatively successful Republican, it would be a high income district. But this prediction is only statistically significant if education is allowed to change as the data dictates it is likely to change. This provides conditional support for Hypothesis 1: Republicans are more legislatively successful when they represent high income districts, but only when education is not held constant.

The next results examine the relationship between Democratic representatives and district demographics. They are exploratory in nature. I had no expectations regarding the behavior of Democrats as it relates to district income and education, in part because most theories of the influence of affluence have been developed and tested on data from Republican controlled branches of government. These results reveal interesting patterns, provide important context to results presented in later sections, and highlight the importance of not confounding the effect of income with the effect of education.

Figure 3: Republican Estimated Changes in Legislative Success

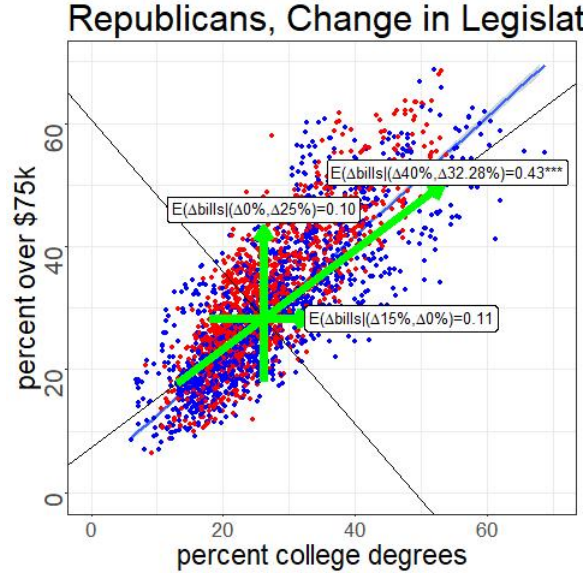


Table 3 shows the relationship between Democratic legislative behavior and district income and education. Even though Democrats and Republicans have similar levels of correlation between district income and education, in this case there is sufficient variation in legislative productivity to discern an independent effect of district education. Democrats produce statistically significantly more legislation when they represent highly educated districts. Yet note that although the coefficient on district income is not statistically significant, it is of similar magnitude and in the opposite direction. This is part of why the joint effect of income and education is not statistically significant. The joint effect of income and education, measured by either the omitted variable models in Models 2 and 3, or in the principal component model of Model 4, is brought closer to zero because the effects of income and education oppose each other. The estimates are not sufficiently precise to distinguish the effect from zero in a statistically significant manner.

The substantive interpretation of these effects are shown in Figure 4. Mov-

Table 3. Legislative Success, Democrats in Democrat Controlled House after 1994

	Model 1	Model 2	Model 3	Model 4
income	−0.010 (0.006)	0.002 (0.004)		
education	0.015* (0.006)		0.007 (0.004)	
SES				0.001 (0.003)
orthogonal				−0.018* (0.008)
conservativeness	−0.369 (0.304)	−0.441 (0.302)	−0.346 (0.304)	−0.369 (0.304)
seniority	0.037*** (0.009)	0.037*** (0.009)	0.037*** (0.009)	0.037*** (0.009)
percent black	−0.090* (0.035)	−0.083* (0.035)	−0.079* (0.035)	−0.090* (0.035)
Black Caucus	0.996*** (0.129)	0.992*** (0.130)	1.014*** (0.129)	0.996*** (0.129)
comm. chair	−0.432*** (0.092)	−0.404*** (0.092)	−0.410*** (0.092)	−0.432*** (0.092)
Observations	502	502	502	502
Akaike Inf. Crit.	1,881.549	1,885.782	1,882.587	1,881.549

Note:

*p<0.05; **p<0.01; ***p<0.001

ing along the largest spread in the conditional distribution of district education, a Democratic representative at the low end of the distribution (left end of the horizontal black arrow) would expect to produce 0.23 fewer successful bills than one at the high end (right end of the horizontal black arrow). This represents 26% more bills than a Democratic representative at the low end of the educational range (left end of the black horizontal arrow).

Figure 4: Democrats Estimated Changes in Legislative Success

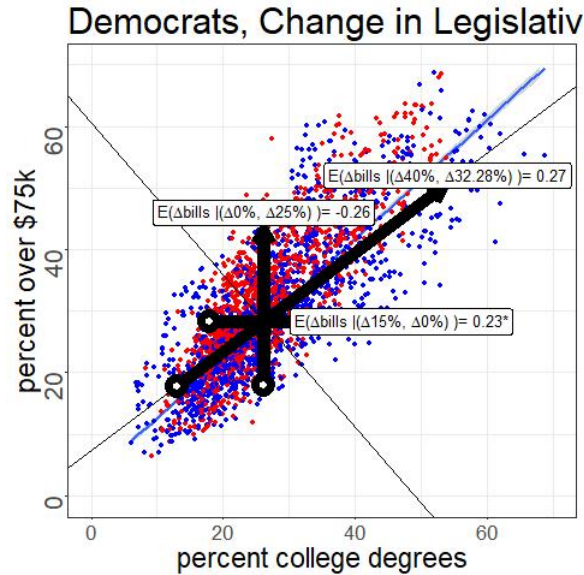
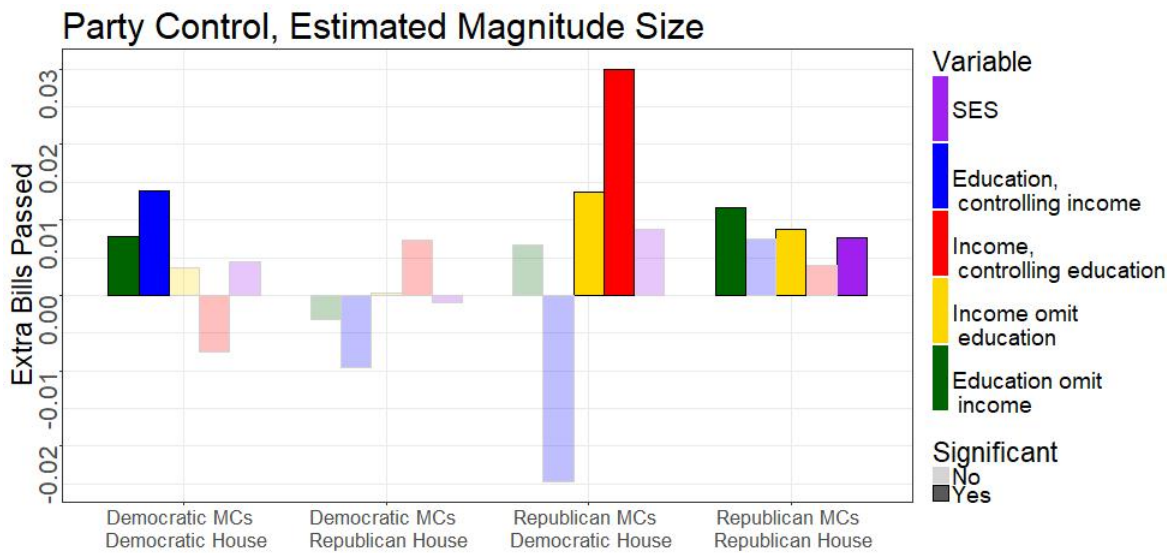


Figure 5 summarizes the information in Tables 2 and 3. The interpretation of these graphics is described in Part 2. It is designed to summarize the tests performed on the effect on income and education in each of the four models. This figure is used to show the effect for Republicans and Democrats individually, while Table 4 in the next section shows that the differences between Republicans and Democrats are statistically significant. The information is similar to that shown in Figure 3 and 4. The change in district income and education used to estimate the magnitude of the effect is somewhat smaller, and the bar chart includes a summary of results

for the minority members as well.⁸ The two types of graphics each have different strengths. The scatterplots with the arrows highlight the direction of the effect and take into account the conditional distribution on income based on education, and vice versa. The bar chart quickly summarizes the results of multiple models, but does not take into account the conditional distribution of income and education.

Figure 5: Magnitude of Effects Based on Partisanship and Party Control in the House



The height of each bar represents how many extra successful bills an individual member of Congress could expect to sponsor based on the socioeconomic characteristics of their district. For example, the last bar, in purple, represents how many extra bills a Republican member of Congress in a House controlled by Republicans could expect to create when they represent a socioeconomically privileged district. The equivalent information in Figure 3 is the change along the principal component line. The blue bar on the left shows that Democratic members of Congress in Democratic

⁸These regression results for minority party representatives are not included but are available upon request.

Houses produced more legislation when they represented highly educated districts. The equivalent information in Figure 4 is the change along the horizontal arrow, representing the change bills passed as district education levels change.

The primary take away of this section is that Republicans in Republican Houses produce more legislation when they represent high income and highly educated districts. Yet while representatives from high income districts produce more legislation than low income districts (and education necessarily changes as well due to the correlated nature of income and education), the independent effect of income is not discernible. Whether this means that there is a latent variable causing changes in income, education, and legislative productivity cannot be determined given the nature of the data. What is clear is that if a Republican represents a high income district, that Republican is expected to produce more successful legislation than a Republican from most lower income districts. Those lower income districts are likely to have lower educational attainment because there are relatively few districts with lower incomes yet similar levels of education.

Meanwhile, no conclusion is possible regarding Democratic legislative productivity and the affluence of their constituents. They are more legislatively productive when they represent highly educated districts, but only for districts with similar levels of income. Although income and education are correlated, there is not statistically discernible effect for whether Democratic representatives from the top quartile of district education levels are more legislatively productive than those from the bottom. This is because there are no districts at the bottom of the education spectrum with similar levels of income to those at the top, as seen in Figure 4.

6 STATISTICAL VALIDATION of the EFFECT of PARTISANSHIP

This part of the dissertation is focused on the differences between Republicans and Democrats. In Part 1 of the dissertation I showed Republicans focused more on policy than did Democrats. In this section I will statistically validate the Hypothesis 1 in this part of the dissertation: Republicans, who are thought to represent business elites, are more engaged than Democrats in legislation when they represent high income constituents.

In order to determine whether there is a significant difference between Democrats and Republicans, I use an interaction term between the three socioeconomic measures and party. This shows whether the magnitude of the effect is significantly different between Republicans and Democrats. The excluded variable is Democrats, so a positive interaction term indicates that Republicans are more responsive to socioeconomic status relative to Democrats.

I refer to the results from Table 4 and 5 to validate the statistical difference between Republicans and Democrats. Table 4 shows the results for Democratic Houses, while Table 5 shows the results for Republican Houses. As before, I separate the results to avoid merging behaviors that are the result of fundamentally different processes; the Republican agenda can be expected to produce different legislative behavior than the Democratic agenda.

Table 4 shows that the interaction effects between party and income, and party and education, are statistically significant in Model 1.⁹ For example, the coefficient for the interaction between Republican identification and district income, seen on

⁹Also in the orthogonal component of Model 4

line two of Table 4, is positive (0.039) and strongly significant. Thus, in Democratically controlled Houses Republicans tend to be more successful than Democrats in creating policy when they represent high income districts. Yet Republicans produce less successful legislation than Democrats when they represent highly educated districts. The effect sizes are nearly identical. When looking at the joint effect of income and education, socioeconomic status, the positive effect of income cancels the negative effect of education. The interaction between Republican identification and socioeconomic status is closer to zero than the interactions for income and education, and is not statistically significant.

Of course, it is difficult to fully interpret an interaction effect based on a table of regression results. To improve ease of interpretation, Figure 6 breaks down the interaction effect by estimating the difference between Republicans and Democrats and between high and low income/education districts. The estimated effect size for income is substantially larger than that for education, simply because there is a larger spread in the conditional distribution of income than for education. This provides support for Hypothesis 1 for Houses controlled by Democrats. As usual, note that the interpretation of this support has been carefully specified; income has an independent effect on legislative productivity, but the estimated changes in legislative productivity cannot reflect the full range of the income distribution without moving outside of any possible combination of district income and education.

Hypothesis 1 is supported by the results for the analysis of Democratically controlled Houses. Table 5 show the results of testing Hypothesis 1 during periods of Republican control of the House. The results provide some support Hypothesis 1, but not in the same way they were supported in Houses controlled by Democrats. The coefficient on the interaction term between district education and party, seen

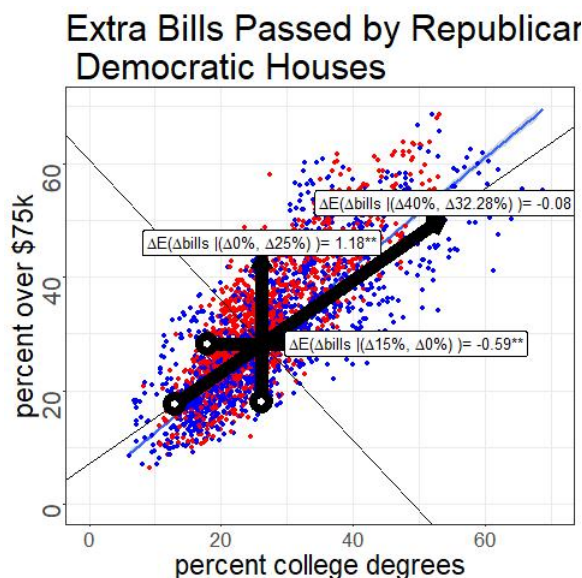
Table 4. Legislative Success, Republicans vs Democrats after 1994 in Democratic Houses

	Model 1	Model 2	Model 3	Model 4
income	−0.011 (0.006)	0.001 (0.004)		
Republican*income	0.039** (0.012)	0.012 (0.007)		
education	0.015* (0.006)		0.006 (0.004)	
Republican*education	−0.039** (0.015)		−0.001 (0.008)	
SES				0.001 (0.003)
Republican*SES				0.006 (0.005)
orthogonal				−0.018* (0.008)
Republican*orth.				0.055** (0.018)
Republican	−0.358 (0.311)	−0.460 (0.307)	−0.113 (0.301)	−0.284 (0.249)
conservativeness	−0.702** (0.237)	−0.780*** (0.236)	−0.703** (0.238)	−0.702** (0.237)
seniority	0.027*** (0.008)	0.028*** (0.008)	0.029*** (0.008)	0.027*** (0.008)
percent black	−0.106*** (0.032)	−0.103** (0.032)	−0.100** (0.032)	−0.106*** (0.032)
comm. chair	1.052*** (0.126)	1.037*** (0.127)	1.046*** (0.127)	1.052*** (0.126)
powerful comm.	−0.400*** (0.080)	−0.387*** (0.080)	−0.396*** (0.080)	−0.400*** (0.080)
Observations	889	889	889	889
Akaike Inf. Crit.	2,868.138	2,873.465	2,875.172	2,868.138

Note:

*p<0.05; **p<0.01; ***p<0.001

Figure 6: Number of Additional Bills Passed by Republicans over Democrats, Democratic Houses



in line four of Model 1, is statistically significant. This entails that Republicans are more legislatively successful than Democrats when they represent highly educated districts in Republican Houses. The independent effect for income is statistically insignificant. Yet the joint effect of income and education is strongly positive and statistically significant. That is, even though the effect is driven by highly educated districts, high income districts still tend to be represented by Republican representatives who are more legislatively successful than their Democratic counterparts.

The merit of interpreting the effect along the principal component, socioeconomic status, is seen in Figure 8. The effect of education is statistically significant and substantively meaningful. A change along the conditional distribution of education is seen to produce an expected difference of 0.26 additional bills for a Republican representative of a district at the high end of that change (right end of the horizontal black arrow) relative to a Democrat. Yet the possible range of education conditional on income is much lower than the full range of district education levels.

Table 5. Legislative Success, Republicans vs Democrats after 1994 in Republican Houses

	Model 1	Model 2	Model 3	Model 4
income	0.002 (0.006)	−0.005 (0.003)		
Republican*income	0.003 (0.007)	0.015*** (0.004)		
education	−0.010 (0.006)		−0.008* (0.004)	
Republican*education	0.017* (0.008)		0.020*** (0.005)	
SES				−0.005 (0.003)
Republican*SES				0.013*** (0.003)
orthogonal				0.009 (0.008)
Republican*orth.				−0.012 (0.010)
Republican	1.243*** (0.163)	1.364*** (0.151)	1.216*** (0.160)	1.767*** (0.123)
conservativeness	−0.617*** (0.122)	−0.624*** (0.121)	−0.589*** (0.119)	−0.617*** (0.122)
seniority	0.044*** (0.005)	0.044*** (0.005)	0.045*** (0.005)	0.044*** (0.005)
percent black	−0.105*** (0.021)	−0.107*** (0.021)	−0.104*** (0.021)	−0.105*** (0.021)
comm. chair	0.943*** (0.075)	0.939*** (0.075)	0.946*** (0.075)	0.943*** (0.075)
powerful comm.	−0.337*** (0.050)	−0.336*** (0.049)	−0.343*** (0.049)	−0.337*** (0.050)
Observations	3,514	3,514	3,514	3,514
Akaike Inf. Crit.	9,702.214	9,702.908	9,699.889	9,702.214

Note:

*p<0.05; **p<0.01; ***p<0.001

Estimating the change along the principal component allows a much larger change in legislative success to be examined. Moving from the low end of the district income and education (bottom left of the black angled arrow) to the high end (top right of the black angled arrow) reveals an estimated increase in legislative success of 0.78, relative to a Democrat. This change is driven by the strength of the changes associated with district education. This does not make it any less true that relative to Democrats, a district with a high income is expected to have a more legislatively successful Republican representative than a district with a low income. Both the independent effect and the joint effects provide meaningful insights into Hypothesis 1.

Figure 7: Number of Additional Bills Passed by Republicans over Democrats, Republican Houses

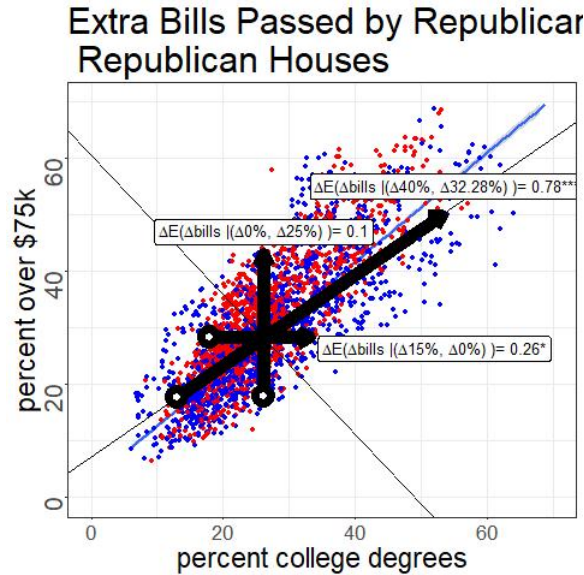


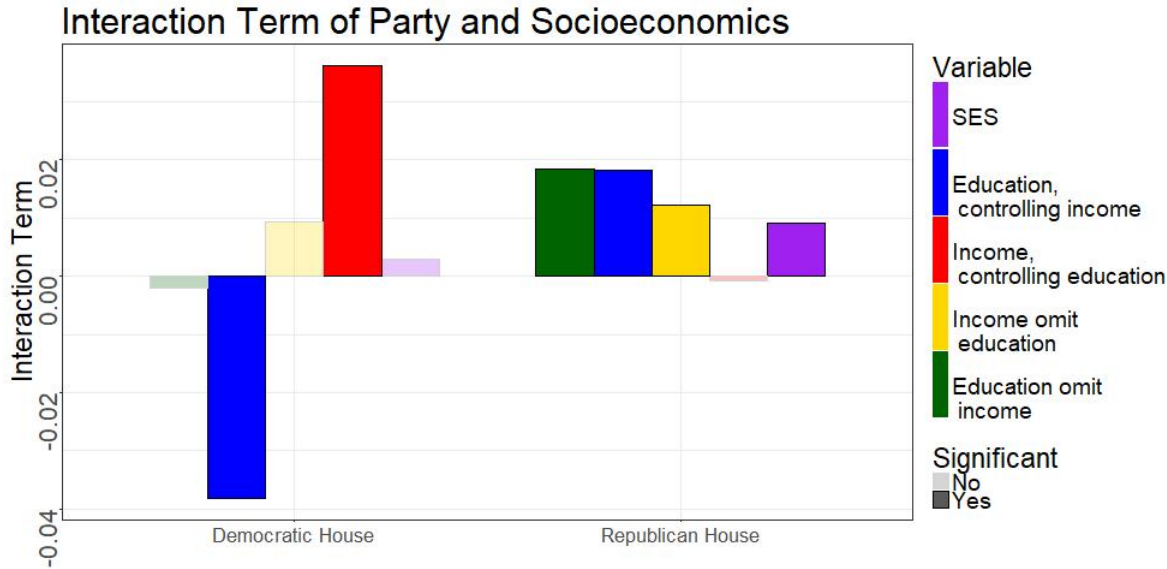
Figure 8 graphs the coefficient for this interaction term according to which party was in control of the House. The model used to estimate the coefficient on the interaction term that is shown in each bar is a minor modification of those already presented in Section 6.

$$\begin{aligned}
\text{successful legislation} \sim & \text{income} + \text{income} * \text{Republican MC} \\
& \text{education} + \text{education} * \text{Republican MC} + \\
& \text{MC conservativeness} + \text{MC seniority} + \\
& \text{percent black population} + \text{Black Caucus MC} + \\
& \text{Black Caucus MC} * \text{year} + \\
& \text{committee chair} + \text{powerful committee member}
\end{aligned}$$

Each bar in the Figure 8 shows the size of the coefficient for the interaction term between Republican partisanship and the relevant income or education variable. Using the same model for both parties allows the interaction term between the district's socioeconomic status and the legislator's party affiliation to be estimated for each group of legislators. If the interaction is statistically significant and positive, the number of extra bills a Republican successfully sponsors because they are from a high income district can be expected to be higher than the number of extra bills a Democrat would expect to produce because of being from a high income district. Republicans are more influenced by income than Democrats, but the exact nature of this effect depends on whether Democrats or Republicans control the House. Republicans produce more legislation when they represent high income districts during Democratically controlled Houses, but only so long as district education is held constant. They produce more successful legislation when they represent both high income and highly educated districts when Republicans control the House. This is primarily due to the fact that Republicans were more legislatively successful when they represented highly educated districts, which are generally going to be high income districts.

Intriguingly, it is common for only one of Models 1 and 4 to produce statistically significant results for income, education, or the joint socioeconomic status.

Figure 8: Difference between Republicans and Democrats for the Effect of Socioeconomic Status on Bill Passage by Partisan Control of the House



Yet note that the orthogonal component is generally statistically significant when income and education are independently statistically significant. This appears to be because when education and income are jointly significant, either the first or second principal component will be statistically significant. When the second component (orthogonal) is statistically significant, the independent effects of income and education are more likely to be statistically significant. When the first component (SES) is statistically significant, multicollinearity is more likely to bite and prevent the independent effects of income and education from being statistically significant. Specifying this pattern is an area for future study.

Even though the effect of income appears in different ways depending on who controls the House, Republicans are more legislatively successful in districts with high levels of economic privilege than are Democrats between 1994 and 2014. Importantly, the fact that Republicans in Republican Houses representing high income

districts tend to produce more successful legislation than Democrats, seen in Table 5 is primarily because Republican representatives of highly educated districts are both more legislatively successful and likely to be affluent. Whether the support from Table 4 or Table 5 is deemed more relevant depends on what the reader finds more important; the independent effect along the limited changes possible in district income conditional upon district education, or the changes along the full range of district income while allowing district education to change as well. This supports the first hypothesis, that Republicans are more likely to produce more legislation when they represent highly districts with many high income constituents relative to Democrats.

7 INCREASING INFLUENCE of AFFLUENCE

The power of the affluent, as reflected in how much of the nation’s wealth they control, has risen over the past forty years. Hypothesis 2 predicts this will be reflected in legislative behavior; legislators produce more legislation when they represent affluent and educated districts.

In order to depict the evidence for Hypothesis 2, I base the graphic in Figure 9 on legislative control of Congress. The legislative behavior of a member of Congress is strongly influenced by who controls Congress (Ramey, 2015; Ballard, 2018). Figure 1 in the data section showed that minority members do not produce much successful legislation. For the visualizations, I create six time blocks based on party control of the House and Senate. Each block presents the results for a regression performed solely on the group of legislators in that time period, unified by the same parties in control of the House and Senate.¹⁰ For example, the first time

¹⁰I carefully validated that members of one party tend to have similar connections between

period focuses on 1973-1980, when the House and Senate were both controlled by Democrats. The second block presents the legislators serving between 1981 and 1986 under the Reagan administration. In that second block the House is still controlled by Democrats, while the Senate is controlled by Republicans.

Figure 9 provides visual evidence that the influence of affluence in legislative outcomes has increased over the past forty years. Generally, Figure 9 is a good way to visualize the changes over time. Yet these changes are suggestive of time trends, not conclusive. Table 6 shows that these time trends are statistically significant.

Each time block has the five bars described in prior sections. The blue and green bars represent two measures of district education. The red and yellow bars present measures of district income. The purple bar presents a unified measure of district socioeconomic privilege, created using factor analysis. The statistically significant results are bolded, while the statistically insignificant results are faded. For example, all coefficients except for the effect of socioeconomic status are statistically significant for 1973-1980. The coefficients for the two measures of district income are statistically significant and negative, while the coefficients for the two measures of district education are statistically significant and positive.

Grouping the data in this manner allows the reader to easily see the changes over time while minimizing the clutter in the graphic. Showing all five bars together allows the reader to see the changes that occur over time with respect to the influence of income and education on legislative success, even though there is a change in the

district demographics and legislative activity under the same legislative majority in Congress. One exception is the year of 2001-2002. This was a single session of Congress that had a number of peculiarities. For one, it was the session that was meeting when 9/11 happened. This had a chaotic effect on American politics. For another, partisan control over the Senate was not consistent. Rather than include it as a time period on its own, I folded it into the time period from 1995-2006, which otherwise saw unified control of Congress by Republicans. The results do not meaningfully change if I simply omit 2001-2002, nor if I include those two years on their own.

consequence of multicollinearity on the statistical significance in the variables, and on the bias of the estimate when we omit a variable. It highlights the differences in the reported effects based on the party in control of the House and the Senate, as well as the changing influence of district income and education on legislative success.

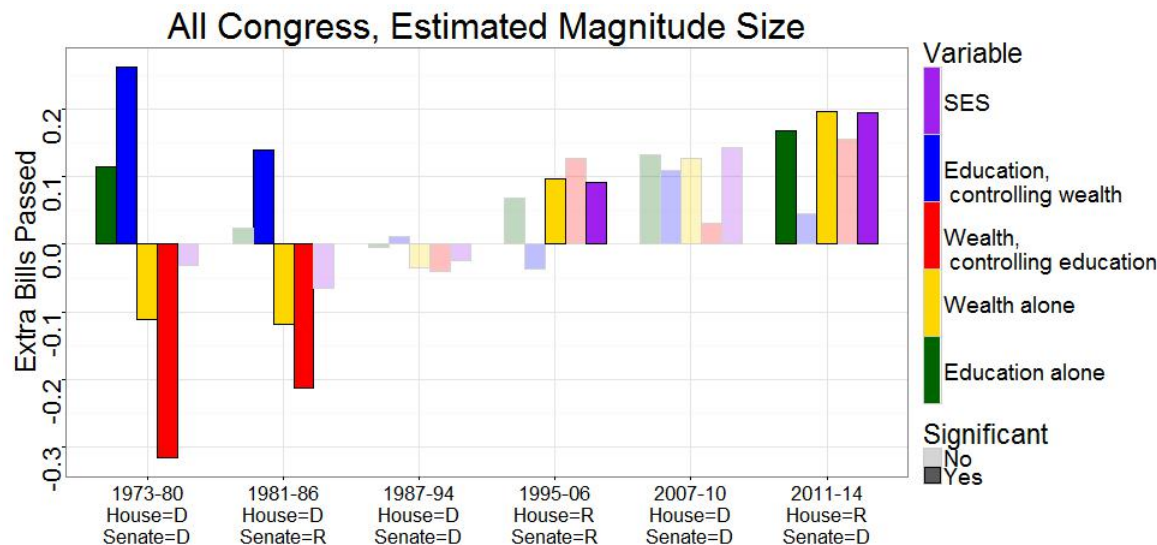
Hypothesis 2 is supported by Figure 9. Representatives from high socioeconomic status districts appear to produce more successful legislation than they used to. The statistical significance of this apparent trend will be confirmed in Table 6. Indeed, prior to the Republican revolution of 1994, legislators from high income districts produced *less* legislation. After 1995, they appear to produce more. This is generally statistically significant for the effect of income in the model that does not control for education, represented by the yellow bars. In these models, the magnitude of the yellow bar is artificially diminished due to the effect of omitted variable bias. Thus, the changes over time in the effect of income on legislative success in Figure 9 appear less substantial than they would if it were not for the effect of omitted variable bias. Yet as I will show in Table 6, the effects are still statistically significant despite this bias.

Recall that the yellow bars are bolded when they are statistically significant. Here, the yellow bars are statistically significant for the following time periods: 1973-80, 1981-86, 1995-2006, and 2011-2014. Between 1973 and 1980, a legislator from a high income district would be expected to produce 0.11 fewer bills in each Congressional session than an equivalent low income district. This is seen in the first yellow bar in Figure 9.¹¹ The direction of this effect stays the same between 1981 and 1986. By 1994, the effect becomes positive and is generally statistically

¹¹I define a high income district to be in the top quartile of income. A low income district is at the bottom quartile of income. Calculating the change in legislative success between two such districts gives a strong indication of how big the effect is in practical terms.

significant. Between 1995 and 2006, a legislator from a high income district could expect to sponsor 0.11 additional successful bills as compared to a legislator from a poor district. I will validate the statistical significance of this trend over time in Table 6.

Figure 9: Estimated Magnitude of Socioeconomic Variables across Time



In order to compare effects across time, I focus on the measure of income from the model that controls for education, shown in the red bar in Figure 9. This measure produces statistically significant results for 1972-1980, and is unbiased throughout the entire time period. Thus, it is preferred to the measure of income that does not control for education (yellow), which is biased by the omitted highly collinear education variable. Yet while the measure of income controlling for education (red) is unbiased after 1994, it is often affected by inflated standard errors caused by multicollinearity. Indeed, the red bars are all faded after 1994 because the standard errors are too large for statistical significance due to this multicollinearity. Yet I use it for the entire time period because it is better than using the measure of income

that is biased by omitting education (yellow).

Between 1972 and 1981, a member of Congress representing a district in the top quartile of the income spectrum could expect to pass 0.32 fewer bills (first red bar in Figure 9) than a member of Congress who represented a district in the bottom quartile. This bar is bolded because it is statistically significant. The average number of bills passed was 1.668, so this represents an 18.9% decrease in the number of successful bills passed by a representative from a high income district. Meanwhile, between 2011 and 2014 a representative of a high income district could potentially expect to produce 0.156 additional pieces of legislation relative to a similar representative from a less high income district. The confidence on this number is weak because the coefficient is not statistically significant, as indicated by the fact that the red color is faded instead of bold. The average number of bills passed in each Congressional session in that time period was 1.19, so a representative from a high income district tended to create around 13.1% more successful bills than a representative from a poor district. Thus, between 1972 and 2014, the effect of income (yellow and red bars) almost entirely reverses to favor districts that have many high income constituents.

Figure 9 also shows that prior to the Republican revolution of 1994, legislators representing highly educated districts produced more legislation (green and blue bars). Between 1973 and 1980, a representative of a district in the top quartile of income could expect to produce 0.26 additional pieces of successful legislation as compared to a representative from a less educated district. This is a 15.7% increase, relative to the average of 1.688 bills passed per member of Congress per Congressional session. After the 1994 Republican Revolution, the effect of education was usually smaller but rarely statistically significant.

Prior to 1994 the combined impact of income and education, as reflected in the purple socioeconomic measure, was negative and not statistically significant. That is, socioeconomically privileged districts did not appear to have legislators who were overall more legislatively productive. This apparent null effect prior to 1995 is caused by the effects of income and education canceling out in the coefficient for the combined socioeconomic measure. After 1994 the effect of the combined socioeconomic status variable is consistently positive. It is also statistically significant for both Houses that were controlled by Republicans.

The graphics show the statistical significance for each of the five measures of socioeconomic status in each time period. The time trends are visually evident, but it is unclear how strong they are. Specifically, the graphics cannot show whether the time trends are statistically significant.

I present the full results of a model that examines time trends in income and education for all members of Congress between 1972 and 2014 in Table 6. I do not control for partisan identity or who controls the House, as the goal is simply to reveal whether the influence of affluence has increased over time. The next section introduces the effect of partisanship as it influences how a district's socioeconomic status changes the number of bills a legislator successfully sponsors.

The statistical significance of the time trend and other effects are presented in Table 6. The models in this table feature a number of interactions. The full regression is for the model that controls for both income and education is specified below.

$$\begin{aligned} \text{successful legislation} \sim & \text{income} + \text{income} * \text{year} + \text{education} + \\ & \text{education} * \text{year} + \text{year} + \text{MC conservativeness} + \\ & \text{MC seniority} + \% \text{ black population} + \text{Black Caucus MC} + \end{aligned}$$

Table 6. All Bills Passing House 1972-2014, No Partisan Controls

	SES	Income, Education	Income	Education
SES	-1.162*** (0.295)			
SES*year	0.011*** (0.003)			
income		-0.092** (0.032)	-0.098*** (0.022)	
income*year		0.001** (0.0003)	0.001*** (0.0002)	
education		0.006 (0.040)		-0.069* (0.028)
education*year		-0.00001 (0.0004)		0.001** (0.0003)
year	0.009** (0.003)	-0.019** (0.007)	-0.018** (0.007)	-0.006 (0.006)
conservativeness	-0.089* (0.036)	-0.094** (0.036)	-0.092** (0.036)	-0.088* (0.036)
seniority	0.069*** (0.004)	0.069*** (0.004)	0.069*** (0.004)	0.070*** (0.004)
percent black	-0.087*** (0.011)	-0.090*** (0.011)	-0.089*** (0.011)	-0.085*** (0.011)
Black Caucus	0.677 (1.088)	0.489 (1.100)	0.451 (1.094)	0.960 (1.085)
Black Caucus*year	-0.007 (0.010)	-0.006 (0.010)	-0.005 (0.010)	-0.010 (0.010)
comm. chair	1.248*** (0.057)	1.246*** (0.057)	1.246*** (0.057)	1.251*** (0.057)
powerful comm.	-0.355*** (0.034)	-0.356*** (0.034)	-0.353*** (0.034)	-0.356*** (0.034)
Observations	9,194	9,194	9,194	9,194
Akaike Inf. Crit.	27,903.930	27,902.010	27,901.190	27,909.640

Note: Negative binomial models, *p<0.05; **p<0.01; ***p<0.001

Black Caucus MC* year + committee chair + powerful committee

The remaining models modify this model mildly by including or excluding education and income variables, as shown in Table 6.

The benefit of Table 6 is the precision of the estimates and the inclusion of time trends. The downside to that they are difficult to interpret thanks to the multiple interaction terms included. For example, the visuals indicate that income had a negative correlation to legislative success in the 1970s and a positive one after 1994. In the full model this can be inferred by combining the coefficient for income with those for the coefficient on the interaction between income and year, but it is far easier to see in the graphics. The effect of party and education are similarly difficult to interpret in the full models. The visuals are based on regressions run separately by six blocks of years, which is an effective way to interpret interaction terms with discrete variables.

The interaction effects between year and the measures of income and overall socioeconomic status are positive and statistically significant. For example, the interaction effect between socioeconomic status and year in the first column, second row of Table 6 is 0.011. It is statistically significant at the $\alpha = 0.001$ level. Not only did the impact of affluence increase over that time period, but as shown in Figure 9 the effect completely flipped for income (yellow) when education is not controlled for. Prior to 1994, the coefficient for both income measures was negative and usually statistically significant. After 1994, the effect became positive, with statistical significance when the House was controlled by Republicans.

Of note, the interaction term in Table 6 between education and year is negative when income is controlled for. That is, the independent effect of education on legislative productivity has decreased over time. As apparent in Figure 9, it never

entirely flips direction, but it does become statistically negligible.

The effect of multicollinearity and omitted variable bias are evident in Figure 9. At no point after 1994 are the effects of education or income statistically significant when the other is controlled for. This is due to multicollinearity inflating the standard errors when both variables create a similar effect on legislative productivity. On the other hand, prior to 1986 the magnitude of both income and education without controlling for the other are artificially reduced due to omitted variable bias. For example, look at the effect of income without controlling for education (yellow bar). It is much smaller in magnitude than the red bar, which is income after education has been controlled for. This is because the income variable captures a lot of the effect of education, which is trying to create the opposite effect on legislative productivity.

A few other results are worth highlighting in Table 6. Committee chairmen tended to produce more legislation, as seen in the consistently positive and statistically significant results in the second to last line of the table. Members of powerful committees tended to produce less legislation, as seen in the last line of the table. One explanation for this is that members of powerful committees get to directly influence the language of important legislation, so policy inclined members focus more on getting the language right on other bills than on producing independent legislation. That is, they gain power through means other than creating successful legislation.

The overall goodness of fit of the model is reported with Akaike's Information Criterion (AIC). This criterion is used to evaluate nested models against each other. The magnitude of the AIC is irrelevant, but the relative size to other models helps determine how good the model is at capturing variation. A smaller AIC mean a

better model. Here, the models are all have similar AICs. The best fitting model is the one that includes only income, but it fairly similar to the others. Thus, there is no reason to discard any of these four models as inappropriate based on their relative AIC.

These results indicate clear support for the theory that the influence of affluence has increased over time. In particular, the coefficients for the connection between district income, legislative success, and time are both statistically significant and substantively meaningful. As discussed earlier, a legislator representing a high income district expects to produce 18.9% fewer successful bills between 1972 and 1980, while a legislator in the modern era produces 13.1% *more* successful bills. The changes in the effect of income drive an increasing impact of overall socioeconomic status as well.

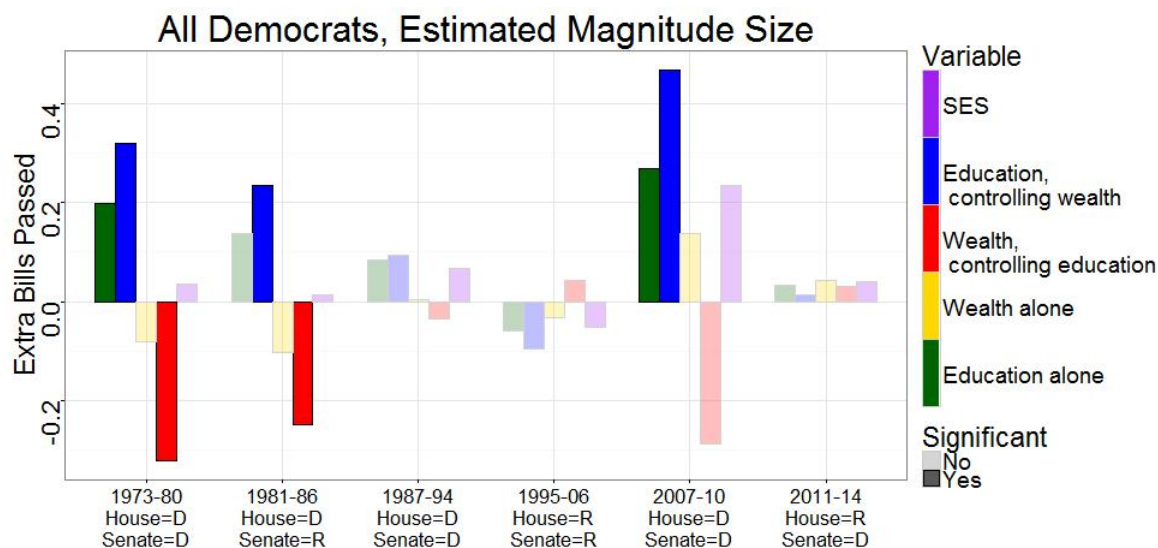
8 INFLUENCE OF AFFLUENCE by PARTISANSHIP over TIME

The prior two sections of this part of the dissertation discussed and provided support for the two theories being tested: the influence of the affluent has increased over time, and Republicans are more likely to be influenced by the affluent. I showed that legislators are increasingly producing more legislation when they represent high income and socioeconomically privileged districts. Prior to 1986, legislators from districts with large numbers of high income constituents created less successful legislation than those with many low income constituents. After the Republican revolution of 1994, they produce more. Republicans took over the House in 1994, and only Republicans tend to produce more legislation when they represent high income dis-

tricts. A logical conclusion is that the new influence of high income districts in legislative success comes directly from the Republican takeover of the House.

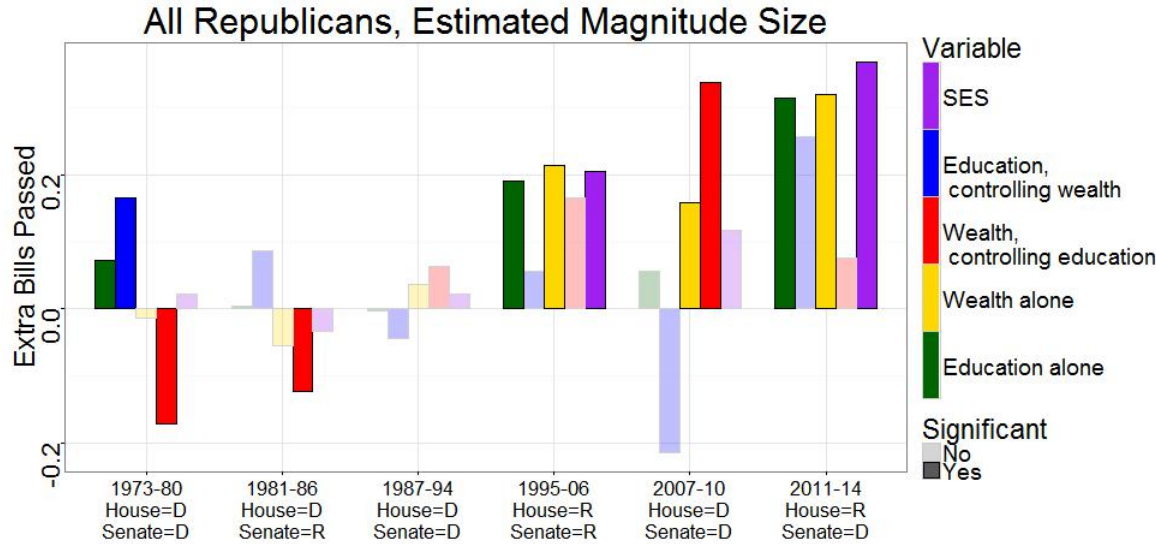
This section explores how well this conclusion fits with the changing behavior of the Republican and Democratic parties over time with respect to the income and educational attainment of the constituents in their districts. The results support the conclusion that recent influence of the affluent is caused by Republicans. Yet this is driven by the increasing influence of affluent districts on Republican legislative success. Democrats, on the other hand, have behaved consistently with respect to legislation and their district socioeconomic measures whenever they hold the majority in Congress.

Figure 10: Estimated Magnitude of Socioeconomic Variables for Democrats Across Time



To show this, I once again use graphics highlighting the magnitudes of the effects of each socioeconomic variable of interest. As before, I separate them into groups based on time, but this time I also separate them by party in Figures 10 and 11. As before, the magnitudes associated with statistically significant coefficients

Figure 11: Estimated Magnitude of Socioeconomic Variables for Republicans Across Time



are bolded. So for Democrats between 2007 and 2010, the magnitudes for both education measures (blue and green) are bolded because they are both statistically significant. However, the magnitudes for the income measures (yellow and red) and socioeconomic status measure (purple) are faded because they are not statistically significant. I then show full regression results that test statistical significance of changes over time and by party in Table 7.

Figures 10 suggests that Democrats behave consistently over time when they are in control of the House. All three statistically significant bars representing the effect of education when income is controlled for, shown in dark blue, are positive and from three of the four time periods when Democrats controlled the House. The effect sizes are meaningful. The first blue bar, representing education after income has been controlled for, shows that between 1973 and 1980 representative from a highly educated district is expected to pass 0.32 extra bills in every session of Congress. The average number of bills passed between in this time period was

2.23, so this represents a 14.3% increase. Similarly, a Democratic legislators from a district with high income, controlling for education (red bar), can expect to create 0.32 fewer bills as compared to a similar legislator representing a poor district. This is a 14.3% decrease. The effect was slightly smaller between 1981 and 1986, and slightly bigger for education between 2007 and 2010.

Republicans, on the other hand, have seen very different correlations between district education, income, and legislative success over time when they are in control of the House. As seen in Figure 11, prior to 1994 Republicans and Democrats had similar ties between district socioeconomics and legislative success. This reflects Gelman (2009)'s finding that something changed about partisan behavior after 1990. In legislative outcomes after 1994, Republicans began to behave as we saw in the prior section. That is, Republicans after 1994 created more successful legislation when they represented both high income (red and yellow bars) and high socioeconomic status (purple bars) districts.

The effect sizes for the statistically significant coefficients are substantively meaningful. Indeed, they are particularly large relative to the number of bills passed in a Congressional session for Republicans between 1973 and 1980, which was 0.68. Recall that Republicans were in the minority party at the time, so they sponsored vastly fewer successful pieces of legislation than did Democrats. Because Democrats were in control of the House, Democratic preferences controlled the agenda (Ballard, 2018). Thus, the types of bills Republicans could get out of committee were generally the kind that Democrats could support. Of note is the fact that a Republican between 1973 and 1980 could expect to pass an extra 0.17 extra bills when they represented a district with many highly educated constituents (blue bar), as opposed to a Republican who did not. This is an additional 25% more bills. Similarly, a

Republican representative would create 0.17 fewer bills when they represented a district with many high income constituents (red bar), a 25% decrease. Again, these effects are in the same direction as the effects for Democrats in this time period. The magnitude of effect is much smaller, but the percentage change is much larger for Republicans.

Although Republicans and Democrats are similar prior to 1994, they are very different after. Between 2011 and 2014, a Republican representing a district with many high income constituents could expect to produce an additional 0.32 bills (yellow bar) as compared to a similar Republican representing a poorer district. This represents 18.6% more successful legislation produced by representatives of high income districts. The effect of education for that time period was similar. This makes sense, as the green, yellow, and purple bars all capture the effect of income and education together. In the case of the green and yellow bars, which capture the effect of education (income) without controlling for income (education), the magnitudes capture the effect of both variables due to omitted variable bias. The magnitude of effect for district socioeconomic status captures the effect of both income and education by design. For Democrats in this time period, there was no clear relationship between district demographics and legislative success.

As is often the case throughout this analysis, when income and education have the same effect on successful legislation, the effects of the coefficient for income when education is controlled for is statistically insignificant due to multicollinearity. Thus, for Republicans between 2011 and 2014, I cannot disentangle the separate effects of income and education. However, I can say that in this time period districts with many highly educated and high income constituents have Republican legislators who produce unusually high amounts of successful legislation.

One possible explanation for the changing behavior of Republican representatives is the changing coalitions of the Republican party. Republicans are supported by different groups of lobbyists than they used to be (Grossmann & Hopkins, 2016). They are increasingly influenced by the evangelical base (Leege & Kellstedt, 2016). It is also possible that Republicans are increasingly from areas that favor the rich, such as the South. I show some support for this in a subsequent section.

Table 7 shows whether the patterns evident in the graphics are statistically significant. I use two interaction terms in this table to uncover the effects of both partisanship and time: one interaction between year and the measures of socioeconomic status, and another interaction between the party of the member of Congress and the measures of socioeconomic status.¹² For example, the interaction between the income of a district and time¹³ is positive, 0.001, and statistically significant. As time goes on, the impact of the income of a district on the number of bills that representative produces goes up. This is true for both models that include income. Note that the interaction term between district income and the party of that district's representative is negative and statistically significant in both models that include income.¹⁴ This is initially counterintuitive, because Republicans clearly produce more successful legislation when they represent high income districts. Yet it makes sense when considering the effect of time. As time goes on, representatives produce more legislation when they hail from high income districts. As time goes on, Republicans

¹²A more appropriate model would include a triple interaction term between party, year, and the measures of socioeconomic status. However, the regression fails to run when that triple interaction is used in the model that controls for both education and income. The results of the model with a modification of the triple interaction term for the model that includes income and education at the same time are consistent with the analysis presented here.

¹³This interaction is on the fifth row of Table 7

¹⁴This is on the sixth row of Table 7. The interaction term for the model with both income and education included is -0.29, while the interaction term for the model that excludes education is 0.009.

Table 7. Bills Passing House 1972-2014, Controlling for Time and Party

	SES	Income, Education	Income	Education
SES	-0.267 (0.297)			
SES*year	0.003 (0.003)			
SES*Republican	-0.008 (0.037)			
income		-0.070* (0.032)	-0.052* (0.022)	
income*year		0.001* (0.0003)	0.001* (0.0002)	
income*Republican		-0.029*** (0.004)	-0.009** (0.003)	
education		0.060 (0.040)		0.024 (0.028)
education*year		-0.001 (0.0004)		-0.0002 (0.0003)
education*Republican		0.040*** (0.005)		0.013*** (0.003)
year	-0.028*** (0.004)	-0.032*** (0.008)	-0.042*** (0.007)	-0.023*** (0.006)
Republican	-12.001*** (0.595)	-9.266*** (0.678)	-11.872*** (0.563)	-11.198*** (0.628)
Republican*year	0.117*** (0.006)	0.091*** (0.007)	0.119*** (0.006)	0.107*** (0.007)
majority	-0.184*** (0.037)	-0.284*** (0.038)	-0.191*** (0.038)	-0.208*** (0.037)
conservativeness	-0.377*** (0.090)	-0.395*** (0.090)	-0.383*** (0.090)	-0.380*** (0.089)
seniority	0.065*** (0.004)	0.066*** (0.004)	0.066*** (0.004)	0.065*** (0.004)
percent black	-0.097*** (0.011)	-0.105*** (0.011)	-0.097*** (0.011)	-0.101*** (0.011)
Black Caucus	-3.757*** (1.078)	-4.051*** (1.082)	-3.977*** (1.081)	-3.670*** (1.075)
Black Caucus*year	0.036*** (0.010)	0.039*** (0.010)	0.038*** (0.010)	0.035*** (0.010)
comm. chair	1.153*** (0.054)	1.120*** (0.054)	1.149*** (0.054)	1.145*** (0.054)
powerful comm.	-0.361*** (0.033)	-0.379*** (0.033)	-0.365*** (0.033)	-0.362*** (0.033)
Observations	9,194	9,194	9,194	9,194
Akaike Inf. Crit.	27,430	27,317	27,420	27,401

Note:

*p<0.05; **p<0.01; ***p<0.001

have gained control of the House. Thus, the interaction term for time and income is capturing the increasing power of Republicans over time. Once you account for that changing effect of time, the model indicates that Republicans produce less legislation when they represent high income districts than do Democrats. Yet because Republicans have gained power in the House over time, ever since 1994 they have produced more successful legislation when they represent high income districts.

Overall, the time trends evident in Figures 10 and 11 are validated by Table 7. As time goes on, the importance of district income for legislative success has increased. The increasing power of Republicans over time drives the evident increase in the connection between Republicans creating successful legislation and the number of high income constituents in their districts, seen in Figure 11.

Yet it is valuable to examine the influence of partisanship by separating Democrats and Republicans in the regression results instead of including an interaction term, as seen in Tables 8 and 9. By separating the two parties from each other, the regression results will highlight the effect of time for each party with fewer complicated nuances in the analysis. These results clearly support the time trends evident in Figures 10 and 11.

The regression results for Republicans in Table 8 substantiate the statistical significance of the increasing influence of district income on legislative success. The time trends on both district socioeconomic status and income are statistically significant and positive.¹⁵ Unsurprisingly, the coefficients in the model that includes both education and income are statistically insignificant. This is, once again, due to collinearity inflating standard errors when both education and income are included. Yet the time trend on education does not itself have an effect on legislative success,

¹⁵These interaction effects are apparent in rows two and four of Table 8

Table 8. Republican Bills Passing House 1972-2014, Controlling for Time

	SES	Income, Education	Income	Education
SES	−0.920* (0.445)			
SES*year	0.010* (0.004)			
income		−0.055 (0.048)	−0.083* (0.032)	
income*year		0.001 (0.0005)	0.001** (0.0003)	
education		−0.016 (0.063)		−0.063 (0.043)
education*year		0.0003 (0.001)		0.001 (0.0004)
year	0.026*** (0.006)	0.004 (0.012)	0.003 (0.011)	0.012 (0.010)
majority	1.061*** (0.056)	1.008*** (0.060)	1.073*** (0.057)	1.024*** (0.056)
seniority	0.063*** (0.005)	0.063*** (0.006)	0.063*** (0.006)	0.063*** (0.005)
conservativeness	−0.620*** (0.117)	−0.624*** (0.117)	−0.610*** (0.117)	−0.626*** (0.117)
percent black	−0.109*** (0.017)	−0.113*** (0.017)	−0.108*** (0.017)	−0.112*** (0.017)
comm. chair	0.847*** (0.076)	0.847*** (0.076)	0.846*** (0.076)	0.849*** (0.076)
powerful comm.	−0.290*** (0.046)	−0.298*** (0.047)	−0.287*** (0.046)	−0.296*** (0.046)
Observations	4,146	4,146	4,146	4,146
Akaike Inf. Crit.	11,230.340	11,228.700	11,235.010	11,226.840

Note:

*p<0.05; **p<0.01; ***p<0.001

as seen in the fourth column of Table 8. Thus, we can infer that the educational attainment of residents of a district does not statistically significantly effect the changing amounts of successful legislation their representatives produce. As seen in Table 8, Republicans have increasingly created more legislation when they represent high income and high socioeconomic status districts.

The regression results for Democrats coincide with Figure 10: there is no apparent interaction between time and socioeconomic variables for Democrats. That is, none of the interactions terms for the measures of socioeconomic status and time are statistically significant.¹⁶ Democratic legislative behavior does not appear to change over time with respect to district income levels. The only evident results in Table 9 is that Democrats produce less legislation when they represent high income districts, as reflected in the coefficient of 0.056 in the third row, for income in the model that does not control for education. All the other measures of socioeconomic status do not reach statistical significance, which is to be expected when including an interaction term that does nothing to explain the variation in the model. That is, including the interaction term for time with Democrats increases standard errors, obscuring the effects of a district's socioeconomic status, income, and education.

Intriguingly, the best fitting model as seen in Akaike's Information Criterion is different for Republicans and Democrats. For Republicans, the best fitting model is the one that focuses on education and omits income. For Democrats, the best fitting model is the one that incorporates both income and education together.

Note that the effect of being a black Democrat is evident in Table 9. Black legislators have become more legislatively productive over time. In fact, the effect size of being black on legislative success is statistically significant and negative for

¹⁶These interaction terms appear on the second, fourth, and sixth rows of Table 9

Table 9. Democratic Bills Passing House 1972-2014, Controlling for Time and Black MC Interaction

	SES	Income, Education	Income	Education
SES	-0.610 (0.371)			
SES*year	0.006 (0.004)			
income		-0.038 (0.041)	-0.056* (0.028)	
income*year		0.0003 (0.0004)	0.001 (0.0003)	
education		0.011 (0.048)		-0.009 (0.034)
education*year		-0.00003 (0.0005)		0.0001 (0.0003)
year	0.014** (0.004)	-0.001 (0.009)	-0.001 (0.009)	0.007 (0.007)
majority	-1.310*** (0.054)	-1.339*** (0.056)	-1.317*** (0.055)	-1.311*** (0.054)
seniority	0.077*** (0.004)	0.077*** (0.004)	0.076*** (0.004)	0.077*** (0.004)
conservativeness	-0.416*** (0.125)	-0.437*** (0.125)	-0.464*** (0.125)	-0.354** (0.122)
percent black	-0.108*** (0.013)	-0.112*** (0.013)	-0.111*** (0.013)	-0.106*** (0.013)
Black Caucus	-3.901*** (1.041)	-4.014*** (1.063)	-4.078*** (1.051)	-3.749*** (1.037)
Black Caucus*year	0.038*** (0.010)	0.039*** (0.010)	0.039*** (0.010)	0.037*** (0.010)
comm. chair	0.852*** (0.066)	0.852*** (0.066)	0.848*** (0.066)	0.860*** (0.066)
powerful comm.	-0.516*** (0.043)	-0.522*** (0.043)	-0.517*** (0.043)	-0.516*** (0.043)
Observations	5,060	5,060	5,060	5,060
Akaike Inf. Crit.	15,281.450	15,275.450	15,278.230	15,281.320

Note:

*p<0.05; **p<0.01; ***p<0.001

the 1970s, but statistically significant and positive in the 1990s and 2000s. This is one result that deserves extra attention. The results for the modern era have been known for a while, (Rocca & Sanchez, 2007) but as far as I am aware no one has explored the fact that black Democrats in the 1970s and 1980s were not successful in creating legislation.

Overall, these results show Republicans are the reason that high income districts tend to have legislators who produce more successful legislation after 1994. Yet this is not just because they took power after the 1994 Republican revolution. Republican behavior changed over time: they increasingly produce more successful legislation when they represent high income and socioeconomically privileged districts.

9 EXPLORING REGIONAL CAUSES of POLITICAL PRIVILEGE

One potential explanation for the changing influence of the affluent is that the parties are now affiliated with different regions of the country (Gelman, 2009). For example, Democrats used to be control the South, which is now a Republican bastion. If certain regions have constant preferences over legislation and legislative activity reflects the behavior of representatives from the more powerful areas, then the transition of the Republican party from a Midwestern party to a Southern party could explain why the tie between district socioeconomics and legislative success has changed for Republicans. The results are suggest intriguing insights into regional variations in politics.

The changing power of the South is reflected in the number of legislators from

the South in each party, as seen in Table 10. Prior to 1988, the regional power of Democrats was concentrated in the South. After 1994, that power transitioned to the Northeast. Instead, Southern Republicans now had the bulk of the premium committee seats. I focus on committee power here, but these results are very similar for the total number of Republican and Democratic seats held in each region as well as the number of members from each region who chair a committee. The base of power has diminished for Republicans in the Midwest and Northeast. Instead, Republican power has settled in the South.

Table 10. Percent of Legislators in Powerful Committees

	before 1988		after 1994	
	Democrats	Republicans	Democrats	Republicans
Midwest	23.8%	38.2%	17.7%	23.9%
Northeast	22.8%	19.3%	30.3%	10.6%
South	37.5%	29.6%	29.1%	46.7%
West	15.7%	12.9%	22.9%	18.8%
Observations	1,925	1,200	1,783	1,798

Figure 12 allows some inferences for whether the changing behavior of Republican legislators is driven by their geographic base. Figure 13 does the same for Democrats. Each figure has four graphics, one for each of the following regions: Northeast, Midwest, West, and South. Each graph shows the same information depicted in the graphs in sections six and seven. Namely, the far left hand grouping of coefficients in each graphic shows the magnitude of the effect of each variable for legislators between 1973 and 1980. Using the example of Midwestern Republicans between 1973 and 1980, we can see that a Midwestern Republican produced 0.11 more successful bills when they represented a highly educated district (in blue), but created 0.13 fewer bills when they represented a district with high average incomes

(in red).

Figure 12 and Figure 13 show that Southern representatives consistently produce more legislation when they represent high income and educated districts, especially when they are in the majority party. All of the statistically significant bars are positive. Republicans have taken over in the South, and Southerners produce more legislation when they represent high income districts. This has contributed to the overall trend that all Republicans increasingly produce more legislation when they represent high income districts.

Yet there are also indications that the increasing influence of affluence is due to changes in behavior within regions. Specifically, the changing patterns between legislation and socioeconomic characteristics for Midwestern Republicans reflect the patterns visible when Republicans are looked at as a whole. Prior to 1995, when Republicans were in the minority party, Midwestern Republicans from high income districts produced slightly less legislation than their counterparts in poorer districts. After the Republicans took over the House after 1995, Midwestern Republicans produced more legislation when they represented high income districts. Thus, the increasing power of high income districts is also being driven by the changing behavior of Midwestern Republicans.

Two other patterns are worthy of mention. The first is that Southern Democrats and Southern Republicans both have similar patterns of legislative productivity with respect to their district socioeconomic characteristics when they are in the majority party. They both tend to produce more legislation when they represent highly educated (blue and green bars) and socioeconomically (purple bars) elite districts. Yet the effect of income once education is controlled for (red) is negligible, and often negative. Midwestern Democrats and Republicans also appear have similar patterns

Figure 12: Republicans, Successful Legislation by Region and Time

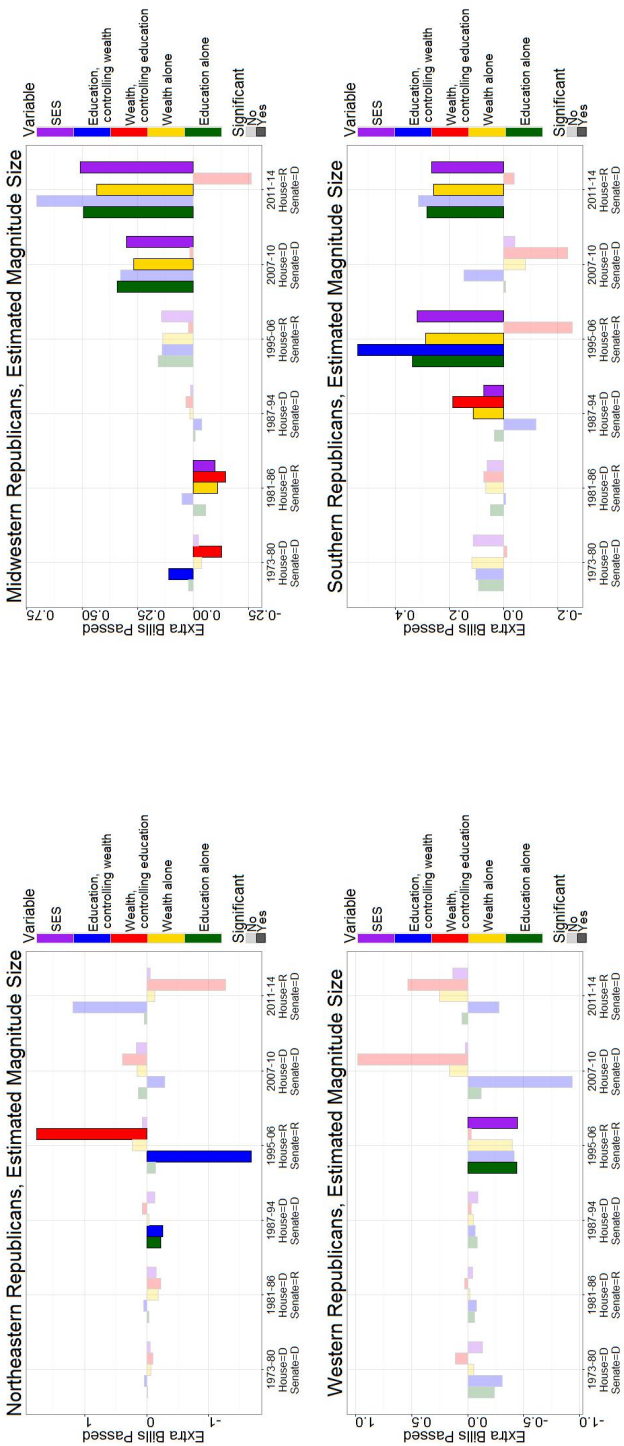
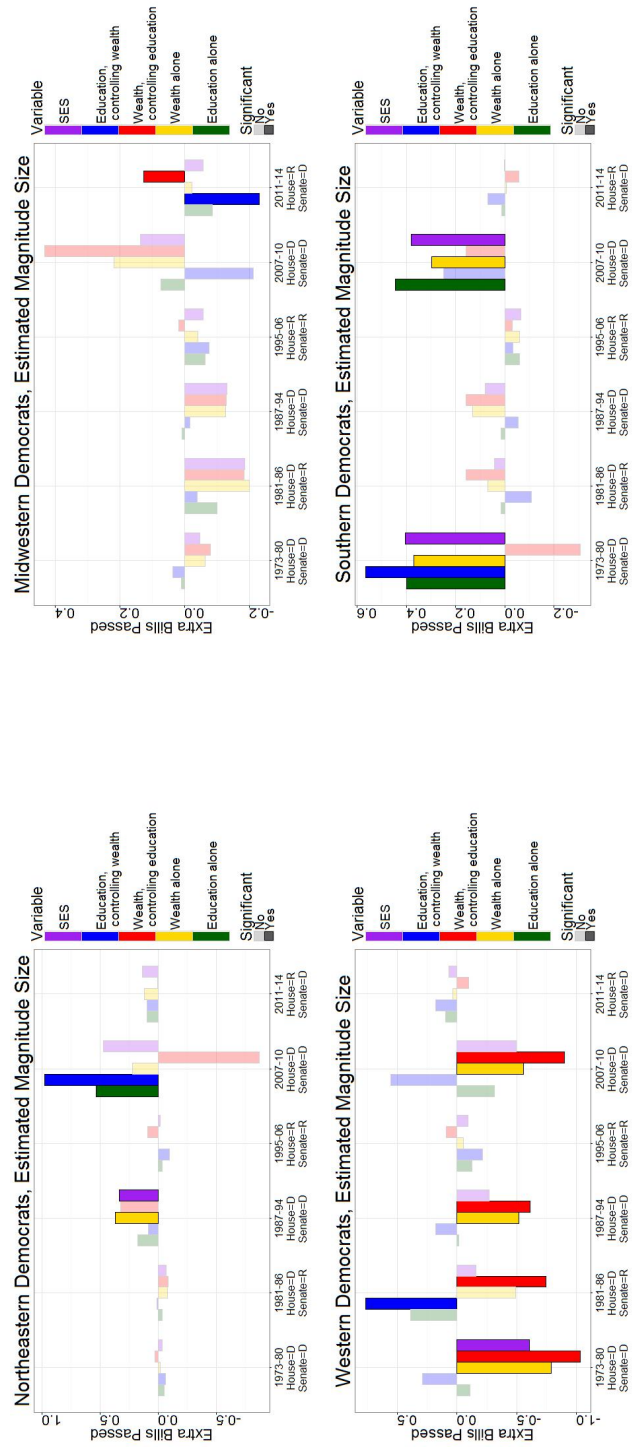


Figure 13: Democrats, Successful Legislation by Region and Time



of legislative success relative to their district demographics, although the effect sizes for Midwestern Democrats are rarely statistically significant. But both parties in the Midwest produced mildly less legislation when they represented high income and educated districts prior to 1994. After 1994, their behavior started to diverge a little more, although both parties produced a bit more legislation when they represented high income districts (yellow bars). Northeastern and Western Democrats, on the other hand, have very different patterns of legislative success relative to their district demographics than do Republicans. The consistency of behavior relative to district demographics, especially for Southern representatives, indicates that there is some merit to the idea that regional ideologies influence legislative behavior.

The second pattern of note is that the positive influence of education and negative influence of income for Democratic representatives appears to be caused by a confluence of behavior by Western and Southern Democrats. Namely, Western Democrats tend to produce more legislation when they represent poor districts (red and yellow bars), while Southern Democrats tend to produce more legislation when they represent educated districts (blue and green bars). As is evident in Figure 10 in Section 8, Democrats overall produce more legislation in high income districts with relatively low educational attainment.¹⁷

The evidence presented here is primarily exploratory. There are some intriguing similarities between Southern Democrats and Republicans, as viewed through the graphics. The idea that Southern legislators have a significantly different interaction with legislative success and district demographics effects is supported by

¹⁷Note that the statistical significance of the effect of education for Democrats in that graphic is sometimes driven by the combination of statistically insignificant coefficients for education in each region except for the Midwest. That is, Democrats in the South, Northeast, and West all produce more legislation when they represent highly educated districts. This is sometimes statistically significant, but combined they produce statistically significant effects for all Democrats.

the full regression analysis, so long as time is not controlled for. As seen in the appendix, the interaction effects between district income and educational measures, partisanship, and the South are generally statistically significant. Yet the effect of region and partisanship is not consistently statistically significant when time is controlled for. This is partially due to the fact that splitting representatives by time as well as region and party substantially reduces the numbers of available observations, so the power of the model is reduced. However, it could also be the case that time is not a relevant factor in the regional analysis. The appropriate model to account for regional variation needs better theoretical grounding in order to fully account for the impact of regional partisan affiliations. However, there appear to be an intriguing difference between regions, and consistent behavior within some regions. This provides an interesting avenue of additional study.

10 CONCLUSION

Just as the influence of the affluent has increased in the economic sphere, I show that legislators who represent high income districts are more likely to produce legislation that favors the high income and to produce higher amounts of successful legislation. Asymmetric politics are clearly evident in these findings. Republicans are the politicians who are more responsive to the economic characteristics of their districts. The increasing influence of the affluent in legislation seems to be tied to the increasing power of Republicans, which is in turn tied to the increasing power of Republicans in the South. As Gelman (2009) shows for citizen partisanship, that change happens just after 1990. I show that for legislative outcomes, the changes occurred just after the Republican revolution of 1994.

Yet Democrats also respond to the elite. Instead of being responsive to high

income constituents, they are more likely to be legislatively productive when they represent highly educated districts. Unlike Republicans, they have been equally responsive to well educated districts whenever they have been in control of the House, regardless of time.

Throughout this paper I demonstrate a methodology to account for the conflicting demands of multicollinearity over time. For some measures of the time trends and differences between Republicans and Democrats, multicollinearity does not obscure the effect by inflating standard errors. The change over time, without controlling for partisanship, is statistically significant. This statistical significance occurs despite the fact that the unbiased measures used in the 1970s and 1980s are obscured by multicollinearity in the 2000s, which would tend to inflate the standard errors. That is, the effect of this trend of time is strong enough and consistent enough to overcome the problems with multicollinearity. As Belsley (1991) said, the effect of multicollinearity does not bite.

Yet multicollinearity does bite in the time trends for Republicans alone, as seen in Table 8. When income and education are both included in the same model, the effect of either variable is obscured even though an F-test on their joint significance reveals they are statistically significant when considering their combined impact. In order to understand the time trends for Republicans, I avoid interpreting the model that controls for both income and education. Instead, I focus on the impact of socioeconomic status, which combines the two by design. The results show that Republicans increasingly produce more legislation when they represent districts with high levels of socioeconomic status. This is in line with the results from the models only include one of education or income, while omitting the other. Both models are biased, yet the time trend is still meaningful. The distinct impact of both

income and education can not be observed due to multicollinearity, but it is clear that district income and education both increase the number of bills a member of Congress successfully sponsors.

The graphics used throughout this paper highlight these trends while accounting for the problems induced by multicollinearity. They report the results of many different regressions and five different coefficients. This provides a richness of detail that allows the reader to see time trends and differences between Democrats and Republicans even when the relevant variables are different for different groups.

It would be interesting to apply this method for analyzing of multicollinearity to constituent preferences, especially as they relate to Republican and Democratic identification. McCarty et al. (2006) indicate that highly educated constituents increasingly lean Republican, while high income constituents increasingly lean Democratic. Accounting for the potential for conflicting demands of multicollinearity on partisan identification could reveal more about these changes over time.

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11 APPENDIX

11.1 Regression Results for Bill Success with Regional Controls

This section provides the regression results for bill success based on party, time, and region, Tables 11, 12, 13, 14, 15. Note that the influence of the South for Republican bills depends on how it is included. When it is included with as a dummy variable without a control for time trends, it is strongly statistically significant across most measures. When it is included as one of four regions— South, Midwest, Northeast, and West— it shows significantly different results from the omitted region of the Midwest. However, when it is included just a dummy variable on its own while controlling for time, it does not demonstrate any statistical significance. This is an intriguing distinction, and one that reverses itself for Democrats. Further study should examine why this is happening. Until then, it is clear that the South has influenced legislative behavior, but it is not clear how that is affected by time.

Table 11. Bills Passing House 1972-2014, Controlling for Southern States and Party

	SES	Income, Education	Income	Education
SES	-0.052 (0.031)			
SES*South	0.102 (0.070)			
SES*Republican	0.189*** (0.046)			
SES*South*Republican	-0.064 (0.094)			
income		0.007** (0.003)	0.004 (0.002)	
income*South		0.022*** (0.007)	0.013* (0.006)	
income*Republican		-0.042*** (0.004)	-0.009** (0.003)	
income*South*Republican		-0.037*** (0.010)	-0.005 (0.008)	
education		-0.011*** (0.003)		-0.009*** (0.002)
education*South		-0.014* (0.007)		0.00004 (0.006)
education*Republican		0.072*** (0.005)		0.042*** (0.004)
education*South*Republican		0.027** (0.010)		-0.004 (0.008)
South	-0.122 (0.063)	-0.324* (0.131)	-0.399** (0.130)	-0.150 (0.096)
Republican	-0.706*** (0.074)	-0.530*** (0.124)	-0.471*** (0.125)	-1.362*** (0.096)
South*Republican	0.242** (0.080)	0.329 (0.193)	0.266 (0.192)	0.334* (0.158)
majority	0.035 (0.035)	-0.186*** (0.043)	0.045 (0.035)	-0.030 (0.038)
seniority	0.086*** (0.004)	0.085*** (0.004)	0.088*** (0.004)	0.084*** (0.004)
conservativeness	0.540*** (0.088)	0.090 (0.090)	0.602*** (0.087)	0.310*** (0.090)
percent black	-0.089*** (0.012)	-0.082*** (0.012)	-0.080*** (0.012)	-0.094*** (0.012)
comm. chair	1.150*** (0.062)	1.067*** (0.060)	1.160*** (0.062)	1.114*** (0.061)
powerful comm.	-0.375*** (0.037)	-0.411*** (0.037)	-0.383*** (0.037)	-0.381*** (0.037)
Observations	7,880	7,880	7,880	7,880
Akaike Inf. Crit.	23,784.470	23,470.390	23,796.150	23,658.080

Note:

*p<0.05; **p<0.01; ***p<0.001

Table 12. Republican Bills Passing House, Controlling for Time and Region

	SES	Income, Education	Income	Education
SES	-3.334*** (0.923)			
SES*year	0.033*** (0.009)			
SES*NE	-0.063 (1.328)			
SES*South	4.630*** (1.182)			
SES*West	1.856 (1.364)			
SES*year*NE	-0.001 (0.013)			
SES*year*South	-0.043*** (0.011)			
SES*year*West	-0.020 (0.013)			
income		-0.011 (0.104)	-0.245*** (0.069)	
income*year		0.00000 (0.001)	0.002*** (0.001)	
income*NE		-0.060 (0.149)	0.040 (0.099)	
income*South		0.304* (0.152)	0.362*** (0.091)	
income*West		0.098 (0.145)	0.205* (0.102)	
income*year*NE		0.001 (0.001)	-0.0004 (0.001)	
income*year*South		-0.003 (0.001)	-0.003*** (0.001)	
income*year*West		-0.001 (0.001)	-0.002* (0.001)	
education		-0.311* (0.129)		-0.279*** (0.084)
education*year		0.003* (0.001)		0.003*** (0.001)
education*NE		0.039 (0.201)		-0.055 (0.126)
education*South		0.083 (0.182)		0.347** (0.109)
education*West		0.049 (0.184)		0.109 (0.124)
education*year*NE		-0.001 (0.002)		0.0003 (0.001)
education*year*South		-0.001 (0.002)		-0.003** (0.001)
education*year*West		-0.001 (0.002)		-0.001 (0.001)
year	0.049*** (0.009)	-0.021 (0.022)	-0.019 (0.022)	-0.007 (0.017)
NE	2.000 (1.239)	1.163 (3.382)	1.554 (3.370)	1.424 (2.591)
South	5.008*** (1.058)	-5.675* (2.879)	-5.712* (2.876)	-1.576 (2.213)
West	2.432* (1.120)	-3.198 (3.332)	-2.992 (3.351)	-0.754 (2.525)
year*NE	-0.017 (0.012)	-0.006 (0.033)	-0.012 (0.032)	-0.008 (0.025)
year*South	-0.045*** (0.010)	0.055* (0.027)	0.055* (0.027)	0.017 (0.021)
year*West	-0.016 (0.011)	0.043 (0.032)	0.038 (0.032)	0.020 (0.024)
majority	1.044*** (0.055)	1.021*** (0.060)	1.053*** (0.056)	1.040*** (0.055)
seniority	0.066*** (0.005)	0.067*** (0.005)	0.067*** (0.005)	0.065*** (0.005)
conservativeness	-0.796*** (0.124)	-0.790*** (0.125)	-0.785*** (0.124)	-0.809*** (0.125)
percent black	-0.059** (0.022)	-0.054* (0.022)	-0.065** (0.022)	-0.064** (0.022)
comm. chair	0.823*** (0.073)	0.822*** (0.073)	0.823*** (0.074)	0.824*** (0.073)
powerful comm.	-0.311*** (0.046)	-0.312*** (0.046)	-0.305*** (0.046)	-0.311*** (0.046)
Observations	4,146	4,146	4,146	4,146
Akaike Inf. Crit.	11,061.200	11,057.210	11,079.920	11,053.760

Note:

*p<0.05; **p<0.01; ***p<0.001

Table 13. Republican Bills Passing House 1972-2014, Controlling for Time and Southern States

	SES	Income, Education	Income	Education
SES	-1.577* (0.683)			
SES*year	0.016* (0.007)			
SES*South	0.694 (1.323)			
SES*year*South	-0.006 (0.013)			
income		-0.067 (0.067)	-0.106* (0.047)	
income*year		0.001 (0.001)	0.001* (0.0005)	
income*South		0.070 (0.184)	0.033 (0.102)	
education		-0.082 (0.096)		-0.153* (0.070)
education*year		0.001 (0.001)		0.001* (0.001)
education*South		-0.012 (0.226)		0.058 (0.128)
education*year*South		0.0002 (0.002)		-0.0004 (0.001)
year	0.035*** (0.009)	0.003 (0.017)	0.003 (0.017)	0.011 (0.014)
South	1.647 (1.208)	0.387 (3.020)	0.061 (2.946)	1.293 (2.449)
year*South	-0.015 (0.012)	-0.006 (0.029)	-0.002 (0.028)	-0.014 (0.024)
majority	1.114*** (0.066)	1.120*** (0.074)	1.144*** (0.068)	1.077*** (0.066)
seniority	0.074*** (0.007)	0.074*** (0.007)	0.074*** (0.007)	0.074*** (0.007)
conservativeness	-0.625*** (0.135)	-0.627*** (0.136)	-0.617*** (0.135)	-0.627*** (0.136)
percent black	-0.117*** (0.023)	-0.117*** (0.023)	-0.120*** (0.023)	-0.115*** (0.022)
comm. chair	0.803*** (0.089)	0.804*** (0.089)	0.800*** (0.089)	0.809*** (0.089)
powerful comm.	-0.318*** (0.052)	-0.317*** (0.052)	-0.315*** (0.052)	-0.322*** (0.052)
Observations	3,481	3,481	3,481	3,481
Akaike Inf. Crit.	9,150.283	9,157.820	9,152.026	9,151.639

Note:

*p<0.05; **p<0.01; ***p<0.001

Table 14. Democratic Bills Passing House, Controlling for Time and Region

	SES	Income, Education	Income	Education
SES	-0.678 (1.039)			
income		-0.033 (0.096)	-0.049 (0.081)	
year	0.017* (0.008)	0.004 (0.023)	0.001 (0.023)	0.012 (0.016)
NE	0.227 (1.028)	-0.247 (3.015)	-0.316 (2.962)	0.892 (2.118)
South	1.538 (1.028)	-1.188 (2.684)	-1.472 (2.653)	1.385 (1.951)
West	1.851 (0.998)	4.003 (3.056)	3.908 (3.036)	3.747 (2.083)
education		0.013 (0.100)		0.007 (0.087)
majority	-1.315*** (0.054)	-1.348*** (0.056)	-1.320*** (0.055)	-1.315*** (0.054)
seniority	0.082*** (0.004)	0.082*** (0.004)	0.082*** (0.004)	0.082*** (0.004)
conservativeness	-0.277* (0.135)	-0.283* (0.135)	-0.303* (0.135)	-0.229 (0.135)
percent black	-0.068*** (0.015)	-0.067*** (0.015)	-0.071*** (0.015)	-0.067*** (0.015)
black caucus	-4.070*** (1.049)	-3.772*** (1.074)	-4.094*** (1.059)	-3.923*** (1.046)
comm. chair	0.828*** (0.065)	0.834*** (0.065)	0.829*** (0.065)	0.841*** (0.065)
powerful comm.	-0.534*** (0.043)	-0.544*** (0.043)	-0.531*** (0.043)	-0.536*** (0.043)
SES*year	0.006 (0.010)			
SES*NE	-0.021 (1.274)			
SES*South	0.916 (1.262)			
SES*West	-1.218 (1.301)			
income*year		0.0003 (0.001)	0.0004 (0.001)	
income*NE		0.034 (0.120)	0.008 (0.098)	
income*South		0.243 (0.133)	0.084 (0.098)	
income*West		0.0003 (0.126)	-0.068 (0.101)	
education*year				-0.00005 (0.001)
education*NE				-0.070 (0.109)
education*South				-0.009 (0.112)
education*West				-0.123 (0.109)
year*NE	-0.002 (0.010)	0.002 (0.030)	0.003 (0.029)	-0.008 (0.021)
year*South	-0.013 (0.010)	0.010 (0.027)	0.013 (0.026)	-0.014 (0.020)
year*West	-0.014 (0.010)	-0.032 (0.030)	-0.031 (0.030)	-0.031 (0.021)
SES*year*NE		-0.0001 (0.001)		
SES*year*South		-0.079 (0.132)		
SES*year*West		-0.227 (0.152)		
education*year1		-0.134 (0.132)		
education*NE1	0.039*** (0.010)	0.036*** (0.010)	0.039*** (0.010)	0.038*** (0.010)
education*South1	0.001 (0.012)			
education*West1	-0.007 (0.012)			
black caucus*year	0.011 (0.013)			
income*year*NE		-0.0003 (0.001)	-0.00004 (0.001)	
income*year*South		-0.002 (0.001)	-0.001 (0.001)	
income*year*West		-0.0001 (0.001)	0.001 (0.001)	
education*year*NE		0.001 (0.001)		
education*year*South		0.002 (0.001)		
education*year*West		0.001 (0.001)		
education*year*NE1				0.001 (0.001)
education*year*South1				0.0002 (0.001)
education*year*West1				0.001 (0.001)
Observations	5,060	5,060	5,060	5,060
Alaike Inf. Crit.	15,208.590	15,213.140	15,206.900	15,216.240

Note:

*p<0.05; **p<0.01; ***p<0.001

Table 15. Democratic Bills Passing House 1972-2014, Controlling for Time and Southern States

	SES	Income, Education	Income	Education
SES	-1.124*			
	(0.560)			
SES*year	0.011			
	(0.005)			
SES*South	1.067			
	(1.266)			
SES*year*South	-0.009			
	(0.012)			
income		-0.087	-0.100*	
		(0.057)	(0.042)	
income*year		0.001	0.001*	
		(0.001)	(0.0004)	
income*South		0.392*	0.136	
		(0.159)	(0.103)	
income*year*South		-0.004*	-0.001	
		(0.002)	(0.001)	
education		0.026		-0.021
		(0.065)		(0.050)
education*year		-0.0002		0.0002
		(0.001)		(0.0005)
education*South		-0.386*		-0.048
		(0.176)		(0.118)
education*year*South		0.004*		0.001
		(0.002)		(0.001)
year	0.020***	-0.008	-0.010	0.011
	(0.006)	(0.014)	(0.014)	(0.010)
South	1.630	-2.964	-2.631	1.802
	(1.204)	(2.415)	(2.430)	(1.854)
year*South	-0.015	0.027	0.023	-0.019
	(0.012)	(0.024)	(0.024)	(0.019)
majority	-1.325***	-1.372***	-1.326***	-1.333***
	(0.063)	(0.070)	(0.065)	(0.063)
seniority	0.088***	0.088***	0.088***	0.088***
	(0.005)	(0.005)	(0.005)	(0.005)
conservativeness	-0.494***	-0.479***	-0.510***	-0.451**
	(0.144)	(0.143)	(0.143)	(0.144)
percent black	-0.104***	-0.101***	-0.104***	-0.103***
	(0.015)	(0.015)	(0.015)	(0.015)
black caucus	-6.050***	-5.894***	-6.305***	-5.658***
	(1.333)	(1.359)	(1.342)	(1.331)
black caucus*year	0.059***	0.057***	0.061***	0.055***
	(0.013)	(0.013)	(0.013)	(0.013)
comm. chair	0.784***	0.787***	0.781***	0.798***
	(0.071)	(0.070)	(0.070)	(0.071)
powerful comm.	-0.552***	-0.549***	-0.548***	-0.553***
	(0.047)	(0.047)	(0.047)	(0.047)
Observations	4,399	4,399	4,399	4,399
Akaike Inf. Crit.	13,519.870	13,514.420	13,514.160	13,524.830

Note:

*p<0.05; **p<0.01; ***p<0.001