Inequality, Economic Segregation, and Unequal Policy Responsiveness

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Abstract
The increasing concentration of wealth in some communities, and poverty in others, may alter the incentives elected officials have to address and respond to the political opinions of constituents in certain geographic areas. To test this hypothesis, we use Cooperative Congressional Election Study data to measure the congruence between individual citizens’ opinions and the roll call votes of their Member of Congress and link each respondent with a newly created measure of economic segregation at the local level. We find that elected officials are especially attentive to the political opinions of citizens living in wealthier communities when there is greater residential segregation and that this effect is primarily driven by Republican MCs. These results suggest that growing economic segregation in the United States may have important implications for political equality and the responsiveness of elected officials to public opinion.
Introduction

Amid high levels of unemployment and poverty in the wake of the 2008 economic collapse, Wall Street CEOs are still receiving record-breaking payouts and the income share of the wealthiest Americans continues to grow (Hacker and Pierson 2010). Indeed, income inequality in the United States recently reached its highest point since 1928 (DeSilver 2013). As a result of this trend, many are asking why only the richest Americans appear to be benefitting from the current economic system. As we learn more about the causes of expanding income differences, it is also important to understand the potential political and societal consequences of economic inequality. This study asks what is at stake in a world where the gap between the wealthy and the poor continues to grow, particularly for those communities sustaining the brunt of rising inequality.

We argue that expanding economic inequality is reshaping American politics in important ways. In particular, we believe that income disparities are changing community contexts and social interactions in ways that further promote existing political inequalities. To better understand these political ramifications of inequality, this paper focuses on the rise of economic segregation, or the degree to which people live among others of similar economic status, which has grown in tandem with income inequality in recent decades (Reardon and Bischoff 2011; Soss and Jacobs 2009; Watson 2009). As the wealthy continue to benefit from inequality they are also becoming more isolated from the middle and lower classes, and this growing economic segregation can transform the incentives of elected officials who represent the residents of these diverging communities.

Growing evidence suggests that the relationship between the public’s policy preferences and the policies favored by government is shaped by economic status. That is, elected officials
appear to be much more responsive to the attitudes of the wealthy than other income groups when making policy decisions in a variety of political contexts (Bartels 2008; Flavin 2012; Gilens 2012). We extend this research by examining whether the geographic clustering of incomes affects how well citizens are represented by their representatives in the U.S. Congress. Increasing economic segregation has the potential to lead to very different community circumstances—and, therefore, can have very different political consequences—depending on the overall economic status of those areas experiencing greater income sorting. In this study we ask if political representation is influenced by the local economic context of where one lives.

With limited time and resources, elected representatives are often required to make tough decisions about how to most effectively use those resources to ensure that they remain in office. These reelection efforts typically include reaching out to constituents to address their concerns and attempting to mobilize them as reliable supporters. For the most part, wealthier individuals can be viewed as dependable political participants who also have more financial resources at their disposal, meaning elected officials will focus their attention on those with higher incomes. This suggests that, when economic segregation occurs among the wealthy, it has the potential to make politicians more responsive to the policy preferences of those residing in these communities since these areas provide clear and targeted opportunities for elected officials to bolster their chances of preserving their political power.

Conversely, when economic segregation leads to the clustering of the poor the result is likely that these communities will experience limited political responsiveness. Politicians can be expected to view those residing in these neighborhoods as politically inactive, difficult to mobilize, and unlikely sources of campaign contributions. The lack of attention given to those living in these areas will lead elected officials to have a poor understanding of the needs and
concerns of these individuals, which will presumably result in lower levels of policy representation.

Below, we discuss the relationship between economic segregation and government responsiveness in more detail and explain our plan for testing our expectations regarding this relationship. We then show how income segregation and income inequality are related yet distinct concepts, develop a measure of local economic segregation, and combine public policy preferences and multiple roll call votes in the House of Representatives over several elections to assess political representation. Adding to the list of negative consequences associated with the distribution of income—in this case, the economic sorting that has coincided with growing inequality—our results suggest that elected officials are especially attentive to the political opinions of citizens living in wealthier communities when there is greater residential segregation and that this effect is primarily driven by Republican Members of Congress. These findings suggest that growing economic segregation in the United States may have important implications for political equality and the responsiveness of elected officials to public opinion.

**Inequality, Segregation, and Representation**

One important development related to the effect of inequality on politics is that economic segregation, or the degree to which people live among others of similar economic status, has grown in tandem with income inequality in the U.S. (Reardon and Bischoff 2011; Watson 2009). According to one estimate, for example, economic segregation grew over 25% from 1970 to 2000 (Reardon and Bischoff 2011). This means neighborhoods have become more homogeneous, or clustered, suggesting that not only are income differences expanding but the geographic distinction between the rich and the poor is also becoming more pronounced. A number of scholars have examined the consequences of economic segregation and have typically
focused on the negative effects segregation can have on disadvantaged groups. For instance, those living in concentrated poverty have fewer job prospects, worse overall health outcomes, and are exposed to more crime than those living in more heterogeneous communities (Dreier, Mollenkopf, and Swanstrom 2004; Massey 1996). Importantly, others have also found that individuals residing in more economically similar neighborhoods are less likely to participate in politics (Campbell 2006; Oliver 1999; Soss and Jacobs 2009; Widestrom 2015).

We are unaware of any research, however, that has assessed whether economic segregation influences patterns of political responsiveness. One study has examined whether varying contexts of income inequality influence the equality of political representation (Ellis 2013), showing that economic inequality has the potential to distort how well the opinions of citizens with low incomes are represented. However, it is important to point out that while the over-time trends in income inequality and economic segregation have been comparable in recent years, the relationship is certainly not one-to-one. Moreover, income inequality and economic segregation are theoretically different concepts. To demonstrate this, Figure 1 shows the economic composition of four hypothetical neighborhoods across three separate scenarios. In each scenario we assume that the level of overall inequality is exactly the same—the only difference is in how those from various income groups are clustered in each of the neighborhoods. Panel A shows a situation where members from each of the three income groups (low, middle, and high) live among each other in all four neighborhoods, which can be thought of as heterogeneous communities with very little economic segregation. Alternatively, panel B presents a scenario where there is segregation among the poor. In this case, those with lower incomes are largely clustered in one neighborhood while the other areas consist of residents having mostly middle and high incomes. In panel C, we show how place can be characterized by
segregation of the rich, where those with high-incomes tend to live among each other in a single neighborhood. The main point here is that the context of inequality can be quite different depending on how those from different income groups are geographically clustered.

[Figure 1 about here]

How, then, might the spatial segregation of incomes affect how well different groups are represented by their elected officials? A growing body of research has uncovered evidence that the political opinions of citizens with lower incomes receive relatively little consideration in government policy decisions compared to the opinions of more affluent citizens (Bartels 2008; Flavin 2012; Gilens 2012; Gilens and Page 2014; Hacker and Pierson 2010; Kelly 2009; Winters and Page 2009). In this paper, we investigate whether economic segregation exacerbates unequal political representation; that is, whether the political opinions of citizens living in wealthier communities are especially well represented (compared to the political opinions of citizens living in poorer communities) when there are greater levels of economic segregation. From a theoretical standpoint, we expect economic segregation to exacerbate unequal political representation for several reasons.

First, from the perspective of a reelection-seeking politician (Mayhew 1974), an economically segregated district makes it easier to target particular areas to visit and raise campaign funds. When a Member of Congress (MC) can target her fundraising efforts in particular areas where wealthier constituents (who are far more likely to give to political campaigns compared to poor households) are concentrated, the MC is likely to interact with those constituents more regularly, hear about their concerns, and learn about their policy preferences (Fenno 1978; Grimmer 2013). Indeed, this micro-targeting can serve to effectively
isolate an MC from lower income areas in her district unless she purposively seeks out areas of lesser means.

Widestrom’s (2015) recent study of four U.S. metropolitan areas demonstrates how the political incentives of elected officials can be altered in varying contexts of economic segregation. Using interviews of local city officials, Widestrom is able to trace the logic and strategy politicians use when determining how to allocate their limited attention and resources across the various communities they represent. A common sentiment expressed by the local officials is that it is much easier to focus efforts on neighborhoods where political and social connections have already been established, which are almost always those areas that have a greater concentration of economic resources. Centering attention on these communities allows politicians to more easily mobilize these constituents to become volunteers, to attend fundraisers, and to more generally help with campaigning and reelection efforts. The payoff for citizens in these neighborhoods is that they develop a relationship with their representative that provides a convenient means to express their concerns and ask for help when problems arise.

This leads to a cyclical pattern that is worthwhile for both the people living in areas of concentrated wealth and their elected officials. Citizens have the economic and organizational resources necessary to help politicians get (re)elected, which leads to strategic decisions by representatives to focus their efforts and resources on communities they perceive as active and reliable supporters. For those living in homogeneous communities where resources are sparse, this same cycle creates circumstances where politicians have little incentive to pay attention to the needs of these individuals in these neighborhoods, which leads to the perception that representatives do not care about these communities and that government does not work for the residents living in these areas (Widestrom 2015).
Second, economic segregation not only shapes how elected officials view particular communities and how constituents view politicians, but can also create different kinds of challenges for government. Concentrated poverty leads to the compounding of issues that makes it difficult to even begin to address the myriad issues existing in these communities, issues that are not only influenced by the lack of individual resources but are further magnified by living in impoverished contexts. For instance, poverty-stricken areas tend to suffer from higher levels of crime, social disorders, health issues, unemployment, family disruption, high mortality rates, and worse educational outcomes (Dreier, Mollenkopf, and Swanstrom 2004; Soss and Jacobs 2009). For the elected officials who represent these neighborhoods, the social problems in areas of segregated poverty are so exceptionally complex that the thought of addressing the issues can be intimidating and (in some cases) may be viewed as impossible to solve. This leads to elected officials believing they can more effectively use their limited resources to address the relatively manageable problems that arise in areas that are economically better off (Widestrom 2015).

A third reason to expect economic sorting to shape government responsiveness is that the political opinions among rich and poor citizens are likely to diverge the most in areas that are segregated. Living in an affluent neighborhood and socializing in an environment almost exclusively made up of others from affluent backgrounds helps to crystallize similar political views and opinions on which political issues are more important than others (Baldassarri and Bearman 2007). In the same way, living in a low income neighborhood composed largely of people from disadvantaged backgrounds will have the same crystallizing effect on political opinions. Given previous research that shows government policy responsiveness is particularly unequal when the preferences of rich and poor citizens diverge (Gilens 2005, 2012), we expect
that political inequality will be heightened in areas where housing patterns are especially segregated by income.

Fourth, previous research has found that electoral jurisdictions with more homogenous preferences are “easier” for elected officials to represent (Gerber and Lewis 2004). A congressional district that is heavily segregated along income lines will have particular areas where wealthier constituents are concentrated. Given the fact that the more affluent tend to participate more in politics—whether it be voting, volunteering for a campaign, contacting elected officials, or any other participatory act—compared to disadvantaged citizens (Verba and Nie 1972; Wolfinger and Rosenstone 1980; Rosenstone and Hanson 1993; Verba, Schlozman, and Brady 1995), these areas will (1) have their political preferences particularly well-articulated and (2) make it easy for MCs to discern and then respond to these preferences. Therefore, residents living in areas where wealth is concentrated will be better represented since this creates circumstances that allow elected officials to more easily respond to citizens’ preferences.

When these reasons are considered together, economic segregation creates a cascading set of effects that shapes how politicians view the effectiveness and efficiency of focusing their resources in a given community and their ability to recognize the interests and preferences of those residing in various neighborhoods. Thus, we expect an MC to target and interact more exclusively with constituents in areas characterized by a concentration of wealth. These effects will subsequently lead to better representation for those living in areas where high incomes are clustered together and worse representation for those living in neighborhoods where residents are segregated and not financially well off.

Finally, it should also be emphasized that the argument we put forward here implies that the contextual effect of segregation on policy representation is separate from and in addition to
the influence of an individual’s income status on representation that scholars have recently uncovered (e.g., Bartels 2008; Gilens 2012). In other words, while those with low incomes are likely to experience worse representation than the rich regardless of where they live, those living in segregated and mostly poor neighborhoods are expected to receive worse representation than people residing in more economically diverse areas regardless of their individual incomes.¹ We assess the possibility of this latter effect in the analyses presented below.

**Measuring Responsiveness and Economic Segregation**

To test our theoretical expectations, we first develop a measure of dyadic representation similar to those created in previous research (e.g., Ellis 2013). Specifically, we use the 2008, 2010, and 2012 Cooperative Congressional Election Study (CCES) surveys to match congressional votes on legislation from the House of Representatives to the preferences of individual citizens on the exact same legislation. This is possible because the CCES asked respondents about their stances on particular pieces of House legislation that was considered leading up to the elections coinciding with each survey (i.e., in 2008, 2010, and 2012). The following prompt is used to assess how individuals view several pieces of legislation: “Congress considered many important bills over the past two years. For each of the following tell us whether you support or oppose the legislation in principle.” The surveys then ask about a number of recent House bills considered to be salient and notable.²

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¹ As we discuss above, a given neighborhood can hypothetically experience a number of different forms of income clustering (see Figure 1). Economic segregation may be due to clustering among the poor, cluster among the wealthy, or both. Previous research shows that growth in income segregation has largely occurred among both the rich and poor in recent decades (Reardon and Bischoff 2011). This is an important point since it suggests living in an economically segregated area may lead to more or less responsiveness depending on whether the homogeneous area is made up of mostly high or mostly low income individuals.

² In 2008, the CCES asked about the following bills: (1) whether to withdraw troops from Iraq; (2) an increase in the minimum wage; (3) federal funding for embryonic stem cell research; (4) expanding government surveillance overseas without a court order; (5) expanding the State Children’s Health Insurance Program (SCHIP); (6) an amendment to ban gay marriage; (7) offering assistance to homeowners as a result of the housing crisis; and (8)
Respondent support for each of these bills is then compared to the actual roll call vote of each individual’s MC to determine whether there is congruence (or not) between citizen opinion and MC behavior. Individuals are considered to have their preferences represented by their district legislator if the respondent and legislator both support or both oppose a given bill. When an individual and his or her representative disagree on a bill—that is, one supports and one opposes the legislation—we record these as instances when a House member was not responsive to the individual. We then use all of the matched roll call votes for each election year to create a congruence score, which is simply a percentage of how often each respondent aligned with his or her representative. In 2008, for instance, eight key pieces of legislation were asked about. If an individual agreed with her House representative on six of those eight bills, she would have a congruence score of 75%.

Overall, CCES respondents appear to be reasonably well represented by their House representatives. The median value of our congruence score is 60% for all years, suggesting that individuals agree with their elected officials on key pieces of legislation around 60% of the time. This level of responsiveness is consistent across elections years, with the exception that the median score is slightly lower (57%) in 2010. Of course, policy preferences do not always correspond well with congressional decision making and some constituents experience much better responsiveness than others. Those in the bottom quarter of responsiveness scale, for instance, agree with their representative’s key legislation votes only about a third of the time. At

whether to extend NAFTA. In 2010, the bills included: (1) federal stimulus through the American Recovery and Reinvestment Act; (2) expanding the State Children’s Health Insurance Program (SCHIP); (3) the creation of a carbon emission cap; (4) comprehensive health care reform; (5) financial reform bill; (6) proposal to end “don’t ask, don’t tell”; (7) expanding government surveillance overseas without a court order; (8) federal funding for embryonic stem cell research; and (9) the Troubled Asset Relief Program (TARP). Finally, in 2012: (1) the Ryan House budget proposal to cut Medicare and Medicaid by 42%; (2) the Simpson-Bowles House budget proposal to cut spending by 15% for most programs and eliminate many tax breaks; (3) the U.S.-Korea Free Trade Agreement; (4) proposal to repeal the Affordable Care Act (ACA); and (5) approval of the Keystone XL pipeline. More information about the CCES can be found at: http://projects.iq.harvard.edu/cces/home.
the opposite end of the spectrum, individuals at top quarter of the scale have their preferences matched by their House member on 80% of the bills that were asked about. We use this measure as our main dependent variables in the analyses presented below to assess whether some of this variance in responsiveness can be explained by levels of local economic segregation.

In addition to the CCES being well suited for our purposes because it asks respondents about key pieces of legislation, it is also ideal because it regularly interviews tens of thousands of people each election cycle. This allows the CCES to release specific geographic information, like county of residence, about its respondents without concerns related to confidentially. This is particularly important for our research since we are interested in understanding how economic segregation at the community level influences political representation, which would be difficult to assess without examining some form of a local context. The 2008, 2010, and 2012 CCES surveys are used since these years correspond with our measure of economic segregation, our main explanatory variable, which we turn to next.

Ideally, we would like to use a measure of economic segregation that accounts for geographic living patterns of people at the neighborhood level since economic sorting is likely to be masked when examining larger geographic areas. We are able to approximate the economic composition of local neighborhoods by using census tract household income data from the U.S. Census’s American Community Survey (ACS) five-year estimates (2008-2012). Next, unlike measures of racial or ethnic segregation where a single category is typically compared to the rest of the population, we need a measure that considers multiple income categories that can clearly be ordered from lower to higher values.

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3 More specifically, the 2008 CCES surveyed 32,800 people, 55,400 individuals were interviewed in 2010, and 54,535 in 2012.

4 Use of the five-year ACS data is necessary when census tract population estimates are needed.
To accomplish this, we use the rank-order information theory index developed by Reardon and Bischoff (2011), which allows us to use census tract data to obtain a measure of local economic segregation across U.S. counties. The first step in the calculation is to rank all individuals according to their position on a cumulative income scale. Since we are using Census data, we are required to do this across the 16 income categories used by the ACS. Then, the proportion of the population below and above every income threshold can be calculated, and the diversity of the population at a given threshold is approximated using a measure of entropy, $E(p)^5$. The entropy measure is then used to calculate the traditional information theory index for each income threshold using

$$H(p) = 1 = \sum_j \frac{t_j E_j(p)}{TE(p)},$$

where $t_j$ is the total population of neighborhood $j$ (i.e., each census tract) and $T$ is the total population of the county where each neighborhood is located. In words, $H(p)$ provides a comparison of the diversity of each neighborhood to the overall diversity of the county for a given income threshold.\(^6\) Since this must be done for every income threshold, we arrive at the rank-order information theory index as a way to combine the information across all income groups:\(^7\)

$$H^R = 2 \ln(2) \int_0^1 E(p) H(P) dp.$$  

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\(^5\) This is essentially the same as the Theil inequality index, and is calculated using:

$$E(p) = p \log_2 \frac{1}{p} + (1 - p) \log_2 \frac{1}{1 - p},$$

where $p$ indicates a given income threshold.

\(^6\) It is not necessary to use the county as the geographic comparison point for the census tracts. For example, Reardon and Bischoff (2011) use metropolitan areas as the higher geographic level in their study. We use counties so that we have comparable geographic measures to the opinion data we use (discussed below), and using county measures allows us to have broader coverage of the U.S. when compared with using metropolitan areas.

\(^7\) See Reardon and Bischoff (2011) for complete details of the measure and an explanation of how to calculate the index when using discrete income categories.
The resulting index ranges from 0 to 1 with higher values indicating greater economic segregation. A value of 0 would indicate that every neighborhood’s income diversity is identical to the income diversity of the county, and a value of 1 would indicate the neighborhoods are completely segregated. One particularly desirable property of this measure is that it is independent of county-level income inequality since overall inequality is essentially held constant when calculating the index, so we can be confident that the index is not simply measuring income inequality.  

During the 2008-2012 period, the economic segregation measure ranges from a low around 0.006 and a high of nearly 0.2. The average level of segregation is approximately 0.07. Similar to common measures of income inequality, like the Gini coefficient, the estimated level of economic segregation for a given county does not have a straightforward interpretation on its own. Instead, the measure indicates where segregation is higher or lower in a county relative to other counties.

When examining the relationship between local levels of economic segregation and responsiveness, we also consider a number of additional factors that are expected to influence how well someone is represented. At the individual level, the literature has established that the wealthy tend to be better represented than the poor (Bartels 2008; Gilens 2012), so we include a measure of household income in our analyses. We also account for whether respondents have the same party identity as their representative, self-reported vote intention in the upcoming election, respondent age, and respondent race and ethnicity.

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8 To get reasonable estimates of economic segregation for a given county, we can only obtain segregation measures for those counties with populations large enough to encompass several census tracts. Therefore, we only have segregation estimates for those counties with household populations over 20,000. Using this as a cutoff point we are able to measure economic segregation for just under 1,000 counties. Although this only makes up about one third of all counties in the country, the counties we do measure cover 85% of the total U.S. population.

9 The segregation measure used here is also useful for comparing over time changes in economic segregation, which is how we know that segregation has increased since the 1970s (Reardon and Bischoff 2011).
In addition to economic segregation, several other aspects of local context are accounted for as well. Importantly, we want to examine if segregation has an effect on responsiveness that is independent from average levels of income. The clustering of incomes can be quite different from overall levels of wealth or poverty. In fact, the correlation between economic segregation and median county income is only 0.066. While the two concepts are different, we do expect average local income to have an influence on government responsiveness. As discussed above, elected officials are more likely to engage communities with greater levels of wealth since the residents in these areas are better able to contribute time and resources to politics and more likely to be connected to influential political networks (Cho and Gimpel 2007). For these reasons, we use median county incomes from the U.S. Census to consider the overall wealth of a community. Finally, we also account for each county’s unemployment rate, percentage of black residents, and percentage of Hispanic residents.¹⁰

**Methods and Results**

We model our dependent variable, the congruence score, by pooling the three CCES surveys from 2008, 2010, and 2012 to match our measure of county-level economic segregation, which covers the five-year period from 2008 to 2012. Since the congruence score ranges from 0 to 100 percent and we are interested in factors that shape government representation at both the county and individual levels, we use multilevel regression analysis with random intercepts to account for the non-independence among our geographic variables at the county level. Random intercepts are also modeled for each congressional district and for each survey year to control for any unobserved heterogeneity within districts or across the three surveys used in the analysis.

¹⁰ Data on county race and ethnicity come from the U.S. Census Bureau and unemployment rates were retrieved from the Bureau of Labor Statistics.
While our measure of economic segregation allows us to assess the extent to which individuals of similar economic status live among each other, it does not give us a good sense of whether a county is predominantly wealthy or less well off. This information is crucial since, as we discuss above, responsiveness is expected to change based on levels of local segregation and the overall level of economic resources available in the segregated area. That is, better representation is expected among the wealthy in more segregated areas because elected officials can more effectively target their attention in communities where more financial resources are available. Conversely, worse responsiveness will occur among the poor in more segregated areas since these neighborhoods are unlikely to be viewed as politically active and the residents in these areas have fewer available resources to devote to politics, meaning representatives will have less incentive to pay attention to the preferences and priorities of those living in these communities.

To evaluate if the level of economic segregation conditions the relationship between county median income and opinion-roll call vote congruence, we include an interaction term between county-level economic segregation and county median income. This interaction term allows us to assess whether the incentives of politicians are shaped by economic segregation of the rich and segregation of the poor. The results of our analyses are presented in the first column of Table 1, where the effects of individual characteristics on our congruence score are listed first followed by the effects of county-level factors on congruence.

[Table 1 about here]

Briefly summarizing the influence of the individual-level variables included in our models, we can see that one of the most important determinants of how well the preferences of individuals are responded to by their House representative is whether they identify with the same
party as their elected representative. As other studies have found, the results in both models show that the rich are better represented than the poor (Ellis 2012; 2013) and that those who are older are better responded to than the young. Unexpectedly, government responsiveness is worse for individuals who reported that they intended to vote in the upcoming election than those stating they were unsure about casting a ballot in the election. This effect is relatively small and self-reported turnout is not always reliable due to social desirability effects, but this result is interesting in any case.

Turning to the county-level contextual effects, the estimated aggregate influence of economic segregation on congruence is negative, suggesting that increases in segregation have led to poorer representation. It is important to keep in mind, however, that this effect is not necessarily the same for all respondents since the variable is specified as being conditioned by county median income. Accordingly, the influence of economic segregation needs to be assessed with respect to levels of median income. Before examining this interaction effect more carefully, we can see that other county-level factors also shape how well individuals are represented. Our results show that residing in an area with higher levels of unemployment leads to lower levels of representation. Additionally, communities where racial and ethnic minorities make up larger portions of the population appear to be better represented than areas with smaller minority populations. This effect is likely due to the ability of black and Hispanic groups to elect minority representatives, thereby providing these individuals with better responsiveness.

When we focus on our primary question of interest (whether economic segregation conditions the relationship between county median income and congruence), the coefficient for the interaction term between segregation and county median income is, as expected, positive and statistically different from zero. This result indicates that the effect of county income on opinion-
roll call vote congruence is larger in counties that are more economically segregated. Because interaction effects can be difficult to interpret by simply examining the size and significance of their estimated coefficients, these effects are plotted in Figure 2. The figure demonstrates the estimated effect of county median income on the congruence score at high and low levels of economic segregation. When comparing the effects of income for more and less segregated areas, we can see that county income matters much more in communities that are highly segregated. These results provide evidence supporting our expectations about how the clustering of incomes shapes the incentives of politicians and, as a result, how well individuals are represented. As Figure 2 shows, living in a highly segregated county that is wealthy leads to much better responsiveness than is observed for areas that are segregated and poor. Indeed, those living in a segregated county with a median income of $100,000 have an expected congruence score that is nearly 10 points higher than individuals living in a county with the same level of segregation but with a median income of only $20,000.

These results suggest that higher levels of economic segregation in a community provides much clearer signals to politicians about the residents of that area than those neighborhoods that are more heterogeneous. This difference is evident when assessing the effects of county income when segregation is relatively low. As indicated by the relatively flat line, changes in congruence as county median income increases are much smaller in areas where incomes are not segregated, indicating that it is more difficult for elected officials to completely focus their attention on areas that are very well off or to completely ignore areas where financial resources are limited. Moreover, if we compare the estimated effects between low and high segregation areas, it is

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11 We define low and high levels of economic segregation as the minimum and maximum observed values of our segregation index.
apparent that the largest difference in representation occurs among lower-income areas. In other words, the political consequences of economic segregation are mostly observed for those residing in poorer counties whereas differences in representation as a result of segregation is relatively small for people who live in wealthier communities.12

Finally, in addition to our main research question, we are also interested in if there are partisan differences in the way that economic segregation conditions the relationship between county income and political representation. In other words, is the link between county income and opinion-roll call vote congruence stronger when there is greater economic segregation for both Democratic and Republican MCs or, instead, is our main result primarily driven by MCs in a single political party? This question is prompted, in part, by previous research that finds the link between individual citizens’ income and how well they are represented by their elected official is particularly strong among Republican legislators (Bartels 2008).

To evaluate this question, we simply split the sample into only respondents represented by Democrats and then, separately, only respondents represented by Republicans and use the same model specification reported above. The results of these two estimations are reported in the second and third columns of Table 1. Focusing on the coefficient for the economic segregation x county median income interaction term in each model, we uncover an interesting result. Namely, economic segregation conditions the linkage between county income and political representation among Republican MCs but not among Democratic MCs. To illustrate the partisan differences,

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12 We provide additional support for this finding through an analysis of first-differences, which are presented in the appendix. Figure A.1 shows the difference and confidence interval between the expected opinion-vote congruence for high and low segregation areas demonstrated in Figure 1. The plot shows that lower income counties have significantly different congruence scores between low and high levels of economic segregation while the differences in higher income counties are not statistically different from zero.
Figure 3 shows, for areas with low vs. high levels of economic segregation, the relationship between county income and expected opinion-roll call vote congruence for only Democratic MCs (the top panel) and then again for only Republican MCs (the bottom panel). Similar to the full model presented earlier, the plot shows that for both groups (i.e., those with Democratic representatives and those with Republican representatives) congruence improves as county median income increases when economic segregation is high, but there is little variation in congruence by level of county income when segregation is low. However, among citizens with Democratic representatives the difference in the effect of county income on congruence in low vs. high segregation counties is notably smaller than the difference for citizens who are represented by Republican representatives. In other words, economic segregation plays a much stronger conditioning role on the relationship between county median income and opinion-roll call congruence for Republican MCs as compared to Democratic MCs.

Perhaps more importantly, the difference in the effect of county income on congruence between low and high segregation areas is quite small for individuals with Democratic representatives relative to the estimates from the Republican subsample. In fact, separate analyses (provided in the appendix) show that there is no statistically discernable difference in the effect of county income on congruence between counties with low and high levels of economic segregation for those with Democratic representatives. In contrast, having a representative from the Republican Party produces much larger differences in opinion-vote congruence when comparing low and high segregation areas. These differences are found to be statistically significant, particularly for those residing in low-income counties.13 In short, our

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13 The estimates of differences in representation and corresponding confidence intervals between counties with low and high levels of economic segregation for the Democratic and Republican Party subsample models can be found in appendix Figures A.2 and A.3, respectively.
main results reported above – that is, those in highly segregated low-income areas experience comparatively poor opinion-vote congruence – appear to be primarily driven by Republican MCs.

**Conclusion**

Increasing economic inequality in the United States has not only raised normative concerns about fairness, it has also been linked to a number of tangible societal consequences. Income inequality may lead to decreases in economic productivity, stability, and growth (Stiglitz 2012), more political power for the wealthy (Solt 2011; Solt et al. 2011), and deficiencies in public health (Wilkinson and Pickett 2011). Additionally, scholars have shown that growing inequality has shaped the geographic living patterns of American families by producing greater levels of economic segregation (Reardon and Bischoff 2011; Soss and Jacobs 2009; Watson 2009). The clustering of incomes has the potential to shape politics in a number of ways, and these consequences are likely in addition to the observed effects of income inequality.

We argue that one important way that economic segregation influences politics is the possibility that it is changing how elected officials represent their constituents. In general, politicians are largely concerned with reelection since any other goals a legislator may have are contingent on holding political office (Mayhew 1974). Elected officials need the support of their constituents in order to stay in power and establishing this support typically requires spending limited time and money on activities demonstrating that these representatives are doing a suitable job. The clustering of incomes across local communities may structure the calculus used by politicians to decide how their scarce resources will be used, particularly when choosing which segments of their community will receive the most attention.
Elected officials will be acutely aware of an area that is very economically segregated and is composed mostly of individuals with high incomes since the people living in this community will have the highest propensity of future political engagement and ability to contribute financially to reelection efforts. Prioritizing the issues and concerns of those residing in these areas is then expected to lead to greater levels of responsiveness to the policy preferences of these individuals. Conversely, increasing economic segregation also leads to the concentration of people with low incomes and makes it much easier for politicians to ignore the residents living in these areas. Unlike the wealthy, those with fewer resources are less likely to be politically involved and do not necessarily have the financial means to support campaigns and fund raising. This suggests the possibility that those living in places where many low-income families are clustered will have very poor levels of political responsiveness from their elected representatives.

To test these expectations, we created a measure of economic segregation that is intended to approximate the degree of clustering of incomes within counties by using census tracts as the geographic basis for the measure. After accounting for a number of individual factors known to shape government responsiveness to public opinion, our findings support the claim that economic segregation influences how well the public is represented. Specifically, those living in areas that are rich and highly segregated experience much better political representation from their elected officials compared to residents of highly segregated communities that are poor. In contrast, individuals living in more heterogeneous areas (i.e., less segregated by income) have more consistent levels of responsiveness that is less dependent on the area’s overall wealth. Importantly, we find that this effect is primarily driven by Republican MCs.
The results of this study indicate that the increasing geographic self-sorting of Americans by socioeconomic status has important consequences for how the actions of politicians are structured and, subsequently, whose opinions are represented by government. While income inequality is a large-scale phenomenon that influences many parts of the world, it is also reshaping politics at the local level. The growing segregation of incomes over time in American communities offers another explanation for how the political power of the wealthy has expanded and suggests that researchers should more carefully consider the role of economic, social, and political context when assessing the effects of inequality on democratic outcomes.
References


Table 1: Effect of Economic Segregation on Opinion-Vote Congruence

<table>
<thead>
<tr>
<th>Individual-Level Variables</th>
<th>All Respondents</th>
<th>Democratic Representatives</th>
<th>Republican Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b / (se)$</td>
<td>$b / (se)$</td>
<td>$b / (se)$</td>
</tr>
<tr>
<td>Income</td>
<td>0.048*</td>
<td>-0.379***</td>
<td>0.538***</td>
</tr>
<tr>
<td></td>
<td>(0.027)</td>
<td>(0.038)</td>
<td>(0.038)</td>
</tr>
<tr>
<td>Same PID as Rep.</td>
<td>25.102***</td>
<td>24.687***</td>
<td>23.283***</td>
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<tr>
<td></td>
<td>(0.170)</td>
<td>(0.242)</td>
<td>(0.246)</td>
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<td>Intends to Vote</td>
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<td>-3.888***</td>
<td>2.124***</td>
</tr>
<tr>
<td></td>
<td>(0.148)</td>
<td>(0.207)</td>
<td>(0.206)</td>
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<td>Age</td>
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<td>-0.014*</td>
<td>0.083***</td>
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<td></td>
<td>(0.006)</td>
<td>(0.008)</td>
<td>(0.008)</td>
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<tr>
<td>Black</td>
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<td>1.981***</td>
<td>-6.758***</td>
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<td>(0.284)</td>
<td>(0.374)</td>
<td>(0.445)</td>
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<td>(0.334)</td>
<td>(0.452)</td>
<td>(0.484)</td>
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<td>(19.944)</td>
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<td>(0.034)</td>
<td>(0.048)</td>
<td>(0.038)</td>
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<td>Unemployment Rate</td>
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<td>(0.088)</td>
<td>(0.109)</td>
<td>(0.103)</td>
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<tr>
<td>% Black</td>
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<td>1.670</td>
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<td>(1.840)</td>
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<td>% Hispanic</td>
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<tr>
<td></td>
<td>(1.697)</td>
<td>(1.834)</td>
<td>(1.759)</td>
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<td>Economic Segregation × Median Income</td>
<td>0.622*</td>
<td>0.505</td>
<td>0.834*</td>
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<tr>
<td></td>
<td>(0.374)</td>
<td>(0.515)</td>
<td>(0.433)</td>
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<tr>
<td></td>
<td>47.961***</td>
<td>61.613***</td>
<td>34.864***</td>
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<td></td>
<td>(2.356)</td>
<td>(3.418)</td>
<td>(2.427)</td>
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<td>52,625</td>
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<td>Log Likelihood</td>
<td>-500,767.100</td>
<td>-253,471.100</td>
<td>-245,873.500</td>
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</tbody>
</table>

*p<0.1; **p<0.05; ***p<0.001
Figures

Figure 1: Income Inequality and Economic Segregation in Three Hypothetical Scenarios
Figure 2: Conditional Effect of County Median Income on Political Representation, by Level of Economic Segregation

Note: Estimates based on the model results presented in the first column of Table 1.
Figure 3: Conditional Effect of County Median Income on Political Representation, by Level of Economic Segregation for Subsamples of Respondents Represented by Democratic and Republican House Members

Note: Estimates for Democratic and Republican representatives are based on the model results presented in Table 1 columns 2 and 3, respectively.
Figure A.1: Difference in Opinion-Vote Congruence Between High and Low Segregation Areas by County Median Income

Note: Estimates based on the model results presented in the first column of Table 1 in the main text and demonstrate the difference between the expected opinion-vote congruence for high and low segregation areas demonstrated in Figure 1. Negative values indicate that those residing in areas with high levels of economic segregation have lower levels of congruence with their representative relative to those living in low segregation areas. The bars represent 90% confidence intervals.
Figure A.2: Difference in Opinion-Vote Congruence Between High and Low Segregation Areas by County Median Income for Subsamples of Respondents Represented by Democratic House Members

Note: Estimates based on the model results presented in the second column of Table 1 in the main text and demonstrate the difference between the expected opinion-vote congruence for high and low segregation areas demonstrated in the top panel of Figure 3. Negative values indicate that those residing in areas with high levels of economic segregation have lower levels of congruence with their representative relative to those living in low segregation areas. The bars represent 90% confidence intervals.
Figure A.3: Difference in Opinion-Vote Congruence Between High and Low Segregation Areas by County Median Income for Subsamples of Respondents Represented by Republican House Members

Note: Estimates based on the model results presented in the third column of Table 1 in the main text and demonstrate the difference between the expected opinion-vote congruence for high and low segregation areas demonstrated in the bottom panel of Figure 3. Negative values indicate that those residing in areas with high levels of economic segregation have lower levels of congruence with their representative relative to those living in low segregation areas. The bars represent 90% confidence intervals.