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“COMPENSATE THE LOSERS?” ECONOMIC POLICY AND THE ORIGINS OF  
U.S. PARTISAN REALIGNMENT

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### **ABSTRACT**

We argue that the Democratic Party’s evolution on economic policy helps explain partisan realignment by education. First, we document that educated Americans differentially oppose “predistribution” (e.g., job guarantees, higher minimum wages, protectionism, and stronger unions), while the educational gradient for redistribution (taxes and transfers) is close to zero. These relationships have been largely unchanged since the 1940s. Second, focusing on politicians and donors as key party actors, we show that the Democratic Party has moved away from predistribution since the 1970s. The number of predistribution bills introduced by Democratic House Speakers has declined by half since the 1970s. Unions—the traditional lobbying force for predistribution—see their share of Democratic Party PAC donations decline from ninety to forty percent from 1968 to 1980, following 1970s legislation that facilitated corporate PAC donations. From 1980 onward, the Democrats rely increasingly on individual contributions from educated donors relative to the Republicans. We show the increased reliance on corporate PACs and educated donors is driven by the rise of a self-described “New Democrat” faction particularly conservative on pre-distribution and social issues. Finally, we trace out the reaction of voters to these changes in the Democratic Party. Less-educated Americans begin to leave the party in the 1970s, after decades of serving as its base. We also show that in the crucial transition period of the 1970s through 1990s, New Democrat candidates out-perform other Democrats among more-educated voters in both survey questions and actual Congressional elections. As the New Democrats are more socially conservative than other Democrats, their success with educated voters suggests that social issues alone cannot explain educational realignment.

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# 1 Introduction

Over the past several decades, less-educated voters in rich democracies have abandoned center-left parties, their political home for generations (Kitschelt and Rehm, 2019; Gethin *et al.*, 2021).<sup>1</sup> In the US context, many pundits have argued that less-educated voters who leave the pro-redistribution Democrats are voting against their economic self-interest. Scholars have proposed social issues (Lee and Roemer, 2006; Gennaioli and Tabellini, 2019; Enke *et al.*, 2021; Inglehart, 2020; Grossmann and Hopkins, 2024; Longuet-Marx, 2024), misinformation (DellaVigna and Kaplan, 2007; Martin and Yurukoglu, 2017; Cruces *et al.*, 2013), or distrust in government (Kuziemko *et al.*, 2015) to help explain this seeming puzzle. A recent review of this evidence by a commentator asked: “Is America too Rich for Class Politics?”<sup>2</sup>

In this paper we focus on the American case and argue that reports of the death of class politics have been exaggerated. We separate economic policies into “predistribution” (policies that aim to change the earnings or income distribution before taxes and transfers, as described in Hacker, 2011) and redistribution (taxes and transfers).<sup>3</sup> We show that less-educated voters support pre-distribution significantly more than do educated voters, while the educational gradient for redistribution policies is close to zero. These patterns have been largely stable since the 1940s. What has changed, however, is that around the 1970s Democrats began to move away from predistribution, led by a growing “New Democrat” faction explicitly skeptical of these policies. We also show that the educational gradient in Democratic identification—significantly negative since the 1940s—begins its upward shift at this same moment. We present a variety of evidence that it was the New Democrats—and not the “old” New-Deal-style, pro-union Democrats—that attracted these educated voters. Importantly, the New Democrats were also more *socially* conservative than the “Old,” pushing against the idea that educated voters became Democrats based on social issues alone.

Our argument has three main steps, which we briefly detail here. First, we focus on *demand* for economic policies by education. To demonstrate that less-educated Americans differentially support predistribution, we harmonize hundreds of surveys asking respondents

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<sup>1</sup>Two salient examples from 2016 include less-educated voters breaking with Labour and supporting Brexit in the UK (Hobolt, 2016) and fueling the **two** successful presidential campaigns of Donald Trump in the US (Sances, 2019).

<sup>2</sup>See <https://nymag.com/intelligencer/2021/09/is-america-too-rich-for-class-politics.html>. The basic argument that social issues are overtaking material concerns among American voters dates back at least to Inglehart (1977).

<sup>3</sup>To quote Hacker (2011), predistribution is a “focus on market reforms that encourage a more equal distribution of economic power and rewards even before government collects taxes or pays out benefits.”

about the minimum wage, a federal job guarantee, unionization, and protectionist trade policies. This educational gradient remains relatively stable since at least the 1940s (with the exception that less-educated Americans have become significantly *more* protectionist over time). By contrast, there is no strong educational gradient for *redistribution* (e.g., higher taxes on the rich, welfare payments): in all cases the magnitudes are small and the sign depends on the exact policy. The strong preference of less-educated voters for predistribution relative to redistribution is, we believe, a novel result in the literature. Our estimates suggest that a four-year increase in education (for example, going from a high school to a college graduate) pushes an individual rightward by an amount equal to 42 percent of the Democrat-Republican gap. Further, we show it is as stable and at least as large as educational divisions over social issues measured over the same period.

Second, we focus on the parties' *supply* of economic policies and show that since the mid-1970s, Democratic politicians and donors have moved away from the economic preferences of less-educated voters. We begin by focusing on Congressional votes. Before the 1970s, predistribution-related topics accounted for nearly twenty percent of House votes in years the Democrats controlled the Speakership, but since then for only ten percent. The redistribution share of House votes under Democratic leadership holds steady. We find a coincident decline in the financial influence of unions—the major lobbying force in support of predistribution policies—in favor of corporate PACs, consistent with 1970s-era reforms codifying the legality of corporate PACs. Between 1968 and 1980, the union share of all PAC donations to Democrats falls from 90 to 40 percent, while remaining unchanged (at a near-zero level) for Republicans. Finally, focusing on individual contributions, we show that from 1980 onward, the Democrats increasingly rely on educated donors relative to Republicans. In short, beginning in the 1970s, the party as a whole moves away from predistribution votes while increasingly their reliance on donors hostile to predistribution.

To further study the supply side of economic policies, we identify an anti-predistribution faction *within* the Democratic Party and document its growth. We compile a list of “New Democrats” based on records from their official organization, the Democratic Leadership Council (DLC), as well as membership lists of aligned Congressional caucuses. We show that the rise of the New Democrats occurs from the 1970s to the 1990s (after which their membership stabilizes at roughly half of all Democratic seats in Congress by the early 2000s). We analyze vote patterns to show that the New/DLC faction was generally more conservative than other Democrats but especially so on predistribution topics, consistent with their stated

positions on these issues. Useful in adjudicating between “economic” versus “social issues” explanations of realignment, we show quantitatively that the New Democrats were also significantly more socially conservative than the rest of the party, again consistent with their public statements. Consistent with their shared opposition to predistribution, corporate PACs and educated donors significant prefer New Democrats over other Democrats.

Third, we trace out voters’ reaction to these changes within the Democratic Party. First, we clean and harmonize over 1,000 surveys ( $N \approx 2$  million) to precisely estimate the year-by-year evolution of party identification with respect to education since the early 1940s. In the 1940s, every additional year of education reduces the likelihood of identifying as a Democrat by three percentage points. This relationship holds with little change until an inflection point, which we estimate as occurring in 1976. Since then, the pace of realignment remains relatively steady. It is not until 2000 that the gradient reaches zero and today it is essentially reversed from its 1940s-1960s baseline, with each additional year of education increasing Democratic identification by three points. Importantly, we estimate that the corresponding breakpoint in the trend for Republicans occurs much later, in 1992. To the best of our knowledge, previous studies of realignment have not identified an inflection point, an exercise we can perform only because of the large dataset we have assembled.

While it is reassuring to see that the educational gradient shifts at the same moment that the New Democrat movement begins, a key advantage of examining party factions is that it facilitates additional testable predictions regarding realignment. Our hypothesis predicts that Democrats should perform better with educated voters when a New/DLC Democrat represents the party than otherwise. We test this claim using survey questions on hypothetical election matchups from the pivotal years of the 1970s through the 1990s. Most of the Democratic presidential primaries in these years came down to a “New” versus an “Old” Democrat (e.g., in 1984 “new” Gary Hart versus “old” Walter Mondale). We use survey questions that ask respondents for whom they would vote in hypothetical presidential elections (e.g., again, in 1984, we would compare answers to a hypothetical Hart-versus-Reagan election and a Mondale-versus-Reagan election). More-educated voters differentially vote for the Democrat when he is a “New Democrat” as opposed to an old-style Democrat.

We then move to actual 1980s House election results. Using returns data disaggregated into granular geographic units (about sixty units per Congressional District), we again show that more-educated neighborhoods differentially vote for the Democrat when he is a DLC Democrat.

As a final piece of evidence that economic policy played a role in realignment, we show a similar educational realignment when voters are asked to rate the *economic policies* of the parties. Since 1950, Gallup has asked which party will better keep the country “prosperous.” The less-educated were consistently more likely to answer “Democrats” than were more-educated respondents in the immediate decades following World War II. Today, the less-educated are more likely to name the Republicans as the party better for prosperity (a result that is robust to many controls, including own party identification).

We use results from the above exercises to gauge the role of the Democratic party’s shift on economic policies and toward the “New” Democrat faction in explaining overall partisan realignment by education from the 1970s onward. Depending on the exact exercise and time period, we can explain between 20 and 50 percent of realignment. We view this magnitude as large enough to show that shifts on economic policies have played an important and understudied role while at the same time leaving ample room for other factors not directly explored in this paper.

In summary, we argue that changes in the Democratic party’s economic policy played a key role in partisan realignment by education. Voters’ economic preferences by education have in fact changed very little since the 1940s—today as then, less-educated voters appear to prefer a less market-based and more interventionist economic program that aims to promote domestic employment and wages. Beginning in the 1970s, the growing New Democrat faction explicitly distances itself from these policies, and we show it is indeed more-educated voters who disproportionately find this faction attractive. We show this timing is consistent with party reforms that reduced the within-party financial influence of labor unions, a traditionally low-education constituency within the Democratic party. By the 1990s, DLC-aligned politicians and advisors controlled the Democratic agenda: a former president of the DLC (Bill Clinton) was in the White House and majorities of Democratic legislators joined DLC-aligned Congressional caucuses. Our paper shows that educational realignment began long before the 2016 election of Donald Trump made it a central topic of public discourse. We end most of our analysis in 2015, before Trump’s election, but in the conclusion we discuss what post-2016 trends suggest about the future of party factions and realignment.

Our paper relates to recent work on the changing relationship between education and partisan identity (what Thomas Piketty has termed the “Brahmification of the left”). As noted earlier in the introduction, researchers have quantitatively explored many hypotheses to explain educational realignment (e.g., Mutz, 2018, Kitschelt and Rehm, 2019, Sides *et al.*, 2019,

Inglehart, 2020, Enke *et al.*, 2021, Besley and Persson, 2021, Zingher, 2022, Bonomi *et al.*, 2021, Marble, 2023, Grossmann and Hopkins, 2024, and Longuet-Marx, 2024), though none to our knowledge focuses exclusively on how well a purely economic-policy-based mechanism performs. However, other researchers have provided more qualitative and narrative evidence for this hypothesis (we benefited in particular from reading Stein, 2010, Geismer, 2022, and Kazin, 2022).<sup>4</sup> This more qualitative literature often identifies the 1970s as a key moment of transition (which we also find in our quantitative analysis).

We differ from much of the existing realignment research by focusing on party *factions*, in our case, factions within the Democratic party. While there is a theoretical literature in political economy studying intra-party bargaining as an explanation for party platforms in multidimensional policy spaces (see e.g., Roemer (1998) or Persico *et al.* (2011)), there is little quantitative work. Intra-party bargaining is particularly important in majoritarian systems like the United States, where electoral competition generates strong pressure for few (often two) parties, so substantial preference aggregation happens within party. Our collecting new data on the “New Democrat” faction and showing it was this conservative faction that differentially attracted educated voters allows us to more directly address the alternative view that educated voters became Democrats entirely because of their liberal positions on social issues.

We also join a large literature in economics and political science that attempts to measure voters’ preferences, in particular on economic issues. For the most part, past papers group together pre- and re-distribution in a single “economic preferences” index. Other papers focus on redistribution explicitly.<sup>5</sup> We document very different educational gradients for re- versus pre-distribution, suggesting that combining the two topics into a single index may mask important heterogeneity.

We are also related to a smaller economics and political science literature on predistribution versus redistribution. A distinguished theoretical literature in public finance (Diamond and Mirrlees, 1971) and law and economics (Kaplow and Shavell, 1994) has argued that

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<sup>4</sup>While to the best of our knowledge economists have not examined the political demand for predistribution more generally, there are several papers on the political effects of trade and immigration. See Choi *et al.* (2021) and Dorn *et al.* (2020) on trade and Mayda *et al.* (2022) on immigration.

<sup>5</sup>For examples of papers that aggregate preferences into a single economic index, see Ansolabehere *et al.* (2006) and Enke *et al.* (2021). The first component of the widely-used DW-nominate is another measure often used to capture the economic ideology of legislators. For papers focusing on preferences for *redistribution*, see Kuziemko *et al.* (2015), Ashok *et al.* (2015), and Alesina *et al.* (2018). Recent and important exceptions are Stantcheva (2022) and Dechezleprêtre *et al.* (2022) examining how voters form views on policies not directly related to taxes and transfers, such as trade and climate change.

*ex-post* redistribution via taxes and transfers best implements egalitarian goals, making pre-distribution superfluous or even harmful. Two recent empirical papers (Bozio *et al.*, 2020 and Blanchet *et al.*, 2022) argue that differences in predistribution better explain differences in inequality across countries than do differences in redistribution. Instead of the *normative* question of whether predistribution is an efficacious and desirable policy tool, in this paper we focus on the *positive* questions of which voters support predistribution and whether the changes in partisan positions on predistribution can help explain observed shifts in partisan identity.

One point to emphasize is that predistribution fits awkwardly with work-horse models in political economy, which typically have voters maximize preferences over leisure and consumption (Meltzer and Richard, 1981). Economists often suggest that output-increasing policies, such as free trade, can be made Pareto efficient by “compensating the losers” with generous transfers. Majority political support for Pareto-improving policies can be guaranteed via sufficient redistribution. While influential, the Meltzer-Richards framework has not been met with overwhelming empirical success.<sup>6</sup> If voters have preferences over *pre-tax-and-transfer* earnings as well as consumption, then economic policy is multi-dimensional and thus cannot be captured by a single tax rate (as in Meltzer-Richard) or a single index.<sup>7</sup>

The paper proceeds as follows. Section 2 briefly introduces our data sources. In Section 3, we document the strong, robust support among less-educated voters for predistribution policies and contrast this pattern with the much weaker educational gradient for redistribution. Section 4 documents changes in the Democratic Party’s position on economic policies, focusing on both politicians and donors. It also documents the rise of the anti-predistribution New Democrat faction. Section 5 documents the reaction of voters to these changes, and again the 1970s. Section 6 briefly considers alternative stories, though we mostly leave this work to future authors. Section 7 concludes.

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<sup>6</sup>For example, the model predicts that demand for redistribution should increase with pre-tax inequality, a result which is remarkably difficult to find in the data (see Bonica *et al.*, 2013, Acemoglu *et al.*, 2015 and Ashok *et al.*, 2015).

<sup>7</sup>While not our focus, past work has suggested a variety of reasons why voters may care about pre-tax-transfer earnings *per se*. Following Adam Smith’s claim that “We desire both to be respectable and to be respected.” (Smith, 2010 (1759, 1.ii.3), voters might care about standing and status, making “compensation” as a “loser” unattractive. As a dimension of “respectability”, voters might have direct preferences over their beliefs that they are productive, as in Bénabou and Tirole (2016), and pre-tax income might be a signal of that productivity. Obscuring that signal with predistribution policy could be preferred by voters with priors that they are low productivity (whereas redistribution in modern tax systems tends to be rank-preserving). Alternatively, voters may believe that the tax and transfer system is more opaque, corrupt, or inefficient than more transparent policy interventions (Kuziemko *et al.*, 2015).

## 2 Data and methodology

### 2.1 Data

This section briefly describes the survey data used in Sections 3 and 5. We provide greater detail on all data sources in Appendix B.

#### 2.1.1 Survey sources

While we include standard data sources such as American National Election Study (ANES), the General Social Survey (GSS), and the Cooperative Congressional Election Study (CCES), we also make heavy use of historical data from survey corporations, for the most part housed by iPoll at Cornell. Many of these come from Gallup, which beginning in 1942 asks respondents both their educational attainment and their self-reported partisan identification (along with standard demographics).<sup>8</sup> Altogether, we have more than 2 million observations that include education and partisan identity, from 1942 until 2020. While education and partisan identity are asked in essentially all Gallup surveys from 1942 onward, Gallup often also asks views on specific policy questions (e.g., the minimum wage, tariffs, taxes), which we also collect.

Many of these datasets have been used by past researchers, particular in political science (see, e.g., Schickler (2016), Berinsky (2019), and Caughey and Warshaw (2022)). In particular, we make use of the files Adam Berinsky and Eric Schickler cleaned and made public for the earliest decade of our analysis.

We believe our effort to *harmonize* over one thousand surveys across eight decades is new to the literature, however. Surveys differ in how they pose policy questions (e.g., binary yes/no versus likert scales); how they code education into different categories (and education categories will naturally evolve over time as the population becomes more educated); the income categories they use (midpoints must be hand-coded to render the variable useful across surveys). In each survey, states and regions can be mapped to FIPS or other numeric codes or simply to string variables based on their abbreviation or full name; age categories similarly vary. Appendix Figure B.1 presents the data sources for each decade, separately for the partisan and economic policy preference analyses. To be consistent across datasets,

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<sup>8</sup>Many datasets require labor-intensive transformation from binary form. That is, the original raw data file contains only zeros and ones, so a question asking you to choose your preferred primary candidate among six options would be coded as six separate binary variables. We contracted with iPoll to perform these conversions and they have already been made available on their website as SPSS and Stata datasets.

we drop any respondent below the age of 21. Otherwise, we impose no sample restrictions.

### 2.1.2 Key survey questions

We provide illustrative examples below of our pre- and re-distribution survey questions. Appendix Table B.1 shows the means of our eight topic areas. These questions emerge as the only eight egalitarian economic policies on which surveys consistently include questions over eight decades.<sup>9</sup> While these eight questions form the core of analysis, we supplement with other policies that are less consistently included in surveys.

#### Predistribution questions

—**Minimum wage.** We include questions that ask whether the respondent approves increasing the minimum wage. Typically, a new, higher level is proposed. An example from Gallup in 2013: “Would you vote for a law that would raise the federal minimum wage to nine dollars an hour?”

—**Government job guarantee.** We include questions that ask respondents whether the government has the responsibility to provide a job for anyone who wants to work. An example from *Time* magazine in 1976: “Do you favor or oppose the passage of a full employment bill in which the government guarantees a job to everyone who wants to work?”

—**Support for unions.** Gallup since the 1940s has asked individuals whether unions should have more, less or the same amount of influence than they currently enjoy. It has also asked respondents’ “approval” of unions. ANES has asked respondents to place their view of labor unions on a 0-100 scale.

—**Trade policy.** In earlier years, Gallup typically asked about tariff levels. For example, in a survey from 1953 they ask: “By and large, do you favor higher or lower tariffs than we have at present?” In more modern datasets, the term “tariffs” is not often used, and instead respondents are asked whether there should be more or fewer “limits” on imports.

#### Redistribution questions

—**Tax the rich more.** We begin with Gallup questions going back to the 1940s on whether there should be limits so that even the very rich do not pay more than half their income in taxes. We then add GSS questions that ask whether the respondent considers that the amount high income earners are paying in taxes is too low.

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<sup>9</sup>We do not include social insurance in this paper as it is not specifically egalitarian across individuals.

—**Views on own taxes.** Since the 1950s, Gallup has asked respondents whether they view their own federal income taxes as fair, too high, or too low. We also rely on a very similarly worded question from the GSS.

—**Prioritizing tax cuts.** A variety of pollsters have asked respondents how strongly they prioritize tax cuts, even if the government would have to put off other goals such as deficit reduction.

—**Transfers to the poor.** An example comes from the GSS: “Are we spending too much, too little, or about the right amount on welfare?”

## 2.2 Estimating educational gradients over long periods

One challenge faced by any long-run analysis involving educational attainment is that a given educational category can represent very different levels of selectivity at different points in time. As just one example, in 1940 only one-fourth of U.S. adults over age 25 had completed twelfth grade, whereas today nearly ninety percent have.

Our goal is to translate our education variable into the same units—years of schooling—across our eight-decade period. Most of our datasets include detailed *categories* of education, typically five to seven categories. The categories naturally shift over time, so a 1940s-era Gallup survey will often provide “less than fourth grade” as a category, whereas such a category would not exist today. We then use the Census (which records education in terms of *years of schooling*) to estimate years of schooling conditional on self-reporting a given educational category. Our preferred method (though we show robustness to alternatives) uses sex, race, year of observation (interpolated between Census years), and birth cohort in ten-year bins to predict years of schooling conditional on a given category of education. In this manner, we can combine over a thousand datasets with different educational categories via a common metric.

We then estimate the relationship between our main outcome variables—e.g., economic-policy preferences, partisan self-identification—and this *AdjYearsEduc* variable, separately by time period  $p$  (where  $p$  is often a single year when data permit or a four- or five-year period when data are more sparse). That is, for each time period  $p$ , we estimate:

$$y_i = \beta^p \text{AdjYearsEduc}_i + f(a_i) + \mu_{s(i)} + e_i, \quad (1)$$

where  $y_i$  is the outcome of interest,  $f(a_i)$  are flexible controls for age (typically age fixed

effects in five-year bins), and  $\mu_{s(i)}$  are survey fixed effects, which subsume time fixed effects.<sup>10</sup>. In general, we view the unconditional covariance between education and preferences as our target parameter, with the exception of age, which we treat as a nuisance variable and thus try to absorb. Many of our main results plot the  $\beta^p$  values over time periods  $p$  to display long-run trends.

### 3 Demand for economic policies by education

This section provides evidence for one of our main claims: that less-educated voters differentially prefer predistribution relative to their more-educated counterparts, whereas the relationship between education and views toward redistribution is close to zero.

#### 3.1 Main result

Figure 1 displays the coefficients from equation (1), separately for each of our eight topic areas. Because the realignment literature emphasizes the “white working class,” we will present results for the entire sample as well as a whites-only sample whenever possible. There are also large educational gaps between whites and non-whites, so readers might worry that in the full sample the educational gradient is actually arising from between-race differences in policy preferences instead of (within-race) variation in preferences by education.

To better compare the various outcomes in one graph, we standardize all outcomes to have a mean of zero and a standard deviation of one. If needed, a question is re-oriented to be increasing in the left-wing (i.e., pro-predistribution, pro-redistribution) answer. Recall that we also include a fixed effect for each of our 310 surveys, which thus captures any changes in question wording. To avoid clutter we suppress confidence intervals but Appendix Figure A.1 shows results for each outcome separately along with confidence intervals.

##### 3.1.1 Predistribution

Figure 1 panel (a) shows a strong, negative association between support for predistribution policies and years of education. In the first series, we show the educational gradient in support for a government job guarantee. Of all of our economic policy questions, this one is perhaps the most striking in that the magnitude of the gradient is both large and relatively

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<sup>10</sup>E.g., if in  $p = 1947$  we had a May and December Gallup Survey and a May Roper survey, we would include three separate fixed effects.

steady over our eight-decade sample period. From the 1940s until today, an additional year of education reduces support by between 0.05 and 0.1 standard deviations. As we show in Appendix Figure A.1, in each period this relationship is highly statistically significant.

The second series in panel (a) shows a consistent, negative association between years of education and support for the minimum wage. Since the 1970s, the educational gradient has been relatively steady: each year of additional education reduces support for the minimum wage by roughly 0.04 standard deviations. The educational gradient was somewhat larger in magnitude in the 1940s and 1950s. A similarly negative and robust pattern of coefficients is obtained when support for unions serves as the outcome variable (third series).

The final predistribution series documents the relationship between education and support for protectionist trade policies. Of all of our predistribution outcomes, support for protectionism has the least stable relationship with education over time. In the 1940s and 1950s, there is little educational gradient in views toward trade.<sup>11</sup> But beginning in the 1970s, a strong, negative educational gradient emerges and by the 1990s it is the predistribution policy that has the largest educational gradient.

As a summary measure, we include the  $\beta$  for all four predistribution questions averaged over the entire sample period, -0.044 ( $p < 0.001$ ). To better understand this magnitude, consider two individuals, one with a high school degree and the other with a college degree. The latter’s support for predistribution will be on average 0.176 standard deviations lower. To put this number in context, the Democrat/Republican difference in support for predistribution over our sample period is 0.34, so this four-year difference in education pushes someone in the Republican direction a distance that is half the average Democrat/Republican difference.

In panel (b) we show that all of these results replicate in the white-only sample. Indeed, the summary  $\beta$  measure for predistribution is nearly identical as in the full sample.

### 3.1.2 Redistribution

Whereas the educational gradient for predistribution policies is large and negative, the gradient for redistribution is close to zero. For the full sample, the  $\beta$  summary measure is positive, but tiny in magnitude and not distinguishable from zero.

Both support for more progressive taxation and views that one’s own taxes are not unfairly high are generally correlated with higher levels of education, though this relationship

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<sup>11</sup>In general, trade policy was not politically salient in the U.S. during this period—the country had few industrial rivals in the immediate post-war decades and a Cold-War, bi-partisan consensus held that the US should provide favorable terms of trade to countries at risk of falling to the communists (Stein, 2010).

is not very large in magnitude. There is a somewhat stronger, positive gradient for willingness to delay tax cuts for other priorities, but, again, the magnitude of this coefficient is smaller than for the predistribution questions.

On the spending side, we examine the educational gradient on support for transfers to the poor. Unlike our three tax questions, the pro-redistribution response to this question is negatively associated with education. But the magnitude of the coefficients is always smaller than the coefficients on the predistribution questions, and there is a slight trend towards zero.<sup>12</sup>

Panel (b) shows that much of this negative gradient on welfare policy disappears when excluding non-whites. Whites are significantly more likely to oppose welfare than non-whites (see Appendix Figure A.4) and given they are also much more educated, much of the negative gradient in panel (a) is coming from between-race differences in preferences. Among whites, education is only slightly correlated with more negative views toward welfare and by 1980 this relationship goes to zero. Other than welfare, there is little difference in the gradients for the white-only sample and indeed the summary gradient measure remains positive and very small (though is now marginally significant).

In both panels, we show that we can easily reject equality of the  $\beta$  gradients on pre- versus re-distribution. We believe this result is novel in the literature and suggests that essential insight may be lost by aggregating all economic policies into a single index of egalitarianism.

### 3.2 Related results on economic policy preferences

We focus on these eight questions because surveys have asked them frequently since the 1940s. In Appendix Table A.1, we show results for other pre- and re-distribution questions for which we have a more limited sample period. For the predistribution policies of wage and price controls, the negative and significant gradient holds (both for the full sample and for whites only). For taxes, the most striking result is the large, positive gradient for the estate tax. The corporate tax also exhibits a positive educational gradient, though its significance depends on the sample. For transfer payments, we find similar patterns of smaller, negative gradients on support for food stamps that shrink for the whites-only sample.

As further evidence that respondents view pre- and re-distribution as distinct policy

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<sup>12</sup>Our estimating slightly different educational gradients for taxes as opposed to transfers relates to Cavaillé and Trump (2015), who argue that voters respond differently to the “take from the rich” part of redistribution versus the “give to the poor” part.

approaches, we return to our main analysis sample and ask whether there is greater within-person correlations in support for policies of the same type. That is, while support for, say, the minimum wage is likely to predict support for a redistribution policy like higher taxes on the rich (after all, all eight policies are egalitarian in nature), does it have additional predictive power for another pre-distribution policy? This analysis can only be performed on the subsample of respondents that answer at least two policy questions, but for these observations, the claim strongly holds (see Appendix Table A.2). Indeed, while the correlation between support for policies of different types is positive and significant, it is twice as large for policies of the same type.

### 3.3 Robustness

**Demographic compositional change.** One challenge of long-run analysis is that demographic composition changes over time in a manner that might complicate interpretation of the educational gradient. We show in Appendix Figure A.2 that re-weighting observations so as to hold fixed *race*  $\times$  *education* composition to its late-1940s distribution does not change the results.

In the interest of space, Appendix Table A.10 performs a number of robustness exercises and sub-sample analysis using a more concise, parametric approach: pooling all questions and regressing the response on a *Years educ.*  $\times$  *Predis* interaction (along with all lower-order terms). We show in this table that there is no significant *trend* in the educational gradient in support for predistribution vs. redistribution (this result can be eye-balled in Figure 1). This result is robust to varying control variables and restricting to subsamples often highlighted in the re-alignment literature (e.g., whites, women, and Southerners). In Figure A.3, we also show that the educational gradient in economic policy preferences remains largely unchanged even when we flexibly control for age, income, and gender.

**Changing policy environment.** Another challenge related to long-run analysis of policy preferences is that policies themselves change. To the extent respondents naturally consider the status quo in answering a question like “Do the rich pay enough in taxes?” we might worry that they answer differently in the high-tax 1950s than the low-tax modern era. If the policy status quo affects the answers of more- and less-educated respondents differently (perhaps because the former have greater awareness), our  $\beta$  gradient estimates may be affected.

We take three approaches to addressing this concern. First, for each of our eight main economic policy questions, we control for the most relevant policy parameter and its interac-

tion with education. For example, for the minimum wage question, we control for the average effective minimum wage in an individual’s Census division and year and its interaction with the education variable.<sup>13</sup> Panel (a) of Appendix Figure A.6 presents the results, which barely change relative to the baseline results in Figure 1.

Instead of choosing our own policy parameters separately for each question, panel (b) of Appendix Figure A.6 interacts education with an omnibus policy measure, the Economic Liberalism index from Caughey and Warshaw (2016), again aggregated to the division-year level. Panel (c) re-estimates our main specification interacting education with Census division  $\times$  year fixed effects, thus absorbing any arbitrary differences including those in the policy environment. In all cases, results remain substantively unchanged and we conclude our results are not artifacts of changing policy environments.

### 3.4 Trends in average support for pre- and redistribution

Given that educational attainment has increased over time, it is possible that overall support for predistribution versus redistribution has declined even if the educational gradient is stable. Moreover, stepping outside the model, support for predistribution across dimensions unrelated to education might be declining and thus the Democrats might be moving away from a predistributionist agenda merely as a result of its diminishing popularity.

In Appendix Table A.9, we show that predistribution appears on average more popular than redistribution over our sample period. Similarly, we find no evidence that predistribution has become less popular relative to redistribution over time (if anything, the opposite appears true).

A natural concern that complicates the interpretation of these results is that it is possible pre-distribution questions are posed in a more positive manner than redistribution or that these differences in question wording change over time.<sup>14</sup> To address this concern, we compute

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<sup>13</sup>Census division is the most disaggregated geographic identifier that we have for all of our policy questions. For the job guarantee, we calculate the division-year-level unemployment rate; for the unions question, the division-year-level union density; for protectionism, the annual level of the trade deficit (we did not see a way to disaggregate sub-nationally); for tax the rich, the average top marginal rate at the division-year level; for the remaining tax/transfer questions, the division-year share of households filing a tax return. To calculate these measures, we make use of data from Kuziemko *et al.* (2025), TAXSIM (Feenberg and Coutts, 1993), and the U.S. Census.

<sup>14</sup>Even small differences in question wording can substantially affect the share of respondents who agree with a statement (Schuman and Presser, 1996) and exact question wording is unlikely to remain perfectly identical over a long time period such as ours. Note that this concern is likely second-order in our estimates of the educational gradient, since we included separate fixed effects for each survey so absorbed whatever differences in question wording might occur. But documenting levels of support precludes our absorbing the

sentiment scores for each question using Loria *et al.* (2018). Appendix G shows, first, that these scores indeed predict support for the policies, confirming that question wording matters. However, controlling for these scores has no effect on our estimates for the level or trends in support for pre- and re-distribution.

A final point to highlight is that the stability of support for predistribution documented in this subsection alongside steadily increasing education levels suggests that the negative educational gradient we estimated in Section 3.1 is a relative concept and not an absolute one. Indeed, we show in Appendix Table A.10 that our main gradient result—that support for predistribution relative to redistribution is negative and stable—holds when we instead use educational *rank within cohort* instead of years of education.

### 3.5 Educational gradient on social issues

This paper highlights a new fact—significantly different educational gradients *among* egalitarian economic policies, in particular between predistribution and redistribution. As noted in the introduction, recent literature on educational realignment has highlighted a positive educational gradient on liberal social issues (Enke *et al.*, 2021; Zingher, 2022; Marble, 2023; Grossmann and Hopkins, 2024; Longuet-Marx, 2024). To the extent that the educational gradient on liberal social positions has increased over time, it would present an alternative (though not mutually exclusive) story to ours, given Democrats are the more socially liberal of the two parties.

To the best of our knowledge, few if any papers have estimated the educational gradient on social issues over long periods, a task we take up in Figure 2 (a). While this exercise naturally limits us to social issues that have remained in the public discourse over several decades, the gradients are remarkably stable for these nine questions (which capture prejudice toward various racial and sexual minority groups, gender roles, and sexual norms). In fact, less-educated Americans becoming *more* liberal than their more-educated counterparts on the question of divorce is the only major shift. This pattern holds for the white sample in panel (b).

While this analysis shows that the educational gradient on social issues has not increased over time, it is of course still possible that social issues drive partisan realignment if these educated voters increasingly view the Democratic Party as aligned with them on these issues.

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mean of each question and thus changes in question wording could have direct effects on our estimates of the popularity of these policies.

So far, we have shown that educated voters have always been wary of pre-distribution while being liberal on social issues. To the extent that the parties are shifting on both predistribution and social issues over time, in a two-party system we have limited degrees of freedom to separate these effects (Noel, 2014; Karol, 2009; Aldrich, 1995). This challenge motivates our focus on *party factions* in the next section.

## 4 Changes in the supply of economic policy

We now turn to examining the supply of predistribution and redistribution by the parties. The first part of this section considers the economic positions of the parties *as a whole* and the second part focuses on the positions of *factions* within the Democratic Party. Besides looking at legislative priorities and platforms, we document the decline of influence of pro-predistribution constituencies (unions) and the rise of anti-predistribution constituencies (corporations and educated individuals). For both types of analyses, we consider politicians and donors (unions, corporations, and individual) as the key actors that determine party or faction positions, with particular attention to out-of-district donors, who cannot vote in the election but nonetheless shape candidates' positions. In the next section, we document *voters'* *reaction* to these positions—both in terms of which party they support and which faction within a party they support—and how these reactions are mediated by voters' education and views on the economy.

### 4.1 Party-level analysis

#### 4.1.1 Party-level changes: Politicians

We begin by documenting the changing character of economic policies the Democratic Party brings to a vote when they enjoy majority-control in a chamber of Congress. For this analysis, we make use of the Comparative Agendas Project (CAP) dataset. CAP groups all Congressional votes since 1947 into policy-related categories and sub-categories. We take these categories as given and then place them into pre- and re-distribution groups.<sup>15</sup> We consider a bill as “predistribution” if it relates to labor market regulation (e.g., minimum

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<sup>15</sup>See <https://www.comparativeagendas.net/> for the CAP website, which includes the dataset we use in this section as well as many others. All CAP categories and sub-categories, including their description and examples, can be found here: [https://comparativeagendas.s3.amazonaws.com/codebookfiles/Codebook\\_PAP\\_2019.pdf](https://comparativeagendas.s3.amazonaws.com/codebookfiles/Codebook_PAP_2019.pdf). We can also use an alternative bill classification dataset from Bateman *et al.* (2018). In the interest of space we show in the main part of the paper results using the CAP dataset and replicate the analysis in Appendix C using the Bateman *et al.* (2018) classification data.

wage, working conditions, union organizing), industrial policy and public works, and trade. For redistribution, we include tax and budget topics and transfer programs. We provide the exact groupings in Appendix C.

We begin with the House because Democrats were in near-constant control of this chamber in the post-war period until 1995 (and then again in the mid 2000s), allowing us a long time-series to study any changes in the composition of roll-call votes while Democrats control the chamber.<sup>16</sup> Figure 3 shows that predistribution figured prominently in the Democrats' House agenda in the decades following World War II, accounting for roughly one-quarter of all votes. That share declines by nearly ten percentage points after 1976 (following historians that date Jimmy Carter's presidency as marking the start of the "New Democrat" era, we compare before and after this point). The redistribution share of bills remains constant. Appendix Figure A.11 shows similar results in the Senate though the gaps in the series are somewhat more frequent.<sup>17</sup>

#### 4.1.2 Party-level changes: Donors

*Decline of Union Finance.* The 1970s saw massive changes in the regulation of campaign finance. As we detail in Appendix F, a combination of reform-minded legislation, the Watergate scandal, and subsequent court cases massively (and for the most part, inadvertently) reduced the relative influence of labor union PACs over the course of a few short years. Until the early 1970s, different laws had governed the political donations of union versus corporate PACs, with unions enjoying substantially more freedom. The mid-1970s reforms put them on the same legal footing, and corporations were now free to enjoy the benefits of their naturally

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<sup>16</sup>Throughout the analysis in this subsection, we make the assumption that the party in control of the chamber of Congress controls the supply of roll-call votes in that chamber. Cox and McCubbins (2005) argue that the structure of House rules strongly favored the majority party, since Thomas Reed systematized House procedures in 1894, writing that "the rules of the legislative game have been heavily stacked in the majority party's favor since the re-adoption of Reed's rules in 1894." The Republicans explicitly formalized this practice with the so-called "Hastert Rule," and since Dennis Hastert's speakership in 1999 do not bring to the floor of the House any measure that a majority of Republican House members do not support. Democrats do not publicly follow such a rule but the vast majority of roll-call votes brought by Democratic Speakers enjoy the support of the majority of Democratic House members.

<sup>17</sup>To bolster our claim that Democratic politicians moved away from predistribution policies at some point in the 1970s, we turn to party platforms. The easiest of our pre-distribution policies to track in terms of word count is the "minimum wage," given it is a single policy that is referred to in an identical manner over our sample period. Appendix Figure ?? shows that for both the national and state-level platforms, Democrats refer to the "minimum wage" substantially less than they did before the 1970s (whereas GOP platforms use the term sparingly throughout the period). This lack of emphasis in Democratic Party platforms is consistent with George W. Bush being the last president to sign a federal minimum wage increase, despite Obama and Biden enjoying Congressional majorities.

deeper pockets.

Labor unions were natural constituencies for predistribution inside the Democratic party. Labor unions have always lobbied for predistribution policies. For example, in 1960, the number one legislative priority for the AFL-CIO was raising and expanding the minimum wage, while the number two priority was “areas of chronic unemployment”.<sup>18</sup> In the Appendix, we show that union members were also quite supportive of predistribution, above and beyond redistribution. Using the same eight questions as in Section 3, Appendix Table A.3 shows that respondents from union households systematically favor pre-distribution policies (minimum wage increases, job guarantees, protectionist trade policies, and greater union influence) while being neutral to slightly negative toward re-distribution. On average, union households support pre-distribution by 0.306 of a standard deviation more than non-union households, but oppose re-distribution by 0.007 of a standard deviation; the difference is statistically and economically significant ( $p < 0.001$ ) and holds when excluding the “greater union influence” item. The magnitude is comparable to the overall Democrat–Republican gap in support for progressive economic policies, reinforcing that union respondents treat pre- and re-distribution as distinct approaches.

To measure the declining financial influence of unions within parties, we stitch together data from Congressional hearings, watch-dog groups, and FEC reports to document the resulting effect on PAC donations by party (Figure 4). As panel (a) shows, as late as 1968, unions accounted for nearly ninety percent of the Democratic Party’s total PAC donations, whereas by 1980 that share had fallen to forty percent. As union PACs had never made substantial donations to the GOP, there is almost no decline in the union share for the GOP. As unions and corporations are the two main sources of PAC contributions, in panel (b) we see the corresponding rise in the corporate share of PAC contributions to Democrats, from ten to 45 percent over the 19670s. By contrast, the GOP corporate share only modestly increases from seventy to eighty percent. Note that the rapid decline in union share cannot be explained by the declining position of unions in the economy as both union and corporate PAC donations increase substantially in absolute terms during this period, but the latter far outpaces the former. Moreover, the timing of the union density decline—density peaks in the early 1950s and has been in gradual decline since then—does not line up with the rapid decline in the union PAC share in the 1970s.

While a formal causal analysis is beyond the scope of our study, we find it reassuring

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<sup>18</sup> *AFL-CIO news* from January 9th 1960, page 5.

that the substantial and rapid decline in the relative financial influence of labor unions in the Democratic Party occurs just as the party (based on House votes) turns away from policies that the labor movement explicitly supports. Unions’ pro-predistribution orientation and their dominance in Democratic party financing kept the postwar Democratic party platform anchored towards predistribution, and the decline of their financial clout inside the party is a natural proxy for the decline of predistributionary prioritization in the Democratic Party.

*Individual donations.* The above analysis showed that corporate PACs gained financial influence in the Democratic party at the expense of labor unions, the traditional lobbying force for predistribution. This shift did not occur for the GOP. Did a similar evolution occur among *individual donors*, whereby the Democrats begin to rely on a group less supportive of predistribution? While donors are often voters, we can focus on out-of-district donors in primary elections to isolate the “within-party” influence of educated donors, who we have shown are relatively opposed to predistribution.

We use data from Bonica (2016) to examine this question. We rely on the results from Section 3 and assume that donations from more educated census tracts (the donations data unfortunately do not ask individuals’ years of schooling) come from individuals on average less supportive of predistribution. A weakness of these data for our purposes is that they begin in 1980, so we cannot observe our key decade of the 1970s. A strength, however, is that we can separate donations into those for the primary and general election (such a distinction was not possible using our historical PAC data in Figure 4). We focus on the primary election as this contest speaks to within-party competition and ultimately determines the supply of candidates to voters in the general election.

Panel (a) of Figure 6 shows that in the early 1980s Democratic primary candidates, relative to their GOP counterparts, are still somewhat less likely to rely on highly-educated census tracts for their donations. But by the late 1980s this difference disappears, after which point Democratic primaries are increasingly reliant on educated census tracts for their donations. By 2018, Democratic primaries are financed by places with 0.41 more years of education than are Republican primaries (a substantial difference given that the within-year, across-census tract standard deviation in years of education is only 1.56).

Interestingly, when we separate primary donations into whether they are coming from within or outside the district (panels b and c, respectively), we see that educated out-of-district primary donors are already skewing Democratic by 1980. At a time when Democrats, relative to Republican, still get most of their votes (and their local donations) from the

less-educated, they are already receiving more of their out-of-district donations from the educated. Importantly, throughout the period, Democratic candidates receive substantially more contributions from out-of-district donors than Republican candidates—by almost 10 percentage points—as shown in Appendix Table A.7.

## 4.2 Factional analysis

So far we have shown that beginning in the 1970s, the Democratic Party moved away from emphasizing pre-distribution policies typically supported by labor unions and less-educated voters. During the 1970s, campaign finance reforms removed the historical advantage unions had enjoyed over corporations in donating to political campaigns, a shift that primarily affected Democrats since unions had rarely contributed to the GOP in the first place. A similar shift toward donors from more educated census tracts can be seen in Democratic primary races.

Given the large and sudden decline in the union share of donations to the Democratic (but not Republican) party, it would be surprising if an anti-predistribution group did not emerge within the party. We document that such a faction did indeed emerge in the 1970s and that they differentially benefit from corporate PAC donations and contributions from educated donors. We further document that this faction was also socially conservative, a fact that will prove useful in disentangling the drivers of voter realignment in Section 5. The remainder of this section is purely empirical, but in the Appendix, we provide a model that formalizes the role of factions in party competition.

### 4.2.1 Factional analysis: Politicians

*Background.* Historians and political scientists have argued that Democrats who entered the political scene in the 1970s were distinct from their predecessors, especially on economic issues. “New Democrats, often from suburban, affluent districts, made it a badge of honor that they were not New Dealers” (Stein, 2010). Many entered Congress in the first-post-Watergate election of 1974 (and were known as the “Watergate Babies”) and had particular interest in the technology sector and other high-skill industries (and gained the nickname “Atari Democrats”). “The freshman Democrat today is likely to be an upper-income type and that causes some problems with economic issues” noted the AFL-CIO general counsel at the time.<sup>19</sup> “[New Democrats’] efforts were backed by connections to finance and corporations

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<sup>19</sup>As quoted in Stein (2010).

rather than organized labor.” (Mudge, 2018, p. 291).

There is no official list of “New Democrats” so to facilitate quantitative hypothesis testing, we will often focus on the largest and most influential organization associated with the movement, the Democratic Leadership Council (DLC), which operates from 1985 to 2011. We have been able to obtain official membership lists for 1985, 1986, 1991, 1993 and then 1997 onward. We define a member of Congress as “DLC” for their entire career if they ever appear on any of these lists.<sup>20</sup> Note that the gaps in our membership lists mean we will have some type II classification errors in the late 1980s and early 1990s.

While we support this point with quantitative evidence, it is worth emphasizing that DLC rhetoric was explicitly skeptical of predistribution policies. In his memoirs, DLC founder Al From specifically criticizes all four of the predistribution policies we examine in Section 3. As just one example, he emphasizes his group’s break with the “old” Democrats’ tolerance of protectionism: “Our [the DLC’s] pro-trade stance clearly reinforced our message that we were different from the old Democrats.”<sup>21</sup>

*Rise of the “New Democrat” faction.* Figure 5 documents the evolution of the DLC as a share of all Democratic House members. The DLC enjoyed robust growth since its founding in 1985 (we attribute the small dip in the 1990s to our missing membership lists for several years during this period). By the early 2000s, almost half of Democrats in the House were DLC members. We show a similar, if somewhat larger, growth in the Senate (Appendix Figure A.7) and note as well that official DLC lists included governors and local politicians.

When did the types of politicians *who would become DLC members* first appear in Congress? While the DLC did not officially exist until 1985, we can observe the share of Representatives who would become DLC members before this date, and we track the “eventual DLC” share going back to the 1960s in Figure 5. We see the DLCers begin to enter Congress in greater numbers in the 1970s, consistent with historical accounts. This trend holds even when we limit the sample to representatives who are in Congress the same years

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<sup>20</sup>Please see Appendix D for greater detail on our definition of a DLC member and our methodology for acquiring membership lists. While the DLC officially closed in 2011, in 1997 both House and Senate Democrats associated with the DLC formed “New Democrat” caucuses, which existed until the end of our sample period. We thus call anyone who is on an official DLC membership list or a member of the New Democrat Caucus a DLC member.

<sup>21</sup>On the minimum wage, he writes: “The bottom line was that the country and economy had changed, and the minimum wage, so important in the New Deal, had ceased to be an effective way to help the working poor.” From often describes unions as a major obstacle to passing DLC-favored policies: “But we needed to change our policy, and I wasn’t about to give the unions or any other constituency group a sign-off on what we recommended” (p. 39). The DLC was also opposed to public jobs programs and in fact called for the elimination of over 250,000 federal government jobs.

as we have DLC lists (second series) to control for sample bias.

*Roll-call Voting Patterns.* We begin our exploration of by-faction differences in roll-call voting patterns by estimating the following baseline regression to assess whether the DLC tends to vote more conservatively (i.e., in line with Republicans) than do other Democrats:

$$Yea_{ir} = \beta DLC_i \times Mean\ Repub_r + \eta_r + \gamma X_{ir} + e_{ir}. \quad (2)$$

The outcome is Representative  $i$  voting “yea” on roll-call bill  $r$ ;  $DLC_i$  is a dummy for whether  $i$  belongs to the DLC;  $Mean\ Repub_r$  is the share of GOP Representatives who voted for bill  $r$ ;  $\eta_r$  are roll-call-vote fixed effects (which subsume year or Congressional session fixed effects);  $X_{ir}$  are controls that we vary to probe robustness; and  $e_{ir}$  is the error term. We estimate this regression only for Democrats, so the  $DLC$  dummy represents the difference between DLC Democrats and other Democrats. We include the vector  $\eta_r$  of roll-call-vote fixed effects (so that each vote receives its own dummy) given the evidence in Figure 3 that the composition of votes has changed across time.

Col. (1) of Table 1 estimates equation (2) on all bills. Relative to other Democrats, when the share of Republicans voting for a bill increases by ten percentage points, the probability a DLC member votes for a bill increases by 1.48 percentage points, confirming that DLC Democrats are significantly more conservative than other Democrats.

Our main hypothesis is that DLC-affiliated representatives are differentially more conservative on predistribution issues. Col. (2) adds an interaction between  $DLC_i \times Mean\ Repub_r$  and a *Predistribution* dummy (as well as all corresponding lower-order interaction terms). The results indicate that for a non-predistribution bill, a ten percentage point increase in the GOP share for a vote increases the DLC probability of voting in favor by 1.66 points, but for a predistribution bill that effect is 2.26 p.p. (36 percent larger).<sup>22</sup> Col. (3) shows that, in contrast to predistribution, DLC House members are no more conservative on redistribution than they already are on all other bills. The DLC’s differential conservatism on predistribution relative to redistribution is statistically significant (and remains so with additional controls, col. 4).

The final column considers bills that the CAP data categorizes as social-issue topics. We again find that while the DLC are more conservative overall than other Democrats, this difference is especially pronounced on social issues.<sup>23</sup>

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<sup>22</sup>Note that the  $DLC \times Predis$  coefficient has no clean interpretation and will depend on whether the particular bill is for or against predistribution.

<sup>23</sup>As a check, we looked up particularly hot-button pieces of legislation in the 1990s and 2000s. Relative

In sum, while DLC Democrats are more conservative than other Democrats generally, this difference is especially pronounced on predistribution and social issues.

#### 4.2.2 Factional analysis: Donors

*PAC donations.* We now return to donors and show that the rise in corporate PAC donations and individual donations from well-educated census tracts that we documented for the Democratic Party as a whole is especially pronounced among DLC Democrats.

We assemble new candidate-level measures of PAC support from the Federal Election Commission (FEC) universe of PAC-to-candidate contributions. We classify each PAC by the legal form of its connected organization (FEC Form 1, Line 5(e)) and, for each candidate, separate receipts from corporate-connected and labor-organization PACs. Using these measures, Table 3 shows that, relative to other Democratic candidates, DLC Democrats receive substantially less from labor-connected PACs and substantially more from corporate-connected PACs.

Table 3 focuses on primary elections, as we view them as more direct inputs into the party’s candidate supply.

We also hand-classify PACs that advocate progressive social positions. Consistent with their more conservative stances on social issues as captured in Table 3, DLC members rely less on progressive social-issue PACs than do other Democrats, consistent with the Congressional voting patterns documented above.

*Individual donations.* Earlier in the section we documented the Democrats’ increasing reliance on more-educated census tract in primary contests, and in this section we ask whether the anti-predistribution faction of the party, the DLC, are differentially reliant on these educated areas relative to other Democrats. The first column of Table 2 documents the differential DLC reliance on educated census tracts when we pool both within and out-of-district donations. For this sample, the average DLC primary donation comes from a census tract that is 0.09 years more educated relative to the average non-DLC donation. The remaining columns show that the DLC’s reliance on educated census tracts comes mostly from out-of-district donations. Indeed, when only local contributors are considered in col. (4), the difference in the education level of donation census tract is smaller and insignificant. But for

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to other Democrats, DLC members were more likely to vote for the “Defense of Marriage Act” of 1996 (by 16 percentage points), the “Partial-Birth Abortion Ban Act” of 2003 (7 percentage points), and the “Border Protection, Anti-terrorism and Illegal Immigration Control Act” of 2005 (10 percentage points). Each of these bills garnered near-unanimous support among Republicans.

out-of-district donations (cols. 5 and 6), the typical DLC census tract is over 0.1 years more educated than that for other Democrats. Thus, DLC candidates are relying on educated donations, in particular from *outside* their district, which reduces the concern that changes in local demand from voters in their district are compelling DLC candidates to vote against policies favored by less-educated voters such as predistribution. The educated are increasing their influence within the Democratic party as national contributors to out-of-district primary races, more than by being a pivotal constituency in local district primary races. And their preferred candidates are the economically and socially conservative DLC faction.<sup>24</sup>

To conclude this section, we have presented a variety of evidence that the Democratic party swung against predistribution in the 1970s. This pivot can be seen in the legislative agenda, party platforms, the decline of union finance and the rise of corporate and educated out-of-district donors, and particularly the rise of an explicitly anti-predistribution (and socially conservative) faction, the New Democrats/DLC, that in turn benefited from the changes in internal party financing.

## 5 How do voters react to changing supply of economic policies?

We have so far shown that economic preferences by education are relatively stable over time, with the less-educated showing a strong preference for pre-distribution policies. By contrast, the Democratic Party moves away from these policies in the 1970s, as a faction explicitly skeptical of pre-distribution gains influence. In this section we track the reaction of voters, both in terms of the party with which they identify as well as the within-party faction they prefer.

### 5.1 When did educational realignment begin?

In Figure 7 we estimate equation (1) with an indicator variable for Democratic party identification as the outcome variable (so Republicans, Independents or any other response are coded as zero). As usual we include age-in-five-year-bin fixed effects and survey fixed effects. We perform this regression separately by year, so the coefficients on the age fixed effects are unrestricted across time.

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<sup>24</sup>One challenge in using election data to study factions such as the DLC is that in many years our DLC lists come from the DLC-affiliated Congressional caucuses, so the DLC status of election *losers* is hard to observe. Reassuringly, our main result holds whether we restrict the sample to election winners or use ML techniques to predicted the DLC status of losers. See Appendix D.

Relative to existing literature, the novel result from this analysis is the clear inflection point in the 1970s. From the 1940s until the mid-1970s, an additional year of education predicted that a respondent was roughly three percentage-points less likely to identify as a Democrat. While largely stable, the magnitude of this negative relationship if anything grew in the 1960s and early 1970s. But shortly thereafter, the slope goes from roughly flat to positive and remains so to this day. As a result, the relationship today is almost exactly the inverse of that after World War II: an additional year of education predicts a respondent is three percentage points *more* likely to be a Democrat. As usual, we show robustness to dropping non-whites (second series), and we also show robustness to using non-adjusted years of schooling (third series).

The large dataset we assembled ( $N \approx 2,200,000$  observations from 1,006 surveys.) allows us to credibly estimate an inflection point (see Appendix Figure A.12). We identify the year  $\tau$  that minimizes the sum of squared residuals of the equation:

$$Dem_{it} = \beta_0 + \beta_1 edu_{it} + \beta_2 edu_{it} \cdot \mathbf{1}\{t > \tau\} + X_{it} + u_{it},$$

following Bai and Perron (1998). We normalize the survey weights so that each year is given the same weights in the estimation. The data choose 1976 as the inflection point. We also show in the Appendix that finding an inflection in the 1970s is robust to various changes in specification or subgroups (e.g., restricting to whites yields a very similar 1978 inflection point).<sup>25</sup>

The patterns documenting in Figure 7 are robust to alternative specifications. We show on Appendix Figure A.19 that using rank in education gives very similar results. We also show in Figure A.20 that controlling for basic respondent covariates such as income, gender, region, and race do not change the timing of the realignment patterns. Lastly, to account for potential historical shifts in demographic composition, we conduct a sensitivity check where the *race*  $\times$  *education* population’s composition is held constant to its late 1940s distribution. Figure A.21 shows that the observed political realignment patterns are not merely a consequence of increased educational attainment over time.

Another natural question is how realignment based on education compares to realignment

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<sup>25</sup>Appendix Figure A.13 shows that there is no corresponding movement in *overall* Democratic party identification in the 1970s (either in aggregate or even just among whites), so roughly speaking realignment shuffled voters across partisan identities but did not benefit one party over the other. In fact, the Democratic share of two-party partisan identification is remarkably stable over time (and even including independents in the denominator, there is only a very gradual decline since the 1950s with no inflection point in the 1970s).

based on other class markers such as income. Appendix Figure A.14 uses the (considerably smaller) subsample of respondents that also has family income information to perform this comparison. Realignment by income is much smaller than realignment by education (in this exercise, both of these explanatory variables are standardized), though like education the gradient switched from negative to positive over time. Moreover, controlling for education almost fully erases any income realignment, though some small post-2012 realignment remains. By contrast, controlling for income has almost no effect on educational realignment. For a much smaller sample, we also show in Appendix Figure A.15 evidence of realignment by another class marker (parents’ education). While certainly not the only class marker nor the only dimension along which it is fruitful to study partisan realignment, education stands out as the dimension along with partisan realignment in the US is most pronounced.

Finally, we examine how the patterns of educational realignment relate to the rise of the DLC faction discussed above. A breakpoint test on the trend in the share of DLC Democrats in Congress identifies 1975 as the pivotal year—one year before the breakpoint in partisan identification. Appendix Figure A.16 plots the correlation between the educational gradient and the share of Democrats affiliated with the DLC. The expansion of the DLC precedes the shift in the educational gradient by several years and is associated with a sharp rise in the gradient, which then levels off in the 1990s as the DLC becomes dominant. These time-series patterns are, of course, at risk of being driven by competing forces, which limits what can be concluded from aggregate data alone. This motivates the next section, where we turn to voters’ preferences over different Democratic factions, allowing us to rule out potential confounds rather than relying solely on party-level trends.

## 5.2 Voters’ views of parties’ overall economic policy

Since 1950, Gallup has asked respondents the following question (with only small variations over eighty years): “Looking ahead for the next few years, which political party—the Republicans or the Democrats—do you think will do the better job of keeping the country prosperous.” While our focus is the educational gradients, Appendix Figure A.17 shows the time series of the share of respondents name each party as better in this regard. Until the late 1970s, Democrats enjoyed large advantages over Republicans on this question, which they never regained except for a few years during the Great Recession.

The first series of Figure 8 panel (a) replicates our main realignment graph in Figure 7, but instead of identifying as a Democrat, choosing Democrats as the party better for the

economy is the outcome variable. In general, the pattern is similar—in the immediate post-war decades, an additional year of education predicted a 2-3 percentage point reduction in the likelihood of identifying the Democrats as the better party for a strong economy. Today, it predicts a two percentage point increase in that same likelihood.

One natural concern is that the result is merely a consequence of party identification more generally. Suppose that less-educated individuals leave the Democratic Party entirely over cultural issues and actually still prefer Democratic economic policies. We might worry that, merely to avoid cognitive dissonance, such respondents—now identifying as Republicans or at least no longer Democrats—prefer not to admit that the Democrats in fact remain the better party on economic issues. We do our best to address this concern by including indicator variables for party identification (dummies for Democrat and Republican, leaving independents/others as the omitted group). This exercise asks, if we compare two Democrats in the early decades, is the less educated one more likely to name the Democrats as the party better for the economy than is the more educated (and vice versa for recent decades)? Even with this very demanding specification, we see evidence of educational realignment on the party better on the economy, especially from the 1980s onward.

A final question is how much less-educated voters’ increasing dissatisfaction with the Democratic party on economic issues explains the overall partisan realignment in Figure 7. In panel (b) of Figure 8, we replicate the overall partisan realignment analysis, but only on the subset of data that also includes the prosperity question (first series). We then add a control for the response to the prosperity question (second series). Roughly half of the overall change is explained by adding this control. We view this estimate as an upper bound on how much economic policy can explain realignment, given as noted some respondent might simply say their party is the best on all measures. One point to note is that controlling for views on the parties’ economic policies does an especially effective job of explaining realignment from 1980 until 2012 (the educational gradient after controlling for this variable is near zero during this period). In the most recent years we see some evidence that educational realignment resumes even after controlling for views on the parties’ economic policies, a point we return to in the conclusion.

### 5.3 Who supported the “New Democrats?”

So far in this section we have shown that the educational gradient begins to shift in the 1970s, the same time that the “New Democrats” gain power and predistribution fades from

the party’s agenda. While consistent with our story, we can perform more demanding tests by examining which faction of the party—the “New” or “old” Democrats—perform better with educated voters.

### 5.3.1 Hypothetical election match-ups

In most of the 1972–1992 Democratic primaries, politicians who clearly identified with one of the two wings of the party (“New Democrats” versus “old-style” New Dealers) either won or were runners-up to the nomination. In 1972, while Humphrey represented the legacy of LBJ’s Great Society, McGovern had no close ties to labor. In fact, unions launched an “ABM” (Anyone but McGovern) campaign and McGovern remains the only Democrat that the AFL-CIO did not endorse in a general election (they remained neutral that year). In 1980, Ted Kennedy runs against the incumbent Carter after a first term that many historians date as the birth of “neoliberalism” in the US.<sup>26</sup> Carter had so disappointed labor that the United Auto Workers took the unusual step of endorsing Kennedy’s upstart primary campaign against an incumbent Democratic president. In 1984, Mondale beats Gary Hart, one of the most prominent “New Democrats.” Hart once described his New Democrat brethren by saying: “We are not a bunch of little Hubert Humphreys.” In 1988, Mike Dukakis beats Jesse Jackson, perhaps the DLC’s most prominent foe, who mocked the group as “Democrats for the Leisure Class.” Finally, in 1992, while Jerry Brown and Bill Clinton were both DLC members, we rank Clinton as “Newer” since he was in fact the president of the group.<sup>27</sup> The 1976 election is hard to categorize as Carter ran mostly on anti-corruption themes and did not face a formidable opponent, but for consistency we label him as “new” and the runner-up, Mo Udall, as “old.”<sup>28</sup>

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<sup>26</sup>Kazin (2022) writes of Carter’s single term: “What Carter did not do was advocate policies that might win the support of poor and working-class Americans buffeted by job insecurity and high inflation. Instead, he peered at social programs, old and new, through an austerity-tinted lens. Explaining that he needed ‘to enhance an image of fiscal responsibility,’ the president sought to balance the budget and opposed a national health insurance plan written by Ted Kennedy. He also signed bills to deregulate the airline and trucking industries....In sum, these moves, and the support they drew from other party leaders, signified a momentous retreat. No longer would Democrats maintain that government had an obligation to set strict rules to protect workers and demand that corporations obey them. No longer would union power be viewed as an unambiguous boon to party fortunes as well as prime evidence that Democrats were the natural home of wage earners of any race, religion, or region.”

<sup>27</sup>We conclude this analysis in 1992 as there was no 1996 Democratic primary and in 2000 the front-runners (Al Gore and Bill Bradley) were both New Democrats. As noted, even in 1992, both candidates are DLCers. By the 1990s DLC types were firmly in control of the party.

<sup>28</sup>While Udall was the (distant) runner-up in the delegate count, he consistently registered low name-recognition in Gallup surveys from that time. The 1976 primary is complicated largely by the role of Hubert Humphrey. He consistently polls as Democrats’ top choice, but he never officially entered the race (though

We make use of surveys that ask all respondents (regardless of party affiliation) for whom they would vote if one of the two Democratic politicians faced the eventual Republican candidate. For example, respondents are asked in 1984 their preferred candidate in a Hart v. Reagan election and, in a separate question, a Mondale v. Reagan election.

Table 4 shows that years of education predict greater support for the “New Democrat,” relative to the “old” Democrat, when each is paired against the eventual GOP nominee. Col. (1) shows that during this period, there is still a significantly negative educational gradient in support for the New Democrat over the Republican (not surprising, as these races are mostly in the 1970s and 1980s when educational realignment has only just begun) but it is much smaller in magnitude than the negative educational gradient when the “old” Democrat is pitted against the Republican (col. 2). Relative to someone with only a high school degree, a voter with a college BA is roughly three percentage points more likely to vote for the Democratic candidate over the Republican when the candidate is a “New” instead of an “old” Democrat.

We can subtract the “old”-Dem-versus-Republican-nominee response from the “new”-Dem-versus-Republican-nominee response to facilitate more succinct analysis (the dependent variable thus takes the values 1, 0 and -1). Note that the dependent-variable means, reported below each column, tend to be small in this analysis, because most respondents support the same party regardless of the identity of the actual candidates. Col. (3) shows that the main result—more-educated voters prefer the New Democrats—holds once we difference the hypothetical responses. As presidential candidates tend to pick up extra support from their own and neighboring states, we add *state*  $\times$  *election* fixed effects in col. (4) and the result remains unchanged.

Col. (5) adds demographic controls (recall flexible age controls are included in all regressions). New Democrats have no differential appeal by gender, but they are far more attractive to white voters. Indeed, part of the educational gradient is explained by whites’ differential attraction to the New Democrats (though the educational gradient remains statistically significant). This result is not surprising given leaders of the Civil Rights movement such as Jackson were DLC foes. Col. (6) replicates col. (4) but drops non-whites. The magnitude of the gradient is reduced but remains (marginally) significant.

The final column shows that the result holds in each election in our sample period with the exception of 1976. We are not surprised by the 1976 result given how little attention at the same time said he might accept the nomination in the case of a brokered convention).

and name-recognition the runner-up Mo Udall enjoyed.<sup>29</sup> Only those following politics very closely would have an opinion, positive or negative, of Udall, and such respondents tend to be more educated.

We use the estimates in columns (1) and (2) to provide a back-of-the-envelope calculation of how much of the partisan realignment the rise of the DLC can explain. In regressions of Democratic party identification (Figure 7), the coefficient on years of education shifts from -0.025 in the pre-1976 period to 0.002 in the 2010s. The corresponding coefficient for presidential voting (Appendix Figure A.23) moves from -0.0215 to 0.006.<sup>30</sup> The difference between the coefficients in the first two columns of Table 4 implies that the shift from “Old” to “New” Democrats accounts for roughly 0.75 percentage points. Taken literally, this suggests that the party’s transformation toward the DLC explains at least one fifth of the overall educational realignment—a lower bound, since for most voters the distinction between two Democratic candidates in a single election is less salient than the broader ideological shift that unfolded over several decades. This lower bound can be compared to the upper bound of 50% obtained from Figure 8. This lower bound can also be seen as a conservative estimate of the realignment caused by the party’s shift on economic issues: since the “New Democrats” were more conservative on social issues than the “Old Democrats”, the total realignment driven by changes in economic positions would likely have been even larger had their social views been comparable to those of other factions.

### 5.3.2 House election returns

In this section we examine *actual* election results as opposed to hypothetical match-ups, so we take an ecological approach as individual-level votes are never observed. King and Palmquist (1997) provide 1980s election results at the *minor-civil-division-group* (MCDG) level. There are roughly sixty MCDG neighborhoods per Congressional District. We match 1980 census data to MCDGs to calculate average years of education among adults and other demographic characteristics in each MCDG. This MCDG-level election returns is only available for the 1980s, so we cannot perform a long-run analysis, but we can examine the early years of educational realignment.

To capture how neighborhood education predicts voting patterns in these House elections,

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<sup>29</sup> As just one example, in a May 1976 Gallup poll (taken *after* most of the primaries already took place) 28% of voters had not heard of Udall (rising to 40% in the bottom third of the education distribution) while only 4% had not heard of Carter (6% in the bottom third).

<sup>30</sup> We use all pre-1976 years and compare them to elections between 2008 and 2015, which we take as the end of our study period.

we estimate the following equation:

$$Dem_{mt} = \beta DLC_{mt} \times Education_m + \gamma_1 DLC_{mt} + \gamma_2 Education_m + \eta_{d(m)} + e_{mt}, \quad (3)$$

where  $Dem_{mt}$  is the share of MCDG  $m$  in election year  $t$  that votes Democratic;  $DLC_{mt}$  is an indicator variable for whether the Democratic candidate in district  $d(m)$  in year  $t$  is a DLC member;  $Education_m$  is the education level of MCDG  $m$  (based on the 1980 Census), and  $\eta_{d(m)}$  is a vector of Congressional district fixed effects (as each MCDG is mapped to a unique Congressional district).

The results in Table 5 document a strong preference of educated neighborhoods for DLC candidates relative to other Democrats. We begin with a sample of elections where Democrats all win (again, for this sample, we can identify DLC members with greater precision). In col. (1), the main effect of years of education is to substantially depress Democratic vote share, not surprising as in the 1980s less-educated voters were still significantly more likely to be Democrats (even if we identify a turning point in the 1970s, the overall gradient is still markedly negative in the 1980s). But the coefficient of interest—the interaction term—indicates that, as we predict, DLC Democrats out-perform other Democrats in more educated areas. In fact, this effect is so large that, among DLC Democrats, about 90% of the large Democratic underperformance in educated areas is erased.

One concern is that, perhaps for strategic reasons, DLC candidates run in more educated districts or in districts where the educated voters are more open to voting Democratic. In Col. (2) we include  $District \times Year$  fixed effects (i.e., a fixed effect for each House election), so the coefficient of interest is identified by comparing the areas where DLC candidates over-perform in a given election to the areas where non-DLC Democrats over-perform in their elections, so across-election comparisons no longer contribute to the estimate. We find similarly large and significant results.

While we have been focusing on the educational level of MCDGs, it might be the case that the DLC over-performance in these areas is better explained by characteristics merely correlated with education. In col. (3) we include controls for share under age 35 and share white and their interactions with DLC. Both of these main effects have large and significant coefficients in the expected direction—in general Democrats over-perform with young and non-white voters. Interestingly, we see that white areas prefer the DLC to other Democrats, consistent with our individual-level results for hypothetical match-ups. But adding these additional controls have no effect on the coefficient of interest. Col. (4) shows robustness to

adding  $District \times Year$  to the col. (3) specification.

The results showing the DLC’s success in both educated and white neighborhoods echo the group’s explicit goals of transforming their party’s base. Representative Tim Wirth (who would go on to be a founding member of the group) said in 1981: “Democratic constituencies used to be labor, blue-collar and minority-oriented. Now, as in my case, they are suburban, with two working parents—a college educated, information-age constituency.”<sup>31</sup>

In Appendix Table A.6, we reproduce the main results from Table 5 but predict DLC status via machine learning techniques as in Table 2 to not restrict the sample to election winners. The Table shows that this basic pattern—DLC over-performance in educated areas compared to other Democrats—holds when we include election-losers and predict DLC status via .<sup>32</sup>

## 6 Alternative explanations for realignment

In this section, we briefly examine other explanations, especially those that might have particular resonance during the 1970s and 1980s, when realignment begins.

### 6.1 The role of Civil Rights

The Democrats’ increasingly liberal position on Civil Rights since the 1940s—and especially their role in passing the signature Civil Rights legislation in the first half of the 1960s—led to a major partisan realignment whereby a significant share of Southern whites left the party (Kuziemko and Washington, 2018). Here, we examine what role if any this large Civil-Rights-driven realignment plays in *educational* realignment.

Appendix Figure A.18 shows our main realignment result (Figure 7) separately by the four Census regions, panel (a) for the full sample and (b) for whites only. In the South, white Democrats are becoming *less* educated from the 1940s through the 1960s.<sup>33</sup> Put differently, just as the Democrats are making moves in the liberal direction on Civil Rights, educated white Southerners are *leaving* the party. This pattern is consistent with a model as in Lee and Roemer (2006) where educated, well-off white Southerners had supported the Democrats

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<sup>31</sup>See Geismer (2022), p. 34.

<sup>32</sup>Note that, compared to the sample restricted to election winners, the mean of the dependent variable is much closer to fifty percent (it is still above fifty, as we would expect, given that during the 1980s the Democrats still held firm control over the House and thus won most elections) as we are no longer restricting the sample to elections where Democrats win.

<sup>33</sup>Using ANES data, Shafer and Johnston (2009) also noted this pattern.

primarily *because* of their defense of Jim Crow and *in spite of* their relatively left-wing economic policies. But as the Democratic party grew more liberal on this key issue, these voters no longer faced a trade-off between their economic interests and their support of segregation, so they left the Democrats. This pattern suggests that partisan shifts due to Civil Rights are unlikely to explain *educational* realignment.

## 6.2 What about the Republicans?

As noted, we cannot always observe the supply of Republican economic policy as easily as we can for Democrats due to the former’s infrequent control of Congress over most of our sample period. But in this subsection we briefly address concerns that changes on the Republican side better explain educational realignment.

First, when we replicate our main realignment Figure 7 but put Republican partisan identification instead of Democratic identification as the outcome, the inflection point is significantly later, in 1992 (see Appendix Figure A.22 for the realignment figure and Appendix Figure A.12 for tests of the inflection point). Roughly speaking, the educational gradient first changes in the mid-1970s along the Democratic-versus-all-other margin and then in 1992 along the Republican margin. The Republican result echoes past work showing that in the early 1990s, Republican politicians’ speech became markedly more partisan (Gentzkow *et al.*, 2019) as well as work documenting the rise of right-wing media during this period (DellaVigna and Kaplan, 2007). The coincident timing suggests that these developments may have appealed more to less-educated voters, which future work could explore. In any case, voters’ reaction is consistent with the Democrats’ agenda changing first.

Second, while Ronald Reagan is widely viewed as a transformative political figure, his role appears rather muted on the more narrow question of educational realignment. In Appendix Figure A.23 we present a version of our main realignment figure but instead of Democratic Party identification we use self-reported Democratic presidential vote as the outcome. If anything, the 1980 election is a bit of a retrenchment, where less-educated voters returned home (briefly, as it would turn out) to the Democratic Party. In neither Reagan election did educational realignment appear to accelerate (and this result holds, as we show in the figure, when non-white voters are excluded). Put differently, the so-called “Reagan Democrats,” while obviously numerous given the landslide results of the 1980 and 1984 elections, were not *differentially* less educated.

Our paper has focused on positive shifts in the bargaining power of the educated faction

within the Democratic Party, but of course Republican factions exist as well. Our read of the modern history of the Republican party suggests that the key changes in its factions are unlikely to explain the *educational* realignment that we document. We already discussed the rise of Southern Republicans (Black *et al.*, 2009) in response to Civil Rights. But Southerners who left the Democrats in the 1940s–1960s were *more* educated than average and after the 1960s the South simply follows all other regions in terms of the pace of partisan educational realignment (see Appendix Figure A.18).

Since at least the 1930s, an anti-government faction of Republicans has battled a faction willing to accept the parameters of the New Deal, with business groups and economists playing important roles in the former group. The more libertarian faction gained influence in the 1970s, especially among donors, think-tanks, and PACs (Gerstle, 2022, Hacker, 2011).<sup>34</sup> This faction is both anti-tax as well as anti-union, anti-tariff, and anti-minimum-wage, but given the much stronger educational gradient in the latter policies relative to the former, their rising influence seems unlikely to have attracted less-educated voters.

Finally, a faction of politically organized evangelical Christians gain power within the Republican coalition in the 1970s. Somewhat reassuringly, we show in Appendix Figure A.24, that flexibly controlling for religion explains essentially no part of partisan realignment. However, we caution that our datasets do not indicate which respondents who identify as Protestant are in fact evangelical or born again. We view the political mobilization of evangelical Christians (and some conservative Catholics) as an important topic for future work and could see an application of our factional analysis applied to “religious-right” Republicans versus more traditional “Rockefeller” Republicans of this period.

Of course, this short section is hardly the final word on alternative explanations for educational realignment. While we believe that some of the patterns in this section suggest that a social-issues-alone (or a Civil-Rights-alone) model of educational realignment is unlikely to be consistent with the data, more nuanced models of how social and economic issues interact may better accommodate these patterns. Similarly, educational realignment is not the *only* shift in political coalitions over the past several decades. Even if the rise of the various Republican factions we noted above cannot explain educational realignment, they can still have profound effects on American political economy.

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<sup>34</sup>Looking beyond the 1970s, while Reagan’s economic agenda appeared to hold sway in the early and mid 1980s, Republicans saw a return of the moderates with George H.W. Bush (1988 and 1992) and then Bob Dole (1996) as the party’s standard bearers. By the late 1980s, a more “populist” and anti-trade faction within the Republican party has also emerged, personified by Pat Buchanan, although it is not ascendant until Donald Trump.

## 7 Conclusion

We have presented evidence that less-educated voters have long favored more pre-tax-and-transfer interventions (“predistribution”) in the economy and labor market. Beginning in the 1970s, Democrats—once champions of these New-Deal-type policies—backed away from this agenda. This shift is coincident with campaign finance reform that disproportionately reduced the political power of unions, the traditional source of Democratic Party finance. We show that this shift is driven by a “New Democrat”/DLC faction openly skeptical of predistribution and significantly more reliant on corporate PACs and educated donors for contributions than are other Democrats. Importantly, we further show that New/DLC Democrats are also more socially conservative.

To track voters’ reaction to this change, we construct a large dataset of partisan identification dating back to 1942 and identify the 1970s as the key turning point for educational realignment, when less-educated voters started leaving the Democratic Party. Importantly, we show that educated voters are differentially attracted to DLC Democrats, both in hypothetical survey questions and in actual House elections using granular neighborhood voting data. As more-educated voters are socially liberal, their supporting the socially conservative DLC faction suggests that it was their shared antipathy toward predistribution that made the DLC attractive to them. We show that the turn away from predistribution and the rise of the New/DLC faction account for between 20% and 50% of the educational realignment since the 1970s. While not precluding an important role for other factors—particularly social issues—our findings indicate that economic issues played a central and previously overlooked role in the origins of this realignment.

As noted earlier, we end most of our analysis before 2016. As the DLC closes operations in 2011, it becomes hard for us to consistently identify the “New Democrat” faction much beyond that date. Moreover, there is growing evidence that in recent years factions within the Democratic Party have shifted. A key claim in our paper is that from the 1970s until the 2010s, the “New Democrats” were comparatively more right-wing on *both* predistribution and social issues. A nascent, more qualitative literature in sociology and political science argues that the party is divided into an economically liberal and socially conservative faction and an economically conservative and socially liberal faction, with the latter faction perhaps best epitomized by Hilary Clinton’s 2016 claim that “breaking up the banks won’t fix racism.” Indeed, recent evidence suggests that since 2010, the Democratic Party’s positions on social issues have driven educational realignment (Longuet-Marx, 2024).

Another reason we focus more on the origins of realignment than on its present-day features is that a pro-predistribution faction of the Republican Party has emerged over the past decade.<sup>35</sup> Recall that our test for whether a Democrat is more right-wing on redistribution is if they vote closer to Republicans than do other Democrats. But on key redistribution questions such as trade, Republicans have moved closer to the historical Democratic position.

While we have focused on factional conflict within the Democratic Party, future work could focus on Republicans. Over the 20th century, isolationists, evangelicals, and libertarians have all jockeyed for relative power in the GOP. While our focus is on educational realignment, which we tie to changes in the economic agenda of the Democratic Party, there are other important dimensions of realignment (e.g. by region, gender, occupation, or religion) that may be better explained by within-party changes happening on the other side of the aisle.

Finally, we have not attempted to rationalize the preferences for redistribution vs redistribution we have documented. These preferences may stem from deep psychological characteristics (Enke *et al.*, 2023; Chinoy *et al.*, 2025), (beliefs about) economic incidence, or they could be more malleable cultural framings of policy issues. Looking at the political cleavages around different types of economic policies in other countries may be informative as to whether the distinction between redistribution and redistribution we have identified in U.S. politics exists elsewhere and whether it can help explain realignment in other contexts. We leave exploration of these deeper microfoundations and comparative examination of policy preferences for future work.

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<sup>35</sup>See Cass (2018) and Ahmari (2023), two recent examples of prominent conservatives supporting redistribution policies such as union organizing and the minimum wage.

## References

- ACEMOGLU, D., NAIDU, S., RESTREPO, P. and ROBINSON, J. A. (2015). Democracy, redistribution, and inequality. In *Handbook of income distribution*, vol. 2, Elsevier, pp. 1885–1966.
- AHMARI, S. (2023). *Tyranny, Inc.: How Private Power Crushed American Liberty—and What to Do About It*. Forum Books.
- ALDRICH, J. H. (1995). *Why parties?: The origin and transformation of political parties in America*. University of Chicago Press.
- ALESINA, A., STANTCHEVA, S. and TESO, E. (2018). Intergenerational mobility and preferences for redistribution. *American Economic Review*, **108** (2), 521–54.
- ALEXANDER, H. E. (1971). *Financing the 1968 election*. Heath Lexington Books.
- ANSOLABEHERE, S., RODDEN, J. and SNYDER, J., JAMES M. (2006). Purple America. *Journal of Economic Perspectives*, **20** (2), 97–118.
- ASH, E. and HANSEN, S. (2023). Text algorithms in economics. *Annual Review of Economics*, **15**.
- ASHOK, V., KUZIEMKO, I. and WASHINGTON, E. (2015). Demand for Redistribution in an Age of Rising Inequality: Some New Stylized Facts and Tentative Explanations. *Brookings Papers for Economic Activity*.
- BAI, J. and PERRON, P. (1998). Estimating and testing linear models with multiple structural changes. *Econometrica*, pp. 47–78.
- BATEMAN, D. A., KATZNELSON, I. and LAPINSKI, J. S. (2018). *Southern nation: Congress and white supremacy after reconstruction*, vol. 158. Princeton University Press.
- and LAPINSKI, J. (2016). Ideal points and American political development: Beyond DW-NOMINATE. *Studies in American Political Development*, **30** (2), 147–171.
- BÉNABOU, R. and TIROLE, J. (2016). Mindful economics: The production, consumption, and value of beliefs. *Journal of Economic Perspectives*, **30** (3), 141–64.
- BERINSKY, A. J. (2019). *In time of war: Understanding American public opinion from World War II to Iraq*. University of Chicago Press.
- BESLEY, T. and PERSSON, T. (2021). The rise of identity politics: Policy, political organization, and nationalist dynamics. In *Munich Lectures and 2020 ASSA Congress, London, ERC and Swedish Research Council*, pp. 1–63.
- BLACK, E., BLACK, M. and BLACK, E. (2009). *The rise of Southern Republicans*. Harvard University Press.

- BLANCHET, T., CHANCEL, L. and GETHIN, A. (2022). Why is Europe more equal than the United States? *American Economic Journal: Applied Economics*, **14** (4), 480–518.
- BONICA, A. (2014). Mapping the ideological marketplace. *American Journal of Political Science*, **58** (2), 367–386.
- (2016). Database on ideology, money in politics, and elections: Public version 2.0 [computer file]. URL: <https://data.stanford.edu/dime>.
- (2018). Inferring roll-call scores from campaign contributions using supervised machine learning. *American Journal of Political Science*, **62** (4), 830–848.
- , MCCARTY, N., POOLE, K. T. and ROSENTHAL, H. (2013). Why hasn’t democracy slowed rising inequality? *Journal of Economic Perspectives*, **27** (3), 103–124.
- BONOMI, G., GENNAIOLI, N. and TABELLINI, G. (2021). Identity, beliefs, and political conflict. *The Quarterly Journal of Economics*, **136** (4), 2371–2411.
- BOZIO, A., GARBINTI, B., GOUPILLE-LEBRET, J., GUILLOT, M. and PIKETTY, T. (2020). Predistribution vs. Redistribution: Evidence from France and the US.
- CASS, O. (2018). *The once and future worker: A vision for the renewal of work in America*. Encounter Books.
- CAUGHEY, D. and WARSHAW, C. (2016). The dynamics of state policy liberalism, 1936–2014. *American Journal of Political Science*, **60** (4), 899–913.
- and — (2022). Dynamic democracy: Public opinion, elections, and policymaking in the american states. In *Dynamic Democracy*, University of Chicago Press.
- CAVAILLÉ, C. and TRUMP, K.-S. (2015). The two facets of social policy preferences. *The Journal of Politics*, **77** (1), 146–160.
- CHARNOCK, E. J. (2020). *The rise of political action committees: Interest group electioneering and the transformation of American politics*. Oxford University Press.
- CHINOY, S., NUNN, N., SEQUEIRA, S. and STANTCHEVA, S. (2025). *Zero-sum Thinking and the Roots of US Political Differences*. National Bureau of Economic Research.
- CHOI, J., KUZIEMKO, I., WASHINGTON, E. L. and WRIGHT, G. (2021). *Local Economic and Political Effects of Trade Deals: Evidence from NAFTA*. Tech. rep., National Bureau of Economic Research.
- COX, G. W. and MCCUBBINS, M. D. (2005). *Setting the agenda: Responsible party government in the US House of Representatives*. Cambridge University Press.
- CRUCES, G., PEREZ-TRUGLIA, R. and TETAZ, M. (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *Journal of Public Economics*, **98**, 100–112.

- DECHEZLEPRÊTRE, A., FABRE, A., KRUSE, T., PLANTEROSÉ, B., SANCHEZ CHICO, A. and STANTCHEVA, S. (2022). *Fighting Climate Change: International Attitudes Toward Climate Policies*. Working Paper 30265, National Bureau of Economic Research.
- DELLAVIGNA, S. and KAPLAN, E. (2007). The Fox News effect: Media bias and voting. *The Quarterly Journal of Economics*, **122** (3), 1187–1234.
- DEVLIN, J., CHANG, M.-W., LEE, K. and TOUTANOVA, K. (2018). Bert: Pre-training of deep bidirectional transformers for language understanding. *arXiv preprint arXiv:1810.04805*.
- DIAMOND, P. A. and MIRRLEES, J. A. (1971). Optimal taxation and public production I: Production efficiency. *The American Economic Review*, **61** (1), 8–27.
- DORN, D., HANSON, G., MAJLESI, K. *et al.* (2020). Importing political polarization? the electoral consequences of rising trade exposure. *American Economic Review*, **110** (10), 3139–83.
- ENKE, B., POLBORN, M. and WU, A. A. (2021). Morals as Luxury Goods and Political Polarization.
- , RODRÍGUEZ-PADILLA, R. and ZIMMERMANN, F. (2023). Moral universalism and the structure of ideology. *The Review of economic studies*, **90** (4), 1934–1962.
- FARBER, H. S., HERBST, D., KUZIEMKO, I. and NAIDU, S. (2021). Unions and inequality over the twentieth century: New evidence from survey data. *The Quarterly Journal of Economics*, **136** (3), 1325–1385.
- FEENBERG, D. and COUTTS, E. (1993). An introduction to the taxsim model. *Journal of Policy Analysis and management*, **12** (1), 189–194.
- FRIEDMAN, J. H. (2001). Greedy function approximation: a gradient boosting machine. *Annals of statistics*, pp. 1189–1232.
- GEISMER, L. (2022). *Left Behind*. Public Affairs.
- GENNAIOLI, N. and TABELLINI, G. (2019). Identity, beliefs, and political conflict.
- GENTZKOW, M., SHAPIRO, J. M. and TADDY, M. (2019). Measuring group differences in high-dimensional choices: method and application to congressional speech. *Econometrica*, **87** (4), 1307–1340.
- GERSTLE, G. (2022). *The rise and fall of the neoliberal order: America and the world in the free market era*. Oxford University Press.
- GETHIN, A., MARTÍNEZ-TOLEDANO, C. and PIKETTY, T. (2021). Brahmin Left Versus Merchant Right: Changing Political Cleavages in 21 Western Democracies, 1948–2020. *The Quarterly Journal of Economics*.

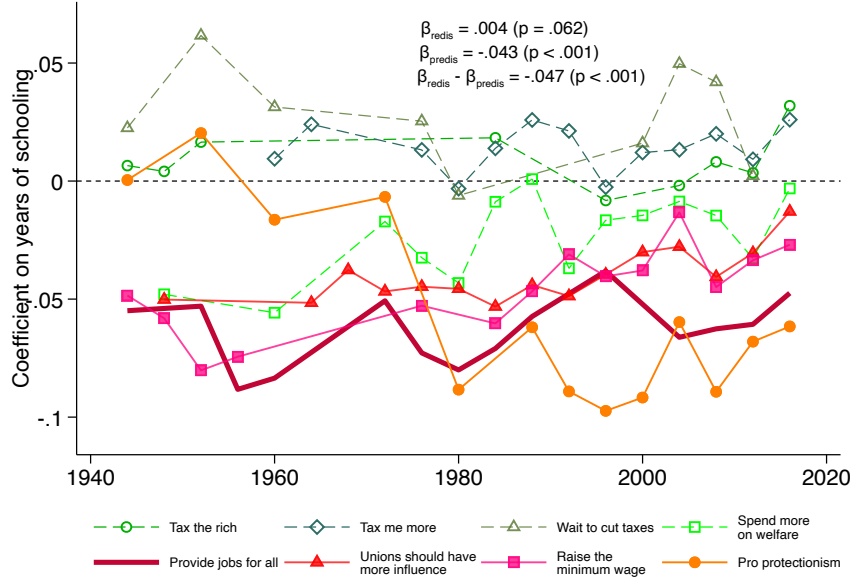
- GROSSMANN, M. and HOPKINS, D. A. (2024). *Polarized by degrees*. Cambridge University Press.
- HACKER, J. (2011). The institutional foundations of middle-class democracy. *Policy Network*, **6** (2011), 33–37.
- HOBOLT, S. B. (2016). The Brexit vote: A divided nation, a divided continent. *Journal of European Public Policy*, **23** (9), 1259–1277.
- HOPKINS, D. J., COFFEY, D. J., GALVIN, D. J., GAMM, G., HENDERSON, J., PADDOCK, J. W. and SCHICKLER, E. (2022). Select American State Party Platforms, 1846-2017.
- INGLEHART, R. (1977). *The silent revolution: changing values and political styles among western publics*. Princeton Univ. Press.
- INGLEHART, R. F. (2020). Cultural evolution: People’s motivations are changing, and reshaping the world.
- JÁCOME, E., KUZIEMKO, I. and NAIDU, S. (2025). Mobility for all: Representative inter-generational mobility estimates over the twentieth century. *Journal of Political Economy*, **133** (1), 306–354.
- KAPLOW, L. and SHAVELL, S. (1994). Why the legal system is less efficient than the income tax in redistributing income. *The Journal of Legal Studies*, **23** (2), 667–681.
- KAROL, D. (2009). *Party position change in American politics: Coalition management*. Cambridge University Press.
- KAZIN, M. (2022). *What it Took to Win: A History of the Democratic Party*. Farrar, Straus and Giroux.
- KING, G. and PALMQUIST, B. (1997). The record of american democracy, 1984–1990. *PS: Political Science & Politics*, **30** (4), 746–747.
- KITSCHOLT, H. P. and REHM, P. (2019). Secular partisan realignment in the United States: The socioeconomic reconfiguration of white partisan support since the New Deal era. *Politics & Society*, **47** (3), 425–479.
- KUZIEMKO, I., NAIDU, S. and ONORATO, D. (2025). The cold war and u.s. labor markets.
- , NORTON, M. I., SAEZ, E. and STANTCHEVA, S. (2015). How elastic are preferences for redistribution? evidence from randomized survey experiments. *American Economic Review*, **105** (4), 1478–1508.
- and WASHINGTON, E. (2018). Why did the Democrats lose the South? Bringing new data to an old debate. *American Economic Review*, **108** (10), 2830–67.
- LEE, W. and ROEMER, J. E. (2006). Racism and redistribution in the United States: A solution to the problem of American exceptionalism. *Journal of Public Economics*, **90** (6), 1027–1052.

- LONGUET-MARX, N. (2024). Party lines or voter preferences? explaining political realignment.
- LORIA, S. *et al.* (2018). textblob documentation. *Release 0.15*, **2** (8), 269.
- MARBLE, W. (2023). What explains educational realignment among white americans. *Unpublished Manuscript*.
- MARTIN, G. J. and YURUKOGLU, A. (2017). Bias in cable news: Persuasion and polarization. *American Economic Review*, **107** (9), 2565–99.
- MAYDA, A. M., PERI, G. and STEINGRESS, W. (2022). The Political Impact of Immigration: Evidence from the United States. *American Economic Journal: Applied Economics*, **14** (1), 358–89.
- MELTZER, A. and RICHARD, S. (1981). A rational theory of the size of government. *The Journal of Political Economy*, **89** (5), 914–927.
- MUDGE, S. L. (2018). *Leftism reinvented: Western parties from socialism to neoliberalism*. Harvard University Press.
- MUTZ, D. C. (2018). Status threat, not economic hardship, explains the 2016 presidential vote. *Proceedings of the National Academy of Sciences*, **115** (19), E4330–E4339.
- NOEL, H. (2014). *Political ideologies and political parties in America*. Cambridge University Press.
- PERSICO, N., PUEBLITA, J. C. and SILVERMAN, D. (2011). Factions and political competition. *Journal of Political Economy*, **119** (2), 242–288.
- POOLE, K. T. and ROSENTHAL, H. (2000). *Congress: A political-economic history of roll call voting*. Oxford University Press, USA.
- ROEMER, J. E. (1998). Why the poor do not expropriate the rich: an old argument in new garb. *Journal of Public Economics*, **70** (3), 399–424.
- SABATO, L. (1984). *PAC Power Inside the World of Political Action Committees*. W.W. Norton.
- SANCES, M. W. (2019). How Unusual Was 2016? Flipping Counties, Flipping Voters, and the Education–Party Correlation since 1952. *Perspectives on Politics*, **17** (3), 666–678.
- SCHICKLER, E. (2016). Racial realignment: The transformation of american liberalism, 1932–1965.
- SCHUMAN, H. and PRESSER, S. (1996). *Questions and answers in attitude surveys: Experiments on question form, wording, and context*. Sage.
- SHAFFER, B. E. and JOHNSTON, R. (2009). *The end of Southern exceptionalism: class, race, and partisan change in the postwar South*. Harvard University Press.

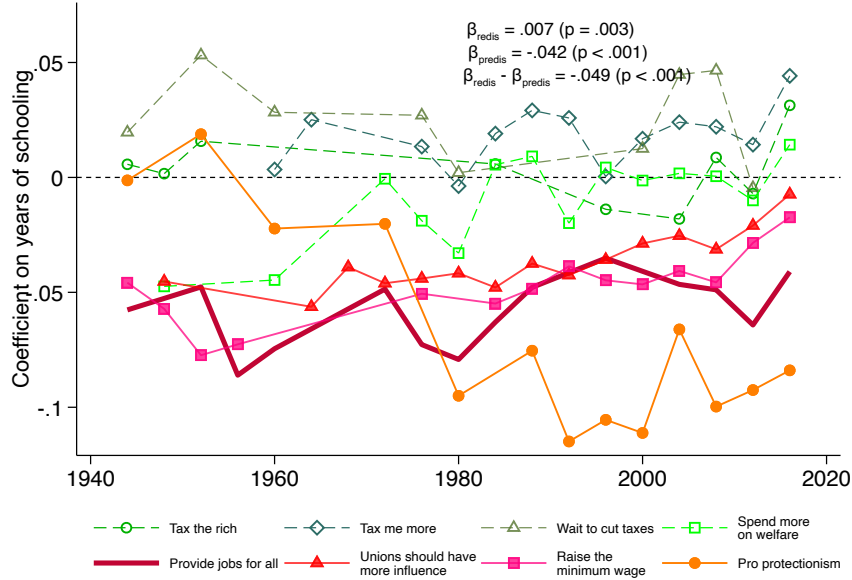
- SIDES, J., TESLER, M. and VAVRECK, L. (2019). *Identity crisis: The 2016 presidential campaign and the battle for the meaning of America*. Princeton University Press.
- SMITH, A. (2010 (1759)). *The theory of moral sentiments*. Penguin.
- STANTCHEVA, S. (2022). *Understanding of Trade*. Working Paper 30040, National Bureau of Economic Research.
- STEIN, J. (2010). *Pivotal decade: How the United States traded factories for finance in the seventies*. Yale University Press.
- ZELIZER, J. E. (2002). Seeds of cynicism: The struggle over campaign finance, 1956–1974. *Journal of Policy History*, **14** (1), 73–111.
- ZINGHER, J. N. (2022). Trends: Diploma divide: Educational attainment and the realignment of the american electorate. *Political Research Quarterly*, **75** (2), 263–277.

Figure 1: Preferences for pre- and re-distribution by education

(a) All respondents



(b) White respondents only



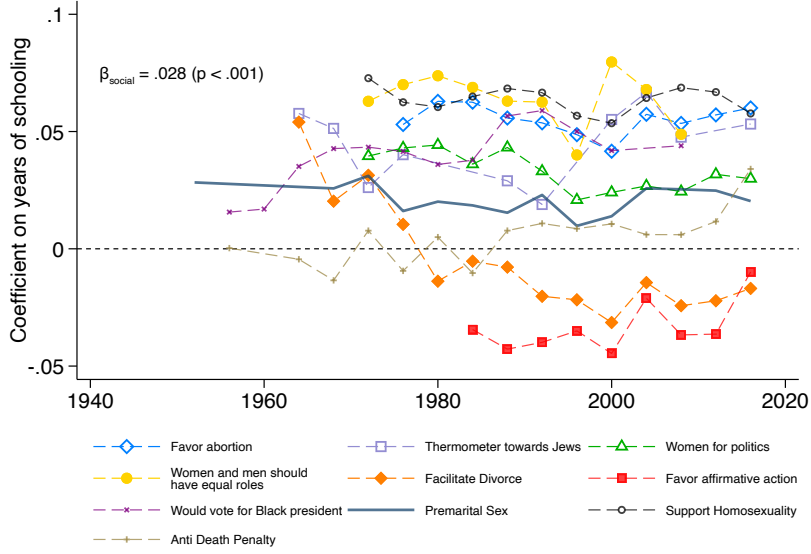
Notes: This figure plots the coefficients  $\beta^p$  from the following regression estimated separately for each four-year period  $p$ :

$$y_{is} = \beta^p \text{Adj. years of school}_i + \mu_{s(i)} + \mathbf{Age}_i + e_{is},$$

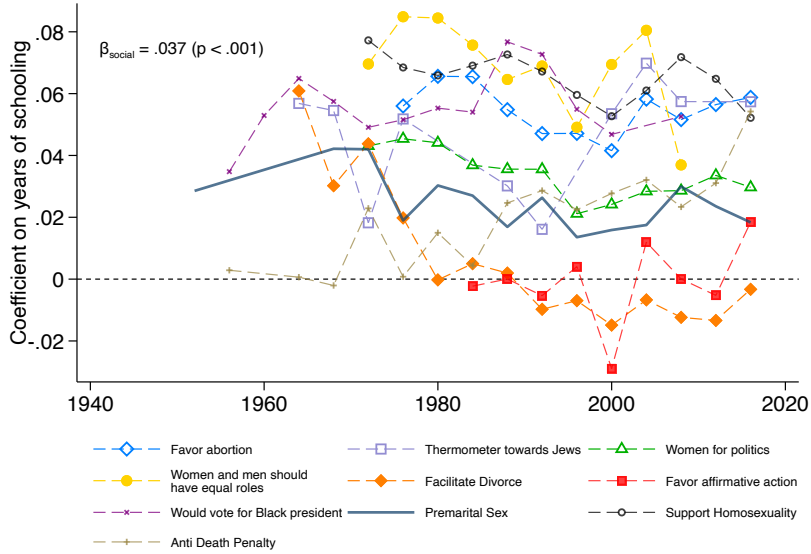
where  $y_{is}$  is the outcome variable for person  $i$  in survey  $s(i)$ ; *Adjusted years of school* is our predicted years of school based on the self-reported educational category provided by the respondent along with demographics and years (see Section 2),  $\mu_{s(i)}$  are survey (which subsume date) fixed effects, as we often have several surveys per period  $p$  and  $\mathbf{Age}_i$  is a vector of age-in-five-year-bin dummies. The outcome variables are standardized measures (mean zero and variance 1) of support for the given policy. We suppress confidence intervals to reduce clutter, but we plot each policy question separately along with 95-percent confidence intervals in Appendix Figure A.1. We use survey weights if provided (we divide by the mean of the weights by survey to ensure they all average to one). The second panel restricts the sample to white respondents only.

Figure 2: Social issue preferences by education

(a) All respondents



(b) White respondents only

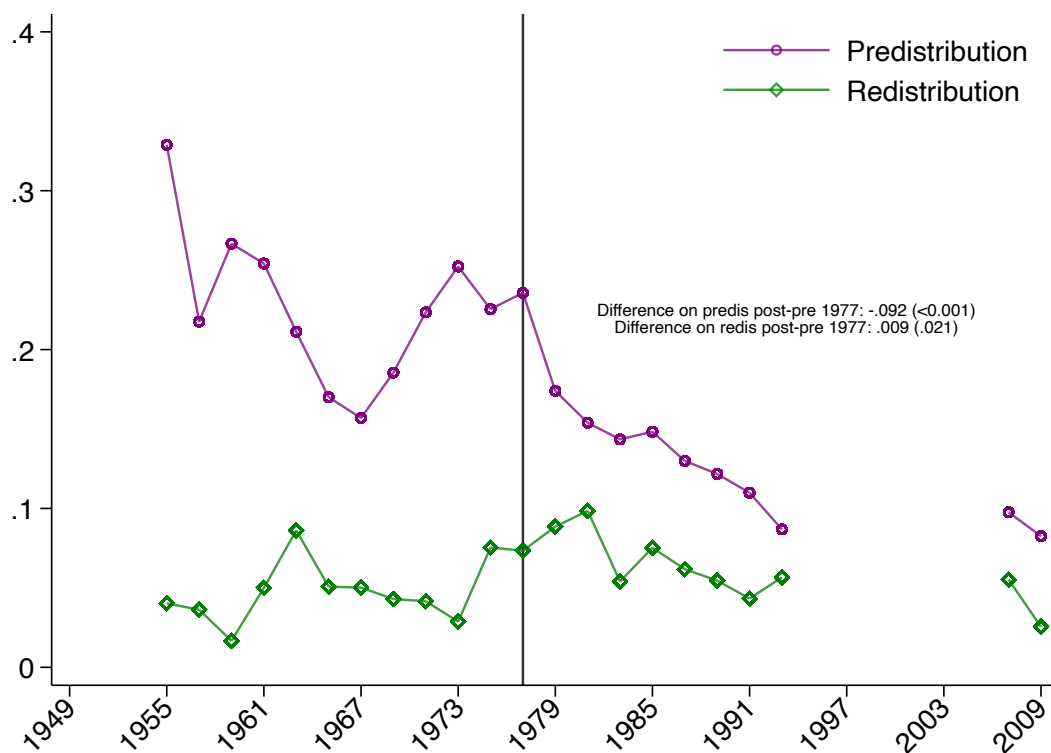


Notes: Notes: As in Figure 1, this figure plots the coefficients  $\beta^p$  from the following regression estimated separately for each four-year period  $p$ :

$$y_{is} = \beta^p \text{Adj. years of school}_i + \mu_{s(i)} + \mathbf{Age}_i + e_{is},$$

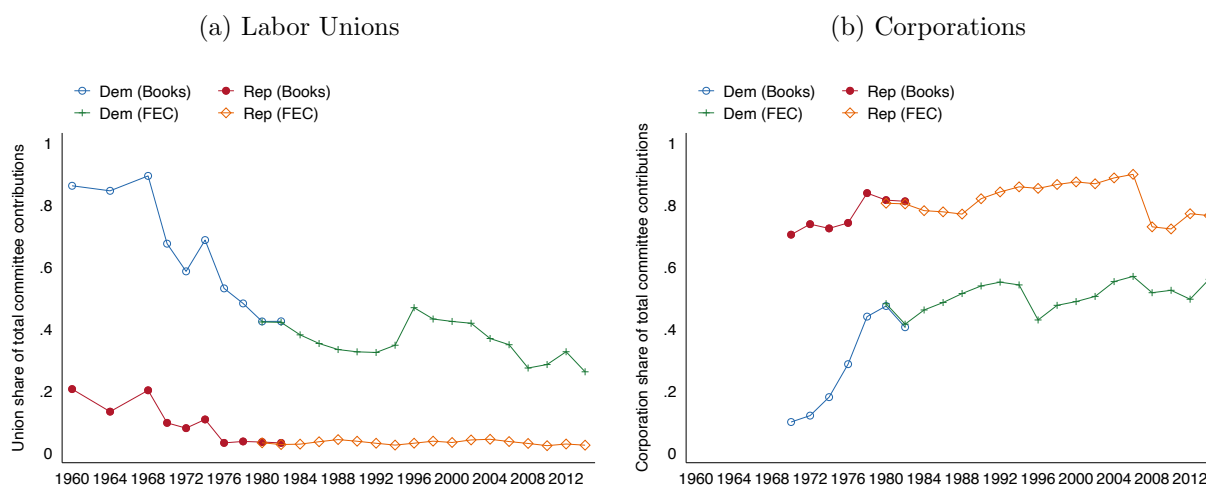
where  $y_i$  is the outcome variable for person  $i$  in survey  $s(i)$ ; *Adjusted years of school* is our predicted years of school based on the self-reported educational category provided by the respondent along with demographics and years (see Section 2),  $\mu_{s(i)}$  are survey (which subsume date) fixed effects, as we often have several surveys per period  $p$  and  $\mathbf{Age}_i$  is a vector of age-in-five-year-bin dummies. The outcome variables are standardized measures (mean zero and variance 1) of support for the given policy. We suppress confidence intervals to reduce clutter, but we plot each policy question separately along with 95-percent confidence intervals in Appendix Figure REF. We use survey weights if provided (we divide by the mean of the weights by survey to ensure they all average to one). The second panel restricts the sample to white respondents only.

Figure 3: The pre- and re-distribution share of House roll-call votes under Democratic leadership



*Notes:* This figure shows the share of pre- and re-distribution roll-call votes every year that the Democrats are in control of the House from 1947 until 2009. Breaks in the series are when Republicans control the House. The same graph in the Senate is shown in Appendix Figure A.11. Robustness to using alternative classification from Bateman *et al.* (2018) is shown in Appendix Figure C.1. See those sections for how we define pre- and re-distribution but generally predistribution involves labor and employment topics, industrial policy, and public works while redistribution involves taxes, transfer programs and the budget process. We test whether the share of rollcalls devoted to predistribution (redistribution) is different before or after 1977, the first year of the Carter administration. We report the  $p$ -value of the test in parenthesis.

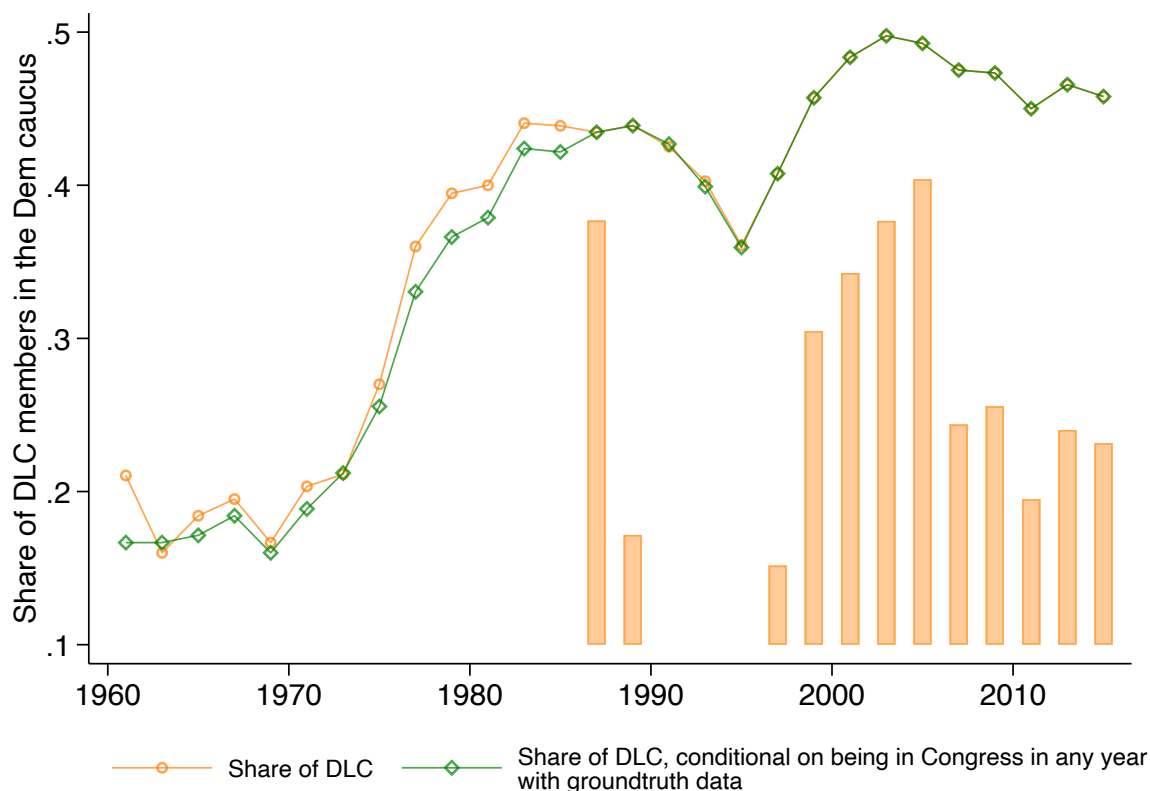
Figure 4: Share of PAC Contributions to Congressional Candidates from Labor Unions (panel a) and Corporations (panel b)



*Source:* Contributions data from the FEC and campaign finance books as described in Section F.

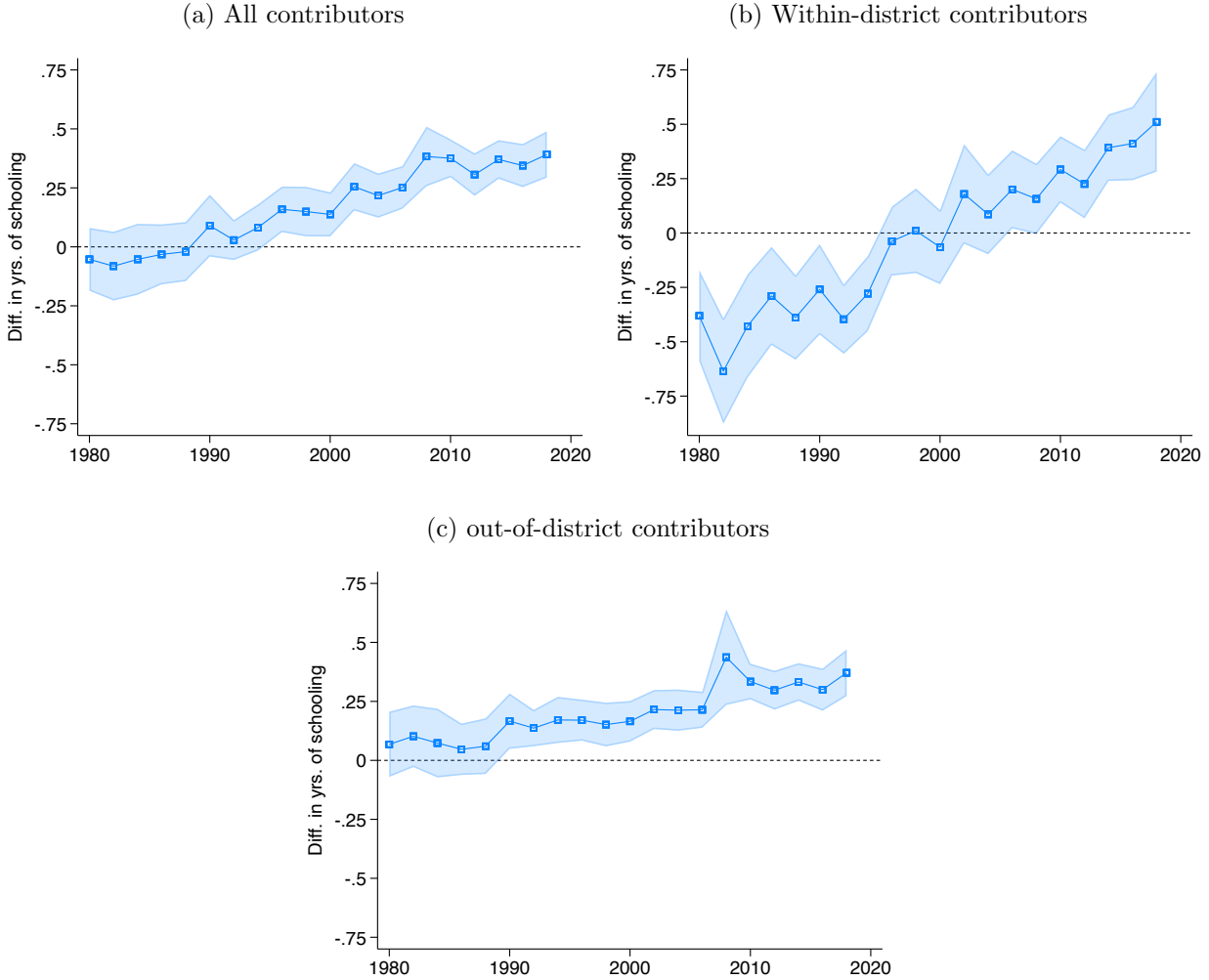
*Notes:* We plot, in each election cycle, the proportion of PAC contributions to Congressional candidates originating from Labor Unions and Corporations. Trade organizations are included in the "Corporations" category. We exclude party PACs from the analysis to avoid double counting. We use data from the FEC and campaign finance books as described in Section F.

Figure 5: Evolution of Democratic Leadership Council (DLC) membership in Congress



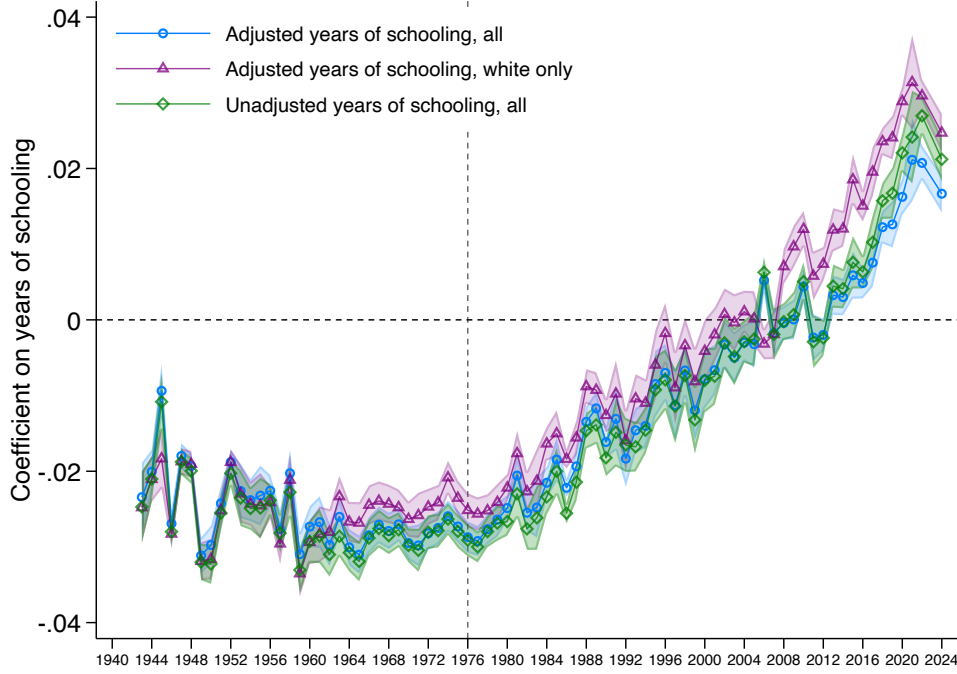
*Notes:* The figure shows the evolution of the share of House Democrats belonging to the DLC. We combine several sources (e.g., original membership lists as well as membership in DLC-aligned House caucuses) to determine DLC membership, detailed in Appendix D. The solid bars show the shares of DLC members for the years for which we have actual records of membership. The series with hollow circles (orange) shows the raw evolution of (interpolated) DLC membership. We assume that any politician on any DLC list is a member for life, so the DLC share is non-zero even in years where we are missing actual membership information. The series with hollow diamonds (green) shows the evolution of the share of DLC members among politicians who were serving in the House during at least one year for which we have actual DLC membership lists (so this series captures the DLC share among representatives who could possibly appear on one of our DLC lists). Given data collection, DLC is likely underestimated from 1987 – 1996 as we will likely miss any DLC Democrat who served *only* during those years.

Figure 6: Difference in the average level of schooling of primary election contributors for House elections



*Notes:* We plot, in each election cycle, the difference in the average years of schooling at the census tract level for all primary-election donations between the Democratic and the Republican party. We weight this average by total dollars received (see Appendix Figure A.9 for analogous results, but weighted by individual contributors). Panel (a) shows results for *all* primary contributors; (b) for only within-congressional- district contributors (i.e., they are donating to candidates for whom they are eligible to vote); and (c) for only out-of-district contributors (i.e., they live outside the district in which their recipient is running). Appendix Table A.7 shows the difference in the proportion of out-of-district contributions received by Democratic and Republican candidates. Appendix Figure A.8 shows the same patterns for the Senate.

Figure 7: Democratic Party identification as a function of education



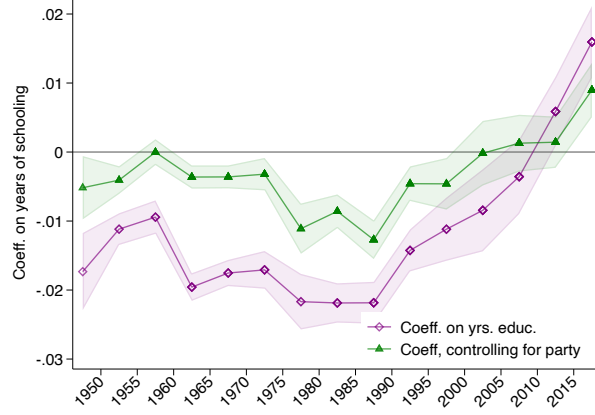
*Notes:* The first series plots the estimated  $\beta_t$  from the following regression estimated separately for each year  $t$ :

$$Democrat_i = \beta_t Adj. \text{ years of school}_i + \mathbf{Age}_i + \mu_{s(i)} + e_i,$$

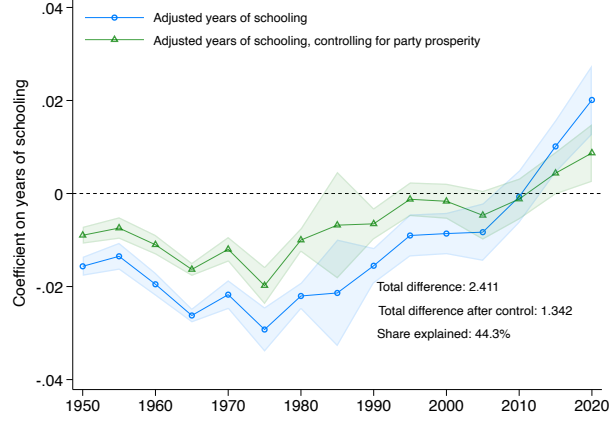
where  $Democrat_{is}$  is an indicator for whether person  $i$  identifies as a Democrat (as opposed to a Republican, Independent, other or nothing, all coded as zero);  $Adjusted \text{ years of school}_i$  is our predicted years of schooling based on the self-reported educational category provided by respondent  $i$  along with demographics and years (see Section 2);  $\mathbf{Age}_i$  is a vector of age-in-five-year-bin dummies;  $\mu_{s(i)}$  are survey (which subsume date) fixed effects, as we often have several surveys per year (for surveys like the GSS that span years, we have a separate fixed effect for each year). The second series replicates the first but includes only white respondents. The third series replicates the first but instead of using our *Adj. years of school* assigns those with “high school or less” as ten, “some college” as 14 and “college or more” as 16 years of schooling. A Chow test identifies 1976 as the break point in trend. We use survey weights (transformed to average to one within each survey) if provided. The shaded areas show the 95% confidence intervals.

Figure 8: Opinion of parties' economic policies, by respondent education

(a) Democrats better to keep the country prosperous



(b) Views on economics policy explains half of realignment



Notes: Panel (a) plots the coefficients  $\omega_p$  from the following regression, estimated separately by five-year period:

$$DemocratsBetter_i = \omega_t Adj. \text{ years school}_i + \mu_{s(i)} + \gamma X_i + e_i,$$

where  $DemocratsBetter_i$  is an indicator for respondent  $i$  answering that the Democratic Party is the best to keep the country prosperous. Panel (b) plots the coefficients of a regression of party identification on years of schooling similar to figure 7:

$$Democrat_i = \beta_t Adj. \text{ years of school}_i (+ DemocratsBetter_i) + \mu_{s(i)} + \mathbf{Age}_i + e_i,$$

we estimate both the unconditional regression and controlling for the views of respondents on Democratic Party's economic policy. We report the share of the total difference in partisan identification by education that is explained by changes in opinion of parties' economic policies. This share explained can be written as one minus the ratio between the difference in the partisan alignment conditional on economic policy opinion and the difference in the unconditional alignment:  $1 - \frac{\widetilde{\beta}_{last} - \widetilde{\beta}_{first}}{\beta_{last} - \beta_{first}}$  with  $\widetilde{\beta}_\tau$  the conditional estimator and  $\beta_\tau$  the unconditional estimator. The *last* years are 2001-2020 and the *first* years are 1948-1967.

Figure A.17 in Appendix shows the share of respondent answering that the Democratic or the Republican Party is the best to keep the country prosperous. The shaded areas show the 95% confidence intervals.

## 8 Tables

Table 1: Democratic House members' alignment with Republican voting

	Dept Var: Voted Yea				
	(1)	(2)	(3)	(4)	(5)
DLC	-0.083*** (0.001)	-0.078*** (0.002)	-0.078*** (0.002)	-0.077*** (0.002)	-0.074*** (0.002)
DLC $\times$ MeanRepub	0.173*** (0.002)	0.166*** (0.002)	0.165*** (0.002)	0.167*** (0.002)	0.162*** (0.002)
DLC $\times$ Predis		-0.039*** (0.004)	-0.038*** (0.004)	-0.038*** (0.004)	-0.041*** (0.004)
DLC $\times$ Predis $\times$ MeanRepub		0.061*** (0.006)	0.061*** (0.006)	0.060*** (0.006)	0.065*** (0.006)
DLC $\times$ Redis			0.004 (0.007)	0.004 (0.007)	0.002 (0.007)
DLC $\times$ Redis $\times$ MeanRepub			0.004 (0.010)	0.003 (0.010)	0.008 (0.010)
DLC $\times$ Social					-0.023*** (0.005)
DLC $\times$ Social $\times$ MeanRepub					0.047*** (0.007)
Rollcall FE	X	X	X	X	X
State $\times$ Congress FE				X	X
Linear combination of estimates:					
Predis - Redis			0.057*** (0.011)	0.056*** (0.011)	0.056*** (0.011)
Predis - Social					0.018** (0.009)
Observations	3,428,405	3,428,405	3,428,405	3,428,405	3,428,405

*Notes:* The table shows the extent to which Democrats are voting with Republicans. The dependent variable is a dummy equal to one if the House member votes Yea. The independent variable *MeanRepub* is the share of Republicans House members who voted Yea on that bill. *DLC* is a dummy variable equal to one if the House member is part of the DLC caucus. *Predis*, *Redis*, and *Social* are dummy variables equal to one if the vote is about predistribution, redistribution, and social issues, respectively. We use the classification from the Comparative Agendas Project (CAP). All Columns control for rollcall fixed effects and Column 5 control for state and year fixed effects. We show the difference between the coefficient on DLC  $\times$  Predis  $\times$  MeanRepub and DLC  $\times$  Redis  $\times$  MeanRepub as well as DLC  $\times$  Predis  $\times$  MeanRepub and DLC  $\times$  Social  $\times$  MeanRepub in the Table statistics. The equivalent table with the (Bateman *et al.*, 2018) classification is displayed in Appendix Table C.3. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard errors clustered by rollcall in parentheses.

Table 2: Primary donors' average education by candidate DLC status

	All contributions		Within district		Out-of-district	
	(1)	(2)	(3)	(4)	(5)	(6)
DLC	0.107*** (0.022)	0.107*** (0.022)	0.124** (0.059)	0.060 (0.055)	0.106*** (0.017)	0.155*** (0.026)
Year x State FE	X	X	X	X	X	X
Weighting	Amount	Contributors	Amount	Contributors	Amount	Contributors
Number of DLC candidates	1611	1611	1523	1523	1604	1604
Mean of dependent variable	14.608	14.718	14.367	14.367	14.688	14.688
Observations	739,461	739,461	99,991	100,000	639,448	640,200

*Notes:* The Table shows the difference in the average education level of primary contributors giving to DLC candidates compared to non-DLC Democratic candidates. We regress the average years of schooling of each contributor for the Democrats at the primaries on whether the candidates are affiliated with the DLC. We use each donor's census tract average education as a proxy for their education. Columns 1, 3, and 5 weight them by amount, while columns 2, 4, and 6 weight by distinct contributors. Appendix Table A.8 use our 2-step Random Forest prediction algorithm as described in Appendix D. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard errors are clustered by candidate by year.

Table 3: PACs primary contributions by candidate DLC status

	Unions		Corporate		Socially Progressive	
	(1)	(2)	(3)	(4)	(5)	(6)
DLC	-0.097*** (0.006)	-0.071*** (0.006)	0.067*** (0.005)	0.050*** (0.005)	-0.003*** (0.001)	-0.002*** (0.001)
Year FE	X	X	X	X	X	X
State FE		X		X		X
Mean of dept. var.	0.364	0.364	0.261	0.261	0.009	0.009
Observations	3,801	3,801	3,801	3,801	3,810	3,810

*Notes:* This table reports estimates from candidate-by-election regressions of the form  $Share_{jtc} = \beta DLC_j + \delta Incumbent_{jt} + \epsilon_{jtc}$ , where  $Share_{jtc}$  denotes the share of primary contributions of type  $c \in \{\text{Labor, Corporate, Progressive}\}$  received by candidate  $j$  in election cycle  $t$ . Columns 1 and 2 report the difference in labor union PAC contributions between DLC-affiliated and non-DLC candidates; Columns 3 and 4 for corporate PACs; and Columns 5 and 6 for socially progressive PACs, which include pro-choice PACs, PACs advocating gender equality, and PACs promoting LGBT+ rights. The sample is restricted to Democratic candidates who ultimately won the general election, since DLC status is unavailable for those who did not serve in the House. Data are from the FEC. Robust standard errors are reported in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table 4: Votes for “new” versus “old” Democrats in hypothetical general-election match-ups

	Nem Dem	Old Dem	New Dem minus Old style Dem				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Years educ.	-0.542*** (0.110)	-1.055*** (0.106)	0.513*** (0.103)	0.515*** (0.104)	0.324*** (0.104)	0.317*** (0.110)	
Female					-0.0805 (0.615)		
White					10.98*** (1.035)		
Years educ. x 1972							0.752*** (0.181)
Years educ. x 1976							-0.760*** (0.286)
Years educ. x 1980							1.281*** (0.253)
Years educ. x 1984							0.404* (0.231)
Years educ. x 1988							0.869*** (0.306)
Years educ. x 1992							0.435* (0.234)
Dept. var. mean	43.217	35.782	7.435	7.439	7.439	8.639	7.435
Sample	All	All	All	All	All	Whites	All
State FE	X	X	X			X	X
State x Election FE				X	X		
Observations	28,528	28,528	28,528	28,526	28,526	25,002	28,528

*Notes:* Column 1 shows the probability to vote for a “New Democrat” rather than a Republican as a function of years of education. Column 2 shows the probability to vote for an “Old-style Democrat” and Columns 3 to 6 show the difference in the probability to vote for the Democratic candidate versus the Republican candidate if the Democratic nominee is a “New Democrat” versus an “Old-style Democrat”. In 1972, the dependent variable is equal to  $(vote_{McGovern} - vote_{Nixon}) - (vote_{Humphrey} - vote_{Nixon})$ . In 1976, the dependent variable is equal to  $(vote_{Carter} - vote_{Ford}) - (vote_{Udall} - vote_{Ford})$ . In 1980, the dependent variable is equal to  $(vote_{Carter} - vote_{Reagan}) - (vote_{Kennedy} - vote_{Reagan})$ . In 1984, the dependent variable is equal to  $(vote_{Mondale} - vote_{Reagan}) - (vote_{Hart} - vote_{Reagan})$ . In 1988, the dependent variable is equal to  $(vote_{Dukakis} - vote_{Bush}) - (vote_{Jackson} - vote_{Bush})$ . In 1992, the dependent variable is equal to  $(vote_{Clinton} - vote_{Bush}) - (vote_{Brown} - vote_{Bush})$ . All coefficients have been multiplied by 100 for readability. Robust standard errors in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table 5: House Democratic vote share by education of neighborhood

	Dept Var: Share Dem			
	(1)	(2)	(3)	(4)
Years educ.	-0.012** (0.005)	-0.012*** (0.005)	-0.010** (0.005)	-0.011** (0.004)
Years educ. $\times$ DLC	0.010** (0.005)	0.010** (0.005)	0.008* (0.004)	0.008* (0.004)
DLC	-0.195*** (0.057)		-0.168*** (0.055)	
Share white			-0.280*** (0.038)	-0.281*** (0.039)
Share white $\times$ DLC			0.034 (0.065)	0.045 (0.063)
Share below 35			0.024 (0.017)	0.025 (0.017)
Share below 35 $\times$ DLC			0.007 (0.041)	0.008 (0.041)
Year FE	X		X	
District FE	X		X	
District x Year FE		X		X
Sample	Basic	Basic	Extended	Extended
Controls	211	211	212	212
Number of DLC candidates	0.669	0.669	0.528	0.528
Mean of dependent variable	22,267	22,265	22,267	22,265

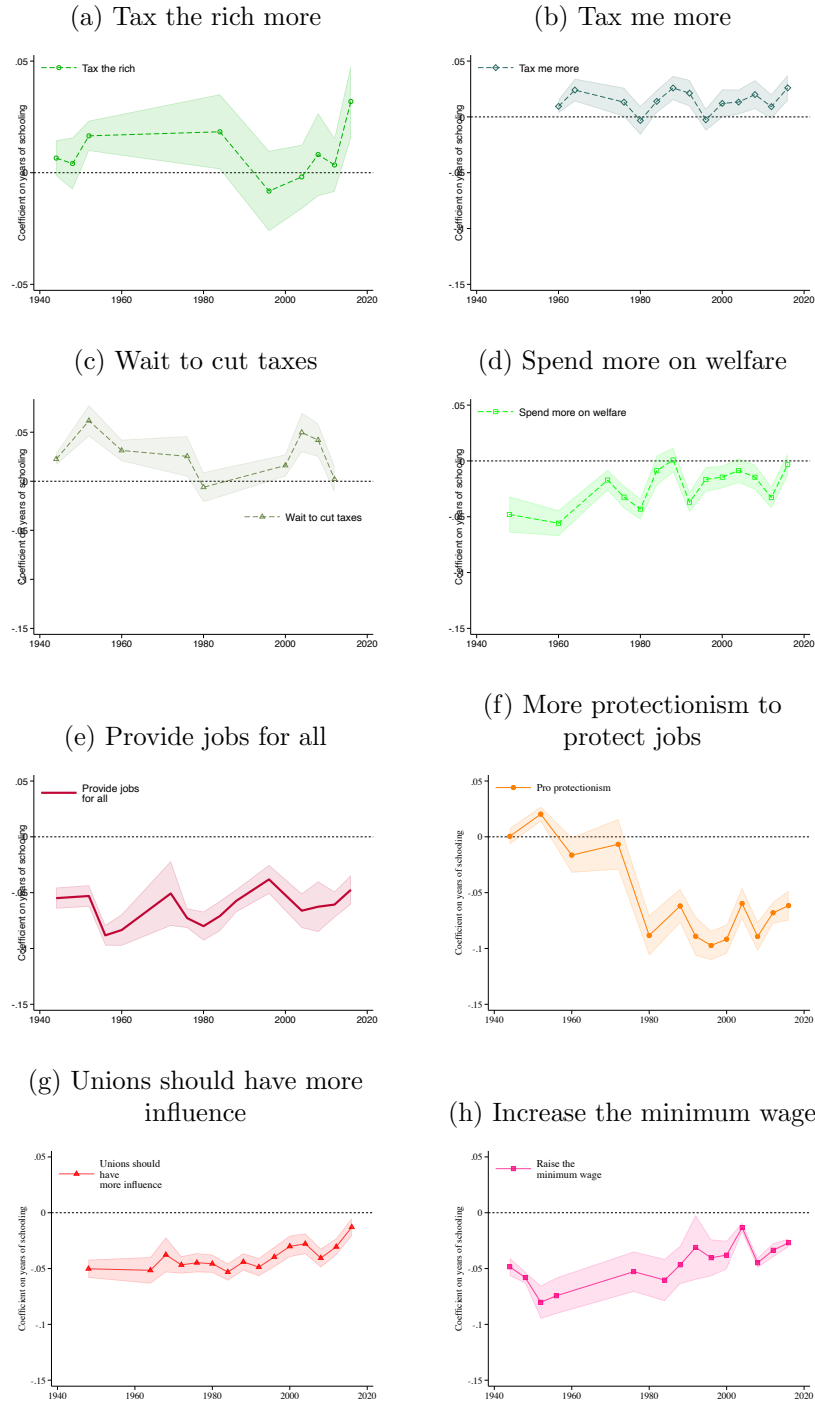
*Notes:* The table shows the Democratic vote share obtained by House Democratic Candidates in MCDG for the period 1984–1990. We regress the share of votes obtained by the Democratic candidate for the House in each MCDG on the average years of education (*Years educ.*) of that MCDG and the interaction of this term with *DLC*, a dummy equal to one if the Democratic candidate is part of the DLC. Columns 1 and 3 include year and district fixed effects while columns 2 and 4 include district by year fixed effects, meaning that we only look at variation within congressional district for each year, for a given candidate. Any non-varying candidate attribute (such as *DLC*) is therefore subsumed by the fixed effects. We keep only elected Democratic candidates since we do not have any information on caucus membership on those who lost the general election. Appendix Table 5 reproduces similar results including predictions from our machine learning algorithm, as described in Appendix D. Standard errors are clustered by district. The number of distinct DLC candidates by election is displayed in the row "Number of DLC candidates". We exclude the bottom and top 1% of MCD groups in terms of population. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

# Appendix

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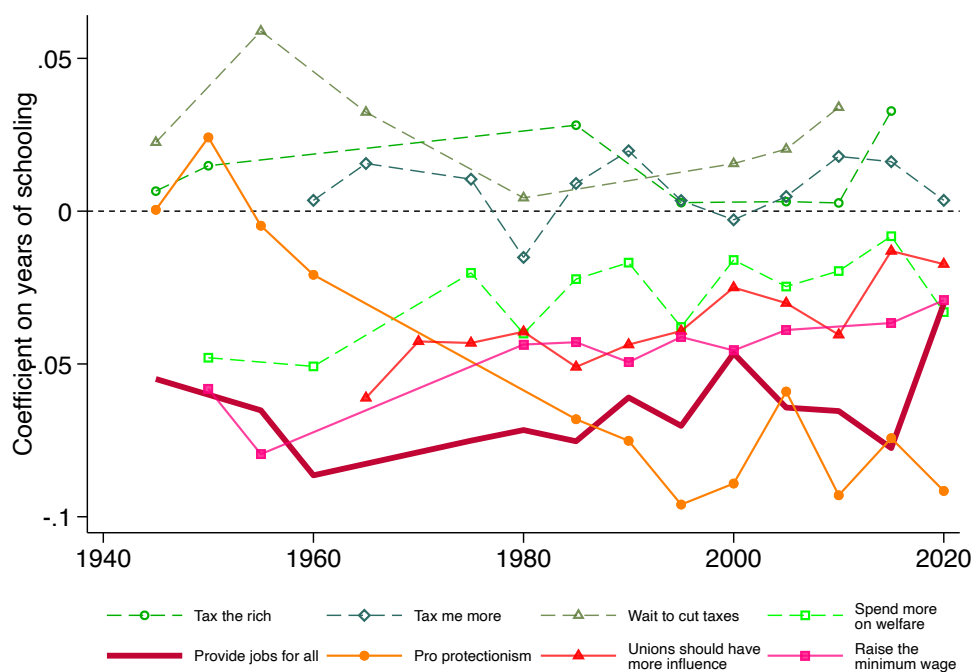
## Appendix A. Supplementary Figures and Tables Noted in the Text

Appendix Figure A.1: Educational gradient for pre- and re-distribution by education (question by question and including confidence intervals)



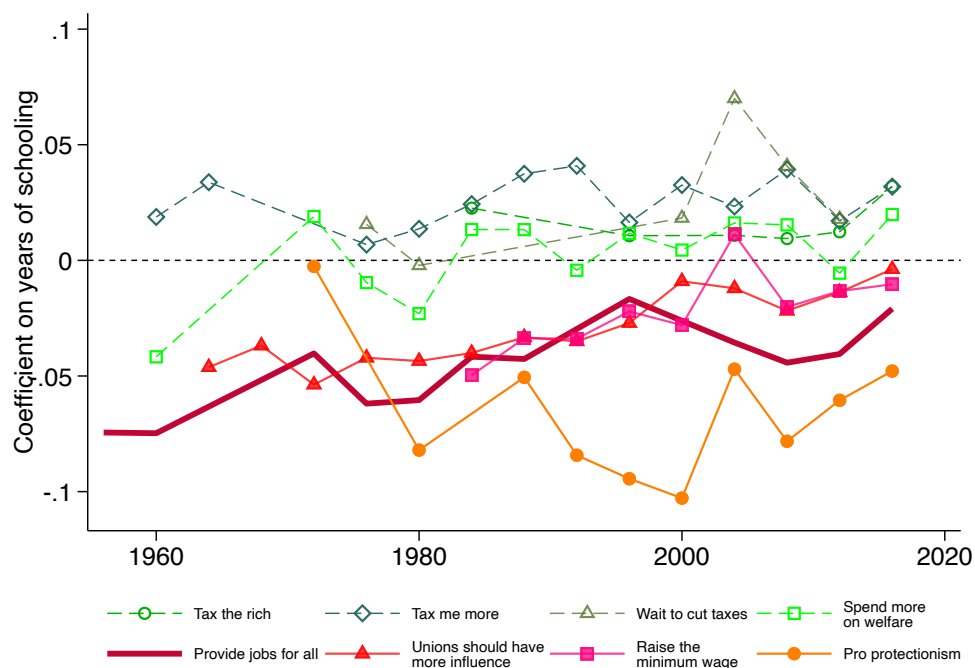
Notes: As in Figure 1, this Figure shows the coefficients  $\beta^p$  from a regression of for each five-year period from specification 1 for each standardized survey question separately.

Appendix Figure A.2: Education gradients for pre- and re-distribution, holding the composition of the population as fixed



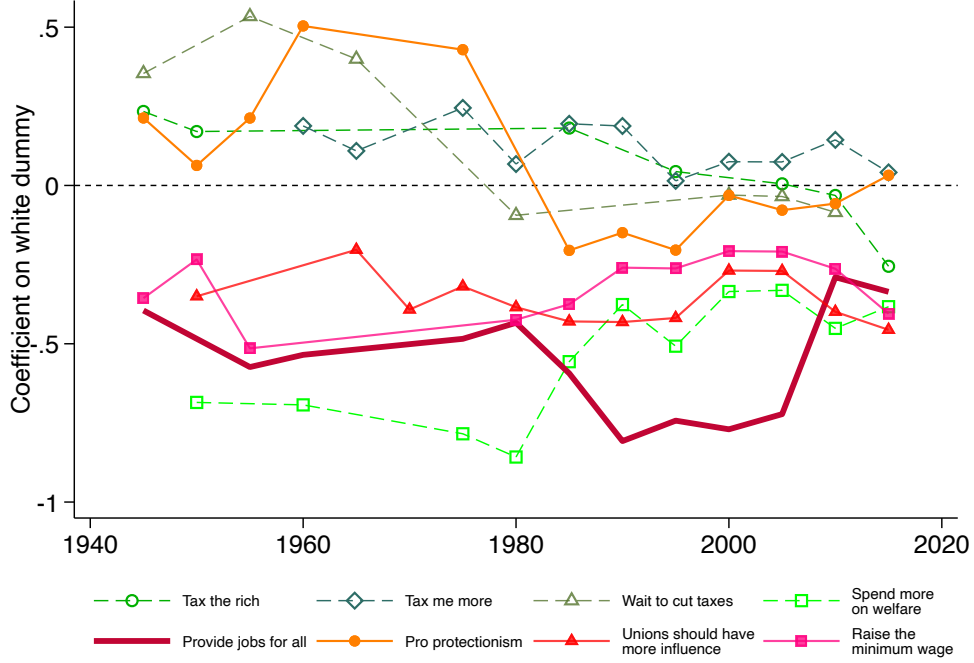
*Notes:* This figure replicates Figure 1 but holds the composition of the population as fixed in terms of education and race. Detailed survey questions for each policy are displayed in Appendix B.

Appendix Figure A.3: Educational gradient for pre- and re-distribution, controlling for income, gender and age



*Notes:* This figure replicates Figure 1 but flexibly controls for income, gender and age by five-year period. Detailed survey questions for each policy are displayed in Appendix B.

Appendix Figure A.4: Preferences for pre- and re-distribution by race

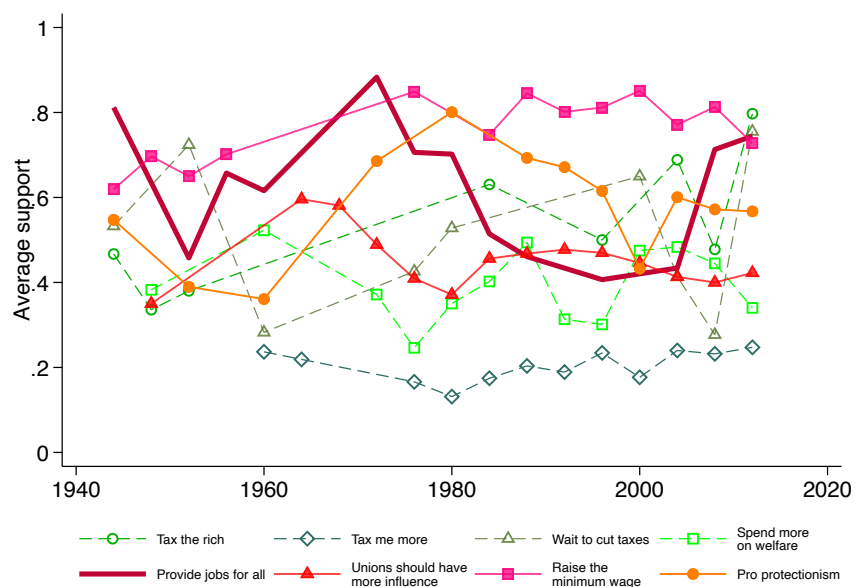


*Notes:* This figure replicates Figure 1 but instead of years of schooling as the main explanatory variable, a dummy variable for identifying as white is the main explanatory variables. That is, the figure plots the estimated  $\beta^p$  from the following regression estimated separately for each five-year period  $p$ :

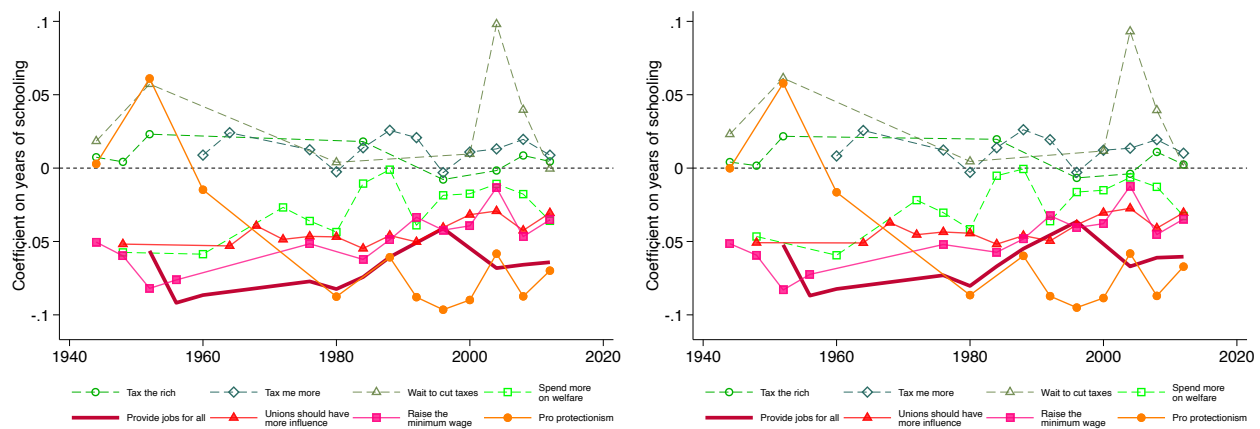
$$y_{is} = \beta^p \text{White}_i + \mu_s + \text{Age}_i + e_{is},$$

where  $y_{is}$  is the outcome variable for person  $i$  in survey  $s$ ; *Adjusted years of school* is our predicted years of school based on the self-reported educational category provided by the respondent along with demographics and years (see Section 2),  $\mu_s$  are survey (which subsume date) fixed effects, as we often have several surveys per period  $p$  and  $\text{Age}_i$  is a vector of age-in-five-year-bin dummies. The outcome variables are standardized measures (mean zero and variance 1) of support for the given policy. Detailed survey questions for each policy are displayed in Appendix B.

Appendix Figure A.5: Economic policy preferences (average levels)



*Notes:* This figure shows the average level of support for each policy by 4-year period. Instead of using z-scores, as we do on Figure 1, we only normalize the variable to be between 0 and 1.



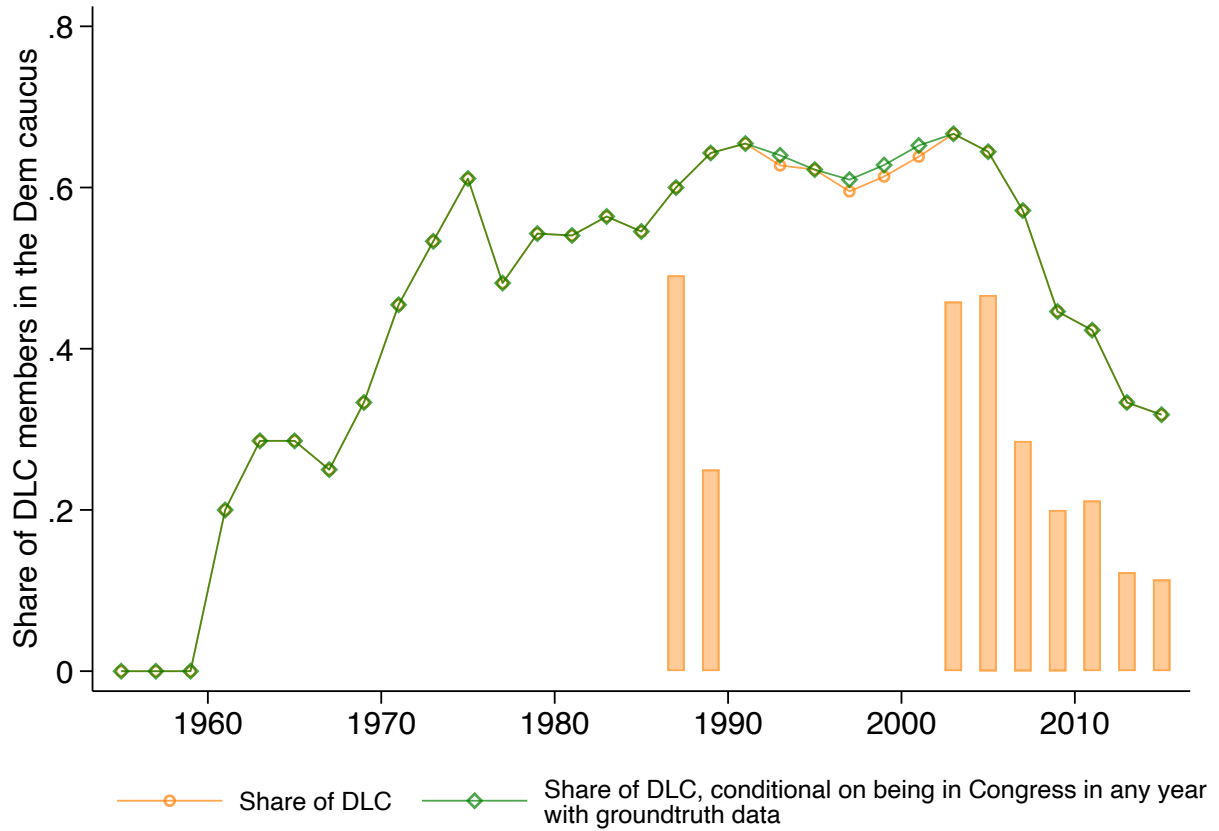
(a) Controlling for Education  $\times$  Economic Liberalism

(b) Controlling for Division  $\times$  Year FE

Appendix Figure A.6: Policy preferences, by education, controlling for the status quo

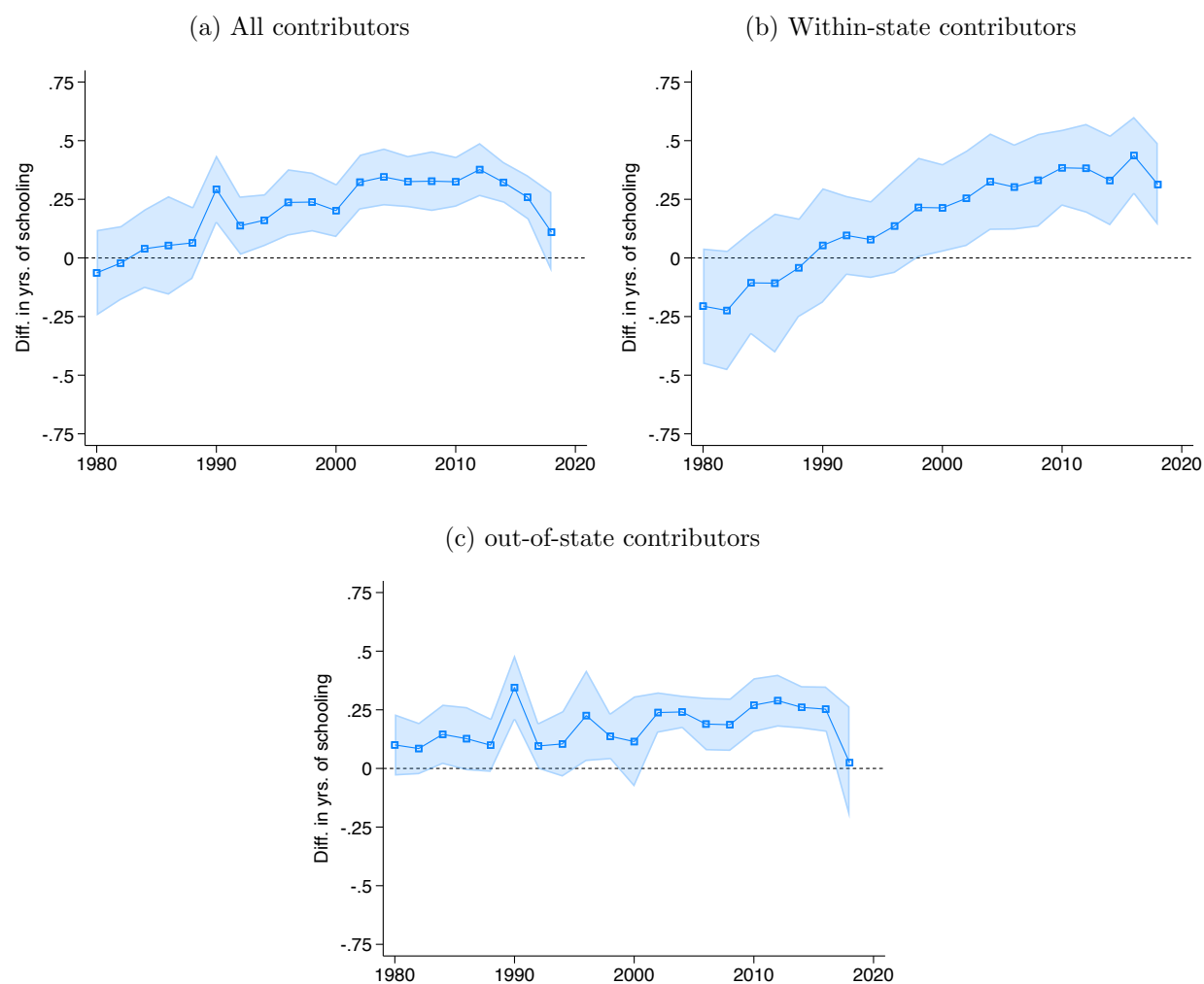
*Notes:* The figure reproduces Figure 1, adding controls for the policy status quo for each question. Panel (a) additionally controls for respondent's education interacted with the policy status quo at the Census division  $\times$  year level, defined as follows: for "Raise the minimum wage," the minimum wage level; for "Provide jobs for all," the unemployment rate; for "Unions should have more influence," union density; for "Pro protectionism," the trade deficit (national level); for "Tax the rich," the marginal tax rate; and for "Tax me more," "Wait to cut taxes," and "Spend more on welfare," the share of households filing a tax return. Panel (b) interacts education with the Economic Liberalism Index from Caughey and Warshaw (2016), and Panel (c) includes Census division  $\times$  year fixed effects.

Appendix Figure A.7: The DLC share of Democratic Senators



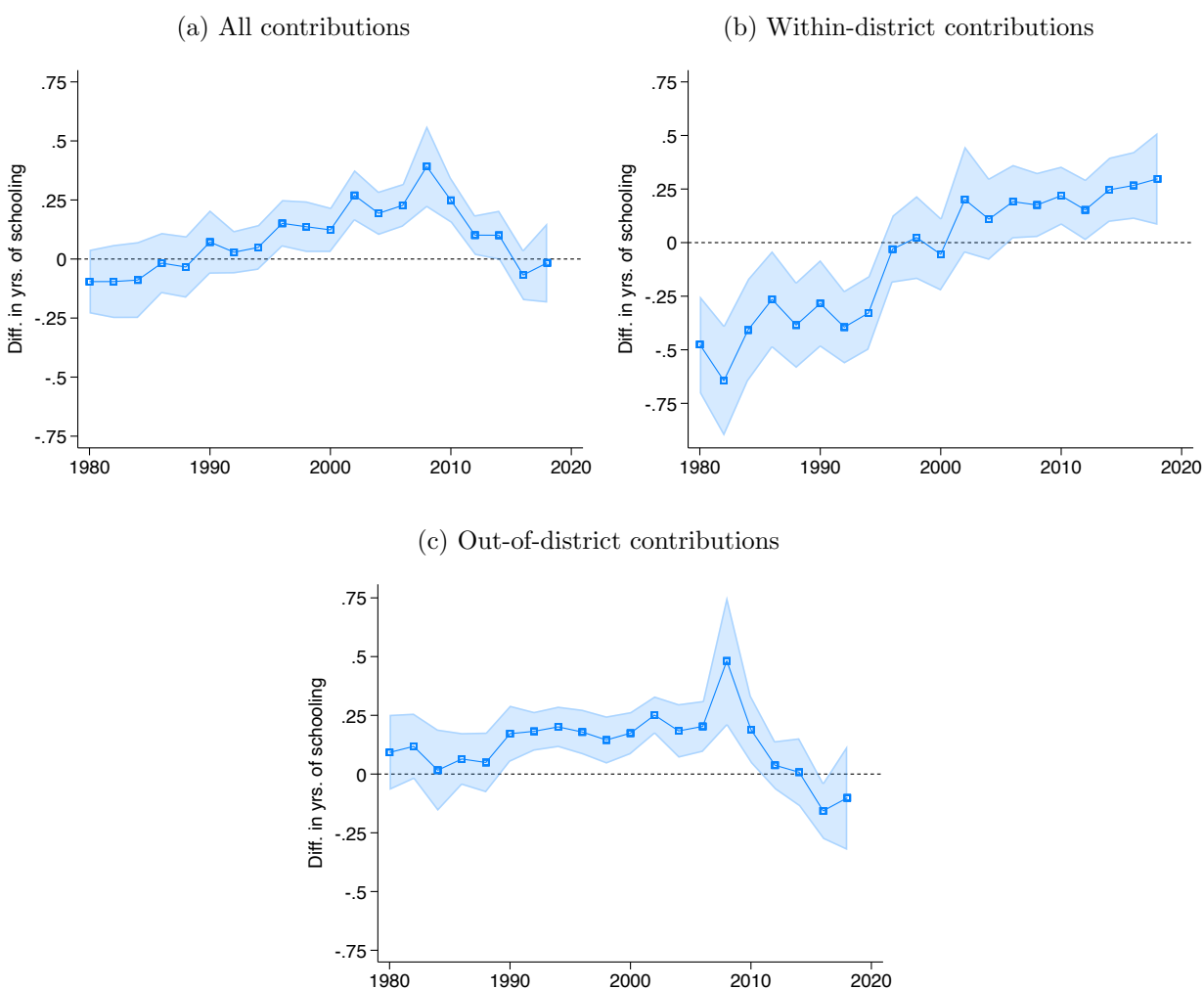
*Notes:* As in Figure 5, this figure shows the evolution of the share of Democrats in the Senate who are members of the New Democratic Caucus. We combine several sources for caucus membership, detailed in Appendix D. The solid bars show the years for which we actually have records of membership. The yellow line show the raw evolution of (interpolated) DLC membership while the orange line shows the evolution of the share of DLC members for politicians who were seating in the 100th Congress, elected in 1986 to control for compositional effect. A politician is defined as DLC if they are ever listed as a member or are in the New Dem Caucus. Given data collection, DLC is likely underestimated from 1987 – 1996.

Appendix Figure A.8: Average level of schooling of primary contributors for Senate elections



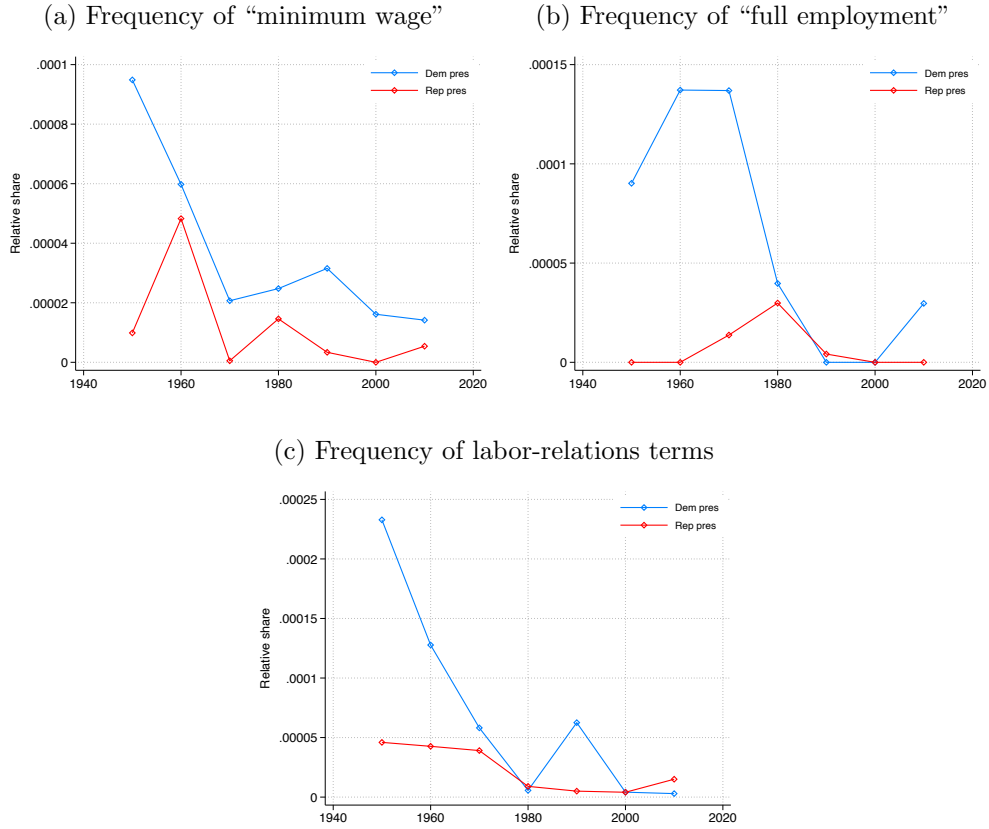
*Notes:* As in Figure 6, this figure shows the difference in the average level of education of each primary contribution, panel (a) shows all the contributors, panel (b) shows the within state donors, panel (c) shows the out-of-state donors. We use the census tract average level of education.

Appendix Figure A.9: Average level of schooling of primary contributors for House elections



*Notes:* As in Figure 6, This figure shows the average level of education of each primary contribution, weighted by individual contributor, panel (a) shows all the contributors, panel (b) shows the within congressional district donors, panel and (c) shows the out-of-district donors.

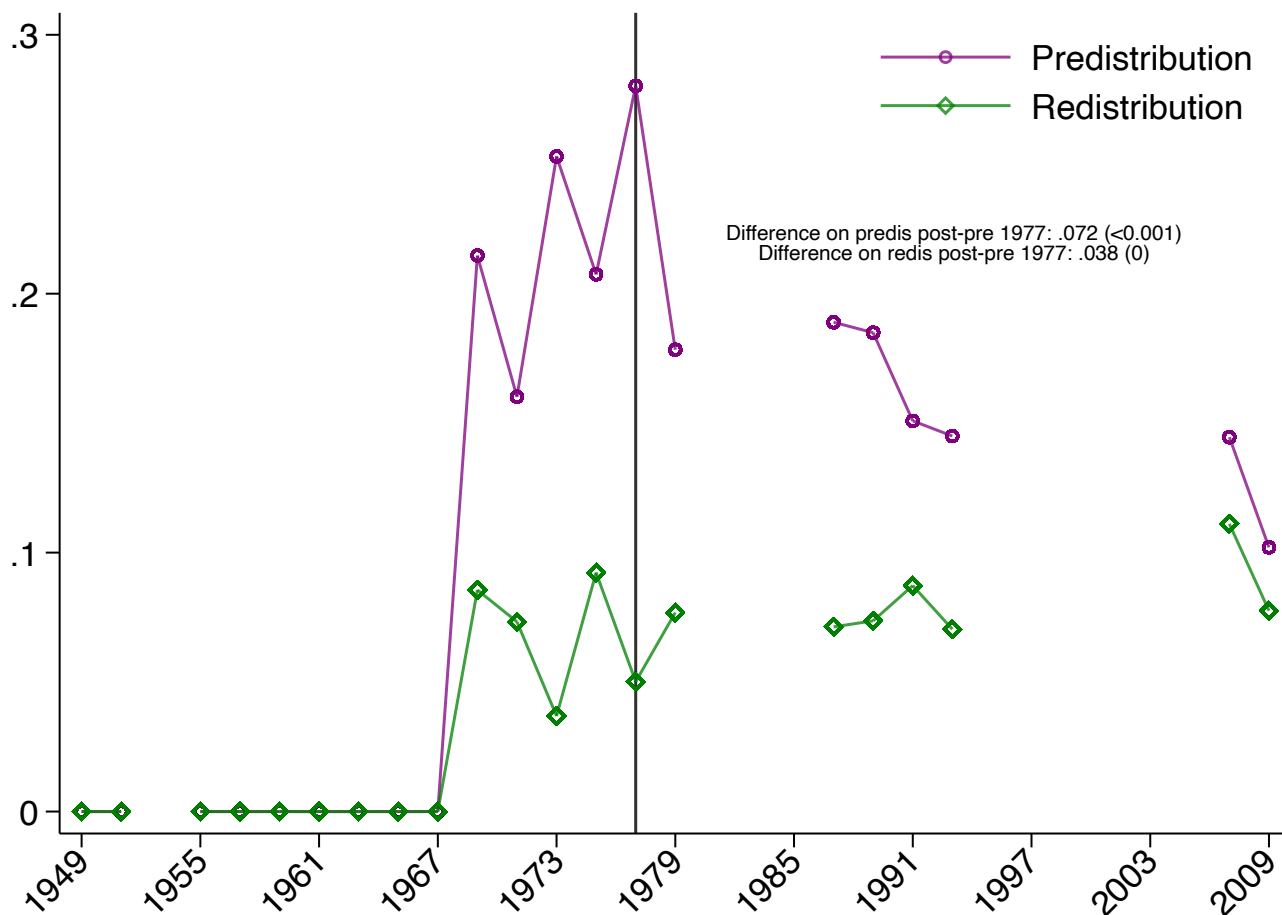
Appendix Figure A.10: Changing language of party platforms



Notes: Data from Hopkins *et al.* (2022). Panel (a) shows the relative frequency of the words “minimum wage” in the Presidential platforms for each party. Panel (b) shows the frequency of the words “full employment”, panel (c) shows the frequency of labor-relations terms: “Taft-Hartley”, “National Labor Relations Act”, “National Labor Relations Board”, “Collective Bargaining”, and “Collective Strike”. We weight each term  $t$  by its partisan weight based on its relative usage across the two parties:

$$\phi_t = \frac{\# t \text{ in Democratic platforms}}{\# \text{ words in Democratic platforms}} - \frac{\# t \text{ in Republican platforms}}{\# \text{ words in Republican platforms}}.$$

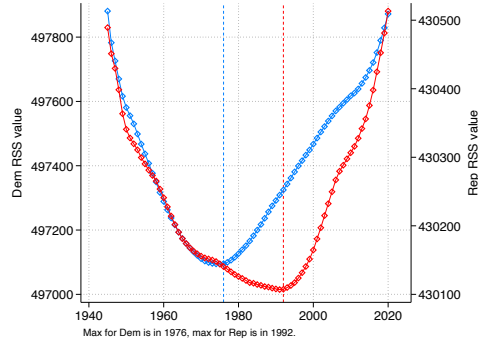
Appendix Figure A.11: The pre- and re-distribution share of House roll-call votes under Democratic leadership in the Senate



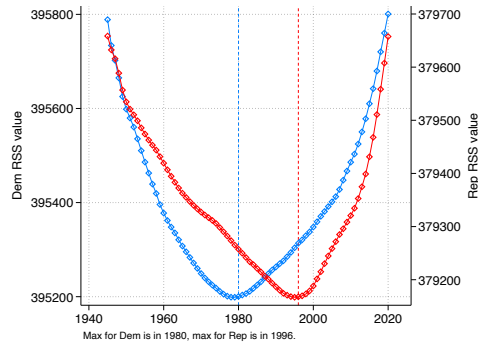
*Notes:* As in Figure 3, we show the share of pre- and re-distribution roll-call votes every year that the Democrats are in control of the Senate from 1947 until 2009. Breaks in the series are when Republicans control the Senate. The overall decline in predistribution votes before vs. after 1977 is smaller than in the House, which is consistent with the majority party having less control for agenda setting in the Senate than in the House.

Appendix Figure A.12: Estimating inflection points in partisan realignment

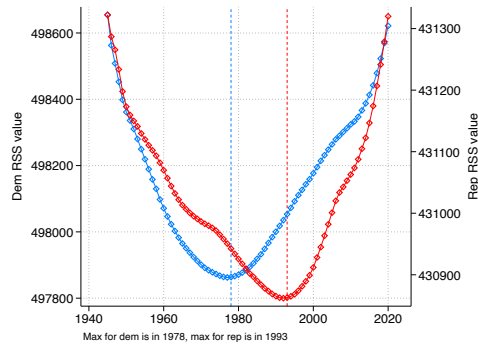
(a) All respondents



(b) Whites only

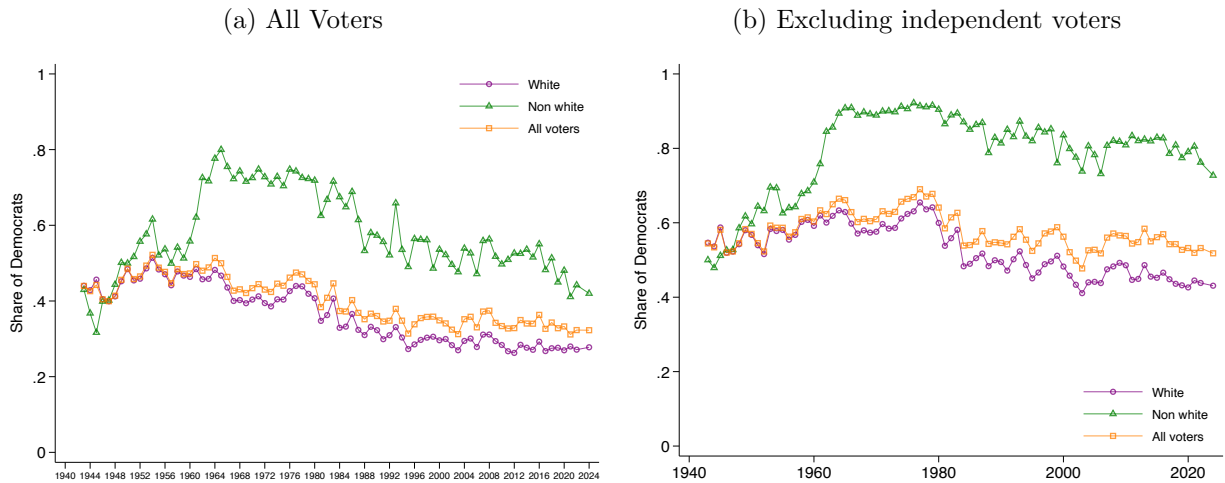


(c) All respondents, unadjusted years of schooling



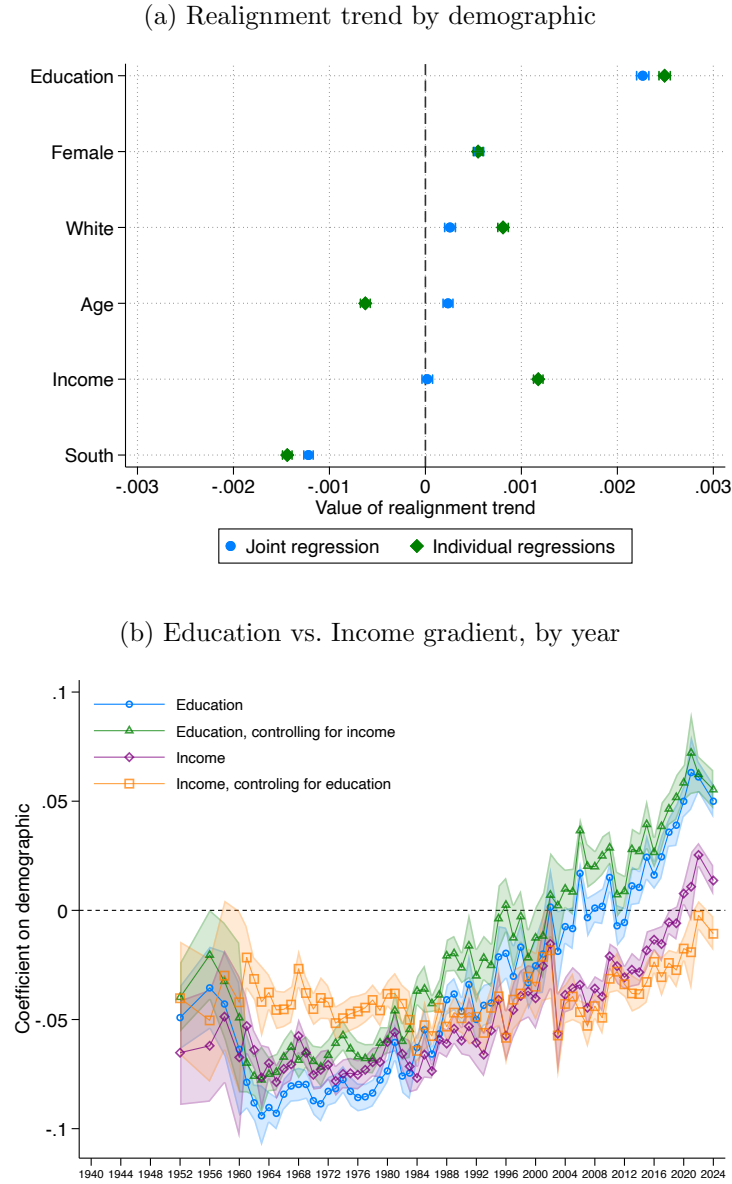
*Notes:* The graph shows the residual sum of squares from regressions with a linear trend cutoff at each year. We controll for survey-year fixed effects, flexibly controlling for age by year. We normalize the survey weights so that each year has the same weights in the regressions. The blue (resp. red) bar shows the minimum of the residual sum of squares for the Democrats (resp. Republicans).

Appendix Figure A.13: Democratic Party identification over time



*Notes:* This figure shows the average share of respondents who identify as Democrats by race, panel (a) shows the raw shares among all respondents while panel (b) excludes independent respondents.

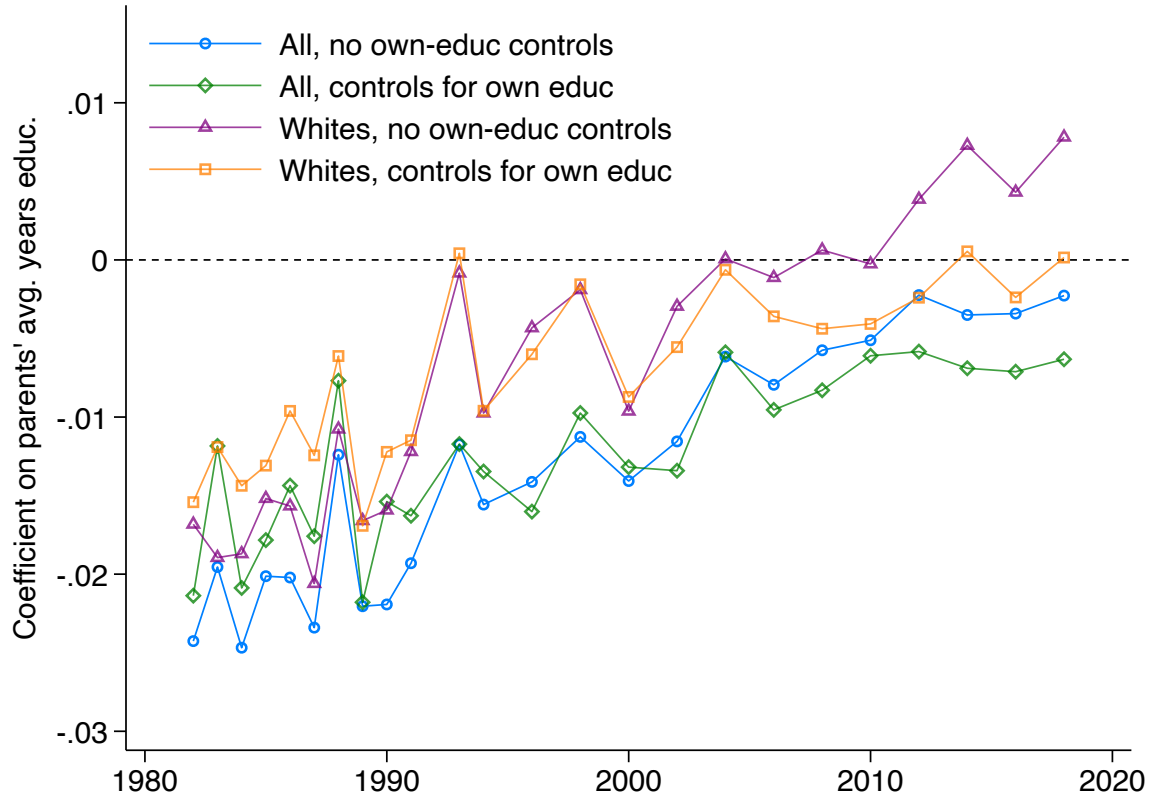
Appendix Figure A.14: “Horserace” of partisan realignment, along different demographic variables



*Notes:* The first panel reports the coefficients  $\beta_d$  from a joint regression estimating the linear trend along each demographic variable  $d$ , where the set of demographic variables includes: adjusted years of schooling, income percentile, a White dummy, a Women dummy, age, and a dummy equals to one if the respondent lives in the South. Each variable is standardized to have a mean of zero and a standard deviation of one. The coefficient on education, for example, indicates that the effect of education on Democratic identification has increased by 0.15 percentage points on average per year. 95% confidence intervals are shown around each coefficient.

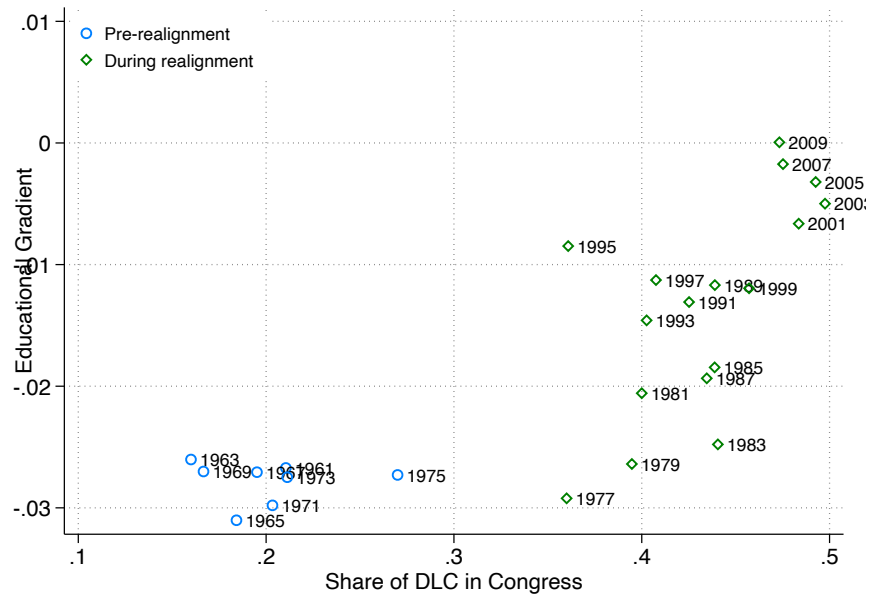
The second panel shows the value of the education and income gradient, year by year, where each demographic variable has been normalized. The blue and purple line show the raw coefficients on education and income, while the green and orange lines show the coefficients, controlling for the other demographic variable. 95% confidence intervals are shown around each coefficient.

Appendix Figure A.15: Realignment by *parental* education



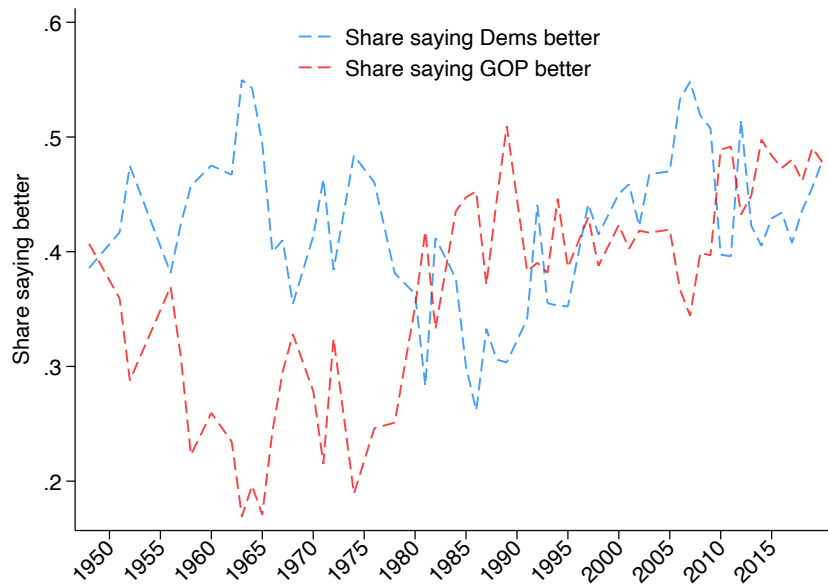
Notes: Data from Jácome *et al.* (2025). The analysis is parallel to that in Figure 7 except that *parental education* is the explanatory variable of interest. Parents' education is based on respondent's recollection. We average parent' years of education in the large majority of cases where both are available, and take mother or father's years of education when only one is available.

Appendix Figure A.16: Educational gradient and share DLC



*Notes:* The figure plots, for each year, the educational gradient from Figure 7 alongside the share of DLC Democrats in Congress (Figure 5).

Appendix Figure A.17: Respondents' views of the parties' economic policies



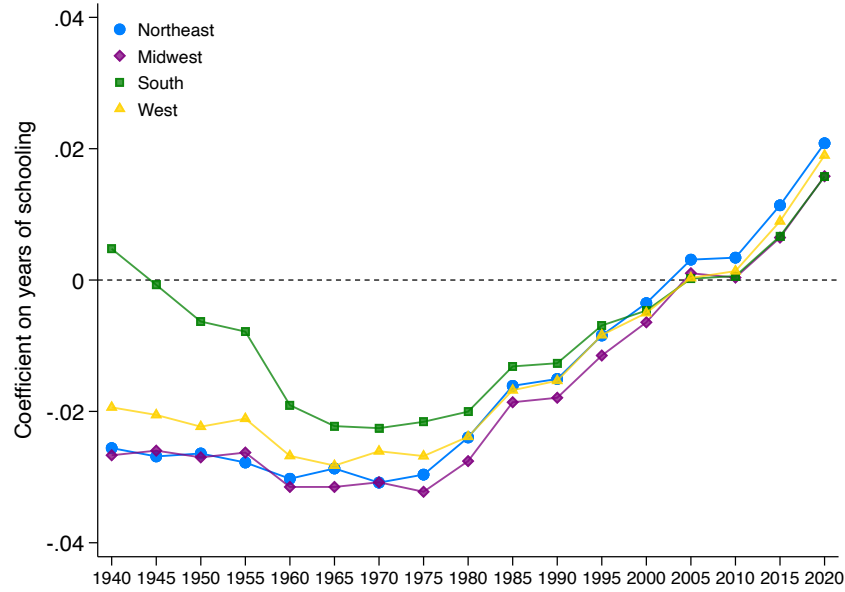
Notes: This figure plots the coefficients  $\beta^p$  from the following regression, estimated separately by five-year period:

$$Democrats_i = \beta^t Adj. \text{ years school}_i + \gamma X_i + e_i,$$

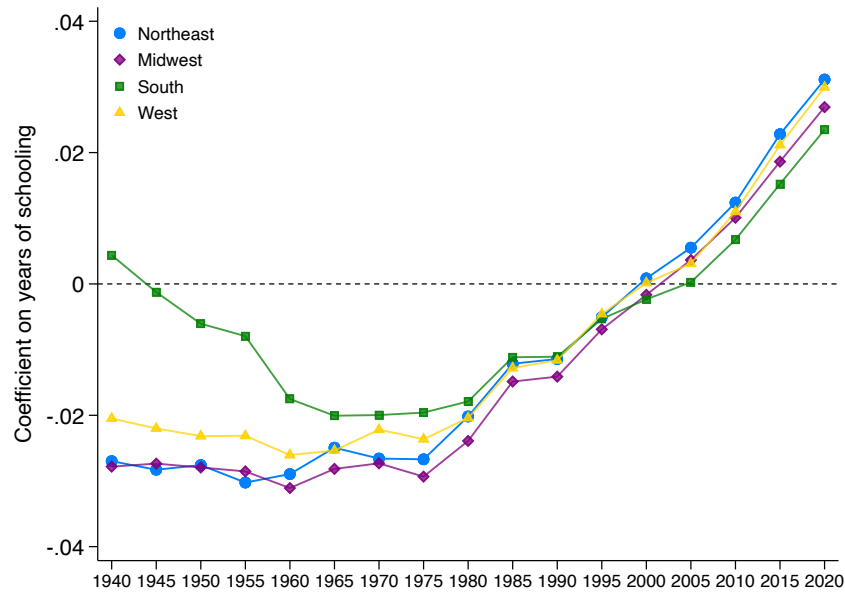
where  $Democrats_i$  is an indicator for respondent  $i$  answering that the Democratic Party is the best to keep the country prosperous.

Appendix Figure A.18: Democratic Party identification by education, by region

(a) All respondents

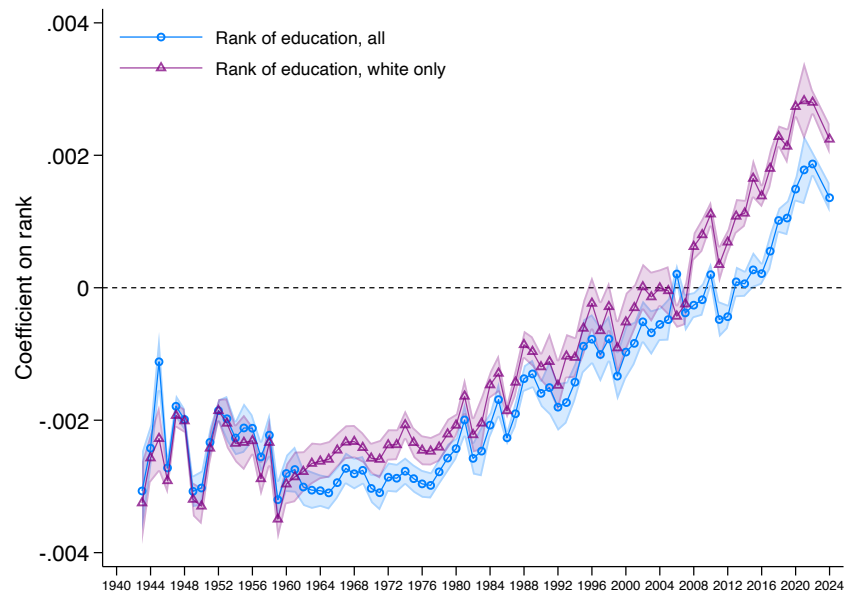


(b) Whites only



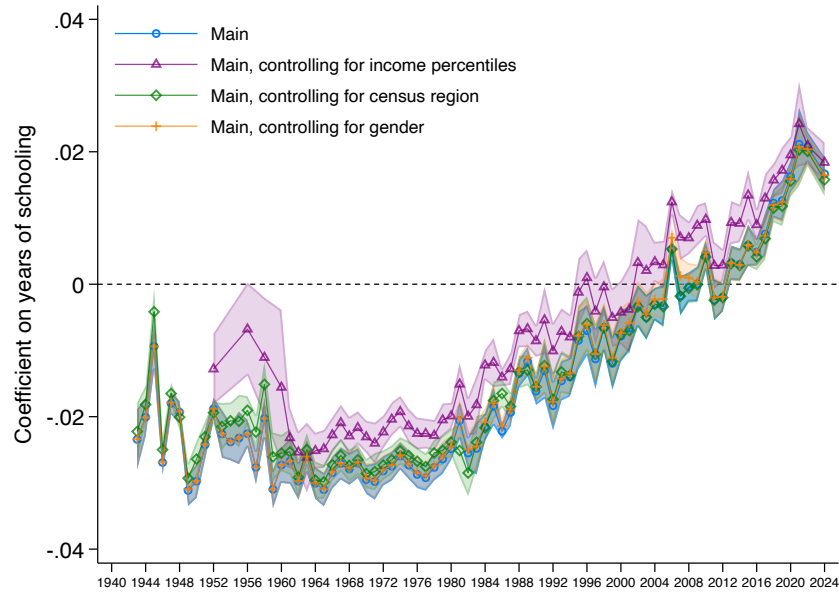
Notes: As in Figure 7, this Figure shows the estimated  $\beta^t$  from a regression of an indicator for Democratic affiliation on our *Adjusted years of schooling* measure. The four series show the coefficients  $\beta^p$  for each census region separately. Panel (a) shows the results for all the population while panel (b) displays the results, restricting the sample to respondents identifying as white.

Appendix Figure A.19: Democratic Party identification by education using rank, whites and nonwhites



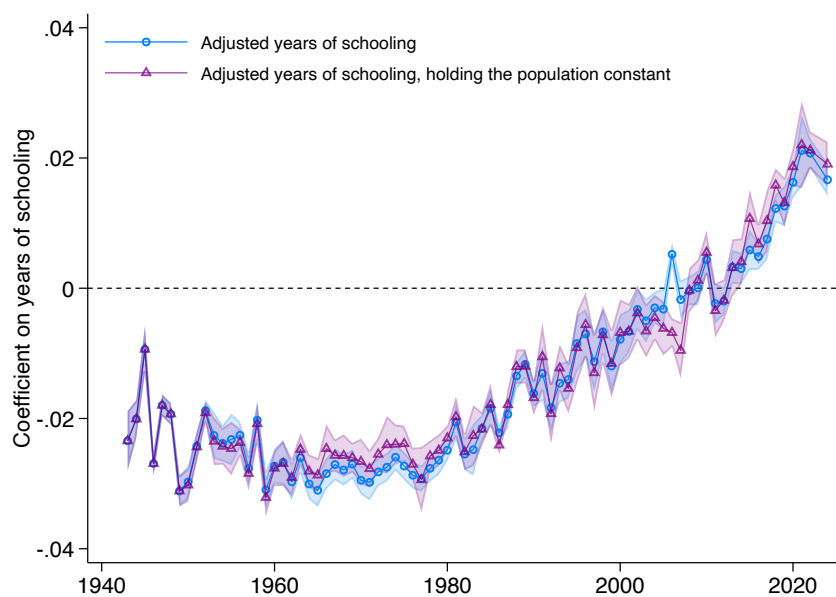
*Notes:* As in Figure 7, this Figure shows the estimated  $\beta^t$  from a regression of an indicator for Democratic affiliation on the rank in education of each survey respondent. The first series, shown in blue, shows the coefficient for all respondents, the second series, shown in green, shows the coefficient for respondents identifying as white. Rank is defined within each age cohort of 10 years for each year. The shaded area shows the 95% confidence intervals.

Appendix Figure A.20: Democratic Party identification controlling for basic covariates



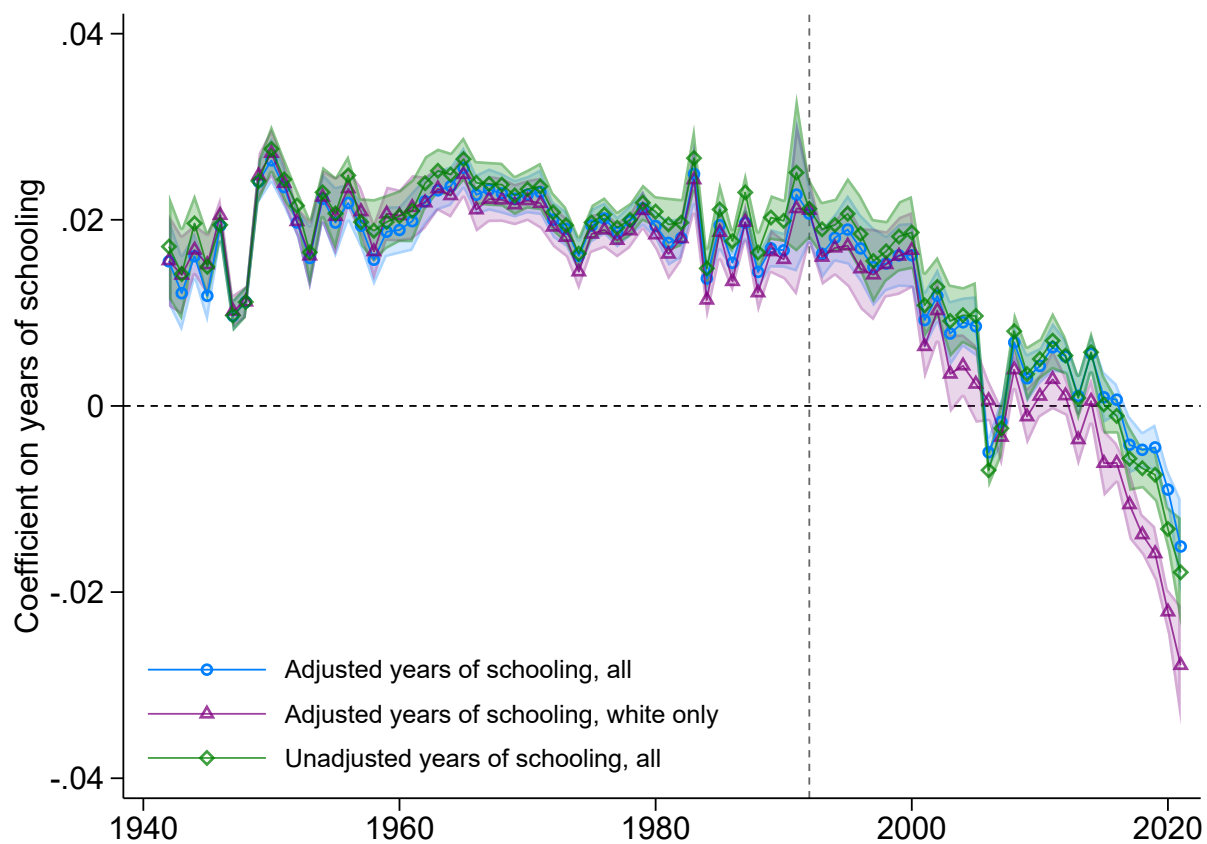
*Notes:* As in Figure 7, this Figure shows the estimated  $\beta^t$  from a regression of an indicator for Democratic affiliation on our *Adjusted years of schooling* measure. The first series, shown in blue, shows the unconditional effect of education, controlling only for age. The second series, shown in purple, shows the same coefficients flexibly controlling for income. Note that income is not included in most of our surveys before the 1960s, so confidence intervals are naturally larger when we include income controls. The third series, shown in green, shows the same coefficients, flexibly controlling for census divisions. The fourth series, shown in orange, shows the same coefficients, flexibly controlling for gender.

Appendix Figure A.21: Democratic Party identification holding fixed population composition



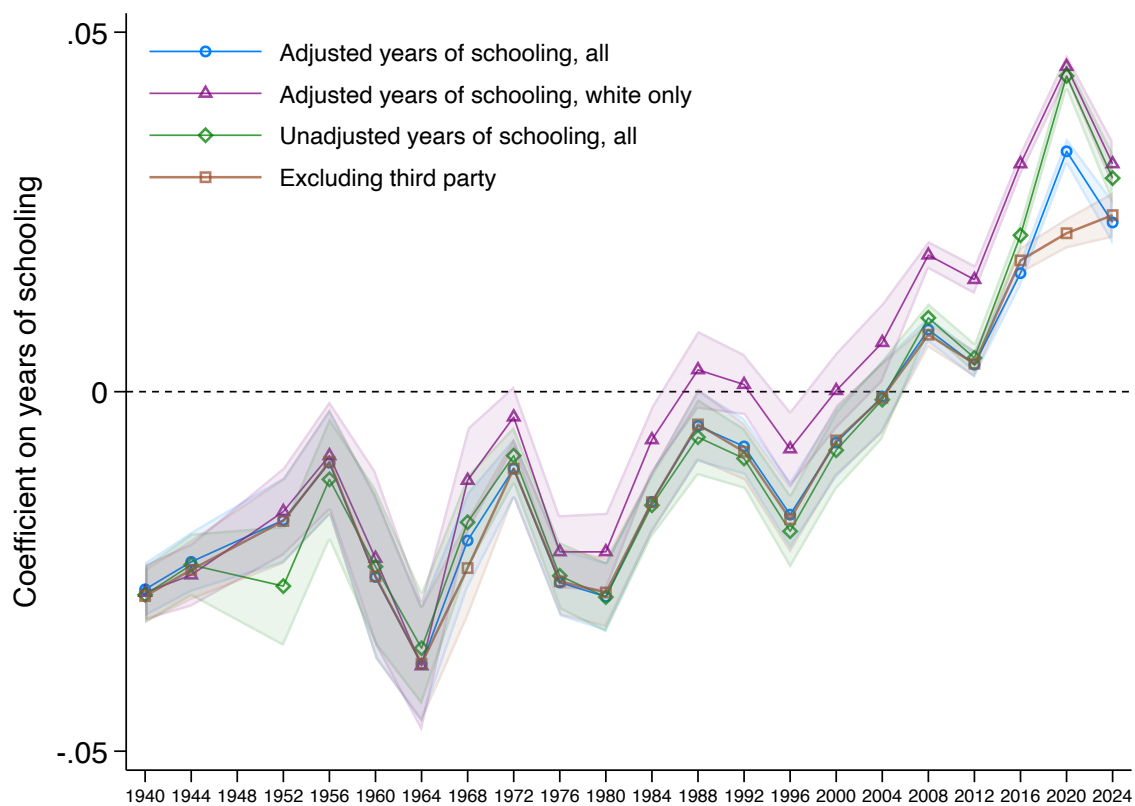
*Notes:* As in Figure 7, this Figure shows the estimated  $\beta^t$  from a regression of an indicator for Democratic affiliation on our *Adjusted years of schooling* measure. The first series, shown in blue, shows the effect of education. The second series, shown in purple, shows the effect of education, holds the educational and racial composition of the population constant.

Appendix Figure A.22: Republican Party identification by education



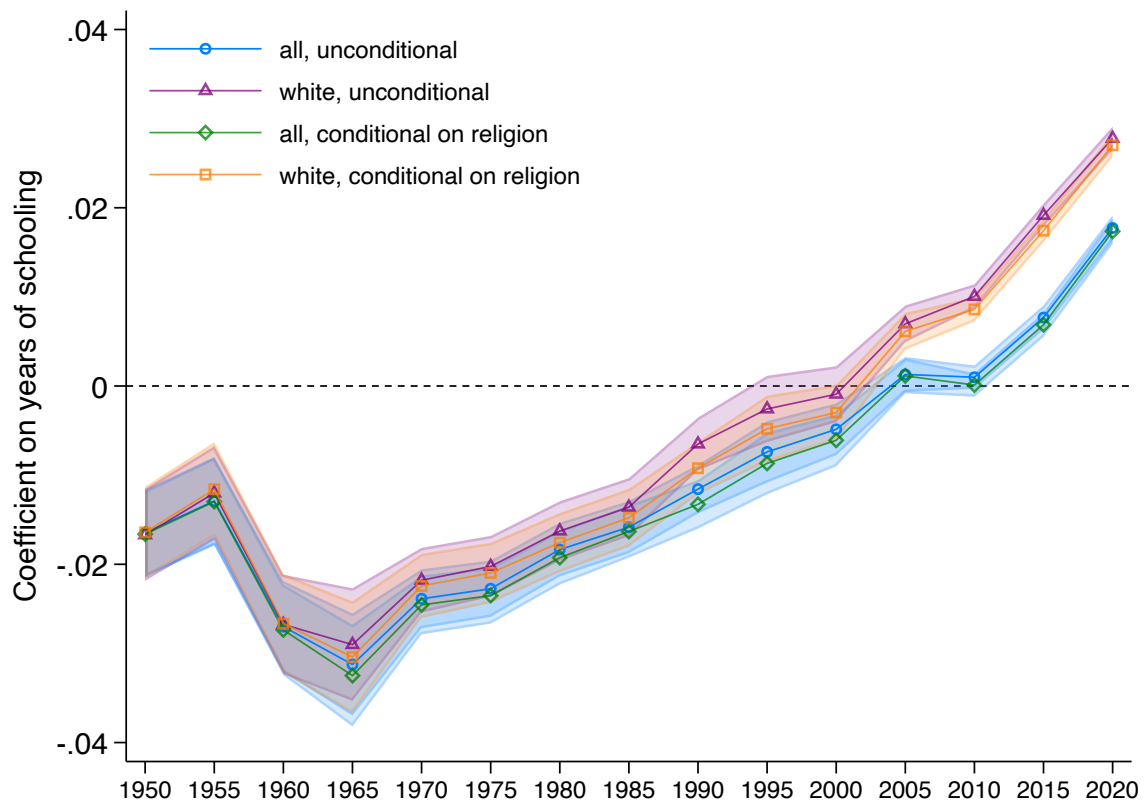
Notes: As in Figure 7, this Figure shows the estimated  $\beta^p$  from a regression of an indicator for Republican affiliation on our *Adjusted years of schooling* measure.

Appendix Figure A.23: Votes for Democratic President, as a function of education



*Notes:* This graph is analogous to the main Figure 7 but substitutes voting for a Democratic president (coded as one, all other answers coded as zero, with non-voters dropped) for Democratic party identification. We also group answers by election instead of by year of observation.

Appendix Figure A.24: Democratic Party Identification, as a function of education, controlling for religious affiliation



*Notes:* This graph is analogous to the main Figure 7 but controls, for each five-year period, for a dummy variable equals to one if the respondent reports being religious and another if the respondent reports being Protestant. Note that we have to rely solely on GSS and CCES for this exercise, explaining the smaller sample size. Shaded areas show the 95% confidence intervals.

Appendix Table A.1: Support for economic policies not included in Figure 1

**Panel A: All respondents**

	Predistribution		Redistribution		
	(1) Price control	(2) Wage control	(3) Food stamps	(4) Estate tax	(5) Business tax
Adjusted yrs. of schooling	-0.0582*** (0.00594)	-0.0518*** (0.00574)	-0.0247*** (0.00226)	0.0396*** (0.00959)	0.00815** (0.00368)
Observations	3021	3031	32449	2791	9307
Min Year	1985	1985	1969	2005	1945
Max Year	1996	1996	2013	2008	2015

**Panel B: White respondents only**

	Predistribution		Redistribution		
	(1) Price control	(2) Wage control	(3) Food stamps	(4) Estate tax	(5) Business tax
Adjusted yrs. of schooling	-0.0635*** (0.00610)	-0.0502*** (0.00578)	-0.00817*** (0.00260)	0.0335*** (0.0103)	0.00770* (0.00402)
Observations	2557	2564	26113	2348	8264
Min Year	1985	1985	1969	2005	1945
Max Year	1996	1996	2013	2008	2015

*Notes:* The table reports the educational gradient for additional predistribution and redistribution questions, which are excluded from Figure 1 due to partial coverage. All regressions include standard controls: survey fixed effects (which subsume year fixed effects) and age-rounded-to-nearest-five fixed effects interacted with year. Panel A includes all respondents, while Panel B is restricted to white respondents. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parenthesis.

Appendix Table A.2: Policy preferences significantly more correlated within category

	Dept Var: Policy Preference				
	(1)	(2)	(3)	(4)	(5)
Cross-preference	0.170*** (0.005)	0.121*** (0.006)	0.121*** (0.006)	0.121*** (0.006)	0.099*** (0.006)
Cross-preference $\times$ Same category		0.112*** (0.009)	0.111*** (0.009)	0.111*** (0.009)	0.120*** (0.009)
Survey FE			X	X	X
Policy Pair FE				X	X
Controls					X
Add'l share expl. by same category		.92	.919	.91	1.204
Observations	359,394	359,394	359,394	359,394	349,326

*Notes:* Each observation corresponds to a pair of a respondent's answers to the eight main policy questions. 'Same category' is a dummy variable equal to one if both policy preference questions in the pair belong to the same category ("predistribution" or "redistribution"). Each policy pair is equally weighted. Standard errors are clustered at the respondent level.

Appendix Table A.3: Union members disproportionately support predistribution policies

	Redistribution				Predistribution			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Tax Me	Tax Rich	Wait to Cut Taxes	Welfare	Jobs for All	Pro protectionism	Union Influence	Incr. Min. Wage
Union household	-0.068*** (0.016)	0.081*** (0.023)	-0.033 (0.024)	-0.038*** (0.014)	0.188*** (0.017)	0.120*** (0.021)	0.508*** (0.010)	0.315*** (0.016)
Constant	0.010 (0.007)	-0.033*** (0.010)	-0.014 (0.010)	-0.012* (0.006)	-0.044*** (0.009)	-0.010 (0.009)	-0.093*** (0.004)	-0.031*** (0.008)
Observations	27,050	16,948	16,316	41,519	22,365	20,279	83,073	21,759

*Notes:* The table reports the coefficient on a dummy equals to one if the respondent belongs to a union household. Outcomes are measured in standard-deviation units (within question). All regressions include standard controls: survey fixed effects (which subsume year fixed effects) and age-rounded-to-nearest-five fixed effects interacted with year. Running a pooled regression that weights each question equally, union-household respondents support predistribution by 0.306 standard deviations more than non-members and oppose redistribution by 0.007 standard deviations; giving a difference of 0.313 ( $p < 0.001$ ). \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parenthesis.

Appendix Table A.4: Democratic House members position depending on DLC status

	Dept Var: Ideal Points (incr. in conservativeness)					
	(1)	(2)	(3)	(4)	(5)	(6)
DLC	0.091*** (0.005)	0.359*** (0.020)	0.264*** (0.031)	0.211*** (0.031)	0.268*** (0.046)	0.106*** (0.005)
Predistribution x DLC						0.267*** (0.016)
Redistribution x DLC						0.191*** (0.015)
Ideal Point Type	DW-N	Predis	Predis	Redis	Social	DW-N, Predis, and Redis
Congress FE	X	X				
State x Congress FE			X	X	X	X
Average difference between parties	0.772	1.805	1.805	1.901	1.755	1.486
Predistribution x DLC - Redistribution x DLC						0.076*** (0.022)
Observations	3,404	3,348	3,226	3,237	3,230	10,110

*Notes:* The table shows the position of House members as defined by DW-Nominate or their topic-specific ideal points. We use the rollcall topic-classification described in Appendix C and the topic-specific ideal point estimation, described in Appendix E. Column 1 regresses the DW-Nominate first dimension on a DLC dummy, controlling for Congress fixed effects, column 2 regresses the predistribution ideal point, controlling for congress FE, while column 3 onwards control for state by congress FE. Column 4 looks at the redistribution ideal point and column 5 at the ideal point on social issues. Column 6 pools together the DW Nominate first dimension, the predistribution and the redistribution ideal point and looks at the relative effect of DLC on economic policies, with respect to DW-Nominate first dimension. We report the average difference between the parties in the table notes and we test the significance of the difference between predistribution and redistribution in column 6. The sample is restricted to Democratic House members. The same table using the Bateman *et al.* (2018) classification is displayed in Appendix Table C.2. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. Standard errors clustered by congress in parentheses.

Appendix Table A.5: Democratic House members' alignment with Republican voting

	Dept Var: Voted Yea				
	(1)	(2)	(3)	(4)	(5)
Union caucus	0.146*** (0.002)	0.137*** (0.002)	0.137*** (0.002)	0.136*** (0.002)	0.135*** (0.002)
Union caucus $\times$ MeanRepub	-0.271*** (0.003)	-0.260*** (0.003)	-0.261*** (0.003)	-0.262*** (0.003)	-0.254*** (0.003)
Union caucus $\times$ Predis		0.068*** (0.007)	0.067*** (0.007)	0.066*** (0.007)	0.068*** (0.007)
Union caucus $\times$ Predis $\times$ MeanRepub		-0.088*** (0.010)	-0.087*** (0.010)	-0.086*** (0.010)	-0.093*** (0.010)
Union caucus $\times$ Redis			-0.012 (0.009)	-0.013 (0.009)	-0.012 (0.009)
Union caucus $\times$ Redis $\times$ MeanRepub			0.010 (0.012)	0.010 (0.012)	0.003 (0.012)
Union caucus $\times$ Social					-0.012 (0.036)
Union caucus $\times$ Social $\times$ MeanRepub					-0.050 (0.040)
Rollcall FE	X	X	X	X	X
State $\times$ Congress FE				X	X
Linear combination of estimates: Predis - Redis			-0.097*** (0.015)	-0.096*** (0.015)	-0.096*** (0.015)
Predis - Social					-0.043 (0.041)
Observations	2,821,247	2,821,247	2,821,247	2,821,247	2,821,247

*Notes:* As in Table 1, the table shows the extent to which Democrats are voting with Republicans. The dependent variable is a dummy equal to one if the House member votes Yea. The independent variable *MeanRepub* is the share of Republicans House members who voted Yea on that bill. *Union Caucus* is a dummy variable equal to one if the House member received more than 50% from labor-connected PACs in any election cycle, 0 otherwise. *Predis*, *Redis*, and *Social* are dummy variables equal to one if the vote is about predistribution, redistribution, and social issues, respectively. We use the classification from the Comparative Agendas Project (CAP). All Columns control for rollcall fixed effects and Column 5 control for state and year fixed effects. We show the difference between the coefficient on Union Caucus  $\times$  Predis  $\times$  MeanRepub and Union Caucus  $\times$  Redis  $\times$  MeanRepub as well the difference between Union Caucus  $\times$  Predis  $\times$  MeanRepub and Union Caucus  $\times$  Social  $\times$  MeanRepub in the Table statistics. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. Standard errors clustered by rollcall in parentheses.

Appendix Table A.6: House Democratic vote share by education of neighborhood

	Dept Var: Share Dem					
	(1)	(2)	(3)	(4)	(5)	(6)
Years educ.	-0.012** (0.005)	-0.012*** (0.005)	-0.008*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)	-0.007*** (0.002)
Years educ. $\times$ DLC	0.010** (0.005)	0.010** (0.005)	0.009** (0.004)	0.008* (0.004)	0.007* (0.004)	0.006 (0.004)
DLC	-0.195*** (0.057)		0.032* (0.018)		0.036** (0.018)	
Share white					-0.291*** (0.028)	-0.297*** (0.028)
Share white $\times$ DLC					0.059 (0.049)	0.053 (0.055)
Share below 35					0.035*** (0.011)	0.035*** (0.011)
Share below 35 $\times$ DLC					-0.003 (0.036)	0.000 (0.035)
Year FE	X		X		X	
District FE	X		X		X	
District $\times$ Year FE		X		X		X
Sample	Winners	Winners	All	All	All	All
Controls	Basic	Basic	Basic	Basic	Extended	Extended
Number of DLC candidates	211	211	219	219	219	219
Mean of dependent variable	0.669	0.669	0.528	0.528	0.528	0.528
Observations	22,267	22,265	49,318	53,740	49,318	53,740

*Notes:* The table shows the Democratic vote share obtained by House Democratic Candidates in MCDG for the period 1984–1990. We regress the share of votes obtained by the Democratic candidate for the House in each MCDG on the average years of education (*Years educ.*) of that MCDG and the interaction of this term with *DLC*, a dummy equal to one if the Democratic candidate is part of the DLC. Column 1, 3, and 5 include year and district fixed effects while columns 2, 4, and 6 include district by year fixed effects, meaning that we only look at variation within congressional district for each year, for a given candidate. Any non-varying candidate attribute (such as *DLC*) is therefore subsumed by the fixed effects. Columns 1 and 2 keep only elected Democratic candidates since we do not have any information on caucus membership on those who lost the general election. Columns 3 to 6 include predictions from our machine learning algorithm, as described in Appendix D. Standard errors are clustered by district. The number of distinct DLC candidates by election is displayed in the row "Number of DLC candidates". We exclude the bottom and top 1% of MCD groups in terms of population. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Appendix Table A.7: Proportion of outside contributions by candidate

	Share of outside dollars		Share of outside contributors	
	(1)	(2)	(3)	(4)
Dem. dummy	0.084*** (0.004)	0.080*** (0.004)	0.089*** (0.004)	0.087*** (0.004)
Election Type	Primary	General	Primary	General
Mean of dependent variable	.594	.602	.598	.593
Observations	21,984	17,108	22,009	17,229

he table reports the difference between the Democratic and Republican Parties in the proportion of campaign contributions originating outside candidates' congressional districts between 1980 and 2016. Columns (1) and (2) present the share of outside dollars for each candidate, while Columns (3) and (4) report the share of outside contributors. Columns (1) and (3) focus on primary elections, and Columns (2) and (4) on general elections. Data are from Bonica (2014). \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

Appendix Table A.8: Primary donors' average education by candidate DLC status

**Panel A: Weighted by distinct contributors**

	All contributions		Within district		Out-of-district	
	(1)	(2)	(3)	(4)	(5)	(6)
DLC	0.139*** (0.024)	0.130*** (0.017)	0.060 (0.055)	0.082** (0.035)	0.155*** (0.026)	0.138*** (0.019)
Year x State FE	X	X	X	X	X	X
Sample	Winners	All	Winners	All	Winners	All
ML type		XG-Boost		XG-Boost		XG-Boost
Number of DLC candidates	1611	2132	1523	1988	1604	2121
Mean of dependent variable	14.608	14.635	14.367	14.419	14.688	14.691
Observations	740,222	1,708,435	100,000	201,689	640,200	1,506,732

**Panel B: Weighted by amount**

	All contributions		Within district		Out-of-district	
	(1)	(2)	(3)	(4)	(5)	(6)
DLC	0.107*** (0.022)	0.109*** (0.016)	0.124** (0.059)	0.114*** (0.038)	0.106*** (0.017)	0.105*** (0.013)
Year x State FE	X	X	X	X	X	X
Sample	Winners	All	Winners	All	Winners	All
ML type		XG-Boost		XG-Boost		XG-Boost
Number of DLC candidates	1611	2132	1523	1988	1604	2121
Mean of dependent variable	14.718	14.782	14.444	14.487	14.827	14.904
Observations	739,461	1,706,118	99,991	201,552	639,448	1,504,552

*Notes:* As in Table 2, this table shows the difference in the average education level of primary contributors giving to DLC candidates compared to non-DLC Democratic candidates. We regress the average years of schooling of each contributor for the Democrats at the primaries on whether the candidates are affiliated with the DLC. We use each donor's census tract average education as a proxy for their education. Panel A weight the results by distinct contributors while panel B weight them by amount. Columns 1, 3, and 5 of both panels use only winners of the general elections, for whom we have the actual DLC status. Columns 2, 4, and 6 of both panel use our 2-step Random Forest prediction algorithm as described in Appendix D. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard errors are clustered by candidate by year.

Appendix Table A.9: Trends in relative support for predistribution

Dept Var: Support for the policy								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Predis	0.180*** (0.0293)	0.0925 (0.0723)	0.0922 (0.0738)	0.137* (0.0697)				
Predis $\times$ Trend			-0.0000167 (0.00126)	0.000437 (0.00120)	-0.000860 (0.000998)	-0.0000701 (0.000809)	-0.00124** (0.000605)	-0.00181** (0.000909)
Question FE	No	No	No	No	Yes	Yes	Detailed	Yes
Survey FE	No	No	No	No	No	Yes	No	No
Text Features	No	Yes	Yes	Yes	No	No	No	Yes
Addl. Controls	Basic	Basic	Basic	Extended	Basic	Basic	Basic	Basic
Observations	421,383	421,383	421,383	411,743	421,383	421,383	421,383	421,383

*Notes:* This table shows estimates from variants of a regression at the question by individual level of the form  $Support_{qit} = \beta_0 Predis_q + \beta_1 Predis_q \times Trend_\tau + \delta_{age(i)} + \delta_t + \delta_q + \epsilon_i$ , where  $q$  denotes survey question type (four predistribution and four redistribution, as in Figure 1),  $t$  denotes year, and  $i$  denotes individual.  $Trend_\tau$  is a linear trend. Age are in 5-year bins. All specifications include year fixed effects. Column 1 to 4 do not include any question fixed effects in order to recover the overall support for predistribution over redistribution. Column 2 additionally controls for text features as defined in Appendix G. Column 3 to 8 include a (de-meaned) trend of support for predistribution. Column 4 adds extended controls (region, gender, and race) by year fixed effects. Column 5 includes fixed effects for our eight questions which prevent us from recovering the overall support for predistribution. Column 6 includes survey by years fixed effects. Column 7 includes detailed question fixed effects for our 95 distinct questions, and column 8 controls flexibly for the text features as described in Appendix G. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard errors clustered by survey in parentheses.

Appendix Table A.10: Robustness of Educational Gradient

	Dept Var: Normalized support for the policy									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Predis X Yrs Ed.	-0.0413*** (0.00301)	-0.0419*** (0.00309)	-0.0403*** (0.00278)	-0.0195*** (0.00635)	-0.0408*** (0.00318)	-0.435*** (0.0392)	-0.0469*** (0.00341)	-0.0323*** (0.00424)	-0.0351*** (0.00451)	-0.0377*** (0.00348)
Predis X Yrs Ed. X Trend					0.000126 (0.000237)	0.000420 (0.00263)	0.0000379 (0.000258)	0.000313 (0.000308)	0.0000303 (0.000299)	0.0000365 (0.000257)
Predis X Non-White										0.241*** (0.0150)
Predis X Female										0.166*** (0.0418)
Predis X South										-0.0561*** (0.00629)
Sample	All	All	All	No Coll.	All	Rank edu	Whites	Women	South	All
Controls	Basic	Basic	Ext.	Ext.	Ext.	Basic	Ext.	Ext.	Ext.	Basic
Text Features	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	419,897	419,897	410,804	305,726	410,804	419,594	334,342	214,197	134,799	419,897

*Notes:* This table shows estimates from variants of a regression at the question by individual level of the form  $Support_{qit} = \beta Predis_q \times AdjEduc_i + \delta_{age(i) \times q \times t} + \delta_{AdjEduc \times t} + \epsilon_i$ , where  $q$  denotes survey question type (four predistribution and four redistribution, as in Figure 1),  $t$  denotes year, and  $i$  denotes individual. Age is in 5-year bins and  $AdjEduc_i$  is years of schooling as described in the text. All specifications except column 6 include age by question by year fixed effects. Column 1 additionally includes only the education by year fixed effects. Column 2 adds age and year-specific effects of the text features as described in Appendix G. Column 3 further adds nonwhite, female, and South all interacted with question fixed effects interacted with year fixed effects. Column 4 adds an interaction of  $Predis_q \times AdjEduc_i \times Trend_t$  to the specification in (3), column 5 looks exclusively at respondents who do not have a college degree, column 6 uses as an alternative measure of education, within cohort rank (between 0 and 1) and omits controls and year fixed effects, and columns 7-9 restrict attention to nonwhite, female, and South subsamples, respectively. Finally, column 10 removes the question by demographic controls and examines the differential support for predistribution by demographic subgroups. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard errors clustered by survey in parentheses.

## Appendix B. Data Appendix

### B.1. ANES repeated cross-sectional data and cumulative file

We use both the individual files for each year and the cumulative file that ANES creates for convenience. The individual files have questions that are not included in the cumulative file. We use every year of data from 1948 to 2018 that includes one of the questions of interest. We use the partisan affiliation variable to define Democratic affiliation. We code as democrats any individual who describe themselves as either “strongly Democrat” or “not strongly Democrat”.

### B.2. Gallup and other historical opinion polls data

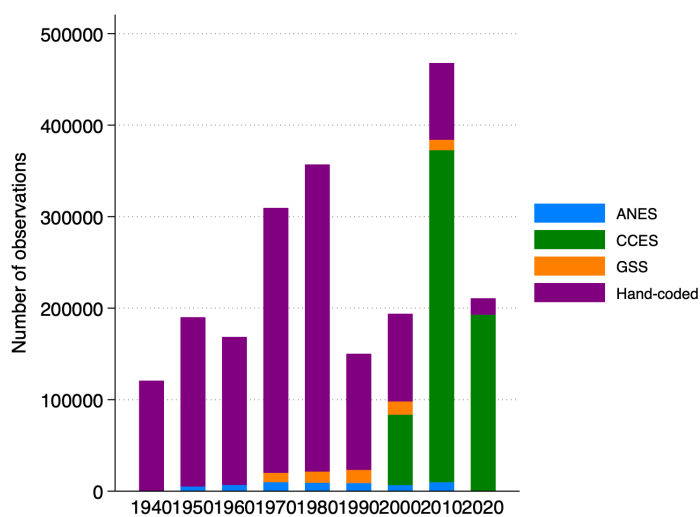
As in Farber *et al.* (2021), we use historical opinion polls from survey corporations, for the most part housed by iPoll at the Roper Center at Cornell. The majority of these data come from Gallup, which beginning in 1942 asked respondents in most of their surveys both their educational attainment and their self-reported partisan identification (Gallup surveys begin in 1935 and since then have always asked age, race and state of residence).

### B.3. General Social Survey

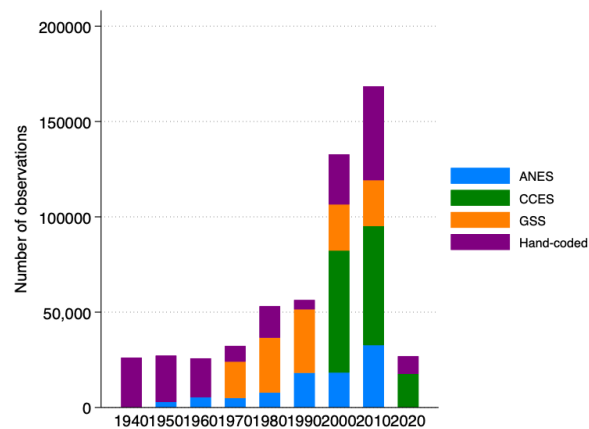
The GSS surveys a sample of around 2,000 nationally representative Americans yearly since 1972 (GSS has been implemented once every other year only since 1994). We use the partisan affiliation variable (*partyid*) to define Democratic affiliation. We code as democrats any individual who describe themselves as either “strongly Democrat” or “not strongly Democrat”.

### B.4. Cooperative Election Study

The CCES is a survey administered by YouGov to a very large sample of Americans (typically over 50,000 people) since 2006. We use the partisan identity question *pid3* to measure Democratic affiliation. The question asks whether the respondent think of themselves as a (Democrat/Republican/Independent/Other/Not Sure).



(a) Party ID



(b) Economic Preferences

Appendix Figure B.1: Data sources by decade

*Notes:* This figure reports the number of observations by decade for our main party dataset (panel (a)) and the economic preferences dataset (panel (b)). All data sourced from iPoll are included in the “hand-coded” category. In panel (b), the count refers to the number of question  $\times$  individual observations.

Appendix Table B.1: Descriptive statistics on policy preference survey questions

	Tax More the Rich	Tax Me More	Wait to Cut Taxes	Spend More on Welfare	Provide Jobs for All	Pro Protectionism	Unions should have more Influence	Raise the Minimum Wage
Mean	0.59	0.21	0.54	0.38	0.61	0.52	0.45	0.72
N. Obs	22,403	50,467	28,853	61,090	35,914	46,421	99,719	204,132
N. Dist. Q.	9	5	22	6	13	16	7	34
N. Dist. Surv.	13	32	22	44	26	43	71	44
Avg. Pol.	0.17	0.16	0.03	0.02	0.21	0.11	0.06	0.14
Avg. Subj.	0.32	0.46	0.28	0.48	0.41	0.24	0.31	0.41
Avg. Gr. Lvl	15.42	8.94	15.44	22.99	15.64	12.33	10.01	16.36

*Notes:* This table shows some descriptive statistics about the eight policy questions we use for Figure 1. The first row shows the average support of each variable (normalized to be between 0 and 1). The second row shows the number of observations for each variable. The third row shows the number of distinct questions framing. The fourth row shows the number of distinct surveys used for each question. The last three rows show the average scores of questions in that category in terms of polarity, subjectivity, and readability, as described in Appendix G.

## Appendix C. Classifying votes as predistribution or redistribution

### C.1. DLC conservatism measured by issue-specific ideal points

**Issue-specific ideal points.** Traditionally, ideal-point models have been estimated on all votes a legislator takes, but more recently some papers have produced “issue-specific ideal points,” (Bateman *et al.*, 2018) which we use below. As we are simply applying the methodology of past authors to the subset of votes related to predistribution and other topic areas, we summarize the ideal-point estimation procedure in Appendix E but do not elaborate here.

In Table A.4 we present results from a regression testing whether the DLC is more conservative relative to other Democrats and in particular on votes related to predistribution. In col. (1) we present results when the familiar DW-Nominate ideal point is regressed on the DLC dummy in a bivariate regression. We use the “first dimension” of the DW-Nominate ideal point, which proxies general left-right ideology (increasing, as are all our ideal points, in conservativeness). By this general measure, DLC members are significantly more conservative than other Democrats.

The rest of the table shows that the DLC are particularly more conservative on economic policy and even more for policies involving predistribution. Col. (2) shows that the DLC are significantly more conservative than other Democrats on predistribution votes, with this gap equal to one-fifth the Democratic-Republican gap (reported in the rows at the bottom of the table). Note that in some years we are missing DLC membership lists, so the coefficient on DLC is likely biased toward zero due to this measurement error, but even so it appears to be economically meaningful. The next column shows that this gap is robust to adding *State*  $\times$  *Congressional term* fixed effects, which isolates comparisons to DLC versus non-DLC members in the same state and time period. Col. (4) shows that the DLC is more conservative on redistribution votes as well (and indeed on social issues, too, in col. 5, a result we return to in Section 6).

The final column shows that while the DLC is in general more conservative than are other Democrats, the opposition against left-wing economic policy and in particular predistribution still stands out. In this regression, each *Congressperson*  $\times$  *Congressional term* has three observations: an ideal point for predistribution, an ideal point for redistribution, and the generic DW-nominate ideal point (the omitted group in the regression). The positive coefficient on the DLC dummy variable reflects the overall conservativeness of the DLC captured in col. (1). The positive and significant interactions show that the DLC is particularly conservative on economic policies (whether pre- or re-distribution) in a manner that can be separated from their generic conservativeness. And in the rows beneath the column we show that the larger (i.e., more conservative) coefficient on predistribution than redistribution is indeed statistically significant. In sum, the DLC is more conservative than other Democrats, especially on economic policy, and especially on *predistribution* topics within economic policy.

## C.2. Comparative Agendas Project

In order to classify policies between *Predistribution*, *Redistribution*, and *Social Issues*, we make heavy use of the Comparative Agendas Project (CAP) dataset. CAP groups all Congressional votes since 1947 into policy-related categories and sub-categories. We take these categories as given and then place them into pre- and re-distribution groups.

The table below shows the CAP topics and subtopics and our classification between the various categories. Those without classification are classified as neither predistribution, redistribution, nor social issues.

General topic	Subtopic	Classification
1. Macroeconomics	100: General 101: Interest Rates 103: Unemployment Rate 104: Monetary Policy 105: National Budget 107: Tax Code 108: Industrial Policy 110: Price Control 199: Other	Predis Predis Predis Predis Redis Redis Predis Predis Both
2. Civil Rights	200: General 201: Minority Discrimination 202: Gender Discrimination 204: Age Discrimination 205: Handicap Discrimination 206: Voting Rights 207: Freedom of Speech 208: Right to Privacy 209: Anti-Government 299: Other	Other Other Other Other Other Other Other Other Other Other
3. Health	300: General 301: Health Care Reform 302: Insurance 321: Drug Industry 322: Medical Facilities 323: Insurance Providers 324: Medical Liability 325: Manpower 331: Disease Prevention 332: Infants and Children 333: Mental Health 334: Long-term Care 335: Drug Coverage and Cost 341: Tobacco Abuse 342: Drug and Alcohol Abuse 398: R&D 399: Other	Other Other Other Other Other Other Other Other Other Other Other Other Other Other Other Social Issues Social Issues Other Other
4. Agriculture	400: General 401: Trade 402: Subsidies to Farmers 403: Food Inspection & Safety 404: Food Marketing & Promotion 405: Animal and Crop Disease 408: Fisheries & Fishing 498: R&D 499: Other	Other Predis Predis Other Other Other Other Other Other Other
5. Labor	500: General 501: Worker Safety 502: Employment Training 503: Employee Benefits 504: Labor Unions 505: Fair Labor Standards 506: Youth Employment 529: Migrant and Seasonal 599: Other	Predis Predis Predis Predis Predis Predis Predis Predis Predis

General topic	Subtopic	Classification
6. Education	600: General 601: Higher 602: Elementary & Secondary 603: Underprivileged 604: Vocational 606: Special 607: Excellence 698: R&D 699: Other	Other Other Other Predis Other Other Other Other
7. Environment	700: General 701: Drinking Water 703: Waste Disposal 704: Hazardous Waste 705: Air Pollution 707: Recycling 708: Indoor Hazards 709: Species & Forest 711: Land and Water Conservation 798: R&D 799: Other	Other Other Other Other Other Other Other Other Other Other Other
8. Energy	800: General 801: Nuclear 802: Electricity 803: Natural Gas & Oil 805: Coal 806: Alternative & Renewable 807: Conservation 898: R&D 899: Other	Other Other Predis Predis Predis Predis Other Other Other
9. Immigration	900: Immigration	Other
10. Transportation	1000: General 1001: Mass 1002: Highways 1003: Air Travel 1005: Railroad Travel 1007: Maritime 1010: Infrastructure 1098: R&D 1099: Other	Other Other Other Other Other Other Predis Other Other
12. Law and Crime	1200: General 1201: Agencies 1202: White Collar Crime 1203: Illegal Drugs 1204: Court Administration 1205: Prisons 1206: Juvenile Crime 1207: Child Abuse 1208: Family Issues 1210: Criminal & Civil Code 1211: Crime Control 1227: Police 1299: Other	Social Issues Social Issues Social Issues Social Issues Social Issues Social Issues Social Issues Social Issues Social Issues Social Issues Social Issues Social Issues

General topic	Subtopic	Classification
13. Social Welfare	1300: General 1302: Low-Income Assistance 1303: Elderly Assistance 1304: Disabled Assistance 1305: Volunteer Associations 1308: Child Care 1399: Other	Other Redis Other Other Other Other Other
14. Housing	1400: General 1401: Community Development 1403: Urban Development 1404: Rural Housing 1405: Rural Development 1406: Low-Income Assistance 1407: Veterans 1408: Elderly 1409: Homeless 1498: R&D 1499: Other	Other Other Other Other Other Redis Other Other Redis Other Other
15. Domestic Commerce	1500: General 1501: Banking 1502: Securities & Commodities 1504: Consumer Finance 1505: Insurance Regulation 1507: Bankruptcy 1520: Corporate Management 1521: Small Businesses 1522: Copyrights and Patents 1523: Disaster Relief 1524: Tourism 1525: Consumer Safety 1526: Sports Regulation 1598: R&D 1599: Other	Other Other Other Other Other Other Other Other Other Other Other Other Other Other Other
16. Defense	1600: General 1602: Alliances 1603: Intelligence 1604: Readiness 1605: Nuclear Arms 1606: Military Aid 1608: Personnel Issues 1610: Procurement 1611: Installations & Land 1612: Reserve Forces 1614: Hazardous Waste 1615: Civil 1616: Civilian Personnel 1617: Contractors 1619: Foreign Operations 1620: Claims against Military 1698: R&D 1699: Other	Other Other Other Other Other Other Pre-dis Pre-dis Pre-dis Other Other Other Other Other Pre-dis Other Other Other

General topic	Subtopic	Classification
17. Technology	1700: General 1701: Space 1704: Commercial Use of Space 1705: Science Transfer 1706: Telecommunications 1707: Broadcast 1708: Weather Forecasting 1709: Computers 1798: R&D 1799: Other	Other Other Other Other Other Other Other Other Other Other
18. Foreign Trade	1800: General 1802: Trade Agreements 1803: Exports 1804: Private Investments 1806: Competitiveness 1807: Tariff & Imports 1808: Exchange Rates 1899: Other	Predis Predis Predis Predis Predis Predis Predis Predis
19. International Affairs	1900: General 1901: Foreign Aid 1902: Resources Exploitation 1905: Developing Countries 1906: International Finance 1910: Western Europe 1921: Specific Country 1925: Human Rights 1926: Organizations 1927: Terrorism 1929: Diplomats 1999: Other	Other Other Other Other Other Other Other Other Other Other Other Other
20. Government Operations	2000: General 2001: Intergovernmental Relations 2002: Bureaucracy 2003: Postal Service 2004: Employees 2005: Appointments 2006: Currency 2007: Procurement & Contractors 2008: Property Management 2009: Tax Administration 2010: Scandals 2011: Branch Relations 2012: Political Campaigns 2013: Census & Statistics 2014: Capital City 2015: Claims against the government 2030: National Holidays 2099: Other	Other Other Other Predis Predis Other Other Predis Other Redis Other Other Other Social Issues Other Social Issues Social Issues Other
21. Public Lands	2100: General 2101: National Parks 2102: Indigenous Affairs 2103: Public Lands 2104: Water Resources 2105: Dependencies & Territories 2199: Other	Other Other Other Other Other Other Other
23. Culture	2300: General	Social Issues

### C.3. Alternative classification

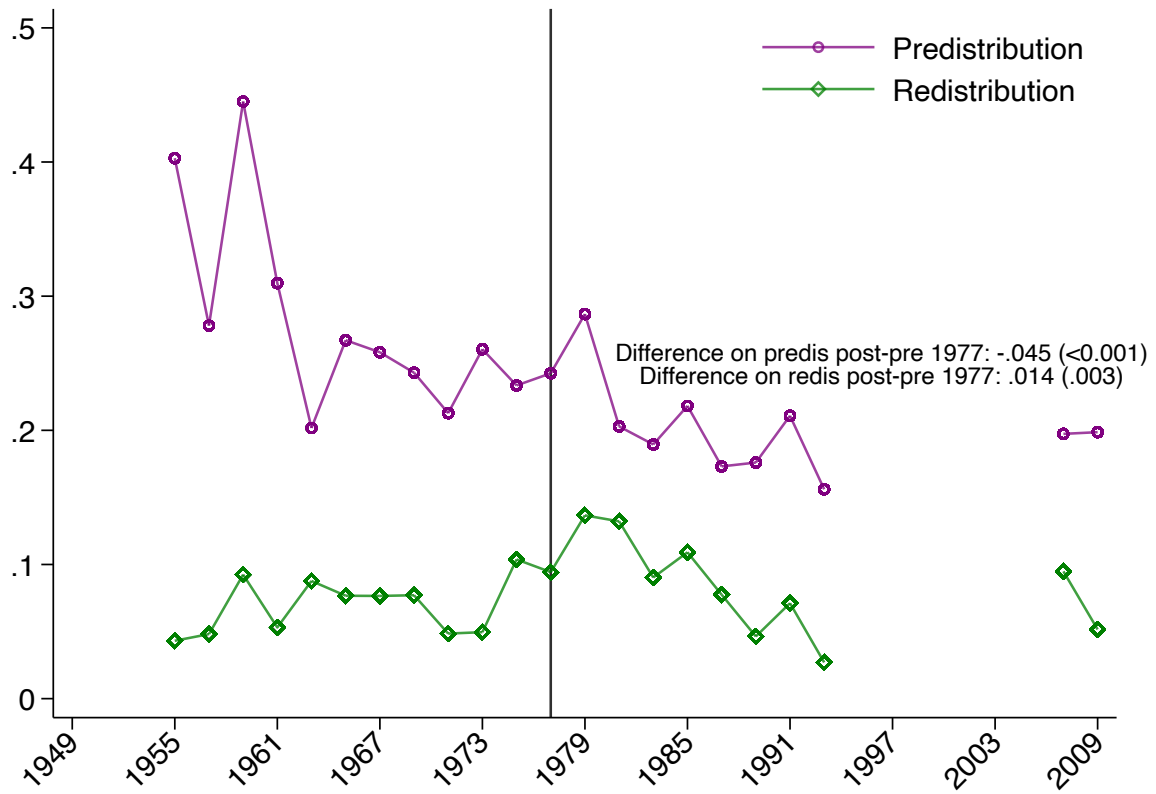
To test the robustness of our results to alternative rollcall classification, we use a second topic classification from (Bateman *et al.*, 2018). Table C.1 below shows which topics have been classified as predistribution, redistribution, and social issues. We also reproduce below all the Tables and Figures of the main paper that are making use of the CAP classification with the (Bateman *et al.*, 2018).

Appendix Table C.1: Topic classification using (Bateman *et al.*, 2018) data.

General topic (Tier 1)	Tier 2	Tier 3	Classification	
Sovereignty	Liberty	Loyalty and Expression	Social Issues	
	Membership and Nation	Religion	Social Issues	
		Privacy	Social Issues	
		Commemorations and National Culture	Social Issues	
		Immigration and Naturalization	Social Issues	
	Civil Rights	African American	Social Issues	
		Native Americans	Social Issues	
		Other Minority Groups	Social Issues	
	Boundaries	Women	Social Issues	
		Voting Rights	Social Issues	
Frontier Settlement		Social Issues		
Indian Removal and Compensation		Social Issues		
State Admission		Social Issues		
Organization and Scope	Gov Organization	Union Composition	Social Issues	
		Territories and Colonies	Social Issues	
		Congressional Organizational		
		Executive Org		
	Representation	Impeachment		
		Judicial		
		Census	Social Issues	
	International Relations	Constitutional Amendments	Elections	
			Groups and Interests	
			Federalism and terms of office	
Defense		Political participation and rights		
		Other		
		Air Force		
		Army Organization		
		Conscription		
		Militias		
		Naval		
	Organization			
	Military Installations			
	Civil Homeland Defense			
Geopolitics	Diplomacy			
	Foreign Aid			
	International Org			
	International Political Economy	Maritime		
		Trade Tariffs		
Economic International Organizations		Predis		

General topic (Tier 1)	Tier 2	Tier 3	Classification
Domestic Affairs	Agriculture and Food	Agricultural Technology	
		Farmers / Farming support	Predis
	Planning and Resources	Fishing and Livestock	
		Corporatism	Predis
		Environment	
		Infrastructure and Public Works	Predis
		National Resources	
		Social Knowledge	Social Issues
		Post office	Predis
		Transportation	Predis
		Wage and price control	Predis
		Interstate compacts	
	Political Economy	Urban rural and regional dev	Predis
		Appropriation	
		Multi agency	
		Business / Capital Markets	Predis
		Fiscal taxation	Redis
		Labor Markets unions	Predis
		Monetary	Predis
		Regulation economic	Predis
	Social Policy	Children / Youth	
		Crime	Social Issues
		Disaster	
		Education	
		Handicapped	
		Health	
		Housing	
		Military pensions	
		Public works and volunteer employment	Predis
		Regulation, social	Social Issues
		Social insurance	

Appendix Figure C.1: The pre- and re-distribution share of House roll-call votes under Democratic leadership (Bateman et al. data)



Notes: As in Figure 3, this figure shows the share of pre- and re-distribution roll-call votes every year that the Democrats are in control of the House from 1947 until 2009. Breaks in the series are when Republicans control the House. The Figure uses data from Bateman *et al.* (2018).

Appendix Table C.2: Democratic House members position depending on DLC status

	Dept Var: Ideal Points (incr. in conservativeness)					
	(1)	(2)	(3)	(4)	(5)	(6)
DLC	0.091*** (0.005)	0.312*** (0.022)	0.238*** (0.042)	0.211*** (0.036)	0.214*** (0.039)	0.106*** (0.005)
Predistribution x DLC						0.220*** (0.019)
Redistribution x DLC						0.192*** (0.023)
Ideal Point Type	DW-N 1	Predis	Predis	Redis	Social	DW-N 1, Predis, Redis
Congress FE	X	X				
State x Congress FE			X	X	X	X
Average difference between parties	.772	1.805	1.805	1.901	1.77	1.486
Predistribution x DLC -						0.028
Redistribution x DLC						(0.026)
Observations	3,404	3,350	3,228	3,231	3,267	10,106

*Notes:* As in Table A.4, this table shows the position of House members as defined by DW-Nominate or their topic-specific ideal points. We use the rollcall topic-classification from Bateman *et al.* (2018) and the topic-specific ideal point estimation, described in Appendix E. Column 1 regresses the DW-Nominate first dimension on a DLC dummy, controlling for Congress fixed effects, column 2 regresses the predistribution ideal point, controlling for Congress FE, while column 3 onwards control for state by congress FE. Column 4 looks at the redistribution ideal point and column 5 at the ideal point on social issues. Column 6 pools together the DW Nominate first dimension, the predistribution and the redistribution ideal point and looks at the relative effect of DLC on economic policies, with respect to DW-Nominate first dimension. We report the average difference between the parties in the table notes and we test the significance of the difference between predistribution and redistribution in column 6. Standard errors clustered by Congress. The sample is restricted to Democratic House members. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard errors clustered by Congress in parentheses.

Appendix Table C.3: Democratic House members' alignment with Republican voting

	Dept Var: Voted Yea			
	(1)	(2)	(3)	(4)
DLC $\times$ MeanRepub	0.173*** (0.002)	0.168*** (0.002)	0.168*** (0.003)	0.169*** (0.003)
DLC $\times$ Predis		-0.012*** (0.004)	-0.012*** (0.004)	-0.011*** (0.004)
DLC $\times$ Predis $\times$ MeanRepub		0.017*** (0.006)	0.017*** (0.006)	0.016** (0.006)
DLC $\times$ Redis			0.003 (0.007)	0.003 (0.007)
DLC $\times$ Redis $\times$ MeanRepub			0.003 (0.009)	0.003 (0.009)
Rollcall FE	X	X	X	X
State $\times$ Congress FE				X
Linear combination of estimates: Predis - Redis			0.013 (0.012)	0.013 (0.012)
Observations	3,428,405	3,170,934	3,170,934	3,170,934

*Notes:* As in Table 1, this table shows the extent to which Democrats are voting with Republicans using the Bateman *et al.* (2018) classification instead of the CAP. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard errors clustered by rollcall in parentheses.

## Appendix D. Predicting DLC Membership

We have relied on several sources to obtain the list of House and Senate members that belong to the Democratic Leadership Council (DLC). It is important to note that we are not necessarily looking for a strict definition of who belonged to this caucus at what exact time, but rather which Democrats were part of the ideological movement corresponding to the DLC. We combine four main sources of DLC membership:

1. A list of founding members of the DLC obtained from the Appendix of the first volume of the *Mainstream Democrat* published in September 1989
2. The list of participants to the third annual DLC’s conference in Philadelphia in March 1989, obtained through the University of Florida
3. Lists of members obtained through archives of the DLC website and the New Democrats Online website
4. Lists of members of the DLC caucus in Congress obtained through the archives of the House and Senate websites.

Since the historical lists of DLC members that we have had access to only include elected members, we only observe DLC members who ran for office and got elected. Most of the results we present in the paper use only this set of “groundtruth” winner DLC members.

To assess the robustness of our results to the inclusion of potential “losers”, we predicted DLC membership based on campaign contributions. We use data from Bonica (2014) to obtain information on all the campaign contributions received by Congress candidates since 1980. These contributions have been used by several papers to estimate the ideology of Congress members, here we want to use them to estimate their membership to a specific faction of the Democratic party.

We train an extreme gradient boosting algorithm (Friedman, 2001) to predict DLC membership using information on contributions and the identity of contributors. Importantly, since we use the predictions to study voters’ reaction to candidates’ DLC status, we only use contributions from committees to train the machine learning model.

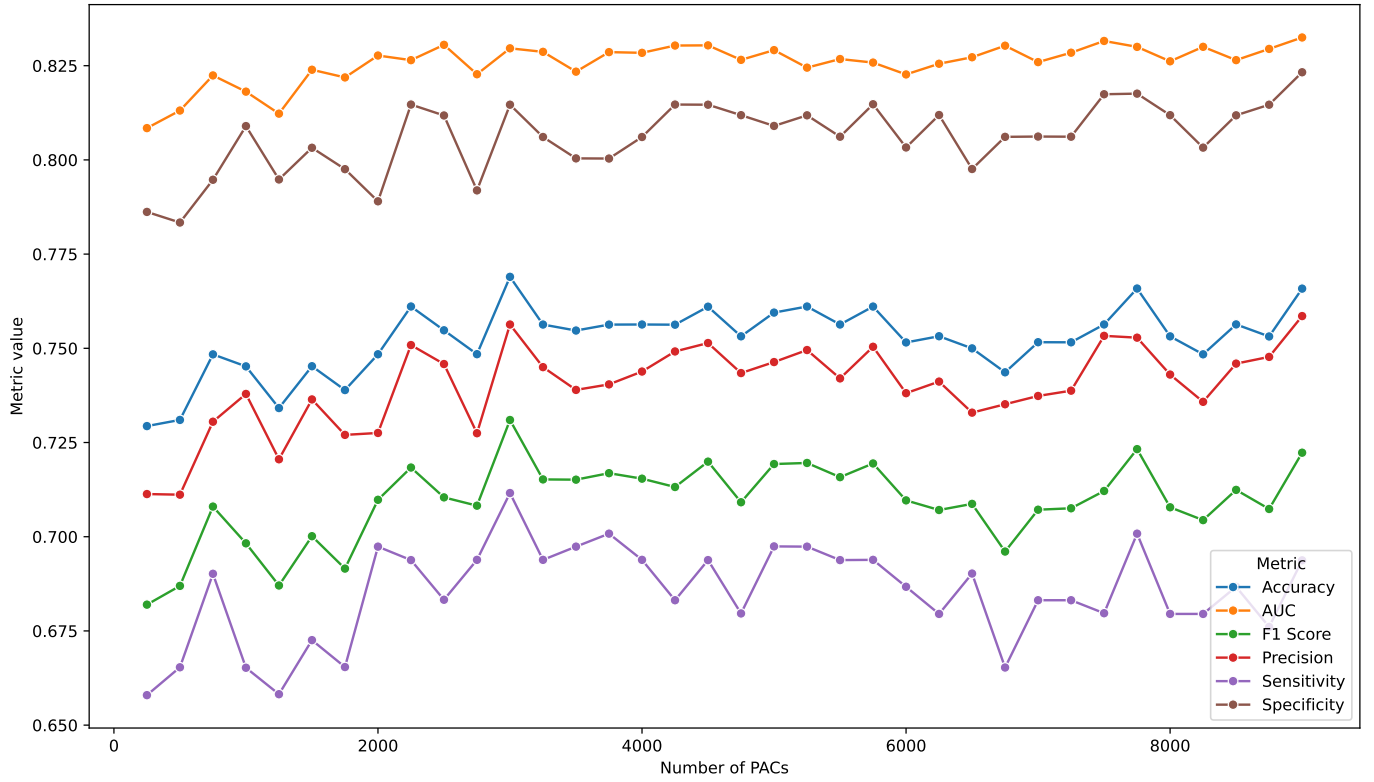
Similarly to Bonica (2018), since the number of distinct contributors is too large to include them all as explanatory variables, we keep the 10,000 largest committees and include the amount received from each of them.<sup>36</sup> For all other PACs, we compute the first principal components of the matrix of contributions and include them as additional regressors. We also include as additional variables the share of contributions coming from labor unions and from corporations. Some specific PACs such as the *New Democratic Network* (NDN) are strong predictors of DLC membership.

In Figure D.1, we report the statistics regarding our predictions.

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<sup>36</sup>To ensure comparability over the whole period, we keep the top 2,500 committees in each year, which results in about 10,000 committees overall.

Appendix Figure D.1: Performance of DLC status prediction



*Notes:* We report five statistics about the performance of our four prediction models. The x-axis shows the number of distinct PACs included as explanatory variables. The remaining PACs are included as summary statistics. We report the Area Under the Curve (AUC), the Accuracy, the F-score, the Precision, the Sensitivity, and the Specificity.

## Appendix E. Estimating Topic-specific Ideal Points

Ideal-point estimation is widely used in political science to summarize dimensions of ideology based on political behavior (roll-call votes, contributions, speech). The standard two-dimensional “DW-Nominate” score from Poole and Rosenthal (2000)<sup>37</sup> estimates 2-dimensions of ideology, and allows politician ideal points to linearly drift with time. The first dimension of DW-Nominate explains over 70% of variation, widely used as summary measure of left-right ideology, and is interpreted by its creators as largely capturing divisions over economic policy in the post-war period.

We are interested in disaggregating economic policy into predistribution and redistribution, and recovering separate ideal points for each congressperson for each of these dimensions (Bateman and Lapinski, 2016). Following the notation of the model, each politician  $i$  has ideal point for policy dimension  $j$  (predistribution or redistribution) given by  $y_{ij}$ . We suppose politicians have quadratic utility function over voting  $Y$  and  $N$  over roll-call  $r$  in congress  $c$  given by:  $U(Y(r)) = -(y_{icj(r)} - x_r^Y)^2 + \nu_{ri}$  and  $U(N(r)) = -(y_{icj(r)} - x_r^N)^2 + \nu'_{ri}$ , where  $j(r)$  designates whether the issue is predistribution or redistribution. If  $\nu$  and  $\nu'$  are jointly normal, together with the assumption that  $E[\nu] - E[\nu'] = 0$  and  $Var(\nu - \nu') = \sigma^2$ , then we have that

$$Pr(Vote_{ir} = Y) = Pr(\nu'_{ir} - \nu_{ir} < (x_r^Y - x_r^N)y_{icj(r)} + (x_r^Y)^2 - (x_r^N)^2) = \Phi(\beta_r y_{icj(r)} - \alpha_r) \quad (4)$$

Where  $\Phi$  is the standard normal cumulative distribution function,  $\beta_r = (x_r^Y - x_r^N)$ , and  $\alpha_r = (x_r^Y)^2 - (x_r^N)^2$ . Estimating this separately for redistribution and predistribution roll-calls yields estimates of topic-specific ideal points for each congressperson  $i$  in congress  $c$  given by  $\widehat{y_{ic,predis}}$  and  $\widehat{y_{ic,redis}}$ . We use the `pscl` package in R, which provides functionality for estimating ideal points from rollcall data, and normalize the ideal points on each topic to be mean 0 and unit standard deviation within each congress to ensure identification, restricting attention to bills (coded as redistribution and predistribution by CAP) with less than 90% support.

In order to make ideal points comparable over time, Bateman and Lapinski (2016) use a procedure that regression-adjusts the congress-specific ideal points over time to make them comparable. Within a Congress, they regress the congress-specific individual ideal points on the mean for each congressperson over all congresses and then subtracting the intercept from each congress-specific ideal point and divide by the coefficient. We follow this procedure to get predistribution and redistribution ideal points that are comparable across congresses.

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<sup>37</sup>Which we downloaded from [voteview.com](http://voteview.com).

## Appendix F. 1970s Campaign Finance Reforms and the Rise of Corporate PACs

### F.1. Historical overview

#### F.1.1. Pre-reforms environment

From the 1940s through the 1960s, the only important political action committees (PACs) were union PACs. Indeed, the term “PAC” comes from the 1943 establishment of the Congress of Industrial Organization’s independent political wing, which they called Political Action Committee, or, simply “PAC” or later “CIO-PAC” once other unions formed their own PACs.

Before the 1970s reforms, different laws governed corporate and labor political donations (the Federal Corrupt Practices Act of 1925 and the Smith Connolly Act of 1943, respectively). It was legally unclear whether federal court decisions that confirmed unions’ rights to solicit donations from members even applied to corporations or business interests. After initial judicial decisions affirmed CIO-PAC’s legal standing, the president of National Association of Manufacturing (NAM) nonetheless wrote in a 1944 memo to members: “The Federal Corrupt Practices Act prevents organizations such as ours from making political contributions. The fact that an Attorney General has approved the actions of the Congress of Industrial Organizations Political Action Committee has not changed that law.”<sup>38</sup>

Even in case law that applied to both unions and corporations equally, unions were often at an advantage. In particular, case law had established that organizations had certain rights in petitioning their *members* for political contributions or communicating political endorsements to them. For unions, membership was clearly defined by the payment of dues, and union members numbered in the tens of millions. The corporate C-suite and major shareholders might be naturally considered “members” of a corporation, but “[s]till untested is whether a corporation may safely urge employees to support a political party or candidate,” read a 1958 memo “What Corporations Can and Can’t Do,” authored by the NAM Legal Department.<sup>39</sup>

On the eve of the 1970s reforms, labor dominated PAC contributions, as Table F.1 confirms. The only two major business-interest PACs were the Business Industry Political Action Committee (BIPAC, based on voluntary contributions from members of NAM) and the American Medical Political Action Committee (AMPAC, the analogous organization for the American Medical Association).

#### F.1.2. The 1970s reforms

In the 1970s, a number of laws and court decisions transformed campaign finance and changed the balance between labor and corporate influence in campaign finance, beginning with the 1971 Federal Election Campaign Act (FECA). “Most important, FECA specifically legitimized PACs by explicitly granting *to both corporations and labor unions* the right to create,

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<sup>38</sup>Quote is from Charnock (2020), p. 208.

<sup>39</sup>Quote is from Charnock (2020), p. 213.

Appendix Table F.1: Largest PACs by expenditure in the 1968 election

Labor		Corporate/Business	
PAC Name	Amount	PAC Name	Amount
COPE (AFL-CIO)	1,207,000	AMPAC	682,000
ILGWU	1,077,000	PIPAC	519,000
Seafarers	947,000		
Machinists	572,000		
UAW	560,000		
Marine Engineers	262,000		
Steelworkers	240,000		
Tranmen	215,000		
DRIVE (Teamsters)	211,000		
Total	7,100,000	Total	1,600,000

Notes: All data taken from Alexander (1971), pp. 195 and 201. Totals reflect *all* labor and business/corporate PAC expenditures in 1968, not only from the large PACs listed in the table.

administer and raise funds for their PACS, and to cover all organizational expenses from corporate and union treasuries [*emph. added*]” (Sabato, 1984, p 8).

The intent of the law was not to reign in unions relative to corporations, and the labor movement in fact pushed for this provision of FECA. Labor had dominated PAC contributions before the reforms, and “[t]he AFL-CIO feared for the future of its PACs” (Zelizer, 2002, p. 94). They sought to protect their existing rights and believed that other laws would still limit corporations’ political spending. “Ironically this provision, which later led to a proliferations of corporate PACs, was added to FECA with the help of the unions” (Sabato, 1984, p. 8).

The 1974 amendments—passed in the aftermath of Watergate—did not directly regulate PACs but put more stringent limits on individual donations, thus increasing the importance of PACs.

Unions had not anticipated that corporations would use their new-found rights to form PACs because they believed that they had an ace in the hole: members of corporations that *received government contracts* had never been allowed to contribute to political campaigns in the past. Granting corporations more rights to form PACs did not change this prohibition, or so they had assumed. This last bit of uncertainty was erased when the FEC ruled in the November 1975 *Sun Oil PAC* decision that even government contractors had the same rights as other corporations to form PACs.

In short, in a period of only a few years, unions went from enjoying a privileged position in terms of political contributions to having lost these considerable advantages. That these reforms differentially benefited corporate PACs is the consensus of historians, political scientists, and watchdog groups. The Report of the Twentieth Century Fund Task Force on Political Action Committees wrote in 1985: “PACs have been around for some time, dating back to the labor movement during World War II. But their spectacular ascendancy did not begin until the 1970s when post-Watergate campaign finance regulation placed stringent limits on individual contributions to candidates while placing higher limits on PAC con-

tributions, thus enhancing their prestige....While all kinds of PACs proliferated, the major growth clearly took place among the corporate PACs” (pp 5–37). Similarly, Charnock (2020) writes: “Indeed, the significant growth in corporate PACs from the mid-1970s onward has been attributed largely to the campaign finance reforms of the 1970s” (p. 218).

## F.2. Data sources

We provide references below to the different books and archives used for the campaign finance analysis.

- For 1960, we use *Financing the 1960 Election* by Herbert E. Alexander. Citizens’ Research Foundation, 1962.
- For 1964, we use *Financing campaigns for congress: contribution patterns of national-level party and non-party committees, 1964* by Kevin L. McKeough. Citizens’ Research Foundation, 1970.
- For 1968, we use *Financing the 1968 Election* by Herbert E. Alexander. Heath Lexington Book, 1971.
- For 1970, we use *Contributions of National-Level Political Committees to Incumbents and Candidates for Public Offices 1970* by Herbert E. Alexander and Caroline D. Jones. Citizens’ Research Foundation, 1972.
- For 1972, we use *Financing the 1972 Election* by Herbert E. Alexander, Heath Lexington Book, 1976.
- For 1976, we use *Financing the 1976 Election* by Herbert E. Alexander. Congressional Quarterly, 1979.
- For 1978, we use the FEC 1978 PAC Report.
- For 1980 onward, we use the FEC data available on [www.fec.gov](http://www.fec.gov).

## Appendix G. Using text-as-data to assess question wording effects

Our survey results on demand show that the educational gradient in respondent preferences over policies do not change over time. A natural concern is that, over a 80 year period, the exact question wordings change over time, and our results are confounded by changes in wording across surveys and over time. In this Appendix, we construct a variety of quantitative measures of the question wording, and show that these do not seem to be biasing our results.

As discussed in the text, we use text embeddings as continuous representations of words to ensure that variants in question wording are not driving any of our results. We calculate BERT (Bidirectional Encoder Representations from Transformers) embeddings (Devlin *et al.*, 2018) for each of the raw survey question texts. BERT returns embeddings for each token in a piece of text. These embedding vectors are optimized to predict nearby words that are omitted (masked), and capture the semantic meanings of words and phrases (a widely-used example is that the embedding of “king” minus the embedding for “queen” yields the embedding for “man”). Embeddings are widely used in deep learning models of language, taking a sentence, breaking it up into tokens (words, subwords and punctuation), and uses both the position of the token as well as a 1024-dimensional vector to predict the omitted tokens in the text (BERT uses both the tokens before and after the missing token for prediction, hence “bidirectional”). The 1024-dimension vector for each token is then tuned to optimally predict the omitted tokens in a 24-layer neural network. BERT (specifically the version we use, BERT-large) is a 340 million parameter model trained on over three billion words of text, and the embeddings perform very well on standard NLP tasks and are widely used in text analysis.<sup>40</sup>

We begin by showing that our embeddings are good at picking up the substance of a question. We have 132 question wordings, with 83 predistribution questions and 49 redistribution questions. In this sample of 132 questions, the first principle component of the embedding vector explains over 20% of the  $R^2$  and the 5 top principal components explain over 80% of the variation in whether the question is predistribution or redistribution, while explaining 40% of the variation in the embeddings themselves.

We next turn in Table G.1 to examining whether support is systematically associated with linguistic features of the question. In addition to the embeddings, we calculate dictionary-based measures of sentiment, such as polarity (how positive or negative the sentiment of a text is) and subjectivity (how subjective is a text, e.g. reporting a particular state of mind via “I feel”). We also calculate Fleish-Kincaid scores for each survey question, measuring the reading level of the text.

Appendix Table G.1 shows that policy support is influenced by question wording. The combined text features explain roughly 80% of the variation of a Democrat dummy variable. While wording clearly matters for survey responses, controlling for these features does not alter our main results. As shown in Appendix Tables A.9 and A.10, both the overall level of support and the educational gradient remain unaffected by their inclusion.

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<sup>40</sup>For an overview of the use of embeddings in economics see (Ash and Hansen, 2023).

Appendix Table G.1: Text Features and Policy Support

Variable	Adj. $R^2$ (within question type)
Polarity	0.7%
Subjectivity	0.7%
Readability	1.3%
Embedding vectors	4.4%
All text features	4.9%
Democrat dummy	6.1%

*Notes:* This table regresses the raw level of support (normalized between 0 and 1) on our measures of text features. Each row shows the adjusted within R-squared, including question type fixed effects. The last row shows the corresponding R-squared interacting a dummy variable equals to one if the respondent identifies as a Democrat with question type.