"Compensate the Losers?" Economy-policy preferences and partisan realignment in the US

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Abstract

Why have less educated voters abandoned center-left parties in rich democracies in recent decades? While much recent literature highlights the role of cultural issues, we argue that, at least in the US, the Democratic Party's evolution on economic issues has played an important role. We show that lower levels of education predict strong support for "predistribution" policies (e.g., guaranteed jobs, public works, a higher minimum wage, protectionism, and support for union organizing) much more than for redistribution policies (taxes and transfers). This robust support for predistribution among the less educated is mostly unchanged since the 1940s. We then move to the "supply side" of economic policies: Congressional roll-call votes exhibit a decline in predistribution legislation while Democrats are in power, whereas redistribution-related legislation has remained steady. We also document changes in the supply of Democratic politicians. Today, Democratic politicians are far more likely to come themselves from elite educational backgrounds than Republicans, whereas the reverse was true before the 1990s, which might help explain why they no longer propose the predistribution policies favored by the less educated. We then examine the intersection of the demand and supply sides of economic policy by showing that today the less educated are more likely than others to say that Republicans are the party that will keep the country prosperous, whereas from 1948 until the 1990s the reverse pattern held.

Key words: Predistribution, Political Competition, Voting, Neoliberalism.
JEL codes: D72, D78, H1.

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1 Introduction

For several decades in rich democracies, less educated voters have abandoned center-left parties, their political home for generations (Kitschelt and Rehm, 2019; Gethin *et al.*, 2021). Despite the Labour party's strong support for the "remain" position, less educated voters in Britain voted disproportionately for Brexit (Hobolt, 2016). Counties with the lowest shares of college graduates sparked Donald Trump's unexpected victory in the 2016 presidential race (Sances, 2019).

Given that the Democrats support redistributive programs such as higher taxes on the rich, many pundits have argued that voters increasingly vote against their economic self interest. Scholars have proposed social issues (Lee and Roemer, 2006; Gennaioli and Tabellini, 2019; Enke *et al.*, 2021), misinformation (DellaVigna and Kaplan, 2007; Martin and Yurukoglu, 2017; Cruces *et al.*, 2013), or distrust in government (Kuziemko *et al.*, 2015) to help explain why less educated voters have left the parties whose redistributive policies should help them. A recent review of this evidence by a labor historian asked: "Is America too Rich for Class Politics?"[1]

In this paper we argue, to paraphrase Mark Twain, that reports of the death of class politics have been exaggerated. Our argument has two main steps. First, we show that less-educated Americans differentially support *predistribution* policies (e.g., public works, minimum wage and overtime regulations, pro-worker industrial relations, price controls, protectionist trade agreements, and financial-sector regulations) and always have, at least since polling became widely available in the 1940s. By contrast, more-educated Americans are stronger supporters of *redistributive* policies (e.g., higher taxes on the rich). Second, the Democratic Party has moved away from predistribution both in the policies it is advancing while in control of the legislature as well as in the identities of the politicians it is putting forward in national politics. As a result, the changing party identification of less-educated Americans can be explained by an explicit shift in the economic policies offered by the American center-left party.

We begin our development of these ideas by observing that past work tends to combine all economic policies into a single index and that the index tends to more heavily weigh redistribution than predistribution. In general, much of the existing literature classifies respondent as "left wing" or "liberal" (in the American sense of that word) on economic policy if they

[1] See https://nymag.com/intelligencer/2021/09/is-america-too-rich-for-class-politics.html.

favor greater taxes and transfers.[2] But at least since the New Deal, the Democratic Party has advocated many "predistribution policies" that target the *pre*-tax-and-transfer income distribution and are distinct from redistribution. We show that lower levels of education is a strong predictor of support for these policies and has been since at least the 1940s.[3] While the education gradient for these questions is largely steady, on protectionist trade policy the differential support among less-educated respondents has in fact grown since the 1950s. Interestingly, the strongest educational gradient over our eighty-year sample period is the differential support among less-educated respondents for a government jobs guarantee.

The educational gradient with respect to support for *re*distribution is different: education mildly predicts more support for higher taxes on the rich and on oneself and more support for the government reducing income differences through higher taxes and aid to the poor. The more-educated also prioritize deficit reduction over tax cuts more than their less-educated counterparts. We further show that these educational differences in policy preferences exhibit very little trend over time, which is prima facie inconsistent with changing preferences for predistribution vs redistribution by education driving changes in party identification.

We then move to the "supply side" of predistribution policies, offerering new quantitative evidence consistent with the change in policy proposals documented by recent political histories of the Democratic Party. Famously, Bill Clinton (a Democrat) signed the North American Free Trade Agreement (NAFTA), strongly opposed by unions and less educated workers, as well as further opened up trade with China (Choi *et al.*, 2021). And Jimmy Carter (another Democrat) along with Clinton both played an important roll in advancing deregulation of large sectors of the U.S. economy. We attempt a more systematic analysis using roll-call votes in Congress, with the assumption that the party that holds the majority in the chamber controls the supply of votes. We focus on the House because the Democrats control the chamber from 1949 until 1994 with only one two-year exception. We show that from the 1940s until the mid-1970s, predistribution-related roll call votes constituted approximated fifteen percent of all House roll-call votes while Democrats held majorities. Beginning in the early 1980s, however, this share dropped, bouncing between five and ten percent through

[2]We will discuss in greater detail our measures of pre- and redistribution and how they compare to existing "economic policy" scales, but note briefly here as prominent examples the widely used DW-nominate dataset (which creates a single economic index along which members of Congress are placed) and the "economic scale" developed in Ansolabehere *et al.* (2006) (which is based mostly on answers to questions regarding taxes and transfers).

[3]Gallup begins fielding regular surveys in 1935, but only in the 1940s does it consistently ask respondents their education level. We provide more information about Gallup and our other surveys sources in Section 3.

2010 (the overlap of our data's sample period and periods of Democratic control of the House ends in 2010). Redistribution-related votes, however, remain stable over the entire sample period (at roughly eight percent of all votes).

Another measure of political supply are the class identity of politicians themselves (Carnes, 2013; Besley and Coate, 1997). We thus examine the education of politicians, as voters might naturally prefer candidates who educational backgrounds mirror their own. An advantage of this biography-based measure is that, unlike the roll-call votes, it is a proxy of supply that can be observed even when the party is not in control of Congress. We show that in the immediate post-war decades, Democrats in the House and Senate were far less likely to come from elite educational backgrounds (which we proxy as having graduated from an Ivy League institution) than Republicans. This pattern is flipped today, with the turning point occurring in the 1970s for the Senate and 1980s for the House. We show that this turn toward elite educational institutions is not driven by geographic migration of the parties—the pattern is largely unchanged after controlling for $state \times year$ fixed effects or simply dropping the Northeast states where the Ivies are located.

The Democrats' move away from their traditional support for predistribution is not a pattern we have uncovered but was in fact deliberate and advertised by party leaders (Geismer, 2022). The transformation of Democratic Party policy positions away from New Deal programs and towards more "market-friendly" positions began after Watergate and gathered steam and momentum with the "Atari Democrats", such as Paul Tsongas, Robert Reich, and Gary Hart, rising to prominence after the election of Ronald Reagan. As this faction of Democrats gained power within the party, forming the Democratic Leadership Council and the Progressive Policy Institute, they moved the policy platform further towards "redistribution", and away from the "predistribution" type policies our surveys ask about. This faction came to national power with the presidential election of its ex-leader Bill Clinton, and resulted in a mix of federal policies that both increased taxes (1993 tax increase) and transfers (EITC expansion), while also increasing pre-tax inequality (e.g. NAFTA, financial deregulation).

The final argument in our "positive case" for the importance of economic policy in explaining the educational realignments combines the demand- and supply-side of economic policy. Since 1948, Gallup has asked respondents "regardless of how you usually vote, which party is more likely to keep the country prosperous." The overall share saying the Democrats has varied in an expected manner, riding high in the 1960s and reaching lows during the

stagflation of the 1970s. Despite this variation in the overall view of the party, the education gradient for this question is steady from 1948 until the 1990s: the less educated are far more likely than others to say that the Democrats are the party to keep the country prosperous. Beginning in the 1990s, the gradient weakens and today it has now reversed. This relationship survives controlling for own party identification separately by year. Thus, conditional on whether an individual self-identifies as a Democrat or not, education today is a positive and significant predictor of agreeing that the Democrats are better for the economy whereas it was a negative and significant predictor before the 1990s.

The last section of the paper examines whether social issues better predict the change in partisan identification by education that began in the 1990s. Before summarizing our evidence on this specific question, it is worth emphasizing two points. First, in any given year, a respondent's answers on social-issue questions is indeed a powerful predictor of their partisan identification. Second, though we find only a limited role for social issues in triggering the realignment of less-educated voters from the Democrats to the GOP in the 1990s, it certainly does not follow that other realignment must also be explained by economic policy shifts (see, e.g., Kuziemko and Washington (2015), where the authors attribute essentially all of the 1960s-era loss of white Southern Democrats to JFK's introduction of the Civil Rights Bill in 1963).

We first show that the educational gradient for most social-issue questions (e.g., abortion, affirmative action, church-going) has been unchanged over the past several decades. Second, the self-reported weights on economic versus social issues (as proxied by surveys asking respondents to list the most important problem facing the country) has shown no secular trend and is instead dominated by the business cycle. Finally, since the 1970s, there is no significant educational gradient in the propensity to list economic problems as most important—the only significant shift was that more-educated respondents used to differentially list foreign policy as a major problem, though that tendency ended by the 1970s.

Our paper is most directly related to the recent work on the changing relationship between education and partisan identity (what Thomas Piketty has termed the "Brahmification of the left"). Explanations for this fact have proliferated in both economics and political science, many of them connected to conjectures about changes in voter policy preferences, for example the incidence of globalization or technology on low-education workers (Dorn *et al.*, 2020). Few of these explanations have focused on the changing policy mix offered by political parties as an independent driver of educational re-alignment.

We also related to the economics and political science literature on predistribution and redistribution, which gained a lift when Ed Miliband, as UK Labour party leader, made it a core part of the Labour's "New Agenda" in 2012.[4] Hacker (2011) defines predistribution as 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". Bozio *et al.* (2020) and Blanchet *et al.* (2020) argue that differences in predistribution better explain differences in inequality across countries than do differences in redistribution. Rodrik and Stantcheva (2021b) highlight predistribution in their policy matrix and in Rodrik and Stantcheva (2021a) argue that the key future challenge of capitalism is the production of good jobs, a central "predistributionist" position.

The exceptions noted above notwithstanding, modern economists on both the right and left of the political spectrum have tended to discount the importance of government policy in shaping the pre-tax-and-transfer distribution. A distinguished theoretical literature in public finance (Diamond and Mirrlees, 1971) and law and economics (Kaplow and Shavell, 1994) has argued that implementing distributional goals is best accomplished via ex-post redistribution via taxes and transfer. This theoretical argument has been brought into public policy recommendations by both conservative and liberal economists. For example, Greg Mankiw writes in the *New York Times* that "policymakers do not have the tools to exert such a strong influence over pretax earnings, even if they wanted to do so.", while Brad DeLong writes "I can't see the mechanism by which changes in government policies bring about such huge swings in pre-tax income distribution."[5]

While acknowledging that the efficacy of predistribution versus redistribution is an open question, in this paper we focus on the *positive* questions of which groups support predistribution and whether the changes in partisan positions on predistribution can explain observed shifts in partisan identity.

The paper proceeds as follows. In the next section, we discuss the conceptual difference between predistribution and redistribution and how it relates to the literature. Then we introduce many of our data sources and use them to reproduce the changing educational composition of Democratic voters already documented in past work. In Section 5 we document the strong support among less educated voters for "predistribution" policies and contrast this pattern with that between education and support for redistribution. In Sections 6 and

[4] `https://www.theguardian.com/commentisfree/2012/sep/12/ed-miliband-predistribution`

[5] See `https://scholar.harvard.edu/mankiw/files/inequality_final.pdf` for the Mankiw quote and `https://delong.typepad.com/sdj/2006/08/the_primacy_of_.html` for the DeLong quote.

7 we argue that Democratic politicians have reduced their support for predistribution since roughly the 1970s, which is the same point at which these politicians themselves began to come from elite educational institutions. In Section 8 we document that less educated voters began to disapprove of Democratic *economic* policy relative to their more-educated counterparts in the 1980s. We address the counter-argument that social issues instead triggered the realignment in Section 9. The final section offers a provisional conclusion and outlines our next steps.

2 Predistribution vs Redistribution in Electoral Competition

Standard models of distributive politics assume that voters only care about consumption, or after-tax income. Parties then compete by offering tax-and-transfer schedules to attract voters, leading to the tax policy preferred by the median voter being implemented. With a linear tax and uniform transfer, this model gives rise to the famous Meltzer-Richards result, where electoral politics results in redistribution from the top to the middle and bottom.

A large literature in economics and political science has shown that voters partisan identification or policy preferences are only weakly related to potential after-tax increases in income. For example, (Barnes, 2015) shows in British survey data that less educated voters do like more progressive taxes, but also favor overall lower tax rates, showing it is the incidence of taxes on pre-tax income, not post-tax, that motivates tax positivity. As another example,

There are a few reasons why voters may care about their pre-tax income independently of their post-tax income, or why they might care about predistribution-type policies versus redistribution. First, voters might be making relative comparisons with their social reference group (Killian *et al.*, 2008), and the metric of the comparison could be pre-tax income (perhaps proxying for talent or human capital). Second, 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. Jamming that signal with policy could be preferred by voters with strong priors that they are low productivity. Third, voters may believe that the tax and transfer system is more opaque, corrupt, or inefficient than more transparent policy interventions (Kuziemko *et al.*, 2015).

If voters have preferences over their pre-tax income, then electoral competition over tax policy may not capture the dimension of redistribution that is salient to voters. In our data it is also quite easy to distinguish preferences for redistribution from predistribution, and as

we show below these are not highly correlated across voters.

On party competition and policy making, while influential, the Meltzer-Richards framework has not been terribly empirically successful. A widely noted empirical puzzle thrown up by this model is that redistribution should increase with pre-tax inequality, a result which is remarkably difficult to find in the data (see Acemoglu *et al.* (2015) for a review). A second noted puzzle is that parties solely concerned with maximizing winning should converge on policies that make the median voter indifferent between the two parties, i.e. it predicts policy convergence. A third puzzle is that parties have to implement the policies they campaign on: i.e. there is no commitment problem.

More realistic models incorporate parties with policy preferences, so that left wing parties intrinsically favor more distribution compared to right-wing parties, competing in multidimensional policy spaces. For example, a classic argument (formalized in Lee and Roemer (2006)) is that the Meltzer-Richards model has a too simple policy space: voters care about non-tax policies (in particular race in the Lee and Roemer model). So conservative parties can win with regressive tax policies by offering racially conservative policies that appeal to enough voters to win elections. In the Lee and Roemer model, party policy preferences are set by within-party bargaining between "opportunists" who are focused on winning, and "militants" who are focused on implementing the policies favored by the party base.

Our implicit framework is similar to Lee and Roemer's, but instead of race being the second dimension of politics, it is predistribution. The political history discussed in the introduction suggests that rising educational attainment in swing constituencies and within-Democrat party bargaining success of "opportunists" in the 1970s and 1980s led to more weight being put on highly-educated voters policy preferences, which favor redistribution over predistribution, and this lost Democrats support among low-education voters. Whether or not this was optimal for the Democrats is a question we return to in the conclusion.

3 Data and methodology

We make use of various data sources in this project. We provide a brief summary below and far greater detail in Appendix B.

3.1 Data

Like past work on educational realignment, we make use of the American National Election Study (ANES), the General Social Survey (GSS), and the Cooperative Congressional Election Study (CCES).

The vast majority of our observations, however, come from less widely used sources. In particular, we make heavy use of historical data from survey corporations, for the most part housed by iPoll 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).

We provide summary statistics by data source and time period in Table 1.

3.2 A simple methodology for summarizing education 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. A high school degree simply meant something different in 1940 than it does now. Regressing each year a dummy for Democratic self-identification on a dummy for having graduated high school separately by year from 1940 through today would create a trend of annual coefficients that would mix any actual change in the educational gradient of partisan identification with changes in the selectivity of a high school education.

We take the following approach to this challenge. Across all of our various datasets, we can cleanly identify three educational levels: (*i*) High school graduation or less; (*ii*) some college or post-secondary education; (*iii*) college BA or more. We call this variable $Educ3$.. We then use the Census and ACS to estimate the predicted value of years of education *conditional* on (*i*) the self-reported value for $Educ3$; (ii) Race (White, Black, all others); (*iii*) Sex; (*iv*) ten-year age bin (21-30, 31-40, etc.) and (*v*) year of observation (interpolated between Census years when needed). We call these conditional means *AdjYearsEduc*.

A few examples illustrate the amount of information added by this procedure. The mean years of education from 1940 through today for those with $Educ3 = 1$ is equal to 10.36. But

for that same category of $Educ3 = 1$, our *AdjYearsEduc* is equal to 5.28 for a Black man age 51-60 in 1940 and is equal to 11.43 for a white woman age 31-40 in 2010.

In almost all of our analysis over time, we estimate the educational gradient for a given outcome (e.g., party ID, support for the minimum wage, support for progressive taxation) separately by year or five-year intervals (depending on how thick the data are for that particular outcome) and conditional on flexible controls for age at the time of observation. That is, for each time period p, we estimate:

$$y_i = \beta^p AdjYearsEduc_i + f(a) + \mu_s + e_i \quad (1)$$

where y_i is the outcome of interest, $f(a)$ are flexible controls for age (typically age fixed effects in five-year bins), and μ_s are survey fixed effects (e.g., if in $p = 1947$ we had three surveys for a given outcome, say a Gallup survey in May and December and a Roper survey in January, each would get its own fixed effect), which therefore subsume date fixed effects. We will then typically plot the β^p values over time to display long-run trends.

4 The long-run educational gradient of Democratic self-identification

Our first result is to reproduce the now familiar result that respondents who identify as Democrats have become relatively more educated over time. Figure 1 begins by regressing an indicator for self-identifying as a Democrat (so those who identify as Republicans, Independents or anything else are coded as zero) on the *Adj. years schooling* variable, 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.

The first series of the figure shows that throughout the first five post-war decades, more years of schooling was a strong, negative predictor of Democratic self-identification. From 1960 through 1980, this tendency was if anything growing in magnitude, though overall from 1942 until the early 1980s, the negative gradient is relatively stable. The differences were large: in the early 1960s, every additional year of schooling was associated with a three-percentage-point decline in the predicted probability of identifying as a Democrat (or roughly a six percent decline, given that on average 49 percent of respondents in our data identify as Democrats in the early 1960s).

Sometime in the late 1980s through early 1990s an inflection point occurs, and this tendency begins to decline until the early 2000s, the educational gradient hits zero. Today,

an additional year of education predicts a two-percentage-point increase in the likelihood of identifying as a Democrat, an economically meaningful magnitude given that respondents are relatively evenly divided among Democrat, Republican, and all other responses.

Because less-educated whites are often singled out as a group that has differentially turned away from the Democrats, in the second series we replicate the first but include only whites. Comparing the two series, the white educational gradient has increased slightly more since the 1970s relative to the full sample.

While we prefer our *adjusted* measures for years of schooling, the third series shows that we find very similar results if, for all years and all demographic groups, we simply code HS graduate or less as 12 years of schooling; some college as 14 and BA or more as 16. Similarly, using a simple college dummy in the fourth series produces a similar pattern. The similar patterns suggest that much of the concern about changing selection into educational categories over time is addressed by the fact that regressions are estimated separately by year so that the age controls are unrestricted across time.

Our larger sample sizes, combining the ANES with Gallup and other sources, allows us to examine the same educational gradient in partisan identification by race and by region, which we do in Appendix Figures A.1 and A.2. For non-whites, there is a similar, but more muted trend in the educational gradient. Given the large baseline support for Democrats among non-white voters, the presence of significantly increasing, even if small, differentials by education is of note.

Turning to regional heterogeneity, while most regions exhibit very similar patterns as the national trend, the South is an exception, with higher education voters being initially significantly *more* Democratic leaning (prior to Civil Rights), then leaving the party, and finally coming back along with the national trend. As we show in the Appendix, this is driven by whites, and is likely part of the overall Southern realignment occuring after Civil Rights (Kuziemko and Washington, 2018).

Figure 1 presents the key pattern our paper tries to explain. We now begin the positive case for our argument: that Democratic politicians moving away from predistribution policies and toward more market-based economic policies was a major trigger of less-educated voters moving away from the party beginning in the 1980s.

5 Preferences for redistribution and predistribution since the 1940s

As noted in the introduction, many papers simply combine economic-policy preferences into a single index. In this section, we show that separating economic policies into predistribution and redistribution creates very different constituencies in terms of education.

We have searched for questions on pre- and re-distribution from a variety of sources. The basic rules we have used on whether to include a particular survey question or not is its comparability over time. For example, we would *not* include a question about the "Bush income tax cuts" because it is not directly comparable to other policies across time. Instead, we would include questions about income tax cuts in general.

5.1 Survey questions

Our questions on predistribution include topics such as the minimum wage and a federal jobs guarantee. Questions on redistribution focus mostly on taxes. The data appendix provides the exact wording of each question. We provide illustrative examples below.

5.1.1 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. We rely largely on Gallup for this topic area, which since the 1940s has asked individuals whether unions should have more, less or the same amount of influence that they currently enjoy.

Trade policy. In more modern datasets, the term "tariffs" are not often used, and instead respondents are asked about whether there should be more or less restrictions on imports. For example, since 1986 ANES has asked a survey question of the form: "Some people have suggested placing new limits on imports in order to protect American jobs. Others say that such limits would raise consumer prices and hurt American exports. Do you favor placing

new limits on imports, or not?" 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?" We combine all of these questions to create a single series whereby answers are increasing if the respondents feels that imports should be limited via tariffs or other mechanisms.

Industrial policy. These questions come largely from the GSS and ask respondents whether the government should aid struggling businesses so as to protect jobs.

5.1.2 Redistribution questions

As above, we focus on questions that are comparable over time. In the case of tax-and-transfer policies, we have two questions that are asked consistently over time.

Tax the Rich More. We include GSS questions that ask whether the respondent considers that the amount high income earners are paying in taxes is too low.

Tax Me More. We also rely on GSS questions that ask whether the respondent considers that the amount they are themselves paying in federal income tax is too low.

5.1.3 Educational gradient in support for predistribution, 1940s-today

The series with hollow (solid) markers in Figure 2 summarizes how years of education predicts support for predistribution (redistribution) policies. To directly compare the various pre- and re-dstribution preferences in one graph, we standardize all outcomes to have a mean of zero and a standard deviation of one.

In this main graph, we show only those predistribution questions for which we have data going back to at least the 1950s, as otherwise the graph becomes too cluttered. In the Appendix, we show supporting evidence from related questions with shorter sample periods. We take two steps to further minimize clutter: we estimate coefficients by five-year bins (instead of annually, as in Figure 1) and we do not include confidence intervals. Appendix Figure A.4 shows each outcome separately with confidence intervals.

Figure 2 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 is perhaps the most striking result in that the magnitude is both large and relatively 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. A similar results obtains for whether

the government should help struggling industries in order to protect jobs, but because this question is not asked before the 1980s, we cannot obtain longer-run trends and we relegate this outcome to the Appendix (see Appendix Figure A.4).

The second series in Figure 2 shows a consistent, negative association between years of education and 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.

The third series documents that more educated respondents are less likely to agree that unions should have greater influence. The educational gradient is roughly equal to -0.05 the entire sample period, with is a recent uptick during the Trump administration (though the gradient remains negative in sign).

The final 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 (though like our other outcomes is on average negative over the long sample period). In the 1940s and 1950s, there is little educational gradient in views toward trade. In general, trade policy was not particularly salient in U.S. politics during this period as the country had few industrial rivals in the immediate post-war decades and a Cold-War, bi-partisan consensus contended that the US should provide favorable terms of trade to countries at risk of falling to the communists (Choi *et al.*, 2021). 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 in magnitude. Since the 1990s the educational gradient has somewhat softened but it still remains large and negative today.

5.1.4 Educational gradient in support for redistribution, 1940s-today

Whereas the educational gradient for predistribution policies is large and negative, the gradient for redistribution is positive and generally smaller. Both preferences for progressive taxation (which we capture with questions that ask if the rich in particular should pay more in income taxes) and own taxation are generally correlated with higher levels of education, though this relationship is not very large in magnitude.

5.2 Support for pre- and re-distribution by race

Because much of the political realignment literature has focused on white Americans, in Figure 3 we reproduce Figure 2 excluding any respondents who do not identify as white and find much the same patterns. Given that, especially historically, non-whites are substantially less educated than white Americans, it could have been the case that pro-predistribution views of non-whites drive the educational gradient we have documented so far.

Given the small sample size, the educational gradient among only non-whites is very noisy and we relegate it to the Appendix. Instead, here we examine views toward pre- and re-distribution by race, setting aside for the moment differences by education. We thus replicate our main Figure 2 but instead of using years of education as our marker for economic status, we use an indicator variable for identifying as white.

Figure 4 shows similar patterns when an indicator variables for white is used as a marker of economic status instead of years of education.

In this section we have shown that grouping all economic policy into a single index obscures important heterogeneity in the relationship between economic preferences and educational attainment. In particular, we have shown that education has, at least since the 1940s, predicted substantially less support for policies meant to reduce differences in pre-tax-and-transfer income ("predistribution") but, if anything, has predicted somewhat greater support for tax and transfer policies aimed at reducing differences in disposable income ("redistribution"). Of course, past work has shown correlations between education and certain specific policy questions (e.g., Choi *et al.*, 2021 shows a strong, negative relationship between education and support for NAFTA in particular and free trade more generally), but we believe our analysis in this section is novel in terms of documenting these preferences over several policy domains and over the last eight decades.

6 Democratic politicians' supply of pre- and re-distribution policies

The previous section has shown a robust demand for predistribution policies among less-educated Americans relative to their more-educated counterparts. Moreover, with some minor exceptions, this relationship has been relatively stable since the 1940s. Thus, if economic policy shifts can explain why less-educated Americans have left the Democratic Party, we will need to show that Democratic politician moved away from predistribution.

6.1 Data

We make use of two data sources that divide post-war legislation into policy categories, and code these categories into redistribution and predistribution.

6.1.1 Comparative Agendas Project

We make heavy use of data from the Comparative Agendas Project (CAP).[6] Among many other contributions, CAP groups into policy-related categories and sub-categories all roll-call votes in both houses of the U.S. Congress since 1947, which coincides almost perfectly with the beginning of our sample period in the previous section.[7]

We take their categorizations as given, but then group their categories and sub-categories ourselves into "predistribution" and "redistribution." For predistribution, we include the sub-category "General Domestic Macroeconomic Issues" (the American Rescue and Recovery Act is given as an example); the sub-category "Industrial Policy"; the sub-category "Price Control and Stabilization"; the entire category of Labor and Employment; the sub-category "Vocational Education"; the entire category of "Transportation" (most examples involve infrastructure projects); and the trade-related sub-categories "Productivity and Competitiveness of U.S. Business" and "Tariff and Import Restrictions, Import Regulation and Outsourcing" (examples given for both categories involve legislation concerned with effects of trade on U.S. workers).

For redistribution, we include the sub-category "National Budget and Debt," the sub-category "Taxation, Tax policy, and Broad Tax Reform," and all of the category of "Social Welfare" (examples given largely include safety-net policies); and three housing-related sub-categories of "Low and Middle-Income Housing Programs and Needs," "Elderly and Disabled Housing," and "Homeless Issues."

6.1.2 Bateman et al. data

We also use roll-call vote data from Bateman *et al.* (2018). Their series ends in 2010, but given that Republicans largely control the House after 2010, this truncation costs us little in our effort to document the trend of roll-call votes during Democratic Speakerships.

[6] See `https://www.comparativeagendas.net/` for the CAP website, which includes the dataset we use in this section as well as many others.

[7] 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`.

We code the topics in Bateman *et al.* dataset along redistribution and predistribution lines. We code predistribution as topics having to do with labor markets, price and wage controls, monetary policy, infrastructure and industrial policy, and international trade. Redistribution are topics having to do with transfers and poverty alleviation as well as taxation and budget issues.

6.2 Identifying roll-call votes with political parties

Throughout the analysis in this section, we make the assumption that the party in control of the chamber of Congress controls the supply of roll-call votes in that chamber. We focus on the House of Representatives, because Democrats were in near-constant control of this chamber in the post-war period until 1995, allowing us a long time-series to study any changes in the composition of roll-call votes while a Democrat occupied the position of Speaker of the House.

Is the assumption that House roll-call votes proxy for the preferences of the party in control of the House valid? The Republicans formalized this practice with the so-called "Hastert Rule," and since Denny 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.

A particularly famous exception to this rule is instructive. A Democratic Speaker of the House (Thomas Foley) introduced a bill in the fall of 1993 that would implement NAFTA, even though fewer than half of his Democratic colleagues supported the bill and it would only pass due to the majority of Republicans supporting it. While the majority of Democratic House members did indeed oppose NAFTA, the *leader* of the Democratic Party (President Bill Clinton) supported it. So while the NAFTA House vote technically violates the rule, it is *not* the case that Democratic leadership opposed a bill that came to the floor of the House while the party controlled the chamber.

6.3 Results

The first panel of Figure 5 shows the share of pre- and re-distribution roll-call votes in the CAP data every year that the Democrats are in control of the House from 1947 until 2009. The gaps in the series occur when Republicans gain control of the chamber, which, as noted, is very infrequent until the mid-1990s.

The figure shows that while predistribution figured prominently in the Democrats House agenda in the decades following World War II, the share of roll-call votes in predistribution-related policy categories begins to decline in the late 1970s. From the late 1940s until the late 1970s, predistribution figured in roughly ten percent of all roll-call votes during Democratic Speakerships. From the 1980s onward, this share fell to just over five percent.

The pattern for the share of votes concerning redistribution is more stable over time. While there were brief spikes in the Kennedy/Johnson era, for the most part redistribution has represented a somewhat constant five percent of all roll-call votes during periods of Democratic House control.

The second panel shows that we obtain very similar patterns if we instead use the Bateman *et al.* (2018) data. In this case, the decline in Democratic introduction of predistribution policies occurs in the early 1980s instead of the late 1970s. And the Bateman *et al.* (2018) series shows a somewhat higher proportion of predistribution policies in the immediate post-war decades than does the CAP data. But the main conclusion that predistribution policies are substantially lower in the 1980s and 1990s than previously holds. Additionally, the two data sets coincide very closely in the share of redistribution roll-calls votes.

7 The supply of Democratic *politicians*

The previous section showed that Democratic politicians in the late 1970s and early 1980s began to shift away from supporting predistribution policies that they have favored in the decades immediately after World War II. In this section, we examine a different margin of political supply: the biographies of politicians themselves. We show that around the same period, Democratic legislators themselves became much more likely to have elite educational backgrounds, relative both to Democrats from previous decades and their Republican counterparts. This shift in the educational background is in itself a change in political supply that might differentially appeal to more educated voters themselves as well as supply an explanation for why Democratic politicians would move away from policies supported by their traditional base of less-educated voters.

7.1 Biographical data

We obtain Congressional biographies from *The Biographical Directory of the United States Congress*.[8] We create a variable for having an Ivy-league education by searching for the names of the eight Ivy-league institutions. This procedure will include post-baccalaureate education such as law or business school.[9] One advantage of this measure of supply relative to the roll-call data is that it is possible to measure for all members of Congress, regardless of whether their party is in power.

7.2 Results

Figure 6 shows the Ivy share of Democrats and Republicans in the raw data, panel (a) for the House and (b) for the Senate. In the two decades following the war, roughly 15 percent of House Democrats hail from Ivy league institutions, while the Republican share is twice as high. The Ivy backgrounds of Republicans steadily declines from the late 1970s until the early 2000s. The Democrats, by contrast, are slowly increasing their Ivy share from the 1940s until the 1980s, when they hit an inflection point and begin a much more rapid increase. Today, House Democrats are over three times more likely to have an Ivy background than their Republican counterparts.

A somewhat similar pattern emerges in the Senate. Senate Republicans enjoy a smaller Ivy advantage over Democrats in the early part of our sample period than do their House counterparts. By the mid-1970s, Senate Democrats begin to increase their Ivy share while Senate Republicans follow their House counterparts in steady decline in terms of Ivy backgrounds.

Of course, a natural explanation for the results in the first two panels of Figure 6 is the geographic migration of the parties over our long sample period. At mid-century, Republicans were dominant in the Northeast, home to all eight Ivy institutions, while today the region is heavily Democratic. Thus, any tendency of members of Congress to attend institutions in their home state or region could drive our results.

The small sample size of the Senate (only two observations per state, often from the same party) limits robustness checks, but we can further probe the House results. That is, we estimate variants of the following regression, separately for each two-year Congressional

[8] We scraped the biographical text from `https://bioguide.congress.gov/search`.

[9] We search for "Yale University" or "Yale College" and not simply "Yale" so we avoid false positive such as a representative graduating from a Yale High School or Brown High School.

term p in our data:

$$Ivy_{isp} = \beta^p Democrat_{ip} + \mu_s + e_{isp}, \tag{2}$$

where Ivy_{isp} is an indicator for legislator i from state s and Congressional term p having an Ivy-league educational background; $Democrat_{ip}$ is an indictor for legislator i in term p being from the Democratic Party and μ_s are state fixed effects. Note that because we estimate this equation separately for each year, the state fixed effects are allowed to vary across years in an unrestricted manner.

The third panel of Figure 6 shows that the House results are not driven by changes in the geographic composition of the parties. The first series plots the estimated β^ps from equation (2) without state fixed effects, to serve as a baseline. These coefficients merely difference the means plotted in panel (a) as well as provide confidence intervals. Democrats exhibited a statistically significant Ivy *disadvantage* in the 1940s. By the early 2000s, they enjoyed a statistically significant Ivy *advantage*, which has only grown since. The second series adds state fixed effects (which, again, have unrestricted effects across time) and results are almost completely unchanged. The third series is identical to the second but we drop all states with an Ivy institution. The large Democratic increase in the Ivy share over our sample period is only marginally attenuated in this specification.

8 Respondents' views of the parties' economic platform by education

We have shown in Section 5 that less-educated Americans support predistribution more than their more-educated counterparts and have for most of the post-war period. In Section 6 we documented a shift away from these policies in the roll-call votes when Democrats controlled the House of Representatives. If this shift away from predistribution was indeed an important factor in the exodus of less-educated Americans from the Democratic Party, then these respondents should register their dissatisfaction with the party's *economic* platform.

8.1 Data and estimation

In this analysis, we rely largely on Gallup. Since the 1940s, 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."

We then estimate, separately by year t, the following regression:

$$Democrats_{it} = \beta^t Adj.\ years\ school_i + \gamma X_i + e_{it}, \tag{3}$$

where $Democrats_{it}$ is an indicator for respondent i answering that the Democratic Party is the best to keep the country prosperous. As a non-trivial share of respondents answer the survey question saying neither or both, we will also show results with *Republicans* as the outcome.

8.2 Results

The first series of panels (a) and (b) of Figure 7 simply plots the mean of the outcome variables. Consistent with Democratic presidents presiding over strong economies in the early and mid-1960s, the share of Gallup respondents (regardless of their educational attainment) answering that Democrats are the better party to keep the country prosperous peaks during this period (see Figure A.6 in Appendix). Conversely, this share hits its lowest points during the "malaise" years of the late 1970s under Democratic President Carter and the 1980s boom during the Reagan Era.

The second series shows that despite large swings in the outcome variables mean, the relationship between education and belief that the Democrats (Republicans) are the better (worse) party to keep the economy prosperous is very stable from the 1940s through the 1980s. Each additional year of education during this period is associated with a decrease of 3-4 percentage points in the likelihood of saying that the Democrats are better for the economy (and roughly a 2-3 point increase in the likelihood of saying Republicans are instead).

However, after four decades of relative stability, the relationship between education and the preferred party to keep the economy prosperous begins to shift in the early 1990s, as greater levels of education begin to predict a preference for the Democrats on this issue. By the end of our sample period, years of education is a positive and statistically significant predictor that a respondents prefers the Democrats on the issue of economic prosperity.

One natural concern is that the results in the figure are merely a consequence of party-switching more generally and in fact have no connection to the decline in Democratic politicians' supply of predistribution policies. Suppose that less-educated individuals leave the Democratic Party entirely over cultural issues and actually still prefer Democratic economic policies (they might undertake such a switch because the Democratic Party switched its

positions on cultural issues in a manner these respondents find unattractive or because the less-educated respondents begin to put more weight on cultural issues in choosing their party identification). The concern is that, merely to avoid cognitive dissonance, such respondents, now identifying as Republicans or at least no longer Democrats, tell survey-takers that the Republicans are in fact the better party on economic issues as well.

We do our best to address this concern by including in equation (3) indicator variables for party identification (dummies for Democrat and Republican, leaving independents/others as the omitted group). This exercise asks, compared to other respondents with the same party identification, how does education predict the party you report having the better economic platform? This specification is very demanding, as most individuals do indeed answer that the party to which they belong has the better plan to keep the country prosperous. We also allow, as usual, these control variables to have different effects over time. As we lose a lot of precision by adding these party-identify dummies, we group the data into five-year bins.

The final series shows that, even controlling flexibly for party identification, the same basic pattern holds. While the coefficients are (as expected) much smaller in magnitude, in the four decades after WWII, education is a negative (positive) predictor of identifying the Democrats (Republicans) as the better party to guide the economy. Most of the coefficients that we plot during this period can be distinguished from zero, despite the demanding specification. This relationship shifts in the early 1990s and by the end of the sample period has become statistically significant but of the opposite sign relative to the post-war relationship.

9 Changes in views on or salience of social issues

We have shown stable differences in demand for predistribution versus redistribution by education, along with declining supply of predistribution policies by the U.S. center-left party. In order to argue that the latter drove the change in party identification, we need to rule changes in demand or supply on other dimensions. Perhaps foremost among these alternative dimensions is increasing cultural liberalism among the more educated. In this argument, the increasing education difference in party identification is driven by changes in non-economic cultural values by education (Enke *et al.*, 2021).

9.1 Have the educated become more liberal on social issues?

Figure 8 explores this possibility using the same specification as equation (1), again using a set of survey questions that are asked consistently over time. These questions include attitudes towards Jews, abortion, women in politics, church attendance, and affirmative action.

In general, more educated respondents are more socially liberal, but this tendency is not new. With one exception (affirmative action, which we return to below) education predicts more liberal opinions over our entire sample period, with little variation across time. The only educational gradient that is changing over time pushes against the idea that education is increasingly associated with cultural liberalism: less-educated Americans are in fact converging over time with their more educated counterparts on the idea that men and women should have equal roles in society.

We replicate this analysis for white respondents only in Figure 9. We see here that the negative educational gradient in Figure 8 was driven by differences across racial groups, as it disappears when examining only whites. Again, we find no evidence that the association between education and cultural liberals has increased over time among white respondents.

9.2 Salience of economic versus non-economic issues

A final possibility is that while the answers that more- and less-educated individuals give on social-issue questions have not diverged over time, the weights that voters put on these non-economic issues have increased over time. Enke *et al.* (2021) note that if salience of economic issues declines over time, as we might expect as a country's per capita income grows, then "luxury goods" such as concern for social issues will have growing predictive power over individuals' partisan identity.

We can assess this argument using Gallup's "Most Important Issue" question, which consistently asks respondents "What do you think is the most important issue facing American?", with responses harmonized into topics by Gallup. Appendix Figure A.7 shows that while there is an obvious countercyclicality to respondents saying the economy is the most important problem, there is no systematic trend.

We further show that the educational gradient in salience of economic issues is both significant and relatively constant over recent decades. We show results from our main specification in Figure 10. The top panel shows clearly that there is no trend towards the educated

no longer differentially thinking that the economy is not the most important issue. If anything, it has increased since the immediate postwar period. The bottom panel shows the next most common category, foreign policy, which is much less differentially salient by education.

10 Conclusion and Next Steps

We have presented what are, to our knowledge, some new facts about the last 80 years of U.S. politics that help explain the realignment of low education voters away from the Democratic Party. Firstly, that there are stable differences by education in the *types* of equalizing policies preferred. Low-education voters seem to consistently favor "predistribution", or policies that target the pre-fiscal distribution of income. High-education voters, on the other hand, consistently favor "redistribution", or policies that use the tax system to redistribute. Alongside the stability of this educational gradient in preferences, we see a change in the supply of policies and candidates from the Democratic Party, with a decreased emphasis on predistribution in roll-call votes and increased educational attainment of House candidates. The payoff for the Democratic Party is that high-education voters increasingly see the Democratic Party as better for the economy, even conditional on own party identification.

Thus far our analysis has been largely descriptive, documenting trends over time. We plan on including identified estimates of the role of demand vs supply of predistribution and redistribution in a future draft. For now, the trends we have documented suggest that a neglected cause of Brahminification of the left lies not with changes in the preferences of voters, but rather changes in policies and candidates offered by the center-left. It remains a question for future research whether this was an optimal response by the party to other circumstance, such as increasing educational attainment, civil rights, or changing policies of the Republicans.

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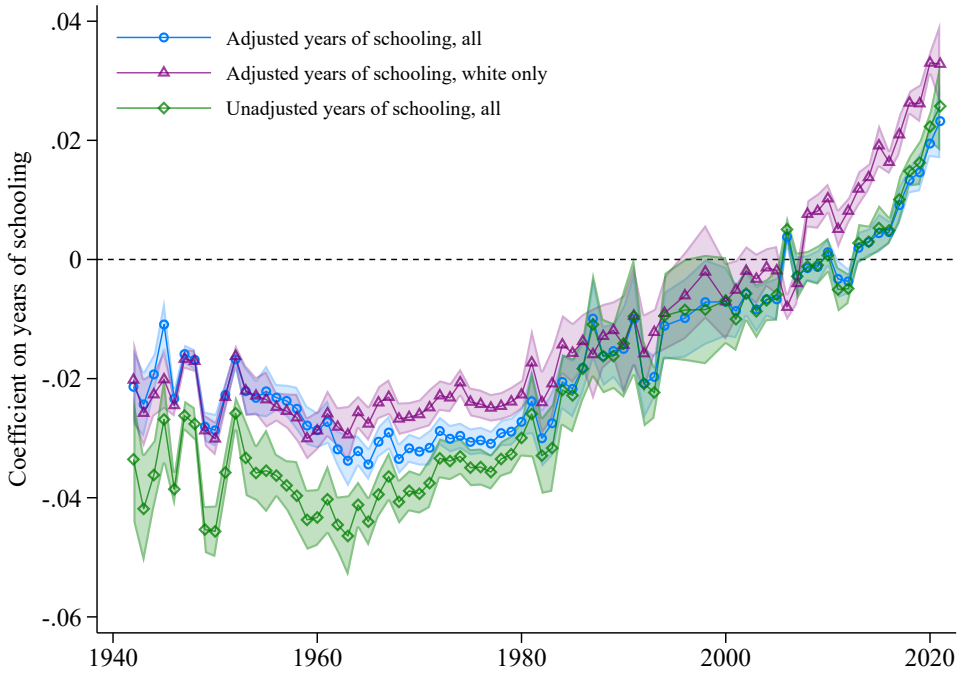
Table 1: Surveys used in the main analysis, grouped by decade

Survey	Decade	Observations	Share college graduates	Share women	Share white
ANES	1950	6,549	0.08	0.54	0.89
ANES	1960	11,568	0.11	0.56	0.87
ANES	1970	9,909	0.15	0.57	0.87
ANES	1980	9,094	0.19	0.56	0.80
ANES	1990	8,932	0.22	0.54	0.76
ANES	2000	6,656	0.27	0.54	0.73
ANES	2010	9,880	0.32	0.52	0.71
CCES	2000	90,284	0.27	0.52	0.74
CCES	2010	366,988	0.28	0.52	0.73
CCES	2020	58,653	0.32	0.52	0.70
GSS	1970	10,187	0.25	0.53	0.88
GSS	1980	13,782	0.32	0.56	0.82
GSS	1990	12,880	0.43	0.55	0.82
GSS	2000	14,502	0.48	0.54	0.77
GSS	2010	11,476	0.51	0.55	0.74
Gallup	1940	48,848	0.09	0.50	0.93
Gallup	1950	18,183	0.08	0.50	0.92
Gallup	1960	1,562	0.11	0.52	0.90
Gallup	1970	10,055	0.18	0.52	0.87
Gallup	1980	6,845	0.20	0.53	0.87
Gallup	1990	5,522	0.25	0.52	0.80
Gallup	2000	25,196	0.30	0.52	0.79
Gallup	2010	58,757	0.32	0.51	0.68
Gallup	2020	2,861	0.37	0.51	0.68

Notes: The table shows the number of observations for each data sources used through the analysis, grouped by decades. The third column shows the share of college graduates in each dataset, the fourt column shows the share of women and the last columns shows the share of white respondents.

Figure 1: Democratic Party identification by education



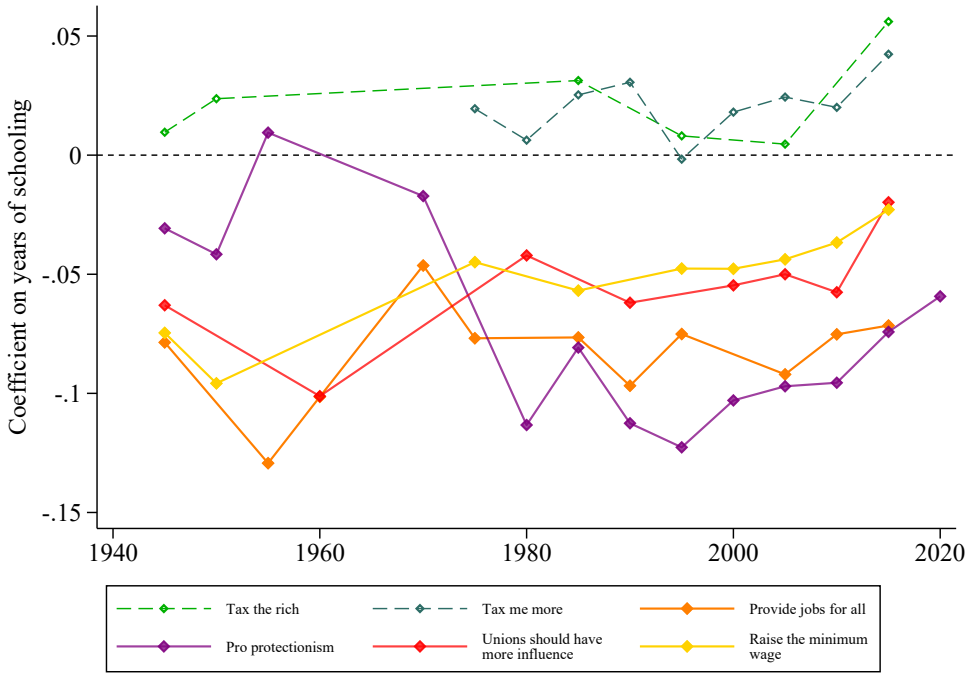
Source: ANES, CCES, Gallup, and GSS as described in Table 1

Notes: The first series plots the estimated β^t from the following regression estimated separately for each year t:

$$Democrat_{is} = \beta^t Adj.\ years\ of\ school_i + \mu_s + \mathbf{Age}_i + e_{is},$$

where $Democrat_{is}$ is an indicator for whether person i in survey s identified as a Democrat (as opposed to a Republican, Independent, other or nothing, all coded as zero), *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 3), μ_s are survey (which subsume date) fixed effects, as we often have several surveys per year and $\mathbf{Age}_i$ is a vector of age-in-five-year-bin dummies. 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.

Figure 2: Preferences for pre- and re-distribution by education



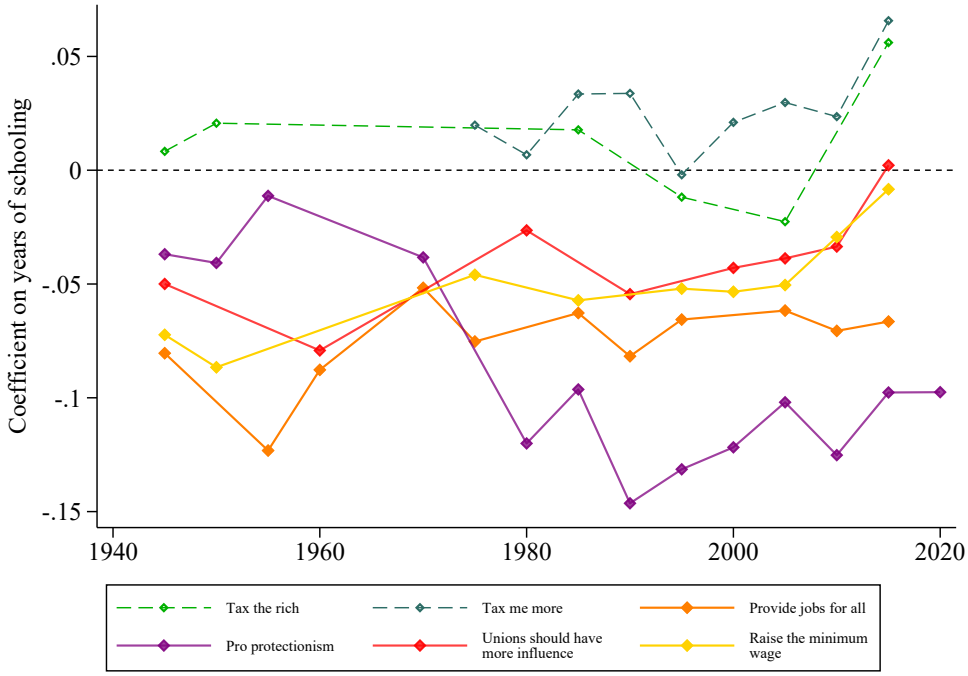
Source: ANES, Gallup, and GSS as described in Table 1

Notes: This figure plots the coefficients β^p from the following regression estimated separately for each five-year period p:

$$y_{is} = \beta^p Adj.\ years\ of\ school_i + \mu_s + \mathbf{Age}_i + e_{is},$$

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 3), μ_s 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. Detailed survey questions for each policy are displayed in Appendix B. We suppress confidence intervals to reduce clutter, but we plot each policy question separately along with 95-percent confidence intervals in the Appendix.

Figure 3: Preferences for pre- and re-distribution by education (white only)



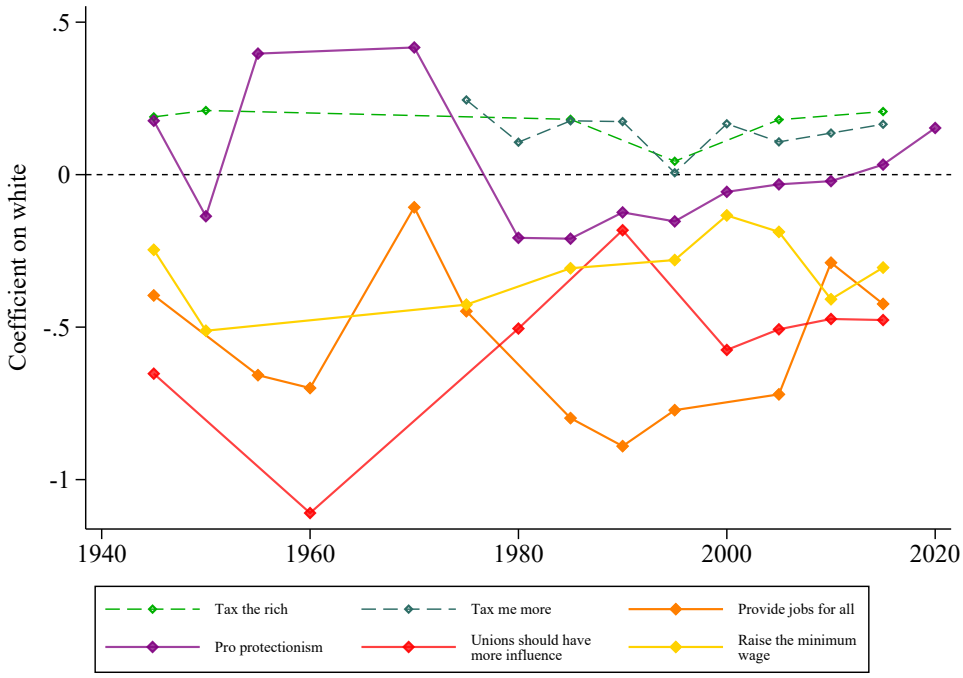
Source: ANES, Gallup, and GSS as described in Table 1

Notes: This figure replicates Figure 2 but includes only white respondents. The same Figure for non-whites is displayed in Appendix (see Figure A.3).
This figure shows coefficients β^p from the following regression estimated separately for each five-year period p:

$$y_{is} = \beta^p Adj.\ years\ of\ school_i + \mu_s + \mathbf{Age}_i + e_{is},$$

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 3), μ_s 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. Detailed survey questions for each policy are displayed in Appendix B. We suppress confidence intervals to reduce clutter, but we plot each policy question separately along with 95-percent confidence intervals in the Appendix.

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



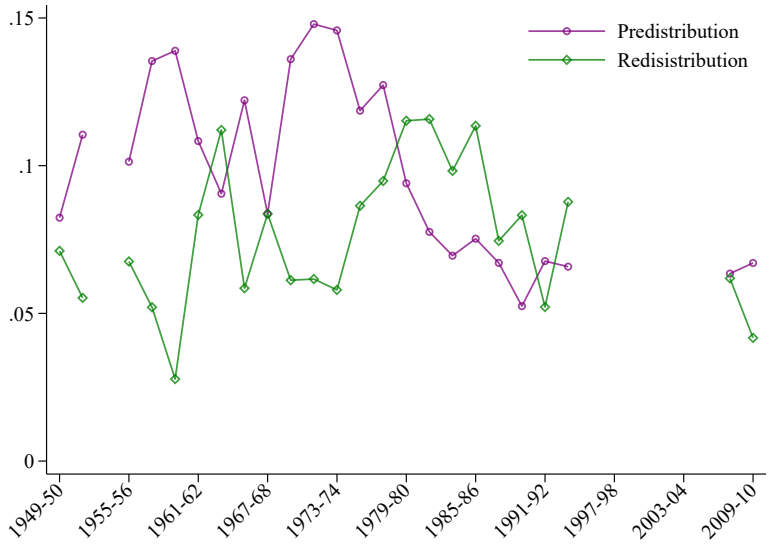
Notes: This figure replicates Figure 2 but instead of years of schooling as the main explanatory variable, a dummy variable for identifying as white is the main explanatory variables. That is, the figure plots the estimated β^p from the following regression estimated separately for each five-year period p:

$$y_{is} = \beta^p \, White_i + \mu_s + Age_i + e_{is},$$

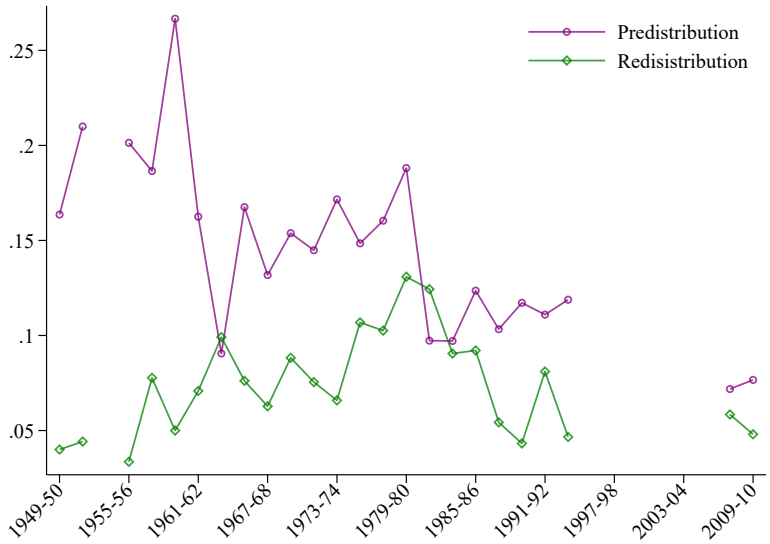
where y_{is} is the outcome variable for person i in survey s; *Adjusted years of school* is our predicted years of school based on the self-reported educational category provided by the respondent along with demographics and years (see Section 3), μ_s are survey (which subsume date) fixed effects, as 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. Detailed survey questions for each policy are displayed in Appendix B.

Figure 5: The pre- and re-distribution share of House roll-call votes under Democratic leadership

(a) CAP data



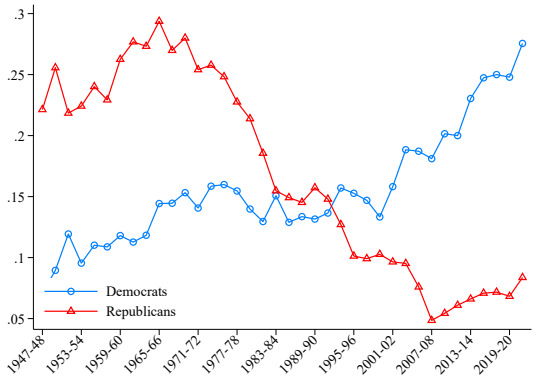
(b) Bateman et al. data



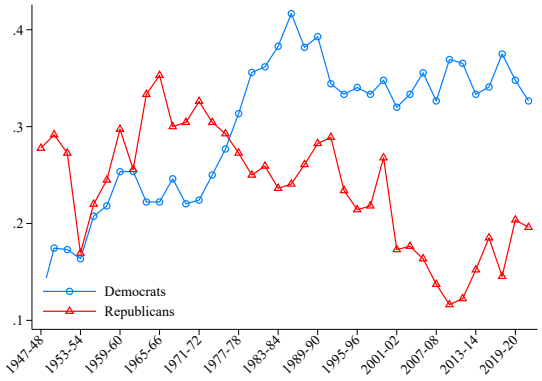
Notes: This figure shows the share of pre- and re-distribution roll-call votes every year that the Democrats are in control of the House from 1947 until 2009. Breaks in the series are when Republicans control the House. The first panel uses data from the Comparative Agenda Project (CAP) as defined in section 6.1.1 and the second panel uses data from Bateman *et al.* (2018) as described in section 6.1.2. 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, social insurance and the budget process.

Figure 6: Ivy-League backgrounds of members of Congress

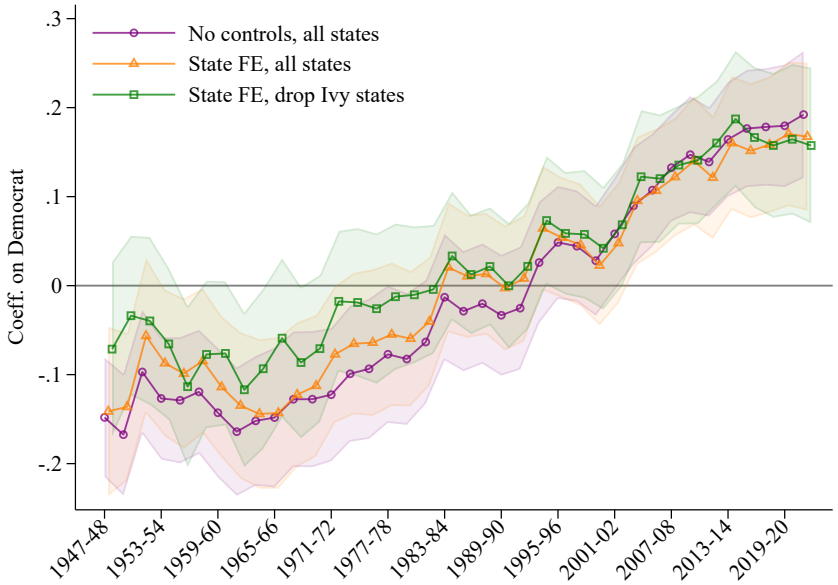
(a) House (means from raw data)



(b) Senate (means from raw data)



(c) House (regression adjusted)



Source: Biographical Directory of the United States Congress.

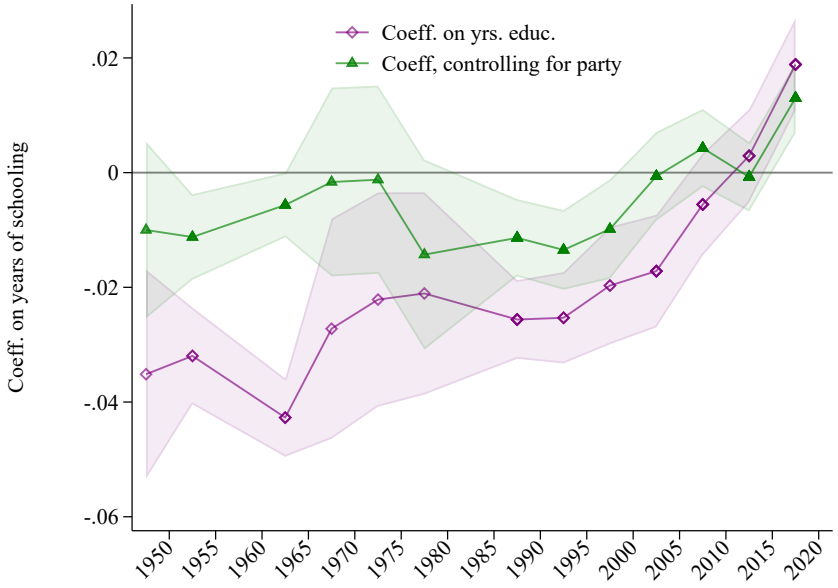
Notes: Panels (a) and (b) plot the share of House and Senate members, respectively, who attended an Ivy League institution. Panel (c) shows the coefficients β^p from variants of the following regression estimated separately by two-year Congressional term p:

$$Ivy_{is} = \beta^p Democrat_{is} + \mu_s + e_{is},$$

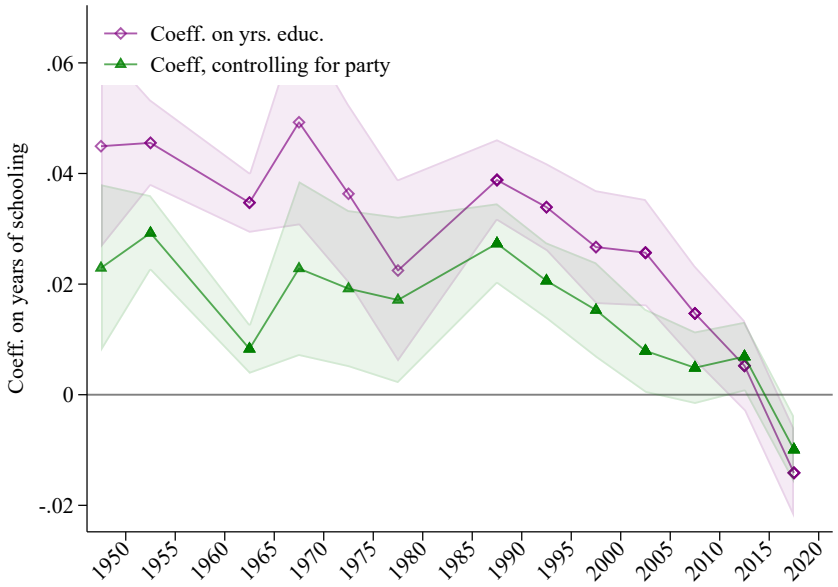
where Ivy_{is} is an indicator variable for whether politician i from state s attended an Ivy League institution; $Democrat_{is}$ is an indicator for whether politician i from state s is a Democrat; and μ_s are state fixed effects. The first series, shown in purple, of panel (c) omits the fixed effects, so just plots the Dem-versus-all-other difference. The second series, shown in orange, includes state fixed effects. The third, shown in green, is identical to the second but we drop all states with an Ivy institution.

Figure 7: Respondents' education of the parties' economic policies

(a) Democrats better to keep the country prosperous



(b) Republicans better to keep the country prosperous



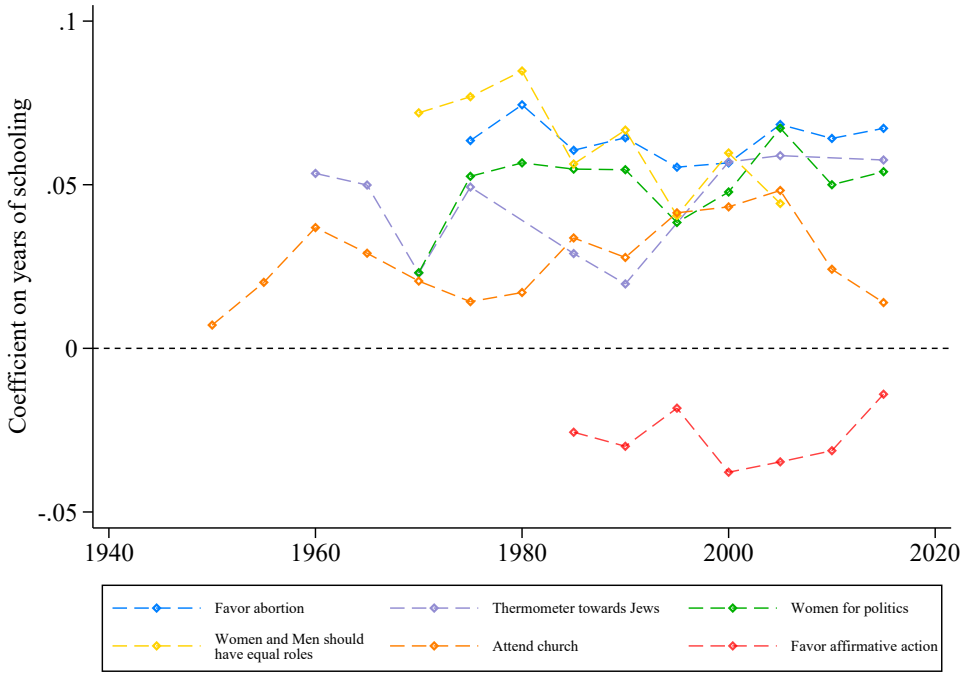
Source: Gallup as described in Table 1

Notes: Panel (a) plots the coefficients β^p from the following regression, estimated separately by five-year period:

$$Democrats_{it} = \beta^t Adj.\ years\ school_i + \gamma X_i + e_{it},$$

where $Democrats_{it}$ is an indicator for respondent i answering that the Democratic Party is the best to keep the country prosperous. Panel (b) plots the coefficients from the same regression with $Republican_{it}$ as a dependent variable indicating that the respondent thinks the Republicans are better to keep the country prosperous. Figure A.6 in Appendix shows the share of respondent answering that the Democratic or the Republican Party is the best to keep the country prosperous.

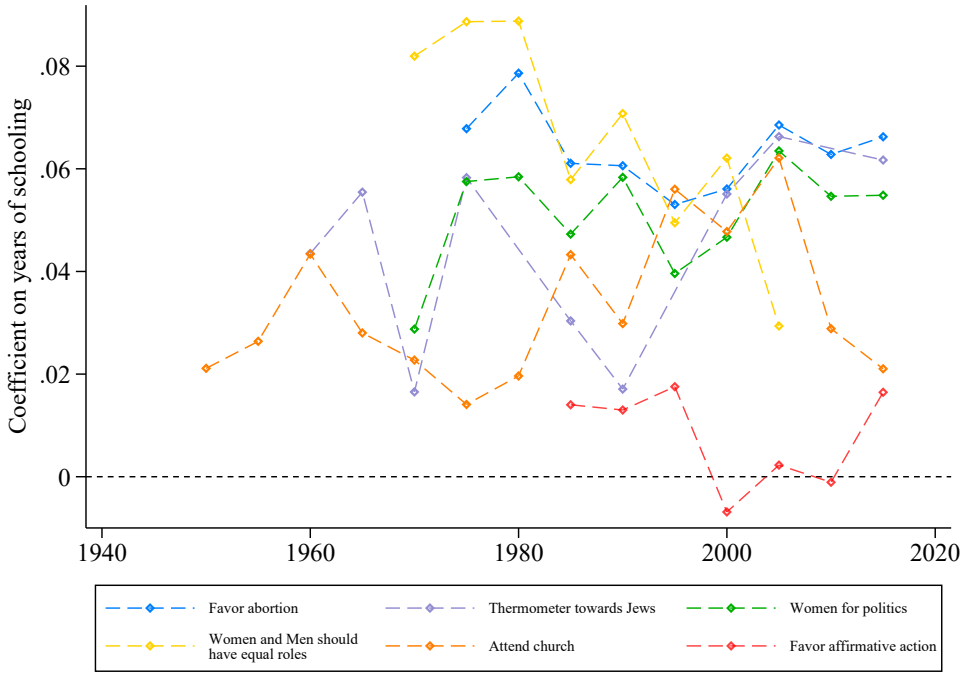
Figure 8: Social Issue Preferences by education



Source: ANES, Gallup, and GSS as described in Table 1

Notes: Figure shows coefficients β^p for each five-year period from specification 1 for each standardized survey question. Detailed survey questions are displayed in Appendix B.

Figure 9: Social Issue Preferences by education (white only)

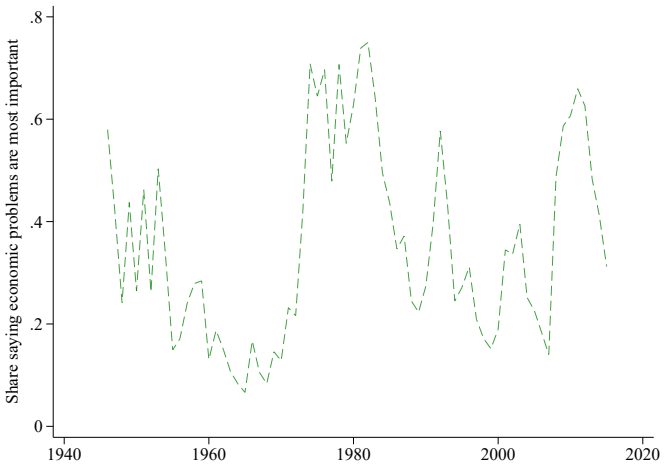


Source: ANES, Gallup, and GSS as described in Table 1

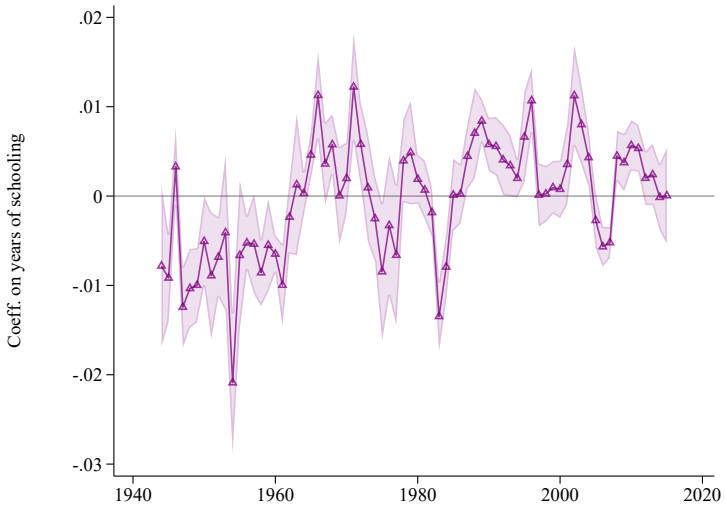
Notes: Figure shows coefficients β^p for each five-year period from specification 1 for each standardized survey question. Detailed survey questions are displayed in Appendix B.

Figure 10: Economic-issue salience over time and by education

(a) Most important problem is the economy.



(b) Concern for economy by education level



Source: Gallup as described in Table 1

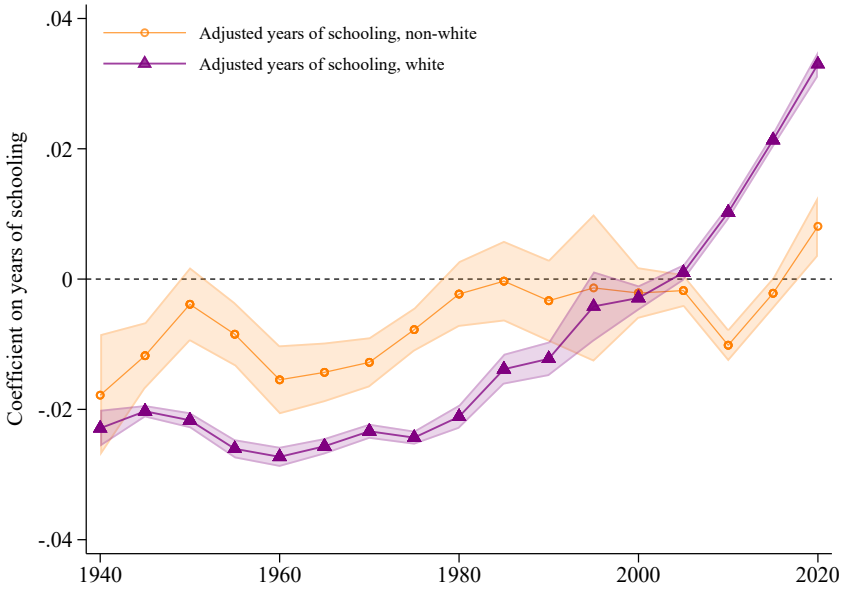
Notes: Panel (a) plots the share of all respondents who choose an economic problem as the most important faced by the country. Panel (b) plots the coefficient β^t from estimating the following regression separately by year t:

$$Econ\,most\,important_{is} = \beta Adj.\ years\ of\ school_i + \mathbf{Age}_i + \mu_s + e_{is},$$

where $Econ\,most\,important_{is}$ is an indicator for respondent i in survey s saying that an economic problem is the most important; $Adj.\ years\ of\ school_i$ is respondent i's predicted years of schooling (as defined in Section 3), μ_s are survey (which subsume date) fixed effects; $\mathbf{Age}_i$ are age-in-five-year-bins fixed effects. We show the analogous analysis when foreign-policy problems are the outcome in Appendix Figure A.8.

Appendix A. Supplementary Figures and Tables Noted in the Text

Appendix Figure A.1: Democratic Party identification by education, nonwhites

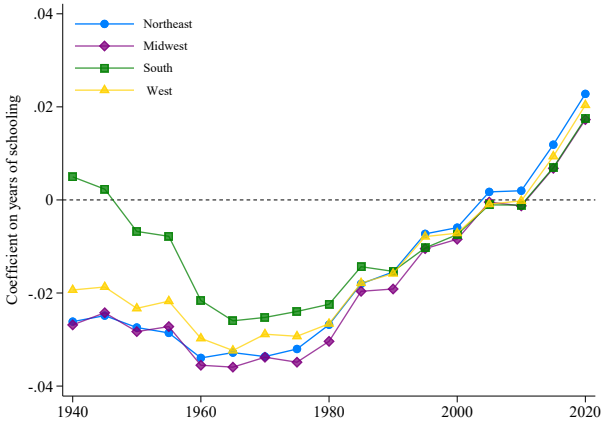


Source: ANES, CCES, Gallup, and GSS as described in Table 1

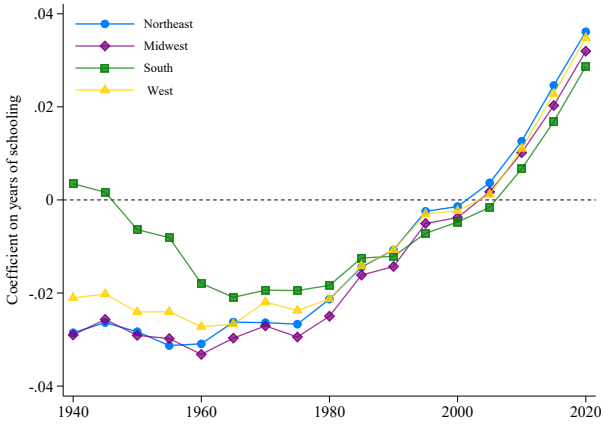
Notes: As in Figure 1, this Figure shows the estimated β^t from a regression of an indicator for Democratic affiliation on our *Adjusted years of schooling* measure. The first series, shown in orange, restricts the sample to respondents identifying as non-white. The second series shows the same coefficients for respondents identifying as white.

Appendix Figure A.2: Democratic Party identification by education, by region

(a) All respondents.



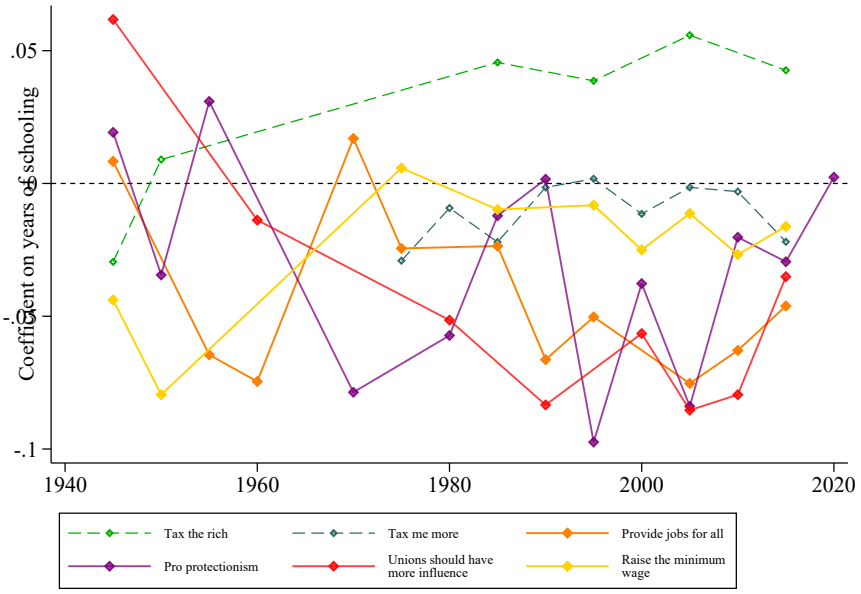
(b) Whites only.



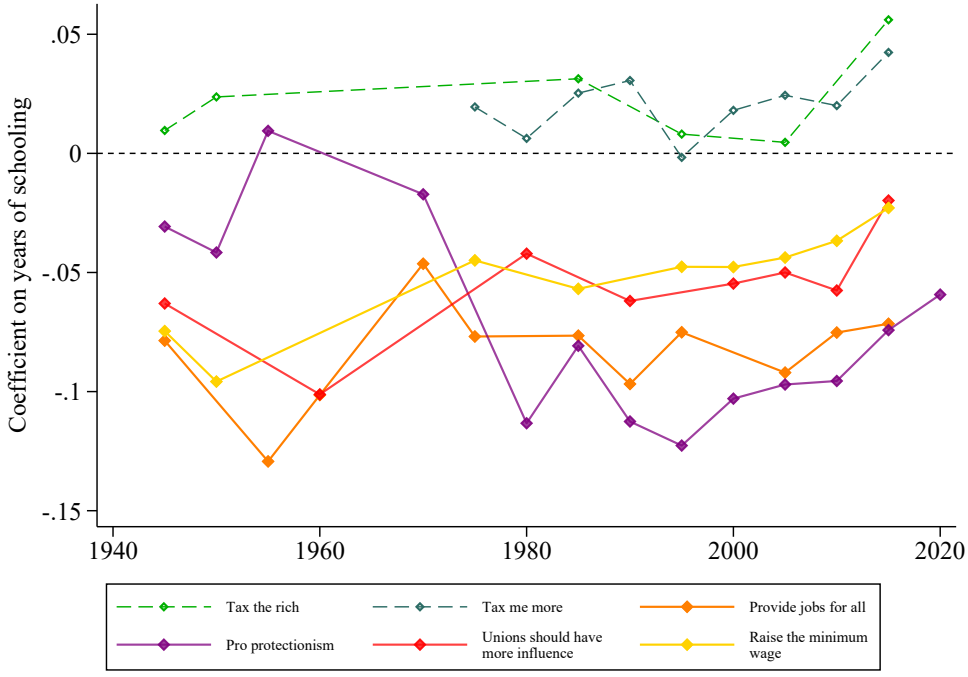
Source: ANES, CCES, Gallup, and GSS as described in Table 1

Notes: As in Figure 1, this Figure shows the estimated β^t from a regression of an indicator for Democratic affiliation on our *Adjusted years of schooling* measure. The four series show the coefficients β^p for each census region separately.

Appendix Figure A.3: Preferences for pre- and re-distribution by education (non-white only)



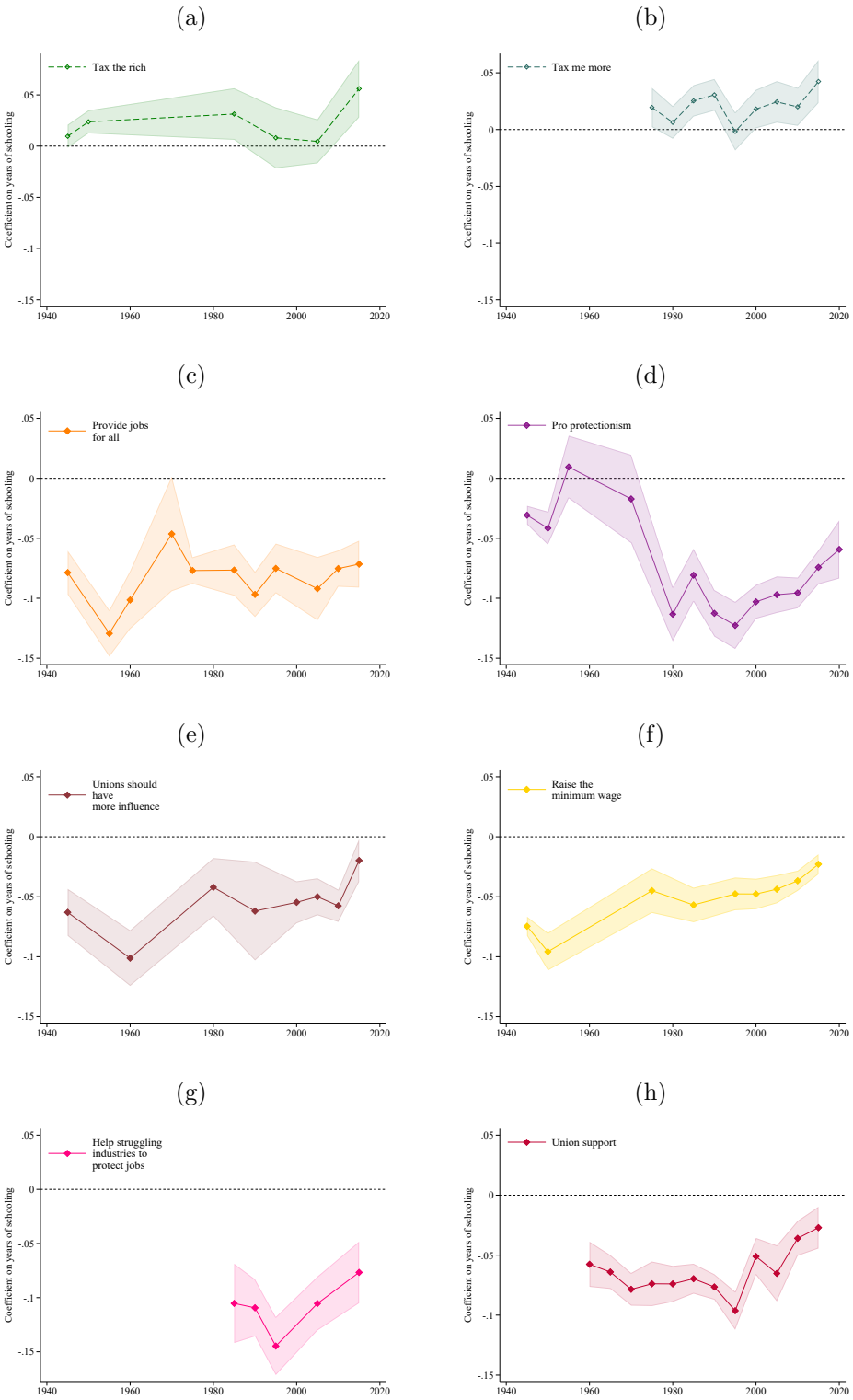
Source: ANES, Gallup, and GSS as described in Table 1



Source: ANES, Gallup, and GSS as described in Table 1

Notes: Figure shows the coefficients β^t from a regression of for each five-year period from specification 1 for each standardized survey question as in 2. The sample is restricted to respondents self-identifying as non-white.

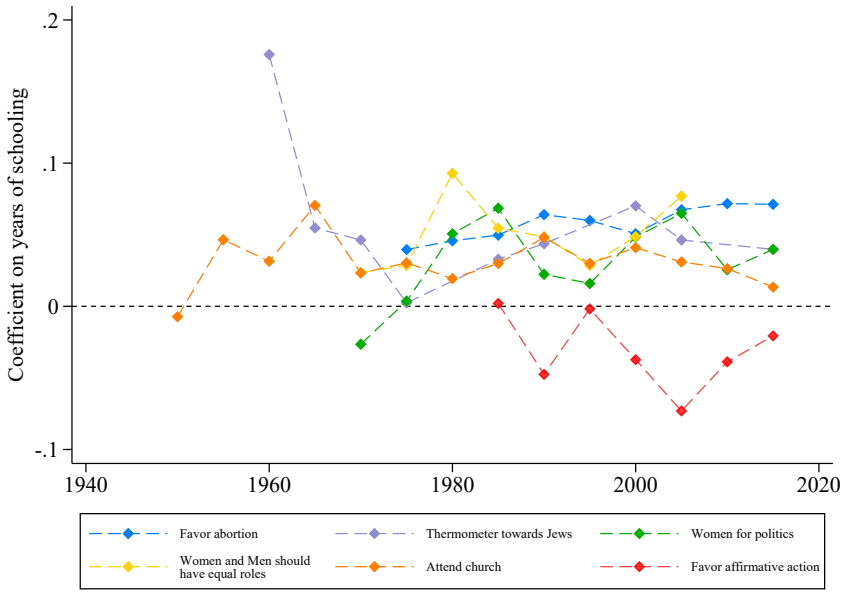
Appendix Figure A.4: Preferences for pre- and re-distribution by education (question by question)



Source: ANES, Gallup, and GSS as described in Table 1

Notes: As in Figure 2, this Figure shows the coefficients β^t from a regression of for each five-year period from specification 1 for each standardized survey question separately.

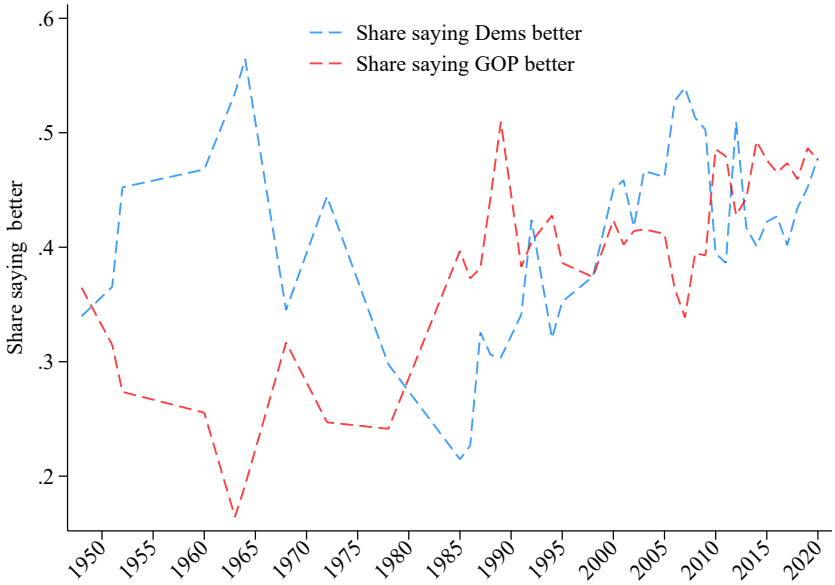
Appendix Figure A.5: Social issue preferences by education (non-white only)



Source: ANES, Gallup, and GSS as described in Table 1

Notes: As in Figure 9, this Figure shows the coefficients β^t from a regression of for each five-year period from specification 1 for each standardized survey question separately. The sample is restricted to respondents self-identifying as non-white.

Appendix Figure A.6: Respondents' views of the parties' economic policies

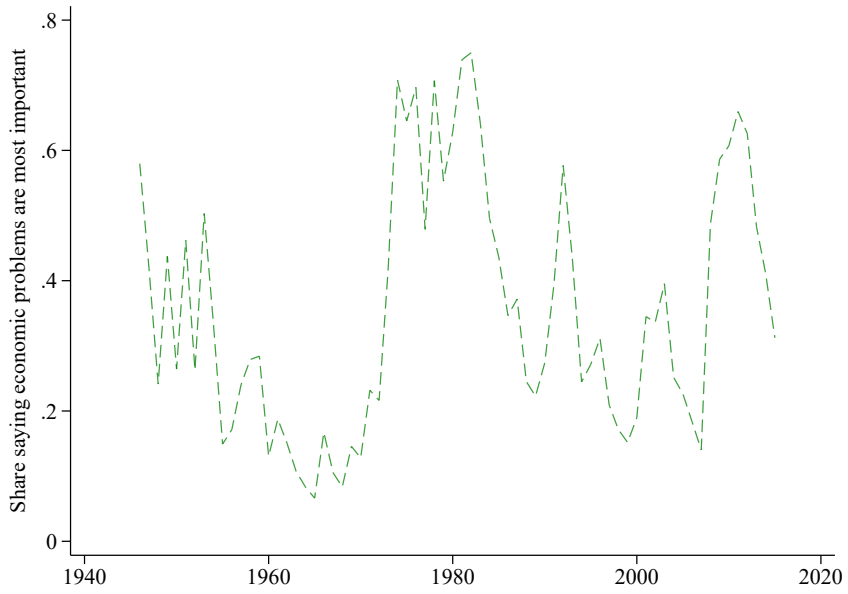


Notes: Panel (a) plots the coefficients β^p from the following regression, estimated separately by five-year period:

$$Democrats_{it} = \beta^t Adj.\ years\ school_i + \gamma X_i + e_{it},$$

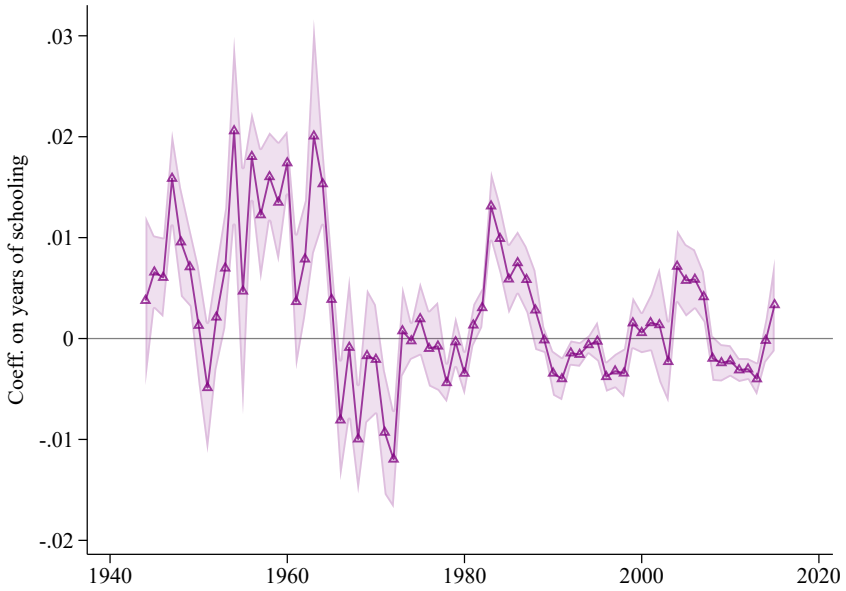
where $Democrats_{it}$ is an indicator for respondent i answering that the Democratic Party is the best to keep the country prosperous. Panel (b) plots the coefficients from the same regression with $Republican_{it}$ as a dependent variable indicating that the respondent thinks the Republicans are better to keep the country prosperous. Figure A.6 in Appendix shows the share of respondent answering that the Democratic or the Republican Party is the best to keep the country prosperous.

Appendix Figure A.7: Share of respondents reporting the economy as most important problem



Source: Gallup as described in Table 1 *Notes*: Figure shows the proportion or respondents who consider the economy as the most important issue facing Americans.

Appendix Figure A.8: Foreign Policy-issue salience over time and by education



Source: Gallup as described in Table 1.
Notes: Figure shows the coefficients β^t from estimating the following regression separately by year t:

$$Foreign\ Policy\ most\ important_{is} = \beta Adj.\ years\ of\ school_i + \mathbf{Age}_i + \mu_s + e_{is},$$

where $Foreign\ Policy\ most\ important_{is}$ is an indicator for respondent i in survey s saying that a Foreign Policy problem is the most important; $Adj.\ years\ of\ school_i$ is respondent i's predicted years of schooling (as defined in Section 3), μ_s are survey (which subsume date) fixed effects; $\mathbf{Age}_i$ are age-in-five-year-bins fixed effects.

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).

B.5. Comparative Agendas Project

CAP has harmonized legislation, executive orders and other political material across dozens of countries. We use the roll-call data, which they have grouped into categories and subcategories based on subject matter.