Identity Politics*

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Abstract

We offer a theory of changing dimensions of political polarization based on endogenous social identity. We formalize voter identity and stereotyped beliefs as in Bonomi et al. (2021), but add parties that compete on policy and also spread or conceal group stereotypes to persuade voters. Parties are historically connected to different social groups, whose members are more receptive to the ingroup party messages. An endogenous switch from class to cultural identity accounts for three major observed changes: i) growing conflict over cultural issues between voters and between parties, ii) dampening of political conflict over redistribution, despite rising inequality, and iii) a realignment of lower class voters from the left to the right. The incentive of parties to spread stereotypes is a key driver of identity-based polarization. Using survey data and congressional speeches we show that - consistent with our model - there is evidence of i) and ii) also in the voting realignment induced by the "China Shock" (Autor et al. 2020).

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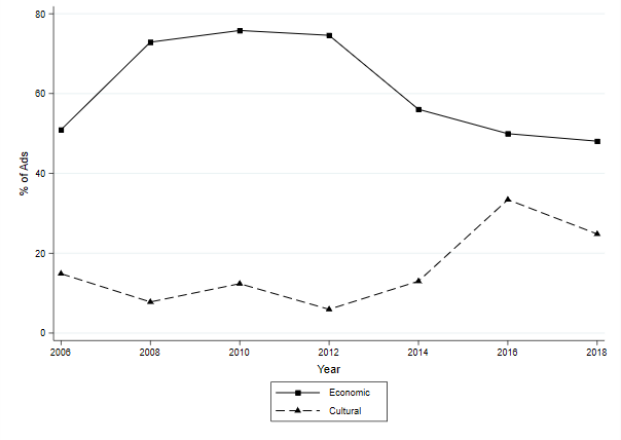
1 Introduction

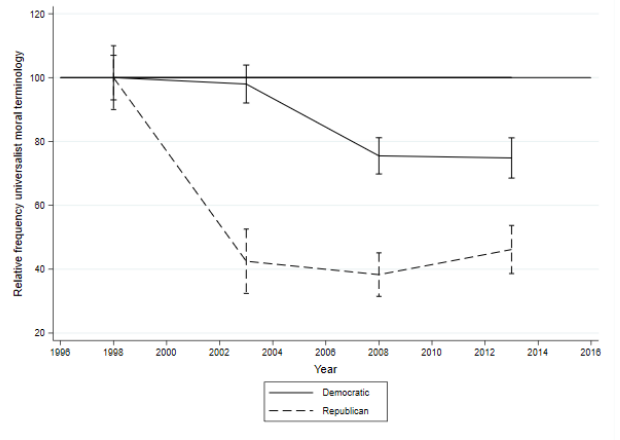
In the last two decades, the US political system has undergone large changes. Voters appear to attach increasing importance to cultural issues such as immigration, race, and civil rights, and to hold more polarized opinions over them; meantime, upper vs. lower class conflict over redistribution has declined (e.g. Bonomi et al. 2021, BGT henceforth). Something similar seems to have occurred on the political supply side. In their political propaganda, US parties attach growing importance to cultural issues relative to economic ones, as shown in Figure 1 (Panel A). Likewise, political rhetoric has culturally polarized: using Enke's (2020) measure, congressional speeches have become less universalistic in recent years, but much more so for Republicans compared to Democrats (Panel B). Other studies have shown that growing polarization among US Congress members is largely driven by cultural, more than economic, issues (Moskowitz et al. 2018). The evidence points to growing "cultural conflict", between voters and between parties.

Figure 1. Trends in Party Advertising and Rhetoric

(a) Economic vs Cultural Ads



(b) Universalist vs Communal Speeches

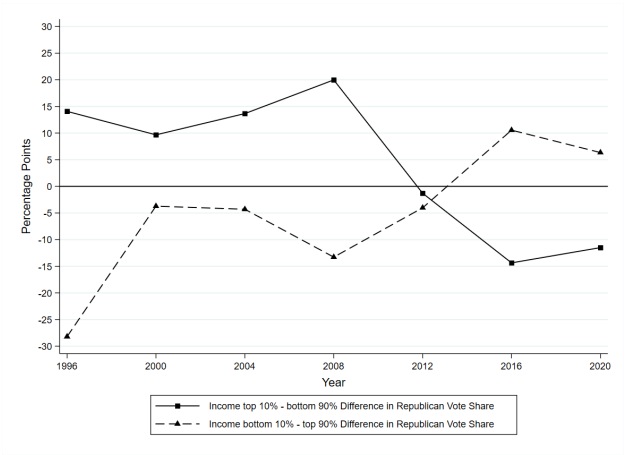


Notes: the figures report the trends over time in the topics of ads (Panel (a)) and in the degree of universalism of congressional speeches (Panel (b)) in the United States. Panel (a) adds, for every year, ads sponsored by the Democratic and Republican parties separately on economic and cultural issues divided by the total number of aired ads. Economic issues include "Taxes", "Deficit/Budget/Debt", "Government Spending", "Recession/Economic Stimulus", "Minimum Wage", "Employment/Jobs", "Poverty", "Housing/Sub-prime Mortgages", "Economy (generic reference)", "Social Security", "Welfare". Cultural topics include "Abortion", "Moral/Family/Religious Values", "Affirmative Action", "Race Relations/Civil Rights", "Immigration", "Gun Control". Data on ads, their content and their political sponsor come from the *Wesleyan Media Project (2008-2018)*. Panel (b) plots the relative frequency of universalist versus communal moral rhetoric in Congressional Speeches from 1996 to 2016, computed following and using data from Enke (2020). This frequency is plotted separately for Democrats and Republicans, together with standard errors (clustered at the candidate level). Frequencies are scaled separately for the two parties so that they take value equal to 100 in the first plotted year. Each plotted value is the average computed over 5-year intervals.

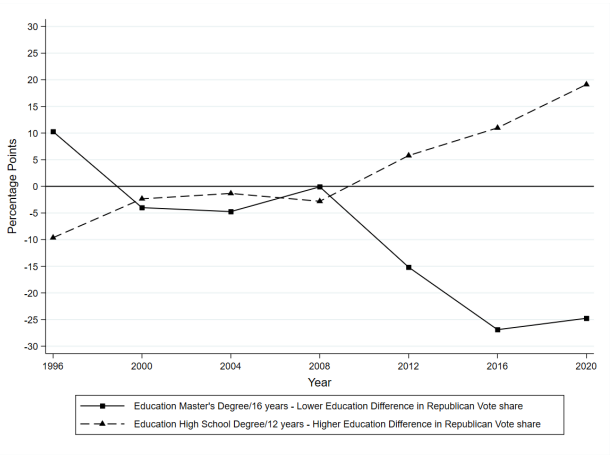
A second important political change is the realignment of US voters across parties. As shown in Figure 2, less educated and poor white people increasingly vote Republican, while the opposite is true for top income earners and highly educated voters. This is part of a long term trend, but it has accelerated recently (Gethin et al. 2021).

Figure 2. Vote Share by Individual Characteristics

(a) Differences in Republican Supporters by Income



(b) Differences in Republican Supporters by Education



Notes: the figure plots the evolution of the difference in Republican vote shares between income and education groups overtime. Panel (a) reports the difference between the vote share of top (resp., bottom) 10 % of the income distribution and that of the rest of the population. Panel (b) reports the difference between the vote share of individuals with a Master's Degree or higher (resp., High School Degree or lower) and that of the rest of the population. Plotted vote shares are obtained by computing the weighted share of respondents within each group that voted Republican and then taking differences between groups; in this computation only white respondents who voted at presidential elections are included. Data on voting outcomes and individual characteristics come from the *ANES Time Series Study (1996-2020)*.

Similar trends have been extensively documented (e.g. Sides et al. 2018, Klein 2020). They are not peculiar to the US, they have occurred in European countries too (see Ford and Jennings (2020) for cultural conflict and Gethin et al. (2021) for voters' realignment).

Existing work analyzing these changes mostly focuses either on growing cultural conflict or on class realignment, seldom on both. Growing cultural conflict is often explained by the spread of higher education or by secularization, which has divided the electorate between progressive elites and traditional strata (Glaeser et al. 2005, Zeira 2021, Kitschelt and Rehm 2019, Fukuyama 2018). This view, however, fails to explain the voting realignment in Figure 2, and in particular why the lower class demands less redistribution, which is puzzling in light of increasing income inequality. In turn, class realignment is often explained by a shift of the Democratic platform toward free markets (eg. Gethin et al. 2021, Kuziemko et al.

2022). A supply-side mechanism is also used to explain the cultural polarization of parties (e.g. Gentzkow et al. 2019). These accounts, however, do not explain why party platforms have changed in the first place, and why similar trends in cultural polarization and voting have occurred in other advanced economies. The almost simultaneous rise of Trump in the US, Brexit in the UK, Le Pen in France, and Salvini in Italy suggests that politicians adapt to deeper common changes in the social landscape, including to changing voter demands.

In this paper we argue that the phenomena in Figures 1 and 2 can be explained by a shift of prevailing voters' social identities from class to culture. Social identity reflects a voter's self-categorization among conflicting social groups and influences individual beliefs (Tajfel and Turner 1979). A voter can view complex policy issues from the perspective of her economic class (working vs middle-upper class), or of her culture (conservative vs progressive). By changing a voter's perspective, an endogenous switch from class to cultural identity can change her demands, leading the party system to adapt.

To motivate this approach, Section 2 provides new evidence on identity, beliefs and voting from a survey of 3000 US individuals. The bulk of our respondents reports to identify with a cultural group (defined by race, religion, etc.) and to do it more now than in the past. Cultural identity is in turn associated with polarized beliefs about social policy and strongly correlates with voting in 2020. These facts point to the promise of an identity-based approach to voter beliefs, preferences, and political change, but also raise several questions: How does identity affect political demands? How is identity determined? And, most important, how do identity switches affect the entire political system?

To address these questions, and to explain our motivating facts, we combine the model of voter identity developed by BGT (2021) with an active political supply. In BGT, a voter identifies herself based on the currently salient conflict, and identity distorts her beliefs toward the ingroup stereotype, a form of social assimilation. In a traditional class-based system, for instance, economic conflict cues a conservative lower class voter to view herself as a "victim of the rich", increasing her demand for redistribution. By exerting the opposite effect on upper class voters, class identity polarizes economic conflict. Increasing salience of cultural conflict, such as a growing importance of immigration or race, or due to economic shocks that predominantly hit unskilled workers, weakens class cohesion and favors cultural identities, causing and endogenous identity switch. In this new regime, salient cultural conflict cues the same lower class and conservative voter to view herself as a "defender of traditional values". This refocuses her demands from generous redistribution to conservative social policy. The opposite effect on progressive voters polarizes cultural conflict at large. In this way, identity shifts cause systemic changes in social cleavages and in voters' demands.

The novelty, compared to BGT, is that we address two key questions concerning the interaction between voters' demands and political supply. First, how do shifting identities

impact on party polarization and vote shares in different social groups? Second, how can parties exploit identity politics in their rhetoric and persuasion? We address these questions in a probabilistic voting model of electoral competition between two office motivated parties. Following Lipset and Rokkan (1967), who view parties as traditionally linked to specific social groups, we assume that parties' histories and organizations make them more or less trusted by different types of voters. For instance, being connected to the church and businesses, the right-wing party exerts a more direct influence on members of these groups than on voters who are secular or progressive. These asymmetric connections induce divergence in party platforms, because each party caters to the groups it is traditionally connected to. Critically, identity switches change the dimensions along which voters disagree the most, changing conflict between parties: If identity shifts from class to culture, party platforms diverge over cultural issues and converge over redistribution. Thus, identity politics yields the first phenomenon described above: growing cultural conflict between voters and between parties.

These demand and supply adjustments also yields the realignment of the lower class toward the conservative right illustrated in Figure 2. This occurs because, when identity switches to culture, economic conflict depolarizes. Lower class voters demand less redistribution, so the conservative among them are lured by the more traditional platform of the right. The opposite happens to upper class and progressive voters. Importantly, without a reduction of redistributive conflict, the class composition of parties would remain unchanged. There would be no class realignment in a rational version of our model. Thus, a switch to cultural identity is necessary and sufficient to connect the first phenomenon, changing voter preferences, to the second, class realignment, without assuming any ad hoc asymmetries between income classes.

We then allow parties to influence identity based stereotypes, through their rhetoric and propaganda. A right-wing politician telling her supporters that "immigrants are criminals" spreads an extreme conservative stereotype in her group, cueing identified conservatives to become more anti-immigrant; interestingly, in our model this rhetoric causes a backlash: in reaction to the anti-immigrant sentiment of conservatives, progressive voters stereotype themselves as even more pro-immigrant. The first effect however dominates, because ingroup voters are directly exposed to their party cue, so they are more affected by it. As a result, in equilibrium parties optimally exacerbate rather than dampen stereotypes, inflating voters' extremism. Endogenous party persuasion amplifies all effects described above and yields two new implications. First, when cultural conflict becomes salient, politicians find it optimal to spread the cultural stereotypes of their ingroup, and instead conceal the class stereotypes of the traditional class-based regime. This yields the changing content of political propaganda and the divergence in cultural rhetoric of Figure 1. Second, party cues could cause a strong change in voter demands even if voters have no tendency to stereotype on their own. Thus, salient cultural conflict creates fertile ground for politicians to polarize the electorate in that

dimension, amplifying cultural conflict between voters and between parties.

We conclude the paper by showing that this mechanism can throw new light on the political effects of the "China Shock" (Autor et al. 2020). If socially conservative voters tend to be employed in import competing sectors, for instance because they are less skilled, then increased trade exposure makes them more likely to switch to cultural identity. The reason is that conservatives now feel more similar to their cultural group, that on average wants trade protection, than to their class, that also includes progressives in favor of free trade. As a result, exposed regions exhibit a voting realignment to the right, as documented by (Autor et al. 2020), and two new predictions follow: i) voters in these regions become more socially conservative and demand less redistribution, and ii) politicians in these regions adopt a more conservative rhetoric, particularly if they belong to the right wing party. Using survey data and data on congressional speeches across US commuter zones and districts, we find support for these predictions (and for the assumption that conservative voters were more exposed to the "China shock"). Thus endogenous social identity is a propagation mechanism, explaining how economic shocks can have far reaching political effects.[1]

We contribute to a growing body of work on major political changes. Enke et al. (2021) offers a model that, like ours, studies the role of changing voters preferences in political realignments. They emphasize a different mechanism, whereby voters attach stronger importance to parties' social policy (as opposed to economic) platform if they are richer. Their analysis does not speak to voters' increased cultural polarization, to the role of persuasion, and does not explain why voters impoverished by trade shocks should demand less redistribution. Kuziemko and Washington (2018) and Schickler (2016) study voting realignment of the past. An open issue is whether identity shifts can help explain these historical episodes.

We also contribute to the growing body of work on identity in politics. Shayo (2009) first applied identity to political economics. Shayo (2020) surveys recent contributions, including Helpman and Grossman (2020) on identity and trade policy. Compared to these papers, in which identity directly affects voters' tastes, in BGT (2021) it causes voters' beliefs to be vulnerable to stereotypes. In this, our approach also speaks to the growing empirical research on distorted political beliefs (Alesina et al. 2023, Kahan 2015). The model in this paper further extends this approach to account for the behavior of politicians, and shows that the link between identity and beliefs is important: it allows to study political persuasion. Colussi et al. (2021) empirically document that increased salience of Muslim minorities triggers an extremist backlash in German voters, in line with some of our predictions. Nouri and Roland (2021) survey work on identity and populism.

[1]Other papers analyzing the political effects of trade shocks are Choi et al. (2021), who study the effect of the NAFTA trade deal on US voters, and Ash et al. (2021) who find that trade shocks can change voters' beliefs. Compared to these papers, our theory explains also changes on the supply side, and reconciles the reaction to trade shocks with broader political changes.

Glaeser et al. (2005), Murphy and Shleifer (2004) and Glaeser (2005) offer early formal analyses of how party connections with different social groups can produce platform divergence and a role for persuasion. Our focus on identity brings two important novelties. First, identity switches change social cleavages, explaining political realignments. Second, persuasion is founded on the spreading of stereotypes, which yields an endogenous complementarity between belief extremism and platform divergence. Callender and Carbajal (2022) study an implicit model of political persuasion in a one-dimensional model of electoral competition. Grossman and Helpman (2022) study the complementarity between party divergence and fake news spread by party controlled media. Unlike us, these papers neither study how polarization changes across different policy domains, nor the mechanisms of persuasion.

The paper is organized as follows. Section 2 presents our new survey evidence on identity and political preferences. Section 3 introduces a simplified version of the BGT model of identity and voter demand. Section 4 introduces the political supply. We first allow politicians to only set a policy platform, and then to use also political rhetoric. Section 5 studies and tests the role of trade shocks. Section 6 concludes.

2 Evidence on Identity, Factual Beliefs, and Policy Views

We corroborate the building blocks of our theory by presenting new survey evidence on the link between identity, policy preferences, factual beliefs, and voting patterns.

2.1 The Survey

In February/March 2022 we surveyed 3000 US subjects, stratified by age, race, gender, region, education and income. The sample is representative of the US population along many demographics.[2] We focus on two issues. The first is social identity. We seek to measure whether the respondent currently identifies with an economic group, or a with a social group located along the cultural divide on civil rights and immigration (e.g. race, religion, local community). We ask: "We have interviewed many people in the US and they all have described themselves in different ways. Some people describe themselves in terms of their religion, others in terms of their race, others in terms of their economic situation, etc. What defines your identity, first and foremost? Please select only one of the following: my religion, my being secular, my race, my local community, my being a citizen of the world, my cultural traditions, my progressive culture, my economic class (working, middle, upper)".

Second, we elicit policy preferences and beliefs on redistribution and social policy. On redistribution, we ask respondents whether the government should: i) provide more services

[2]The main discrepancies are that our respondents are poorer, more educated and white than the US population, see Online Appendix Table B.1. The questionnaire is available upon request.

(even if it entails higher taxes), ii) support people's standard of living, and iii) levy an estate tax. We harness factual beliefs on this domain by asking how the income share going to the top 1% has changed in the US during the last 30 years, and what is the probability that a hard working poor can become rich during his lifetime. On social policy, we ask whether: i) women should be treated preferentially in hiring and promotion, ii) the number of immigrants allowed to enter the country should be increased, and iii) abortion should be lawful. We elicit factual beliefs on this domain by asking: i) whether and to what extent a black man with the same experience or education of a white man has a lower pay and gets treated worse in the workplace, ii) what share of crimes were committed by immigrants in the past 12 months, and iii) what share of pregnant women have an abortion.

At the end of the survey, subjects report whether they are Democrat, Republican or Independent. If the answer is "Democrat" or "Republican", they must also report whether they primarily identify with their party or with the previously chosen cultural group or class. For these respondents, identity is determined at this point. Partisanship is measured at the end to avoid cueing party positions when answering policy questions. We then ask respondents whether their identity has remained stable over time, and how they identified in the past. Finally, we ask respondents how the voted in 2020 and in 2016.

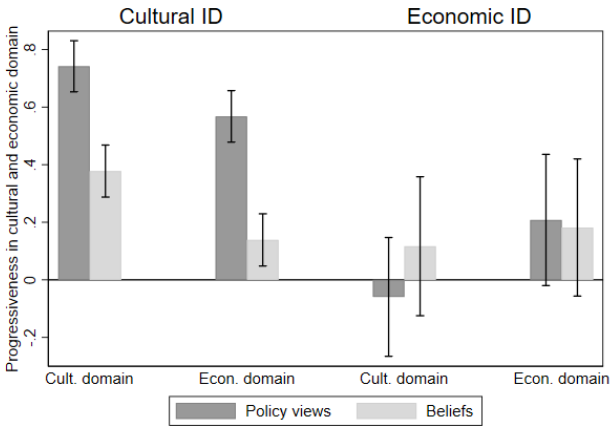
2.2 The Key Facts

The survey unveils three main findings. First, more than two thirds of respondents identify with a social group aligned along the cultural divide (race, religious/secular, local community/citizen of the world, or traditional/progressive values). The remaining third splits about equally between those who identify with an economic group, upper/lower class, or with one of the two political parties (see Appendix Table A.1, column 1). Social identity is persistent, but far from immutable. About half of those who currently identify with a conservative or progressive social group also did so in the past. But economic and political identities are less stable: well over half of those who in the past had an economic or political identity have now acquired a cultural identity (see Online Appendix Table B.2).

Second, cultural identities are strongly correlated with respondents' opinions and beliefs, more than traditional class identities, although not as much as partisan political identities. To reduce measurement error, we extract the first principal component of beliefs and policy preferences, separately for the economic and social policy questions. Higher values correspond to more progressive policy preferences and beliefs. Figure 3 reports the average difference in these principal components between progressive vs conservative respondents and between lower vs. upper class. The beliefs and policy views of culturally identified respondents disagree, in the expected direction, on both social and economic issues. Class identified respondents disagree in the expected direction on redistribution, while they do not disagree on social

policy (since few people identify with an economic group, estimates are not very precise). See Appendix Table A.1 for details.

Figure 3. Difference in Position: Full Sample



Notes: the figure reports, for both cultural and economic issues, the difference of average policy views (resp., beliefs) between Progressives and Conservatives (for Cultural ID) and between respondents belonging to the Lower and to the Upper Class (for Economic ID). In particular, higher values capture more progressive beliefs and policy views on cultural issues and more pro redistribution views and beliefs on economic domains of one group relative to the other. Bands represent the 95% confidence intervals from a t-test of the difference between means of the two groups being equal to 0.

One interpretation of Figure 3 is that opinions determine social identity. For instance, voters with extreme views on, say, abortion or redistribution are more likely to identify with a group sharing those views (religious people, or blue collar workers). Identity based accounts of political change (Nouri and Roland 2020) often take the opposite perspective, whereby identity itself affects beliefs and preferences. Our approach embodies both effects: social and economic changes trigger identity shifts that polarize voters along pre-existing, latent disagreements. Shifting identities offer a theory of changing voter preferences.

Our third finding is that identity is associated with voting. Voters identified with culturally progressive groups disproportionately voted Democrat in 2020, while cultural conservatives more likely voted Republican (see Appendix Table A.2). These correlations are robust to controlling for a voter's demographics and even for its vote in 2016 (see Online Appendix Table B.3), consistent with identity being an important correlate of political preferences.

In sum, the survey buttresses the pillars of our approach. First, cultural identity is widespread, probably more so than in the past. Second, switches from class to cultural identity can be a driver of changing voters' opinions and of voting realignments.

3 Social Identity and Stereotypes

We now present a simple version of the model in BGT (2021), where endogenous identity shapes voters' preferences and affects prevailing cleavages in society.

3.1 Policy Instruments and Voter Types

There is a social policy q, capturing value-laden issues such as civil rights, race relations, immigration. Larger q is a more liberal policy. There is a proportional income tax $\tau \geq 0$ that finances a public good g. It entails quadratic distortions $-\frac{1}{2}\tau^2$ that reduce aggregate income.

Preferences over q follow the quadratic loss $\frac{1}{2}\left(q-\widetilde{\psi}\right)^2$. The random variable $\widetilde{\psi}$ is a voter's ideal policy. It reflects her uncertainty over factual judgments (how many immigrants commit crimes?) and value judgments (what are the social benefits of diversity?). It has Gaussian density $z^j\left(\widetilde{\psi}\right) = z\left(\widetilde{\psi}\,|\psi^j\right)$ with voter specific mean ψ^j and unit variance. Higher ψ^j means that the voter is more socially progressive, she prefers higher q. There are two cultural types $j = P, C$, Progressive P, and Conservative C, with $\psi^P = -\psi^C = \psi > 0$. Parameter ψ measures cultural disagreement.

Preferences over τ depend on a voter's tax burden and on her taste for the public good. Tax burden is uncertain because future income $1+\widetilde{\varepsilon}$ is subject to shocks. The random variable $\widetilde{\varepsilon}$ has Gaussian density $z^i\left(\widetilde{\varepsilon}\right) = z\left(\widetilde{\varepsilon}\,|\varepsilon^i\right)$ with voter-specific mean ε^i and unit variance. A voter with higher expected income ε^i bears a higher expected tax burden. There are two economic types $i = U, L$, Upper class U and Lower class L, with $\varepsilon^U = -\varepsilon^L = \varepsilon > 0$. Parameter ε measures economic inequality.

The value of the public good, $\tilde{v}$, is also uncertain (e.g. does public spending reward "hard-workers or free riders"? Can the government be trusted?). It is Gaussian, with mean $\nu^j = \nu + \beta\psi^j$, $\nu > 1$, and unit variance. Parameter $\beta \in [0,1]$ connects preferences over redistribution and social policy. Due to cultural traits such as localism and distrust of strangers, conservative voters tend to dislike immigrants (low ψ^j) but also universal transfers that may benefit them (low ν^j) - see Enke et al. (2022) for evidence on this.

A voter type ij is then summarized by the income-culture profile (ε^i, ψ^j). There are four voter types: upper class and progressive $ij = UP$, upper class and conservative $ij = UC$, lower class and progressive $ij = LP$, lower class and conservative $ij = LC$. Each type accounts for 1/4 of the populace. Given our assumptions, the average upper class voter is culturally neutral, with traits $(\varepsilon, 0)$, and so is the average lower class voter, with traits $(-\varepsilon, 0)$. The average conservative voter is economically neutral, with traits $(0, -\psi)$, and so is the average progressive voter, with traits $(0, \psi)$. The assumption of zero correlation between income and culture simplifies the model, but our results obtain more generally (see BGT 2021).

Since ε^i has zero mean in the population, aggregate income gross of tax distortions is 1

and the quantity of g is equal to the tax rate τ. The rational expected utility of voter (ε^i, ψ^j) is, up to an additive constant:

$$W^{ij}(\tau, q) = \left(1 + \varepsilon^i\right)(1 - \tau) - \frac{1}{2}\tau^2 + (\nu + \beta\psi^j)\tau - \frac{\kappa}{2}\left(q - \psi^j\right)^2, \tag{1}$$

where $\kappa > 0$ captures the weight attached to social policy q. Neglecting non-negativity constraints, the rational bliss point of voter ij is equal to:

$$\tau^{ij} = (\nu + \beta\psi^j) - \left(1 + \varepsilon^i\right), \qquad q^{ij} = \psi^j. \tag{2}$$

More progressive voters, higher ψ^j, demand more redistribution, higher τ, and a more liberal social policy, higher q. Richer voters, higher ε^i, demand less redistribution, lower τ, because of their greater tax burden. We assume throughout that $\varepsilon > \beta\psi$, which implies that the voter's class has a stronger influence on her tax preferences than her cultural type. Average welfare is maximized at $\tau^\circ = \nu - 1$, and $q^\circ = 0$.[3]

To see the patterns of group disagreement, denote by $\tau^j \equiv \frac{1}{2}\left(\tau^{Lj} + \tau^{Uj}\right)$ the (rationally) desired tax rate by the average member of cultural group $j = C, P$ and by $\tau^i \equiv \frac{1}{2}\left(\tau^{iC} + \tau^{iP}\right)$ the desired tax rate by the average member of class $i = L, U$. Desired social policies q^j and q^i are similarly defined . Equation (2) implies:

$$\begin{aligned} \tau^P - \tau^C &= 2\beta\psi, \;\; q^P - q^C = 2\psi, \\ \tau^L - \tau^U &= 2\varepsilon, \;\; q^L - q^U = 0. \end{aligned}$$

Consistent with our survey, opposite cultural groups P and C disagree on redistribution and social policy, while opposite classes L and U disagree only on redistribution. As we will see, these baseline opinion differences shape the effect of identity on voter demands.

3.2 Identity Determination

According to social identity theory (Tajfel and Turner 1979) a voter belongs to several groups defined by occupation, race, religion, etc., so she has several potential identities. In our setup, she can identify with her class, $G = U, L$, or cultural group, $G = C, P$. Here G denotes the ingroup. For instance, a lower class and conservative voter $ij = LC$ may identify with her trade union, $G = L$, or with her church, $G = C$.

At a given point in time, the voter identifies with the group that is most salient and to

[3]We also assume that preferred tax rates are always between 0 and 1, which requires $v \in (1 + \beta\psi + \varepsilon, 2 - \beta\psi - \varepsilon)$, which is non empty for $\beta\psi + \varepsilon < 1/2$.

which she feels more similar. Based on social psychology, we formalize the salience of ingroup G by its policy conflict with outgroup $\overline{G}$, measured by the welfare loss born by the average ingroup when moving from her ideal policy $\left(\tau^G, q^G\right)$ to the ideal policy of the average outgroup $(\tau^{\overline{G}}, q^{\overline{G}})$. $\overline{G}$ captures all voter types not belonging to G (i.e. $G = U$ implies $\overline{G} = L$). Using equation (1) the salience of G is equal to:

$$\Delta\left(G, \overline{G}\right) = \frac{\kappa}{2}\left(q^G - q^{\overline{G}}\right)^2 + \frac{1}{2}\left(\tau^G - \tau^{\overline{G}}\right)^2. \tag{3}$$

Salience increases in disagreement between ingroups and outgroups. We capture similarity between type ij and G by the negative of her policy conflict with the average ingroup, which is equal to $\Delta^{ij}(G) = \frac{\kappa}{2}\left(q^{ij} - q^G\right)^2 + \frac{1}{2}\left(\tau^{ij} - \tau^G\right)^2$.

Voter ij identifies with the most salient ingroup G, economic or cultural, provided she feels similar enough to G. Formally, voter ij selects her identity $\iota(ij)$ such that:

$$\iota(ij) = \arg\max_{G \in \{i,j\}} \Delta\left(G, \overline{G}\right) - \lambda \Delta^{ij}(G), \tag{4}$$

where $\lambda \geq 0$ is the relative weight attached to similarity. We call "identity regime" an identity configuration $\iota(ij)$ for all types. We will often index identity by ι, keeping the dependence on the type ij implicit.

Proposition 1. *If $\psi^2(\kappa + \beta^2) \geq \varepsilon^2$ all voters identify with their cultural group, $\iota(ij) = j \in \{C, P\}$. Otherwise they identify with their economic class, $\iota(ij) = i \in \{L, U\}$.*

Due to the model's symmetry, all voters identify along the same trait, economic or cultural. Cultural identity occurs either when cultural disagreement is large compared to economic inequality, ψ/ε is high, or when social policy is important compared to redistribution, κ is large. A higher influence of culture in the evaluation of the public good, β, favors cultural identity because it makes cultural disagreement more relevant, also for taxes.

Parameter changes cause social identity to switch. Suppose that initially voters identify with their class, as in a "traditional" political system. If the importance κ of social policy rises, due say to a large inflow of immigrants or to episodes of racial discrimination, cultural conflict becomes more salient, triggering a switch from economic to cultural identity. The same effect arises if cultural disagreement within classes ψ increases, due for instance to growing differences in education. Higher income inequality ε has the opposite effect: it renders economic conflict more salient, favoring class identity. Note that higher ε captures a symmetric increase in inequality within cultural groups. In Section 5 we show that a different kind of income shocks, that asymmetrically hit different cultural groups, can trigger cultural identity. We use this mechanism to throw new light on the political effects of trade shocks.

3.3 Stereotypes, Identity Switches, and Changes in Voters Demand

In social psychology, identity affects beliefs and policy preferences by causing a voter to "depersonalize", namely to move her opinions toward those that are stereotypical of the ingroup. Following BCGS (2016), BGT (2021) formalize the stereotype of ingroup G as the belief that is more frequent for the average ingroup $\left(\varepsilon^{G}, \psi^{G}\right)$ compared to outgroup $(\varepsilon^{\overline{G}}, \psi^{\overline{G}})$. Then, the stereotyped belief $z_{\iota}^{ij}\left(\widetilde{y}\right)$ of voter ij about income or culture $\tilde{y} = \tilde{\varepsilon}, \tilde{\psi}$ when identified with ingroup ι is equal to:

$$z_{\iota}^{ij}\left(\widetilde{y}\right) \propto z^{ij}\left(\widetilde{y}\right)\left[\frac{z_{\iota}^{\iota}\left(\widetilde{y}\right)}{z_{-\iota}^{-\iota}\left(\widetilde{y}\right)}\right]^{\chi_{\iota}}, \tag{5}$$

where $-\iota$ is the outgroup of voter ij. In Equation (5), $z_{\iota}^{\iota}\left(\widetilde{y}\right)$ are the stereotyped beliefs held by the voter's average ingroup, $z_{-\iota}^{-\iota}\left(\widetilde{y}\right)$ those held by her average outgroup. $\chi_{\iota} \geq 0$ captures the presence and strength of stereotyping. For now $\chi_{\iota} = \chi$ for all groups. In Section 4 we allow χ_{ι} to be endogenously determined by political persuasion.

Beliefs are determined by a fixed point, because also the beliefs of average ingroups and outgroups - the drivers of stereotypes - are determined in equilibrium. As we prove in the Appendix, when $\chi < 1/2$ there is a unique and stable equilibrium, in which the beliefs of voter ij about her income or culture when she identifies with group ι are:

$$y_{\iota}^{ij} = y^{ij} + \theta\left(y^{\iota} - y^{-\iota}\right) \quad \text{for } y = \varepsilon, \psi \text{ and } \iota = i, j \tag{6}$$

where $\theta \equiv \frac{\chi}{1-2\chi}$. If $\chi = 0$, then $\theta = 0$ and beliefs are rational. Identity plays no role.

If $\theta > 0$, identity renders a voter's beliefs more extreme in the direction of ingroup-outgroup disagreement $(y^{\iota} - y^{-\iota})$.[4] It also causes beliefs to change with identity switches. To see this, consider a conservative lower class voter $ij = LC$ initially identified with the lower class, $\iota = L$. The economic backwardness distinctive of her ingroup cues her to be too pessimistic about her future income, $\varepsilon_{L}^{LC} = -\left(1 + 2\theta\right)\varepsilon$, the more so the higher is θ. Her cultural beliefs are instead undistorted $\psi_{U}^{LC} = -\psi$, because there are no class differences, and hence no class stereotypes, along culture $\widetilde{\psi}$.

Suppose now that a shock, for instance an episode of racial discrimination, increases the importance κ of social policy. The salience of cultural conflict causes the voter's identity to switch to her conservative ingroups, $\iota = C$. Her beliefs then change in two ways. First, she polarizes in the cultural domain: the conservatism distinctive of her ingroup cues her to become more conservative than before, $\psi_{C}^{LC} = -\left(1 + 2\theta\right)\psi$, the more so the higher is θ.

[4]Equation (5) implicitly assumes that, when forming his sterotyped belief associated with identity ι, the voter perceives members of the outgroup $-\iota$ as being also identified with the latter. This assumption is immaterial here because all voters identify either along income or culture, but it has bite in Section 5, where identity need not be the same for all voter types.

Second, and critically, her economic beliefs de-polarize and become non distorted ($\varepsilon_C^{LC} = -\varepsilon$) because class conflict is no longer salient.

By changing voter beliefs, identity switches change policy demands. By (2), we have:

Proposition 2. *The bliss points of voter ij identified with ι are:*

$$\tau_\iota^{ij} = \tau^{ij} + \beta\theta\left(\psi^\iota - \psi^{-\iota}\right) - \theta\left(\varepsilon^\iota - \varepsilon^{-\iota}\right), \tag{7}$$

$$q_\iota^{ij} = q^{ij} + \theta\left(\psi^\iota - \psi^{-\iota}\right). \tag{8}$$

Consider our lower class and conservative voter. When switching from lower class to conservative identity, she demands a more conservative cultural policy, $q_C^{LC} < q_L^{LC}$. A shock rendering cultural conflict salient breeds social policy extremism. Critically, the same shock also reduces the voter's demand for redistribution, $\tau_C^{LC} < \tau_L^{LC}$. This effect arises because the shock - although unrelated to the economic domain - causes a switch to conservative identity, making the voter less focused on class conflict and more suspicious of universal transfers.[5]

Considering all voter types, BGT (2021) show that a switch from class to cultural identity boosts polarization between conservatives and progressives over social policy, and reduces lower vs upper class conflict over redistribution (due to the assumption $\beta\psi < \varepsilon$). A switch from class to cultural identity can thus explain the observed change in social cleavages: increased disagreement over cultural issues and reduced class conflict over redistribution. As discussed in the introduction, using survey evidence, BGT(2021) show that polarization of US voters has indeed changed in this way after 2008. During the same period, US voters perceive race and immigration as more important problems than before, consistent with an increase in κ, the trigger for an identity switch in this model.[6]

[5] In our model stereotypes only arise along the trait (income or culture) along which identity is defined. BGT (2021) consider a more general setting in which income and social progressiveness are positively correlated in the population. In this case, Upper class identity also brings about some exaggeration of progressive views, because being progressive is also a distinct feature of the Upper class (as opposed to the Lower class). However, this exaggeration is weaker than under cultural identity. Our main results hold if we allow for this effect as long a correlation amogn traits is imperfect.

[6] In a rational model, one way to account for growing cultural polarization is to assume that cultural disagreement ψ has increased. BGT (2021) show, however, that this rational explanation implies that polarization over redistribution should also increase, which is not what we see in the data. BGT (2021) also discuss other features of survey evidence consistent with the implications of an identity shift, for which there are no parsimonious alternative explanations. Using data on Europe, Danieli et al. (2022) estimate a structural voting model and find evidence of increased salience of cultural issues (a higher κ in our model), but no change in voters' policy preferences.

4 Electoral Competition and Identity Politics

We now add an active political supply side and show that the changes in voter demands described above can also account for similar changes in party platforms, in the content of political propaganda, and for the voting realignments illustrated in Figure 2.

4.1 Identity, Party Divergence, and Voter Realignments

Two parties, left D and right R, compete in an election by announcing platforms $Y_p = (\tau_p, q_p)$, $p = D, R$. Their goal is to maximize their vote share.

Parties are historically connected to groups standing on opposite sides of major social cleavages (Lipset and Rokkan 1967). One can think of these connections as being intermediated by social organizations such as the church, trade unions or business groups, which enhance the party's influence and reputation within these groups. Party R is connected to the upper class and to social conservatives, D is connected to the lower class and to social progressives. Voters belonging to both groups a party is historically connected to are its "core voters". Thus, D's core voters are lower class and progressive types, $ij = LP$, while R's core voters are upper class and conservative types, $ij = UC$. Core voters distrust (or don't pay attention to) the other party. Formally, a measure $\alpha < 1/4$ of party p's core voters does not believe the policy promises of party $\overline{p} \neq p$. Such promises are believed by all other voters.[7]

Election Electoral competition occurs with probabilistic voting. The timing is: i) Voter identities ι are formed; ii) Parties simultaneously announce their platforms Y_p; iii) Voters compute their expected welfare under each party and vote. Let $\hat{Y}_D^{ij}$ and $\hat{Y}_R^{ij}$ be the policies that voter ij expects parties to implement in office. $W_\iota^{ij}(\hat{Y}_p^{ij})$ is the welfare of voter ij if party p wins, when the voter's identity is ι. The voter chooses R if and only if:

$$W_\iota^{ij}(\hat{Y}_R^{ij}) - W_\iota^{ij}(\hat{Y}_D^{ij}) \geq \tilde{\delta}^k$$

where $\tilde{\delta}^k$ is an i.i.d. popularity shock favoring party D**.** It is distributed uniformly across all voters in type ij with mean 0 and density Φ. The vote share of party p in type ij is equal to:

$$\pi_{\iota p}^{ij} = 0.5 + \Phi\left[W_\iota^{ij}(\hat{Y}_p^{ij}) - W_\iota^{ij}(\hat{Y}_{\overline{p}}^{ij})\right], \tag{9}$$

[7]Equivalently, we could assume that core voters in UC and LP have higher absolute trust for R and D, respectively, while middle of the road groups UP and LC have lower and equal trust for R and D. The assumption that some voter types are asymmetrically informed about party promises is also made in different contexts by Glaeser et al. (2005), Gavazza and Lizzeri (2009) and Matejka and Tabellini (2021).

where Φ is small enough that in equilibrium vote shares within each type are interior $1 > \pi_{\iota p}^{ij} > 0$ for all p and ij. The overall vote share of party p is $\pi_p = \frac{1}{4}\sum_{ij} \pi_{\iota p}^{ij}$.

Equilibrium Policies Party p announces platform Y_p taking the other party's platform as given. Denote by c_p the core voters of p, ($c_D = LP$ and $c_R = UC$). A measure α of these voters does not believe announcement $Y_{\bar{p}}$, instead expecting for party $\bar{p}$ the equilibrium platform, $\hat{Y}_{\bar{p}}^{c_p} = Y_{\bar{p}}^*$. Equilibrium platforms thus maximize the welfare of trusting voters:

$$Y_p^* = \arg\max_{Y_p} \frac{1}{4}\sum_{ij} W_\iota^{ij}(Y_p) - \alpha W_\iota^{c_{\bar{p}}}(Y_p). \tag{10}$$

To see how equilibrium platforms depend on identity ι we study both the effect of stronger stereotypes (higher θ) within an identity regime, and the effect of identity switches. In particular, we study a switch to cultural identity triggered by higher importance of social policy κ. This case is an important benchmark, because it matches the evidence that social policy has become more important for voters over time, both in the US (BGT 2021) and Europe (Danieli et al. 2022).

Proposition 3. *In any identity regime and for any $\theta \geq 0$, the equilibrium platform of party D is economically and socially more liberal than that of R, $q_R^* < q^\circ < q_D^*$ and $\tau_R^* < \tau^\circ < \tau_D^*$. Identity exerts two effects:*

Amplification. Within an identity regime, platform divergence increases in θ, strictly so in at least one policy instrument.

Change. If $\theta > 0$, an increase in κ that switches identity from class to culture increases platform divergence over q and reduces it over τ. If $\theta = 0$, platforms do not change with κ.

Since parties are opportunistic, platform divergence is due to disagreement among core voters. D is economically and socially more liberal than R because it does not fully internalize the demands of the upper class and conservative core voters of R, and conversely for party R.

By changing the demands of core voters, identity affects party platforms in two ways. First, within an identity regime higher $\theta > 0$ increases platform divergence, because it causes the core voters of each party to hold more extreme beliefs, either culturally or economically. Identity fuels partisan conflict. Second, a switch from class to cultural identity radically changes the domain in which voter preferences and hence party platforms are most polarized. By increasing social policy disagreement between conservative and progressive voters, this identity switch polarizes platforms over q. By reducing disagreement on redistribution between lower and upper class voters, the same identity switch reduces platform divergence over τ.

This result shows that a switch to cultural identity can produce, also on the political supply side, growing social policy conflict and lower redistributive policy conflict. Using voting

behavior and opinion surveys of US congressmen, Moskowitz et al. (2018) detect in recent decades growing polarization among US an increase in polarization between Republicans and Democrats on cultural, not on economic issues.[8] In our model this occurs because opportunistic politicians accommodate to changing voter demands. A switch to cultural identity can thus help rationalize changes in party platforms that are not explained in pure supply side mechanisms (Gentzkow et al. 2019, Gethin et al. 2021, Kuziemko et al. 2022).

A second key feature of partisan polarization, documented in Figure 1, is growing advertising over social policy compared to redistribution and growing divergence in political rhetoric. These phenomena can also be explained by a shift to cultural identity, as shown in subsection 4.2 where we study party persuasion. Before doing so, we consider another key political change: the voters realignment described in Figure 2.

Equilibrium vote shares Once again, we study the effect of higher θ within an identity regime and the effect of a switch to cultural identity.

Proposition 4. *In any identity regime party D and R obtain the same vote share, $\pi_p = 1/2$, and earn a majority of their core voters, $\pi_R^{UC} > 1/2 > \pi_R^{LP}$. If $\theta = 0$ and κ increases, R wins conservatives votes and loses progressive ones, regardless of their class: $\frac{\partial \pi_{iR}^{iC}}{\partial \kappa} > 0 > \frac{\partial \pi_{iR}^{iP}}{\partial \kappa}$, $i = U, L$. If $\theta > 0$ there are two additional effects:*

Amplification. If identity is cultural, higher κ causes a stronger shift of conservative voters toward R and of progressive voters toward D, the more so the larger is θ: $\frac{\partial^2 \pi_{CR}^{iC}}{\partial \kappa \partial \theta} > 0 > \frac{\partial^2 \pi_{PR}^{iP}}{\partial \kappa \partial \theta}$.

Class Realignment. An increase in κ inducing a switch from class to cultural identity causes party R to gain lower class votes and D to gain upper class votes.

Higher κ boosts cultural sorting of voters: some conservative voters move to R, some progressive voters move to D. When social policy is more important, conservatives find the restrictive q supplied by R more appealing and vice-versa for progressives. This realignment of cultural groups occurs also in the rational model, but cultural identity amplifies it, because it enhances both voter disagreement and platform divergence over q, boosting cultural sorting.

Critically, if voters are rational there is no class realignment. The reason is that conservative (resp. progressive) voters are equally present in both classes. As a result, the class composition of parties remains stable as cultural conflict becomes more intense. Matters change if higher κ causes a switch from class to cultural identity. In this case, conservative lower class voters move toward R, and progressive upper class toward D. The reason is that the identity switch depolarizes class conflict, reducing voter extremism about redistribution. Lower class

[8] Similar supply side changes occurred in other Western democracies, not just in the US. Hix et al. (2019) study roll call votes in the European Parliament and show that, since 2014, conflict changed from left vs. right to nationalism vs being pro-EU.

conservatives who voted for D now find a fiscally restrictive platform less disturbing, so they switch to R, and conversely for the upper class progressives.[9]

More generally, and irrespective of the causes of identity shifts, under class identity voters sort across parties primarily by their income ($\pi_R^U > 1/2 > \pi_R^L$), while under cultural identity they sort by their culture ($\pi_R^C > 1/2 > \pi_R^P$). This is consistent with the evidence on voters' realignments presented in Figure 2. Similarly, Sides et al. (2018) show that, after 2008, ethnic minorities and people with favorable attitudes toward them became more likely to support the Democratic party, while the opposite happened for white voters with negative views on minorities. At the same time measures of economic anxiety became uncorrelated with how people vote. They argue that this was due to the election of a black president, which made race politically more salient. We return to this point in the conclusions.[10]

A growing body of work seeks to explain voter realignments, in the US and other advanced economies, as a rational response to exogenous changes in political supply (Gethin et al. 2021, Kuziemko et al. 2022), or in voters' composition (Kitschelt and Rehm 2019). Our mechanism explains why political supply changed, and offers a unified explanation of changes in the dimension of polarization in the electorate, in party platforms, and voter realignment, all resulting from higher salience of cultural issues. Our mechanism has a key new implication: upon switching to cultural identity, the same lower class voter demands less redistribution and becomes culturally more extreme. Section 5 offers evidence in line with this prediction.

4.2 Political Persuasion and Extremism

Politicians often appeal to identity to persuade voters and increase their electoral support. In the heyday of class conflict, communist leaders connected to blue collars by stationing in front of industrial plants. Right-wing leaders still connect to conservatives by deploying religious symbols and rituals. Based on these connections, politicians galvanize their constituencies using "us vs. them" rhetoric. We now study such identity-based persuasion in our model. We show that politicians have a stronger incentive to push their voters toward more extreme beliefs if platform divergence is larger. This creates a powerful feedback effect between party divergence and voters' extremism that amplifies voter disagreement. This effect is magnified as identity switches from class to culture and helps rationalize the evidence on political advertising and rhetoric in Figure 1.

[9] In the rational model, an increase in κ would also cause a class realignment between parties if income and cultural preferences of voters were positively correlated. Our model emphasizes a stronger mechanism: when identity switches to culture, the conservative lower class and the progressive upper class become more elastic to differences in q because they (and party platforms) become less extreme about τ.

[10] Danieli et al. (2022) document similar patterns in Europe, showing that voters' realignment towards extreme right wing populist parties can be largely explained by a rise in the salience of cultural issues for conservative voters.

Political Persuasion Consider Equation (5), describing the beliefs of voter ij about the trait $\widetilde{y} = \widetilde{\psi}, \widetilde{\varepsilon}$ under identity ι:

$$z_{\iota}^{ij}\left(\widetilde{y}\right) \propto z^{ij}\left(\widetilde{y}\right)\left[\frac{z_{\iota}^{\iota}\left(\widetilde{y}\right)}{z_{-\iota}^{-\iota}\left(\widetilde{y}\right)}\right]^{\chi_{\iota}}, \tag{11}$$

where χ_{ι} captures overweighting of distinctive ingroup beliefs. We model persuasion as a costly effort by a party to influence the weight χ_{ι} of stereotypes for the group to which the party is connected. Party R is connected to conservative (C) and upper class (U) groups, so it affects χ_C and χ_U. Party D is connected to the opposite groups, so it affects χ_P and χ_L.[11]

To see how persuasion works, suppose that identity is cultural. As shown in the appendix, beliefs continue to fulfill Equation (6), but with group-specific distortion parameters:

$$\theta^C = \left(\frac{\chi_C}{1-\chi_C-\chi_P}\right), \;\; \theta^P = \left(\frac{\chi_P}{1-\chi_P-\chi_C}\right). \tag{12}$$

Suppose now that party R cues a conservative stereotype, increasing χ_C. This could be done by spreading the conservative stereotype "all immigrants are criminals". This message cues conservative voters to attach higher weight on ingroup stereotypes, affecting their belief distortion θ^C in two ways: first directly, by increasing their weigh on stereotypical conservative beliefs (captured by higher χ_C in the numerator of θ^C); second indirectly, by rendering the equilibrium conservative stereotype more extreme (as captured by higher χ_C in the denominator of θ^C). But, higher χ_C also backfires, because it makes the progressive outgroup even more progressive (as captured by higher χ_C in the denominator of θ^P). Intuitively, a more extreme conservative stereotype makes highly progressive beliefs even more stereotypical of P, enhancing the extremism of P's voters.

The logic is analogous when the left-wing politician raises χ_P by saying "immigrants are persecuted/refugees", which renders both progressive and conservatives more extreme in equilibrium. Persuasion also works in the same way - with respect to beliefs about income - when identity is class based. Overall, then, persuasion causes a party's connected voters to be more extreme, and hence "captive" to the party, but it also alienates non connected voters, generating a political trade-off.

Equilibrium Let $a_{\iota p}$ denote persuasion effort of party p for its connected group ι. Under cultural identity $\chi_C = \chi + a_{CR}$ and $\chi_P = \chi + a_{PD}$, while under class identity $\chi_U = \chi + a_{UR}$ and $\chi_L = \chi + a_{LD}$. Through persuasion, party p can either enhance ($a_{\iota p} > 0$) or dampen ($a_{\iota p} < 0$)

[11] The assumption that persuasion by a party influences the voters aligned with it is consistent with Ansolabehere and Iyengar (1995) and Chang (2003).

stereotypes, relative to the baseline $\chi \geq 0$.[12] The case $\chi = 0$ is particularly interesting: in this case voters' belief distortions are entirely due to political persuasion. Each party p chooses policies (q_p, τ_p) and persuasion effort $a_{\iota p}$, taking voters' identity and the choices of its opponent as given. Persuasion entails an advertising cost $C(a) = c \cdot a^2/2$, where $c > 0$ is large enough to guarantee a unique and stable fixed point for beliefs, $0 < \chi_\iota < 1/2$.

Equilibrium platforms (q_p, τ_p) and voting patterns do not change from Propositions 2 and 3, but now parameter θ is endogenous and could vary with identity. Let $a^*_{\iota p}$ denote equilibrium persuasion by party p for its ingroup ι. We prove the following result.

Proposition 5. *If the cost of persuasion is sufficiently convex (c is sufficiently large), there is a unique symmetric equilibrium in which parties enhance stereotypes. Thus, they spread class stereotypes $a^*_{LD} = a^*_{UR} > 0$ when identity is class based and they spread cultural stereotypes $a^*_{PD} = a^*_{CR} > 0$ when identity is cultural. Persuasion effort increases in the share of core voters α, in economic inequality ε and in cultural disagreement ψ.*

If κ increases so that identity switches from class to culture, persuasion effort and stereotypes switch from economic to cultural, and they both increase: $a^*_{PD} = a^*_{CR} > a^*_{LD} = a^*_{UR}$.

Due to the model's symmetry, the two parties choose the same amount of persuasion, balancing the net marginal benefit of increasing $a_{\iota p}$ with its marginal advertising cost $C'(a_{\iota p})$. The net marginal benefit of persuasion is positive: stronger attachment by more extreme ingroup voters dominates the alienating effect on outgroup voters. Thus, parties fuel stereotypes and belief extremism.

Parties engage in persuasion even if voters have no tendency to stereotype on their own, $\chi = 0$. In this case party persuasion is entirely responsible for voters' distorted beliefs and for the change in voter demands upon identity switches. It is not that politicians can get voters to believe anything: the direction of persuasion is determined by a salient shock, that creates the conditions for class or cultural identity. Voters are influenced only if politicians spread stereotypes that concern the salient social cleavage, because the latter resonate with a social conflict voters feel part of. This may help explain why voters may be susceptible to political propaganda even in scientific domains such as natural evolution, global warming, or Covid (Kahan 2015, Allcott et al. 2020). Politicians can become persuasive by framing these domains in terms of a "culture war" in which people are ready to take sides.

Proposition 5 shows a complementarity between party divergence and persuasion: making your connected voters more extreme is more useful when your platform is more extreme.

[12] Murphy and Shleifer (2004) study how the connection between parties and social groups promoting certain core issues allows politicians to persuade group members on non-core issues. In our model, we microfound persuasion using stereotypes, and show that the identity switches from class to culture dramatically change the structure of persuasion, more than the distinction between core and non-core issues. Another margin along which politicians can ride identity politics is by shaping the salience of certain conflicts (e.g. by changing κ), but we abstract from this here.

Hence, anything that increases policy divergence boosts persuasion effort. If α increases, core voters are less mobile and party platforms become more divergent. Thus, parties try to make all ingroup voters more extreme, including non core ones. Similarly, if cleavages are higher, ε and ψ are larger, parties fuel more extremism.[13]

These results shed more light on partisan polarization in Figure 1. When social policy becomes sufficiently important that identity switches from class to culture, there are two effects. First, politicians change the content of their propaganda, directing it to the issues that voters now find most important such as social policy (Figure 1, Panel A). Second, politicians change the content of their rhetoric, fueling cultural stereotypes in domains like immigration and race, but also in redistribution. The right opposes universal transfers not because they "expropriate the rich", but because "they go to immigrants or politicians in Washington", the left supports them based on principles of "fairness and justice". This is consistent with the growing divergence in the universalism of speeches (Figure 1 Panel B) and with the growing distinctiveness of Republican vs Democratic speeches, which occurs especially in cultural but also in economic domains (Gentzkow et al. 2019).

The feedback between political persuasion, party platform and voter beliefs under cultural identity can also explain growing affective polarization. Because cultural disagreement concerns a large array of policy domains, politics becomes a fight between two groups that disagree about everything. Sides et al. (2018) show that this also occurs because parties enhances voters' identity-based stereotypes: after the Trump presidential campaign of 2016 which focused on racial and immigration issues, Democratic and Republican supporters hold more divergent and stereotypes beliefs about race, immigration, Islamic religion. As in our model, these polarizing effects of political rhetoric often reflect a backlash of out-group voters, and not just persuasion of ingroups. For instance, a by-product of Trump statements on immigrants was to reinforce Latino and Asian identities.[14]

In our model extremism emerges from the interaction between political demand and supply. On the one hand, politicians face stronger incentives to engage in political propaganda on the issues where voters are divided. On the other hand, political propaganda further exacerbates voters' divisions. Identity politics is at the heart of this interaction, because voters are more easily persuaded by politicians who socially resonate with them. Politicians can be group

[13]Persuasion is also stronger if baseline stereotyping χ is higher, because this too increases policy divergence, or if voters are more responsive to differences in policy platforms (Φ is higher), because persuasion has a larger effect on vote shares

[14]In line with this notion, Nicholson (2011) shows that indicating that a controversial statement was backed by Presidents Obama makes Republican respondents more likely to disagree with it, and similarly for Democrats with regard to statements backed by George W. Bush. Similarly, a byproduct of Trump statements on immigrants was to reinforce Latino and Asian identities. These and several related findings are discussed in Sides et al. (2018), p.212-214 and the references cited therein. See also Pew (2017), Telhami (2017), Tesler (2016).

symbols, used by voters to categorize themselves in one camp or another. If social conflict is low, politicians are moderate, and voters hold moderate views. If social conflict is high, the payoff is large for politicians to compete via diverging platforms, incendiary rhetoric, and misrepresentation of reality that render voters' beliefs even more extreme, which in turn feeds back into even more extreme platforms. Political polarization is not only due to an initial social fracture caused by a salient conflict and the realignment of extremists into parties. It is also due to the endogenous incentive of politicians to render voters more extreme.

5 Trade Shocks and Cultural Identity

We now show that even specific economic shocks, trade shocks, can cause a switch to cultural identity, if they exacerbate conflict between opposite cultural groups. We develop the precise implications on political demand and supply and then test them on US evidence.

5.1 Import exposure and social identity

Adding Trade Shocks to our Basic Model Consider a small open economy similar to the one described above but consisting of several districts. In each district there are two sectors, export and imports, producing goods x and m, whose international prices are 1 and p^* respectively. Voters earn their taxable income $1 + \varepsilon^i$ in the export sector. They also earn non-taxable income from two units of labor that can be employed in either sector, with voter and district specific probabilities. Districts are identical in all respects, except in these probabilities - which is the key new ingredient here.

Denote by η_z^{ij} the probability that type ij in district z is employed in the import sector. In non-exposed districts, $z = n$, no voter earns import-sector income, $\eta_n^{ij} = 0$ for all ij. In exposed districts, $z = e$, only conservative voters can earn import sector income, with equal probabilities across classes, $\eta_e^{UC} = \eta_e^{LC} = \eta > 0$ and $\eta_e^{UP} = \eta_e^{LP} = 0$. Half districts are exposed, the other half are non-exposed. Thus, aggregate domestic production of the imported good is $\eta/2$. Higher η captures higher exposure to import competition, which affects only conservative voters in exposed districts. The stronger trade exposure of conservative voters is important. We view it as capturing lower education, which is associated with more conservatism (lower ψ^j) and higher employment in the import competing sector (higher η_z^{ij}).[15]

Voter ij in district z has utility:

[15]The assumptions that $\eta_z^{iP} = 0$ in all districts and that $\eta_z^{iC} = 0$ in non-exposed districts simplify notation but entail no loss of generality as long as conservatives remain more exposed than progressives in the exposed districts. Footnote 17 discusses how predictions on voters' demands would be affected if η_z^{iP} also differed among districts.

$$u_z^{ij} = x_z^{ij} + U(m_z^{ij}) + vg - \frac{\kappa}{2}(q - \psi^j)^2,$$

where x_z^{ij} and m_z^{ij} denote private consumption of the exported and imported good, g is the public good, and q is social policy - both nationally provided and hence without z subscripts. Utility from imports is quadratic $U(m) = -\frac{1}{2}(\varpi - m)^2$. To simplify the algebra, we set the value of the public good to be the same for all voters ($\beta = 0$). As before, the government levies a distorting tax τ on $1 + \varepsilon^i$, and in addition it levies an ad valorem tariff t that raises the domestic import price at $(1 + t)p^*$. Tariff revenue is used to finance the public good g, along with tax revenue τ.

The appendix solves this model and shows that, under rationality, the only difference with Section 3 is the presence of conflict over trade policy. Preferences over q and τ are the same as in (2) (with $\beta = 0$). The voter's ideal tariff is equal to:

$$t_z^{ij} = \hat{t} + \frac{2\eta_z^{ij}}{p^*(2v - 1)}, \tag{13}$$

where $\hat{t} > 0$ is the same for all voters. Higher exposure η_z^{ij} entails a higher ideal tariff.

Social Identity As in Section 3, a voter can identify with his class or cultural group, so as to maximize $\Delta(G, \bar{G}) - \lambda\Delta_z^{ij}(G)$, where $\Delta(G, \bar{G})$ is salience and $\Delta_z^{ij}(G)$ is the voter's dissimilarity from his national ingroup, with λ being the weight given to dissimilarity relative to salience. But while relevant groups are defined at the national level, conservative individuals differ across districts in their import exposure. Hence, dissimilarity of conservative types from their cultural group varies across districts. We obtain the following result.

Proposition 6. *Suppose that $\varepsilon^2 > \kappa\psi^2$ and that $\lambda > 4/3$. There are two thresholds $\bar{\eta} > \underline{\eta} > 0$ such that, if import exposure is small, $\eta < \underline{\eta}$, all voters identify with their class. A trade shock increasing η affects identity as follows:*

If $\eta \in \left(\underline{\eta}, \bar{\eta}\right)$, conservative voters in exposed districts switch to cultural identity, all other voters remain class identified.

If $\eta > \bar{\eta}$, progressive voters in all districts also switch to cultural identity. Conservative voters in non exposed districts remain class identified.

Stronger import competition favors cultural identity. While different economic classes are equally exposed to imports, and thus agree on the tariff, different cultural groups are not, so they disagree over it. Disagreement over tariffs increases the salience of cultural groups, the more so the higher is η. This affects identity differently across districts, due to heterogeneous exposure to the shock.

Conservative voters from exposed districts are most eager to switch to cultural identity. As the trade shock hits, they feel dissimilar from their average upper or lower class ingroup, who is not very exposed to trade. They feel more similar to the average conservative ingroup, who is more exposed, causing them to identify with the latter.

Conservative voters from non exposed districts, by contrast, are the last eager to switch. In fact, they do not switch at all when $\lambda > 4/3$ (as in Proposition 5). These voters do not lose from trade, so they feel very dissimilar from the average conservative ingroup, who is quite exposed. They feel more similar to the average class ingroup, who is little exposed like them, so they stick to class identity.[16]

Finally, progressive voters from exposed and non-exposed districts stand in between these extremes. They feel similar to their cultural group, which is not exposed like them, but they also feel quite similar to their economic class, which is on average little exposed anyhow. As growing import exposure causes cultural conflict to become more salient, progressive voters too eventually switch to cultural identity. Note that the switch of progressive voters happens uniformly, since by assumption $\eta_z^{iP} = 0$ in all districts.[17]

Predictions The asymmetry in identity switches between exposed and non exposed conservatives is the source of our model's distinctive diff-in-diff predictions. The first such prediction concerns the effect of the trade shock on voters' demand for social policy q and redistribution τ. Under rationality, these demands are unaffected by η.[18] Denote by $\Delta\tau_z$ and Δq_z the change in the average demand for redistribution and social policy in district z, and by $\Delta\tau_z^G$ and Δq_z^G the change in policy demands in the same district but only within group G.

Prediction 1 *(Voters' Demand) A trade shock, higher η, causing some voters to switch to cultural identity exerts two effects in exposed relative to non-exposed districts.*

1) Conservative voters demand more conservative social policies, progressive voters are unaffected: $\Delta q_e^C < \Delta q_n^C$ and $\Delta q_e^P = \Delta q_n^P$. Thus, average demand for progressive social policies drops, $\Delta q_e < \Delta q_n$.

[16] If the weight on group similarity is smaller, $\lambda < 4/3$, then also conservative voters from non exposed districts can switch to cultural identity provided trade exposure η is large enough that the salience of cultural groups is also very large. In this extreme case, the increase in trade exposure η is so strong that there is a uniform switch from class to cultural identity across all voters and districts, so there are no diff-in-diff patterns.

[17] If progressives were also exposed to import competition, heterogeneity across localities would have opposite effects on conservatives and progressives. For instance, suppose that progressive exposure in locality $z = e$ is $\eta_e^P < \eta$ (conservatives are still more exposed than progressives on average). Then progressive in the exposed localities would be less likely to identify with their cultural group, compared to those in non exposed localities. The reason is that progressives on average demand less protection than conservatives. Hence an exposed progressive would be less similar to her cultural group, compared to a non exposed one.

[18] Demand for tariffs is affected by the trade shock in both the rational model and when identity matters. We do not emphasize our model's prediction for tariffs both because it is less distinctive and because we do not measure voters' preferences over tariffs in our data.

2) The demand for redistribution drops for the lower class and rises for the upper class: $\Delta\tau_e^L < \Delta\tau_n^L$ *and* $\Delta\tau_e^U > \Delta\tau_n^U$*. Thus, average demand for redistribution is unaffected.*

Only the demands of conservative voters change asymmetrically across exposed and non exposed districts, driving our diff-in-diff predictions. As exposed conservatives switch to culture, they demand a more restrictive social policy than their non exposed counterparts, causing also a relative drop in the desired q for the average voter in exposed districts.

Similarly, as exposed lower class and conservative voters switch to culture, they reduce their demand for redistribution compared to their non exposed counterparts. Thus, in exposed districts demand for redistribution by the average lower class voter drops, while upper class voters move in the opposite direction. Given the symmetry of the model, overall demand for redistribution does not change - although it would drop (in exposed districts and in the entire country) if the lower class was larger than the upper class.[19,20]

Our second prediction concerns political supply. Suppose that each district elects a political representative. There are two parties, $p = D, R$, each fielding a candidate in each district, who is fully trusted by only some voters, as in the previous sections. Candidates maximize their vote share in their district.[21] They simultaneously announce a platform,$(q_{zp}, \tau_{zp}, t_{zp})$, and choose persuasion effort $a_{\iota zp}$ for each identity group ι of connected voters. Because now some voters may be culturally and others class identified, a party may exert effort on both economic and cultural persuasion. We assume a separable cost function for effort, $C\left(a_{\iota zp}, a_{\iota' zp}\right) = \frac{c}{2} \cdot (a_{\iota zp}^2 + a_{\iota' zp}^2)$. If c is sufficiently large we show that the following holds.

Prediction 2 *(Political supply) A trade shock, higher* η*, causing some voters to switch to cultural identity exerts the following effects in exposed relative to non-exposed districts:*

i) Both parties issue more conservative social policies, but especially so party R*,* $\Delta(q_{eR}^* - q_{nR}^*) < \Delta(q_{eD}^* - q_{nD}^*) < 0$*, so divergence over* q *increases*: $\Delta\left(q_{eD}^* - q_{eR}^*\right) > \Delta\left(q_{nD}^* - q_{nR}^*\right)$.

ii) Party D *issues a less redistributive policy while party* R *issues the same or a more redistributive policy,* $\Delta\left(\tau_{eD}^* - \tau_{nD}^*\right) < 0 \leq \Delta\left(\tau_{eR}^* - \tau_{nR}^*\right)$*, so that divergence in* τ *decreases,* $\Delta\left(\tau_{eD}^* - \tau_{eR}^*\right) < \Delta\left(\tau_{nD}^* - \tau_{nR}^*\right)$.[22]

[19] Average demand for redistribution would also drop in the exposed districts if we retained the assumption that $\beta > 0$. In this case, when exposed conservatives switch to culture they reduce their average demand for redistribution. If progressives do not switch to culture, this yields a diff and diff drop in average demand for redistribution in exposed districts compared to non exposed ones, $\Delta\tau_e < \Delta\tau_n$.

[20] If progressive types were also exposed to import competition, as discussed in footnote 17, they would be less likely to identify with P in more exposed districts. Hence they would demand a lower q, reinforcing the implications for this policy tool. The effect on τ is more complex, and our predictions only carry through if η is such that non-exposed progressive do not switch to culture.

[21] Policy announcements and persuasion effort differ by districts, although announcements refer to a national policy, because vote shares refer to the district. We assume that voters vote sincerely, neglecting strategic interactions between elected representatives in the national legislature. Thus, in each district voters trade off their perceived welfare under the announced policies against the idiosyncratic features of each candidate, as in section 4. We do not characterize the equilibrium policy.

[22] As shown in the appendix, $\Delta(\tau_{eR}^* - \tau_{nR}^*) = 0$ if η is such that progressive voters are culturally identified

iii) Party R increases effort in conservative persuasion and both parties decrease effort in class persuasion.

When η increases, conservative voters in exposed districts switch from class to cultural identity. To attract them, both parties shift their social policy platforms toward conservatism relative to non-exposed districts (recall that the identity of progressives is equally affected by η in all districts). The effect is stronger for party R than for party D, however, since only the former is trusted by all conservative voters. As a result, platform divergence over social policy also increases in exposed districts compared to non-exposed ones.

Party R does not change its redistributive policies in exposed relative to non-exposed districts, because the effect of the identity switch on the redistributive preferences of conservatives belonging to opposite economic classes exactly offset each other. Party D, on the other hand, is predominantly influenced by the reduced demand for redistribution of the lower-class conservatives in the exposed (relative to non-exposed) districts, and hence pursues a less redistributive policy in the exposed districts. Thus, party divergence in redistributive policies shrinks in the exposed districts relative to the non-exposed ones.

Finally, a similar effect holds regarding persuasion. Trade exposure changes its content: it reduces class rhetoric, which does not resonate with culturally identified voters, and boosts cultural rhetoric. Critically, the effect is asymmetric: R has a strong incentive to boost its conservative rhetoric in exposed districts compared to non exposed ones because its connected voters are now culturally identified. The effect on D is instead ambiguous. When only exposed conservatives switch to culture, $\eta \in \left(\underline{\eta}, \bar{\eta}\right)$, D also deploys more conservative rhetoric in exposed vs. non exposed districts, seeking to dampen conservative stereotypes (i.e., $a_{eD} < 0$). By doing so, D reduces the ability of R to induce strong stereotypes among conservative voters. When however also progressive voters switch to culture, D may find it optimal to marshal progressive values to mobilize its culturally identified core voters. In this case, the effect of higher η on D's rhetoric is moot.[23]

5.2 Empirical Tests

We now explore empirically the validity of our "cultural identity" approach to trade shocks. Autor et al. (2020) already studied voter realignment in more exposed districts. We apply their empirical strategy to test our distinctive diff-in-diff predictions on: i) voters' policy preferences over social policy and redistribution, Prediction 1, and ii) parties' social policy positions and rhetoric, Prediction 2.

Following Autor et al. (2020), we measure the trade shock as the change in Chinese import

in all districts, while $\Delta(\tau^*_{eR} - \tau^*_{nR}) > 0$ if they are class identified in all districts.

[23]Thus, one difference in the analysis of persuasion compared to the model of Section 4 is that now in some districts equilibrium persuasion is asymmetric.

penetration, and instrument it with the contemporaneous change in Chinese imports in eight other developed nations. Variation across US commuting zones (CZ), z, is due to differential local importance of import competing industries. We denote such measure by ΔIP_z. It proxies for the change in average exposure η_z in z in our model.[24]

Who is more exposed? A key assumption in the model is that culturally conservative voters are more exposed to the trade shock than progressives. Our survey supports this assumption. We asked respondents whether they think that the economic losses (if any) borne by themselves or their peers are due to globalization and technology. As shown in Figure 4 below, conservative respondents hold globalization and technology more responsible for their economic losses than progressives. Instead, there is no tangible difference in attribution between upper and lower class identified voters.

These perceptions are consistent with the demographic patterns of respondents from the CCES survey used below to test Prediction 1. CCES respondents in more exposed CZs are on average less educated and more religious (two correlates of being conservative), but their income is uncorrelated with imports exposure.[25]

These correlations support the notion that trade shocks may have amplified the cleavage between cultural groups, causing losers from trade to identify as cultural conservatives.

Prediction 1: Changes in Voter Demands CCES is an online US survey of political opinions conducted between 2006 and 2016, with 36,000 respondents per year on average.

[24]Autor et al. (2013), which introduces the general methodology, measure the change in import exposure in each CZ by the average change in Chinese import penetration in the CZ's industries, weighted by each industry's share in the CZ initial employment. Thus, the change in import exposure in CZ z is defined as:

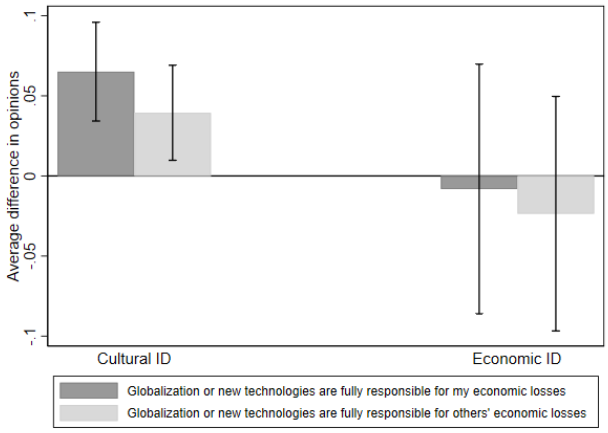
$$\Delta IP_z = \sum_{m \in M} \frac{L_{m,z,00}}{L_{z,00}} \times \frac{I_{m,t_2} - I_{m,00}}{Y_{m,91} + I_{m,91} - X_{m,91}} \tag{14}$$

where the first term in summation is the share of manufacturing industry m in *total* employment of CZ z, while the second term is the increase in US imports from China of products typical of m between 2000 and year t_2, standardized by m's market size in 1991 (i.e, prior to the boom in China's exports). Since the change in penetration is likely to be endogenous, imports are instrumented as in Acemoglu et al (2016), in a way similar to Autor et al (2013). The instrument is obtained by replacing $(I_{m,t_2} - I_{m,00})$ with $(I^{EU}_{m,t_2} - I^{EU}_{m,00})$, namely the increase of Chinese imports in eight developed countries over the same period, and all the other terms in (1) with their values in 1988.

[25]We explore conditional correlations with a regression at the CZ level. The dependent variable is the increase in Chinese imports, ΔIP_{00-16}. The covariates, measured at the beginning of the CCES sample period, are the CZ's share of respondents who have some college education, college education or more, who are secular, and the respondent's average income. The results are (standard error in parenthesis, asterisks denoting significance levels):

$$\Delta IP_{00-16} = \underset{(0.283)}{1.533^{***}} - \underset{(0.249)}{0.915^{***}} somecollege_{06} - \underset{(0.293)}{0.789^{***}} collegemore_{06} - \underset{(0.267)}{0.618^{***}} secular_{06} + \underset{(0.003)}{0.002} income_{06}.$$

Figure 4. Respondents Holding Globalization Responsible for Economic Losses: Full Sample



Notes: the figure reports the difference of average beliefs about the economic losses caused by globalization and new technologies between Conservatives and Progressives (for Cultural ID) and between respondents belonging to the Lower and to the Upper Class (for Economic ID). In particular, higher values capture greater support in favour of the statement: "Globalization or new technologies are fully responsible for my (resp. others') economic losses". Bands represent the 95% confidence intervals from a t-test of the difference between means of the two groups being equal to 0.

Critically, for a subset of 9,400 respondents there is a panel dimension over 2010-14, so we can check whether the opinions of the *same* respondent changed over time depending on import exposure. There are about 67 respondents per CZ and year on average in the cross section, and 15 respondents per CZ in the panel. Online Appendix Tables B.4 and B.5 report key summary statistics for both samples at the CZ and individual level.

To test for Prediction 1, we construct two indicators using data available both in the cross section and the panel: preferences for redistribution (τ) and preferences over immigration (q). Both indicators consist of the first principal component from two questions on government spending and taxation, and on border control and illegal immigrants, respectively (see the Appendix). Higher values indicate more favorable views on redistribution and immigration.[26]

US imports from China grew fast before the start of our sample, and the effect on beliefs and policy preferences is likely to be delayed. Thus, to measure trade shocks, we take the change in import exposure during the 6 years before the CCES survey. In the cross section, this is the change in import exposure between 2000 and 2016. In the panel, it is the change between 2004 and 2014.

In the repeated cross sections, we test Prediction 1 by comparing respondent attitudes in the first (2006-7) and last (2016) years of the survey (the initial year varies by question) using

[26]We do not consider preferences over trade policy because the CCES survey does not measure such preferences consistently over time.

the diff-in-diff specification:

$$y_{i,z,t} = \beta_0 \Delta \widehat{IP}_z * d_t + X'_{i,z,t}(\beta_1 + \beta_2 * d_t) + Z'_z \beta_3 * d_t + \beta_4 d_t + \alpha_z + u_{i,z,t},$$

where $y_{i,z,t}$ measures the opinion of respondent i in z in year t, $\Delta \widehat{IP}_z$ is the instrumented increase in import exposure in z, d_t is a dummy that equals 1 in the post-shock period.

The coefficient of interest is β_0. It measures the change of average attitudes in CZs that have become more exposed. By Prediction 1, we expect that more exposed voters have become strictly less pro immigration ($\beta_0 < 0$) and weakly less pro redistribution ($\beta_0 \leq 0$) compared to less exposed ones.

We control for individual covariates $X_{i,z,t}$ (gender, race, educational attainments, age and age squared), for CZ covariates Z_z in year 2000, and for CZ fixed effects (α_z). Note that the vector Z_c includes initial manufacturing employment, and it is interacted with the dummy variable d_2. This amounts to controlling for any shock that hits the entire manufacturing sector. Thus, the coefficient of interest β_0 is estimated using variation within manufacturing.[27]

In the panel data, we assess the change in the opinion of a *given* respondent by estimating:

$$\Delta y_{i,z} = \beta_0 \Delta \widehat{IP}_z + X'_{i,z,1} \beta_1 + Z'_z \beta_2 + u_{i,z},$$

where $\Delta y_{i,z}$ is the change in attitudes by respondent i in CZ z between 2010 and 2014. The coefficient of interest is again β_0. It measures the change in opinions of the average resident in more exposed CZs. By Prediction 1 β_0 should be negative both for immigration and redistribution (again, weakly so for the latter).

We again control for respondent demographics, for her initial attitudes in 2010 $X_{i,z,1}$, as well as for CZ characteristics Z_z. We also include a dummy variable for respondents who changed CZ between 2010 and 2014, as well as the interaction of this dummy with $\Delta \widehat{IP}_z$.[28] The change in opinion is measured over a fairly short period (five years). Since identities and opinions are likely to change slowly over time, this is a demanding exercise.

Table 1 reports the estimates for the two specifications, with and without covariates for the CZ. Estimation is by 2SLS and standard errors are clustered at the CZ level. The first two columns refer to panel data, the others to repeated cross sections.

[27] As in Autor et al. (2020), the vector Z_z includes the manufacturing share of employment, the offshorability and routine task indexes of Autor and Dorn (2013), the county-level vote share for G.W. Bush in the presidential election, a dummy for Republican victory in that county, and their interaction. All variables are measured in 2000. Inclusion of these variables is important for identification, given the nature of the instrument defined in the previous footnote. Z_z also includes the CZ average of the dependent variable measured at $t = 1$, $\bar{y}_{z,1}$, to allow for mean reversion of attitudes over time.

[28] Here the vector Z_z does not include mean reversion controls, since mean reversion is already captured by the included variable $X_{i,z,1}$. Results (available upon request) are robust to also controlling for initial party identity, religiosity, and income of respondents.

Table 1. Import Penetration and Attitudes - Baseline Results

	Panel		Cross Section	
	(1)	(2)	(3)	(4)
	Panel A: Immigration			
ΔIP	-0.080***	-0.124**	-0.024**	-0.035
	(0.031)	(0.058)	(0.011)	(0.025)
Observations	9,451	9,451	73,486	73,486
F-stat	53.53	37.86	75.17	31.01
	Panel B: Redistribution			
ΔIP	-0.038	-0.170**	-0.019	-0.053**
	(0.037)	(0.068)	(0.018)	(0.026)
Observations	7,251	7,251	66,308	66,308
F-stat	57.06	40.09	67.05	26.84
Individual Controls	Yes	Yes	Yes	Yes
CZ Controls		Yes		Yes

Notes: The table reports 2SLS estimates. For each commuting zone (CZ), the change in import penetration refers to the period between 2004 and 2014 in the panel sample and between 2000 and 2016 (and it is interacted with the second period dummy) in the cross section. In the panel, dependent variables are first differenced over the period 2010-2014. In the cross section, the dependent variables are measured in the following pairs of years: 2007 and 2016 (Panel A); 2006 and 2016 (Panel B). All specifications include demographic controls for gender, age, a quadratic of age, educational attainment, and race. CZ controls refer to year 2000 and include the manufacturing share in CZ employment, the offshorability and routine-task-intensity indexes as in Autor and Dorn (2013), the county-level republican vote share, a dummy for Republican victory in that county, and their interaction. In the the cross section, both demographic and CZ controls are interacted with the second period dummy and regressions include CZ and second period fixed effects. In the panel, regressions are augmented by a dummy variable for respondents who changed CZ between 2010 and 2014, alone and interacted with the change in imports exposure. The cross section regressions include the CZ mean of the dependent variable in the initial period interacted with a dummy variable for the second period; whereas, the panel regressions include the level of the dependent variable in 2010. F-stat is the KP F-stat for weak instruments. Standard errors are clustered at CZ level. Significance levels: *** $p< 0.01$, ** $p< 0.05$, * $p< 0.1$.

Consistent with Prediction 1, both in the panel and in the cross section residents of more exposed CZs become less favorable to redistribution and to immigration. The effect is not always significant at conventional levels, but it is always directionally as predicted.[29]

Prediction 1 further implies that, in the more exposed CZ, only culturally conservative voters switch identity from class to culture and become more averse to immigrants. Regarding redistribution, it implies that lower class voters should be the ones demanding less redistri-

[29] According to our panel estimates, an acceleration in import penetration by one standard deviation reduces the willingness to redistribute and to accept immigrants by about 20% relative to the standard deviation of the change of mean attitudes across CZs between 2010 and 2014. The magnitude of the estimated effects in the repeated cross sections is smaller: a one-standard-deviation increase in imports exposure changes attitudes by about 8%-15% of a standard deviation of their mean change across CZs.

bution while the opposite should be true for upper class voters. To test these implications, we estimate the same regressions of Table 1, but interact the import shocks with two dummy variables, one for being secular and the other for belonging to the upper-middle classes (defined as being in the top 67% of the national income distribution of the CCES sample). Both dummy variables are measured at the beginning of the sample period (2010). We only estimate these interacted regressions in the panel, which allows us to see how a voter's beliefs change depending on his initial socioeconomic status. These are demanding regressions, since we only have an average of 15 respondents per CZ.

Table 2. Import Penetration and Attitudes - Heterogeneity in the Panel Sample

	Immigration		Redistribution	
	(1)	(2)	(3)	(4)
ΔIP	-0.173***	-0.193**	-0.189***	-0.286***
	(0.055)	(0.076)	(0.066)	(0.072)
ΔIP * Secular	0.144**		0.041	
	(0.066)		(0.077)	
ΔIP * Middle/Upper Class		0.111		0.146**
		(0.068)		(0.065)
Observations	9,451	8,423	7,251	6,527
F-stat	18.93	20.45	20.01	21.27
Individual Controls	Yes	Yes	Yes	Yes
CZ Controls		Yes		Yes

Notes: The table reports 2SLS estimates. For each commuting zone (CZ), the change in import penetration refers to the period between between 2004 and 2014. All dependent variables are first differenced over the period 2010-2014 and regressions include a control for the level of the dependent variable in 2010. Income class and religiosity refer to 2010. All specifications are augmented by both demographic and CZ controls. Demographic controls include: gender, age, a quadratic of age, educational attainment, and race. CZ controls refer to year 2000 and include the manufacturing share in CZ employment, the offshorability and routine-task-intensity indexes as in Autor and Dorn (2013), the county-level republican vote share, a dummy for Republican victory in that county, and their interaction. All regressions include a dummy variable for respondents who changed CZ between 2010 and 2014, alone and interacted with the change in imports exposure. F-stat is the KP F-stat for weak instruments. Standard errors are clustered at CZ level. Significance levels: *** p< 0.01, ** p< 0.05, * p< 0.1.

Columns (1) - (4) of Table 2 reports the estimates for policy preferences. The dependent variable is attitudes towards immigrants in columns (1)-(2) and preferences for redistribution in columns (3)-(4). In line with Prediction 1, religious people become less favorable to immigrants in more exposed CZ, while the effect of import exposure is absent or much smaller for secular respondents. In addition, demand for redistribution falls amongst the lower class, while there is no change or a much smaller effect in the upper-middle classes, which is again broadly consistent with Prediction 1.[30]

[30]Choi et al. (2021) report a similar finding in their analysis of the political effects of exposure to trade

A possible concern with these estimates is that the sample period (2006-2016 in the cross section, 2010-14 in the panel) overlaps with other major economic shocks, such as the 2007-2008 financial crisis or the diffusion of labor savings technologies (e.g. robots). To assess this concern note as a first step that in our theory not all economic shocks should cause a switch to cultural identity, only those that - like trade - concentrate losses on conservative voters. As discussed in BGT (2021), the use of robots may have a similar effect, because they disproportionately hit less educated and hence more conservative voters. It is instead not obvious that the financial crisis satisfied this requirement, because it hit very severely also urban centers and hence highly educated/progressive voters.

Having this in mind, we control in our regression for two contemporaneous shocks. We measure exposure to the financial crisis by the change in housing net worth in a county between 2006 and 2009, as in Mian and Sufi (2014). We measure exposure to labor saving technologies as in Acemoglu and Restrepo (2019), by the diffusion of robots in the CZ over the period 2000-14, instrumented with the penetration of robots in Europe. Online Appendix Table B.6 displays the correlation matrix of import exposure with these two shocks, across CZs. As conjectured, the increase in housing net worth is barely (and positively) correlated with our imports shock variable. If anything, the financial crisis was less severe in the most trade exposed counties. Exposure to robots, instead, is positively correlated with import penetration, before controlling for the other regressors, confirming that labor savings technology may also act as a catalyst of cultural identity.

Online Appendix Table B.7 adds exposure to robots and changes in housing net worth to the specification of Table 1.[31] The estimated coefficients of interest remain unaffected, although robot shocks also induce a deterioration in the attitudes towards immigrants, as predicted by BGT (2021). Unfortunately, due to unavailability of the outcome variables, we cannot ask whether these results may reflect pre-existing trends in the more exposed CZs.

Overall, the results are broadly consistent with Prediction 1. Because import exposure is correlated with a pre-existing cultural cleavage, it causes conservative losers from trade to abandon class identity and switch to culture. This affects preferences in domains that are remote from the shock: stronger opposition to immigration by exposed conservatives, and less support for redistribution by exposed lower class voters.

Prediction 2: Changes in Political Supply We now test Prediction 2, which says that areas more exposed to import competition should see more culturally conservative party platforms and a more conservative political rhetoric, especially by the right-wing party. We

liberalization induce by NAFTA in the 1990s. Alhough they study voting behavior, rather than individual opinions, they find that the Democratic party lost votes in the more exposed counties particularly among white voters holding more conservative social views.

[31] The Housing shock variable can only be constructed for 944 counties.

measure party positioning and rhetoric by the degree of relative universalism in Congressional speeches between 2000 and 2015-16, as in Enke (2020). This index is constructed by counting the relative frequency of universalist vs communal words as defined in the Moral Foundation Dictionary (cf. Haidt, 2012).[32]

With reference to our model, lower universalism can capture the right-wing politician's recourse to culturally conservative persuasion or the left-wing's politician lower recourse to progressive persuasion. But lower universalism can also signal the politician's more conservative social policy platform (lower q). We cannot distinguish these two objects in our data, but Prediction 2 says that they should tend to go hand in hand: more exposed districts should witness more conservative platforms and rhetoric compared to other districts, especially for party R.

The unit of observation is the Congressional district (CD). Because district boundaries changed over time, we first match counties and commuting zones to CDs corresponding to Congress 106 (years 1999-2000), and construct a time-invariant cross-walk to map redistricted CDs to their geography in Congress 106, as in Calderon et al. (2021). The outcome of interest is the change in relative universalism between 2000 and 2015-16 in the speeches of representatives elected in the same geographic areas. Redistricting also changed the average features of the constituency that elected each representative and held him/her accountable, acting as a possible confounder. To address this problem, we adjust the change in the outcome variable by removing the changes that occurred around the time of redistricting, as in Autor et al. (2020). More details are provided in the Supplementary Materials.[33]

We estimate the following cross-sectional regression:

$$\Delta y_d = \beta_0 \Delta \widehat{IP}_d + Z_d' \beta_2 + u_d \tag{15}$$

where d denotes the CD, Δy_d is the change in relative universalism in the speeches of Congress representatives between 2000 and 2015-16, and the vector Z_d' includes state fixed effects plus other regressors at the CD level as in Autor et al. (2020) and Acemoglu and Restrepo (2019), accounting for demographic and labor market features of the CD, plus the Republican vote share in the 2000 Presidential elections.[34] All variables, including Δy_d, are standardized.

The coefficient of interest is β_0. It measures the effect of a standard deviation change in import exposure ΔIP_d on the change in relative universalism in Congressional speeches

[32]Records on Congressional speeches collected by Enke stop in July 2016.

[33]Results are robust to defining the outcome variables unadjusted for redistricting.

[34]The demographic variables are: log population, share of women, share of elderly people (65yrs and above), share of blacks, share of hispanics, share of asians, share of whites, share of population with at least some college education and share of population with high-school diploma or lower grades. The labor market variables are: share in manufacturing, share of women in manufacturing, routine-task-intensity and offshorability indeces as in Autor et al. (2013). Since we include state fixed effects, 5 at-large districts that coincide with the state are not in our sample.

Δy_d, relative to the standard deviation of Δy across CDs. Summary statistics are in Online Appendix Table B.8. Estimation is by 2SLS, with ΔIP instrumented by the corresponding change in other developed countries, as in Autor et al. (2020) and as for the CCES data studied above.

Table 3 reports the estimated coefficient of interest, for different specifications (columns 1-4). In line with Prediction 2, representatives elected in CD that have become more exposed to import competition have on average reduced universalistic rhetoric in their speeches. When all regressors are included, in column (4), a one standard deviation change in import exposure is associated with a 0.237 reduction in relative universalism (relative to the standard deviation of its change).

Columns (5) and (6) estimate (15) in the subsamples of CDs in which the white non-hispanic population is above and below the sample median, respectively. The former CDs can be interpreted as having a larger share of conservative voters compared to the latter, given that ethnic minorities are unlikely to be conservative on the salient cultural issues of race and immigration. Even though Prediction 2 does not study the effect of differential voter composition, it is natural to expect that more losers from trade should switch to cultural identity in CDs with many white voters, and so in these CDs the incentive for politicians to become more conservative should be stronger. The estimation results support this conjecture: the effect of increased import exposure is twice as large as the average effect in CDs above the median, while it is almost absent below the median.

We conclude by considering the second implication of Prediction 2: the trade shock should cause a stronger shift to conservatism by the right-wing party. Testing this implication is tricky because, as shown by Autor et al. (2020), higher import exposure also increased the likelihood that a Republican is elected. To assuage this concern, we explore the data in different ways. Reassuringly, no matter how we split the sample we obtain the same result: in exposed CDs, Republican politicians become more conservative than Democrats compared to non exposed CDs, consistent with Prediction 2.

Table 4 splits CDs based on the party in office in 2000 (columns 1 and 2), and based on the party elected in 2014 and in office in 2015-16 (columns 3 and 4).[35] In both cases, the effect of increased import exposure is negative only for Republican representatives. The effect is absent or goes in the opposite direction for Democrats.[36]

[35]To account for redistricting, in this second split by party, we compute the change in universalism, Δy, by comparing the speeches of each Republican (resp Democrat) representative in 2016 with the speeches of whoever was in office in 2000 in the same geographic area (weighting each part of the district by its population in 2000).

[36]Note that some Republicans in office in 2000 were replaced by Democrats, and viceversa. Since Republicans are less universalistic to begin with, these (possibly endogenous) party changes can explain why the effect on Republican representatives is weaker and less precisely estimated on the initially Republican CDs (column 1) than on the CDs where a Republican was in office in 2016 (column 4).

Table 3. Relative Universalism in Political Rhetoric - Baseline Estimates

	Relative Universalism					
	(1)	(2)	(3)	(4)	(5)	(6)
ΔIP	-0.064	-0.056	-0.209*	-0.237**	-0.500**	-0.047
	(0.065)	(0.065)	(0.111)	(0.111)	(0.250)	(0.139)
Observations	426	426	426	426	211	215
F-stat	205.9	209.7	122.2	122.7	20.56	117.4
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Controls		Yes	Yes	Yes	Yes	Yes
Labor Market Controls			Yes	Yes	Yes	Yes
Republican Vote Share				Yes	Yes	Yes
Sample	all	all	all	all	above median WNH	below median WNH

Notes: The table reports 2SLS estimates. The last two columns refer to Congressional Districts (CDs) with share of white and non-hispanic population above (below) median. The outcome measures the 2000-2016 change in the relative frequency of universalist moral rhetoric in Congressional speeches. The treatment variable measures the 2000-2016 change in import penetration. Both outcome and treatment variables are standardized. Demographic controls are measured in 2000 and include: log of population, share of women, of people above 65 years, of blacks, of hispanics, of asians, of whites, share of population with at least some college education and with high-school diploma or lower grades. Labor market controls are measured in 2000 and they include: share of workers in manufacturing, of women in manufacturing, routine task intensity and offshorability indeces as in Autor et al. (2013). Republican vote share refers to 2000 Presidential elections. The sample includes all CDs in continental US for which we have data, dropping at-large seats. F-stat is the KP F-stat for weak instruments. Standard errors are robust to heteroskedasticity. Significance levels: *** p< 0.01, ** p< 0.05, * p< 0.1.

To isolate the effect of import exposure that is not due to a party change, the remaining columns of Table 4 only consider CDs where the party in office in 2016 was the same as in 2000, again splitting the sample between Republican and Democrats. To cope with redistricting, columns (5) and (6) only consider CDs where at least 50% of the population in the CD (as defined in 2015-16) is represented by the same party (resp. Republican and Democrat) as in 2000. Columns (7) and (8) restrict the sample to the portion of the CDs (as defined in 2000) whose population is represented by the same party in 2015-16 (resp. Republican and Democrat), weighting each portion of the CD by its population. No matter how the sample is split, Republicans in the more exposed districts have become less universalistic, while Democrats have not changed their rhetoric or have moved in the opposite direction.

As shown in Online Appendix Table B.9, these results are robust. Columns (1-4) add exposure to the Robot shocks (instrumented by the corresponding change in European exposure) and changes in housing net worth discussed above, both in the entire sample and in CDs with above median white non-hispanic population. Neither of these two additional regressors is significant and the estimate of interest remains unchanged. Columns (5-6) estimate two

Table 4. Relative Universalism in Political Rhetoric - Heterogeneity by Party

	Relative Universalism							
	In Congress, 2000		In Congress, 2016		No Party Change			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIP	-0.334*	0.053	-0.341**	0.236*	-0.588***	0.120	-0.309*	0.378**
	(0.197)	(0.189)	(0.148)	(0.140)	(0.225)	(0.276)	(0.172)	(0.179)
Observations	218	208	314	282	184	137	202	174
F-stat	31.55	91.94	29.73	211.20	12.70	315.8	17.42	220.9
Party	Rep	Dem	Rep	Dem	Rep	Dem	Rep	Dem

Notes: The table reports 2SLS estimates. The outcome measures the 2000-2016 change in the relative frequency of universalist moral rhetoric in Congressional speeches. The treatment variable measures the 2000-2016 change in import penetration. Both outcome and treatment variables are standardized. All regressions replicate the baseline specification, reported in column 4 of Table 3. Column 1 (resp. 2) restricts the sample to CDs represented by a Republican (resp. Democrat) in 2000 . Column 3 (resp. 4) restricts the sample to the portion of the CDs (as defined in 2000) whose population is represented by a Republican (resp. Democrat) in 2016. Columns 5 and 6 restrict the sample to CDs in which at least 50% of the population in the district as defined in 2016 is represented by the same party as in 2000, for Republicans and Democrats, respectively. Columns 7 and 8 restrict the sample to the portion of the CDs (as defined in 2000) whose population is represented by the same party in 2016, for Republicans and Democrats, respectively. The sample includes all Congressional Districts in continental US for which we have data, dropping at-large seats. F-stat is the KP F-stat for weak instruments. Standard errors are robust to heteroskedasticity. Significance levels: *** p< 0.01, ** p< 0.05, * p< 0.1.

stacked first difference regressions, over the periods 2000-2007 and 2007-2016, again in the entire sample and for CDs with white non-hispanic population share above the median. The estimates remain similar.

Finally, Online Appendix Table B.10 shows that these results are not due to pre-existing trends towards less universalism in the more exposed districts. Column (1) reproduces the baseline results of Table 3. In columns (2-3) we perform a placebo test, replacing the dependent variable with the change in relative universalism observed in the preceding periods 1993-2000 and 1980-2000 (adjusted for redistricting whenever relevant). The treatment ΔIP_d is computed over 2000-2016, as in column (1). The estimated coefficient of interest is positive and not statistically significant, suggesting the absence of relevant pre-existing trends in the outcome variable. The remaining columns control for the lagged change of the dependent variable over 1980-2000 and 1990-2000. The coefficient of interest is unaffected.

Overall these results are consistent with our theory, in particular with a reaction of political supply to a switch of voters to cultural identity: in CDs more exposed to import competition, Republican representatives move towards more communitarian and conservative platforms and rhetoric, so as to cater to the increased conservatism of many voters in these areas.

6 Concluding Remarks

In political economics, a group is typically defined based on shared economic interests or common policy preferences. In this paper we have discussed an additional important feature of social groups: whether its members are also aware of their group identity. This property has profound implications, because identification with a group amplifies belief distortions and political extremism, and it can be switched on or off by economic shocks or other changes in the salience of conflict dimensions.

We have discussed how this mechanism can explain the propagation of economic shocks. In particular, increased conflicts due to trade or technology shocks, and higher relevance of cultural issues like race and immigration, can give rise to new social cleavages between conservative and progressive views of the world and dampen redistributive conflict, leading to sharp realignments in party positions and voting behavior. Although these effects originate in group identity, they reverberate in party propaganda and are further amplified by feedback effects between voters' polarization and political persuasion.

In our model, voters identify with social groups, not with political parties. Our survey evidence is consistent with this assumption. Nevertheless, party policy platforms and their propaganda can influence the salience of specific issues and hence voters' social identities. This aspect is missing from our analysis, and it can be an important source of interaction between political demand and supply. A particularly important issue is the alignment between group conflict and party divergence. If parties mostly disagree on redistribution, they will attract the votes of opposite economic classes, facilitating and strengthening class identities. If instead party divergence is mostly on cultural issues, voters will sort across parties by their culture, reinforcing identification along this dimension.

Through this channel, random shocks can have persistent effects on the political system and on voters' polarization. As pointed out by Sides et al. (2018), the Obama presidency amplified racial sorting across parties, which presumably reinforced racial and cultural identity. This in turn enhanced voters' polarization on racial issues, and increased the incentives of parties to engage in racial propaganda, further inflaming voters' polarization and racial sorting. In this sense, Obama's election may have facilitated the subsequent election of President Trump, with lasting effects on the US political system.

Studying more in details these interactions between political demand and supply through the lenses of identity theory is a promising direction for future research.

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Appendix

A Main Text Appendix

Appendix 1: Proofs

Proof of Proposition 1. The conflict between cultural groups and the conflict between economic classes (defined in terms of their rational bliss points in policy) are easily found to be:

$$\Delta\left(U,L\right)=2\varepsilon^{2},\ \Delta\left(P,C\right)=2\left(\kappa+\beta^{2}\right)\psi^{2}.$$

Consider the similarity $\Delta^{ij}\left(G\right)$ of voter ij to his ingroup G. Members of the same economic class differ by ψ from the average class ingroup. Members of the same cultural group differ by ε from the average income of their cultural ingroup. This implies that:

$$\Delta^{Uj}\left(U\right)=\Delta^{Lj}\left(L\right)=\left(\kappa+\beta^{2}\right)\psi^{2}/2,\ \Delta^{iP}\left(P\right)=\Delta^{iC}\left(C\right)=\varepsilon^{2}/2.$$

All voters then identify with their cultural group if and only if:

$$\begin{aligned}\Delta\left(P,C\right)-\lambda\varepsilon^{2}/2 &\geq \Delta\left(U,L\right)-\lambda\left(\kappa+\beta^{2}\right)\psi^{2}/2\Leftrightarrow\\ \psi^{2} &\geq \left(\frac{1}{\kappa+\beta^{2}}\right)\varepsilon^{2},\end{aligned}$$

while they identify with their economic class otherwise. □

Proof of Proposition 2. We now prove that beliefs fulfill Equation (6), and that hence Equations (7) and (8) represent the bliss points of voter ij identified with ι. Let $\tilde{y}=\tilde{\psi}$. In (5), the distorted likelihood ratio between average group members is:

$$\frac{z_{\iota}^{\iota}\left(\widetilde{y}\right)}{z_{-\iota}^{-\iota}\left(\widetilde{y}\right)}=\frac{K_{\iota}}{K_{-\iota}}*\frac{z^{\iota}\left(\widetilde{y}\right)}{z^{-\iota}\left(\widetilde{y}\right)}\left[\frac{z_{\iota}^{\iota}\left(\widetilde{y}\right)}{z_{-\iota}^{-\iota}\left(\widetilde{y}\right)}\right]^{\left(\chi_{\iota}+\chi_{-\iota}\right)}$$

$$\frac{z_{\iota}^{\iota}\left(\widetilde{y}\right)}{z_{-\iota}^{-\iota}\left(\widetilde{y}\right)}=\frac{K_{\iota}}{K_{-\iota}}*\frac{z^{\iota}\left(\widetilde{y}\right)}{z^{-\iota}\left(\widetilde{y}\right)}\left[\frac{z_{\iota}^{\iota}\left(\widetilde{y}\right)}{z_{-\iota}^{-\iota}\left(\widetilde{y}\right)}\right]^{2\chi},\tag{16}$$

where K_{ι} and $K_{-\iota}$ are positive normalization constants. The equation defines a fixed point condition, which has a unique, non-zero, and stable solution provided $\chi<1/2$. In this case, there also exist K_{ι} and $K_{-\iota}$ such that the distorted distributions integrate to one. Then,

Equation (5) becomes:

$$z_{\iota}^{ij}\left(\widetilde{y}\right)=K_{ij,\iota}*z^{ij}\left(\widetilde{y}\right)\left[\frac{z_{\iota}^{\iota}\left(\widetilde{y}\right)}{z_{-\iota}^{-\iota}\left(\widetilde{y}\right)}\right]^{\frac{\chi}{1-2\chi}},$$

which yields, under Gaussian distributions:

$$y_{\iota}^{ij}=\int\widetilde{y}z_{\iota}^{ij}\left(\widetilde{y}\right)d\widetilde{y}=y^{ij}+\theta\left(y^{\iota}-y^{-\iota}\right)\qquad\text{for }y=\varepsilon,\psi.$$

Finally, Equations (7) and (8) are immediately obtained by substituting the stereotyped beliefs from (6) into (2). □

Proof of Proposition 3. The objective function of party p is:

$$\max_{q_p,\tau_p}\frac{1}{4}\sum_{ij}\pi_{\iota p}^{ij},$$

where

$$\pi_{\iota p}^{ij}=0.5+\Phi\left[\frac{\kappa}{2}\left(\widehat{q}_{\overline{p}}^{ij}-q_{\iota}^{ij}\right)^{2}+\frac{1}{2}\left(\widehat{\tau}_{\overline{p}}^{ij}-\tau_{\iota}^{ij}\right)^{2}-\frac{\kappa}{2}\left(\widehat{q}_{p}^{ij}-q_{\iota}^{ij}\right)^{2}-\frac{1}{2}\left(\widehat{\tau}_{p}^{ij}-\tau_{\iota}^{ij}\right)^{2}\right],\qquad(17)$$

with expected policies $\widehat{q}_{p}^{ij}=q_{p}$ and $\widehat{\tau}_{p}^{ij}=\tau_{p}$ unless $p=R$ and $ij=LP$ or $p=D$ and $ij=UC$, in which cases for a measure $\alpha<1/4$ of group members expected policies are the equilibrium ones. Denote by $ij=c_{\overline{p}}$ the core voters of party $\overline{p}$ (who do not fully trust party's p policy promises). Then, first order conditions by $p=R,D$ are:

$$-\frac{\Phi}{4}\sum_{ij\neq c_{\overline{p}}}\kappa\left(\widehat{q}_{p}^{ij}-q_{\iota}^{ij}\right)-\Phi\left(\frac{1}{4}-\alpha\right)\kappa\left(\widehat{q}_{p}^{c_{\overline{p}}}-q_{\iota}^{c_{\overline{p}}}\right)=0,$$
$$-\frac{\Phi}{4}\sum_{ij\neq c_{\overline{p}}}\left(\widehat{\tau}_{p}^{ij}-\tau_{\iota}^{ij}\right)-\Phi\left(\frac{1}{4}-\alpha\right)\left(\widehat{\tau}_{p}^{c_{\overline{p}}}-\tau_{\iota}^{c_{\overline{p}}}\right)=0,$$

with second pure derivatives $-\Phi\kappa\left(1-\alpha\right)<0$ and $-\Phi\left(1-\alpha\right)<0$ and zero cross partials, so that second order conditions for a maximum are satisfied. Denote by $\rho=\varepsilon$,ψ the identity regime, economic if $\rho=\varepsilon$ and cultural if $\rho=\psi$. Equilibrium platforms are:

$$q_{\rho p}^{*}=q^{o}+\sum_{ij}\alpha_{p}^{ij}\psi_{\iota}^{ij};\quad\tau_{\rho p}^{*}=\tau^{o}+\sum_{ij}\alpha_{p}^{ij}(\beta\psi_{\iota}^{ij}-\varepsilon_{\iota}^{ij}),$$

where $q^{o}=0$, $\tau^{o}=v-1$ and where ψ_{ι}^{ij} and ε_{ι}^{ij} denote the stereotyped beliefs of voter ji when identified with ingroup ι, where $\iota=i$ for $\rho=\varepsilon$ and $\iota=j$ otherwise, and the weights are

$\alpha_p^{ij} = \frac{1}{4(1-\alpha)}$ for $ij \neq c_{\overline{p}}$ and $\alpha_p^{ij} = \frac{1/4-\alpha}{1-\alpha}$ for $ij = c_{\overline{p}}$. Hence:

$$\begin{aligned} q^*_{\rho R} &= -\frac{\alpha}{1-\alpha}\psi^P_\rho < q^o = 0 < q^*_{\rho D} = -\frac{\alpha}{1-\alpha}\psi^C_\rho, \\ \tau^*_{\rho R} &= \tau^o - \frac{\alpha}{1-\alpha}(\beta\psi^P_\rho - \varepsilon^L_\rho) < \tau^o < \tau^*_{\rho D} = \tau^o - \frac{\alpha}{1-\alpha}(\beta\psi^C_\rho - \varepsilon^U_\rho). \end{aligned}$$

where ψ^P_ρ is the average culture of progressive voters (i.e. voters in group P) when the identity regime is ρ and where ψ^C_ρ, ε^L_ρ and ε^U_ρ are defined accordingly. By using the equations for beliefs, one finds that party divergence over q and τ in different identity regimes fulfills:

$$q^*_{\varepsilon D} - q^*_{\varepsilon R} = \frac{2\alpha\psi}{1-\alpha} < q^*_{\psi D} - q^*_{\psi R} = \frac{2\alpha\psi\,(1+2\theta)}{1-\alpha}, \tag{18}$$

$$\tau^*_{\varepsilon D} - \tau^*_{\varepsilon R} = \frac{2\alpha\,[\beta\psi + \varepsilon\,(1+2\theta)]}{1-\alpha} > \tau^*_{\psi D} - \tau^*_{\psi R} = \frac{2\alpha\,[\beta\psi\,(1+2\theta) + \varepsilon]}{1-\alpha}. \tag{19}$$

Divergence weakly increases in θ. A switch in the identity regime from class to culture (i.e from $\rho = \varepsilon$ to $\rho = \psi$), which by Proposition 1 occurs when κ increases from $\kappa_0 < (\varepsilon/\psi)^2 - \beta^2$ to $\kappa_1 > (\varepsilon/\psi)^2 - \beta^2$, boosts polarization over q, reduces it over τ. □

Proof of Proposition 4. In analogy with our definition of $\Delta^{ij}(G)$, the (quadratic) welfare loss for voter ij if party p wins is, at equilibrium policies:

$$\Delta^{ij}_\iota(\widehat{Y}_p) = \frac{1}{2}[(\kappa+\beta^2)(\psi_{\rho p} - \psi^{ij}_\iota)^2 + (\varepsilon_{\rho p} - \varepsilon^{ii}_\iota)^2] - \beta(\psi_{\rho p} - \psi^{ij}_\iota)(\varepsilon_{\rho p} - \varepsilon^{ij}_\iota),$$

where $\psi_{\rho p} = \sum_{ij} \alpha^{ij}_p \psi^j_\rho$, $\varepsilon_{\rho p} = \sum_{ij} \alpha^{ij}_p \varepsilon^i_\rho$, where ψ^j_ρ and ε^i_ρ are defined as in the proof of Proposition 3. Plugging this expression in (17) we obtain:

$$\begin{aligned} \pi^{ij}_{\iota R} &= 0.5 + \Phi[\frac{\kappa+\beta^2}{2}[(\psi_{\rho D} - \psi_{\rho R})(\psi_{\rho D} + \psi_{\rho R} - 2\psi^j_\rho) + \\ &\quad + \frac{1}{2}[(\varepsilon_{\rho D} - \varepsilon_{\rho R})(\varepsilon_{\rho D} + \varepsilon_{\rho R} - 2\varepsilon^i_\rho)] - \\ &\quad - \beta[(\psi_{\rho D} - \psi^j_\rho)(\varepsilon_{\rho D} - \varepsilon^i_\rho) - (\psi_{\rho R} - \psi^j_\rho)(\varepsilon_{\rho R} - \varepsilon^i_\rho)]], \end{aligned} \tag{20}$$

where in $\pi^{ij}_{\iota R}$ the ingroup ι corresponds to the one selected in identity regime ρ. Because the identity regime ρ is the same for everyone, $\psi_{\rho D} - \psi_{\rho R} = \frac{2\alpha}{1-\alpha}\psi^P_\rho$, $\varepsilon_{\rho D} - \varepsilon_{\rho R} = \frac{2\alpha}{1-\alpha}\varepsilon^L_\rho$, $\psi_{\rho D} + \psi_{\rho R} = \varepsilon_{\rho D} + \varepsilon_{\rho R} = 0$, where we exploit $\psi^C_\rho = -\psi^P_\rho$ and $\varepsilon^U_\rho = -\varepsilon^L_\rho$. Plugging these conditions into $\pi^{ij}_{\iota R}$ and simplifying we obtain:

$$\pi^{ij}_{\iota R} = \Phi\left\{\frac{2\alpha}{1-\alpha}\left[\psi^P_\rho[\beta\varepsilon^i_\rho - (\kappa+\beta^2)\psi^j_\rho] + \varepsilon^L_\rho[\beta\psi^j_\rho - \varepsilon^i_\rho]\right]\right\}. \tag{21}$$

Defining $\varepsilon_\varepsilon = \varepsilon(1+2\theta)$, $\psi_\varepsilon = \psi$ and $\varepsilon_\psi = \varepsilon$, $\psi_\psi = \psi(1+2\theta)$, we have that:

$$\begin{aligned}
\pi_{\iota R}^{UC} &= 0.5 + \Phi\frac{2\alpha}{1-\alpha}[2\beta\psi_\rho\varepsilon_\rho + (\kappa+\beta^2)\psi_\rho^2 + \varepsilon_\rho^2] > 1/2 \\
\pi_{\iota R}^{LP} &= 0.5 + \Phi\frac{2\alpha}{1-\alpha}[-2\beta\psi_\rho\varepsilon_\rho - (\kappa+\beta^2)\psi_\rho^2 - \varepsilon_\rho^2] < 1/2 \\
\pi_{\iota R}^{UP} &= 0.5 + \Phi\frac{2\alpha}{1-\alpha}[-(\kappa+\beta^2)\psi_\rho^2 + \varepsilon_\rho^2] \gtreqless 0.5 \text{ as } \varepsilon_\rho^2 \gtreqless (\kappa+\beta^2)\psi_\rho^2 \\
\pi_{\iota R}^{LC} &= 0.5 + \Phi\frac{2\alpha}{1-\alpha}[(\kappa+\beta^2)\psi_\rho^2 - \varepsilon_\rho^2] \lesseqgtr 0.5 \text{ as } \varepsilon_\rho^2 \gtreqless (\kappa+\beta^2)\psi_\rho^2
\end{aligned}$$

If initially $\kappa < (\varepsilon/\psi)^2 - \beta^2$ class identity prevails, a fortiori $\varepsilon_\varepsilon^2 > (\kappa+\beta^2)\psi_\varepsilon^2$, which implies $\pi_{UR}^{UP} > 0.5 > \pi_{LR}^{LC}$. If κ increases to the point that $\kappa > (\varepsilon/\psi)^2 - \beta^2$, we move from $\rho = \varepsilon$ to $\rho = \psi$. A fortiori $\varepsilon_\psi^2 < (\kappa+\beta^2)\psi_\psi^2$, which implies $\pi_{PR}^{UP} < 0.5 < \pi_{CR}^{LC}$. Thus, as identity switches to culture, the majority of UP (resp. LC) voters switches from R (resp. D) to D (resp. R). Note that the above expressions imply that, under cultural identity:

$$\frac{\partial\pi_{CR}^{iC}}{\partial\kappa\partial\theta} = 2\psi^2 = -\frac{\partial\pi_{PR}^{iP}}{\partial\kappa\partial\theta} > 0$$

Using the notation $z = 1+2\theta$ and dropping to common proportionality constant $\Phi\frac{2\alpha}{1-\alpha}$ we find that when κ increases from $\kappa_0 < (\varepsilon/\psi)^2 - \beta^2$ to $\kappa_1 > (\varepsilon/\psi)^2 - \beta^2$, voter types ij realign as follows:

$$\begin{aligned}
\pi_{CR}^{UC} - \pi_{UR}^{UC} &\propto \left[(\kappa_1+\beta^2)\psi^2 - \varepsilon^2\right]z^2 - \left[(\kappa_0+\beta^2)\psi^2 - \varepsilon^2\right] > 0, \\
\pi_{PR}^{LP} - \pi_{LR}^{LP} &\propto \left[(\kappa_0+\beta^2)\psi^2 - \varepsilon^2\right] - \left[(\kappa_1+\beta^2)\psi^2 - \varepsilon^2\right]z^2 < 0, \\
\pi_{PR}^{UP} - \pi_{UR}^{UP} &\propto \left[(\kappa_0+\beta^2)\psi^2 + \varepsilon^2\right] - \left[(\kappa_1+\beta^2)\psi^2 + \varepsilon^2\right]z^2 < 0, \\
\pi_{CR}^{LC} - \pi_{LR}^{LC} &\propto \left[(\kappa_1+\beta^2)\psi^2 + \varepsilon^2\right]z^2 - \left[(\kappa_0+\beta^2)\psi^2 + \varepsilon^2\right] > 0.
\end{aligned}$$

The above inequality hold also for $\theta = 0$, namely $z = 1$. However, $\theta > 0$ makes the changes larger in magnitude. In moving from κ_0 to κ_1 progressive (resp. conservative) voters leave (resp. join) R regardless of their class. Overall, the lower/upper class joins/leaves R iff:

$$\left(\pi_{PR}^{LP} - \pi_{LR}^{LP}\right) + \left(\pi_{CR}^{LC} - \pi_{LR}^{LC}\right) > 0 \Leftrightarrow z^2 = (1+2\theta)^2 > 1.$$

Thus, the lower class moves toward R if and only if $\theta > 0$. □

Proof of Proposition 5. To ease notation, we replace the effort $a_{\iota p}$ that party p exerts to persuade its connected voter group ι, with a_p with keeps the identity regime implicitly. Each

party p solves:

$$\max_{a_{\iota p},\tau_p,q_p} V_p = \max_{a_{\iota p},\tau_p,q_p} \frac{1}{4}\sum_{ij} \pi_{\iota p}^{ij} - C(a_p),$$

where in the above expression $\chi^{\iota} = \chi + a_{\iota p}$ if $\iota = U, C$ and $p = R$ or if $\iota = L, P$ and $p = D$. The first (and second) order derivatives with respect to τ_p and q_p are described in Proposition 2. Consider now the choice of a_p, focusing on R. By exploiting (17) and noting that p optimizes over a_p by taking (τ_p, q_p) as given, we find that the first order condition for a_p is:

$$\frac{\partial V_p}{\partial a_{\iota p}} = \frac{1}{4}\sum_{ij} \Phi\left[\kappa\left(\widehat{q}_p^{ij} - \widehat{q}_{\overline{p}}^{ij}\right)\frac{\partial q_\iota^{ij}}{\partial \theta_{ij}}\frac{\partial \theta_{ij}}{\partial a_{\iota p}} + \left(\widehat{\tau}_p^{ij} - \widehat{\tau}_{\overline{p}}^{ij}\right)\frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}}\frac{\partial \theta_{ij}}{\partial a_{\iota p}}\right] - C'(a_p) = 0, \tag{23}$$

where θ_{ij} is $\psi\,(1+2\theta)$ when identity is cultural while it is $\varepsilon\,(1+2\theta)$ when identity is economic, where in both cases θ is determined in equilibrium. This notation recognizes that the belief distortion is group specific due to the the differential effect of a_p on different groups. To verify that the second order conditions for a maximum are met, it is useful to note that:

$$\frac{\partial V_p}{\partial a_{\iota p}\partial q_p} = \frac{\Phi\kappa}{4}\left[\sum_{ij\neq c_{\overline{p}}} \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}}\frac{\partial \theta_{ij}}{\partial a_{\iota p}} + (1-4\alpha)\sum_{ij\in c_{\overline{p}}} \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}}\frac{\partial \theta_{ij}}{\partial a_{\iota p}}\right], \tag{24}$$

$$\frac{\partial V_p}{\partial a_{\iota p}\partial \tau_p} = \frac{\Phi}{4}\left[\sum_{ij\neq c_{\overline{p}}} \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}}\frac{\partial \theta_{ij}}{\partial a_{\iota p}} + (1-4\alpha)\sum_{ij\in c_{\overline{p}}} \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}}\frac{\partial \theta_{ij}}{\partial a_{\iota p}}\right]. \tag{25}$$

Let us go back to the first order condition. It can be expressed as:

$$\frac{\partial V_p}{\partial a_{\iota p}} = \frac{1}{2}\sum_{ij} \Phi\left[\kappa\left(\widehat{q}_p^{ij} - \widehat{q}_{\overline{p}}^{ij}\right)\frac{\partial q_\iota^{ij}}{\partial \theta_{ij}}\frac{\partial \theta_{ij}}{\partial a_{\iota p}} + \left(\widehat{\tau}_p^{ij} - \widehat{\tau}_{\overline{p}}^{ij}\right)\frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}}\frac{\partial \theta_{ij}}{\partial a_{\iota p}}\right] - C'(a_{\iota p}) \tag{26}$$

$$= \frac{\Phi}{4}\left[D_{G_p}\sum_{ij\in G_p}\frac{1-\chi-a_{\iota\overline{p}}}{\left(1-2\chi-a_{\iota p}-a_{\iota\overline{p}}\right)^2} + D_{\overline{G}_p}\sum_{ij\in \overline{G}_p}\frac{\chi+a_{\iota\overline{p}}}{\left(1-2\chi-a_{\iota p}-a_{\iota\overline{p}}\right)^2}\right] - C'(a_{\iota p}) = 0, \tag{27}$$

where in the second and third expressions we use G_p and $\overline{G}_p$ to denote the party's ingroup and outgroups, we denote $D_{G_p} = \kappa\left(\widehat{q}_p^{ij} - \widehat{q}_{\overline{p}}^{ij}\right)\frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} + \left(\widehat{\tau}_p^{ij} - \widehat{\tau}_{\overline{p}}^{ij}\right)\frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}}$, which is constant within ingroups and within outgroups. We also exploit the expression for θ_{ij} as a function of $a_{\iota p}$ and $a_{\iota\overline{p}}$. Because ingroups and outgroups have opposite interests along the identity trait, $\frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} = -\frac{\partial q_{-\iota}^{ij}}{\partial \theta_{ij}}$ and $\frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}} = -\frac{\partial \tau_{-\iota}^{ij}}{\partial \theta_{ij}}$, we have $D_{\overline{G}_p} = -D_{G_p} = D$.

In addition, because each party has two ingroups and two outgroups, (27) becomes:

$$\frac{\partial V_p}{\partial a_{\iota p}} = \frac{\Phi}{2} D\frac{1-2\chi-2a_{\iota\overline{p}}}{\left(1-2\chi-a_{\iota p}-a_{\iota\overline{p}}\right)^2} - C'(a_{\iota p}) = 0, \tag{28}$$

where $D \geq 0$ as long as parties move their platform in the direction of ingroup preferences relative to their opponent, which is true in equilibrium. In a symmetric equilibrium, denote by a_ρ^* the equilibrium effort in identity regime $\rho = \varepsilon, \psi$. Then, the first order condition under class and cultural identity are respectively defined by:

$$\frac{2\alpha\Phi}{1-\alpha}\frac{\varepsilon^2(1+2\theta)+\beta\varepsilon\psi}{1-2\chi-2a_\varepsilon^*} - C'(a_\varepsilon^*) = 0, \tag{29}$$

$$\frac{2\alpha\Phi}{1-\alpha}\frac{(\kappa+\beta^2)\psi^2(1+2\theta)+\beta\varepsilon\psi}{1-2\chi-2a_\psi^*} - C'(a_\psi^*) = 0, \tag{30}$$

Where the θ in each equation is the equilibrium degree of stereotyping under the respective identity regime $\rho = \varepsilon, \psi$. Assume that (29) and (30) identify the equilibrium persuasion effort. We later find a condition under which this is the case. Then, the LHS of the conditions is decreasing in a_x^* if the following condition is satisfied:

$$\frac{2c\cdot a_\varepsilon^*}{1-2(\chi+a_\varepsilon^*)} + \left(\frac{2\alpha\Phi}{1-\alpha}\right)\left(\frac{\varepsilon}{1-2\chi-2a_\varepsilon^*}\right)^2 - c < 0, \tag{31}$$

$$\frac{2c\cdot a_\psi^*}{1-2\left(\chi+a_\psi^*\right)} + \left[\frac{2\alpha\Phi(\kappa+\beta^2)}{1-\alpha}\right]\left(\frac{\psi}{1-2\chi-2a_\psi^*}\right)^2 - c < 0 \tag{32}$$

If $1-2\chi-4a_\iota^* > 0$, the above equations decrease in the cost parameter c. Assuming that this is the case, if c is sufficiently large the above equations hold. At the same time, because the latter condition ensures that a_ρ^* decreases in c, with $\lim_{c\to\infty} a_\rho^* = 0$, sufficiently large c also ensures $1-2\chi-4a_\rho^* > 0$.

Under (31), a_ι^* is increasing in any parameter that increases the LHS of (29) and (30). Accordingly, persuasion is larger under cultural identity if $\psi^2(\kappa+\beta^2) > \varepsilon^2$, which is equivalent to the condition for cultural identity of Proposition 1. This implies that an increase in κ from $\kappa_0 < (\varepsilon/\psi)^2 - \beta^2$ to $\kappa_1 > (\varepsilon/\psi)^2 - \beta^2$ that causes a switch to cultural identity increases persuasion, $a_\psi^*(\kappa_1) > a_\varepsilon^*(\kappa_0)$, and stereotyping $\theta\left(a_\psi^*(\kappa_1)\right) > \theta\left(a_\varepsilon^*(\kappa_0)\right)$.

Consider finally the second order optimality condition. Equations (29) and (30) are sufficient for a maximum if the Hessian of the program is negative semi definite. We already know from the proof of Proposition 2 that $\partial^2 V_p/(\partial q_p)^2 = -\Phi\kappa(1-\alpha)$, $\partial^2 V_p/(\partial\tau_p)^2 = -\Phi(1-\alpha)$ and $\partial^2 V_p/\partial\tau_p\partial q_p = 0$. The Hessian is then negative semidefinite if and only if:

$$\Phi(1-\alpha)\kappa\partial V_p/\left(\partial a_{\iota p}\right)^2 + \left(\partial V_p/\partial a_{\iota p}\partial q_p\right)^2 + \left(\partial V_p/\partial a_{\iota p}\partial\tau_p\right)^2 < 0.$$

At the symmetric optimum, $\partial V_p/\left(\partial a_{\iota p}\right)^2 = \Phi D\frac{2}{\left(1-2\chi-2a_\rho^*\right)^2} - c$. The cross partials $\partial V_p/\partial a_{\iota p}\partial q_p$ and $\partial V_p/\partial a_{\iota p}\partial\tau_p$ do not depend on the cost function. As a result, a sufficiently convex cost function, c large enough, ensures both that (29) and (30) identify the equilibrium persuasion

efforts and that (31) holds, validating the comparative statics of Proposition 4. □

Trade Policy Model

As in Section 3, before, the government levies a tax τ on $1+\varepsilon^i$ that reduces aggregate taxable income by $-\tau^2/2$. The government also levies an ad valorem tariff t, setting the domestic import price at $(1+t)p^*$, which in turn sets the voter's expected import sector income at $2(1+t)p^*\eta_z^{ij}$. Expected disposable income is thus equal to:

$$I_z^{ij}(\tau,t) = (1+\varepsilon^i)(1-\tau) - \tau^2/2 + 2[(1-\eta_z^{ij}) + (1+t)p^*\eta_z^{ij}],$$

which varies across districts and cultural groups due to import exposure η_z^{ij}. Optimal consumption of m is: $\hat{m} = \varpi - (1+t)p^*$, and it is the same in all localities.

The government sets policies, τ, t and q. Aggregate tariff revenue, expressed in terms of the export good, is $T(t) = tp^*[\hat{m} - \eta/2] = tp^*[\varpi - p^*(1+t) - \eta/2]$.[37] Taking the government budget constraint into account, the voter's expected welfare function under rationality is:

$$W_z^{ij}(\tau,t,q) = I_z^{ij}(\tau,t) + S(t) + v(\tau + T(t)) - \frac{\kappa}{2}(q-\psi^j)^2.$$

where $S(t) = U(\hat{m}) - p^*(1+t)\hat{m} = p^*(1+t)\left[\frac{p^*(1+t)}{2} - \varpi\right]$.

Computing the optimal tariff for voter ij in sector z yields equation (13) in the text, where $\hat{t} = \frac{(\varpi - p^*)(v-1) - v\eta/2}{p^*(2v-1)}$.[38]

[37] To ensure positive revenue from the tariff, we assume $\varpi - p^*(1+t) > \eta/2$ for all t.

[38] In order to have $\hat{t} > 0$, we assume: $(\varpi - p^*)(v-1) > \eta v/2$. If progressive types also were exposed to import competition, the greater their exposure, the higher their preferred tariff.

Appendix 2: Tables

Table A.1. Average Policy Views and Beliefs by Group

	Percentage	Average Economic policy views (Mean: 0; Sd: 1)	Average Cultural Policy views (Mean: 0; Sd: 1)	Average Economic beliefs (Mean: 0; Sd: 1)	Average Cultural beliefs (Mean: 0; Sd: 1)
Conservative	36.75	-0.28***	-0.34***	-0.06*	-0.15***
		(0.04)	(0.04)	(0.04)	(0.04)
Cath./Prot. Religion	14.51	-0.38***	-0.56***	-0.19***	-0.27***
		(0.06)	(0.05)	(0.05)	(0.06)
White Race	6.21	-0.24***	-0.35***	-0.001	-0.30***
		(0.08)	(0.08)	(0.08)	(0.08)
Local Community	7.57	-0.19***	0.01	-0.01	0.06
		(0.07)	(0.07)	(0.07)	(0.07)
Cultural Traditions	8.46	-0.22***	-0.26***	-0.06	0.002
		(0.07)	(0.07)	(0.07)	(0.07)
Progressive	31.85	0.29***	0.40***	0.08**	0.23***
		(0.04)	(0.04)	(0.04)	(0.04)
Secular	2.83	0.26**	0.38***	0.23*	0.22*
		(0.12)	(0.12)	(0.12)	(0.12)
Black Race	5.04	0.44***	0.47***	-0.17*	0.25***
		(0.09)	(0.09)	(0.09)	(0.09)
Citizen of World	19.25	0.12**	0.26***	0.03	0.15***
		(0.05)	(0.05)	(0.05)	(0.05)
Progressive Culture	4.73	0.83***	0.92***	0.45***	0.55***
		(0.09)	(0.09)	(0.09)	(0.09)
Upper Class	3.34	-0.19*	0.06	-0.004	-0.03
		(0.11)	(0.11)	(0.11)	(0.11)
Lower Class	11.49	0.02	0.003	0.17***	0.09
		(0.06)	(0.06)	(0.06)	(0.06)
Republican	7.18	-0.73***	-0.82***	-0.11	-0.39***
		(0.08)	(0.08)	(0.08)	(0.08)
Democrat	9.39	0.52***	0.62***	0.13**	0.31***
		(0.07)	(0.07)	(0.07)	(0.07)

Notes: the table shows average values by group of indexes measuring progressiveness in economic and cultural stances; it also includes standard errors from a t-test testing the null hypothesis of the difference between the average index in each group and the one in the full sample being equal to 0. In order to build the index, each question related to the topic of the index is coded such that a higher value indicates a more progressive stance, and standardized to take zero mean and unit standard deviation; the index is then constructed by summing these modified questions. The final version of index is once again standardized take zero take mean and unit standard deviation. The economic policy views index collapses questions about government services, the government's role in providing jobs and adequate standards of living, and estate tax. The economic belief index includes questions about income inequality and social mobility. For cultural policy views, questions about abortion, immigration and affirmative action are selected. For the cultural beliefs index, questions about differential wages by race, immigration and crime, as well as on the number of abortions every year are included. Significance levels: *** p< 0.01, ** p< 0.05, * p< 0.1.

Table A.2. Share of Voters by Group

	Republican	Democrat	No Vote
Conservative	0.45	0.36	0.15
Cath./Prot. Religion	0.53	0.36	0.09
White Race	0.41	0.34	0.21
Local Community	0.36	0.41	0.19
Cultural Traditions	0.42	0.34	0.19
Progressive	0.17	0.53	0.27
Secular	0.21	0.52	0.23
Black Race	0.04	0.69	0.24
Citizen of World	0.23	0.45	0.30
Progressive Culture	0.06	0.70	0.24
Upper Class	0.38	0.44	0.14
Lower Class	0.29	0.41	0.25

Notes: the table reports for each economic and cultural identity group the share of individuals that voted republican, democratic or did not vote at the 2020 presidential election. Individuals with political identity are excluded from the table.

B Online Appendix

Appendix 1: Proofs

Proof of Proposition 6. Repeating the steps in the proof of Proposition 1, the contrast between ingroup and outgroup (eq. 3) now takes the form:[39]

$$\Delta\left(G,\overline{G}\right)=\frac{\kappa}{2}\left(q^{G}-q^{\bar{G}}\right)^{2}+\frac{1}{2}\left(\tau^{G}-\tau^{\bar{G}}\right)^{2}+\frac{(p^{*})^{2}(2v-1)}{2}(t^{G}-t^{\bar{G}})^{2} \tag{33}$$

A voter's dissimilarity from his group is equal to:

$$\Delta_{z}^{ij}(G)=\frac{\kappa}{2}(\psi^{G}-\psi^{j})^{2}+\frac{1}{2}(\varepsilon^{G}-\varepsilon^{i})^{2}+\frac{2(\eta^{G}-\eta_{z}^{j})^{2}}{(2v-1)}. \tag{34}$$

Using (13), we have $t^{G}-t^{\bar{G}}=\frac{2(\eta^{G}-\eta^{\bar{G}})}{p^{*}(2v-1)}$, $\eta^{U}=\eta^{L}=\eta/4$, $\eta^{C}=\eta/2$, $\eta^{P}=0$. Hence, $\Delta(C,P)=2\kappa\psi^{2}+\frac{2\eta^{2}}{4(2v-1)}$ and $\Delta(L,U)=2\varepsilon^{2}$.

Consider now $\Delta_{z}^{ij}(G)$. Under class identity, in exposed and non exposed districts we have:

$$\begin{aligned}\Delta_{e}^{GP}(G) &= \frac{\kappa}{2}\psi^{2}+\frac{\eta^{2}}{8(2v-1)} \text{ and } \Delta_{e}^{GC}(G)=\frac{\kappa}{2}\psi^{2}+\frac{9\eta^{2}}{8(2v-1)}\\ \Delta_{n}^{Gj}(G) &= \frac{\kappa}{2}\psi^{2}+\frac{\eta^{2}}{8(2v-1)}, \quad G=L,U \text{ and } j=C,P\end{aligned}$$

Under cultural identity, in exposed and non exposed districts we have:

$$\Delta_{z}^{iC}(G)=\frac{1}{2}\varepsilon^{2}+\frac{\eta^{2}}{2(2v-1)} \text{ and } \Delta_{z}^{iP}(P)=\frac{1}{2}\varepsilon^{2}, \text{ for } i=U,L \text{ and } z=e,n$$

A progressive voter chooses cultural identity if and only if:

$$2\kappa\psi^{2}+\frac{2\eta^{2}}{4(2v-1)}-\frac{\lambda}{2}\varepsilon^{2}>2\varepsilon^{2}-\lambda\left[\frac{\kappa}{2}\psi^{2}+\frac{\eta^{2}}{8(2v-1)}\right],$$

which reads:

$$\eta^{2}>4(2v-1)\left(\varepsilon^{2}-\kappa\psi^{2}\right). \tag{35}$$

A conservative voter in a non exposed district chooses cultural identity if and only if:

$$2\kappa\psi^{2}+\frac{2\eta^{2}}{4(2v-1)}-\lambda\left[\frac{1}{2}\varepsilon^{2}+\frac{\eta^{2}}{2(2v-1)}\right]>2\varepsilon^{2}-\lambda\left[\frac{\kappa}{2}\psi^{2}+\frac{\eta^{2}}{8(2v-1)}\right],$$

which reads:

[39] In deriving $\Delta(G,\bar{G})$, we used the fact that $W_{tt}^{ij}=-(p^{*})^{2}(2v-1)$.

$$\eta^2\left(\frac{4-3\lambda}{4+\lambda}\right) > 4(2v-1)\left(\varepsilon^2-\kappa\psi^2\right). \tag{36}$$

A conservative voter in an exposed district chooses cultural identity if and only if:

$$2\kappa\psi^2+\frac{2\eta^2}{4(2v-1)}-\lambda\left[\frac{1}{2}\varepsilon^2+\frac{\eta^2}{2(2v-1)}\right] > 2\varepsilon^2-\lambda\left[\frac{\kappa}{2}\psi^2+\frac{9\eta^2}{8(2v-1)}\right],$$

which reads:

$$\eta^2\left(\frac{4+5\lambda}{4+\lambda}\right) > 4(2v-1)\left(\varepsilon^2-\kappa\psi^2\right). \tag{37}$$

To study identity switches, define $\underline{\eta}\equiv 2\sqrt[2]{\frac{(4+\lambda)(2v-1)(\varepsilon^2-\kappa\psi^2)}{4+5\lambda}}$ and $\bar{\eta}\equiv 2\sqrt[2]{(2v-1)\left(\varepsilon^2-\kappa\psi^2\right)}$, with $\bar{\eta}>\underline{\eta}$

If $\varepsilon^2>\kappa\psi^2$ and $\eta\approx 0$, none of (35), (36) and (37) holds, and all voters identify with their class. If η increases and lies in the interval$\left(\underline{\eta},\bar{\eta}\right)$, conservative voters in exposed districts switch to cultural identity, all other voters remain class identified. If η increases above $\bar{\eta}$, but $\eta^2\left(\frac{4-3\lambda}{4+\lambda}\right)<4(2v-1)\left(\varepsilon^2-\kappa\psi^2\right)$, conservative voters in exposed districts and all progressive voters switch to cultural identity, conservative voters in non exposed districts remain class based. If η increases above $\bar{\eta}$ and $\eta^2\left(\frac{4-3\lambda}{4+\lambda}\right) > 4(2v-1)\left(\varepsilon^2-\kappa\psi^2\right)$, all voters switch to cultural identity. □

Proof of Prediction 1. Denote by q_ρ^{ijz} and by τ_ρ^{ijz} the desired policies by voter ij from district z under identity regime ρ. If voters identify with their class, $\rho=\varepsilon$, these demands are: $q_\varepsilon^{iPn}=q_\varepsilon^{iPe}=\psi$, $q_\varepsilon^{iCn}=q_\varepsilon^{iCe}=-\psi$, $i=U,L$, and $\tau_\varepsilon^{Ljn}=\tau_\varepsilon^{Lje}=\varepsilon\left(1+2\theta\right)$, $\tau_\varepsilon^{Ujn}=\tau_\varepsilon^{Uje}=-\varepsilon\left(1+2\theta\right)$, $j=C,P$. If voters identify with their culture, $\rho=\psi$, these demands are: $q_\psi^{iPn}=q_\psi^{iPe}=\psi\left(1+2\theta\right)$, $q_\varepsilon^{iCn}=q_\varepsilon^{iCe}=-\psi\left(1+2\theta\right)$, $i=U,L$, and $\tau_\varepsilon^{Ljn}=\tau_\varepsilon^{Lje}=\varepsilon$, $\tau_\varepsilon^{Ujn}=\tau_\varepsilon^{Uje}=-\varepsilon$, $j=C,P$. Demands in a policy domain, by each voter type, do not differ across exposed and non exposed districts within a given identity regime.

Suppose that at $t=0$ all voters identify with their class, $\rho=\varepsilon$. Then voter types have identical demands across districts, and so do average demands: $q^{n0}=q^{e0}=0.5*\psi-0.5*\psi=0$ and $\tau^{n0}=\tau^{e0}=0.5*\varepsilon\left(1+2\theta\right)-0.5*\varepsilon\left(1+2\theta\right)=0$. Where q^{z0} and τ^{z0} are the average policy demands in district z at time $t=0$. In the baseline, all districts are identical.

Suppose that exposure to trade increases to $\eta\in(\eta_{Ce},\eta_P)$. Then only conservative voters in exposed districts switch to culture. As a result, $q^{e1}-q^{e0}=0.5*\psi-0.5*\psi\left(1+2\theta\right)=-\psi\theta$ while $q^{n1}-q^{n0}=0$, while $\tau^{e1}-\tau^{e0}=0$ while $\tau^{n1}-\tau^{n0}=0$. In this case, the reduction in q in exposed districts is concentrated among conservative voters. For $j=C$, the change in q is $2\psi\theta$ in $z=e$ and 0 in $z=n$. For $j=P$, there is no change within any district and hence no differences across. Furthermore, while the average demand for redistribution does

not change within and across districts, it drops in exposed districts compared to non exposed ones if one conditions on lower class voters (it should in fact be concentrated among lower class *and* conservative voters): $\tau_{\varepsilon}^{Le,1} - \tau_{\varepsilon}^{Le,0} = -\varepsilon\theta < \tau_{\varepsilon}^{Ln,1} - \tau_{\varepsilon}^{Ln,0} = 0$.

Suppose that exposure to trade increases to $\eta > \eta_P$ but $\eta^2 \left(\frac{4-3\lambda}{4+\lambda}\right) < 4(2v-1)\left(\varepsilon^2 - \kappa\psi^2\right)$. Then also progressive voters switch to culture, but not conservative voters in non exposed districts. As a result, $q^{e1} - q^{e0} = 0.5 * \psi\left(1+2\theta\right) - 0.5 * \psi\left(1+2\theta\right) = 0$ while $q^{n1} - q^{n0} = 0.5 * \psi\left(1+2\theta\right) - 0.5 * \psi = 0.5 * \psi\theta$, while $\tau^{e1} - \tau^{e0} = 0$ and $\tau^{n1} - \tau^{n0} = 0$. Also in this case, the reduction in q in exposed districts is concentrated among conservative voters, and we see a reduction in the demand for redistribution by lower class voters across exposed and non exposed districts: $\tau_{\varepsilon}^{Le,1} - \tau_{\varepsilon}^{Le,0} = -2\varepsilon\theta < \tau_{\varepsilon}^{Ln,1} - \tau_{\varepsilon}^{Ln,0} = -\varepsilon\theta$. □

Proof of Prediction 2. In district z, each party p solves:

$$\max_{a_{\psi zp}, a_{\varepsilon zp}, \tau_{zp}, q_{zp}, t_{zp}} V_{zp} = \max_{a_{\psi zp}, a_{\varepsilon zp}, \tau_{zp}, q_{zp}, t_{zp}} \frac{1}{4}\sum_{ij} \pi_{\iota zp}^{ij} - C(a_{\psi zp}) - C(a_{\varepsilon zp}),$$

where $a_{\rho zp}$ is persuasion effort by party p in district z toward its ingroup voters identified along dimension $\rho = \varepsilon, \psi$. by taking into account that $\chi^{\iota} = \chi + a_{\rho zp}$ if $\iota = U, C$ and $p = R$ or if $\iota = L, P$ and $p = D$, where ι is the group a voter of type ij identifies with in district z. Following the same steps in Proposition 2, one finds that a voter of type ij in z votes for p with probability:

$$\pi_{\iota zp}^{ij} = 0.5 + \frac{\Phi}{2}\left[\begin{array}{c} \kappa\left(\widehat{q}_{z\overline{p}} - \widehat{q}_{zp}\right)\left(\widehat{q}_{z\overline{p}} + \widehat{q}_{zp} - 2q_{\rho z}^{ij}\right) + \left(\widehat{\tau}_{z\overline{p}} - \widehat{\tau}_{zp}\right)\left(\widehat{\tau}_{z\overline{p}} + \widehat{\tau}_{zp} - 2\tau_{\rho z}^{ij}\right) \\ +\varphi(\widehat{t}_{z\overline{p}} - \widehat{t}_{zp})\left(\widehat{t}_{z\overline{p}} + \widehat{t}_{zp} - 2t_{\rho z}^{ij}\right) \end{array}\right],$$

where in $\pi_{\iota zp}^{ij}$ index ι refers to the ingroup of voter ij when the identity regime is $\rho = \varepsilon, \psi$. $\varphi = (p^*)^2(2v-1)$ and t_z^{ij} is the voter's preferred tariff (which does not vary with identity).

With respect to policy platforms and persuasion, the first order conditions for party p in z yields:

$$q_{zp} = \sum_{ij} \alpha_p^{ij}\psi_{\rho z}^{j},\ \tau_{zp} = -\sum_{ij} \alpha_p^{ij}\varepsilon_{\rho z}^{i},\ t_{zp} = \sum_{ij} \alpha_p^{ij} t_z^{j}, \tag{38}$$

$$\frac{\partial V_{zp}}{\partial a_{\rho pz}} = \frac{1}{4}\sum_{ij} \Phi\left[\kappa\left(\widehat{q}_p^{ij} - \widehat{q}_{\overline{p}}^{ij}\right)\frac{\partial q_{\iota}^{ij}}{\partial \theta_{ij}} + \left(\widehat{\tau}_p^{ij} - \widehat{\tau}_{\overline{p}}^{ij}\right)\frac{\partial \tau_{\iota}^{ij}}{\partial \theta_{ij}}\right]\frac{\partial \theta^{ij}}{\partial a_{\rho pz}} - C'(a_{\rho pz}) = 0,\ \rho = \varepsilon, \psi \tag{39}$$

where the key new difference (besides the introduction of the tariff) is that $a_{\iota p}$ is set for both cultural and class identity if in z party p has culturally and class identified core voter types. Equation (39) takes into account that party p does not expend effort on persuading a group with which no voter is identified because $\frac{\partial q_{\iota}^{ij}}{\partial \theta_{ij}}, \frac{\partial \tau_{\iota}^{ij}}{\partial \theta_{ij}} \neq 0$ if and only if voter ij is identified with group ι and zero otherwise. We continue to assume that the cost function is sufficiently

convex that a stable interior equilibrium exists.

In the initial equilibrium, with low import exposure η, class identity prevails everywhere. With respect to q and τ, the equilibrium is the same as in Propositions 2 and 3 in all districts, regardless of whether $z = e$ or $z = n$ (with respect to tariffs, it is easy to see that there is divergence with $t_{zR} \geq t_{zD}$ with strict inequality in exposed districts and equality and non exposed ones). Platform divergence is $(q^*_{\varepsilon D} - q^*_{\varepsilon R})$ and $(\tau^*_{\varepsilon D} - \tau^*_{\varepsilon R})$ in (18) and (19) and persuasion effort is a^*_ε in (29) (with $\beta = 0$). The average social policy platform in all districts is $(q^*_{\varepsilon D} + q^*_{\varepsilon R})/2 = 0$ and the average redistributive platform is $(\tau^*_{\varepsilon D} + \tau^*_{\varepsilon R})/2 = \tau^o$.

If η increases to the point that conservative voters in $z = e$ switch to culture, while all other voters remain class identified, the policy platforms in non exposed districts do not change. The platforms in exposed districts become $q^*_{eR} = -\frac{1}{(1-\alpha)}\psi\theta_{\psi e} - \frac{\alpha}{1-\alpha}\psi$, $q^*_{eD} = -\frac{1}{(1-\alpha)}\psi\theta_{\psi e} + \frac{\alpha}{1-\alpha}\psi(1+2\theta_{\psi e})$, $\tau^*_{eR} = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon(1+2\theta_{\varepsilon e})$, $\tau^*_{eD} = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon$. As a result, $(q^*_{eR} + q^*_{eD})/2 = -\psi\theta_{\psi e}$ and $(\tau^*_{\varepsilon D} + \tau^*_{\varepsilon R})/2 = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon\theta_{\varepsilon e}$. Compared to non exposed districts, social policy platform become on average more restrictive. Party divergence is:

$$\begin{aligned} q^*_{eR} - q^*_{eD} &= -\left(\frac{2\alpha}{1-\alpha}\right)\psi(1+\theta_{\psi e}),\ \tau^*_{eR} - \tau^*_{eD} = -\left(\frac{2\alpha}{1-\alpha}\right)\varepsilon(1+\theta_{\varepsilon e}), \\ q^*_{nR} - q^*_{nD} &= -\left(\frac{2\alpha}{1-\alpha}\right)\psi,\ \tau^*_{nR} - \tau^*_{nD} = -\left(\frac{2\alpha}{1-\alpha}\right)\varepsilon(1+2\theta_{\varepsilon n}), \end{aligned}$$

which depends, through stereotypes, on persuasion effort. Regarding the latter, in exposed districts, $z = e$, parties engage in symmetric economic persuasion $a^*_{\varepsilon eR} = a^*_{\varepsilon eD} = a^*_{\varepsilon e} > 0$, which is pinned down by:

$$\frac{\alpha\Phi}{1-\alpha}\frac{\varepsilon^2(1+\theta_{\varepsilon e})}{1-2(\chi + a^*_{\varepsilon e})} = C'(a^*_{\varepsilon e}). \tag{40}$$

By comparing (40) to (29) (with $\beta = 0$) one sees that $0 < a^*_{\varepsilon e} < a^*_{\varepsilon n}$ and hence $\theta_{\varepsilon e} < \theta_{\varepsilon n}$. The trade shock causes economic stereotypes to fall in exposed districts. Since $\tau^*_{zR} = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon(1+2\theta_{\varepsilon z})$ for $z = e, n$, and $\theta_{\varepsilon e} < \theta_{\varepsilon n}$, we then have $\tau^*_{eR} > \tau^*_{nR}$.

With respect to cultural persuasion, by (39) party efforts $a^*_{\psi eR}$ and $a^*_{\psi eD}$ are pinned down by:

$$\frac{\alpha\Phi\kappa}{1-\alpha}\psi^2\frac{\left(1-\chi-a^*_{\psi eD}\right)^2}{\left(1-2\chi-a^*_{\psi eR}-a^*_{\psi eD}\right)^3} = C'(a^*_{\psi eR}), \tag{41}$$

$$-\frac{\alpha\Phi\kappa}{1-\alpha}\psi^2\frac{\left(1-\chi-a^*_{\psi eD}\right)\left(\chi+a^*_{\psi eR}\right)}{\left(1-2\chi-a^*_{\psi eR}-a^*_{\psi eD}\right)^3} = C'(a^*_{\psi eD}), \tag{42}$$

which implies $a^*_{\psi eR} > 0 > a^*_{\psi eD}$. That is, in exposed districts R fuels conservative stereotypes, D reduces progressive stereotypes. Compared to non exposed districts, where $a^*_{\psi nR} = a^*_{\psi nD} = 0$, the cultural rhetoric of both parties becomes more conservative. In a stable equilibrium

$1-\chi-a^*_{\psi eD} > \chi + a^*_{\psi eR}$, Equations (41) and (42) imply that R increases its conservatism more than D, namely $a^*_{\psi eR} > -a^*_{\psi eD}$, or $a^*_{\psi eR} + a^*_{\psi eD} > a^*_{\psi nR} = a^*_{\psi nD} = 0$. As a result, $\theta_{\psi e} > \theta_{\psi n}$, which implies higher policy divergence in culture and lower divergence in taxes $q^*_{eR} - q^*_{eD} < q^*_{nR} - q^*_{nD}$, $\tau^*_{eR} - \tau^*_{eD} > \tau^*_{nR} - \tau^*_{nD}$. We impose a stable equilibrium by assuming that c is large enough that $a^*_{\psi eD}$ and $-a^*_{\psi eR}$ are small.

Suppose now that η increases to the point that also progressive voters switch to cultural identity. Conservative voters in $z = n$ stay class identified. In exposed districts, then, everybody is culturally identified. Thus, platform divergence is $\left(q^*_{\psi D} - q^*_{\psi R}\right)$ and $\left(\tau^*_{\psi D} - \tau^*_{\psi R}\right)$ in (18) and (19) and persuasion effort is a^*_ψ in (30) (with $\beta = 0$). The average social policy platform in all districts is $\left(q^*_{\varepsilon D} + q^*_{\varepsilon R}\right)/2 = 0$ and the average redistributive platform is $\left(\tau^*_{\varepsilon D} + \tau^*_{\varepsilon R}\right)/2 = \tau^o$.

In non exposed districts, only social progressives are culturally identified. Party platforms here are $q^*_{nR} = \frac{1}{(1-\alpha)}\psi\theta_{\psi n} - \frac{\alpha}{1-\alpha}\psi\left(1+2\theta_{\psi n}\right)$, $q^*_{nD} = \frac{1}{(1-\alpha)}\psi\theta_{\psi n} + \frac{\alpha}{1-\alpha}\psi$, $\tau^*_{nR} = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon$, $\tau^*_{nD} = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon\left(1+2\theta_{\varepsilon n}\right)$. As a result, $\left(q^*_{nR} + q^*_{nD}\right)/2 = \psi\theta_{\psi n}$ and $\left(\tau^*_{\varepsilon D} + \tau^*_{\varepsilon R}\right)/2 = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon\theta_{\varepsilon n}$. Again, in exposed districts, compared to non exposed ones, the social policy platform becomes on average more restrictive. Tax rates of party R remain the same in the two districts ($\tau^*_{zR} = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon$, for $z = n, e$) while party D announces a less redistributive tax rate in the exposed districts: $\tau^*_{eD} = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon < \tau^*_{nD} = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon\left(1+2\theta_{\varepsilon n}\right)$.

Platform divergence fulfills:

$$\begin{aligned} q_{eR} - q_{eD} &= -\left(\frac{2\alpha}{1-\alpha}\right)\psi\left(1+2\theta_{\psi e}\right),\ \tau_{eR} - \tau_{eD} = -\left(\frac{2\alpha}{1-\alpha}\right)\varepsilon, \\ q_{nR} - q_{nD} &= -\left(\frac{2\alpha}{1-\alpha}\right)\psi\left(1+\theta_{\psi n}\right),\ \tau_{nR} - \tau_{nD} = -\left(\frac{2\alpha}{1-\alpha}\right)\varepsilon\left(1+\theta_{\varepsilon n}\right), \end{aligned}$$

which depends, through stereotypes, on persuasion effort. Regarding the latter, in exposed districts, $z = e$, there is a symmetric equilibrium $a^*_{\psi eR} = a^*_{\psi eD} = a^*_\psi > 0$ (as in (30) with $\beta = 0$) and $a^*_{\varepsilon nR} = a^*_{\varepsilon nD} = 0$. In non exposed districts, $z = n$, economic persuasion effort is $a^*_{\varepsilon nR} = a^*_{\varepsilon nD} = a^*_{\varepsilon n} = a^*_{\varepsilon e} > 0$, where $a^*_{\varepsilon e}$ is pinned down by (40). Cultural persuasion effort is determined by:

$$-\frac{2\alpha\Phi\kappa}{1-\alpha}\psi^2\frac{\left(1-\chi-a^*_{\psi nR}\right)\left(\chi+a^*_{\psi nD}\right)}{\left(1-2\chi-a^*_{\psi nR}-a^*_{\psi nD}\right)^3} = C'(a^*_{\psi nR}), \tag{43}$$

$$\frac{2\alpha\Phi\kappa}{1-\alpha}\psi^2\frac{\left(1-\chi-a^*_{\psi nR}\right)^2}{\left(1-2\chi-a^*_{\psi nR}-a^*_{\psi nD}\right)^3} = C'(a^*_{\psi nD}). \tag{44}$$

Party D enhances progressive stereotypes, R reduces conservative ones, $a^*_{\psi nD} > 0 > a^*_{\psi nR}$. In a stable equilibrium, it is again the case that $a^*_{\psi nD} + a^*_{\psi nR} > 0$. Comparing exposed to non

exposed districts, R's rhetoric becomes more conservative, $a^*_{\psi eR} = a^*_{\psi} > 0 > a^*_{\psi nR}$, while D's rhetoric becomes more conservative (less progressive) if and only if $a^*_{\psi eD} = a^*_{\psi} < a^*_{\psi nD}$. This latter effect could go either way.

We assume that c is large enough that $2\theta_{\psi e} > \theta_{\psi n}$ (this is equivalent to imposing low equilibrium persuasion efforts). Thus, based on economic persuasion, $\theta_{\varepsilon n} > \theta_{\varepsilon e} = 0$, in moving from $z = n$ to $z = e$ divergence over taxes falls $|\tau_{eR} - \tau_{eD}| < |\tau_{nR} - \tau_{nD}|$. Based on cultural persuasion, divergence over social policy falls. The effects of trade exposure in increasing cultural conservative and in reducing economic conflict are stronger for R than for D. □

Appendix 2: Data Appendix

B.1 Exposure to Import Competition and Other Shocks

Autor et al. (2013) measure the change in import exposure in each Commuting Zone (CZ) by the average change in Chinese import penetration in the CZ's industries, weighted by each industry's share in the CZ initial employment. Thus, the change in import penetration in CZ z is defined as:

$$\Delta IP_z = \sum_{m \in M} \frac{L_{m,z,00}}{L_{z,00}} \times \frac{I_{m,t_2} - I_{m,00}}{Y_{m,91} + I_{m,91} - X_{m,91}} \tag{45}$$

where the first term in summation is the share of manufacturing industry m in *total* employment of CZ z, while the second term is the increase in US imports from China of products typical of m between 2000 and year t_2, standardized by m's market size in 1991 (i.e., prior to the boom in China's exports). Since the change in penetration is likely to be endogenous, imports are instrumented as in Autor et al. (2013). In particular, the instrument is obtained by replacing $(I_{m,t_2} - I_{m,00})$ with $(I^{EU}_{m,t_2} - I^{EU}_{m,00})$, namely the increase of Chinese imports in eight countries over the same period, and all the other terms in (1) with their values in 1988.[40]

Data on bilateral imports are downloaded from the UN Comtrade database in HS-6 product classification. In particular, we obtain data on imports from China for the US as well as for the other countries. Such data are treated following a procedure similar to Autor et al. (2013), Acemoglu et al. (2016) and Autor et al. (2020). In particular, to obtain industry-level imports, we apply the crosswalk developed by Pierce and Schott (2012), which maps each HS-6 product into a single SIC industry. In the cross-section analysis we consider changes in imports between 2000 and 2016 (the last year of measurement of our outcome variables). For consistency with the cross section, also in analyzing the panel we consider shocks starting 6 years before the first year of measurement of attitudes, and therefore consider changes in imports between 2004 and 2014. Trade flows are made comparable across time by deflating them with the PCE index.

Import shocks are weighted using data on employment by county and industry contained in the County Business Patterns (CBS). As these employment figures are often reported in brackets, we use the fixed-point methodology developed by Autor et al. (2013) to make them continuous. We also map the counties to commuting zones (CZ), as in Acemoglu et al. (2016).

To perform the robustness checks presented in Table B.7, we use the housing net worth shock between 2006 and 2009 and the change in robot penetration between 2000 and 2014. The former is taken from the county-level data set by Mian and Sufi (2014). The latter is computed at the CZ level and is taken from Acemoglu and Restrepo (2020). As in this

[40] Countries are: Australia, Denmark, Finland, Germany, Japan, New Zealand, Spain and Switzerland

last paper, robot penetration is instrumented with a corresponding variable for European countries.[41]

B.2 Cooperative Congressional Election Study

All individual level variables are from the Cooperative Congressional Election Study (CCES), a series of surveys with questions on political attitudes, vote choices and individual demographic characteristics. The surveys are administered online on a opt-in basis, but sample matching is employed to assure representativeness of the target population, namely US individuals aged 18 or more. The cross-sectional study has been carried out yearly starting in 2006. Between 2010 and 2014 the CCES also had a longitudinal component, with questions similar to the ones administered in the cross section. We exploit both data sets. For each respondent, CCES provides the county of residence: we map respondents to CZs through the crosswalk employed in Autor et al. (2013).

In the repeated cross-section analysis, for each outcome variable of interest, we use the first and the last wave for which comparable questions on that outcome are asked. Following this logic, for preferences for redistribution and immigration, we use 2006 and 2007 as first year, respectively. The second year of measurement is always 2016. In our panel analysis, we rely on the data collected in 2010 and 2014.

After combining data from all these sources we obtain a final pooled estimation sample of about 100,000 individuals for the outcomes studied in the cross section. This amounts to roughly 70 individuals per CZ and year. The sample size of the panel is between 7,250 and 9,450 individuals, roughly 15 individuals per CZ on average. The unit of variation of import shocks are CZs, and the CCES micro data do not include survey weights that ensure representativeness at CZ or county level. All analyses are therefore unweighted. The sample size of the cross section, considerably larger than the one of found in similar studies, and the balanced longitudinal structure of the 2010-2014 panel survey limit between-year sampling variability.

Below, we describe the main dependent variables and the individual controls used in our analysis, all coming from the CCES. The other variables are described in more detail in the sources indicated above.

Redistribution First principal component of the following two questions: "If your state were to have a budget deficit this year it would have to raise taxes on income and sales or cut spending, such as on education, health care, welfare, and road construction. What would you prefer more, raising taxes or cutting spending? Choose a point along the scale from 0

[41] In particular, we make use of the baseline instrument which exploits variation in the average robot penetration in *EURO5* countries. This set of countries include: Denmark, Finland, France, Italy, and Sweden, that is, countries ahead of the United States in robotics, excluding Germany.

to 100"; "If the state had to raise taxes, what share of the tax increase should come from increased income taxes and what share from increased sales taxes? Choose a point along the scale from 0 to 100.". The component correlates positively with willingness to raise taxes instead of cutting spending and with higher desired share of tax revenues from income tax (and these types of answers are positively correlated). Hence the index captures willingness to redistribute.

Immigration. We extract the first polychoric principal component from two questions: "What do you think the U.S. government should do about immigration? Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes. [1. Yes; 2. No]" and "What do you think the U.S. government should do about immigration? Increase the number of border patrols on the US-Mexican border. [1. Yes; 2. No]". "Immigration"is the resulting first principal component, recoded so that higher values capture more liberal views on immigration.

Both dependent variables are demeaned and divided by their standard deviation computed on the two periods pooled together.

Voted Republican We define a dummy variable that equals one if in the last Senate election (either 2020 or 2014) the respondent voted for the Republican candidate, and 0 otherwise (don't know and NA are coded as missing). The dependent variable is the change in this dummy variable between 2010 and 2014.

The regression and correlation analysis also makes use of the following individual controls:

Education Self-reported highest educational level achieved. Based on this question we create dummy variables for three education levels (less than college, some college, college or more).

White Self-identified race. Dummy equal to 1 if the respondent identifies as white.

Age Self-reported age. We also include its square in order to account for non-linear relations often found when dealing with subjective dependent variables.

Woman Self-reported gender. Dummy equal to 1 if the respondent reports being a female.

Secular "How important is religion in your life? [1. Very important; 2. Somewhat important; 3. Not too important; 4. Not Important]". Indicator variable equal to 1 if the respondent answers "Not too important"or "Not important".

Family Income Self-reported annual family income, in 12 income brackets. Made continuous by coding each bracket as its midpoint.

Income Top 67% Indicator variable equal to 1 if the respondent falls in the upper two-thirds of the wave-specific family income distribution.

CZ Mover Dummy equal to 1 if the commuting zone of residence of the respondent changed between 2010 and 2014.

Heterogeneity Analysis: Specification In order to test the heterogeneity of the effect of import shocks on different social groups, we rely on the following specification,

$$\Delta y_{i,z} = \alpha + \beta_0 \Delta IP_z + \beta_1 \Delta IP_z * G_i + \beta_2 G_i + X'_{i,z,1}\beta_3 + Z'_z\beta_4 + u_{i,z},$$

where $\Delta y_{i,z}$ measures the change in individual i's attitudes between 2010 and 2014; ΔIP_z is the change in import penetration in CZ z, between 2004 and 2014; G_i is a dummy variable equal to 1 if i belongs to the social group for which we want to study the heterogeneous effect (people in the upper two thirds of the income distribution in 2010 or people who are secular in 2010). $X_{i,z}$ includes a set of individual covariates (gender, race, educational attainment, age and age squared) measured in 2010, plus i's initial attitudes in 2010 to allow for differential trends (e.g. mean reversion). As in the baseline specification described in Section 5.2 of the paper, the vector also includes an indicator variable for those who changed CZ between 2010 and 2014, alone and interacted with the shocks. These latter two variables are also interacted with G_i, to correctly identify the heterogeneous effects of the shocks on members of G and $\bar{G}$ who lived in the CZ throughout the five years. Z_c is the vector of covariates referring to the CZ in the year 2000 (See Section 5.1). Z and its interactions are instrumented using the usual instrument (and the corresponding interactions).

B.3 Congressional Speeches

Data on congressional speeches are taken from Enke (2020), who estimates politicians' moral types through political rhetoric. In particular, he extrapolates words from the text of the US Congressional Record that was made publicly available in a cleaned form by Gentzkow et al. (2019) and he implements a simple word count exercise that is based on the keywords in the Moral Foundations Dictionary (MFD). For each of the four dimensions harm/care, fairness/reciprocity, in-group/loyalty, and authority/respect, the MFD contains a list of words (often word stems), for a total of 215 words. The index of relative universalism is defined as:

$$\text{Relative frequency of universal terminology} = \frac{\text{Care} + \text{Fairness} - \text{In-group} - \text{Authority}}{\text{Total number of non-stop words}}$$

Note that we first compute this variable for each politician on a given date and then we take the mean by politician-congress and, subsequently, by CD-congress, except for Congress 106 (years 1999-2000), where we only consider year 2000, since this is when we start measuring import exposure and when we measure all remaining regressors. Result are similar if we include the entire 106th Congress, starting from 1999 rather than 2000.

B.4 Socio-demographic and Other Covariates

In our analysis (both with CCES and Congressional speeches data), we make use of additional variables to account for different socio-demographic layers and labor market structures. Socio-demographic variables are taken from U.S. 2000 Census. The National Historical Geographic Information System (NHGIS) provides open access to summary statistics - both at the county and at the Congressional district level - of population, housing, agriculture, and economic data. When necessary, county-level counts are collapsed at the CZ level through the crosswalk provided by Autor et al. (2013). Labor market variables also relies on the statistics of the U.S. 2000 Census but for the offshorability and routine-task-intensity indices that are taken from Autor et al. (2013). Finally, county-level data on the 2000 Presidential elections are downloaded from the online public database of the American University.

Table B.1. Comparison of Demographics between Survey and US Population

	Share in Survey	Share in US Population	Difference
Household Income			
Less than 50,000$	0.46	0.31	0.15***
Between 50,000$ and 100,000 $	0.29	0.31	-0.02
Greater than 100,000 $	0.25	0.38	-0.13***
Race			
White	0.75	0.64	0.11***
Black / African American	0.12	0.13	-0.01
Hispanic	0.05	0.16	-0.11***
Asian	0.04	0.06	-0.02
Age			
Less than 35	0.30	0.32	-0.02
Between 35 and 60	0.40	0.41	-0.01
Greater than 60	0.30	0.27	0.03
Sex			
Male	0.47	0.49	-0.02**
Female	0.53	0.51	0.02**
Region			
Northeast	0.19	0.17	0.02
Midwest	0.22	0.21	0.01
West	0.21	0.24	-0.03
South	0.38	0.38	0
Education			
No High School Diploma	0.11	0.10	0.01
High School Graduate	0.27	0.36	-0.09***
Some College or College	0.50	0.43	0.07***
Postgraduate	0.13	0.12	0.01

Notes: the table reports the shares of groups by demographic characteristics in the survey sample (column 1), in the US population (column 2) and their difference (column 3). Column 3 also reports the significance from a t-test of the difference between the two shares by group being equal to zero. Demographics characteristics displayed in the table are the ones that have been used in the process of sample stratification; categories reported by demographics have been chosen to facilitate the comparison between the two populations. Data for US population are taken from the 2019 1-year *American Community Survey from IPUMS*; shares refer to individuals over 18 only. Significance levels: *** $p< 0.01$, ** $p< 0.05$, * $p< 0.1$.

Table B.2. Percentage of Identity Switchers

Past ID / ID	Conservative	Progressive	Upper Class	Lower Class	Democrat	Republican
Conservative	42.95	22.42	4.32	12.21	9.37	8.74
Progressive	23.06	55.04	1.16	7.75	9.88	3.10
Upper Class	36.49	27.03	10.81	4.05	13.51	8.11
Lower Class	38.74	26.65	0.82	21.70	7.69	4.40
Democrat	27.04	43.78	2.58	10.30	14.59	1.72
Republican	52.66	11.17	4.79	7.98	1.06	22.34

Notes: the table shows, for all respondents that identified with a given past identity (in rows), the share reported of each current identity. Such shares are computed using only the set of individuals who reported both past and present ID in our survey. Each cell is thus the probability that a respondent who identified with X in the past identifies now with Y.

Table B.3. Marginal Effects from Multinomial Logit

	Republican	Democratic	Republican	Democratic
	(1)	(2)	(3)	(4)
Conservative	0.094***	-0.087***	0.051**	-0.028
	(0.030)	(0.032)	(0.021)	(0.022)
Progressive	-0.114***	0.102***	-0.009	0.041*
	(0.031)	(0.033)	(0.020)	(0.022)
Upper Class	0.029	-0.073	0.002	-0.006
	(0.053)	(0.055)	(0.034)	(0.038)
Demographics	X	X	X	X
Vote 2016			X	X
Observations	2,150	2,150	2,150	2,150

Notes: the table reports marginal effects from multinomial logit regressions of vote in 2020 over group identities. Columns 1 and 2 display the effects on Republican and Democratic vote controlling for demographics only (sex, region, race, education, income, religion, employment), while Columns 3 and 4 add vote in 2016 to the regression. Both analyses include also respondents who did not vote or voted other parties at the 2020 election (the respective marginal effects are not shown in the table), and use "No Vote" as the baseline comparison group. Individuals with political identity are excluded from the sample. Significance levels: *** $p< 0.01$, ** $p< 0.05$, * $p< 0.1$.

Table B.4. CCES Summary Statistics - CZ level

Variables	Obs	Mean	St. Dev.	Median	Min	Max
Panel A: Panel Sample						
Immigration attitudes (2010-2014)	557	0.045	0.450	0	2.399	-2.399
Preferences for redistribution (2010-2014)	524	-0.023	0.590	-0.004	3.178	-3.825
Import Penetration (2004-2014)	558	0.713	0.567	0.596	-0.343	3.733
Robot Penetration (2000-2014)	558	1.588	1.209	1.329	0.196	9.117
Housing Net Worth shock (2006-2009)	345	-0.053	0.070	-0.031	-0.382	0.043
Routine-task-intensity index (2000)	558	0.295	0.026	0.294	0.225	0.367
Offshorability index (2000)	558	-0.578	0.293	-0.582	-1.383	0.544
Manufacturing share (2000)	558	0.200	0.105	0.192	0.006	0.547
Republican vote share (2000)	558	0.556	0.101	0.562	0.242	0.822
Panel B: Cross Section Sample						
Immigration attitudes (2007-2016)	562	0.356	0.559	0.371	2.511	-1.883
Preferences for redistribution (2006-2016)	610	0.227	0.522	0.239	2.358	-2.618
Import Penetration (2000-2016)	656	1.404	1.281	1.093	10.889	-0.379
Robot Penetration (2000-2014)	656	1.505	1.161	1.233	9.117	0.196
Housing Net Worth shock (2006-2009)	363	-0.051	0.069	-0.029	0.043	-0.382
Routine-task-intensity index (2000)	656	0.291	0.028	0.291	0.367	0.222
Offshorability index (2000)	656	-0.602	0.291	-0.613	0.544	-1.383
Manufacturing share (2000)	656	0.196	0.109	0.186	0.547	0.003
Republican vote share (2000)	656	0.565	0.103	0.561	0.246	0.883

Notes: The table reports summary statistics for change in outcomes, main regressors and controls at the Commuting Zone level. In Panel A (resp. Panel B), the sample is restricted to the panel (resp. cross section) sample.

Table B.5. CCES Summary Statistics - Individual level

Variables	Obs	Mean	St. Dev.	Median	Min	Max
Panel A: Panel Sample						
Immigration attitudes (2010)	9,451	-0.039	0.962	0.229	-0.967	1.432
Immigration attitudes (2014)	9,451	0.039	1.035	0.229	-0.967	1.432
Immigration attitudes (2010-2014)	9,451	0.078	0.805	0	-2.399	2.399
Preferences for redistribution (2010)	7,251	-0.060	0.994	-0.015	-1.692	2.300
Preferences for redistribution (2014)	7,251	0.087	1.032	0.163	-1.692	2.300
Preferences for redistribution (2010-2014)	7,251	0.148	0.707	0.080	-3.512	3.772
Age	9,457	55.754	11.611	57	18	91
Female	9,457	0.445	0.497	0	0	1
Non-white	9,457	0.160	0.366	0	0	1
Educational attainment	9,457	2.311	0.803	3	1	3
Middle/Upper Class	8,428	0.632	0.482	1	0	1
Secular	9,457	0.333	0.471	0	0	1
Panel B: Cross Section Sample						
Immigration attitudes (2007)	9,935	-0.293	0.990	-0.039	-1.294	1.217
Immigration attitudes (2016)	63,560	0.047	0.994	-0.038	-1.294	1.217
Preferences for redistribution (2006)	26,204	-0.167	1.003	-0.048	-1.955	2.623
Preferences for redistribution (2016)	40,120	0.109	0.983	0.254	-1.955	2.623
Age	100,021	48.615	16.113	50	18	99
Female	100,021	0.525	0.499	1	0	1
Non-white	100,021	0.253	0.435	0	0	1
Education attainment	100,021	2.180	0.839	2	1	3

Notes: The table reports summary statistics for outcomes and demographic controls at the CCES respondent level. In Panel A (resp. Panel B), the sample is restricted to the panel (resp. cross section) sample.

Table B.6. Correlation across Shocks

Variables	(1)	(2)	(3)	(4)
(1) ΔIP_{00_16}	1.000			
(2) ΔIP_{04_14}	0.829	1.000		
(3) ΔRP_{00_14}	0.449	0.502	1.000	
(4) ΔHNW_{06_09}	0.137	0.174	0.087	1.000

Notes: The table reports the correlation coefficient across the shocks used in the analysis. Correlations are computed at the CZ level. Import Penetration exposure (ΔIP) is measured between 2000 and 2016, and 2004 and 2014. Robot Penetration (ΔRP) is computed between 2000 and 2014. Housing Net Worth shock (ΔHNW) is taken between 2006 and 2009.

Table B.7. Import Penetration and Attitudes - Robustness to Alternative Shocks

Dep.	Panel		Cross Section	
	(1)	(2)	(3)	(4)
	Panel A: Immigration			
ΔIP	-0.136**	-0.152**	-0.038	-0.038
	(0.056)	(0.059)	(0.026)	(0.028)
ΔRP	-0.018***	-0.015**	-0.008	-0.008
	(0.006)	(0.006)	(0.005)	(0.006)
ΔHNW		-0.026		0.141
		(0.111)		(0.095)
Observations	9,451	8,705	73,486	68,620
F-stat	18.28	14.60	14.66	11.12
	Panel B: Redistribution			
ΔIP	-0.166**	-0.206**	-0.055**	-0.084**
	(0.071)	(0.084)	(0.027)	(0.033)
ΔRP	0.003	-0.003	-0.003	-0.009
	(0.007)	(0.007)	(0.005)	(0.006)
ΔHNW		0.093		0.088
		(0.103)		(0.093)
Observations	7,251	6,098	66,308	55,878
F-stat	19.40	15.58	12.55	8.55
Individual Controls	Yes	Yes	Yes	Yes
CZ Controls		Yes		Yes

Notes: The table reports 2SLS estimates. For each commuting zone (CZ), the change in import penetration refers to the period between 2004 and 2014 in the panel sample and between 2000 and 2016 (and it is interacted with the second period dummy) in the cross section. Robot penetration is computed at the CZ level over the period 2000-2014.Housing net worth shocks are measured at the county level, between 2006 and 2009. In the panel sample, all dependent variables are first differenced over the period 2010-2014. In the cross section sample, dependent variables are measured in the following pairs of years: 2007 and 2016 (Panel A); 2006 and 2016 (Panel B). All specifications include demographic controls for gender, age, a quadratic of age, educational attainment, and race. CZ controls refer to year 2000 and include the manufacturing share in CZ employment, the offshorability and routine-task-intensity indexes as in Autor and Dorn (2013), the county-level republican vote share, a dummy for Republican victory in that county, and their interaction. In the the cross section, both demographic and CZ controls are interacted with the second period dummy and regressions include CZ and second period fixed effects. In the panel, regressions are augmented by a dummy variable for respondents who changed CZ between 2010 and 2014, alone and interacted with the change in imports exposure. The cross section regressions include the CZ mean of the dependent variable in the initial period interacted with a dummy variable for the second period; whereas, the panel regressions include the level of the dependent variable in 2010. F-stat is the KP F-stat for weak instruments. Standard errors are clustered at CZ level. Significance levels: *** $p< 0.01$, ** $p< 0.05$, * $p< 0.1$.

Table B.8. Congressional Speeches Summary Statistics - CD level

Variables	Obs	Mean	St. Dev.	Median	Min	Max
	Panel A: Long Difference, 2000-2016					
Import Penetration	432	0	1	-0.159	-1.574	5.612
Relative universalism (Congress 106)	428	0	1	-0.054	-3.171	5.049
Relative universalism (Congress 114)	432	0	1	-0.020	-5.521	4.951
Relative universalism (Cong. 114-106)	431	0	1	0.055	-5.302	4.615
Relative universalism (Cong. 106-96)	432	0	1	-0.040	-3.210	3.718
Relative universalism(Cong. 106-101)	432	0	1	-0.077	-4.085	8.510
	Panel B: First Difference, 2000-2007 and 2007-2016					
Import Penetration	860	0	1	-0.312	-2.157	7.465
Relative universalism (Cong. 106; 110)	860	0	1	-0.091	-3.563	6.135
Relative universalism (Cong. 109-106; 114-110)	859	0	1	0.013	-7.060	5.035

Notes: The table reports summary statistics for outcomes and treatment variables at the Congressional District (CD) level. Change in relative universalism are adjusted for redistricting.

Table B.9. Relative Universalism in Political Rhetoric - Robustness

	Relative Universalism					
	(1)	(2)	(3)	(4)	(5)	(6)
ΔIP	-0.222**	-0.498**	-0.239**	-0.498**	-0.277***	-0.347*
	(0.112)	(0.248)	(0.112)	(0.247)	(0.103)	(0.183)
ΔRP	-0.129	-0.204	-0.151	-0.206	-0.022	-0.072
	(0.108)	(0.147)	(0.109)	(0.152)	(0.088)	(0.106)
ΔHNW			-0.227	-0.010		
			(0.156)	(0.304)		
Observations	426	211	425	211	849	421
F-stat	62.82	10.26	68.69	11	112.7	49.04
Specification	LD	LD	LD	LD	FD	FD
Sample	all	above median WNH	all	above median WNH	all	above median WNH

Notes: The table reports 2SLS estimates. The outcome measures the 2000-2016 change in the relative frequency of universalist moral rhetoric in Congressional speeches. The treatment variable measures the 2000-2016 change in import penetration. Both outcome and treatment variables are standardized. Robot penetration is measured over the period 2000-2014; whereas, housing net worth shocks are computed between 2006 and 2009. All regressions replicate the baseline specification, reported in column 4 of Table 3. All columns report the long difference specification over the 2000-2016 period but for columns 6 and 7 in which regressions are estimated in first difference over the 2000-2007 and 2007-2016 periods. The sample includes all Congressional Districts in continental US for which we have data, dropping at-large seats. Even columns report estimated coefficients restricting the sample to CDs with white and non-hispanic population share above median. F-stat is the KP F-stat for weak instruments. Standard errors are robust to heteroskedasticity and in columns 6 and 7, they are clustered at the congressional district level. Significance levels: *** $p< 0.01$, ** $p< 0.05$, * $p< 0.1$.

Table B.10. Relative Universalism in Political Rhetoric - Pre-Trends

	Relative Universalism				
	(1)	(2)	(3)	(4)	(5)
ΔIP	-0.237**	0.141	0.061	-0.233**	-0.248**
	(0.111)	(0.125)	(0.150)	(0.109)	(0.105)
Observations	426	422	426	426	426
F-stat	122.7	118.7	122.7	122.7	122.1
Outcome	Baseline	1993-2000	1980-2000	Baseline	Baseline
Controls				1980-2000	1990-2000

Notes: The table reports 2SLS estimates. The treatment variable measures the 2000-2016 change in import penetration. The last two rows of the table report the Congress period over which the outcome and the control for lagged outcome are computed. The outcome measures the 2000-2016 change in the relative frequency of universalist moral rhetoric in Congressional speeches in columns 1, 4, and 5. In columns 2 and 3 the outcome is computed over the period 1993-2000 and 1980-2000, respectively. Both outcome and treatment variables are standardized. All outcomes are adjusted for redistricting. All regressions replicate the baseline specification, reported in column 1. Columns 4 and 5 augment the baseline specification by including the lagged outcome computed over the 1980-2000 and 1990-2000 period, respectively. The sample includes all CDs in continental US for which we have data, dropping at-large seats. F-stat is the KP F-stat for weak instruments. Standard errors are robust to heteroskedasticity. Significance levels: *** $p< 0.01$, ** $p< 0.05$, * $p< 0.1$.