WORKING PAPER SERIES

Identity Politics

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Working Paper n. 693

This Version: June, 2024

Presidential Lecture: Identity Politics[*]

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June 2024

Abstract

We offer a theory of changing dimensions of political polarization based on endogenous social identity. We formalize voter identity as in Bonomi et al. (2021), but add parties that compete on policy and spread stereotypes to persuade voters. Parties are historically connected to different social groups, whose members are more receptive to the party messages. An endogenous switch from class to cultural identity accounts for three major changes: i) growing cultural conflict between voters and parties; ii) dampening of redistributive conflict, despite rising inequality; 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 of i) and ii) in the voting realignment induced by the "China Shock" (Autor et al. 2020).

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1 Introduction

In the last two decades, US politics has been transformed. Voters attach increasing importance to, and disagree more on, cultural issues such as immigration, race, and civil rights. Meantime, upper vs. lower class conflict over redistribution has declined (Bonomi et al. 2021, BGT henceforth). Something similar has happened on the supply side. In their propaganda, US parties attach growing importance to cultural issues relative to economic ones (Figure 1, Panel A) and their political rhetoric has polarized culturally: congressional speeches of Republicans have become less universalistic than those of Democrats (Figure 1, Panel B). Thus, there is growing "cultural conflict" between voters and between parties (Moskowitz 2018, Sides et al. 2018, Klein 2020).

Figure 1. Trends in Party Advertising and Rhetoric

(a) Economic vs Cultural Ads   (b) Universalist vs Communal Speeches
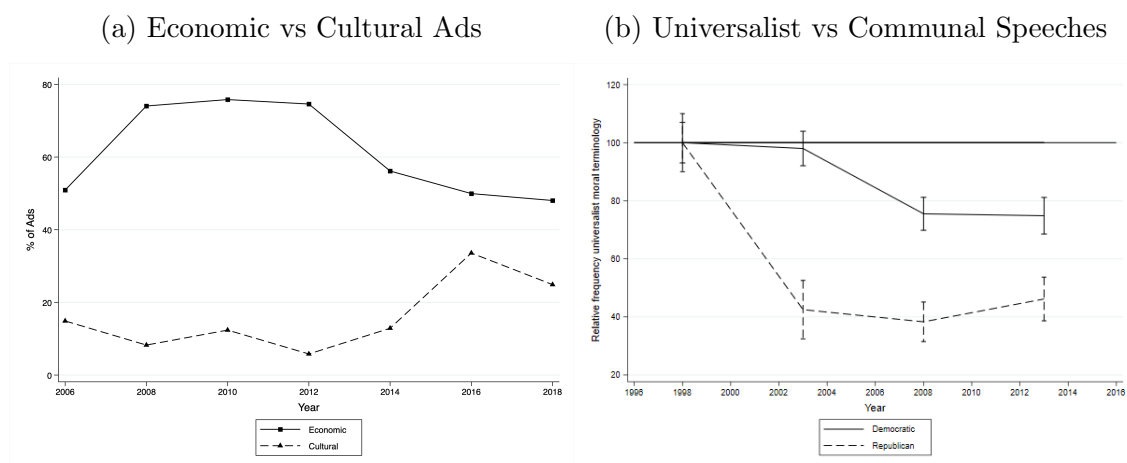
Notes: Panel (a) reports the fraction of TV ads sponsored by the US Democratic and Republican parties, on economic and cultural issues. Source: *Wesleyan Media Project (2008-2018)*. Panel (b) plots the relative frequency of universalist versus communitarian moral rhetoric in Congressional Speeches for Democrats and Republicams, with their standard errors (clustered at the candidate level). Initial values are separately normalized to 100 in the initial year, and observations refer to 5-year averages. Source: Enke (2020).

In addition, voters have realigned 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. 2022).

Figure 2. Vote Share by Individual Characteristics

(a) Differences in Republican Supporters by Income | (b) Differences in Republican Supporters by Education
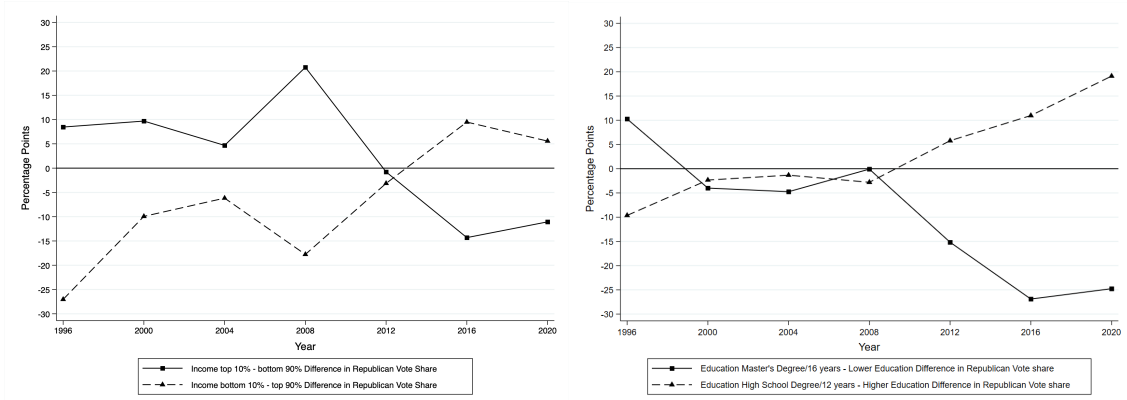
Notes: Panel (a) reports the difference between the (weighted) vote share for the US Republican Presidential candidate of top (resp., bottom) 10 % of the income distribution and that of the rest of the population, among white respondents who voted. Panel (b) does the same for respondents with a Master's Degree or higher (resp., High School Degree or lower) vs the rest of the population. Source: *ANES Time Series Study (1996-2020)*.

Existing work seeks to explain either growing cultural conflict or voters' realignment, seldom both (an exception is Kitschelt and Rehm 2019). Increased cultural conflict is often explained by the spread of higher education, which has divided the electorate between progressive elites and traditional strata (Zeira 2021). This mechanisms does not explain why the lower class now demands less redistribution, however, despite increased inequality. Voters' realignment has been attributed to a shift of the Democratic party toward free markets (Kuziemko et al. 2022). This does not explain why party platforms have changed, however, nor why other countries had similar trends (Ford and Jennings 2020, Gethin et al. 2022).

This paper builds on BGT (2021), and explains the transformation of the US political system based on a change in voters' identities. Social identity reflects people's self-categorization in society and shapes their beliefs (Tajfel and Turner 1979). For much of the 20th century, voters saw themselves as members of opposite income classes, mostly in conflict over economic issues. Over time, the growing importance of immigration, race, religion and civil rights has brought to the fore a clash between two opposite views of ideal American society: white, christian and traditionalist, vs

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multicultural, mutiethnic and progressive. As argued by Fukuyama (2018), Sides et al. (2018) and BGT (2021), voters now identify with social groups on opposite sides of the fundamental cleavage between a progressive vs conservative culture. This shift in voters' identities has changed their beliefs and the issues over which they are polarized, in turn inducing the competitive party system to adapt. We offer a new framework to analyze these demand-supply interaction, and obtain new predictions, which we test.

We start with some motivating evidence from a new survey of 3000 US individuals. The bulk of our respondents identifies with a cultural group (defined by race, religion, etc.) rather than an economic group, more so now than in the past. Consistent with our approach, these non-economic identity groups align along an underlying divide between a conservative vs a progressive culture, which is associated with polarized beliefs and policy preferences, and with how people vote.

Next, we turn to the theory. On the demand side, following BGT (2021), voters identify in the dimension – economic or cultural – where ingroup vs outgroup conflict is more salient. Identity, in turn, distorts beliefs toward the ingroup stereotype, amplifying polarization. On the supply side, two vote-maximizing parties announce policy platforms ahead of the elections. They also engage in costly propaganda, that affects voters' beliefs by boosting or dampening group stereotypes. As in Lipset and Rokkan (1967), parties are linked to specific social groups. We model this idea with the assumption that voters have more trust in the policy promises of the party linked to their group, and pay more attention to its propaganda. For instance, the right-wing party, that traditionally represented business interests and conservative social groups, is less trusted by lower-class and progressive voters. This leads to policy divergence, and implies that propaganda has asymmetric effects across social groups.

Suppose now that cultural conflict becomes more salient compared to economic conflict, so that voters' identity switches from class to culture. This has three effects.

First, the dimension of voter and party polarization changes. Voters in opposite cultural groups polarize on social policy, voters in opposite income classes de-polarize over redistribution. Following these demand changes, parties diverge on cultural issues and converge on redistribution. Identity politics yields growing cultural conflict among voters and between parties, and dampens redistributive conflict.

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Second, voters realign across parties. The cultural conservative lower-class turns to the right, the progressive upper-class to the left. Lower-class voters demand less redistribution and become more extreme in their cultural preferences, so the conservative among them are lured by the rightwing social policy platform. The opposite happens to upper-class and progressive voters. Class realignment is entirely due to the identity switch, which reduces redistributive conflict, and it would not occur in our model if voters were rational.

Third, party propaganda: i) switches from economic to cultural, and ii) aims to fuel voter polarization. The first result says that politicians tune their rhetoric to the salient group cleavage, because this is how voters form their beliefs. This also implies that, as identity switches to culture, propaganda uses categories such as universalism vs. communitarianism also in traditional economic domains like trade policy and redistribution. To explain the second result, consider a right-wing party message that "immigrants are criminals". This cues conservatives to be more anti-immigrant, but also causes a progressive backlash. On net the party gains votes, however, because conservatives are more sensitive than progressives to right-wing propaganda. Thus, voter polarization and extremist political propaganda fuel each other.

Our premise, so far, is that cultural conflict has become more salient. But why? This could be due to a large inflow of immigrants (BGT 2021), or the election of a black president (Sides et al. 2018). The last part of the paper shows that international trade can also have this effect. The reason is that less educated workers, who tend to be culturally more conservative, are also more exposed to import competition from developing countries. Hence, lower trade barriers increase the salience of the educational and cultural divide and can lead to identity shifts. We derive this result theoretically, and study empirically the effects of the "China shock" (Autor et al. 2020). We show two new facts consistent with our predictions: (i) Voters in regions more exposed to the China shock have become more anti-immigrants (if religious) and demand less redistribution (if poor) than in the past. (ii) Congressmen in these regions have adopted a more conservative rhetoric, particularly if Republicans. Both facts predate Trump election in November 2016. Thus, endogenous identity can explain why an adverse economic shock can lead to less, rather than more, demand for redistribution and exerts far reaching political effects. As discussed by BGT

(2021), shocks induced by labor saving technologies can have similar effects, if they increase the skill premium.

We contribute to a growing literature on identity in politics. In Akerlof and Kranton (2000) identity creates a preference for complying with the behavior of an exogenous group. We link identity to beliefs and endogenize the group voters identify with. Shayo (2009) first applied identity to the politics of redistribution. In his pioneering paper, voters choose between opposite classes vs a common national identity, and are altruistic towards the identity ingroup. As identity shifts from class to the nation, the poor demand less redistribution because their ingroup is now richer. Helpman and Grossman (2020) adapt this approach to trade policy, Sambanis and Shayo (2013) to ethnic conflict. Our innovation is to view identity as shaping beliefs, and to study the choice between opposite class vs opposite cultural identities. This is important to explain the growth of cultural conflict and observed political realignments. Shayo (2020) surveys recent contributions Nouri and Roland (2021) survey work on identity and populism. Glaeser et al. (2005), Murphy and Shleifer (2004) and Grossman and Helpman (2022) study how party links with different social groups can yield platform divergence and a role for persuasion. Compared to these papers, our approach links persuasion to identity, and helps explain why voters often hold distorted factual beliefs (Alesina et al. 2023, Kahan 2015). Esteban and Ray (2008) study endogenous political alliances along class vs ethnic dimensions, but they disregard social identities.

Enke et al. (2021), like us, attribute voters' realignment to their changing preferences. In their model, voters care more about social policy as they get richer. This does not explain increased cultural polarization, however, nor why voters hit by trade shocks 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.

The paper is organized as follows. Section 2 presents our new survey evidence. Section 3 describes our model of the economy and of the political system. Section 4 illustrates how we formalize social identity and derives our main results on the political effects of identity shifts. Section 5 studies and tests the effects of trade shocks. Section 6 concludes. Unless noted otherwise, proofs are in the Appendix.

2 Evidence on Identity and Beliefs

At the heart of our approach is the idea that "identity politics" – the growing political importance of religious, racial, place-based divisions – reflects and reverberates into a deeper conflict between conservative and progressive values over a broad range of issues, "cultural conflict" for short. To assess this basic premise, in February/March 2022 we ran a new survey of 3000 US subjects, representative of the US population along many demographics.[1] To measure identity 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)". We define as cultural progressive those who identify as "black", "secular", "citizen of the world" or "progressive culture". We define as cultural conservative those who identify as "white", "christian and protestant religion", "local community", or "traditional culture". The answer to this question allows us to assess the relative importance of class divisions, and which non-class identity (aka "cultural") group people feel closest to. Next, we elicit policy views and beliefs about facts on redistribution and social policy.[2]

At the end of the survey, subjects report whether they are Democrat, Republican or Independent. If the answer is "Democrat" or "Republican", they are asked whether they primarily identify with their party or with the previously chosen cultural group

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[1]The main discrepancies are that our respondents are poorer, more educated and white than the US population, see Online Appendix Table A.1. The survey was run on the Lucid platform with some attention checks, stratified by race, gender, age, income, education and region, and approved by Bocconi University ethics committee.

[2]The style of the identity question is borrowed from Afrobarometer. We force people to pick one group because we are interested in measuring which group people feel closest to and howr this correlates with policy views. The policy questions are as follows. On redistribution, we ask whether the government should: i) provide more services (even if it entails higher taxes), ii) support people's standard of living, and iii) levy an estate tax. We also ask factual questions on income inequality and social mobility. On social policy, we elicit preferences on gender affirmative actions, immigration and abortion, and factual beliefs about racial discrimination in the workplace, cimes by immigrants in the past 12 months, and abortion. The questionnaire is in the online appendix.

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 how they voted in 2020 and 2016.

2.1 Key Facts

The survey unveils three main findings, illustrated in Table 1 and Figure 3. First, only one third of respondents identify with parties or classes (in similar shares), while cultural identities are dominant. Interesting, well over half of those who in the past had an economic or political identity now identify with a cultural group (Online Appendix Table A.2).

Table 1. Average Policy Views and Beliefs by Group

Identity	Percentage	Average Economic policy views	Average Cultural Policy views	Average Economic beliefs	Average Cultural beliefs	Share Voted Republican	Share Voted Democrat
Conservative	36.75	-0.28 (0.03)	-0.33 (0.03)	-0.07 (0.03)	-0.12 (0.03)	0.45	0.36
Progressive	31.86	0.28 (0.03)	0.40 (0.03)	0.08 (0.03)	0.21 (0.03)	0.17	0.53
Difference	(P.value):	0.00	0.00	0.00	0.00		
Upper Class	3.34	-0.17 (0.10)	0.05 (0.09)	-0.02 (0.11)	0.01 (0.11)	0.38	0.44
Lower Class	11.49	0.03 (0.06)	0.00 (0.05)	0.19 (0.05)	0.09 (0.05)	0.29	0.41
Difference	(P.value):	0.09	0.64	0.07	0.46		
Republican	7.18	-0.72 (0.08)	-0.81 (0.06)	-0.10 (0.07)	-0.39 (0.07)	0.91	0.02
Democrat	9.39	0.52 (0.05)	0.61 (0.05)	0.14 (0.07)	0.29 (0.07)	0.02	0.93
Difference	(P.value):	0.00	0.00	0.02	0.00		

Notes: the table shows average values by group of indexes measuring progressiveness in economic and cultural stances. Standard errors of each variable for each identity group are reported in parentheses. 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. The index is then constructed by taking the first polychoric principal component of these questions. The final version of the index is standardized to take zero 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. The last two columns report, for each identity group, the share of individuals who voted republican or democratic at the 2020 presidential election. The *Difference* rows report the p-values from t-tests of the difference between the average values by group being equal to zero. Each *Difference* row refers to the difference between the two groups reported above.

Figure 3. Average Policy Preferences by Cultural Subgroups
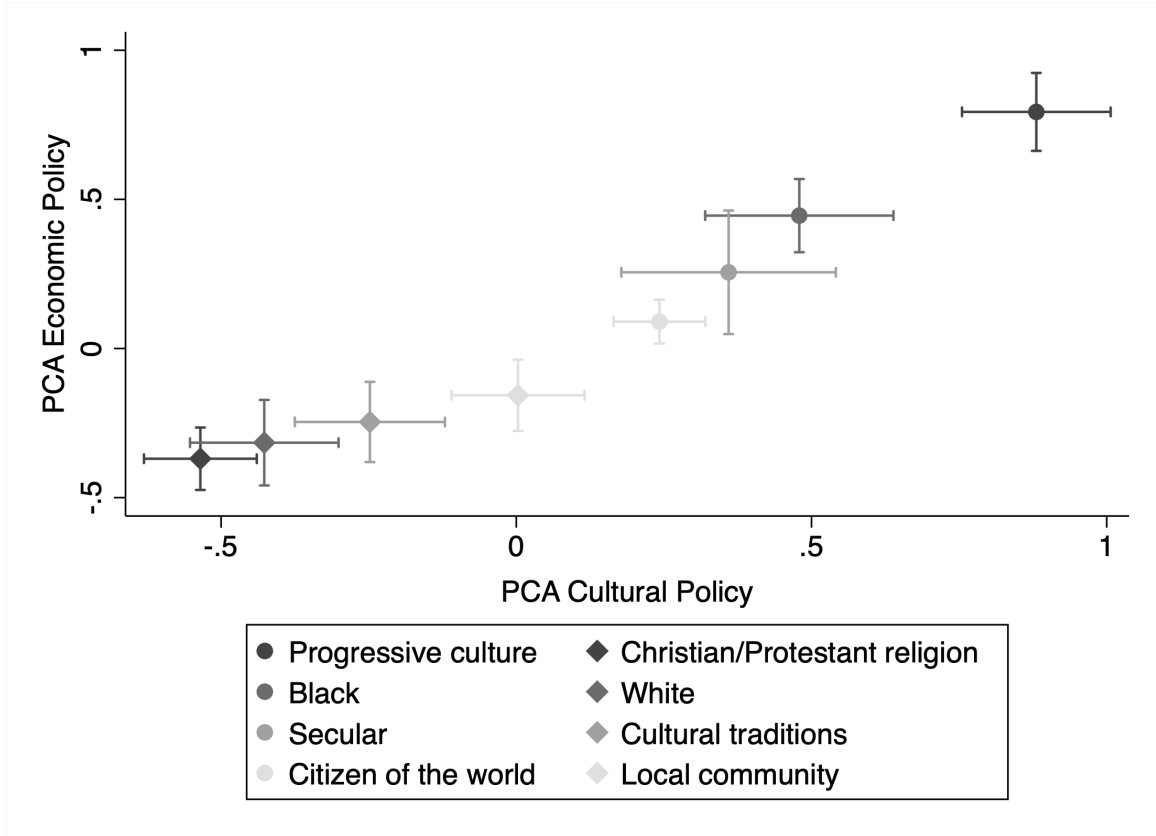
Notes: The figure plots average values of views over cultural and economic policies (columns 3 and 4 of Table 1), by cultural subgroups. 95% confidence intervals are also reported.

Second, different cultural identities locate along a conservative-progressive divide over a range of social as well as economic policies. To reduce measurement error, we extract the first principal component of policy views and factual beliefs. Higher values correspond to more progressive attitudes. Table 1 reports the average magnitudes by broad identity groups, while Figure 3 zooms in on the cultural subgroup, plotting the average policy preferences of each of them. Respondents who identify with their religion, local community, cultural traditions and white race are culturally and economically more conservative than those who identify with being secular, citizen of the world, black race and with having progressive values. Some groups are more extreme than others, but there is a broad alignment of these identities with a general cultural fracture, which we call cultural identity, progressive vs conservative. Disagreement

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concerns both factual beliefs and policy preferences. For instance, cultural conservatives are not only less open to immigration, they also believe that immigrants commit more crimes, compared to progressives. Importantly, cultural divisions are stronger and more comprehensive than class divisions: people with opposite class identities only disagree on economics (since few people declare an economic identity, estimates are less precise), suggesting an association between cultural identity and political polarization.

The third and final finding is that identity is associated with voting. Those identified as cultural conservatives and with the upper class disproportionately voted Republican in 2020, while those identified as progressives and lower class more likely voted Democrat. This is robust to controlling both for a voter's demographics and for its vote in 2016 (Online Appendix Table A.3). Identity is an important correlate of political behavior.

Overall, and despite a plurality of potential identities, these facts are consistent with a two-dimensional framework, where individuals can identify with a cultural group (progressive vs conservative) or with an economic group (upper vs lower class). The rest of the paper relies on this simplifying abstraction to explore the political implications of switching identities from the economic to the cultural domain.

3 The Model

Here we describe voters' preferences and the political system. Social identity is introduced in the next section.

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

Voters are uncertain about these policies. Preferences over q follow the quadratic loss $\frac{1}{2}\left(q - \widetilde{\psi}\right)^2$. The voter's ideal policy $\widetilde{\psi}$ is random, which reflects 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.

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, whose Gaussian density $z^i\left(\widetilde{\varepsilon}\right) = z\left(\widetilde{\varepsilon}\,|\varepsilon^i\right)$ has voter-specific mean ε^i and unit variance. A voter with higher expected income ε^i bears a higher expected tax burden.

Finally, 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?) and Gaussian, with mean $\nu^j = \nu + \beta\psi^j$, $\nu > 1$, and unit variance. $\beta \in [0,1]$ connects preferences over redistribution and social policy. Due to cultural traits such as distrust of strangers, conservative voters dislike immigrants (low ψ^j) but also universal transfers that may benefit them (low ν^j) - cf. Enke et al. (2022).

A voter type ij is thus summarized by the income-culture profile (ε^i, ψ^j). There are two cultural types: Progressive P, and Conservative C, with $\psi^P = \psi$ and $\psi^C = -\psi$. Higher $\psi > 0$ implies more cultural disagreement. There are two economic types: Upper class U and Lower class L, with $\varepsilon^U = \varepsilon$ and $\varepsilon^L = -\varepsilon$, where $\varepsilon > 0$ captures economic inequality. The population is equally split into four types: upper class and progressive $ij = UP$, upper class and conservative $ij = UC$, lower class and progressive $ij = LP$, lower class and conservative $ij = LC$. The average upper (resp. lower) class voter is culturally neutral, with traits $(\varepsilon, 0)$ (resp. $(-\varepsilon, 0)$). The average conservative (resp. progressive) voter is economically neutral, with traits $(0, -\psi)$ (resp. $(0, \psi)$). 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:

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

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:

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

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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 that $\varepsilon > \beta\psi$, which implies that class has a stronger influence on tax preferences than culture. Average welfare is maximized at $\tau^\circ = \nu - 1$, and $q^\circ = 0$.[3]

The Political System Two parties, left D and right R, seek to maximize their vote share by simultaneously announcing policy platforms $Y_p = (\tau_p, q_p)$, $p = D, R$. Parties are historically connected to groups standing on opposite sides of major cleavages (Lipset and Rokkan 1967). Connections could reflect the intermediation of social organizations such as the church, trade unions or business groups. Party R is connected to the upper class and to social conservatives, party D is connected to the lower class and to social progressives. Connections foster trust and attention, so voters not connected to a party do not fully trust it or do not pay full attention to its policy promises. The voters not connected to party R are neither upper class nor conservative, so they are the lower class and progressive types, $ij = LP$. Voters not connected to party D are the upper class and conservative types, $ij = UC$. A measure $0 < \alpha < 1/4$ of voters not connected to party p does not believe its policy promises. Such promises are believed by all other voters. We refer to the non-connected voters or party p as the core voters of its opponent, $\bar{p} \neq p$.[4]

We assume probabilistic voting. Let $W^{ij}(\hat{Y}_p^{ij})$ denote the expected welfare of voter ij if party p wins the election, with $\hat{Y}_p^{ij}$ being the policy vector that voter ij expects if party p wins..Then, voter k of type ij votes for R if and only if:

$$W^{ij}(\hat{Y}_R^{ij}) - W^{ij}(\hat{Y}_D^{ij}) \geq \tilde{\delta}^k \tag{3}$$

where $\tilde{\delta}^k$ is a voter-specific i.i.d. popularity shock favoring party D. It is uniformly distributed with mean 0 and density Φ. Hence, party $p's$ vote share in type ij is

$$\pi_p^{ij} = 0.5 + \Phi\left[W^{ij}(\hat{Y}_p^{ij}) - W^{ij}(\hat{Y}_{\bar{p}}^{ij})\right], \tag{4}$$

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[3] Preferred tax rates in $(0,1)$ requires $v \in (1 + \beta\psi + \varepsilon, 2 - \beta\psi - \varepsilon)$, which is non empty for $\beta\psi + \varepsilon < 1/2$.

[4] The assumption that some voter types are asymmetrically informed about party promises is also made in different contexts by Glaeser et al. (2005) and Matejka and Tabellini (2021).

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

Political Equilibrium Consider party D. A measure α of the upper class and conservative voters does not believe D's announcements, instead expecting the equilibrium platform, Y_D^*, whatever D announces. Thus in equilibrium D maximizes the welfare of trusting voters:

$$Y_D^* = \arg\max_{Y_D} \frac{1}{4} \sum_{ij} W^{ij}(Y_D) - \alpha W^{UC}(Y_D). \tag{5}$$

An analogous expression describes policy choice by R.

The equilibrium has two intuitive properties. First, there is policy divergence: the equilibrium platform of D is economically and socially more liberal than that of R, $q_R^* < q^\circ < q_D^*$ and $\tau_R^* < \tau^\circ < \tau_D^*$. Second, although in equilibrium party D and R obtain the same vote share of $1/2$, they are supported by a majority of their core voters, $\pi_{\iota R}^{*UC} > 1/2 > \pi_{\iota R}^{*LP}$. Party 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, and viceversa for party R. This in turn leads core voters to predominantly vote for their party.[5]

4 Political Effects of Social Identity

We study how endogenous social identity shapes voters' opinions and the dimensions of political polarization on the demand and supply sides.

4.1 Identity Determination

According to social identity theory, a voter has several potential identities, defined by occupation, religion, race, etc.. In our setup, she can identify with her class, $i = U, L$, or cultural group, $j = C, P$. We denote the identity group of voter ij by $\iota(ij) = i, j$ - often we just use ι for convenience.

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[5]To derive these results, set parameter $\theta = 0$ in the proofs of Propositions 3 and 4 that follow.

The voter identifies with the group that is most salient and to which she feels more similar. Based on social psychology, we formalize the salience of ingroup ι by its policy conflict with outgroup$-\iota$, measured by the welfare loss born by the average ingroup when moving from her ideal policy (τ^ι, q^ι) to the ideal policy of the average outgroup $(\tau^{-\iota}, q^{-\iota})$. Using (1) the salience of ι is equal to:

$$\Delta(\iota, -\iota) = W^\iota(\tau^\iota, q^\iota) - W^\iota(\tau^{-\iota}, q^{-\iota}) = \frac{\kappa}{2}\left(q^\iota - q^{-\iota}\right)^2 + \frac{1}{2}\left(\tau^\iota - \tau^{-\iota}\right)^2, \qquad (6)$$

which increases in ingroup-outgroup disagreement. We capture similarity between voter ij and ι by the negative of her policy conflict with the average ingroup, $\Delta^{ij}(\iota) = \frac{\kappa}{2}\left(q^{ij} - q^\iota\right)^2 + \frac{1}{2}\left(\tau^{ij} - \tau^\iota\right)^2$.

Voter ij identifies with the most salient ingroup ι, economic or cultural, provided she feels similar enough to it. Formally, she solves:

$$\iota(ij) = \arg\max_{\iota \in \{i,j\}} \Delta(\iota, -\iota) - \lambda\Delta^{ij}(\iota), \qquad (7)$$

where $\lambda \geq 0$ is the relative weight attached to similarity. An "identity regime" is a configuration $\iota(ij)$ for all types.

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

Due to the model's symmetry, all voters have the same identity, economic or cultural. Cultural identity occurs if cultural disagreement is large compared to inequality, ψ/ε is high, or if social policy is important compared to redistribution, κ is large. Stronger influence of culture on the value of the public good, β, favors cultural identity: it makes cultural disagreement more relevant for taxes.

Parameter changes cause identity switches. Suppose that voters identify with their class. 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 salient, triggering a switch from economic to cultural identity. The same effect arises if cultural disagreement ψ increases, due for instance to growing inequality in education. If income inequality ε increases, class identity is instead favored.

These results do not unequivocally support the notion that conditions have become more favorable to cultural identity: although the relevance and intensity of cultural conflict has increased, as discussed below, so has inequality. But in section 5 we show that economic shocks induced by globalization can have a surprising effect: if they hit different cultural groups asymmetrically, e.g. they mostly hurt conservative voters, they foster cultural identity.

4.2 Identity and Voters' Polarization

In social psychology, identity distorts beliefs through "depersonalization": the voter moves her opinions toward those that are stereotypical of the ingroup, namely that are more frequent in the average ingroup $(\varepsilon^\iota, \psi^\iota)$ compared to outgroup $(\varepsilon^{-\iota}, \psi^{-\iota})$, where $-\iota$ are all voters not in ι. Following BGT (2021), the belief $z_\iota^{ij}(\widetilde{y})$ of voter ij about income or culture $\widetilde{y} = \widetilde{\varepsilon}, \widetilde{\psi}$ when identified with ingroup ι is:

$$z_\iota^{ij}(\widetilde{y}) \propto z^{ij}(\widetilde{y}) \left[\frac{z_\iota^\iota(\widetilde{y})}{z_{-\iota}^{-\iota}(\widetilde{y})} \right]^{\chi_\iota}, \tag{8}$$

where $z_\iota^\iota(\widetilde{y})$ are the stereotyped beliefs held by the voter's average ingroup, $z_{-\iota}^{-\iota}(\widetilde{y})$ those of her average outgroup, and $\chi_\iota \geq 0$ captures the strength of stereotyping. For now $\chi_\iota = \chi$ for all groups. In Subsection 4.4 χ_ι is determined by political propaganda.

Beliefs are determined by a fixed point, because the beliefs of average ingroups and outgroups - the drivers of stereotypes - are determined together. The Appendix proves that, if $\chi < 1/2$, there is a unique and stable equilibrium, in which the beliefs of voter ij when she identifies with group ι are:

$$y_\iota^{ij} = y^{ij} + \theta\left(y^\iota - y^{-\iota}\right) \quad \text{for } y = \varepsilon, \psi \text{ and } \iota = i, j \tag{9}$$

where $\theta \equiv \frac{\chi}{1-2\chi}$.[6] This in turn feeds into policy preferences. By (2), the bliss points

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[6] Equation (8) 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.

of voter ij identified with group ι are:

$$\tau_\iota^{ij} = \tau^{ij} + \beta\theta\left(\psi^\iota - \psi^{-\iota}\right) - \theta\left(\varepsilon^\iota - \varepsilon^{-\iota}\right), \tag{10}$$

$$q_\iota^{ij} = q^{ij} + \theta\left(\psi^\iota - \psi^{-\iota}\right). \tag{11}$$

If $\theta > 0$, identity makes beliefs and policy preferences more extreme in the direction of ingroup-outgroup disagreement $(y^\iota - y^{-\iota})$, the more so the greater is θ. Consider a conservative lower class voter, $ij = LC$, identified with her lower class, $\iota = L$. She is too pessimistic about her income, for low income is distinctive of her ingroup: $\varepsilon_L^L = \varepsilon^L + \theta(\varepsilon^L - \varepsilon^U) = -(1+2\theta)\varepsilon$. But her cultural beliefs and policy preferences are undistorted, since there are no cultural differences across classes. Thus, she over-estimates the benefit of higher taxes, relative to a rational voter: $\tau_L^{LC} > \tau^{LC}$.[7]

Suppose now that the importance κ of social policy rises. If this causes the voter's identity to switch to her conservative ingroups, $\iota = C$, her beliefs change in two ways. First, she becomes more conservative, because this trait is now distinctive of her ingroup: $\psi_C^{LC} = -(1+2\theta)\psi$. Thus, she demands a more conservative social policy: $q_C^{LC} < q_L^{LC}$. Second, her economic beliefs become non-distorted ($\varepsilon_C^{LC} = -\varepsilon$) because income does not vary between cultural groups. For both reasons, she now demands less redistribution: $\tau_C^{LC} < \tau_L^{LC}$ - recall that conservative voters value the public good less.

These differences in beliefs and policy preferences between identity groups are consistent with the evidence of Section 2. They imply that a shift from class to cultural identity changes the dimension over which voters are polarized. Define disagreement over policy $x = q, \tau$ between two groups by the distance between the values of x preferred by their average voters.[8] Recalling the assumption $\beta\psi < \varepsilon$ we obtain:

Proposition 2 *A rise in κ that changes identity from class to culture: (i) increases*

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[7]In our model stereotypes only arise along the trait (income or culture) along which identity is defined. BGT (2021) consider a general setting in which income and social progressiveness are positively correlated. In this case, Upper class identity also causes 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.

[8]Eg., the tax preferred by the average lower class when culturally identified is $(\tau_C^{LC} + \tau_P^{LP})/2$, etc.

disagreement over q and τ between the opposite cultural groups P and C; (ii) reduces disagreement over τ between the opposite economic classes L and U; (iii) increases the variance of preferred q and decreases the variance of preferred τ over the entire population. These effects are stronger the higher is θ, and are absent if θ = 0.

This result echoes the demand side analysis in BGT (2021), who also show empirically that polarization of US voters has indeed changed in this way after 2008. During the same period, US voters also 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.[9]

4.3   Party Divergence and Voters' Realignment

By changing voters' demands, identity also affects party platforms and how voters sort across parties. Suppose that voters' identities are formed ahead of the elections and are known to (and taken as given by) the parties when they announce policy platforms. Repeating the steps of section 3, but with voters beliefs distorted by identity, we have:

Proposition 3 *An increase in κ that changes identity from class to culture increases platform divergence between party R and party D over q, and reduces it over τ, the more so the larger is θ. If θ = 0, platforms do not change with κ.*

Within an identity regime, higher $\theta > 0$ increases policy divergence over at least one instrument because it causes the core voters of each party to hold more extreme beliefs, either culturally or economically. A switch from class to cultural identity increases disagreement between conservative and progressive voters, so it polarizes party platforms over q. By reducing disagreement on redistribution between lower and upper class voters, the same switch also reduces platform divergence over τ.

Consistent with the evidence, then, a switch to cultural identity changes the dimensions of party polarization. Using voting behavior and opinion surveys of US

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[9]In a rational model, one way to account for growing cultural polarization is to assume that cultural disagreement ψ has increased. This would imply that polarization over redistribution also increases, but we do not see it in the data. BGT (2021) discuss another implication of an identity shift from class to culture, also consistent with survey evidence, increased correlation in voters' preferences over q and τ, for which there are no parsimonious alternative explanations.

congressmen, Moskowitz et al. (2018) show that, in recent decades, Republicans and Democrats representatives became more polarized on cultural, not on economic, issues. A switch to cultural identity can thus rationalize observed changes in party positions that remain unexplained in pure supply side explanations, and that occurred in several countries.

Next, consider how voters sort across parties:

Proposition 4 *If κ increases, party R gains conservative votes and loses progressive votes in all economic classes, irrespective of identity. This effect is larger under cultural identity, the more so the greater is θ. If the rise in κ makes identity shift from class to culture, party R also gains lower class votes and loses upper class votes.*

Higher κ always boosts sorting of voters by their culture: 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 is true even if $\theta = 0$ (i.e. with rational voters), but if $\theta > 0$ a switch to cultural identity amplifies the realignment of cultural groups because it enhances voter disagreement and party divergence over q.

If $\theta = 0$, however, higher κ does not cause a class realignment. Since conservative (resp. progressive) voters are equally present in both classes, parties' class composition remains stable as κ rises. This is no longer true if higher κ causes identity to switch from class to culture, and $\theta > 0$. 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 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.

This implication is consistent with the evidence 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.

Some recent papers seek to explain voter realignments as a rational response to exogenous changes in political supply (Kuziemko et al. 2022), or in voters' composition (Kitschelt and Rehm 2019). Our mechanism also explains why political supply changed, and offers a unified explanation of changes in the dimension of polarization in the electorate, in party platforms, and in how voters sort between parties. The driver of all these changes is a higher salience of cultural issues, that triggered an identity shift. But 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.

4.4 Political Propaganda and Extremism

Thus far, we assumed that when shocks hit, voters' beliefs change spontaneously. In reality, political propaganda plays an important role. In the heyday of class conflict, communist leaders appealed to blue-collar identity by stationing in front of industrial plants. Today, right-wing leaders appeal to conservative identity by deploying religious symbols and rituals. By mobilizing identities, politicians can polarize voters using "us vs. them" rhetoric. We now study such mechanism, asking two questions. Does optimal propaganda enhance or dampen voters' polarization? What are the consequences of identity switches in this context? We continue to assume that parties take identity as given.[10]

Political Persuasion   Equation (8) describes how identified voters overweight distinctive ingroup beliefs by parameter χ_ι. We formalize party propaganda as costly effort to change χ_ι 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 (which one depends on voters' identity). Party D is connected to the opposite groups, so it affects χ_P and χ_L.[11]

Suppose that identity is cultural. As shown in the appendix, beliefs continue to

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[10]Politicians could induce identity shifts by making some conflicts more or less salient (e.g. by changing κ), but we leave this to future research.

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

fulfill Equation (9), but with group-specific distortion parameters:

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

If party R increases χ_C, for instance by cueing the stereotype that all immigrants are criminals, conservative beliefs become more extreme in two ways: directly, by weighting this ocnsertaive stereotype more (higher χ_C in the numerator of θ^C); indirectly, as the equilibrium conservative stereotype becomes more extreme (higher χ_C in the denominator of θ^C). This change in beliefs benefits party R, since conservative voters become less likely to vote for party D. But higher χ_C also backfires, because it makes the progressive voters even more progressive (higher χ_C in the denominator of θ^P). When they see a more extreme conservative stereotype, highly progressive beliefs become even more stereotypical of P, enhancing $P's$ progressiveness. This logic highlights a political tradeoff: propaganda attaches connected voters to the party, but it also alienates non-connected voters.

Equilibrium To study this tradeoff, let $a_{\iota p}$ denote propaganda 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 propaganda, party p can either enhance ($a_{\iota p} > 0$) or dampen ($a_{\iota p} < 0$) stereotypes, relative to the baseline $\chi \geq 0$. If $\chi = 0$, voters' belief distortions are entirely due to propaganda. Propaganda 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, $0 < \chi_\iota < 1/2$.

Each party p chooses policies (q_p, τ_p) and propaganda $a_{\iota p}$, taking voters' identity and the choices of its opponent as given. Equilibrium platforms (q_p, τ_p) and voting patterns are as in Propositions 2 and 3, but now parameter θ is endogenous and could vary with identity. Let $a_{\iota p}^*$ denote equilibrium propaganda by party p for its ingroup ι. The Online Appendix proves:

Proposition 5 *If the cost of propaganda is sufficiently convex (c is sufficiently large), there is a unique symmetric equilibrium in which parties enhance stereotypes. They spread class stereotypes $a_{LD}^* = a_{UR}^* > 0$ under class identity, and cultural stereotypes $a_{PD}^* = a_{CR}^* > 0$ under cultural identity. Propaganda increases in the share of*

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distrusting core voters, α, in economic inequality, ε, and in cultural disagreement, ψ.

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

Parties engage in costly propaganda because it influences the beliefs of its ingroup voters more than those of outgroups. Thus, propaganda brings more votes than it alienates, giving parties an incentive to fuel extremism. This incentive is stronger the greater is party divergence, which creates a complementarity: more extreme parties lead to more extreme voters and vice-versa. Any parameter change that increases voters' extremism (higher ε, ψ or χ) or that increases party divergence (higher α) boosts propaganda, making voters even more extreme and parties even more divergent.[12]

When identity switches from class to culture, the content of propaganda changes, as in Figure 1. Political advertising focuses on culture rather than on economics (Panel A), and parties change their rethoric over 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 growing divergence in the universalism of speeches (Panel B) and with growing distinctiveness of Republican vs Democratic speeches in cultural domains (Gentzkow et al. 2019).

In equilibrium, propaganda distorts beliefs even if voters have no spontaneous tendency to stereotype, $\chi = 0$, because it makes a new social cleavage more salient, producing stereotypes. But politicians cannot get voters to believe anything. To be persuasive, they must connect to a cleavage that is already top of voters' minds.

Consistent with this identity-based view of propaganda, Sides et al. (2018) show that, after the Trump presidential campaign of 2016 which focused on racial and immigration issues, Democratic and Republican supporters hold more divergent beliefs about race, immigration, Islamic religion. As in our model, propaganda excerbates an existing cleavage and polarizes beliefs both by persuading ingroups and by causing a backlash of out-groups. For instance, a by-product of Trump statements on

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[12]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

immigrants was to reinforce Latino and Asian identities.[13]

5 Trade Shocks and Cultural Identity

We now show that trade shocks can cause a switch to cultural identity, if they exacerbate conflict between opposite cultural groups. As shown by Autor et al (2020), the "China shock" benefited the Republican party. We develop additional implications of this shock in our framework, and show that they are consistent with the evidence.

5.1 Import exposure and social identity

Import Exposure A small open economy consists of several districts indexed by z. In each districts there are two sectors, export x and import m, with international prices 1 and p^* respectively. Thus, we neglect terms of trade effects. Voters earn their taxable income $1 + \varepsilon^i$ in the export sector. Distortionary taxes on this income finance a national public good g, and the national government also sets a social policy q. Except for the import sector, the model is the same as before.

The new assumption is that voters also earn non-taxable income from two units of labor that can be employed in either sector, with voter and district specific probability. Let η_z^{ij} be the probability that type ij in district z is employed in the import sector. Half districts are "non-exposed", $z = n$. Here no voter earns import-sector income, $\eta_n^{ij} = 0$ for all ij. Half districts are "exposed", $z = e$. Here conservative voters earn import sector income, with equal probabilities across classes, $\eta_e^{UC} = \eta_e^{LC} = \eta > 0$, while progressive voters do not, $\eta_e^{UP} = \eta_e^{LP} = 0$. Thus, aggregate domestic production of the imported good is $\eta/2$. As η rises, conservative voters in exposed districts are more exposed to imports. The positive correlation between conservatism and import exposure captures the idea that less skilled/educated workers are both more conservative (lower ψ^j) and more exposed to imports (higher η_z^{ij}).[14]

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[13]In line with this, 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 statements backed by G. 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.

[14]The assumptions that $\eta_z^{iP} = 0$ in all districts and that $\eta_z^{iC} = 0$ in non-exposed districts sim-

Voter ij in district z has utility:

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

where x_z^{ij} and m_z^{ij} denote private consumption of the exported and imported good. Utility from imports is quadratic $U(m) = -\frac{1}{2}(\varpi - m)^2$. To simplify, the value of the public good is the same for all voters ($\beta = 0$). The government sets an ad valorem tariff t that raises the domestic import price at $(1+t)p^*$, used to finance g along with the income tax τ. Thus, expected disposable income is

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

where the last term is expected income from the additional labor endowment, wich varies across districts and cultural groups due to import exposure η_z^{ij}.

Taking the government budget constraint into account, the voter expected welfare function 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 $T(t) = tp^*[\hat{m} - \eta/2]$ is aggregate tariff revenue expressed in terms of the export good, $\hat{m} = \varpi - (1+t)p^*$ is optimal consumption of m, and $S(t) = U(\hat{m}) - p^*(1+t)\hat{m}$.

With rational voters, preferences over q and τ are the same as in (2) (with $\beta = 0$), and the ideal tariff for voter ij in sector z is:

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

Thus, higher exposure η_z^{ij} entails a higher ideal tariff.[15]

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plify notation but entail no loss of generality as long as conservatives remain more exposed than progressives in the exposed districts.

[15] $\hat{t} = \frac{(\varpi - p^*)(v-1) - v\eta/2}{p^*(2v-1)}$. We assume $(\varpi - p^*)(v - 1) > \eta v/2$ to have $\hat{t} > 0$, and $\varpi - p^*(1+t) > \eta/2$ for all t to have positive tariff revenue. If progressive types were also exposed to import competition, the greater their exposure, the higher their preferred tariff.

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Social Identity   A voter continues to identify with her cultural or economic in-group.[16] Which of the two prevails is again determined by the tradeoff between group contrast, $\Delta(\iota, -\iota)$, vs dissimilarity from the ingroup, $\lambda\Delta_z^{ij}(\iota)$, as in (7), where λ is the relative weight on dissimilarity. But while groups are defined at the national level, conservative types differ across districts in their import exposure. Hence, dissimilarity of conservatives from their cultural group varies across districts, giving rise to het-erogeneous identities. The online appendix proves that a trade shock that increases import exposure, η, affects identity as follows:

Proposition 6 *Suppose that $\varepsilon^2 > \kappa\psi^2$ and $\lambda > 4/3$. There is a threshold $\underline{\eta} > 0$ such that, if $\eta < \underline{\eta}$, all voters identify with their class, while if $\eta > \underline{\eta}$, conservatives in exposed districts switch to cultural identity. Conservatives in non-exposed districts are always class identified. The identity of progressives depends on η, but it is the same in all districts.*

Greater import exposure increases the salience of cultural conflict, because it heightens conflict over trade policy between conservatives vs progressives. Opposite classes are instead equally exposed to trade. Crucially, the effect on identity varies across space: conservatives demand a restrictive trade policy only in exposed dis-tricts. As η rises, they feel more similar to the average conservative ingroup, who also demands more protection, than to their class. The opposite happens in non-exposed districts, where conservatives do not lose from trade. Here, higher η makes non-exposed conservatives less similar to their cultural group. Thus, conservatives switch to cultural identity only in the exposed districts.

This heterogeneous identity switch produces our diff-in-diff predictions. We do not discuss what happens to progressives, because their identity does not vary across districts. For the same reason, we neglect other drivers of cultural identity, like changes in κ, that have uniform effects across districts.[17]

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[16]In a previous version we also allowed voters to identify along a third dimension, as supporters vs opponent of trade protection. This is akin to identify with one's own district. Our main results continue to hold provided exposed districts are on average more conservative than non exposed ones. If so, voters who identify as losers from trade also become more culturally conservative and less class polarized, giving the predictions that we empirically test below.

[17]Progressive voters also switch to cultural identity if $\eta > \bar{\bar{\eta}}$ $(> \underline{\eta})$, but they do so uniformly across districts, since they have zero exposure in all districts. If progressives were also exposed to

Predictions Our first prediction concerns the effect of trade shocks on voters' demand for social policy q and redistribution τ. Under rationality, these are unaffected by η. Denote by $\Delta\tau_z$ and Δq_z the change in the average demand for redistribution and social policy in district z, and by $\Delta\tau_z^\iota$ and Δq_z^ι the change in policy demands in the same district but only within group ι. The Online Appendix proves:

Prediction 1 *(Voters' Demand) A trade shock, higher η, causing some voters to switch to cultural identity affects exposed vs. non-exposed districts as follows:*

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

2) The demand for redistribution drops for the lower class, $\Delta\tau_e^L < \Delta\tau_n^L$, and rises for the upper class, $\Delta\tau_e^U > \Delta\tau_n^U$, leaving average demand for redistribution unchanged.

The heterogeneous response of districts mimics our predictions in Section 4, except that it only concerns conservative voters. As exposed conservatives switch to cultural identity, they demand a more restrictive social policy, so on average desired q in the district decreases, compared to non- exposed districts where identity does not change. The identity switch also de-polarizes redistributive conflict in the exposed (relative to non-exposed) districts, because exposed conservatives move away from their class. Given our assumptions (equal size of upper and lower classes and $\beta = 0$), the overall demand for redistribution does not change, but it would drop in exposed districts if the lower class was larger than the upper class.

Our second prediction concerns political supply. Suppose that each district elects a 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.[18] They announce a platform,$(q_{zp}, \tau_{zp}, t_{zp})$ and propaganda $a_{\iota zp}$ for each identity group ι of connected voters. With heteroge-

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import competition, heterogeneity across localities would have opposite effects on conservatives and progressives, strengthening our predictions. If $\lambda < 4/3$, then also conservatives from non-exposed districts can switch to cultural identity provided trade exposure η is very large. In this case too, however, there are no diff-in-diff patterns.

[18]Although announcements refer to a national policy, they differ by districts because candidates maximize their vote share in 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 national policy.

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neous identities, a candidate may engage in both economic and cultural propaganda, at separable cost $C\left(a_{\iota zp}, a_{\iota' zp}\right) = \frac{c}{2} \cdot \left(a_{\iota zp}^2 + a_{\iota' zp}^2\right)$. The Online Appendix proves that, if c is sufficiently large, a trade shock has the following effects.

Prediction 2 *(Political supply) A rise in η that causes some voters to switch to cultural identity has the following effects in exposed relative to non-exposed districts:*

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

ii) Party D candidates announce a less redistributive policy while party R candidates announce the same or a more redistributive one, so that divergence in τ decreases, $\Delta\left(\tau_{eD}^* - \tau_{eR}^*\right) < \Delta\left(\tau_{nD}^* - \tau_{nR}^*\right).$[19]

iii) Party R increases conservative propaganda and both parties decrease class propaganda.

When η increases, conservative voters in exposed districts switch from class to cultural identity. To attract them, both parties set more conservative platforms 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, however, since only R is trusted by all conservative voters. Thus, platform divergence over q increases.

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, and hence pursues a less redistributive policy. Thus, party divergence over τ shrinks.

Finally, a similar effect holds for propaganda. 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 because its connected voters are now culturally identified. The effect on D is instead ambiguous.

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[19] As shown in the appendix, $\Delta(\tau_{eR}^* - \tau_{nR}^*) = 0$ if η is such that progressive voters are culturally identified in all districts, while $\Delta(\tau_{eR}^* - \tau_{nR}^*) > 0$ if they are class identified in all districts.

5.2 Evidence

To test our diff-in-diff predictions, we follow Autor et al. (2020) and measure the trade shock as the change in Chinese import penetration, instrumented 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 our model.[20]

Who is more exposed? In our model, trade shocks favor cultural identity because they hurt cultural conservatives more 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 Table 2, respondents identified with a conservative cultural group hold globalization and technology more responsible for their economic losses than those identified as progressives. There is no tangible difference in attribution between respondents identified with upper vs lower classes.

These perceptions are also consistent with the demographics in the CCES survey used below to test Prediction 1. Respondents in CZs more exposed to the China shock are on average less educated and more religious, which correlates with being conservative. Their income is instead uncorrelated with imports exposure.[21]

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[20]Autor et al. (2013), which introduces the general methodology, measure the change in import exposure in each CZ between years t_1 and $t_2 > t_1$ 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:

$$\Delta IP_z = \sum_{m \in M} \frac{L_{m,z,t_1}}{L_{z,t_1}} \times \frac{I_{m,t_2} - I_{m,t_1}}{Y_{m,91} + I_{m,91} - X_{m,91}} \qquad (14)$$

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, 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 $(I_{m,t_2} - I_{m,t_1})$ with $(I^W_{m,t_2} - I^W_{m,t_1})$, namely the increase of Chinese imports in eight developed countries over the same period, and all the other terms in (14) with their values in 1988.

[21]We explore conditional correlations with a regression at the CZ level. The dependent variable is the increase in Chinese imports between 2000 and 2016, ΔIP_{00-16} - the period considered by Autor et al (2020). The covariates, measured in 2006 (the beginning of the CCES sample period),

Table 2. Respondents Holding Globalization Responsible for Economic Losses

Difference:	Conservatives − Progressives	Lower − Upper
Globalization or new technologies are fully responsible for my economic losses	0.07	-0.01
	(0.00)	(0.00)
Globalization or new technologies are fully responsible for others' economic losses	0.04	-0.02
	(0.00)	(0.00)

Notes: The table reports the difference of average beliefs about the economic losses caused by globalization and new technologies between Conservatives and Progressives and between respondents belonging to the Lower and Upper Class. 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". Standard errors for each variable are reported in parentheses.

Prediction 1: Changes in Voter Demands We study a panel of 9400 US respondents (15 per CZ) interviewed in the CCES survey between 2010-14. This enables us to test whether the opinions of the same respondent change upon a rise in import exposure, as predicted. Online Appendix Tables A.4 and A.5 report key summary statistics at the CZ and individual level. A previous version obtained similar results in a larger repeated cross section of 36000 respondents (67 per CZ) over 2006-16.

We measure two outcomes, preferences for redistribution (τ) and immigration (q), using the first principal component from two questions on government spending and taxation, and on border control and illegal immigrants, respectively. Higher values indicate more favorable views on redistribution and immigration.[22]

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 panel, namely between 2004 and 2014. We estimate:

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

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):

$$\Delta IP_{00-16} = \underset{(0.185)}{2.151} - \underset{(0.249)}{0.915}\,somecollege_{06} - \underset{(0.293)}{0.789}\,collegemore_{06} - \underset{(0.267)}{0.618}\,secular_{06} + \underset{(0.003)}{0.002}\,income_{06}.$$

[22]We don't study opinions on trade policy because they are not consistently measured over time.

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where $\Delta y_{i,z}$ is the change in attitudes by respondent i in CZ z between 2010 and 2014, and $\Delta \widehat{IP}_z$ is the instrumented increase in import exposure in z. The coefficient of interest is 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 control for respondent demographics, for her initial attitudes in 2010 $X_{i,z,1}$, as well as for CZ characteristics Z_z in year 2000, as in Autor et al. (2020). Note that the vector Z_c includes manufacturing employment. 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.[23] We also include a dummy variable for respondents who changed CZ between 2010 and 2014, and its interaction with $\Delta \widehat{IP}_z$. The change in opinion is measured over a short period (five years), making this is a demanding exercise.

Table 3 reports the estimates, with and without covariates for the CZ. Estimation is by 2SLS and standard errors are clustered at the CZ level. As expected, residents of more exposed CZs become less favorable to redistribution and immigration.[24]

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. It also implies that lower class voters are the ones demanding less redistribution, while the opposite is true for upper class voters. To test this, in Table 4 we interact the import shocks with two dummy variables measured at the beginning of the sample period (2010), 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). 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

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[23]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 these variables are measured in 2000. Inclusion of these variables is important for identification, given the nature of the instrument. Results (available upon request) are robust to also controlling for initial party identity, religiosity, and income of respondents.

[24]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.

Table 3. Import Penetration and Attitudes

	Immigration		Redistribution	
	(1)	(2)	(3)	(4)
ΔIP	-0.080	-0.124	-0.038	-0.170
	(0.031)	(0.058)	(0.037)	(0.068)
Observations	9,451	9,451	7,251	7,251
F-stat	53.53	37.86	57.06	40.09
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. The dependent variables are first differenced over the period 2010-2014. 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, a dummy variable for respondents who changed CZ between 2010 and 2014, alone and interacted with the change in imports exposure, and 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.

exposed CZ, while the effect of import exposure is absent or much smaller for secular respondents. In addition, demand for redistribution falls for the lower class, while there is no change or a much smaller effect in the upper-middle classes.[25]

A possible concern is that the sample period overlaps with other major economic shocks, such as the 2007-2008 financial crisis or the diffusion of labor savings technologies (e.g. robots). A previous version of this paper showed that the estimates are robust to controlling for the incidence of these shocks in the CZ. Interestingly, the diffusion of robots also induces a deterioration in the attitudes towards immigrants, while measures of the severity of the financial crisis are uncorrelated with changes in opinions. This too is consistent with the observation of BGT (2021), that only economic shocks that differentially hurt opposite cultural groups (like labor saving technologies) can favor cultural identity.

Overall, the results are roughly consistent with the model. Identity can explain a

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

Table 4. Import Penetration and Attitudes - Heterogeneus effects

	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	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.

puzzling fact: an economic shocks that hurts conservative voters is associated with a drop in the demand for redistribution and a surge in opposition to immigrants.

Prediction 2: Changes in Political Supply To test Prediction 2, we measure the degree of relative universalism in Congressional speeches between 2000 and 2015-16, as in Enke (2020).[26] This index is constructed by counting the relative frequency of universalist vs communal words as defined in the Moral Foundation Dictionary (cf. Haidt, 2012). This measure reflects both policy platforms and rethoric, and it is commonly interpreted as distinguishing progressive vs conservative values (Enke 2023). We cannot distinguish rethoric from policy positions in these data, but Prediction 2 says that they should go hand in hand: more exposed districts should witness more

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

conservative platforms and rhetoric, especially for party R.

The unit of observation is the Congressional district (CD). The outcome of interest is the change in relative universalism between 2000 and 2015-16 in the speeches of representatives elected in the district. The Change in import exposure is measured over the same time period.[27]

We estimate the 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. All variables, including Δy_d, are standardized.[28]

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 Δy_d, relative to the standard deviation of Δy across CDs. Summary statistics are in Online Appendix Table A.6. 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 5 reports the estimated coefficient of interest, for different specifications (columns 1-2). In line with Prediction 2, representatives elected in more exposed CDs have reduced universalistic rhetoric in their speeches. In column (2), a one

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[27]District boundaries changed over time, so 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). 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). Results are robust to defining the outcome variables unadjusted for redistricting.

[28]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.

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 (3) and (4) 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 are likely to have a larger share of conservative voters, since ethnic minorities are unlikely to be conservative on the salient issues of race and immigration. We thus expect politicians to use a more conservative language in these CDs, where there are more white losers from trade who switch to conservative cultural identity. Indeed, 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 also consider the second implication of Prediction 2: the trade shock cause a stronger shift to conservatism by party R than by D. Columns (5) and (6) of Table 5 splits CDs based on the party in office in 2000. The effect of increased import exposure is negative only for Republican representatives. As shown in a previous version, results are even stronger if the split is based on the party in office in 2016.

To isolate the effect of import exposure that is not due to a party change, columns (7) and (8) 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, we 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. Again, only Republicans have become less universalistic in the more exposed districts, while there is no change for Democrats. Results are similar if we 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.

Online Appendix Table A.7 shows that these results are not due to pre-existing trends towards less universalism in the more exposed districts. In columns (1-2) 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. The estimated coefficient of interest is positive and not statistically significant, suggesting the absence of relevant pre-existing trends in the outcome variable. The

Table 5. Relative Universalism in Political Rhetoric - Baseline Estimates

	Relative Universalism							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIP	-0.209	-0.237	-0.500	-0.047	-0.336	0.059	-0.589	0.132
	(0.111)	(0.111)	(0.250)	(0.139)	(0.197)	(0.189)	(0.225)	(0.276)
Observations	426	426	211	215	218	208	184	137
F-stat	122.2	122.7	20.6	117.4	31.6	91.9	12.7	315.8
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Labor Market Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Republican Vote Share		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample	all	all	above WNH	below WNH	Rep 2000	Dem 2000	Rep	Dem

Notes: The table reports 2SLS estimates. Columns 3 and 4 refer to Congressional Districts (CDs) with share of white and non-hispanic population above (below) median. Columns 5 (resp. 6) restricts the sample to CDs represented by a Republican (resp. Democrat) in 2000. Columns 7 and 8 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. 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.

remaining columns control for the lagged change of the dependent variable over 1980-2000 and 1990-2000. The coefficient of interest is unaffected. A previous version showed that the results are also robust to controlling for a measure of the financial crisis and of the diffusion of robots, and to estimating two stacked first difference regressions, over the periods 2000-2007 and 2007-2016.

Overall, and consistently with prediction 2, in CDs more exposed to import competition Republican representatives have moved towards more conservative platforms and rhetoric, so as to cater to the increased conservatism of their voters in these areas.

6 Concluding Remarks

Conventional analyses of recent political changes often put political leaders center stage, as demiurges of sweeping shifts in the dimensions of conflict. This approach has two important weaknesses. First, it does not explain where the change in political supply comes from. There are surely historical accidents, but why do we observe growing cultural conflict and the lower class voting for the right, in so many countries at the same time? Second, and related, this approach assumes stable voter demands. But then, why would this agitation by politicians matter at all? If voters' beliefs are stable, politicians exaggerating policy conflicts may garner support of extremists, but eventually lose out due to the alienation of moderates.

We have argued that new voter demands, induced by shifting social identities, are an important driver of these changes. As shown by BGT (2021) and Sides et al. (2018), this perspective is consistent with US survey evidence indicating that: i) voters care more about cultural issues than in the past, ii) opposite cultural groups have polarized, both in social policy and redistribution, and iii) opposite classes have de-polarized on redistribution. Voters now frame politics as a "culture war" rather than a "class struggle". This new frame influences their opinions across a range of issues. The psychology of identity offers the microfoundation for this process.

We have also shown that this approach is not just about demand, it is fruitful for thinking also about political supply. First, politicians adapt their platforms, rethoric and propaganda to voters' identities, and become actors in the culture war. Second, the consequences of the identity shift can be amplified by political leaders. By making

ingroup-outgroup diferences even more salient, these supply responses amplify the change in voters' opinions, fueling polarization and erroneous beliefs.

Finally, this approach does not only explain why voters change their demands and politicians their platforms, but also what drives political change. In particular, it explains why increased exposure to globalization, or to technological shocks increasing the salience of the educational divide, are associated with more cultural conservatism and lower demand for redistribution by economic losers.

One advantage of our approach is that it helps explains why similar trends of political realignment and growing cultural conflict are observed in several countries, and not just in the US.[29] 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, due to a shift to cultural identity. Indeed, recent research has identified several shocks that, by increasing the salience of cultural conflict, may have strengthened cultural identities throughout Europe. These common fault lines between opposite visions of what it means to be French, or German, or British, running through similar neighboring nations, may also have been amplified by spillover effects across countries.[30]

In future work it may be interesting to study how party platforms and propagande may contribute to change voters' identities, by enhancing the salience of underlying cleavages or of secific shocks. 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 political 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, reinforcing racial identity. This in turn enhanced voters' polarization on racial issues, and increased the incentives of parties

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[29]See Gethin et al. (2022). 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.

[30]Danieli et al. (2022) show that voters' realignment towards extreme right wing populist parties in Europe can be largely explained by a rise in the salience of cultural issues for conservative voters. On which shocks increased the salience of cultural conflict, see the review by Colantone et (2022) on the role of globalization, technology and immigration throughout Europe, Samsi (2024) on the effects of exposure to immigrants during the Brexit campaign, Manacorda et al. (2023) on the effects of 3G and 4G technologies in strenghtening cultural and political tribalism in Europe.

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 lens of identity theory is a promising direction for future research.

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Appendix

Proof of Equation (9). We now prove that beliefs fulfill Equation (9). In (8), the distorted likelihood ratio between average group members is:

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

where K_ι and $K_{-\iota}$ are positive normalization constants and where we used $\chi_\iota + \chi_{-\iota} = 2\chi$. 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 (8) becomes:

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

So, for Gaussian distributions: $y_\iota^{ij} = \int \widetilde{y} z_\iota^{ij}\left(\widetilde{y}\right) d\widetilde{y} = y^{ij} + \theta\left(y^\iota - y^{-\iota}\right)$ for $y = \varepsilon, \psi$. ∎

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

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

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. Thus:

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

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

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

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while they identify with their economic class otherwise. ∎

Proof of Proposition 2. Using (9), (10), (11):

$$q_\psi^P - q_\psi^C = (1 + 2\theta)2\psi > q_\varepsilon^P - q_\varepsilon^C = 2\psi$$

$$\tau_\psi^P - \tau_\psi^C = (1 + 2\theta)2\beta\psi > \tau_\varepsilon^P - \tau_\varepsilon^C = 2\beta\psi$$

$$\tau_\psi^L - \tau_\psi^U = 2\varepsilon < \tau_\varepsilon^L - \tau_\varepsilon^U = (1 + 2\theta)2\varepsilon$$

Moreover, $Var(q_\iota^{ij}) = \frac{1}{4}\sum_{ij}(q_\iota^{ij})^2$. Since $q_j^{ij} = (1 + 2\theta)q_i^{ij}$, for $j = C, P$ and $i = L, U$, we have $Var(q_j^{ij}) > Var(q_i^{ij})$. Also,

$$Var(\tau_\iota^{ij}) = \frac{1}{4}\sum_{ij}[\beta^2(\psi_\iota^{ij})^2 + (\varepsilon_\iota^{ij})^2 - 2\beta\psi_\iota^{ij}\varepsilon_\iota^{ij}] \tag{17}$$

where $\psi_j^{ij} = (1 + 2\theta)\psi_i^{ij}$ and $\varepsilon_i^{ij} = (1 + 2\theta)\varepsilon_j^{ij}$, for $j = C, P$ and $i = L, U$. Inserting these expressions in (17) and using $\varepsilon > \beta\psi$ proves that $Var(\tau_j^{ij}) < Var(\tau_i^{ij})$. ∎

Proof of Proposition 3. Party p solves $\max_{q_p, \tau_p} \frac{1}{4}\sum_{ij} \pi_{\iota p}^{ij}$, where

$$\pi_{\iota p}^{ij} = 0.5 + \Phi\left[\frac{\kappa}{2}\left(\hat{q}_{\bar{p}}^{ij} - q_\iota^{ij}\right)^2 + \frac{1}{2}\left(\hat{\tau}_{\bar{p}}^{ij} - \tau_\iota^{ij}\right)^2 - \frac{\kappa}{2}\left(\hat{q}_p^{ij} - q_\iota^{ij}\right)^2 - \frac{1}{2}\left(\hat{\tau}_p^{ij} - \tau_\iota^{ij}\right)^2\right], \tag{18}$$

with expected policies $\hat{q}_p^{ij} = q_p$ and $\hat{\tau}_p^{ij} = \tau_p$ 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 fixed at the equilibrium policies. Denote by $ij = c_{\bar{p}}$ the core voters of party $\bar{p}$ (who do not fully trust party's p policy promises). Then, first order conditions are:

$$-\frac{\Phi}{4}\sum_{ij \neq c_{\bar{p}}} \kappa\left(\hat{q}_p^{ij} - q_\iota^{ij}\right) - \Phi\left(\frac{1}{4} - \alpha\right)\kappa\left(\hat{q}_p^{c_{\bar{p}}} - q_\iota^{c_{\bar{p}}}\right) = 0,$$

$$-\frac{\Phi}{4}\sum_{ij \neq c_{\bar{p}}} \left(\hat{\tau}_p^{ij} - \tau_\iota^{ij}\right) - \Phi\left(\frac{1}{4} - \alpha\right)\left(\hat{\tau}_p^{c_{\bar{p}}} - \tau_\iota^{c_{\bar{p}}}\right) = 0,$$

with second derivatives $-\Phi\kappa(1/4 - \alpha) < 0$ and $-\Phi(1/4 - \alpha) < 0$ and zero cross partials. So second order conditions for a maximum are satisfied. Denote by $\rho = \varepsilon, \psi$

the identity regime, economic if $\rho = \varepsilon$, cultural if $\rho = \psi$. Equilibrium platforms are:

$$q^*_{\rho p} = q^o + \sum_{ij} \alpha^{ij}_p \psi^{ij}_\iota; \quad \tau^*_{\rho p} = \tau^o + \sum_{ij} \alpha^{ij}_p (\beta \psi^{ij}_\iota - \varepsilon^{ij}_\iota),$$

where $q^o = 0$, $\tau^o = v - 1$ and where ψ^{ij}_ι and ε^{ij}_ι 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 $\alpha^{ij}_p = \frac{1}{4(1-\alpha)}$ for $ij \neq c_{\bar{p}}$ and $\alpha^{ij}_p = \frac{1/4-\alpha}{1-\alpha}$ for $ij = c_{\bar{p}}$. Hence:

$$q^*_{\rho R} = -\frac{\alpha}{1-\alpha} \psi^P_\rho < q^o = 0 < q^*_{\rho D} = -\frac{\alpha}{1-\alpha} \psi^C_\rho,$$

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

where ψ^P_ρ is the average culture of 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. Using the equations for beliefs, party divergence over q and τ in different identity regimes is:

$$q^*_{\varepsilon D} - q^*_{\varepsilon R} = \frac{2\alpha\psi}{1-\alpha} < q^*_{\psi D} - q^*_{\psi R} = \frac{2\alpha\psi(1+2\theta)}{1-\alpha}, \tag{19}$$

$$\tau^*_{\varepsilon D} - \tau^*_{\varepsilon R} = \frac{2\alpha[\beta\psi + \varepsilon(1+2\theta)]}{1-\alpha} > \tau^*_{\psi D} - \tau^*_{\psi R} = \frac{2\alpha[\beta\psi(1+2\theta) + \varepsilon]}{1-\alpha}. \tag{20}$$

Divergence weakly increases in θ. A switch in identity regime from class to culture (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 $\Delta^{ij}(\iota)$, 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 (18) we obtain:

$$\pi_{\iota R}^{ij} = 0.5 + \Phi[\frac{\kappa + \beta^2}{2}[(\psi_{\rho D} - \psi_{\rho R})(\psi_{\rho D} + \psi_{\rho R} - 2\psi_\rho^j)+ \tag{21}$$

$$+ \frac{1}{2}[(\varepsilon_{\rho D} - \varepsilon_{\rho R})(\varepsilon_{\rho D} + \varepsilon_{\rho R} - 2\varepsilon_\rho^i)]-$$

$$- \beta[(\psi_{\rho D} - \psi_\rho^j)(\varepsilon_{\rho D} - \varepsilon_\rho^i) - (\psi_{\rho R} - \psi_\rho^j)(\varepsilon_{\rho R} - \varepsilon_\rho^i)]],$$

where in $\pi_{\iota R}^{ij}$ the ingroup ι corresponds to the one selected in identity regime ρ. Because the identity regime ρ is the same for everyone, $\psi_{\rho D} - \psi_{\rho R} = \frac{2\alpha}{1-\alpha}\psi_\rho^P$, $\varepsilon_{\rho D} - \varepsilon_{\rho R} = \frac{2\alpha}{1-\alpha}\varepsilon_\rho^L$, $\psi_{\rho D} + \psi_{\rho R} = \varepsilon_{\rho D} + \varepsilon_{\rho R} = 0$, where we exploit $\psi_\rho^C = -\psi_\rho^P$ and $\varepsilon_\rho^U = -\varepsilon_\rho^L$. Plugging these conditions into $\pi_{\iota R}^{ij}$ and simplifying we obtain:

$$\pi_{\iota R}^{ij} = \Phi\left\{\frac{2\alpha}{1-\alpha}\left[\psi_\rho^P[\beta\varepsilon_\rho^i - (\kappa + \beta^2)\psi_\rho^j] + \varepsilon_\rho^L[\beta\psi_\rho^j - \varepsilon_\rho^i]]\right\} \tag{22}$$

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

$$\pi_{\iota R}^{UC} = 0.5 + \Phi\frac{2\alpha}{1-\alpha}[2\beta\psi_\rho\varepsilon_\rho + (\kappa + \beta^2)\psi_\rho^2 + \varepsilon_\rho^2] > 1/2$$

$$\pi_{\iota R}^{LP} = 0.5 + \Phi\frac{2\alpha}{1-\alpha}[-2\beta\psi_\rho\varepsilon_\rho - (\kappa + \beta^2)\psi_\rho^2 - \varepsilon_\rho^2] < 1/2$$

$$\pi_{\iota R}^{UP} = 0.5 + \Phi\frac{2\alpha}{1-\alpha}[-(\kappa + \beta^2)\psi_\rho^2 + \varepsilon_\rho^2] \gtreqless 0.5 \text{ as } \varepsilon_\rho^2 \gtreqless (\kappa + \beta^2)\psi_\rho^2$$

$$\pi_{\iota R}^{LC} = 0.5 + \Phi\frac{2\alpha}{1-\alpha}[(\kappa + \beta^2)\psi_\rho^2 - \varepsilon_\rho^2] \lesseqgtr 0.5 \text{ as } \varepsilon_\rho^2 \gtreqless (\kappa + \beta^2)\psi_\rho^2$$

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 the constant $\Phi\frac{2\alpha}{1-\alpha}$, 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:

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

The above inequality hold also for $\theta = 0$, i.e. $z = 1$. But $\theta > 0$ amplifies the changes. 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 $\theta > 0$. ∎

A   Online Appendix

Appendix 1: Proofs

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 (18) 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:

$$\frac{\partial V_p}{\partial a_{\iota p}} = \frac{1}{4} \sum_{ij} \Phi \left[\kappa \left(\widehat{q}_p^{ij} - \widehat{q}_{\overline{p}}^{ij} \right) \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} + \left(\widehat{\tau}_p^{ij} - \widehat{\tau}_{\overline{p}}^{ij} \right) \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} \right] - C'(a_p) = 0, \quad (24)$$

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:

$$\frac{\partial V_p}{\partial a_{\iota p} \partial q_p} = \frac{\Phi \kappa}{4} \left[\sum_{ij \neq c_{\overline{p}}} \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} + (1 - 4\alpha) \sum_{ij \in c_{\overline{p}}} \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} \right], \quad (25)$$

$$\frac{\partial V_p}{\partial a_{\iota p} \partial \tau_p} = \frac{\Phi}{4} \left[\sum_{ij \neq c_{\overline{p}}} \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} + (1 - 4\alpha) \sum_{ij \in c_{\overline{p}}} \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} \right]. \quad (26)$$

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

$$\frac{\partial V_p}{\partial a_{\iota p}} = \frac{1}{2} \sum_{ij} \Phi \left[\kappa \left(\hat{q}_p^{ij} - \hat{q}_{\bar{p}}^{ij} \right) \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} + \left(\hat{\tau}_p^{ij} - \hat{\tau}_{\bar{p}}^{ij} \right) \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} \right] - C'(a_{\iota p}) \tag{27}$$

$$= \frac{\Phi}{4} \left[D_{G_p} \sum_{ij \in G_p} \frac{1 - \chi - a_{\iota \bar{p}}}{(1 - 2\chi - a_{\iota p} - a_{\iota \bar{p}})^2} + D_{\overline{G}_p} \sum_{ij \in \overline{G}_p} \frac{\chi + a_{\iota \bar{p}}}{(1 - 2\chi - a_{\iota p} - a_{\iota \bar{p}})^2} \right] - C'(a_{\iota p}) = 0, \tag{28}$$

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 $D_{G_p} = \kappa \left(\hat{q}_p^{ij} - \hat{q}_{\bar{p}}^{ij} \right) \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} + \left(\hat{\tau}_p^{ij} - \hat{\tau}_{\bar{p}}^{ij} \right) \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}}$, which is constant within ingroups and within outgroups. We also exploit the expression for θ_{ij} as a function of $a_{\iota p}$ and $a_{\iota \bar{p}}$. 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, (28) becomes:

$$\frac{\partial V_p}{\partial a_{\iota p}} = \frac{\Phi}{2} D \frac{1 - 2\chi - 2a_{\iota \bar{p}}}{(1 - 2\chi - a_{\iota p} - a_{\iota \bar{p}})^2} - C'(a_{\iota p}) = 0, \tag{29}$$

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:

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

$$\frac{2\alpha \Phi}{1 - \alpha} \frac{(\kappa + \beta^2) \psi^2 (1 + 2\theta) + \beta \varepsilon \psi}{1 - 2\chi - 2a_\psi^*} - C'(a_\psi^*) = 0, \tag{31}$$

Where the θ in each equation is the equilibrium degree of stereotyping under the respective identity regime $\rho = \varepsilon, \psi$. Assume that (30) and (31) identify the equilibrium persuasion effort. We later find a condition under which this is the case. Then, the

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LHS of the conditions is decreasing in a_x^* if the following condition is satisfied:

$$\frac{2c \cdot a_\varepsilon^*}{1 - 2\left(\chi + a_\varepsilon^*\right)} + \left(\frac{2\alpha\Phi}{1 - \alpha}\right)\left(\frac{\varepsilon}{1 - 2\chi - 2a_\varepsilon^*}\right)^2 - c < 0, \qquad (32)$$

$$\frac{2c \cdot a_\psi^*}{1 - 2\left(\chi + a_\psi^*\right)} + \left[\frac{2\alpha\Phi\left(\kappa + \beta^2\right)}{1 - \alpha}\right]\left(\frac{\psi}{1 - 2\chi - 2a_\psi^*}\right)^2 - c < 0 \qquad (33)$$

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 (32), a_ι^* is increasing in any parameter that increases the LHS of (30) and (31). 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 (30) and (31) 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 $\partial^2 V_p/(\partial q_p)^2 = -\Phi\kappa\left(1 - \alpha\right)$, $\partial^2 V_p/(\partial\tau_p)^2 = -\Phi\left(1 - \alpha\right)$ and $\partial^2 V_p/\partial\tau_p\partial q_p = 0$. The Hessian is then negative semidefinite if and only if:

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

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 (30) and (31) identify the equilibrium persuasion efforts and that (32) holds, validating the comparative statics of Proposition 4. ∎

Proof of Proposition 6. Repeating the steps in the proof of Proposition 1, the

contrast between ingroup and outgroup (eq. 6) now takes the form:[31]

$$\Delta\left(\iota,-\iota\right) = \frac{\kappa}{2}\left(q^\iota - q^{-\iota}\right)^2 + \frac{1}{2}\left(\tau^\iota - \tau^{-\iota}\right)^2 + \frac{(p^*)^2(2v-1)}{2}(t^\iota - t^{-\iota})^2 \qquad (34)$$

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

$$\Delta_z^{ij}(\iota) = \frac{\kappa}{2}(\psi^\iota - \psi^j)^2 + \frac{1}{2}(\varepsilon^\iota - \varepsilon^i)^2 + \frac{2(\eta^\iota - \eta_z^j)^2}{(2v-1)}. \qquad (35)$$

Using (13), we have $t^\iota - t^{-\iota} = \frac{2(\eta^\iota - \eta^{-\iota})}{p^*(2v-1)}$, $\eta^U = \eta^L = \eta/4$, $\eta^C = \eta/2$, $\eta^P = 0$. Hence, $\Delta(C,P) = 2\kappa\psi^2 + \frac{2\eta^2}{4(2v-1)}$ and $\Delta(L,U) = 2\varepsilon^2$. Consider now $\Delta_z^{ij}(\iota)$. Under class identity, in exposed and non exposed districts we have:

$$\Delta_e^{\iota P}(\iota) = \frac{\kappa}{2}\psi^2 + \frac{\eta^2}{8(2v-1)} \text{ and } \Delta_e^{\iota C}(\iota) = \frac{\kappa}{2}\psi^2 + \frac{9\eta^2}{8(2v-1)}$$

$$\Delta_n^{\iota j}(\iota) = \frac{\kappa}{2}\psi^2 + \frac{\eta^2}{8(2v-1)}, \quad \iota = L, U \text{ and } j = C, P$$

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

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

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:

$$\eta^2 > 4(2v-1)\left(\varepsilon^2 - \kappa\psi^2\right). \qquad (36)$$

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

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

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

which reads:

$$\eta^2 \left(\frac{4 - 3\lambda}{4 + \lambda} \right) > 4(2v - 1) \left(\varepsilon^2 - \kappa\psi^2 \right). \tag{37}$$

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:

$$\eta^2 \left(\frac{4 + 5\lambda}{4 + \lambda} \right) > 4(2v - 1) \left(\varepsilon^2 - \kappa\psi^2 \right). \tag{38}$$

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 $\bar{\eta} \equiv 2\sqrt[2]{(2v - 1)(\varepsilon^2 - \kappa\psi^2)}$, with $\bar{\eta} > \underline{\eta}$ If $\varepsilon^2 > \kappa\psi^2$ and $\eta \approx 0$, none of (36), (37) and (38) holds, and all voters identify with their class. If η increases and lies in the interval $(\underline{\eta}, \bar{\eta})$, conservative voters in exposed districts switch to cultural identity, all other voters remain class identified. If η increases above $\bar{\eta}$, but $\eta^2 \left(\frac{4-3\lambda}{4+\lambda} \right) < 4(2v - 1)(\varepsilon^2 - \kappa\psi^2)$, 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 $\eta^2 \left(\frac{4-3\lambda}{4+\lambda} \right) > 4(2v - 1)(\varepsilon^2 - \kappa\psi^2)$, 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 $\tau_\varepsilon^{Ljn} = \tau_\varepsilon^{Lje} = \varepsilon(1 + 2\theta)$, $\tau_\varepsilon^{Ujn} = \tau_\varepsilon^{Uje} = -\varepsilon(1 + 2\theta)$, $j = C, P$. If voters identify with their culture, $\rho = \psi$, these demands are: $q_\psi^{iPn} = q_\psi^{iPe} = \psi(1 + 2\theta)$, $q_\varepsilon^{iCn} = q_\varepsilon^{iCe} = -\psi(1 + 2\theta)$, $i = U, L$, 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 $\tau^{n0} = \tau^{e0} = 0.5 * \varepsilon(1 + 2\theta) - 0.5 * \varepsilon(1 + 2\theta) = 0$. 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, $q^{e1} - q^{e0} = 0.5 * \psi - 0.5 * \psi(1 + 2\theta) = -\psi\theta$ 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

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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 $\eta^2 \left(\frac{4-3\lambda}{4+\lambda}\right) < 4(2v - 1)(\varepsilon^2 - \kappa\psi^2)$. Then also progressive voters switch to culture, but not conservative voters in non exposed districts. As a result, $q^{e1} - q^{e0} = 0.5 * \psi(1 + 2\theta) - 0.5 * \psi(1 + 2\theta) = 0$ while $q^{n1} - q^{n0} = 0.5 * \psi(1 + 2\theta) - 0.5 * \psi = 0.5 * \psi\theta$, 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: $\tau_\varepsilon^{Le,1} - \tau_\varepsilon^{Le,0} = -2\varepsilon\theta < \tau_\varepsilon^{Ln,1} - \tau_\varepsilon^{Ln,0} = -\varepsilon\theta$.

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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:

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

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

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conditions for party p in z yields:

$$q_{zp} = \sum_{ij} \alpha_p^{ij} \psi_{\rho z}^j, \ \tau_{zp} = -\sum_{ij} \alpha_p^{ij} \varepsilon_{\rho z}^i, \ t_{zp} = \sum_{ij} \alpha_p^{ij} t_z^j, \tag{39}$$

$$\frac{\partial V_{zp}}{\partial a_{\rho p z}} = \frac{1}{4} \sum_{ij} \Phi \left[\kappa \left(\widehat{q}_p^{ij} - \widehat{q}_{\overline{p}}^{ij} \right) \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} + \left(\widehat{\tau}_p^{ij} - \widehat{\tau}_{\overline{p}}^{ij} \right) \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}} \right] \frac{\partial \theta^{ij}}{\partial a_{\rho p z}} - C'(a_{\rho p z}) = 0, \ \rho = \varepsilon, \psi. \tag{40}$$

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 (40) 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 (19) and (20) and persuasion effort is a_ε^* in (30) (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:

$$q_{eR}^* - q_{eD}^* = -\left(\frac{2\alpha}{1-\alpha} \right) \psi (1 + \theta_{\psi e}), \ \tau_{eR}^* - \tau_{eD}^* = -\left(\frac{2\alpha}{1-\alpha} \right) \varepsilon (1 + \theta_{\varepsilon e}),$$

$$q_{nR}^* - q_{nD}^* = -\left(\frac{2\alpha}{1-\alpha} \right) \psi, \ \tau_{nR}^* - \tau_{nD}^* = -\left(\frac{2\alpha}{1-\alpha} \right) \varepsilon (1 + 2\theta_{\varepsilon n}),$$

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:

$$\frac{\alpha\Phi}{1-\alpha}\frac{\varepsilon^2\left(1+\theta_{\varepsilon e}\right)}{1-2\left(\chi+a^*_{\varepsilon e}\right)} = C'(a^*_{\varepsilon e}). \tag{41}$$

By comparing (41) to (30) (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 $\tau^*_{zR} = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon\left(1+2\theta_{\varepsilon z}\right)$ for $z = e, n$, and $\theta_{\varepsilon e} < \theta_{\varepsilon n}$, we then have $\tau^*_{eR} > \tau^*_{nR}$. With respect to cultural persuasion, by (40) party efforts $a^*_{\psi eR}$ and $a^*_{\psi eD}$ are pinned down by:

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

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

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 (42) and (43) 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 (19) and (20) and persuasion effort is a^*_ψ in (31) (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 $q^*_{nR} = \frac{1}{(1-\alpha)}\psi\theta_{\psi n} - \frac{\alpha}{1-\alpha}\psi\left(1+2\theta_{\psi n}\right)$,

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$q_{nD}^* = \frac{1}{(1-\alpha)}\psi\theta_{\psi n} + \frac{\alpha}{1-\alpha}\psi$, $\tau_{nR}^* = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon$, $\tau_{nD}^* = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon\left(1 + 2\theta_{\varepsilon n}\right)$. 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:

$$q_{eR} - q_{eD} = -\left(\frac{2\alpha}{1-\alpha}\right)\psi\left(1 + 2\theta_{\psi e}\right), \ \tau_{eR} - \tau_{eD} = -\left(\frac{2\alpha}{1-\alpha}\right)\varepsilon,$$

$$q_{nR} - q_{nD} = -\left(\frac{2\alpha}{1-\alpha}\right)\psi\left(1 + \theta_{\psi n}\right), \ \tau_{nR} - \tau_{nD} = -\left(\frac{2\alpha}{1-\alpha}\right)\varepsilon\left(1 + \theta_{\varepsilon n}\right),$$

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 (31) 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 (41). Cultural persuasion effort is determined by:

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

$$\frac{2\alpha\Phi\kappa}{1-\alpha}\psi^2\frac{\left(1 - \chi - a_{\psi nR}^*\right)^2}{\left(1 - 2\chi - a_{\psi nR}^* - a_{\psi nD}^*\right)^3} = C'(a_{\psi nD}^*). \tag{45}$$

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

A.1   Political Ads

In constructing Figure 1, Panel A, we classified political ads as follows. Economic issues include "Taxes", "Deficit/Budget/Debt", "Government Spending", "Recession/Economic Stimulus", "Minimum Wage", "Employment/Jobs", "Poverty", "Housing/Subprime Mortgages", "Economy (generic reference)", "Social Security", "Welfare". Cultural topics include "Abortion", "Moral/Family/Religious Values", "Affirmative Action", "Race Relations/Civil Rights", "Immigration", "Gun Control". These topics were coded in the original dataset, after manual inspection of the ads, except for immigration that was included as a topic only since 2012. For the missing years, we classified ads as related to immigration by searching for keywords. These topics are not mutually exclusive (eg. the same ad could talk about both immigration and affirmative action), but we avoid double counting in our classification of economic vs cultural issues (although the same ad could be classified as both economic and cultural). When downloaded from the source, data were available for 2006-18.

A.2   Exposure to Import Competition and Other Shocks

The countries used to define the instruments, with regard to import penetration as defined in footnote 20, are: Australia, Denmark, Finland, Germany, Japan, New Zealand, Spain and Switzerland.

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 analyzing the CCES panel we consider shocks starting 6 years before the first year of the inital 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. In the analysis of Congressional speeches, the period over

which import exposure is measured is 2000-2016.

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).

A.3 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 our panel analysis, we rely on the data collected in 2010 and 2014. 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.

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 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.

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).

A.4   Congressional Speeches

Data on congressional speeches are taken from Enke (2020), who estimates politicians' moral types through political rhetoric. He extrapolates words from the text of the US Congressional Record provided by Gentzkow et al. (2019) and counts words matching 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:

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.

A.5 Congressional District Geography

We define the geographic unit of our main analysis to be the congressional district (henceforth, CD). Therefore, we need to address the issue of mapping economic shocks (defined at the commuting zone level) to CDs as well as the one of changing CD boundaries over time due to redistricting.

CD-CZ crosswalk To overcome the first issue, we follow Feigenbaum and Hall (2015) and we perform a spatial merge between CZs and CDs (as defined in Congress 106, corresponding to year 2000).[32] In so doing, we are able to determine the composition of each CD in terms of CZs. The exposure to import competition of each CD is defined as the weighted average of exposures of the corresponding CZs, with weights being equal to CZ's land area share of the CD. The same procedure is followed for other variables used in our analysis and measured at the CZ level such as the indices of routine-task-intensity and offshorability.

Time-invariant CD crosswalk The issue of redistricting is addressed by fixing Congress 106 as our baseline geography and mapping all CDs of subsequent Congresses to it, as in Calderon et al. (2021). That is, for each Congress between 107 (2001-2003) and 114 (2015-2017), we perform a spatial merge between its districts and

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[32]The reason why we use the map of CDs in 2000 will be clearer later.

the map of districts in Congress 106 (1999-2001) and we calculate a weighed average of the variables under scrutiny that correspond to the area originally represented by CDs according to the 2000 map.[33] In particular, we adopt a weighting scheme that is population-based and that relies on the distribution of population at a finer level (i.e. county level).[34] Once obtained the intersecting cells between the two Congresses, we assign the 2000 county population to each cell in proportion to the cell's area share of the county. Then, for each district in Congress 106, we compute our final weights as the population share of each intersecting cell.

To further purge the noise caused by redistricting, we follow Autor et al. (2020) in computing a redistricting-adjusted version of congressional speeches outcomes. In particular, we build our outcome as:

$$\Delta Y_{d,\tau}^{adj} = \sum_{t\epsilon\tau}(1 - R_{dt+2})\Big(\sum_{d'}\frac{p_{dd'}}{p_d}Y_{d't+2} - \sum_{d'}\frac{p_{dd'}}{p_d}Y_{d't}\Big) \qquad (46)$$

where $\Delta Y_{d,\tau}^{adj}$ is the redistricting-adjusted change of the outcome Y over period τ in Congressional district d (as defined in 2000). The variable $Y_{d't}$ indicates the level of the outcome in a year t that is the start of a two-year period contained in τ. It is measured for congressional districts d' with boundaries defined in year t. The fraction $p_{dd'}/p_d$ indicates the population share of the initial congressional district d that maps to the new intersecting cell dd'. R_{dt+2} is a dummy variable equal to 1 if congressional district d experience redistricting in year $t + 2$.

Heterogeneity Analysis To test the prediction on party divergence on moral rhetoric we face the empirical challenge of distinguishing our data on congressional speeches according to the party of the elected Representative in our time-invariant map of Congressional districts. In Table 5 (columns 5 and 6), we split the sample by distinguishing between CDs represented by either a Republican or a Democrat in 2000 (Congress 106 is our baseline geography).

Next, in the remaining columns of Table 5, we only take into account the CDs

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[33]A similar procedure is followed for Congresses prior to 2000 to compute variables used in the pre-trends analysis.

[34]To construct our crosswalks of county-district cells, we draw on data of the Census Bureau and on maps provided by IPUMS National Historical Geographic Information Systems and Lewis et al. (2013).

where the party in office in 2016 was the same as in 2000. In columns (7) and (8), we define a CD to be Republican (resp. Democratic) in 2016 if at least 50% of the population in that congressional district (after being mapped to our baseline geography) is represented by a Republican (resp. Democratic) Representative in 2016.

A.6   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 A.1. Comparison of Demographics between Survey and US Population

	Share in Survey	Share in US Population	Difference	P.value
Household Income				
Less than 50,000$	0.46	0.31	0.15	0.00
Between 50,000$ and 100,000$	0.29	0.31	-0.02	0.59
Greater than 100,000$	0.25	0.37	-0.13	0.00
Race				
White	0.75	0.64	0.11	0.00
Black / African American	0.12	0.13	-0.01	0.78
Hispanic	0.05	0.16	-0.11	0.00
Asian	0.04	0.06	-0.02	0.22
Age				
Less than 35	0.30	0.32	-0.01	0.96
Between 35 and 60	0.40	0.41	-0.01	0.98
Greater than 60	0.30	0.28	0.02	0.95
Sex				
Male	0.47	0.49	-0.02	0.03
Female	0.53	0.51	0.02	0.03
Region				
Northeast	0.19	0.17	0.02	0.45
Midwest	0.22	0.21	0.02	0.41
West	0.20	0.24	-0.03	0.11
South	0.38	0.38	0.00	0.97
Education				
No High School Diploma	0.11	0.10	0.01	0.63
High School Graduate	0.27	0.36	-0.09	0.00
Some College or College	0.50	0.43	0.07	0.00
Postgraduate	0.13	0.11	0.01	0.61

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 4 also reports the p.values of 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.

Table A.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 A.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.

Table A.4. CCES Summary Statistics - CZ level

Variables	Obs	Mean	St. Dev.	Median	Min	Max
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	-3.825	3.178
Import Penetration (2004-2014)	558	0.713	0.567	0.596	-0.343	3.733
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

Notes: The table reports summary statistics for change in outcomes, main regressors and controls at the Commuting Zone level.

Table A.5. CCES Summary Statistics - Individual level

Variables	Obs	Mean	St. Dev.	Median	Min	Max
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

Notes: The table reports summary statistics for outcomes and demographic controls at the CCES respondent level.

Table A.6. Congressional Speeches Summary Statistics - CD level

Variables	Obs	Mean	St. Dev.	Median	Min	Max
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	-0.077	-4.085	8.510
Relative universalism(Cong. 106-101)	432	0	1	-0.040	-3.210	3.718

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 A.7. Relative Universalism in Political Rhetoric - Pre-Trends

	Relative Universalism			
	(1)	(2)	(3)	(4)
ΔIP	0.141	0.061	-0.233	-0.248
	(0.125)	(0.150)	(0.109)	(0.105)
Observations	422	426	426	426
F-stat	118.7	122.7	122.7	122.1
Outcome	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 3 and 4. In columns 1 and 2 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. Columns 3 and 4 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.

Appendix 3: Survey Questionnaire

We report here the survey questionnaire. Answer options are reported in square brackets. The survey featured four attention check questions, which we have highlighted in bold. Comments to ease understanding of some of the questions are reported in italics.

1. What is your age in years?

2. What is your sex? [Male/Female]

3. In which region of the US do you live? [Northeast/Midwest/West/South]

4. Choose one or more races that you consider yourself to be: [White/Black or African American/Hispanic/Asian/Other/Mixed]

5. What level of education did you achieve? [Did not graduate from high school/High school graduate/Some college, but no degree/College degree/Postgraduate degree (MA, MBA, MD, JD, PhD, etc.)]

6. What was your TOTAL household income, before taxes, last year? [$0 - $9,999/$10,000 - $14,999/$15,000 - $24,999/$25,000 - $34,999/$35,000 - $49,999/$50,000 - $74,999/$75,000 - $99,999/$100,000 - $149,999/$150,000 - $199,999]

7. (**Attention check**) Many studies have found an association between excessive media use in children and reduced sleep, increased obesity, and language delays. To prove that you are reading carefully, just go ahead and select somewhat disagree among the alternatives below, no matter what your opinion is.
Do you agree or disagree with the following statement: "Parents should limit the media use of their children"? [Strongly disagree/Somewhat disagree/Somewhat agree/Strongly agree]

8. What is your religion? [Protestantism/Catholicism/Islam/Judaism/Other/None]

9. To what extent does your religion shape your choices in life? (0 = a little, 100 = a lot)

10. People have different views about how they relate to people at different physical distance and to the world at large. Would you tell us how close do you feel to other people who are in...? (0 = very far, 10 = very close) [Question asked making reference to the following groups: your town or city/your state/your country/North America/the world]

11. Which economic class do you belong to? [Working class/Lower middle class/Upper middle class/Upper class]

12. People have different views on how they relate to the traditions of their communities versus new ideas and values. Where do you place yourself on this scale? (0 = traditionalist, 100 = progressive)

13. You have to choose how to divide a gift of $100 between two individuals. How would you split this amount between a member of one of your past or current organizations (local church, leisure club or association, etc.) and a random person from the US or abroad?
The closer you drag the slider to one individual, the more money you allocate to that individual. Please assume that both individuals have the same income, and would not find out that it was you who sent them the money. *Respondents are asked to drag a slider on the screen.*

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14. What is your current employment status? [Employed/Unemployed and looking for work/ Student/Not currently working and not looking for work/Retiree]

15. (**Attention check**) Please, enter the following code in the box below: 2ewp9i

16. 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, other in terms of their economic class, 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 class, middle class or upper class)]

17. Consider your response to the previous question. How strong would you say your attachment is to the identity you chose? (0 = weak, 100 = strong)

18. How hot or cold you do you feel toward these groups? Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the group. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the group and that you don't care too much for that group. You would rate the group at the 50 degree mark if you don't feel particularly warm or cold toward the group. [Question asked separately for the following groups: (i) Protestants/Catholics/Muslims/Jews/Secular/Hindus; (ii) White/African American/Hispanic/Asian; (iii) People attached to their local community and traditions/People who feel they are citizens of the world; (iv) Traditionalists/Progressives; (v) Working class / Middle class / Upper class/Trade unions/Business; Asked at the very end: (vi) Republican Party/Democratic Party]

    Now, we will ask you some questions on your beliefs, attitudes, and perceptions about current economic and social conditions in the US.
    Some of the questions in this survey will ask you to make your best estimate as to how many out of 100 people have different features. To get you used to thinking in these terms, we have one example for you to practice.
    Example: According to the United States Census, approximately 2 out 100 Americans live in Massachusetts. This is equivalent to saying that 2% of Americans live in Massachusetts.

19. Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. Other people feel that it is important for the government to provide many more services even if it means an increase in spending. Where would you place yourself on this scale? [Scale from 1: *Government should provide many fewer services* to 7: *Government should provide many more services*]

20. Some people feel that the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each

person get ahead on their own. Where would you place yourself on this scale? [Scale from 1: *Government should see to jobs and standard of living* to 7: *Government should let each person get ahead on own*]

21. In a perfectly equal society 1% of the population owns exactly 1% of total income. In an unequal society, the richest 1% of the population owns more than 1% of total income. How has the share of total income that goes to the richest 1% of the US population evolved over the past 30 years? [Increased a lot/Increased a little/Stayed about the same/Decreased a little/Decreased a lot]

22. The estate tax is a tax on the transfer of wealth from a deceased person to his/her heirs. This tax applies only to rich individuals (i.e. above a given level of wealth). Some people argue that the estate tax is fair since it reduces inequality, while others believe that it is unfair as it punishes success. Where would you place yourself on this scale? [Scale from 1: *I do not support the estate tax* to 7: *I strongly favor the estate tax*]

23. Consider **100 children** from the poorest families of the US. These children are very determined and put in hard work both at school and later in life. How many of them do you think will grow up to be rich?

24. Some people think that, because of historical discrimination, women should be given preference in hiring and promotion. Others oppose such policy, arguing that it would give women advantages they haven't earned. Where do you place yourself on this scale? [Scale from 1: *I am against preferential hiring and promotion of women* to 7: *I am in favor of preferential hiring and promotion of women*]

25. Consider a black man and a white man with the same experience and education doing the same job in the same geographic location. Who do you think has a lower pay and gets treated worse? [Scale from 1: *The black man has a lower pay and gets treated worse* to 7: *The white man has a lower pay and gets treated worse*]

26. Some people think that the number of immigrants from foreign countries who are permitted to live in the United States should be increased. Others think that it should be decreased. Where would you place yourself on this scale? [Scale from 1: *The number of immigrants who are permitted to come to the US to live should be <u>increased a lot</u>* to 7: *The number of immigrants who are permitted to come to the US to live should be <u>decreased a lot</u>*]

27. Consider all crimes committed in the US in the past 12 months. **Out of 100 crimes**, how many do you think were committed by immigrants?

28. There has been some discussion about abortion during recent years. Some people think that abortion should never be permitted, others think that abortion is a personal choice and

women should always be able to obtain it, other believe that abortion should be permitted only in some cases. Where would you place yourself on this scale? [Scale from 1: *By law, abortion should never be permitted* to 7: *By law, a woman should always be able to obtain an abortion as a matter of personal choice*]

29. Consider all the women who get pregnant in the US every year. **Out of 100 such women**, how many do you think have an abortion every year?

30. (**Attention check**) Some people feel that donuts should have very large holes, while others believe that they should have tiny holes. The aim of this question is to understand if you are carefully reading the questions of the survey. Where do you place yourself on this scale? Please, select 4. [Scale from 1: *Donuts should have large holes* to 7: *Donuts should have small holes*]

31. Some people think that the US government should impose tariffs in order to reduce imports from China and other countries, so as to protect US jobs. Others oppose import tariffs on the grounds that they increase the prices consumers pay and that they are not effective at creating jobs. What is your view on this issue? [Scale from 1: *Government should impose tariffs* to 7: *Government should not impose tariffs*]

32. Every year in the US many jobs are lost due to various reasons. **Out of 100 lost jobs**, how many do you think are lost due to globalization?

33. Some people argue that carbon emissions should be taxed, even if it means losing some income and jobs, in order to protect the environment. Others think that taxing carbon emissions is economically too costly. What is your view on this issue? [Scale from 1: *Carbon emissions should be taxed* to 7: *Carbon emissions should not be taxed*]

34. Some people think that climate change is man-made, others think that it is a natural phenomenon. Which position is closest to what you feel? [Scale from 1: *Climate change is man-made* to 7: *Climate change is a natural phenomenon*]

35. Do you think your economic situation has deteriorated over time? [A lot/A bit/Not at all]

36. If your economic situation has deteriorated, do you think that it is due to globalization or new technologies? [Yes, entirely/Yes, only in part/No]

37. Has the economic situation of people around you deteriorated due to globalization or new technologies? [Yes, entirely/Yes, only in part/No]

38. (**Attention check**) Do you think that a pumpkin is a fruit? Please, select no. [Yes/No]

39. Are you Republican, Democrat, Independent? [Republican/Democrat/Independent]

40. Earlier in the survey we asked you what defines your identity the most within a number of alternatives. You replied [Answer to Q16]. If you had to choose, would you say that you mostly identify with [Answer to Q16] or with being a Republican? [I would mostly identify with [Answer to Q16]/I would mostly identify with being a Republican]

41. Earlier in the survey we asked you what defines your identity the most within a number of alternatives. You replied [Answer to Q16]. If you had to choose, would you say that you mostly identify with [Answer to Q16] or with being a Democrat? [I would mostly identify with [Answer to Q16]/I would mostly identify with being a Democrat]

42. Which other group have you also identified with in the past? Please, click **only one** option [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 class, middle class or upper class)/Another Economic Class/Being Republican/Being Democrat/None]. *In the answer options, we omit respondent's answer to Q16. Also, option Another Economic Class is only present for respondents choosing option My Economic Class to Q16.*

43. (*If Q46 = Another Economic Class*) Please indicate what other economic class you identified with in the past [Working Class/Lower Middle Class/Upper Middle Class/Upper Class]. *In the answer options, we omit respondent's answer to Q11.*

44. Which party did you vote for in the 2016 presidential elections, if any? [Republican party/ Democratic party/Other/None]

45. Which party did you vote for in the 2020 presidential elections, if any? [Republican party/ Democratic party/Other/None]

46. In which ZIP code do you live?