

# Identity Politics\*

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## Abstract

We offer a theory of changing dimensions of political polarization based on endogenous social identity. We formalize voter identity 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 observed changes: i) growing conflict over cultural issues 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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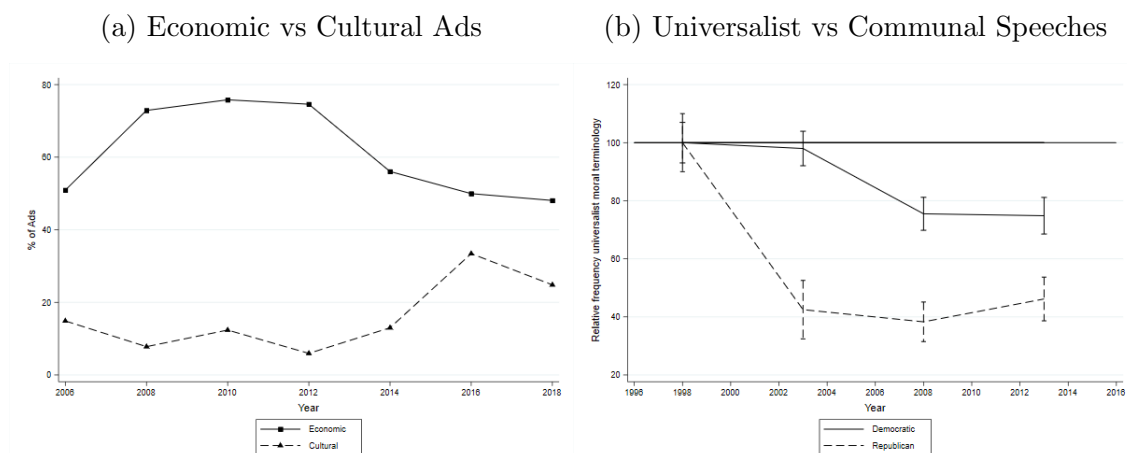
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# 1 Introduction

In the last two decades, the US political system has been transformed. First, voters’ priorities and the issues over which they are polarized have changed. 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). Second, something similar has also 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). In other words, 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



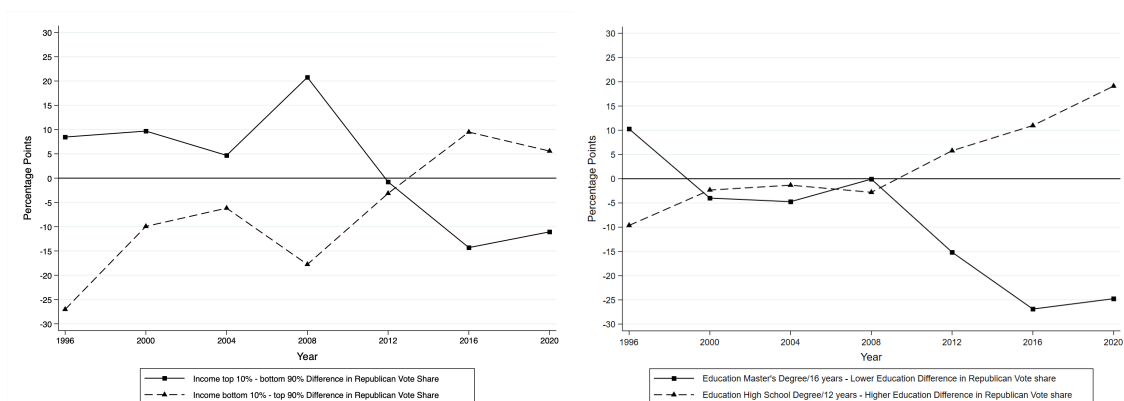
Notes: Panel (a) reports the fraction of TV ads sponsored by the US Democratic and Republican parties, on economic and cultural issues. Source: *Wesleyan Media Project (2008-2018)*. Panel (b) plots the relative frequency of universalist versus communitarian moral rhetoric in Congressional Speeches for Democrats and Republicans, 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).

The third key change is the realignment of US voters across parties. As shown in Figure 2, less educated and poor white people increasingly vote Republican, while the opposite is true for top income earners and highly educated voters. This is part

of a long term trend, but it has accelerated recently (Gethin et al. 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)*.

Similar trends have occurred in European countries, for both increased cultural conflict and voters' realignment (Ford and Jennings 2020, Gethin et al. 2022).

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, Fukuyama 2018). This mechanisms does not explain why the lower class now demands less redistribution, however, despite increased inequality. Voters' realignment is explained by 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 similar trends are observed in several countries. 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.

We argue that these events can be jointly explained by a shift of prevailing voters' identities from class to culture. Social identity reflects a person's self-categorization

in society and influences beliefs (Tajfel and Turner 1979). As shown in BGT (2021), the growing importance of cultural issues, such as immigration, race and civil rights, has changed how voters view themselves: from members of opposite income classes to members of opposite cultural groups. This in turn has changed their beliefs and the issues over which they are polarized. Here we also study how parties respond to these changes in social cleavages. We offer a new framework to analyze demand-supply interaction, and obtain new predictions, which we test.

We start with some motivating evidence from a 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. Cultural identity is associated with polarized beliefs and preferences on social policy, and with how people vote; economic identity with polarized beliefs and preferences over redistribution.

Next, we turn to the theory. The demand side follows BGT (2021). Voters differ in two dimensions, economic and cultural. They identify in the dimension 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), however, parties are linked to specific social groups. We model this 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 dimensions of voter and party polarization change. Voters in opposite cultural groups polarize on social policy, voters in opposite income classes de-polarize over redistribution. Party platforms follow these demand changes: they diverge on cultural issues and converge on redistribution. Thus, identity politics yields growing cultural conflict between voters and between parties, and a dampening of redistribu-

tive conflict.

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 or 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 to right-wing propaganda. Thus, political propaganda deliberately amplifies the salient social cleavages, creating a complementarity between political extremism on the demand and supply sides.

Our premise, so far, is that cultural conflict has become more salient. But why? As discussed by BGT (2021), this could be due to a large inflow of immigrants, or (in the US) to 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. Thus, endogenous social identity can explain

why an adverse economic shocks can lead to less, rather than more, demand for redistribution and exert 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. Shayo (2009) first applied identity to political economics. Shayo (2020) surveys recent contributions, including Helpman and Grossman (2020) on trade policy. 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).

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

In February/March 2022 we surveyed 3000 US subjects, representative of the US population along many demographics.<sup>1</sup> We first ask whether the respondent currently identifies with an economic group, or a with a social group located along the cultural divide on civil rights and immigration (e.g. race, religion, local community). We ask:

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<sup>1</sup>The main discrepancies are that our respondents are poorer, more educated and white than the US population, see Online Appendix Table A.1. The questionnaire is available upon request.

“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 conservative those who identify as “white”, “christian and protestant religion”, “local community”, or “traditional culture”.

Next, we elicit policy views and factual beliefs on redistribution and social policy.<sup>2</sup> 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 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. First, more than two thirds of respondents identify with a social group aligned along the cultural divide. The remaining third splits about equally between those who identify with an economic group, upper/lower class, or with one of the two political parties (column 2). Identity is persistent, but not immutable. About half of those who currently identify with a

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<sup>2</sup>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 harness factual beliefs on this domain by asking how the income share going to the top 1% has changed in the US during the last 30 years, and what is the probability that a hard working poor can become rich during his lifetime. On social policy, we ask whether: i) women should be treated preferentially in hiring and promotion, ii) the number of immigrants entering the country should be increased, and iii) abortion should be lawful. We elicit factual beliefs on this domain by asking: i) whether and to what extent a black man with the same experience or education of a white man has a lower pay and gets treated worse in the workplace, ii) what share of crimes were committed by immigrants in the past 12 months, and iii) what share of pregnant women have an abortion.

conservative or progressive group also did so in the past. But economic and political identities are less stable: well over half of those who in the past had an economic or political identity have now acquired a cultural identity (Online Appendix Table A.2).

Second, identity is associated with voting. Culturally progressive people disproportionately voted Democrat in 2020, while conservatives more likely voted Republican. 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.

Third, cultural identities are strongly correlated with respondents’ policy views and factual beliefs, more than traditional class identities, although not as much as partisan political identities. To reduce measurement error, we extract the first principal component of policy views and factual beliefs, separately for the economic and social policy questions. Higher values correspond to more progressive attitudes. Table 1 reports the average magnitudes by identity groups. Respondents with opposite cultural identities disagree, in the expected direction, on both social and economic issues. Those with opposite class identities only disagree in the expected direction on economics (since few people declare an economic identity, estimates are less precise). Disagreement 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. Moreover, views are highly correlated within the subgroups we define as progressive or conservatives (details available upon request), indicating a systematic pattern of opinions associated with what we label progressive vs conservative identity.

Some of the correlation between identity and beliefs reflects sorting, as some common individual feature (eg. religiosity, or race) may determine both declared identity and opinions. Sorting occurs in our approach, too: voters have a set of core beliefs that locates them on different sides of a social cleavage. Work in social psychology also suggests that identity itself molds beliefs, however. When a cleavage becomes salient, voters perceive themselves as members of opposite groups, and their disagreement is accentuated. Section 4 shows how this mechanism can be formalized.



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
<i>Conservative</i>	36.75	-0.28 (1.02)	-0.33 (0.97)	-0.07 (0.97)	-0.12 (1.02)	0.45	0.36
<i>Progressive</i>	31.86	0.28 (0.89)	0.40 (0.93)	0.08 (0.98)	0.21 (0.92)	0.17	0.53
Difference	(P.value):	0.00	0.00	0.00	0.00		
<i>Upper Class</i>	3.34	-0.17 (0.92)	0.05 (0.84)	-0.02 (1.00)	0.01 (0.99)	0.38	0.44
<i>Lower Class</i>	11.49	0.03 (0.96)	0.004 (0.90)	0.19 (0.93)	0.09 (0.91)	0.29	0.41
Difference	(P.value):	0.09	0.64	0.07	0.46		
<i>Republican</i>	7.18	-0.72 (1.10)	-0.81 (0.80)	-0.10 (1.01)	-0.39 (0.92)	0.91	0.02
<i>Democrat</i>	9.39	0.52 (0.75)	0.61 (0.79)	0.14 (1.04)	0.29 (1.12)	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.

### 3 The Model

Here we describe voters' preferences and the political system, and derive the political equilibrium with rational voters. 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.

To study how identity shapes beliefs, we let voters be uncertain about policy consequences. Preferences over  $q$  follow the quadratic loss  $\frac{1}{2} \left( q - \tilde{\psi} \right)^2$ . The random

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

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

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

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

Since  $\varepsilon^i$  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  $\tau$ . The rational expected utility of

voter  $(\varepsilon^i, \psi^j)$  is, up to an additive constant:

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

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:

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

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

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

$$\tau^P - \tau^C = 2\beta\psi, \quad q^P - q^C = 2\psi, \quad (3)$$

$$\tau^L - \tau^U = 2\varepsilon, \quad q^L - q^U = 0. \quad (4)$$

Consistent with our survey, opposite cultural groups  $P$  and  $C$  disagree on redistribution and social policy, the more so the larger is  $\psi$ . Opposite classes  $L$  and  $U$  disagree only on redistribution, the more so the larger is  $\varepsilon$ .

**The Political System** Two parties, left  $D$  and right  $R$ , compete by simultaneously announcing platforms  $Y_p = (\tau_p, q_p)$ ,  $p = D, R$  ahead of the election. Their goal is to maximize their vote share. Parties are historically connected to groups standing on opposite sides of major social cleavages (Lipset and Rokkan 1967). One can think of connections as being intermediated by social organizations such as the church, trade

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

unions or business groups, which enhance the party's influence and reputation within these groups. Party  $R$  is connected to the upper class and to social conservatives, party  $D$  is connected to the lower class and to social progressives. Voters not connected to a party do not trust it and do not pay full attention to its policy promises. The voters not connected to party  $R$  are those that are neither upper class nor conservative, namely the lower class and progressive types,  $ij = LP$ . Voters not connected to party  $D$  are the upper class and conservative types,  $ij = UC$ . Formally, a measure  $0 < \alpha < 1/4$  of voters not connected to party  $p$ 's 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,  $\bar{p} \neq p$ .<sup>4</sup>

We assume probabilistic voting. Let  $\hat{Y}_D^{ij}, \hat{Y}_R^{ij}$  be the policies that voter  $ij$  expects parties to implement in office. Then, voter  $k$  of type  $ij$  chooses  $R$  if and only if:

$$W^{ij}(\hat{Y}_R^{ij}) - W^{ij}(\hat{Y}_D^{ij}) \geq \tilde{\delta}^k \quad (5)$$

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  $\Phi$ . Hence, party  $p$ 's vote share in type  $ij$  is:

$$\pi_p^{ij} = 0.5 + \Phi \left[ W^{ij}(\hat{Y}_p^{ij}) - W^{ij}(\hat{Y}_{\bar{p}}^{ij}) \right], \quad (6)$$

where  $\Phi$  is small enough that equilibrium vote shares within each type are interior,  $1 > \pi_p^{ij} > 0$  for all  $p$  and  $ij$ . 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  $\alpha$  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:

$$Y_D^* = \arg \max_{Y_D} \frac{1}{4} \sum_{ij} W^{ij}(Y_D) - \alpha W^{UC}(Y_D). \quad (7)$$

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<sup>4</sup>The assumption that some voter types are asymmetrically informed about party promises is also made in different contexts by Glaeser et al. (2005), Gavazza and Lizzeri (2009) and Matejka and Tabellini (2021).

An analogous expression describes policy choice by  $R$ .

It is easy to verify that the equilibrium has two intuitive properties. First, there is policy divergence: the equilibrium platform of party  $D$  is economically and socially more liberal than that of  $R$ ,  $q_R^* < q^\circ < q_D^*$  and  $\tau_R^* < \tau^\circ < \tau_D^*$ . Second, although in equilibrium party  $D$  and  $R$  obtain the same vote share,  $\pi_p^* = 1/2$ , they are supported by a majority of their core voters,  $\pi_R^{*UC} > 1/2 > \pi_R^{*LP}$ . 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.<sup>5</sup>

This rational model cannot easily explain the motivating facts discussed in the introduction. In particular, an exogenous increase in cultural disagreement,  $\psi$ , leads to more cultural polarization between voters and parties, but cannot explain the observed dampening of redistributive conflict among economic classes, nor class realignment. Similarly, an increase in the share of mistrusting voters,  $\alpha$ , increases party polarization, but counterfactually also over economic policy, and it cannot explain increased cultural polarization among voters, nor class realignment.

## 4 Political Effects of Social Identity

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

At a given point in time, the voter identifies with the group that is most salient and to which she feels more similar. Based on social psychology, we formalize the

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

salience of ingroup  $G$  by its policy conflict with outgroup  $\bar{G}$ , measured by the welfare loss born by the average ingroup when moving from her ideal policy  $(\tau^G, q^G)$  to the ideal policy of the average outgroup  $(\tau^{\bar{G}}, q^{\bar{G}})$ .  $\bar{G}$  captures all voter types not belonging to  $G$  (i.e.  $G = U$  implies  $\bar{G} = L$ ). Using equation (1) the salience of  $G$  is equal to:

$$\Delta(G, \bar{G}) = W^G(\tau^G, q^G) - W^G(\tau^{\bar{G}}, q^{\bar{G}}) = \frac{\kappa}{2} (q^G - q^{\bar{G}})^2 + \frac{1}{2} (\tau^G - \tau^{\bar{G}})^2. \quad (8)$$

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

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

$$\iota(ij) = \arg \max_{G \in \{i,j\}} \Delta(G, \bar{G}) - \lambda \Delta^{ij}(G), \quad (9)$$

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

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

Due to the model’s symmetry, all voters have the same identity, economic or cultural. Cultural identity occurs if cultural disagreement is large compared to inequality,  $\psi/\varepsilon$  is high, or if social policy is important compared to redistribution,  $\kappa$  is large. A higher influence of culture in the evaluation of the public good,  $\beta$ , 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  $\kappa$  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  $\psi$  increases, due for instance to growing inequality in education. If income inequality  $\varepsilon$  increases, the effect is the opposite: class identity is favored.

But not all economic shocks have this effect. Shocks that asymmetrically hit different cultural groups, e.g. that mostly hurt unskilled/conservative voters, foster cultural identity. In Section 5 we use this idea to study the political effects of trade shocks.

## 4.2 Identity, Stereotypes and Polarization

In social psychology, identity affects beliefs through “depersonalization”, namely by moving opinions toward those that are stereotypical of the ingroup. Following Bordalo et al. (2016), BGT (2021) formalize the stereotype of ingroup  $G$  as the belief that is more frequent in the average ingroup  $(\varepsilon^G, \psi^G)$  compared to outgroup  $(\varepsilon^{\bar{G}}, \psi^{\bar{G}})$ . Then, the stereotyped belief  $z_\iota^{ij}(\tilde{y})$  of voter  $ij$  about income or culture  $\tilde{y} = \tilde{\varepsilon}, \tilde{\psi}$  when identified with ingroup  $\iota$  is equal to:

$$z_\iota^{ij}(\tilde{y}) \propto z^{ij}(\tilde{y}) \left[ \frac{z_\iota^t(\tilde{y})}{z_{-\iota}^{-t}(\tilde{y})} \right]^{\chi_\iota}, \quad (10)$$

where  $-\iota$  is the outgroup of voter  $ij$ . In Equation (10),  $z_\iota^t(\tilde{y})$  are the stereotyped beliefs held by the voter’s average ingroup,  $z_{-\iota}^{-t}(\tilde{y})$  those of her average outgroup.  $\chi_\iota \geq 0$  captures the presence and strength of stereotyping. For now  $\chi_\iota = \chi$  for all groups. In Subsection 4.4  $\chi_\iota$  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  $ij$  about her income or culture when she identifies with group  $\iota$  are:

$$y_\iota^{ij} = y^{ij} + \theta (y^t - y^{-t}) \quad \text{for } y = \varepsilon, \psi \text{ and } \iota = i, j \quad (11)$$

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

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<sup>6</sup>Equation (10) implicitly assumes that, when forming his stereotyped belief associated with identity  $\iota$ , 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  $\iota$  are:

$$\tau_\iota^{ij} = \tau^{ij} + \beta\theta(\psi^\iota - \psi^{-\iota}) - \theta(\varepsilon^\iota - \varepsilon^{-\iota}), \quad (12)$$

$$q_\iota^{ij} = q^{ij} + \theta(\psi^\iota - \psi^{-\iota}). \quad (13)$$

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  $\theta$ . To see this, consider a conservative lower class voter,  $ij = LC$ , identified with her lower class,  $\iota = L$ . She is too pessimistic about her income, the more so the higher is  $\theta$ , because that 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:  $\tau_L^{LC} > \tau^{LC}$ .<sup>7</sup>

Suppose now that the importance  $\kappa$  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 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 class conflict is no longer salient. For both reasons, she now demands less redistribution:  $\tau_C^{LC} < \tau_L^{LC}$  - recall that, through the value of the public good, desired taxation is lower for more conservative voters.

Through these mechanism, a shift from class to cultural identity changes the dimension over which voters are polarized. As in section 3, define disagreement over policy instrument  $x = q, \tau$  between groups  $G$  and  $\bar{G}$ , when they are identified in dimension  $d$ , as  $|x_d^G - x_d^{\bar{G}}|$ , where  $x_d^G$  is the policy desired by the average member of group  $G$ , and  $d = \varepsilon, \psi$  denotes class or cultural identity respectively. Eg.,  $\tau_\psi^L = (\tau_C^{LC} + \tau_P^{LP})/2$  is the desired tax rate by the average lower class when culturally

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<sup>7</sup>In our model stereotypes only arise along the trait (income or culture) along which identity is defined. BGT (2021) consider a more general setting in which income and social progressiveness are positively correlated in the population. In this case, Upper class identity also brings about some exaggeration of progressive views, because being progressive is also a distinct feature of the Upper class (as opposed to the Lower class). However, this exaggeration is weaker than under cultural identity. Our main results hold if we allow for this effect as long a correlation among traits is imperfect.



identified, and so on. By (12) and (13) and recalling the assumption  $\beta\psi < \varepsilon$ :

**Proposition 2.** *A rise in  $\kappa$  that changes identity from class to culture: (i) increases disagreement over all policies between opposite cultural groups:  $q_\psi^P - q_\psi^C > q_\varepsilon^P - q_\varepsilon^C$  and  $\tau_\psi^P - \tau_\psi^C > \tau_\varepsilon^P - \tau_\varepsilon^C$ ; (ii) reduces disagreement over redistribution between opposite economic classes:  $\tau_\psi^L - \tau_\psi^U < \tau_\varepsilon^L - \tau_\varepsilon^U$ ; (iii) increases the variance of preferred social policies, and decreases the variance of preferred tax rates, over the entire population:  $\text{Var}(q_j^{ij}) > \text{Var}(q_i^{ij})$ ,  $\text{Var}(\tau_j^{ij}) < \text{Var}(\tau_i^{ij})$ ,  $j = C, P$ ,  $i = L, U$ . All these effects are stronger the higher is  $\theta$ , and are absent if  $\theta = 0$ .*

As discussed in the introduction, BGT (2021) show 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  $\kappa$ , the trigger for an identity switch in this model.<sup>8</sup>

### 4.3 Party Divergence and Voters' Realignment

By changing voters' demands, identity also affects party platforms and how voters sort across parties. We now discuss these implications of the model.

Suppose that voters' identities are formed ahead of electoral competition, so that parties take identity as given when announcing policy platforms. Let  $W_\iota^{ij}(\hat{Y}_p^{ij})$  denote the expected welfare of voter  $ij$  identified with ingroup  $\iota$  if party  $p$  wins the election. Using this term in the expression for probabilistic voting, (5), and repeating the steps in section 3, we have:

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

Within an identity regime, higher  $\theta > 0$  increases platform divergence of the related policy instruments, because it causes the core voters of each party to hold more

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<sup>8</sup>In a rational model, one way to account for growing cultural polarization is to assume that cultural disagreement  $\psi$  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  $\tau$ , for which there are no parsimonious alternative explanations.

extreme beliefs, either culturally or economically. A switch from class to cultural identity changes the domain in which voter preferences and hence party platforms are most polarized. By increasing disagreement between conservative and progressive voters, this identity switch polarizes party platforms over  $q$ . By reducing disagreement on redistribution between lower and upper class voters, it also reduces platform divergence over  $\tau$ .

Hence, a switch to cultural identity also changes the dimensions of party polarization. This implication too is consistent with the evidence. Using voting behavior and opinion surveys of US 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.<sup>9</sup>

Next, consider how voters sort across parties:

**Proposition 4.** *If  $\kappa$  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  $\theta$ . If the rise in  $\kappa$  makes identity shift from class to culture, party  $R$  also gains lower class votes and loses upper class votes.*

Higher  $\kappa$  always boosts sorting of voters by their culture: some conservative voters move to  $R$ , some progressive voters move to  $D$ . This is true even if  $\theta = 0$ . When social policy is more important, conservatives find the restrictive  $q$  supplied by  $R$  more appealing, and vice-versa for progressives. This realignment of cultural groups occurs also in the rational model, but cultural identity amplifies it, because it enhances voter disagreement and party divergence over  $q$ .

But if voters are rational, a higher  $\kappa$  does not induce class realignment in this model. The reason is that conservative (resp. progressive) voters are equally present in both classes. Thus, the class composition of parties remains stable as cultural conflict becomes more intense. Matters change if higher  $\kappa$  causes identity to switch from class to culture. In this case, conservative lower class voters move toward  $R$ , and

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<sup>9</sup>Similar supply side changes occurred in other Western democracies, not just in the US. Hix et al. (2019) study roll call votes in the European Parliament and show that, since 2014, conflict changed from left vs. right to nationalism vs being pro-EU.

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.<sup>10</sup>

This implication is consistent with the evidence on voters' realignments presented in Figure 2. Similarly, Sides et al. (2018) show that, after 2008, ethnic minorities and people with favorable attitudes toward them became more likely to support the Democratic party, while the opposite happened for white voters with negative views on minorities. At the same time, measures of economic anxiety became uncorrelated with how people vote. They argue that this was due to the election of a black president, which made race politically more salient. We return to this point in the conclusions.<sup>11</sup>

Some recent papers seek to explain voter realignments, in the US and other advanced economies, 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 voters' beliefs change spontaneously when certain shocks trigger identity switches. In reality, politicians play an important role in this process,

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<sup>10</sup>In the rational model, an increase in  $\kappa$  would also cause a class realignment between parties if income and cultural preferences of voters were positively correlated. Our model emphasizes a stronger mechanism: when identity switches to culture, the conservative lower class and the progressive upper class become more elastic to differences in  $q$  because they (and party platforms) become less extreme about  $\tau$ .

<sup>11</sup>Danieli et al. (2022) document similar patterns in Europe, showing that voters' realignment towards extreme right wing populist parties can be largely explained by a rise in the salience of cultural issues for conservative voters.

with identity-based propaganda. In the heyday of class conflict, communist leaders used to appeal to blue-collar identity by stationing in front of industrial plants. 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. In their propaganda, do politicians find it optimal to enhance or to dampen voters’ polarization? What are the consequences of identity switches in this context? Throughout, we assume that parties continue to take identity as given.<sup>12</sup>

**Political Persuasion** Equation (10) describes how identity distorts beliefs, because voters overweight distinctive ingroup beliefs by the parameter  $\chi_i$ . Here, we formalize party propaganda as costly effort to change parameter  $\chi_i$  for the group to which the party is connected. Party  $R$  is connected to conservative ( $C$ ) and upper class ( $U$ ) groups, so it affects  $\chi_C$  and  $\chi_U$  (which one depends on voters’ identity). Party  $D$  is connected to the opposite groups, so it affects  $\chi_P$  and  $\chi_L$ .<sup>13</sup>

To see how propaganda works, suppose that identity is cultural. As shown in the appendix, beliefs continue to fulfill Equation (11), but with group-specific distortion parameters:

$$\theta^C = \left( \frac{\chi_C}{1 - \chi_C - \chi_P} \right), \quad \theta^P = \left( \frac{\chi_P}{1 - \chi_P - \chi_C} \right). \quad (14)$$

Suppose that party  $R$  cues a conservative stereotype, increasing  $\chi_C$ , for instance by saying that all immigrants are criminals. This makes conservative beliefs more extreme, in two ways: directly, by increasing the weigh on stereotypical conservative beliefs (higher  $\chi_C$  in the numerator of  $\theta^C$ ); indirectly, as the equilibrium conservative stereotype becomes more extreme (higher  $\chi_C$  in the denominator of  $\theta^C$ ). This belief change benefits party  $R$ , since conservative voters become less likely to vote for party  $D$ . But higher  $\chi_C$  also backfires, because it makes the progressive voters even more progressive (higher  $\chi_C$  in the denominator of  $\theta^P$ ). Intuitively, a more extreme conservative stereotype makes highly progressive beliefs even more stereotypical of the progressive ingroup, enhancing their progressiveness. This logic highlights

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<sup>12</sup>Politicians could induce identity shifts by making some conflicts more or less salient (e.g. by changing  $\kappa$ ), but we leave this to future research.

<sup>13</sup>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).

a political tradeoff: propaganda attaches connected voters to the party, but it also alienates non-connected voters.

**Equilibrium** To study this tradeoff under class and cultural identity, let  $a_{\iota p}$  denote propaganda effort of party  $p$  for its connected group  $\iota$ . 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. Each party  $p$  chooses policies  $(q_p, \tau_p)$  and propaganda  $a_{\iota p}$ , taking voters' identity and the choices of its opponent as given. 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,  $0 < \chi_\iota < 1/2$ .

Equilibrium platforms  $(q_p, \tau_p)$  and voting patterns are as in Propositions 2 and 3, but now parameter  $\theta$  is endogenous and could vary with identity. Let  $a_{\iota p}^*$  denote equilibrium propaganda by party  $p$  for its ingroup  $\iota$ . 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 core voters who do not trust the other party,  $\alpha$ , in economic inequality,  $\varepsilon$ , and in cultural disagreement,  $\psi$ .*

*If  $\kappa$  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 the beliefs of ingroup voters are more influenced by their party than those of outgroups. Thus, propaganda brings more votes than it alienates. Parties have an incentive to fuel extremism. This incentive is stronger the greater is party divergence. Hence, there is a complementarity between voters and parties, and extremism is amplified by supply and demand interactions. Any parameter change that increases voters' extremism (higher  $\varepsilon, \psi$  or  $\chi$ ) or that increases party divergence (higher  $\alpha$ ) boosts propaganda, making voters even more

extreme and parties even more divergent.<sup>14</sup>

When identity switches from class to culture, the content of propaganda changes, as in Figure 1. Political advertising focuses on cultural issues rather than on economics (Panel A), and parties change their rhetoric 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 tendency to stereotype on their own,  $\chi = 0$ . In this case, once a new social cleavage emerges, propaganda makes it more salient, producing stereotyped beliefs. But politicians cannot get voters to believe anything. To be persuasive, they must connect to the cleavage that is already present in 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 exacerbates 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 immigrants was to reinforce Latino and Asian identities.<sup>15</sup>

## 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

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<sup>14</sup>Persuasion is also stronger if baseline stereotyping  $\chi$  is higher, because this too increases policy divergence, or if voters are more responsive to differences in policy platforms ( $\Phi$  is higher), because persuasion has a larger effect on vote shares

<sup>15</sup>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.

“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. 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  $\eta_z^{ij}$  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 only conservative voters can 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  $\eta$  rises, conservative voters in exposed districts are more exposed to import competition. The correlation between culture and import exposure captures the idea that less skilled/educated workers are both more conservative (lower  $\psi^j$ ) and more exposed to imports (higher  $\eta_z^{ij}$ ).<sup>16</sup>

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  $\tau$ .

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<sup>16</sup>The assumptions that  $\eta_z^{iP} = 0$  in all districts and that  $\eta_z^{iC} = 0$  in non-exposed districts simplify notation but entail no loss of generality as long as conservatives remain more exposed than progressives in the exposed districts.

The appendix solves this model and shows that, under rationality, preferences over  $q$  and  $\tau$  are the same as in (2) (with  $\beta = 0$ ). The voter's ideal tariff is equal to:

$$t_z^{ij} = \hat{t} + \frac{2\eta_z^{ij}}{p^*(2v - 1)}, \quad (15)$$

where  $\hat{t} > 0$  is the same for all voters. International trade creates a new policy conflict: higher exposure  $\eta_z^{ij}$  entails a higher ideal tariff.

**Social Identity** Class vs cultural identity is determined by the tradeoff between group contrast,  $\Delta(G, \bar{G})$ , vs dissimilarity from the ingroup,  $\lambda\Delta_z^{ij}(G)$ , as in (9), where  $\lambda$  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 heterogeneous identities. The online appendix proves that a trade shock that increases import exposure,  $\eta$ , 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  $\eta > \underline{\eta}$ , conservative voters in exposed districts switch to cultural identity. Conservative voters in non-exposed districts are always class identified. The identity of progressive voters also depends on  $\eta$ , but it is the same in all districts.*

Greater import exposure increases the salience of the cultural cleavage, because it heightens conflict over trade policy between conservatives vs progressives, while opposite economic classes are equally exposed to trade. Crucially, for conservative voters the effect on identity varies across districts. Conservatives demand a restrictive trade policy only in exposed districts. As  $\eta$  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  $\eta$  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  $\kappa$ , that have uniform effects across districts.<sup>17</sup>

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

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

1) *Conservative voters demand more conservative social policies,  $\Delta q_e^C < \Delta q_n^C$ , 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 (upper and lower alike). 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

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<sup>17</sup>Progressive voters also switch to cultural identity if  $\eta > \bar{\eta}$  ( $> \eta$ ), but they do so uniformly across districts, since they have zero exposure in all districts. If progressives were also exposed to import competition, heterogeneity across localities would have opposite effects on conservatives and progressives. If  $\lambda < 4/3$ , then also conservatives from non-exposed districts can switch to cultural identity provided trade exposure  $\eta$  is very large. In this case too, however, there are no diff-in-diff patterns.

maximize their vote share in their district.<sup>18</sup> They announce a platform,  $(q_{zp}, \tau_{zp}, t_{zp})$  and propaganda  $a_{\iota zp}$  for each identity group  $\iota$  of connected voters. With heterogeneous identities, a candidate may engage in both economic and cultural propaganda, at separable cost  $C(a_{\iota zp}, a_{\iota' zp}) = \frac{c}{2} \cdot (a_{\iota zp}^2 + a_{\iota' zp}^2)$ . The Online Appendix proves that, if  $c$  is sufficiently large, a trade shock has the following effects.

**Prediction 2** (*Political supply*) *A rise in  $\eta$  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:  $\Delta(q_{eD}^* - q_{eR}^*) > \Delta(q_{nD}^* - q_{nR}^*)$ .*

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

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

When  $\eta$  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  $\eta$  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  $\tau$  shrinks.

Finally, a similar effect holds for propoganda. Trade exposure changes its content:

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<sup>18</sup>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.

<sup>19</sup>As shown in the appendix,  $\Delta(\tau_{eR}^* - \tau_{nR}^*) = 0$  if  $\eta$  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.

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.

## 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  $\Delta IP_z$ . It proxies for the change in average exposure  $\eta_z$  in our model.<sup>20</sup>

**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.

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<sup>20</sup>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:

$$\Delta IP_z = \sum_{m \in M} \frac{L_{m,z,t_1}}{L_{z,t_1}} \times \frac{I_{m,t_2} - I_{m,t_1}}{Y_{m,91} + I_{m,91} - X_{m,91}} \quad (16)$$

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  $(I_{m,t_2}^{EU} - I_{m,t_1}^{EU})$ , namely the increase of Chinese imports in eight developed countries over the same period, and all the other terms in (1) with their values in 1988.

Table 2. Respondents Holding Globalization Responsible for Economic Losses

Difference:	Conservatives – Progressives	Lower – Upper
<i>Globalization or new technologies are fully responsible for my economic losses</i>	0.07 (0.02)	-0.01 (0.04)
<i>Globalization or new technologies are fully responsible for others' economic losses</i>	0.04 (0.02)	-0.02 (0.04)

*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.

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.<sup>21</sup>

**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 cross section of 36000 respondents (67 per CZ) over 2006-16.

We measure two outcomes, preferences for redistribution ( $\tau$ ) 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.<sup>22</sup>

<sup>21</sup>We explore conditional correlations with a regression at the CZ level. The dependent variable is the increase in Chinese imports between 2000 and 2016,  $\Delta IP_{00-16}$  - the period considered by Autor et al (2020). The covariates, measured in 2006 (the beginning of the CCES sample period), are the CZ’s share of respondents who have some college education, college education or more, who are secular, and the respondent’s average income. The results are (standard error in parenthesis):

$$\Delta IP_{00-16} = 2.151 - 0.915 \text{somecollege}_{06} - 0.789 \text{collegemore}_{06} - 0.618 \text{secular}_{06} + 0.002 \text{income}_{06}.$$

(0.185)      (0.249)                      (0.293)                      (0.267)                      (0.003)

<sup>22</sup>We don’t study opinions on trade policy because they are not consistently measured over time.

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:

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

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  $\beta_0$ . It measures the change in opinions of the average resident in more exposed CZs. By Prediction 1,  $\beta_0$  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  $\beta_0$  is estimated using variation within manufacturing.<sup>23</sup> 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.<sup>24</sup>

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 re-

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<sup>23</sup>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.

<sup>24</sup>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)
$\Delta IP$	-0.080 (0.031)	-0.124 (0.058)	-0.038 (0.037)	-0.170 (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.

distribution, 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 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.<sup>25</sup>

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

<sup>25</sup>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. Although 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 - Heterogeneous effects

	Immigration		Redistribution	
	(1)	(2)	(3)	(4)
$\Delta IP$	-0.173 (0.055)	-0.193 (0.076)	-0.189 (0.066)	-0.286 (0.072)
$\Delta IP * \text{Secular}$	0.144 (0.066)		0.041 (0.077)	
$\Delta IP * \text{Middle/Upper Class}$		0.111 (0.068)		0.146 (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 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.

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 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).<sup>26</sup> 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 rhetoric. We cannot distinguish these two in our data, but Prediction 2 says that they should go hand in hand: more exposed districts should witness more conservative platforms and rhetoric compared to other districts, especially for party  $R$ .

The unit of observation is the Congressional district (CD). 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.<sup>27</sup>

We estimate the cross-sectional regression:

$$\Delta y_d = \beta_0 \Delta \widehat{IP}_d + Z'_d \beta_2 + u_d \quad (17)$$

where  $d$  denotes the CD,  $\Delta y_d$  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  $\Delta y_d$ , are standardized.<sup>28</sup>

The coefficient of interest is  $\beta_0$ . It measures the effect of a standard deviation change in import exposure  $\Delta IP_d$  on the change in relative universalism in Congressional speeches  $\Delta y_d$ , relative to the standard deviation of  $\Delta y$  across CDs. Summary

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<sup>26</sup>Records on Congressional speeches collected by Enke stop in July 2016.

<sup>27</sup>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.

<sup>28</sup>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 indexes 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.



statistics are in Online Appendix Table A.6. Estimation is by 2SLS, with  $\Delta IP$  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 on average reduced universalistic rhetoric in their speeches. In column (2), a one standard deviation change in import exposure is associated with a 0.237 reduction in relative universalism (relative to the standard deviation of its change).

Columns (3) and (4) estimate (17) 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

Table 5. Relative Universalism in Political Rhetoric - Baseline Estimates

	Relative Universalism							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\Delta$ IP	-0.209 (0.111)	-0.237 (0.111)	-0.500 (0.250)	-0.047 (0.139)	-0.336 (0.197)	0.059 (0.189)	-0.589 (0.225)	0.132 (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 indices 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.

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  $\Delta IP_d$  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 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 communitarian and 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, rhetoric 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 differences 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.

By enhancing the salience of specific cleavages, party platforms and their propaganda could also induce identity shifts. This aspect is missing from our analysis, since we assumed that politicians take identity as given. A particularly important issue is the alignment between group conflict and party divergence. If parties mostly disagree on redistribution, they will attract the votes of opposite economic classes, facilitating and strengthening class identities. If instead party divergence is mostly on cultural issues, voters will sort across parties by their culture, reinforcing identification along this dimension. Through this channel, random 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 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 Proposition 1.* The conflict between cultural groups and the conflict between economic classes (defined in terms of their rational bliss points in policy) are easily found to be:

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

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

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



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

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

while they identify with their economic class otherwise.  $\square$

*Proof of Equation (11).* We now prove that beliefs fulfill Equation (11). In (10), the distorted likelihood ratio between average group members is:

$$\frac{z_\iota^\iota(\tilde{y})}{z_{-\iota}^{-\iota}(\tilde{y})} = \frac{K_\iota}{K_{-\iota}} * \frac{z_\iota^\iota(\tilde{y})}{z_{-\iota}^{-\iota}(\tilde{y})} \left[ \frac{z_\iota^\iota(\tilde{y})}{z_{-\iota}^{-\iota}(\tilde{y})} \right]^{2\chi}, \quad (18)$$

where  $K_\iota$  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  $K_\iota$  and  $K_{-\iota}$  such that the distorted distributions integrate to one. Then, Equation (10) becomes:

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

which yields, under Gaussian distributions:

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

$\square$

*Proof of Proposition 2.* Using (11), (12), (13) and (3),(4):

$$\begin{aligned} q_\psi^P - q_\psi^C &= (1 + 2\theta)2\psi > q_\varepsilon^P - q_\varepsilon^C = 2\psi \\ \tau_\psi^P - \tau_\psi^C &= (1 + 2\theta)2\beta\psi > \tau_\varepsilon^P - \tau_\varepsilon^C = 2\beta\psi \\ \tau_\psi^L - \tau_\psi^U &= 2\varepsilon < \tau_\varepsilon^L - \tau_\varepsilon^U = (1 + 2\theta)2\varepsilon \end{aligned}$$

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,

$$Var(\tau_l^{ij}) = \frac{1}{4} \sum_{ij} [\beta^2 (\psi_l^{ij})^2 + (\varepsilon_l^{ij})^2 - 2\beta\psi_l^{ij}\varepsilon_l^{ij}] \quad (19)$$

where  $\psi_j^{ij} = (1 + 2\theta)\psi_i^{ij}$  and  $\varepsilon_j^{ij} = (1 + 2\theta)\varepsilon_i^{ij}$ , for  $j = C, P$  and  $i = L, U$ . Inserting these expressions in (19) and using  $\varepsilon > \beta\psi$  proves that  $Var(\tau_j^{ij}) < Var(\tau_i^{ij})$ .  $\square$

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

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

where

$$\pi_{ip}^{ij} = 0.5 + \Phi \left[ \frac{\kappa}{2} (\hat{q}_p^{ij} - q_l^{ij})^2 + \frac{1}{2} (\hat{\tau}_p^{ij} - \tau_l^{ij})^2 - \frac{\kappa}{2} (\hat{q}_p^{ij} - q_l^{ij})^2 - \frac{1}{2} (\hat{\tau}_p^{ij} - \tau_l^{ij})^2 \right], \quad (20)$$

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 by  $p = R, D$  are:

$$\begin{aligned} -\frac{\Phi}{4} \sum_{ij \neq c_{\bar{p}}} \kappa (\hat{q}_p^{ij} - q_l^{ij}) - \Phi \left( \frac{1}{4} - \alpha \right) \kappa (\hat{q}_p^{c_{\bar{p}}} - q_l^{c_{\bar{p}}}) &= 0, \\ -\frac{\Phi}{4} \sum_{ij \neq c_{\bar{p}}} (\hat{\tau}_p^{ij} - \tau_l^{ij}) - \Phi \left( \frac{1}{4} - \alpha \right) (\hat{\tau}_p^{c_{\bar{p}}} - \tau_l^{c_{\bar{p}}}) &= 0, \end{aligned}$$

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

$$q_{pp}^* = q^o + \sum_{ij} \alpha_p^{ij} \psi_l^{ij}; \quad \tau_{pp}^* = \tau^o + \sum_{ij} \alpha_p^{ij} (\beta\psi_l^{ij} - \varepsilon_l^{ij}),$$

where  $q^o = 0$ ,  $\tau^o = v - 1$  and where  $\psi_\iota^{ij}$  and  $\varepsilon_\iota^{ij}$  denote the stereotyped beliefs of voter  $ji$  when identified with ingroup  $\iota$ , where  $\iota = i$  for  $\rho = \varepsilon$  and  $\iota = j$  otherwise, and the weights are  $\alpha_p^{ij} = \frac{1}{4(1-\alpha)}$  for  $ij \neq c_{\bar{p}}$  and  $\alpha_p^{ij} = \frac{1/4-\alpha}{1-\alpha}$  for  $ij = c_{\bar{p}}$ . Hence:

$$\begin{aligned} q_{\rho R}^* &= -\frac{\alpha}{1-\alpha}\psi_\rho^P < q^o = 0 < q_{\rho D}^* = -\frac{\alpha}{1-\alpha}\psi_\rho^C, \\ \tau_{\rho R}^* &= \tau^o - \frac{\alpha}{1-\alpha}(\beta\psi_\rho^P - \varepsilon_\rho^L) < \tau^o < \tau_{\rho D}^* = \tau^o - \frac{\alpha}{1-\alpha}(\beta\psi_\rho^C - \varepsilon_\rho^U). \end{aligned}$$

where  $\psi_\rho^P$  is the average culture of progressive voters (i.e. voters in group  $P$ ) when the identity regime is  $\rho$  and where  $\psi_\rho^C$ ,  $\varepsilon_\rho^L$  and  $\varepsilon_\rho^U$  are defined accordingly. By using the equations for beliefs, one finds that party divergence over  $q$  and  $\tau$  in different identity regimes fulfills:

$$q_{\varepsilon D}^* - q_{\varepsilon R}^* = \frac{2\alpha\psi}{1-\alpha} < q_{\psi D}^* - q_{\psi R}^* = \frac{2\alpha\psi(1+2\theta)}{1-\alpha}, \quad (21)$$

$$\tau_{\varepsilon D}^* - \tau_{\varepsilon R}^* = \frac{2\alpha[\beta\psi + \varepsilon(1+2\theta)]}{1-\alpha} > \tau_{\psi D}^* - \tau_{\psi R}^* = \frac{2\alpha[\beta\psi(1+2\theta) + \varepsilon]}{1-\alpha}. \quad (22)$$

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

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

$$\Delta_\iota^{ij}(\widehat{Y}_p) = \frac{1}{2}[(\kappa + \beta^2)(\psi_{pp} - \psi_\iota^{ij})^2 + (\varepsilon_{pp} - \varepsilon_\iota^{ii})^2] - \beta(\psi_{pp} - \psi_\iota^{ij})(\varepsilon_{pp} - \varepsilon_\iota^{ij}),$$

where  $\psi_{pp} = \sum_{ij} \alpha_p^{ij} \psi_\rho^j$ ,  $\varepsilon_{pp} = \sum_{ij} \alpha_p^{ij} \varepsilon_\rho^i$ , where  $\psi_\rho^j$  and  $\varepsilon_\rho^i$  are defined as in the proof of Proposition 3. Plugging this expression in (20) we obtain:

$$\begin{aligned} \pi_{\iota R}^{ij} &= 0.5 + \Phi\left[\frac{\kappa + \beta^2}{2}[(\psi_{\rho D} - \psi_{\rho R})(\psi_{\rho D} + \psi_{\rho R} - 2\psi_\rho^j) + \right. \\ &\quad \left. + \frac{1}{2}[(\varepsilon_{\rho D} - \varepsilon_{\rho R})(\varepsilon_{\rho D} + \varepsilon_{\rho R} - 2\varepsilon_\rho^i)] - \right. \\ &\quad \left. - \beta[(\psi_{\rho D} - \psi_\rho^j)(\varepsilon_{\rho D} - \varepsilon_\rho^i) - (\psi_{\rho R} - \psi_\rho^j)(\varepsilon_{\rho R} - \varepsilon_\rho^i)]\right], \end{aligned} \quad (23)$$

where in  $\pi_{\iota R}^{ij}$  the ingroup  $\iota$  corresponds to the one selected in identity regime  $\rho$ . Because the identity regime  $\rho$  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:

$$\pi_{\iota R}^{ij} = \Phi \left\{ \frac{2\alpha}{1-\alpha} [\psi_{\rho}^P [\beta \varepsilon_{\rho}^i - (\kappa + \beta^2)\psi_{\rho}^j] + \varepsilon_{\rho}^L [\beta \psi_{\rho}^j - \varepsilon_{\rho}^i]] \right\}. \quad (24)$$

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

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

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

Note that the above expressions imply that, under cultural identity:

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

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

types  $ij$  realign as follows:

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

The above inequality hold also for  $\theta = 0$ , namely  $z = 1$ . However,  $\theta > 0$  makes the changes larger in magnitude. In moving from  $\kappa_0$  to  $\kappa_1$  progressive (resp. conservative) voters leave (resp. join)  $R$  regardless of their class. Overall, the lower/upper class joins/leaves  $R$  iff:

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

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

### Trade Policy Model

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

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

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

The government sets policies,  $\tau$ ,  $t$  and  $q$ . Aggregate tariff revenue, expressed in terms of the export good, is  $T(t) = tp^*[\hat{m} - \eta/2] = tp^*[\varpi - p^*(1+t) - \eta/2]$ .<sup>29</sup> Taking the government budget constraint into account, the voter's expected welfare function under rationality is:

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

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<sup>29</sup>To ensure positive revenue from the tariff, we assume  $\varpi - p^*(1+t) > \eta/2$  for all  $t$ .

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

Computing the optimal tariff for voter  $ij$  in sector  $z$  yields equation (15) in the text, where  $\hat{t} = \frac{(\varpi - p^*)(v-1) - v\eta/2}{p^*(2v-1)}$ .<sup>30</sup>

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<sup>30</sup>In order to have  $\hat{t} > 0$ , we assume:  $(\varpi - p^*)(v-1) > \eta v/2$ . If progressive types also were exposed to import competition, the greater their exposure, the higher their preferred tariff.

# 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  $\iota$ , 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  $\tau_p$  and  $q_p$  are described in Proposition 2. Consider now the choice of  $a_p$ , focusing on  $R$ . By exploiting (20) and noting that  $p$  optimizes over  $a_p$  by taking  $(\tau_p, q_p)$  as given, we find that the first order condition for  $a_p$  is:

$$\frac{\partial V_p}{\partial a_{\iota p}} = \frac{1}{4} \sum_{ij} \Phi \left[ \kappa (\hat{q}_p^{ij} - \hat{q}_p^{ij}) \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} + (\hat{\tau}_p^{ij} - \hat{\tau}_p^{ij}) \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} \right] - C'(a_p) = 0, \quad (26)$$

where  $\theta_{ij}$  is  $\psi(1 + 2\theta)$  when identity is cultural while it is  $\varepsilon(1 + 2\theta)$  when identity is economic, where in both cases  $\theta$  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:

$$\frac{\partial V_p}{\partial a_{\iota p} \partial q_p} = \frac{\Phi \kappa}{4} \left[ \sum_{ij \neq c_p} \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} + (1 - 4\alpha) \sum_{ij \in c_p} \frac{\partial q_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} \right], \quad (27)$$

$$\frac{\partial V_p}{\partial a_{\iota p} \partial \tau_p} = \frac{\Phi}{4} \left[ \sum_{ij \neq c_p} \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} + (1 - 4\alpha) \sum_{ij \in c_p} \frac{\partial \tau_\iota^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{\iota p}} \right]. \quad (28)$$

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

$$\frac{\partial V_p}{\partial a_{ip}} = \frac{1}{2} \sum_{ij} \Phi \left[ \kappa (\hat{q}_p^{ij} - \hat{q}_{\bar{p}}^{ij}) \frac{\partial q_L^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{ip}} + (\hat{\tau}_p^{ij} - \hat{\tau}_{\bar{p}}^{ij}) \frac{\partial \tau_L^{ij}}{\partial \theta_{ij}} \frac{\partial \theta_{ij}}{\partial a_{ip}} \right] - C'(a_{ip}) \quad (29)$$

$$= \frac{\Phi}{4} \left[ D_{G_p} \sum_{ij \in G_p} \frac{1 - \chi - a_{i\bar{p}}}{(1 - 2\chi - a_{ip} - a_{i\bar{p}})^2} + D_{\bar{G}_p} \sum_{ij \in \bar{G}_p} \frac{\chi + a_{i\bar{p}}}{(1 - 2\chi - a_{ip} - a_{i\bar{p}})^2} \right] - C'(a_{ip}) = 0, \quad (30)$$

where in the second and third expressions we use  $G_p$  and  $\bar{G}_p$  to denote the party's ingroup and outgroups, we denote  $D_{G_p} = \kappa (\hat{q}_p^{ij} - \hat{q}_{\bar{p}}^{ij}) \frac{\partial q_L^{ij}}{\partial \theta_{ij}} + (\hat{\tau}_p^{ij} - \hat{\tau}_{\bar{p}}^{ij}) \frac{\partial \tau_L^{ij}}{\partial \theta_{ij}}$ , which is constant within ingroups and within outgroups. We also exploit the expression for  $\theta_{ij}$  as a function of  $a_{ip}$  and  $a_{i\bar{p}}$ . Because ingroups and outgroups have opposite interests along the identity trait,  $\frac{\partial q_L^{ij}}{\partial \theta_{ij}} = -\frac{\partial q_{-L}^{ij}}{\partial \theta_{ij}}$  and  $\frac{\partial \tau_L^{ij}}{\partial \theta_{ij}} = -\frac{\partial \tau_{-L}^{ij}}{\partial \theta_{ij}}$ , we have  $D_{\bar{G}_p} = -D_{G_p} = D$ . In addition, because each party has two ingroups and two outgroups, (30) becomes:

$$\frac{\partial V_p}{\partial a_{ip}} = \frac{\Phi}{2} D \frac{1 - 2\chi - 2a_{i\bar{p}}}{(1 - 2\chi - a_{ip} - a_{i\bar{p}})^2} - C'(a_{ip}) = 0, \quad (31)$$

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  $a_\rho^*$  the equilibrium effort in identity regime  $\rho = \varepsilon, \psi$ . Then, the first order condition under class and cultural identity are respectively defined by:

$$\frac{2\alpha\Phi}{1-\alpha} \frac{\varepsilon^2(1+2\theta) + \beta\varepsilon\psi}{1-2\chi-2a_\varepsilon^*} - C'(a_\varepsilon^*) = 0, \quad (32)$$

$$\frac{2\alpha\Phi}{1-\alpha} \frac{(\kappa + \beta^2)\psi^2(1+2\theta) + \beta\varepsilon\psi}{1-2\chi-2a_\psi^*} - C'(a_\psi^*) = 0, \quad (33)$$

Where the  $\theta$  in each equation is the equilibrium degree of stereotyping under the respective identity regime  $\rho = \varepsilon, \psi$ . Assume that (32) and (33) identify the equilibrium persuasion effort. We later find a condition under which this is the case. Then, the



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

$$\frac{2c \cdot a_\varepsilon^*}{1 - 2(\chi + a_\varepsilon^*)} + \left( \frac{2\alpha\Phi}{1 - \alpha} \right) \left( \frac{\varepsilon}{1 - 2\chi - 2a_\varepsilon^*} \right)^2 - c < 0, \quad (34)$$

$$\frac{2c \cdot a_\psi^*}{1 - 2(\chi + a_\psi^*)} + \left[ \frac{2\alpha\Phi(\kappa + \beta^2)}{1 - \alpha} \right] \left( \frac{\psi}{1 - 2\chi - 2a_\psi^*} \right)^2 - c < 0 \quad (35)$$

If  $1 - 2\chi - 4a_i^* > 0$ , 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  $a_\rho^*$  decreases in  $c$ , with  $\lim_{c \rightarrow \infty} a_\rho^* = 0$ , sufficiently large  $c$  also ensures  $1 - 2\chi - 4a_\rho^* > 0$ . Under (34),  $a_i^*$  is increasing in any parameter that increases the LHS of (32) and (33). 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  $\kappa$  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  $\theta(a_\psi^*(\kappa_1)) > \theta(a_\varepsilon^*(\kappa_0))$ . Consider finally the second order optimality condition. Equations (32) and (33) are sufficient for a maximum if the Hessian of the program is negative semi definite. We already know from the proof of Proposition 2 that  $\partial^2 V_p / (\partial q_p)^2 = -\Phi\kappa(1 - \alpha)$ ,  $\partial^2 V_p / (\partial \tau_p)^2 = -\Phi(1 - \alpha)$  and  $\partial^2 V_p / \partial \tau_p \partial q_p = 0$ . The Hessian is then negative semidefinite if and only if:

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

At the symmetric optimum,  $\partial V_p / (\partial a_{ip})^2 = \Phi D \frac{2}{(1 - 2\chi - 2a_\rho^*)^2} - c$ . The cross partials  $\partial V_p / \partial a_{ip} \partial q_p$  and  $\partial V_p / \partial a_{ip} \partial \tau_p$  do not depend on the cost function. As a result, a sufficiently convex cost function,  $c$  large enough, ensures both that (32) and (33) identify the equilibrium persuasion efforts and that (34) holds, validating the comparative statics of Proposition 4.  $\square$

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

between ingroup and outgroup (eq. 8) now takes the form:<sup>31</sup>

$$\Delta(G, \bar{G}) = \frac{\kappa}{2} (q^G - q^{\bar{G}})^2 + \frac{1}{2} (\tau^G - \tau^{\bar{G}})^2 + \frac{(p^*)^2(2v-1)}{2} (t^G - t^{\bar{G}})^2 \quad (36)$$

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

$$\Delta_z^{ij}(G) = \frac{\kappa}{2} (\psi^G - \psi^j)^2 + \frac{1}{2} (\varepsilon^G - \varepsilon^i)^2 + \frac{2(\eta^G - \eta_z^j)^2}{(2v-1)}. \quad (37)$$

Using (15), we have  $t^G - t^{\bar{G}} = \frac{2(\eta^G - \eta^{\bar{G}})}{p^*(2v-1)}$ ,  $\eta^U = \eta^L = \eta/4$ ,  $\eta^C = \eta/2$ ,  $\eta^P = 0$ . Hence,  $\Delta(C, P) = 2\kappa\psi^2 + \frac{2\eta^2}{4(2v-1)}$  and  $\Delta(L, U) = 2\varepsilon^2$ . Consider now  $\Delta_z^{ij}(G)$ . Under class identity, in exposed and non exposed districts we have:

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

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

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

A progressive voter chooses cultural identity if and only if:

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

which reads:

$$\eta^2 > 4(2v-1) (\varepsilon^2 - \kappa\psi^2). \quad (38)$$

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

which reads:

$$\eta^2 \left( \frac{4-3\lambda}{4+\lambda} \right) > 4(2v-1) (\varepsilon^2 - \kappa\psi^2). \quad (39)$$

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:

$$\eta^2 \left( \frac{4+5\lambda}{4+\lambda} \right) > 4(2v-1) (\varepsilon^2 - \kappa\psi^2). \quad (40)$$

To study identity switches, define  $\underline{\eta} \equiv 2\sqrt{\frac{(4+\lambda)(2v-1)(\varepsilon^2 - \kappa\psi^2)}{4+5\lambda}}$  and  $\bar{\eta} \equiv 2\sqrt{(2v-1)(\varepsilon^2 - \kappa\psi^2)}$ , with  $\bar{\eta} > \underline{\eta}$ . If  $\varepsilon^2 > \kappa\psi^2$  and  $\eta \approx 0$ , none of (38), (39) and (40) holds, and all voters identify with their class. If  $\eta$  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  $\eta$  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  $\eta$  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.  $\square$

*Proof of Prediction 1.* Denote by  $q_\rho^{ijz}$  and by  $\tau_\rho^{ijz}$  the desired policies by voter  $ij$  from district  $z$  under identity regime  $\rho$ . 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:  $q_\psi^{iPn} = q_\psi^{iPe} = \psi(1+2\theta)$ ,  $q_\psi^{iCn} = q_\psi^{iCe} = -\psi(1+2\theta)$ ,  $i = U, L$ , and  $\tau_\psi^{Ljn} = \tau_\psi^{Lje} = \varepsilon$ ,  $\tau_\psi^{Ujn} = \tau_\psi^{Uje} = -\varepsilon$ ,  $j = C, P$ . 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  $\tau^{z0}$  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 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:  $\tau_\varepsilon^{Le,1} - \tau_\varepsilon^{Le,0} = -2\varepsilon\theta < \tau_\varepsilon^{Ln,1} - \tau_\varepsilon^{Ln,0} = -\varepsilon\theta$ .  $\square$

*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  $\iota$  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:

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

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

conditions for party  $p$  in  $z$  yields:

$$q_{zp} = \sum_{ij} \alpha_p^{ij} \psi_{\rho z}^j, \tau_{zp} = - \sum_{ij} \alpha_p^{ij} \varepsilon_{\rho z}^i, t_{zp} = \sum_{ij} \alpha_p^{ij} t_z^j, \quad (41)$$

$$\frac{\partial V_{zp}}{\partial a_{\rho pz}} = \frac{1}{4} \sum_{ij} \Phi \left[ \kappa (\hat{q}_p^{ij} - \hat{q}_p^{ij}) \frac{\partial q_{\rho}^{ij}}{\partial \theta_{ij}} + (\hat{\tau}_p^{ij} - \hat{\tau}_p^{ij}) \frac{\partial \tau_{\rho}^{ij}}{\partial \theta_{ij}} \right] \frac{\partial \theta^{ij}}{\partial a_{\rho pz}} - C'(a_{\rho pz}) = 0, \rho = \varepsilon, \psi. \quad (42)$$

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 (42) takes into account that party  $p$  does not expend effort on persuading a group with which no voter is identified because  $\frac{\partial q_{\rho}^{ij}}{\partial \theta_{ij}}, \frac{\partial \tau_{\rho}^{ij}}{\partial \theta_{ij}} \neq 0$  if and only if voter  $ij$  is identified with group  $\iota$  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  $\eta$ , class identity prevails everywhere. With respect to  $q$  and  $\tau$ , 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 (21) and (22) and persuasion effort is  $a_{\varepsilon}^*$  in (32) (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  $\eta$  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  $(\tau_{eD}^* + \tau_{eR}^*)/2 = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon\theta_{\varepsilon e}$ . 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  $a_{\varepsilon e R}^* = a_{\varepsilon e D}^* = a_{\varepsilon e}^* > 0$ , which is pinned down by:

$$\frac{\alpha\Phi}{1-\alpha} \frac{\varepsilon^2(1+\theta_{\varepsilon e})}{1-2(\chi+a_{\varepsilon e}^*)} = C'(a_{\varepsilon e}^*). \quad (43)$$

By comparing (43) to (32) (with  $\beta = 0$ ) one sees that  $0 < a_{\varepsilon e}^* < a_{\varepsilon n}^*$  and hence  $\theta_{\varepsilon e} < \theta_{\varepsilon n}$ . The trade shock causes economic stereotypes to fall in exposed districts. Since  $\tau_{zR}^* = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon(1+2\theta_{\varepsilon z})$  for  $z = e, n$ , and  $\theta_{\varepsilon e} < \theta_{\varepsilon n}$ , we then have  $\tau_{eR}^* > \tau_{nR}^*$ . With respect to cultural persuasion, by (42) party efforts  $a_{\psi e R}^*$  and  $a_{\psi e D}^*$  are pinned down by:

$$\frac{\alpha\Phi\kappa}{1-\alpha} \psi^2 \frac{(1-\chi-a_{\psi e D}^*)^2}{(1-2\chi-a_{\psi e R}^*-a_{\psi e D}^*)^3} = C'(a_{\psi e R}^*), \quad (44)$$

$$-\frac{\alpha\Phi\kappa}{1-\alpha} \psi^2 \frac{(1-\chi-a_{\psi e D}^*)(\chi+a_{\psi e R}^*)}{(1-2\chi-a_{\psi e R}^*-a_{\psi e D}^*)^3} = C'(a_{\psi e D}^*), \quad (45)$$

which implies  $a_{\psi e R}^* > 0 > a_{\psi e D}^*$ . That is, in exposed districts  $R$  fuels conservative stereotypes,  $D$  reduces progressive stereotypes. Compared to non exposed districts, where  $a_{\psi n R}^* = a_{\psi n D}^* = 0$ , the cultural rhetoric of both parties becomes more conservative. In a stable equilibrium  $1-\chi-a_{\psi e D}^* > \chi+a_{\psi e R}^*$ , Equations (44) and (45) imply that  $R$  increases its conservatism more than  $D$ , namely  $a_{\psi e R}^* > -a_{\psi e D}^*$ , or  $a_{\psi e R}^* + a_{\psi e D}^* > a_{\psi n R}^* = a_{\psi n D}^* = 0$ . 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  $a_{\psi e D}^*$  and  $-a_{\psi e R}^*$  are small. Suppose now that  $\eta$  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  $(q_{\psi D}^* - q_{\psi R}^*)$  and  $(\tau_{\psi D}^* - \tau_{\psi R}^*)$  in (21) and (22) and persuasion effort is  $a_{\psi}^*$  in (33) (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  $(\tau_{\varepsilon D}^* + \tau_{\varepsilon R}^*)/2 = \tau^o$ . In non exposed districts, only social progressives are culturally identified. Party platforms here are  $q_{nR}^* = \frac{1}{(1-\alpha)}\psi\theta_{\psi n} - \frac{\alpha}{1-\alpha}\psi(1+2\theta_{\psi n})$ ,

$q_{nD}^* = \frac{1}{(1-\alpha)}\psi\theta_{\psi n} + \frac{\alpha}{1-\alpha}\psi$ ,  $\tau_{nR}^* = \tau^o - \frac{\alpha}{1-\alpha}\varepsilon$ ,  $\tau_{nD}^* = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon(1 + 2\theta_{\varepsilon n})$ . As a result,  $(q_{nR}^* + q_{nD}^*)/2 = \psi\theta_{\psi n}$  and  $(\tau_{\varepsilon D}^* + \tau_{\varepsilon R}^*)/2 = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon\theta_{\varepsilon n}$ . 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:  $\tau_{eD}^* = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon < \tau_{nD}^* = \tau^o + \frac{\alpha}{1-\alpha}\varepsilon(1 + 2\theta_{\varepsilon n})$ . Platform divergence fulfills:

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

which depends, through stereotypes, on persuasion effort. Regarding the latter, in exposed districts,  $z = e$ , there is a symmetric equilibrium  $a_{\psi eR}^* = a_{\psi eD}^* = a_{\psi}^* > 0$  (as in (33) 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 (43). Cultural persuasion effort is determined by:

$$-\frac{2\alpha\Phi\kappa}{1-\alpha}\psi^2\frac{(1-\chi-a_{\psi nR}^*)(\chi+a_{\psi nD}^*)}{(1-2\chi-a_{\psi nR}^*-a_{\psi nD}^*)^3} = C'(a_{\psi nR}^*), \quad (46)$$

$$\frac{2\alpha\Phi\kappa}{1-\alpha}\psi^2\frac{(1-\chi-a_{\psi nR}^*)^2}{(1-2\chi-a_{\psi nR}^*-a_{\psi nD}^*)^3} = C'(a_{\psi nD}^*). \quad (47)$$

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  $D$ .  $\square$

## 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”.

### A.2 Exposure to Import Competition and Other Shocks

Autor et al. (2013) measure the change in import exposure in each Commuting Zone (CZ) by the average change in Chinese import penetration in the CZ’s industries, weighted by each industry’s share in the CZ initial employment. Following them, we define the change in import penetration in CZ  $z$  between years  $t_1$  and  $t_2 > t_1$  as:

$$\Delta IP_z = \sum_{m \in M} \frac{L_{m,z,t_1}}{L_{z,t_1}} \times \frac{I_{m,t_2} - I_{m,t_1}}{Y_{m,91} + I_{m,91} - X_{m,91}} \quad (48)$$

where the first term in summation is the share of manufacturing industry  $m$  in *total* employment of CZ  $z$ , while the second term is the increase in US imports from China of products typical of  $m$  between  $t_1$  and  $t_2$ , standardized by  $m$ ’s market size in 1991 (i.e., prior to the boom in China’s exports). Since the change in penetration is likely to be endogenous, imports are instrumented as in Autor et al. (2013). In particular, the instrument is obtained by replacing  $(I_{m,t_2} - I_{m,t_1})$  with  $(I_{m,t_2}^{EU} - I_{m,t_1}^{EU})$ , namely the increase of Chinese imports in eight countries over the same period, and all the other terms in (1) with their values in 1988.<sup>32</sup>

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

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<sup>32</sup>Countries are: Australia, Denmark, Finland, Germany, Japan, New Zealand, Spain and Switzerland



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 initial 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 an 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;  $\Delta IP_z$  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:

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

Note that we first compute this variable for each politician on a given date and then we take the mean by politician-congress and, subsequently, by CD-congress, except for Congress 106 (years 1999-2000), where we only consider year 2000, since this is when we start measuring import exposure and when we measure all remaining regressors. Results 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).<sup>33</sup> 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

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<sup>33</sup>The reason why we use the map of CDs in 2000 will be clearer later.

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 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.<sup>34</sup> 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).<sup>35</sup> 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:

$$\Delta Y_{d,\tau}^{adj} = \sum_{t \in \tau} (1 - R_{dt+2}) \left( \sum_{d'} \frac{p_{dd'}}{p_d} Y_{d't+2} - \sum_{d'} \frac{p_{dd'}}{p_d} Y_{d't} \right) \quad (49)$$

where  $\Delta Y_{d,\tau}^{adj}$  is the redistricting-adjusted change of the outcome  $Y$  over period  $\tau$  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  $\tau$ . 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  $t + 2$ .

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<sup>34</sup>A similar procedure is followed for Congresses prior to 2000 to compute variables used in the pre-trends analysis.

<sup>35</sup>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).

**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 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
<i>Household Income</i>				
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
<i>Race</i>				
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
<i>Age</i>				
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
<i>Sex</i>				
Male	0.47	0.49	-0.02	0.03
Female	0.53	0.51	0.02	0.03
<i>Region</i>				
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
<i>Education</i>				
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 (0.030)	-0.087 (0.032)	0.051 (0.021)	-0.028 (0.022)
Progressive	-0.114 (0.031)	0.102 (0.033)	-0.009 (0.020)	0.041 (0.022)
Upper Class	0.029 (0.053)	-0.073 (0.055)	0.002 (0.034)	-0.006 (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)
$\Delta$ IP	0.141 (0.125)	0.061 (0.150)	-0.233 (0.109)	-0.248 (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.