

Economic Decline, Social Identity, and Authoritarian Values in the United States¹

Cameron Ballard-Rosa
University of North Carolina
cambr@email.unc.edu

Amalie Jensen
Princeton University
ajensen@princeton.edu

Kenneth Scheve
Stanford University
scheve@stanford.edu

February 2020
Word Count: 11,305

¹The authors thank David Rueda and workshop participants at APSA 2018, IPES 2018, Stanford University, UCLA, UNC Chapel Hill, and Washington University, St. Louis for useful feedback on the manuscript. Scheve thanks the Institution for Research in the Social Sciences for Support.

Abstract

Why does the contemporary backlash against globalization in the United States have such a substantial authoritarian character? We argue that sustained economic decline has a negative effect on the social identity of historically dominant groups. These losses lead individuals to be more likely to want to enforce social norm conformity—that is, adopt more authoritarian values—as a way to preserve social status and this effect is greater the larger the size of other groups in the population. Central to our account is the expectation of an interactive effect of local economic and demographic conditions in forging value responses to economic decline. The paper evaluates this argument using an original 2017 representative survey in the United States. We find that individuals living in relatively diverse regions in which local labor markets were more substantially affected by imports from China have more authoritarian values. We further find that the greater effect of globalization-induced labor market decline in more diverse areas is also evident for vote choice in the 2016 Presidential election.

1 Introduction

Donald Trump’s victory in the 2016 US presidential race came as a surprise to students of politics. In the years since, two dominant narratives have arisen to account for Trump’s unexpected electoral success. On the one hand, some scholars have emphasized the importance of racial animus, particularly among white Americans, as a crucial predictor of voter support for Trump. On the other hand, authors have proposed that Trump’s victory hinged on the support of a “white working class” who felt left behind by economic development, and in particular by globalization. Many works on both sides have pitted these accounts as theoretically (and empirically) zero sum: in essence, arguing that it must either be cultural values or economic hardship alone that account for the rise of Trump.

In this paper, we attempt to bridge the gap between these two accounts by considering social identity and material wellbeing as two interrelated components of an individual’s overall utility. Rather than demanding that one facet must override the other, we instead consider the ways in which, in particular, sustained regional economic decline may influence the relative importance of social conformity by different groups. Informed by this view of individual utility, we investigate the interactive effects of local economic and demographic conditions on the values individuals hold; in so doing, we demonstrate that rather than thinking of the economic and social explanations for Trump’s election as competing, they may more properly be thought of as complementary approaches to studying the same phenomenon at different stages of the causal chain.

More precisely, we interrogate in this paper the consequences of international economic integration on a set of individual values often called the *authoritarian personality*, which we take to refer to an individual preference for social order and conformity and a belief that these outcomes should be achieved by force if necessary (Altemeyer, 1981). Our interest in explaining the consequences of international economic exchange arises out of a narrative that voter support for Trump was motivated by a “backlash against globalization;” Trump’s opposition to immigration and free trade are often touted as manifestations of this backlash. Yet, while some political reactions to rising globalization have taken predictable forms emphasizing less globalization and/or more generous

policies to help those adversely affected by economic integration (Feigenbaum and Hall, 2015; Che et al., 2016), many journalistic and academic treatments have emphasized that the backlash is also characterized by anger and has evolved into full blown authoritarian populism (see e.g. Haynes (2016), Taub (2016), and Rodrik (2018)). That is, it is not simply a case of wanting to reduce international trade, immigration, and foreign investment: many of these voters connect globalization to their feelings of being abandoned by a “corrupt elite” that has betrayed the “virtuous people” and of being threatened by the loss of status in an increasingly diverse country (Mudde and Kaltwasser, 2017). Indeed, we believe that authoritarian values characterize the rhetoric and many of the proposed policy responses of the contemporary backlash against globalization in the United States.

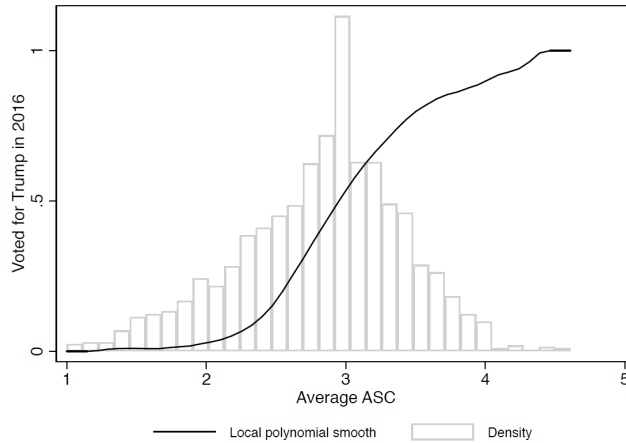
This phenomenon is well illustrated in Donald Trump’s 2016 presidential campaign. He campaigned on a platform for which free trade and immigration were not just bad policies but symptoms of betrayal and disorder and it was at least in part voters with authoritarian values who responded to these appeals. As motivation for this claim, Figure 1 presents a smoothed locally-weighted average of the proportion of respondents voting for Donald Trump in the 2016 U.S. presidential election against a measure of authoritarian preferences which we describe in detail below.¹ As can be seen in the figure, there is a remarkably strong bivariate association between individuals with greater authoritarian tendencies and the likelihood of voting for Trump.²

The connection of globalization to support for Trump and populists like him around the world has been made in a number of recent papers. Che et al. (2016), Autor et al. (2017), Jensen, Quinn and Weymouth (2017), Colantone and Stanig (2018*a,b*), and Hays, Lim and Spoon (2019) all provide evidence of a correlation between some dimension of the impact of economic integration on local economic performance and support for populist political outcomes including Trump, more extreme left and right Congressional candidates, non-incumbents, Brexit, and far right parties in Europe. Many of these studies present compelling research designs that support a causal interpretation of these associations.

¹This is drawn from a nationally-representative sample of adults in the United States that was fielded by the authors and is described below.

²See also MacWilliams (2016).

Figure 1: Authoritarian Values and Voting for Trump



Notes: Smoothed locally-weighted average of the proportion of respondents voting for Trump at the 2016 presidential election by authoritarian values as measured by the ASC scale.

The obvious question is why globalization should lead to the support of these candidates. In the US context, Che et al. (2016) and others focus on the potential issue voting mechanism, suggesting that candidates like Trump are offering more protectionist policy which is what voters want; in these accounts, the rise of authoritarian sentiment and rhetoric is largely beside the point.³ Jensen, Quinn and Weymouth (2017) argue that negative shocks from globalization function very similarly to all types of economic shocks, with poor economic performance being linked in the minds of voters to an anti-incumbent inclination. Yet this says little about why voters would respond in particular—among the set of available opposition messages—to the authoritarian kinds of rhetoric that have resonated with publics recently. Autor et al. (2017) focus on polarization and contend that voters respond to the negative consequences of globalization by supporting more extreme versions of whatever ideological leanings they previously held. We think all three of these mechanisms are plausible and contribute to our understanding of how globalization has affected American political behavior. That said, they do not really answer the question of why America’s backlash against globalization has had such an authoritarian flavor (and that of other countries as well).

³While outside the context of support for Trump in the US, recent work by Colantone and Stanig (2018b) argues that Europeans in regions exposed to Chinese import competition are more likely to turn towards “economic nationalism” due to a failure of states to adequately compensate workers for the economic exposure of rising global integration. Like Che et al. (2016), their account primarily emphasizes an issue voting mechanism and the movement of voters towards autarkic preferences.

Without an obvious answer to this question, other journalists and scholars have taken a skeptical view that America’s rising authoritarian populism has much to do with globalization or other economic sources (see e.g. Rothwell and Diego-Rosell (2016), Inglehart and Norris (2016), and Mutz (2018)). Some of this skepticism is due to different assessments of the correlation between economic decline and voting for populist candidates. But the critique goes deeper than this with the view that even when such a correlation is observed, it is often viewed as spurious in that the real forces at work are some form of cultural backlash. After all, if the “backlash against globalization” is solely about its economic consequences, why hasn’t the backlash been focused exclusively on economic policies?

A second account for the rise of Trump emphasizes instead the importance of “identity” concerns, particularly among white Americans. One of the most prominent expositions of this view comes from Sides, Tesler and Vavreck (2019), which argues that broader demographic shifts in the US population led to a crisis of identity of who, precisely, should count as “American.” This was perceived to be particularly challenging to white Americans who had long been viewed as sitting atop the racial identity hierarchy, and thus felt threatened by changing notions of the body public (Mutz, 2018). In a similar vein, Jardina (2019) argues that many white Americans intensified identification with their own race over the 2010s; these identity concerns were to prove potent electoral motivation for the candidacy of Donald Trump, who ran a campaign that was particularly focused on addressing a base of aggrieved white voters. Of course, in these accounts of the rise of out-group animus and hostility among white Americans, we again witness the shadow of authoritarian values: indeed, the motivating example in the introduction to Sides, Tesler and Vavreck (2019) concerns an act of violence against black individuals attending a Trump rally, which is fully consonant with the use of force against outgroups or non-conformists as a strong authoritarian preference.

Thus, without disputing that social identity played a central role in the 2016 presidential election, this paper proposes an answer to why regional economic decline associated with globalization would lead to the types of authoritarian political reactions observed in the United States (and, likely, other countries around the world). Our framework synthesizes the insights in both the

economic and cultural value approaches to understanding the rise of authoritarian populism in the United States. We argue that long-run economic changes from globalization have a negative impact on the social identity of historically dominant groups. This leads to an increase in authoritarian values because of an increased incentive to force minority groups to conform to social norms as compensation for identity losses; one of the most common behavioral consequences of authoritarian values is, of course, a strong reification of ingroup-outgroup identity and dislike for those that are perceived as threatening to the current order. We further argue that the effect of economic changes from globalization on authoritarian values is greater the larger the relative size of minority groups in the population.

The paper tests the predicted effect of economic decline on authoritarian values using an original 2017 representative survey in the US. Following recent research in psychometric measurement of authoritarian values, this included a battery of questions to capture separately three conceptual dimensions argued to be core to the authoritarian personality: aggression, submission, and conventionalism.⁴ Based on an established literature documenting the negative consequences of Chinese import penetration for local economies in the US (Autor, Dorn and Hanson, 2013; Acemoglu et al., 2016), we identify local economic shocks in the US induced by China’s integration with the world economy to estimate the causal impact of long-run structural decline in labor market outcomes on authoritarian values and voting behavior.

We find that majority group members living in relatively diverse regions in which local labor markets were more substantially affected by imports from China have more authoritarian values. The implied substantive effect of an economic shock is large and pronounced: in diverse areas, a standard deviation increase in the degree of import penetration is associated with approximately one-third of a standard deviation increase in our baseline measure of authoritarianism. Consistent with our argument, this impact is much larger than the effect of trade shocks in less diverse areas. In contrast to these strong effects on white respondents, however, we find no systematic association between economic shock and the authoritarian values of non-white respondents, which accords with our expectations that the decline of majority group status is a crucial mediator. Our

⁴Duckitt et al. (2010); Dunwoody and Funke (2016).

estimates are robust to the inclusion of a wide variety of demographic variables as well as controls for the extent of manufacturing employment prior to China’s integration into the world economy and the size of the foreign born population; results also persist when we instrument for Chinese imports into the US using a combination of Chinese imports into a number of similar economies. We further find that the greater effect of labor market decline in more diverse areas is evident for vote choice in the 2016 Presidential election – among white survey respondents who live in diverse areas, a standard deviation increase in the China shock corresponds to a 13 percentage point increase in the likelihood of voting for Donald Trump.

The paper contributes to three important literatures: the impact of globalization on voting behavior and support for populists, the origins of authoritarian values, and the public behavior literature on the role of economic and value concerns in the determination of mass behavior. First, as discussed above, the existing literature on the impact of globalization on voting in the US emphasizes issue-based voting concerning anti-globalization policy, retrospective voting over poor economic performance, and a policy extremity updating process in explaining the mechanisms that might account for this relationship (Che et al., 2016; Autor et al., 2017; Jensen, Quinn and Weymouth, 2017; Colantone and Stanig, 2018*a*). Our evidence suggests a fourth mechanism is value change in which trade shocks lead voters to adopt more authoritarian values. These values in turn impact voting behavior including the support of populist candidates and parties.⁵ This mechanism not only explains the interaction between economic decline and the size of minority groups but also answers our motivating question of why America’s backlash is characterized by authoritarian rhetoric and policies: these values resonate with voters experiencing identity losses from the permanent decline in demand for their labor.

Second, our results provide novel empirical evidence linking economic threat to authoritarian values. Previous empirical work showing that economic change fosters authoritarian values has primarily been based on aggregate correlations across countries or across time within countries (Sales, 1973; Doty, Peterson and Winter, 1991; Perrin, 2005) or individual-level correlations be-

⁵Our theory is consistent with recent findings by Hays, Lim and Spoon (2019) that xenophobic beliefs about immigrants mediate the effect of trade shocks on support for rightwing populists in Europe.

tween economic characteristics and authoritarian values (Sniderman, Peri and de Figueiredo Jr, 2002; Feldman, 2003; Stenner, 2005).⁶ Our study provides credible causal estimates that Chinese imports had a positive effect on authoritarian values. This result suggests that in addition to socialization, contemporary economic threats can affect levels of authoritarian values as theorized in early work by Fromm (1941), Lipset (1959), and Rokeach (1960).

Third, our study highlights the importance of understanding how certain types of economic shocks might affect political behavior, particularly when moderated by local racial demography. Much of the literature on the role of economic interests and cultural values in determining behavior views these explanations as competing rather than complementary. Even when researchers consider them complementary, they still tend to view these forces as orthogonal. In contrast, we argue that exploring the interplay between contemporary material interests and identity considerations is of fundamental importance to understanding some of the central political puzzles of our era.⁷

The paper is structured as follows. In the next section, we outline our theoretical framework linking authoritarian values to concerns over material and identity payoffs. Section 3 describes our research design and data, while section 4 introduces our baseline results as well as a series of robustness checks. Section 5 provides additional empirical analysis to facilitate the interpretation of our primary findings, while section 6 concludes.

2 Theoretical Framework

In this paper, we argue that negative economic changes from globalization have a positive impact on authoritarian values, and that this effect is particularly large in areas with more diverse populations. In the following, we outline a theoretical framework for how to think about the effect of globalization on authoritarianism, which will guide our empirical analysis.

⁶Note that there is a more well-developed set of causal findings on the effect of security threats—not economic threats as we discuss here—activating authoritarian behavior; see, e.g., Hetherington and Weiler (2009); Richey (2012).

⁷See Gidron and Hall (2017) for recent work that posits a similar inter-relationship between cultural and economic decline and support for the populist right in Europe.

Economic self-interest as a driver of political preferences is widely studied in the literature, and this motive is often pitched against value- and social identity-based motives. Building on the insights of social identity theory (Tajfel and Turner, 1979; Tajfel, 1981) and its applications to economic behavior (Akerlof and Kranton, 2000), we argue that the two types of motives can interact to shape political preferences, in that long-run economic changes can lead to identity losses and value changes. Importantly, given the centrality to our account of changing social perceptions around group identities, we believe that the effects we document are most likely to become pronounced from sustained economic decline. At the core of our argument are the anxieties that arise when a majority group member perceives that the social standing of her group has fallen permanently due to declining economic resources of the group; such changes in perception would be unlikely to be found following fluctuations due to relatively short-term periodicity in the business cycle, for example.⁸

Thus, in considering the political effect of globalization generally and specifically China’s integration into the world economy, we are referring to structural changes in regional economies. These are fundamental shifts in production capacity and employment patterns; economic changes from trade shocks are comparable to, for instance, the economic effects of technological change or, historically, economic dislocation following industrialization. These developments had long-lasting consequences for the distribution of growth and productivity across industries and occupations and for the return to skills across workers in the labor market. Therefore, economic changes from trade shocks affect entire communities or local economies and put people and places on very different life trajectories in terms of employment and income, but also in their ability to fulfill their social roles in their families and communities. Consistent with this conceptualization, existing literature on the effects of the “China shock” on the US has documented negative effects on local economic outcomes including rising unemployment and lower average wages (e.g., Autor, Dorn and Hanson (2013); Acemoglu et al. (2016)), but also health outcomes (Pierce and Schott, 2016) and social outcomes such as marriage and parenthood (Autor, Dorn and Hanson, 2018).

⁸Our emphasis on the effects of long-run structural change on value change, of course, does not imply that shorter-lived shocks do not affect political behavior. See Margalit (2019) for a recent review.

Importantly, this work has identified that while the nucleus of economic dislocation is likely to be in manufacturing industries decimated by competition with cheaper Chinese products, the consequences of rising import penetration have spread beyond this core of affected industries to include average employment in the affected communities more broadly. Broz, Frieden and Weymouth (2019) emphasizes, for example, that when a large factory in town shuts down, the overall shocks to aggregate demand that occur tend to affect employment and earning capacity across the region more generally. The widespread effects of the kinds of economic change we study in this paper are therefore likely to not only affect certain individuals living in a region, but perceptions of group standing more generally. While a growing body of research has documented a number of political consequences from local economic decline, in summarizing work in this vein Broz, Frieden and Weymouth (2019, 24) nonetheless emphasizes the importance of “research about the conditioning effect of cultural identities. Even though combining local economic hardship with identity politics is complicated, this is the research frontier. A crucial question is why whites and non-whites respond differently to manufacturing decline in their communities.”

In this paper, we address this component of the research frontier by arguing that—particularly if many trade-competing manufacturing industries were perceived as sources of valuable economic advancement for majority group members (Guisinger, 2017)—falling incomes for members of these communities will be reflected not merely in an individual sense of economic loss, but in a broader group perception of falling social status for the majority group.⁹ This insight hinges on the assumptions that individual group identities are formed, at least in part, on the basis of the economic standing of members of the group and the ability of group members through work to meet the role expectations as a provider, consumer, and productive member of the community that come with their privileged status.¹⁰ While there clearly are additional dimensions of status that feed into a group’s standing, our account emphasizes that at least some part of this standing is tied to the group’s labor market trajectory. This resonates with a recent working paper by Baccini and Weymouth (2019), which finds that deindustrialization in the United States over the last two

⁹For a recent formalization of this concept within the context of trade policy specifically, see Grossman and Helpman (2018).

¹⁰For a detailed discussion of the formation of white identity, see Jardina (2019).

decades (a process driven, in part, by trade competition) has indeed led to declining perceptions of social standing by white Americans, as well as heightened support for Donald Trump in 2016 among whites.

In response to this decline in social status, we argue that (some) majority group members may seek to compensate this loss by enhancing other identity-related payoffs that they enjoy as members of the group. In particular, given our interest in the rise of seemingly authoritarian impulses in the US electorate, we focus on the utility citizens may derive from social order and conformity, and the preference to impose such conformity through the use of force if necessary. This set of preferences is derived directly from the classic account of authoritarian values in Altemeyer (1981). More specifically, we argue that, when threatened with declining economic status, majority group members may respond by heightening their preferences for ingroup homogeneity, and dislike for non-conformist behavior by members of other social groups. In so doing, respondents may effectively upweight the importance of the components of their group identity that do not depend on their declining economic prospects.

Yet, crucially, we also argue that the relative importance of this imposition of conformity on out-group members is likely to vary systematically with the local demography in which an individual resides. In regions populated almost entirely by majority group members, there is little opportunity to run into out-group members, or to observe non-conformist behavior by these individuals. This suggests that such regions have little potential to compensate job-related status losses on majority groups through inducing greater conformity on minorities, whatever the baseline rates of authoritarian values are in these places. In contrast, in regions where non-majority members form a larger share of the local population, exposure of majority group members to the presence of potential non-conformist behavior is much greater, and so the relative potential compensation from economic-decline induced status losses of imposing social order on out-groups is substantially higher.¹¹ This suggests that the effects of sustained economic decline on the preference for “authoritarian values” among majority members should be most pronounced for

¹¹In an influential conceptualization of authoritarian values, Feldman (2003) argues that “[d]iversity is both an indicator that people are not conforming to common social norms and a potential threat to the maintenance of those norms.”

those citizens who live in regions characterized by greater social diversity.¹²

For purposes of answering the question of why the backlash against globalization has had such authoritarian characteristics, the key insight is that long-run economic decline from globalization decreases not only economic returns but the social status of majority groups. Economic change can undermine the social roles that individuals fill in their communities and families and the loss of status from no longer meeting these expectations is especially acute for members of historically advantaged groups. Some members of these groups may seek to compensate these identity losses by increasing their social status through other means, especially by enforcing greater homogeneity and conformity on the part of other groups. This response is more likely in diverse demographic settings in which levels of heterogeneity and/or nonconformity are potentially higher.

We summarize our argument with the two empirical hypotheses that we investigate in this paper:

Hypothesis 1. Globalization-induced economic decline in local labor markets increases authoritarian values among historically dominant majority social groups.

Hypothesis 2. The positive effect of globalization-induced economic decline in local labor markets on authoritarian values among historically dominant majority social groups is larger in more socially diverse regions.

3 Research Design

Our empirical strategy uses geographic variation in economic change and demographic characteristics in the United States to evaluate these two hypotheses. We specifically exploit variation in the effect of China’s integration into the world economy on local labor markets to estimate both quantities of interest.

Two important clarifications about the research design are essential. First, focusing our attention on the impact of trade integration on values is of inherent interest because of the specific role

¹²In ongoing work, Autor et al. (2019) also investigate the consequences of trade exposure on polarization and voting outcomes in the US as conditioned by local racial demography.

that the “globalization backlash” has been thought to play in recent trends in American political behavior. Our research design yields new evidence on the impact of globalization on political behavior and suggests that one mechanism that has often been misunderstood is that globalization has an impact on voting behavior and policy opinions through its effect on values. Second, we study the effect of trade integration on authoritarian values because we think there is a compelling research design for doing so. This focus does not mean, however, that we think that other economic shocks that reflect long-run structural change such as deindustrialization and automation are less important. To the contrary, our larger theoretical argument is about the impact of economic decline on authoritarian values and political behavior and globalization is studied here as an example.

3.1 Data

Our analysis is based on a combination of data on local Chinese import penetration over time, data on local economic and demographic conditions, and an original survey conducted in the US.¹³ Measures of Chinese import penetration are from the replication data and files provided by Autor, Dorn and Hanson (2013) and Acemoglu et al. (2016). The measures are constructed using international trade data from the UN Comtrade Database and data on commuting zone employment by industry from the County Business Patterns. Data on local conditions are from the US Census. Our survey was implemented by YouGov in September 2017 and includes 1,800 respondents.¹⁴ The survey data are nationally representative of the US adult population and contain information about the respondent’s county and zipcode of residence as well as a battery of questions measuring authoritarian values.¹⁵

Our main dependent variable is a combined index of measures designed to capture authoritarian aggression, submission, and conventionalism (*ASC*). While past scholarship on authoritarianism is replete with multiple suggestions of potential measurement approaches, we follow the recommen-

¹³The survey was reviewed by the Institutional Review Boards at Stanford University and the University of North Carolina.

¹⁴13 respondents from Alaska and Hawaii are dropped from the analysis, as we do not have trade shock measures for these states.

¹⁵See Appendix A for discussion of the sample.

dations of recent research in the psychometric literature emphasizing the importance of separating out each of the three subdimensions of authoritarianism identified by Altemeyer (1981). Specifically, we follow the design proposed in Dunwoody and Funke (2016), who develop three sets of six questions for each sub-dimension of authoritarianism. Example questions for the aggression dimension included statements like “It is necessary to use force against people who are a threat to authority” and “Strong punishments are necessary to send a message”. Questions for the submission dimension included “Our leaders know what is best for us” and “We should believe what our leaders tell us”. Questions for the conventionalism dimension included “People should respect social norms” and “Traditions are the foundation of a healthy society and should be respected”. The entire battery of questions is provided in the Appendix. The order of the statements was randomized. For each statement, there was a five-point scale from “strongly disagree” to “strongly agree”; we take the arithmetic mean of each subset to generate measures of average aggression, average submission, and average conventionalism, and subsequently take the average of these three components to generate our baseline outcome ASC .¹⁶

To empirically assess the effect of labor market shocks on authoritarian values, we follow a now commonly-employed measurement and identification strategy originally developed by Autor, Dorn and Hanson (2013) for estimating the effect of Chinese import shocks on labor market outcomes in the United States. Autor, Dorn and Hanson (2013) and Acemoglu et al. (2016) provide evidence that Chinese import shocks had negative effects on local market outcomes including manufacturing employment, labor market participation, and earnings. The measurement and identification strategy has since been applied to study other political economy outcomes in the United States including Congressional support for protectionism (Feigenbaum and Hall, 2015), incumbent party vote share (Jensen, Quinn and Weymouth, 2017), political polarization and Congressional voting (Autor et al., 2017), and marriage and fertility (Autor, Dorn and Hanson, 2018).

The measure of a local labor market shock is the average change in Chinese import penetration

¹⁶We also examine each of these sub-indices individually below. Descriptive statistics for each sub-component, and the correlation matrix across the sub-components, are presented in Appendix Tables A.2 and A.3.

across industries, weighted by each industry’s share of initial employment. We use U.S. commuting zones to define local labor markets. Commuting zones are administrative geographic units made up of counties, and they are constructed to reflect the local economy where people live and work. We use data from Acemoglu et al. (2016) to get commuting zone-level measures of the shocks. We link these data to the respondents in our survey by information about respondents’ county of residence. The trade shock data contain 722 commuting zones covering the U.S. mainland, with boundaries defined by the beginning of the period of China’s integration into the world economy (1990). Our survey data cover 366 of these commuting zones.

Following existing studies of the effects of Chinese import penetration on local economies (Acemoglu et al. 2016; Autor et al. 2017; Autor, Dorn and Hanson 2018), we define local labor market shocks as the average change in Chinese import penetration in the commuting zone’s industries, weighted by each industry’s share in the commuting zones’s initial employment. This is done by first constructing—at the level of a US manufacturing industry j —the import penetration ratio of Chinese imports over time period τ , given by

$$\Delta IP_{j\tau} = \frac{\Delta M_{j,\tau}^{uc}}{Y_{j,91} + M_{j,91} - E_{j,91}} \quad (1)$$

where the numerator ($\Delta M_{j,\tau}^{uc}$) captures change in Chinese imports into the US over the relevant time period τ , and the denominator captures “initial absorption” as measured by industry shipments ($Y_{j,91}$) plus industry imports ($M_{j,91}$) less industry exports ($E_{j,91}$) at the beginning of the period. We construct our baseline measure over the years 1991-2007; we choose to end our baseline time period in 2007 so as to prevent the possibility of confounding an effect of Chinese import penetration on local labor markets with any consequences potentially arising during the Great Recession.¹⁷ Having constructed this measure of industry import penetration, we subsequently

¹⁷Our primary findings are not affected by this choice: we find consistent results looking at differing time periods, including from 1991-1999, 1991-2011, 1999-2007, and 1999-2011. Results available upon request.

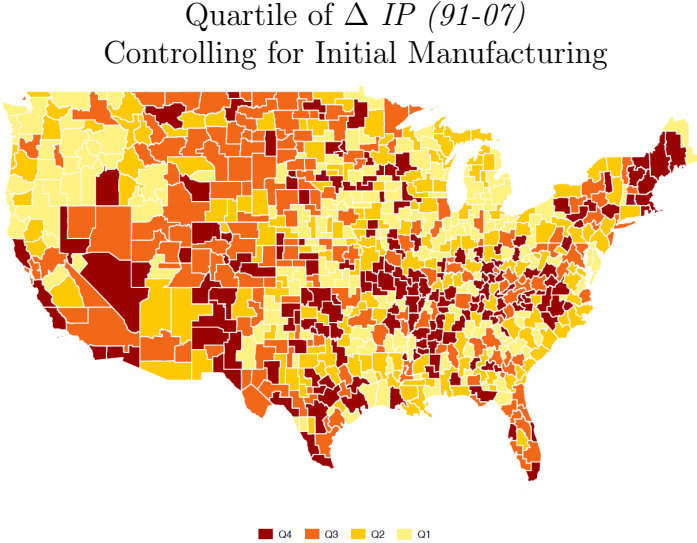
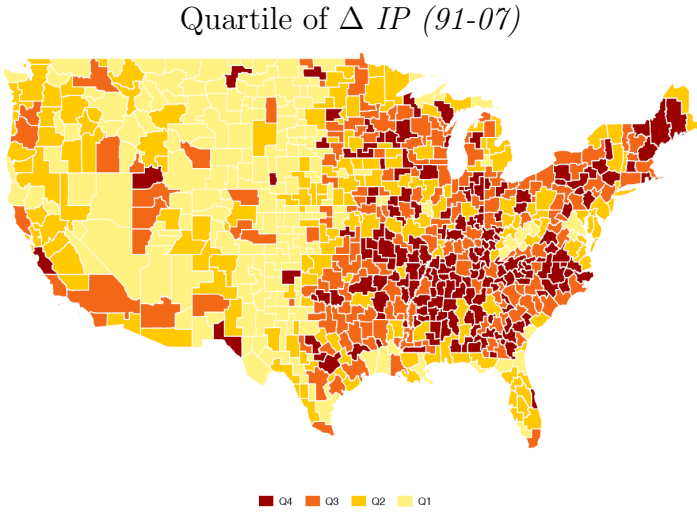
generate a location-specific measure of changing import exposure for a given commuting zone r as

$$\Delta IP_{r\tau}^{cu} = \sum_j \frac{L_{rj\tau}}{L_{r\tau}} \Delta IP_{j\tau}^{cu} \quad (2)$$

As explained in Acemoglu et al. (2016, S176), $L_{rj\tau}/L_{r\tau}$ “is industry j ’s start-of-period share of total employment in CZ r . The variation in $\Delta IP_{r\tau}^{cu}$ across local labor markets stems entirely from variation in local industry employment structure at the start of period τ .” $\Delta IP_{r\tau}^{cu}$ weights changing industry exposure to Chinese imports by the initial importance of employment in that industry within a given labor market, with the final value simply the sum of industry exposure across all manufacturing industries. In essence, the import penetration measure will be higher in those commuting zones characterized by a larger initial share of employment in industries that saw a prominent increase in Chinese imports; for regions without any employment in import-competing sectors, this measure should be zero. In what follows, for ease of notation we suppress super-scripts and sub-scripts on our primary treatment measure, referred to as ΔIP (91-07) below. To help describe our shock data, we first present a breakdown of commuting zones by quartile of import competition, as demonstrated in Figure 2.

The main idea behind treating the China import shock measure as exogenous is to take advantage of the fact that China’s integration into the world economy was primarily a consequence of its decision to reform its economy and this was motivated by domestic political economy considerations in China. Nonetheless, to the extent that import demand is potentially affected by localized economic conditions, concern may still exist that this measure of changing Chinese imports is not truly exogenous to characteristics of labor markets across the US. In order to address this source of potential endogeneity, we follow a host of work (Acemoglu et al., 2016; Autor, Dorn and Hanson, 2018) that employs an instrumental variables strategy, instrumenting for changes in imports of Chinese goods into the US with a weighted average of changing imports into other “similar” countries. More precisely, we construct a measure of changing trade exposure to Chinese imports

Figure 2: Trade Shock Exposure across Commuting Zones



Notes: The top panel shows a map indicating the quartile of each commuting zone’s trade shock value, ΔIP (91-07). The bottom panel shows a map indicating the quartile of this measure controlling for the initial value of manufacturing employment in the commuting zone.

in other countries (O) for an industry j as

$$\Delta IPO_{j\tau} = \frac{\Delta M_{j,\tau}^{oc}}{Y_{j,88} + M_{j,88} - E_{j,88}} \quad (3)$$

where “ $\Delta M_{j,\tau}^{oc}$ is the growth in imports from China in industry j during the period τ ...in eight other high-income countries excluding the United States” (Acemoglu et al., 2016, S152).¹⁸ As argued elsewhere, much of China’s expansion as a prominent exporter arose due to supply-side considerations within the country, which should be uncorrelated with the characteristics of particular labor markets within the US. To the extent that most developed economies experienced similar exposure to rising Chinese manufacturing production, instrumenting for US imports of Chinese goods with imports into other similar countries should remove potentially endogenous demand-driven components of Chinese import exposure to a given commuting zone in the US.

In the analysis, we investigate how trade shocks affect authoritarian values differentially depending on the relative size of minority groups in the local area. We simplify the complex patterns of diversity across U.S. regions and focus on the relative size of the population that is white and non-white. Information about local ethnic composition is obtained from the Census Bureau’s American FactFinder database. We define the variable *Diversity* equal to the value 1 if the respondent lives in a county with a non-white population of more than 30%.¹⁹ Based on this definition, about one-third of our respondents live in a diverse area.

In some estimations, we include measures of additional individual and regional characteristics to strengthen our research design. At the individual level, we introduce measures for whether survey respondents identified as *Female*, their *Age* in years, an indicator variable *College* if the respondent’s highest level of completed education was either “some college” or an associate’s degree, an indicator variable *University* if the respondent reported completing a bachelor’s degree, master’s degree, professional degree or doctoral degree, whether the respondent reported being

¹⁸The eight similar countries are Australia, Denmark, Finland, Germany, Japan, New Zealand, Spain, and Switzerland.

¹⁹As reported in Appendix Table A.5, our primary findings hold for a range of particular cutpoints designating a locale as “diverse.” While our primary specifications report results from a cutpoint that corresponds approximately to the 67th percentile (that is, the top third) in terms of local diversity, we find similar effects for cutpoints ranging from the 50th to the 75th percentiles (that is, the top half to the top quarter of locations in terms of diversity).

Married, and whether they had any *Children* under the age of 18.

We also introduce a series of commuting-zone-level and county-level measures to account for variation across different regions that may affect the values of individuals in those regions outside of our proposed mechanism. First, we include a measure of initial *Manufacturing* employment share in the respondent’s local labor market.²⁰ In addition, given accounts of recent political mobilization based on perceived threats from immigration, we also include a measure of the percent of the local population that is *Foreign Born*, as well as the *Change in % Foreign Born*, measured at the county level.

3.2 Econometric model

We model authoritarian values as a function of exposure to trade shocks from China’s integration into the world economy, individual socio-demographic characteristics, and other regional characteristics. Our baseline model is:

$$ASC_i = \beta_0 + \beta_1 \Delta IP_r + \beta_2 Diversity_k + \beta_3 Diversity_k * \Delta IP_r + \mathbf{X}_i' \psi + \mathbf{Z}_k' \phi + \epsilon_i \quad (4)$$

where i indexes individual respondents, r indexes commuting zones, and k indexes counties; ΔIP and *Diversity* are defined above; X_i are individual-level covariates; Z_k are county-level covariates; ϵ_i is the error term; and $\beta_0, \beta_1, \beta_2, \beta_3, \psi$, and ϕ are parameters to be estimated. We initially estimate this equation by ordinary least squares and report standard errors clustered on commuting zones.²¹ Given our theoretical interest in the effects of economic shocks on majority group members’ values, in our baseline results we restrict our analysis to respondents who self-identified as white only, then subsequently estimate our models on non-whites (as well as our full sample).

As discussed above, we also estimate this equation using $\Delta IPO (91-07)$ to instrument for $\Delta IP (91-07)$. The theory supporting the relevance of the instrument is that reforms in China led to a surge in its imports in many wealthy countries around the world and the US measure captures

²⁰This measure is from the replication data and files provided by Autor, Dorn and Hanson (2013).

²¹All reported regression results employ population weights. Note that commuter zones are constructed based on underlying county-level data based on location of residence and commute-to-work distance.

this general effect. One requirement for the exclusion restriction to hold is that we must also assume that changes in Chinese imports to other advanced economies only have an effect on US authoritarianism through their impact on Chinese imports into the US. This could be violated if, for example, US citizens paid attention to and responded to changes in other countries' economies directly. Given the low levels of information that citizens have about trade even in the US, let alone other countries, this seems unlikely (Rho and Tomz, 2017). As with all shift-share instruments, the exclusion restriction would be violated if the initial shares of labor concentration across industries are correlated with some other factor influencing authoritarian values. We implement a number of conditioning strategies such as controlling for initial levels of manufacturing and prior authoritarian values to further strengthen the plausibility of the exclusion restriction.

In terms of our hypotheses, three sets of parameter estimates are of direct interest. Hypothesis 1 refers to the marginal effect of economic change on authoritarian values. For individuals in low-diversity local labor markets, this quantity corresponds to β_1 while for individuals in high-diversity local labor markets this quantity corresponds to $\beta_1 + \beta_3$. Hypothesis 2 predicts that the marginal effect of economic change will be higher in high-diversity communities and this quantity is captured by β_3 .

4 Results

We first present baseline results from the OLS regression of average authoritarian values (*ASC*) on Chinese import competition, as well as its interaction with local diversity, on our sample of white respondents. As reported in column 1 of Table 1, the coefficient estimate on $\Delta IP (91-07)$ (β_1) is positive but not statistically significant. Once we condition the effect of import competition on local diversity in Column 2, we find that economic shocks are associated with significantly higher authoritarianism in regions with greater levels of diversity (the marginal effect of the trade shock in diverse commuting zones is equal to the sum of the coefficient on $\Delta IP (91-07)$ and the coefficient on the interaction term—i.e. $\beta_1 + \beta_3$). It is worth noting that the coefficient on diversity itself is negative, consistent with the idea that majority group members who select into

diverse regions are likely to have less intense preferences for homogeneity and order in the first place.²² These results are unchanged when we subsequently introduce our battery of individual- and regional-level covariates in column 3.

Of course, as mentioned above, if demand for imports is in part a function of economic conditions in differing parts of the US, our measure of $\Delta IP (91-07)$ may not be exogenous to labor market characteristics that could also affect authoritarianism. To address this concern, we replicate our primary specifications in an instrumental variables (IV) framework reported in Table 2, instrumenting for imports into the US with information on Chinese imports into other similar countries. The lower half of columns 1, 2, and 3 report the first stage results from our IV estimations; as can be seen, our instrument for Chinese imports in other developed economies ($\Delta IPO (91-07)$) is always a significant predictor of Chinese imports into the US.

Turning to our second-stage estimates, when employing an instrumental variable approach we recover evidence of an (unconditional) positive and statistically significant association between local import penetration and individual authoritarian values in column 1, although the substantive size of this effect is somewhat small. After including an interaction of the shock with local diversity in column 2, our estimates are quite similar to the OLS estimates and consistent with Hypotheses 1 and 2.

Employing the IV estimates in column 3 which also include control variables, Figure 3 summarizes the marginal effect of a one-standard deviation increase in $\Delta IP (91-07)$ on the authoritarian values of white respondents in low and high diversity communities. This is our preferred specification and allows us to evaluate all three quantities of interest relevant to our two hypotheses. As shown in the figure and consistent with Hypothesis 1, the marginal effect of the shock is positive and statistically significant in both low diversity (β_1) and high diversity ($\beta_1 + \beta_3$) places. The substantive magnitude of the effect is large for the high diversity cases: a one-standard deviation increase in $\Delta IP (91-07)$ is associated with approximately one-third of a standard deviation increase in ASC , whereas a one-standard deviation increase in the shock is associated with about half that much change in less diverse areas. The confidence intervals in the figure also indicate,

²²For a discussion of regional sorting by cosmopolitan values in Europe, see Maxwell (2019).

VARIABLES	(1) ASC	(2) ASC	(3) ASC
Δ IP (91-07)	0.024 (0.015)	0.005 (0.016)	0.022 (0.018)
Diversity		-0.179*** (0.058)	-0.141** (0.064)
Diversity* Δ IP (91-07)		0.107*** (0.029)	0.106*** (0.030)
Female			-0.011 (0.033)
Age			0.009*** (0.001)
University			-0.224*** (0.041)
College			-0.167*** (0.037)
Married			0.039 (0.035)
Has children			0.179*** (0.041)
Manufacturing			-0.426 (0.290)
% Foreign Born			-0.002 (0.002)
Δ % Foreign Born			0.012 (0.010)
Observations	1,225	1,225	1,225
R-squared	0.002	0.009	0.118
Commuting zones	324	324	324

Table 1: OLS: Trade Shock Exposure and Authoritarianism. The table shows results from an OLS regression of the variable *ASC* on the trade shock measure Δ *IP* (91-07). In column 2, a dummy variable for living in a diverse county and an interaction between the diversity variable and the trade shock variable are added. In column 3, a set of controls are added. Standard errors are clustered at the commuting zone-level and reported in parentheses. Significance levels are reported in the following way: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

consistent with Hypothesis 2, that the estimates are significantly different from each other with the larger estimates for the diverse communities. Thus, we find strong evidence consistent with our core hypotheses regarding the effects of economic shocks on authoritarian values, as conditioned by local ethnic and racial geography.

Given our theoretical framework, all of our main analyses have been estimated on white respondents only. Our expectation is that the value effects of long-run economic decline should be very different for individuals who are not part of traditional dominant social groups. Specifically, there is no reason to think that authoritarian values would provide compensating identity payoffs for non-white respondents, regardless of local diversity. Consistent with this expectation, if we conduct our analysis on the subsample of respondents who do not identify as white, there is no effect of trade shocks on authoritarian values (as reported in Table A.9). While one concern here might be due to loss in statistical power—our sample of non-white respondents is about half the size of our white respondent sample—it is worth noting that other correlates of authoritarian values (such as education and age) remain statistically significant in this specification. In addition, the size of the coefficient on the interaction between trade shocks and local racial diversity in the non-white sample is approximately one-tenth the size of that in the white sample, suggesting that the lack of a significant association between local economic decline and authoritarian values in non-majority populations is indeed unlikely to arise. This is consistent with our theoretical account emphasizing the importance of compensating values in the face of declining social status for the majority group.²³

4.1 Robustness

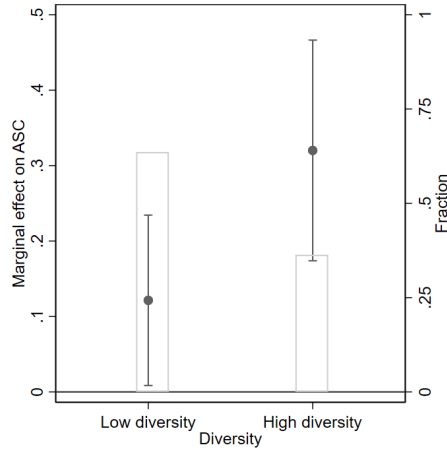
The core finding from our baseline specifications is maintained across a host of robustness checks; in the interest of space, we simply discuss these results here and report the output in the Appendix. To begin, we include several additional covariates—at the individual and regional level—to our primary specifications. The first is a measure of *Household Income*; while including this variable

²³If we run our analysis on our full sample of respondents, our main results are robust but the size of the effect is attenuated, as should be expected if we are pooling whites (for whom there is a large effect) and non-whites (for whom there is no effect) together.

2ND STAGE	(1) ASC	(2) ASC	(3) ASC
Δ IP (91-07)	0.038** (0.017)	0.019 (0.019)	0.060** (0.028)
Diversity		-0.151** (0.066)	-0.124* (0.069)
Diversity* Δ IP (91-07)		0.091*** (0.034)	0.098*** (0.033)
Female			-0.012 (0.033)
Age			0.009*** (0.001)
University			-0.220*** (0.041)
College			-0.166*** (0.037)
Married			0.037 (0.035)
Has children			0.180*** (0.041)
Manufacturing			-0.782** (0.365)
% Foreign Born			-0.003 (0.002)
Δ % Foreign Born			0.012 (0.010)
1ST STAGE	Δ IP	Δ IP	Δ IP
Δ IPO (91-07)	1.179*** (0.068)	1.206*** (0.079)	1.074*** (0.088)
Diversity		0.142 (0.146)	0.204 (0.148)
Diversity* Δ IPO (91-07)		-0.121 (0.128)	-0.157 (0.129)
Controls			✓
Observations	1,225	1,225	1,225
R-squared	0.002	0.008	0.115
Weak ID F stat	300.6	117.6	84.10

Table 2: IV: Trade Shock Exposure and Authoritarianism. The table shows first stage and second stage results from an IV regression of the variable *ASC* on the trade shock measure ΔIP (91-07), using the variable ΔIPO (91-07) as instrument. In column 2, a dummy variable for living in a diverse county and an interaction between the diversity variable and the trade shock variable are added. In column 3, a set of controls are added. Standard errors are clustered at the commuting zone-level and reported in parentheses. Significance levels are reported in the following way: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Figure 3: Marginal Effect of Trade Shock Exposure on Authoritarian Values



Notes: The plot shows the marginal effect of a one standard deviation increase in trade shock exposure for low and high diversity commuting zones on the ASC measure of authoritarian values expressed as a standard deviation change (dot is the point estimate and whiskers are the 95% confidence interval). The plot is based on the IV estimates in Table 2 with control variables. The histogram indicates the fraction of observations in low and high density commuting zones.

may introduce post-treatment bias, as reported in column 1 of Appendix Table A.4 our primary findings are unchanged if we include this measure. Given early work on the strong association between authoritarian values and religious belief, we also introduce a measure capturing individual *Religious Importance* in column 2; this measure is indeed strongly positively correlated with *ASC*, but its inclusion has no perceptible consequence for our primary estimates of interest. Column 3 introduces a measure of individual belief that success is due to hard work (as opposed to luck), which is also found to be strongly associated with authoritarian values but has no appreciable effect on the interaction of *Diversity** Δ *IP* (91-07).

At the regional level, we introduce county-level measures capturing the percentage of the population that lives in *Rural* areas in column 4 and a (logged) measure of *Total Population* in column 5; as expected, individuals from smaller and more rural counties do report somewhat higher average levels of authoritarianism, but our core estimate of interest remains unchanged. Given concerns over the possibility of regional concentration of high shock areas with greater racial diversity, column 6 introduces dummies for the main *Regions* of the US; while respondents from the US South do report somewhat higher levels of *ASC* than the baseline levels (in the Midwest), this effect no longer remains significant in Column 7 once we introduce all of the aforementioned

covariates simultaneously. Crucially for our purposes, in all of these specifications we continue to find positive (and statistically significant) evidence that individuals in racially-diverse regions more exposed to Chinese imports have higher average authoritarian values.

Beyond controlling for a host of additional covariates, we also probe the robustness of our results to different operationalizations of our shock measure. We continue to find a positive and statistically significant interaction between diversity and shock intensity after transforming our shock variable into its natural log, or instead simply dichotomizing regions into “high” versus “low” shock areas.²⁴ In addition, while we follow convention in constructing our import competition measure over the period 1991-2007 in order to avoid confounding effects of the Great Recession, our core findings are robust to selecting several different base and end years for the time period.²⁵

Finally, while our baseline specification identifies regions as “diverse” when the share of the population that is non-white exceeds 30%—corresponding approximately to the top tercile of diverse counties—this threshold is somewhat arbitrary. In Appendix Table A.5, we replicate our core specification with varying thresholds for classifying a community as diverse. We continue to find strong support for our hypothesized positive interaction of $Diversity * \Delta IP (91-07)$ employing thresholds that range from the top quarter to the top half of regions in terms of diversity. As should be expected, for thresholds that include more racially homogeneous areas in our “diverse” measure, we fail to recover a significant effect of import penetration on authoritarian values.²⁶

5 Interpretation

5.1 Sorting

One potential concern with our interpretation of our estimates is that they could be due to geographic sorting rather than value change. Two types of sorting seem relevant. First, if more

²⁴Results available upon request.

²⁵More specifically, we consider five different time periods: 1991-1999, 1991-2007, 1991-2011, 1999-2007, and 1999-2011. Results available upon request.

²⁶In the main results, the measure of authoritarianism averaged across the three dimensions of authoritarian aggression, submission, and conventionalism. We also estimated our OLS and IV specifications for all 3 subdimensions separately and, as reported in Appendix Tables A.6, A.7, and A.8, we generally find evidence of a positive marginal effect of import penetration on each for respondents in diverse areas.

authoritarian individuals sorted into industries and regions later hit by the China trade shock, our estimates might be spurious. We have, however, already controlled for most of the factors that would plausibly lead to such sorting – e.g., the percent employed in manufacturing at the beginning of the period, whether or not the area was rural, and the size of the population. We explore this further by collecting data from the American National Election Studies. We identify a set of questions in the ANES from 1990 through 2016 that plausibly measure authoritarian aggression, conventionalism, and submission.²⁷ In each survey wave, we conduct factor analysis among white respondents on this set of questions which yields three separate dimensions with eigenvalues greater than one; each of these dimensions loads on to the questions we included as likely to be associated with authoritarian values. Although China’s integration into the world economy certainly started in the 1990s, it became much more intense after it joined the WTO in 2001. To include as many geographic regions as possible, we pool all available ANES waves prior to Chinese WTO accession and calculated average “pre-trade shock” authoritarian values (based on the underlying three dimensions from the factor analysis) for each county available; we similarly pool all ANES waves following 2001 to generate average “post-trade shock” values by county.²⁸

We use these data to evaluate concerns about pre-trade-shock sorting. First, we merge the ANES county-level measures with our individual-level survey data. We regress our *ASC* measure on the ANES “pre-shock” measure and find that they are positively but somewhat weakly correlated.²⁹ This is consistent with the pre-sorting concern. We then regress our *ASC* measure on the ANES “post-shock” measure and find that they are strongly positively correlated.³⁰ The strengthening of this relationship is inconsistent with the view that evidence above is driven only by pre-trade-shock geographic sorting of authoritarian types. If individuals were geographically sorted by authoritarian values prior to the sharp rise in Chinese import competition, including this measure of pre-shock sorting into our primary regressions should attenuate our main effect if

²⁷See Appendix B for further details.

²⁸This generates average authoritarian values for 549 counties in the “pre-trade shock” period and 1,443 counties in the “post-trade shock” period.

²⁹ $p < 0.1$

³⁰ $p < 0.001$

this primarily arises due to pre-period sorting of types. However, as demonstrated in Column 4 in Appendix Table A.10, our key results are robust to including this control.³¹

The second type of sorting is in response to the trade shock. If individuals respond to economic shocks in their area by leaving regions more hard hit by crisis, and if capacity for geographic mobility is correlated with individual authoritarian values, then our observed association between regions hit by economic downturn and average authoritarian values may be driven by locational sorting, not by changes in values themselves. While conceptually plausible, we note first that existing literature shows a relatively modest response in terms of geographic mobility across local labor markets in response to trade shocks (Autor, Dorn and Hanson, 2013). In addition, recent work has found that regional labor mobility in the US, while quite high from the 1950s through the late 1980s, has declined precipitously over the past 25 years (Kaplan and Schulhofer-Wohl, 2017). Thus, there are reasons to suspect that individuals have not actually sorted themselves following trade shocks.

However, to address this issue, we included a question in our survey asking respondents whether they had moved their primary residence over the past 20 years. We restrict our analysis only to those individuals who report not having moved in the past two decades. As reported in Columns 1-3 of Appendix Table A.10, we continue to find a strongly positive and statistically significant relationship between trade shock exposure and authoritarian values among respondents who live in diverse areas and have not moved over the past 20 years.

5.2 Effects on Voting Behavior

Our motivating discussion at the outset of this paper highlighted the role of a “backlash against globalization” as an important account of the election of Donald Trump to the office of President. Further, we showed that authoritarian values were strongly associated with voting for Trump and highlighted a larger literature that has suggested that authoritarian values are important for understanding political behavior. Thus, it is natural to ask the question of whether import shocks

³¹Note that we lose a significant number of observations because of individuals in our sample who live in counties not represented in the ANES from 1990 to 1998.

explain voting behavior in the 2016 US presidential election. This general idea has been explored by other researchers but they have primarily emphasized policy voting (voting for Trump because he offered protectionist policy alternatives), retrospective voting (voting for Trump because he was the anti-establishment alternative and as such not responsible for prior economic outcomes), and ideological polarization (voting for Trump among those with prior ideological beliefs that government should have a limited role in the economy because he was offering a more extreme alternative of that policy disposition).³² In this paper, we argue that a fourth mechanism is value change as trade shocks lead voters to adopt more authoritarian values and expect for this effect to be greater in more diverse geographic regions.

While we demonstrated above a remarkably robust association between our measure of *ASC* and support for Donald Trump, we present here results of a “reduced form” exercise in which we directly regress presidential vote choice by our survey respondents on our measure of Chinese trade competition.³³ As demonstrated in Table 3, we find that white individuals living in more diverse regions exposed to greater import penetration are significantly more likely to report voting for Donald Trump, even after including our battery of individual- and regional-level controls. Interpreting our coefficients in the context of a linear probability model, the implied substantive effect of this is quite large: a standard deviation increase in $\Delta IP (91-07)$ in a diverse region is associated with an increased probability of voting for Donald Trump of approximately 13 percentage points.

6 Conclusion

Several recent studies conclude that globalization has had important economic and political consequences all over the developed world. However, our understanding of the potential link between globalization and the rise of populism and why globalization would lead to the types of authoritarian political reactions that have characterized so many countries is very limited. The main argument of this paper is that long-run economic changes from globalization have a negative

³²Che et al. (2016); Jensen, Quinn and Weymouth (2017); Autor et al. (2017)

³³For the IV estimates to have a causal interpretation here, the exclusion restriction must hold: vote choice for Donald Trump should not be influenced by local Chinese import penetration except via its consequences on individual values.

VARIABLES	(1) Trump (OLS)	(2) Trump (IV)
$\Delta IP (91-07)$	0.024 (0.016)	0.053** (0.025)
Diversity	-0.113 (0.069)	-0.137** (0.068)
Diversity* $\Delta IP (91-07)$	0.086** (0.034)	0.104*** (0.034)
Female	-0.095*** (0.028)	-0.097*** (0.028)
Age	0.005*** (0.001)	0.005*** (0.001)
University	-0.180*** (0.039)	-0.175*** (0.039)
College	-0.095*** (0.034)	-0.094*** (0.034)
Married	0.098*** (0.032)	0.095*** (0.031)
Has children	0.021 (0.044)	0.020 (0.043)
Manufacturing	-0.291 (0.237)	-0.626** (0.297)
% Foreign Born	-0.007*** (0.002)	-0.007*** (0.002)
$\Delta \% Foreign Born$	0.020*** (0.008)	0.021*** (0.008)
1ST STAGE	N/A	ΔIPO
$\Delta IPO (91-07)$		1.173*** (0.087)
Diversity		0.193 (0.148)
Diversity* $\Delta IPO (91-07)$		-0.129 (0.125)
Controls		✓
Observations	1,023	1,023
R-squared	0.122	0.119
Weak ID F stat		105.4

Table 3: OLS & IV: Trade Shock Exposure and Voting. This table shows results of an OLS regression of a dummy variable for voting for Trump regressed on the trade shock measure $\Delta IP (91-07)$ in column 1, and an IV regression of a dummy variable for voting for Trump regressed on the trade shock measure $\Delta IP (91-07)$ using the variable $\Delta IPO (91-07)$ as instrument in column 2. Standard errors are clustered at the commuting zone-level and reported in parentheses. Significance levels are reported in the following way: *** p<0.01, ** p<0.05, * p<0.1.

impact on the social identity of historically dominant groups. This leads to an increase in authoritarian values because of an increased incentive to force minority groups to conform to social norms. We further argue that the effect of economic changes from globalization on authoritarian values is greater the larger the relative size of minority groups in the population.

We test our argument using data from the U.S. on local labor markets and local demographics, and an original representative survey of the U.S. population with detailed measures of authoritarian values. In particular, we study the effect of local labor market shocks induced by China's integration with the world economy during the 1990s and 2000s on individual authoritarian values. To test the majority-minority group dynamics from our theoretical model, we study this on a sample of white respondents only (representing the historically dominant group in the U.S.) and we test whether the effect of the trade shocks varies by size of minority groups in the local population. Consistent with these hypotheses, we find that individuals in regions where labor markets were more exposed to increased imports from China, and where the local population is more diverse, express more authoritarian values. We furthermore find that individuals in these areas were more likely to vote for Donald Trump in the 2016 election.

Our paper contributes to existing literatures in at least three important ways. First, it sheds new light on the sources of populism and support for extreme parties and candidates. Our findings show that changes in authoritarian values caused by changes in economic conditions and labor market status is one mechanism through which globalization can lead to support for extreme candidates. This implies that explanations for the election of Trump, and the rise of extreme candidates and parties in general, cannot be simplified to either pure economic self-interest or pure non-economic values. In fact, our study shows that economic conditions and non-economic values interact in important ways to shape political opinions and behavior.

Second, we shed new light on the origins of authoritarian values. Authoritarian values are known to be an important predictor of political preferences and behavior, but we know very little about where these values come from. Our results show that at least parts of authoritarian values are sensitive to contemporary economic and social conditions.

Third, our study highlights the importance of understanding how certain types of economic

shocks might affect social identity and status, and ultimately political behavior. Here, it is important to note that there presumably are differing social identity effects of and political responses to different types of economic shocks. China's integration with the world economy caused a specific type of labor market change. The result of increased Chinese import penetration was a permanent negative shock to demand for certain types of domestic workers and hence put these workers on a very different life path in terms of career and income. This is very different from business cycle-type unemployment shocks which are often temporary and idiosyncratic. In addition, the shocks from Chinese import penetration were highly geographically concentrated, which is again different from other economic shocks, and which might have important consequences for the political effects. A better understanding of how economic changes affect values and ultimately political behavior—and how effects vary depending on the nature of the economic shocks—is an important direction for future research.

References

- Acemoglu, Daron, David Autor, David Dorn, Gordon Hanson and Brendan Price. 2016. "Import Competition and the Great US Employment Sag of the 2000s." *Journal of Labor Economics* 34(S1):141–198.
- Akerlof, George A. and Rachel E. Kranton. 2000. "Economics and Identity." *The Quarterly Journal of Economics* 115(3):715–753.
- Altemeyer, Bob. 1981. *Right-Wing Authoritarianism*. Winnipeg: University of Manitoba Press.
- Autor, David, David Dorn and Gordon Hanson. 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." *American Economic Review* 103(3):2121–2168.
- Autor, David, David Dorn and Gordon Hanson. 2018. "When Work Disappears: Manufacturing Decline and the Falling Marriage Market Value of Young Men." *MIT Working Paper* .

- Autor, David, David Dorn, Gordon Hanson and Kaveh Majlesi. 2017. “Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure.” *MIT Working Paper* .
- Autor, David, David Dorn, Gordon Hanson, Kaveh Majlesi et al. 2019. “Importing political polarization? The electoral consequences of rising trade exposure.”
- Baccini, Leonardo and Stephen Weymouth. 2019. “Gone for Good: Deindustrialization, white voter backlash, and U.S. presidential voting.” *Georgetown University Working Paper* .
- Broz, J Lawrence, Jeffry Frieden and Stephen Weymouth. 2019. “Populism in place: the economic geography of the globalization backlash.” *Prepared for a Special Issue of International Organization* .
- Che, Yi, Yi Lu, Justin Pierce, Peter Schott and Zhigang Tao. 2016. “The Effects of Global Competition on Attitudes in Western Europe.” *Working Paper* .
- Colantone, Italo and Piero Stanig. 2018a. “Global Competition and Brexit.” *American Political Science Review* 112(2):201–218.
- Colantone, Italo and Piero Stanig. 2018b. “The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe.” *American Journal of Political Science* .
- Doty, Richard M, Bill E Peterson and David G Winter. 1991. “Threat and Authoritarianism in the United States, 1978–1987.” *Journal of Personality and Social Psychology* 61(4):629.
- Duckitt, John, Boris Bizumic, Stephen Krauss and Edna Heled. 2010. “A Tripartite Approach to Right-Wing Authoritarianism: The Authoritarianism-Conservatism-Traditionalism Model.” *Political Psychology* 31(5):685–715.
- Dunwoody, Philip and Friedrich Funke. 2016. “The Aggression-Submission-Conventionalism Scale: Testing a New Three Factor Measure of Authoritarianism.” *Journal of Social and Political Psychology* 4(2):571–600.

- Feigenbaum, James J. and Andrew B. Hall. 2015. “How Legislators Respond to Localized Economic Shocks: Evidence from Chinese Import Competition.” *Journal of Politics* 77(4):1012–1030.
- Feldman, Stanley. 2003. “Enforcing Social Conformity: A Theory of Authoritarianism.” *Political Psychology* 24(1):41–74.
- Fromm, Eric. 1941. *Escape From Freedom*. New York: Farrar Rinehart.
- Gidron, Noam and Peter A Hall. 2017. “The Politics of Social Status: Economic and Cultural Roots of the Populist Right.” *The British Journal of Sociology* 68(S1).
- Grossman, Gene M and Elhanan Helpman. 2018. Identity politics and trade policy. Technical report National Bureau of Economic Research.
- Guisinger, Alexandra. 2017. “Preferences without Politics: American Opinion on Trade.” *Temple University* .
- Haynes, Bruce. 2016. “Two Trends, One Trigger. The 25 Year Tide that Gave Us Trump.”.
- Hays, Jude, Junghyun Lim and Jae-Jae Spoon. 2019. “The path from trade to right-wing populism in Europe.” *Electoral Studies* 60:102038.
- Hetherington, Marc J and Jonathan D Weiler. 2009. *Authoritarianism and Polarization in American Politics*. Cambridge: Cambridge University Press.
- Inglehart, Ronald and Pippa Norris. 2016. “Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash.” *HKS Faculty Research Working Paper Series RWP16-026* .
- Jardina, Ashley. 2019. *White identity politics*. Cambridge University Press.
- Jensen, J. Bradford, Dennis P. Quinn and Stephen Weymouth. 2017. “Winners and Losers in International Trade: The Effects on US Presidential Voting.” *International Organization* 71(3):423–457.

- Kaplan, Greg and Sam Schulhofer-Wohl. 2017. "Understanding the long-run decline in interstate migration." *International Economic Review* 58(1):57–94.
- Lipset, Seymour Martin. 1959. *Political Man: The Social Bases of Politics*. New York: Doubleday Company.
- MacWilliams, Matthew C. 2016. "Who Decides When the Party Doesn't? Authoritarian Voters and the Rise of Donald Trump." *PS: Political Science and Politics* 49(4):716–721.
- Margalit, Yotam. 2019. "Political Responses to Economic Shocks." *Annual Review of Political Science* 22(1):null.
- Maxwell, Rahsaan. 2019. "Cosmopolitan immigration attitudes in large European cities: Contextual or compositional effects?" *American Political Science Review* 113(2):456–474.
- Mudde, Case and Cristobal Rovira Kaltwasser. 2017. *Populism: A Very Short Introduction*. Oxford: Oxford University Press.
- Mutz, Diana C. 2018. "Status threat, not economic hardship, explains the 2016 presidential vote." *Proceedings of the National Academy of Sciences* .
URL: <http://www.pnas.org/content/early/2018/04/18/1718155115>
- Perrin, Andrew J. 2005. "National Threat and Political Culture: Authoritarianism, Anti-authoritarianism, and the September 11 Attacks." *Political Psychology* 26(2):167–194.
- Pierce, Justin R and Peter K Schott. 2016. Trade Liberalization and Mortality: Evidence From US Counties. Technical report National Bureau of Economic Research.
- Rho, Sungmin and Michael Tomz. 2017. "Why Don't Trade Preferences Reflect Economic Self-Interest?" *International Organization* 71(S1):S85–S108.
- Richey, Sean. 2012. "Campaign Advertising and the Stimulation and Activation of the Authoritarian Personality." *Political Communication* 29(1):24–43.

- Rodrik, Dani. 2018. "Populism and the Economics of Globalization." *Journal of International Business Policy* .
- Rokeach, Milton. 1960. *The Open and Closed Mind: Investigations into the Nature of Belief Systems and Personality Systems*. New York: Basic Books.
- Rothwell, Jonathan and Pablo Diego-Rosell. 2016. "Explaining nationalist political views: The case of Donald Trump." *Gallup Working Paper* .
- Sales, Stephen M. 1973. "Threat as a Factor in Authoritarianism: An Analysis of Archival Data." *Journal of Personality and Social Psychology* 28(1):44.
- Sides, John, Michael Tesler and Lynn Vavreck. 2019. *Identity crisis: The 2016 presidential campaign and the battle for the meaning of America*. Princeton University Press.
- Sniderman, Paul M, Pierangelo Peri and Rui JP de Figueiredo Jr. 2002. *The Outsider: Prejudice and Politics in Italy*. Princeton: Princeton University Press.
- Stenner, Karen. 2005. *The Authoritarian Dynamic*. Cambridge: Cambridge University Press.
- Tajfel, Henri. 1981. *Human Groups and Social Categories*. Cambridge: Cambridge University Press.
- Tajfel, Henri and John Turner. 1979. An Integrative Theory of Intergroup Conflict. In *The Social Psychology of Intergroup Relations*, ed. William G. Austin and Stephen Worchel. Monterey: Wadsworth pp. 33–47.
- Taub, Amanda. 2016. "The rise of American authoritarianism." .
URL: <https://www.vox.com/2016/3/1/11127424/trump-authoritarianism>

Online Appendix for “Economic Decline, Social Identity, and Authoritarian Values in the United States”

A Sample

The survey was conducted in September 2017 by YouGov. YouGov employs matched sampling to approximate a random sample of the adult population. Matched sampling involves taking a stratified random sample of the target population and then matching available internet respondents to the target sample (Rivers 2011). Ansolabehere and Rivers (2013) and Ansolabehere and Schaffner (2014) show that matched sampling produces accurate population estimates and replicates the correlational structure of random samples using telephones and residential addresses. The respondents were matched to a sampling frame based on gender, age, race, education, party identification, ideology, and political interest. The frame was constructed by stratified sampling from the full 2010 American Community Survey (ACS) sample with selection within strata by weighted sampling with replacements (using the person weights on the public use file). Data on voter registration status and turnout were matched to this frame using the November 2010 Current Population Survey. Data on interest in politics and party identification were then matched to this frame from the 2007 Pew Religious Life Survey. The matched cases were weighted to the sampling frame using propensity scores. The matched cases and the frame were combined and a logistic regression was estimated for inclusion in the frame. The propensity score function included age, gender, race/ethnicity, years of education, and ideology. The propensity scores were grouped into deciles of the estimated propensity score in the frame and post-stratified according to these deciles.

- Interview period: September 2017
- Sample size: 1,800
- Source of data on population socio-demographics: US Census
- Weights range from 0.144 to 5.076, with a mean of 1 and a standard deviation of 0.39.

Table A.1: Distribution of Socio-demographics in the Survey Sample and the Population.

Group	Population	Weighted Sample	Raw Sample
Gender: Male	49.2	48.6	47.3
Gender: Female	50.8	51.3	52.7
Age: 18-34	30.1	31.7	29.6
Age: 35-54	33.0	31.3	30.1
Age: 55+	36.8	35.5	38.9
Bachelor's degree or greater:	30.3	25.6	28.9
HS or greater:	87.0	91.3	92.5

Notes: The table shows the distributions of socio-demographics in the population, the weighted sample, and the raw sample. See text for data sources on the population socio-demographics.

B ANES Regional Data

The American National Election Study has collected nationally-representative panels of American voters for many years. While the exact survey questions included have varied somewhat over time, there are a set of questions that approximate our three subdimensions of authoritarian values that have appeared consistently in the ANES since 1990. More precisely, we argue that the *authoritarian aggression* subdimension is likely to be well proxied by an individual’s preference over the use of the death penalty; the ANES includes questions asking about respondent support for the use of the death penalty to punish respondents convicted of murder, and also asks separately about the strength of support or opposition to the death penalty. We next argue that questions about appropriate values for child rearing should serve as a close proxy for *authoritarian submission*; these questions ask respondents to report whether they favor children who are respectful versus obedient, well-mannered versus curious, obedient versus self-reliant, and well-behaved versus considerate. Finally, the *authoritarian conventionalism* subdimension is quite closely related to a battery of questions that the ANES labels as “moral traditionalism;” these questions ask respondents whether they believe that society should adjust its values in light of a changing world, whether newer lifestyles are contributing to the breakdown of society, whether individuals should be more tolerant of others who live differently, and whether the country would be better off with more emphasis on traditional family ties.

We collected responses to each of these questions for the following ANES survey waves: 1990, 1992, 1994, 1996, 1998, 2000, 2004, 2008, 2012, and 2016.¹ We then performed principal component analysis on the full set of questions listed above for respondents who self-identified as white. In each case, factor analysis identified three subdimensions with eigenvalues greater than one. In each case, the questions on child rearing all loaded strongly onto one dimension, which we labeled “submission;” the questions on the death penalty loaded strongly onto another dimension, which we labeled “aggression;” and the moral traditionalism questions loaded strongly onto the third dimension, which we labeled “conventionalism.”²

Having generated these measures of authoritarianism based on ANES data, we generated average values for each subdimension at the county level (based on the arithmetic mean of such values for all respondents in a given county). These provided county-level averages of our three dimensions of authoritarian aggression, submission, and conventionalism. However, as there was not sufficient coverage of all US counties in a given survey wave, in order to maximize potential geographic coverage we subsequently generated a “pre-trade shock” measure of average authoritarian values by pooling data for all survey waves fielded prior to China’s accession to the WTO in 2001, as well as a “post-trade shock” measure that pooled across all waves after 2001. Finally, we calculated our average regional ASC measure by taking the average of the regional measures for aggression, submission, and conventionalism.

¹The 2002 wave did not contain these questions, and so was omitted. Note that the 1996 and 1998 waves did not contain questions about child rearing, and the 1990 wave only contained one such question.

²For the 1996 and 1998 waves, there were only two dimensions identified, as there were no questions on child rearing.

C ASC Component Questions

Dunwoody & Funke (2016) propose a battery of 18 questions to capture three distinct sub-dimensions of authoritarianism that they call “aggression, submission, and conventionalism.” Each dimension is measured by taking the average level of support across six questions, three of which are protrait and three of which are contrait and are therefore reverse coded. The exact set of questions for each dimension is provided below:

Authoritarian Aggression

Strong force is necessary against threatening groups.
 It is necessary to use force against people who are a threat to authority.
 Police should avoid using violence against suspects.*
 People should avoid using violence against others even when ordered to do so by the proper authorities.*
 Using force against people is wrong even if done so by those in authority.*
 Strong punishments are necessary in order to send a message.

Authoritarian Submission

We should believe what our leaders tell us.
 Our leaders know what is best for us.
 People should be critical of statements made by those in positions of authority.*
 People in positions of authority generally tell the truth.
 People should be skeptical of all statements made by those in positions of authority.*
 Questioning the motives of those in power is healthy for society.*

Conventionalism

People emphasize tradition too much.*
 Traditions are the foundation of a healthy society and should be respected.
 It would be better for society if more people followed social norms.
 Traditions interfere with progress.*
 People should challenge social traditions in order to advance society.*
 People should respect social norms.
 * = reverse coding.

D Additional Tables

Table A.2: *Summary Statistics for ACS Components*

	Count	Mean	Variance	Min	Max
Avg. Aggression	1787	2.97	0.81	1	5
Avg. Submission	1787	2.28	0.67	1	4.3
Avg. Conventionalism	1787	3.22	0.76	1	5

Table A.3: *Correlation Matrix for ACS Components*

	Avg. Aggression	Avg. Submission	Avg. Conventionalism
Avg. Aggression	1.000		
Avg. Submission	0.336	1.000	
Avg. Conventionalism	0.530	0.318	1.000

VARIABLES	(1) ASC	(2) ASC	(3) ASC	(4) ASC	(5) ASC	(6) ASC	(7) ASC
$\Delta IP (91-07)$	0.023 (0.018)	0.023 (0.017)	0.019 (0.017)	0.010 (0.018)	0.015 (0.018)	0.016 (0.019)	0.006 (0.018)
Diversity	-0.154** (0.066)	-0.187*** (0.065)	-0.137** (0.060)	-0.145** (0.063)	-0.133** (0.060)	-0.142** (0.064)	-0.184*** (0.058)
Diversity* $\Delta IP (91-07)$	0.109*** (0.030)	0.104*** (0.033)	0.100*** (0.027)	0.109*** (0.029)	0.108*** (0.029)	0.101*** (0.030)	0.105*** (0.028)
Female	-0.014 (0.033)	-0.051* (0.029)	-0.007 (0.032)	-0.012 (0.033)	-0.014 (0.033)	-0.010 (0.033)	-0.045 (0.029)
Age	0.009*** (0.001)	0.006*** (0.001)	0.009*** (0.001)	0.009*** (0.001)	0.009*** (0.001)	0.009*** (0.001)	0.006*** (0.001)
University	-0.228*** (0.047)	-0.187*** (0.040)	-0.213*** (0.038)	-0.208*** (0.040)	-0.213*** (0.039)	-0.221*** (0.040)	-0.171*** (0.041)
College	-0.169*** (0.038)	-0.144*** (0.035)	-0.155*** (0.037)	-0.158*** (0.038)	-0.162*** (0.038)	-0.165*** (0.038)	-0.125*** (0.036)
Married	0.033 (0.040)	-0.000 (0.033)	0.026 (0.033)	0.042 (0.035)	0.040 (0.034)	0.040 (0.035)	-0.007 (0.034)
Has children	0.182*** (0.041)	0.142*** (0.040)	0.154*** (0.040)	0.169*** (0.040)	0.175*** (0.040)	0.179*** (0.041)	0.124*** (0.038)
Manufacturing	-0.429 (0.293)	-0.521* (0.268)	-0.375 (0.282)	-0.403 (0.285)	-0.363 (0.286)	-0.292 (0.292)	-0.362 (0.265)
% Foreign Born	-0.002 (0.002)	0.000 (0.002)	-0.001 (0.002)	0.002 (0.002)	0.004 (0.003)	-0.002 (0.002)	0.005** (0.003)
Δ % Foreign Born	0.012 (0.010)	0.012 (0.009)	0.011 (0.009)	0.021** (0.009)	0.014 (0.010)	0.009 (0.011)	0.012 (0.009)
HH income	0.002 (0.007)						0.000 (0.006)
Religion is important		0.449*** (0.031)					0.402*** (0.030)
Success comes from hard work			0.322*** (0.033)				0.250*** (0.031)
Rural pop. (%)				0.004*** (0.001)			0.001 (0.001)
Total pop. (logged)					-0.057*** (0.016)		-0.023 (0.021)
Northeast						0.059 (0.057)	0.083* (0.047)
South						0.085* (0.049)	0.045 (0.046)
West						0.042 (0.052)	0.015 (0.050)
Observations	1,217	1,225	1,225	1,225	1,225	1,225	1,217
R-squared	0.118	0.240	0.187	0.131	0.128	0.121	0.290
Commuting zones	323	324	324	324	324	324	323

Table A.4: OLS: Trade Shock Exposure and Authoritarianism (Add. Covariates). The table shows results from an OLS regression of the variable ASC on the trade shock measure $\Delta IP (91-07)$, a dummy variable for living in a diverse county, an interaction between the diversity variable and the trade shock variable, and different sets of control variables. Standard errors are clustered at the commuting zone-level and reported in parentheses. Significance levels are reported in the following way: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

VARIABLES	(1) ASC (OLS)	(2) ASC (OLS)	(3) ASC (OLS)	(4) ASC (OLS)	(5) ASC (OLS)	(6) ASC (OLS)	(7) ASC (OLS)
Δ IP (91-07)	0.037** (0.018)	0.033* (0.018)	0.028 (0.018)	0.022 (0.019)	0.023 (0.019)	0.019 (0.021)	0.026 (0.019)
Diversity (10th pc)	0.072 (0.093)						
Diversity (10th pc)* Δ IP (91-07)	0.026 (0.045)						
Diversity (25th pc)		-0.089 (0.067)					
Diversity (25th pc)* Δ IP (91-07)		0.087*** (0.032)					
Diversity (33rd pc)			-0.120* (0.064)				
Diversity (33rd pc)* Δ IP (91-07)			0.098*** (0.027)				
Diversity (50th pc)				-0.141** (0.062)			
Diversity (50th pc)* Δ IP (91-07)				0.075** (0.029)			
Diversity (67th pc)					-0.089 (0.063)		
Diversity (67th pc)* Δ IP (91-07)					0.038 (0.030)		
Diversity (75th pc)						-0.114* (0.065)	
Diversity (75th pc)* Δ IP (91-07)						0.035 (0.029)	
Diversity (90th pc)							-0.139* (0.077)
Diversity (90th pc)* Δ IP (91-07)							0.013 (0.026)
Female	-0.008 (0.033)	-0.011 (0.033)	-0.012 (0.033)	-0.011 (0.033)	-0.011 (0.033)	-0.012 (0.033)	-0.013 (0.033)
Age	0.009*** (0.001)	0.009*** (0.001)	0.009*** (0.001)	0.009*** (0.001)	0.009*** (0.001)	0.009*** (0.001)	0.009*** (0.001)
University	-0.221*** (0.041)	-0.221*** (0.041)	-0.225*** (0.041)	-0.222*** (0.041)	-0.222*** (0.041)	-0.221*** (0.041)	-0.219*** (0.041)
College	-0.164*** (0.038)	-0.164*** (0.037)	-0.168*** (0.037)	-0.167*** (0.038)	-0.165*** (0.037)	-0.162*** (0.038)	-0.160*** (0.037)
Married	0.042 (0.035)	0.041 (0.036)	0.040 (0.035)	0.037 (0.034)	0.039 (0.035)	0.038 (0.035)	0.043 (0.035)
Has children	0.178*** (0.041)	0.181*** (0.041)	0.178*** (0.041)	0.181*** (0.041)	0.182*** (0.041)	0.181*** (0.041)	0.178*** (0.041)
Manufacturing	-0.378 (0.295)	-0.442 (0.296)	-0.437 (0.291)	-0.406 (0.289)	-0.369 (0.294)	-0.349 (0.292)	-0.333 (0.294)
% Foreign Born	-0.003 (0.002)	-0.003 (0.002)	-0.002 (0.002)	-0.001 (0.002)	-0.001 (0.002)	-0.000 (0.002)	-0.000 (0.002)
Δ % Foreign Born	0.012 (0.010)	0.010 (0.010)	0.011 (0.009)	0.012 (0.010)	0.011 (0.010)	0.013 (0.010)	0.014 (0.010)
Observations	1,225	1,225	1,225	1,225	1,225	1,225	1,225
R-squared	0.113	0.114	0.116	0.116	0.113	0.114	0.115
Commuting zones	324	324	324	324	324	324	324

Table A.5: OLS: Trade Shock Exposure and Authoritarianism (Different diversity cutpoints). The table shows results from an OLS regression of the variable ASC on the trade shock measure $\Delta IP (91-07)$, a dummy variable for living in a diverse county, an interaction between the diversity variable and the trade shock variable, and different sets of control variables, for different cutpoints of the diversity definition. Standard errors are clustered at the commuting zone-level and reported in parentheses. Significance levels are reported in the following way: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

VARIABLES	(1) Aggr. (OLS)	(2) Aggr. (OLS)	(3) Aggr. (OLS)	(4) Aggr. (IV)	(5) Aggr. (IV)	(6) Aggr. (IV)
$\Delta IP (91-07)$	0.035 (0.022)	0.015 (0.025)	0.031 (0.029)	0.055** (0.026)	0.030 (0.030)	0.087** (0.042)
Diversity		-0.200** (0.091)	-0.110 (0.099)		-0.206** (0.102)	-0.123 (0.101)
Diversity* $\Delta IP (91-07)$		0.113** (0.045)	0.107** (0.045)		0.119** (0.053)	0.121** (0.049)
Female			-0.131*** (0.048)			-0.132*** (0.048)
Age			0.012*** (0.001)			0.012*** (0.001)
University			-0.298*** (0.064)			-0.292*** (0.064)
College			-0.123** (0.057)			-0.122** (0.057)
Married			0.060 (0.048)			0.055 (0.048)
Has children			0.222*** (0.054)			0.224*** (0.054)
Manufacturing			-0.433 (0.426)			-1.015** (0.514)
% Foreign Born			-0.006* (0.003)			-0.007** (0.003)
Δ % Foreign Born			0.020 (0.015)			0.021 (0.015)
Observations	1,225	1,225	1,225	1,225	1,225	1,225
R-squared	0.003	0.007	0.103			
Czone	324	324	324	324	324	324
Weak ID F stat				300.6	117.6	84.10

Table A.6: Trade Shock Exposure and Authoritarian Aggression. The table shows results from OLS and IV regressions of the variable for Authoritarian Aggression on the trade shock measure $\Delta IP (91-07)$, using the variable $\Delta IPO (91-07)$ as an instrument in the IV regressions. Standard errors are clustered at the commuting zone-level and reported in parentheses. Significance levels are reported in the following way: *** p<0.01, ** p<0.05, * p<0.1.

VARIABLES	(1) Subm. (OLS)	(2) Subm. (OLS)	(3) Subm. (OLS)	(4) Subm. (IV)	(5) Subm. (IV)	(6) Subm. (IV)
$\Delta IP (91-07)$	0.024 (0.016)	0.007 (0.017)	0.024 (0.018)	0.038* (0.020)	0.027 (0.023)	0.065* (0.033)
Diversity		-0.153** (0.069)	-0.182** (0.085)		-0.079 (0.075)	-0.124 (0.093)
Diversity* $\Delta IP (91-07)$		0.101*** (0.035)	0.113*** (0.036)		0.056 (0.043)	0.079* (0.044)
Female			0.061* (0.035)			0.060* (0.035)
Age			0.000 (0.001)			0.001 (0.001)
University			-0.173*** (0.045)			-0.168*** (0.045)
College			-0.239*** (0.047)			-0.236*** (0.046)
Married			0.057 (0.042)			0.054 (0.042)
Has children			0.092* (0.051)			0.092* (0.051)
Manufacturing			-0.498 (0.322)			-0.841** (0.419)
% Foreign Born			0.001 (0.002)			0.000 (0.002)
Δ % Foreign Born			-0.000 (0.012)			-0.001 (0.012)
Observations	1,225	1,225	1,225	1,225	1,225	1,225
R-squared	0.002	0.007	0.042			
Czone	324	324	324	324	324	324
Weak ID F stat				300.6	117.6	84.10

Table A.7: Trade Shock Exposure and Authoritarian Submission. The table shows results from OLS and IV regressions of the variable for Authoritarian Submission on the trade shock measure $\Delta IP (91-07)$, using the variable $\Delta IPO (91-07)$ as an instrument in the IV regressions. Standard errors are clustered at the commuting zone-level and reported in parentheses. Significance levels are reported in the following way: *** p<0.01, ** p<0.05, * p<0.1.

VARIABLES	(1) Conv. (OLS)	(2) Conv. (OLS)	(3) Conv. (OLS)	(4) Conv. (IV)	(5) Conv. (IV)	(6) Conv. (IV)
$\Delta IP (91-07)$	0.012 (0.021)	-0.007 (0.023)	0.012 (0.027)	0.020 (0.023)	-0.001 (0.026)	0.027 (0.039)
Diversity		-0.184** (0.084)	-0.132 (0.087)		-0.169* (0.096)	-0.124 (0.094)
Diversity* $\Delta IP (91-07)$		0.107*** (0.039)	0.098*** (0.038)		0.098** (0.045)	0.094** (0.042)
Female			0.036 (0.044)			0.035 (0.043)
Age			0.015*** (0.001)			0.015*** (0.001)
University			-0.200*** (0.055)			-0.198*** (0.055)
College			-0.140*** (0.052)			-0.140*** (0.052)
Married			0.002 (0.048)			0.001 (0.048)
Has children			0.224*** (0.056)			0.224*** (0.056)
Manufacturing			-0.347 (0.370)			-0.491 (0.465)
% Foreign Born			-0.002 (0.003)			-0.002 (0.003)
$\Delta \% Foreign Born$			0.017 (0.013)			0.017 (0.013)
Observations	1,225	1,225	1,225	1,225	1,225	1,225
R-squared	0.000	0.004	0.126			
Czone	324	324	324	324	324	324
Weak ID F stat				300.6	117.6	84.10

Table A.8: Trade Shock Exposure and Authoritarian Conventionalism. The table shows results from OLS and IV regressions of the variable for Authoritarian Conventionalism on the trade shock measure $\Delta IP (91-07)$, using the variable $\Delta IPO (91-07)$ as an instrument in the IV regressions. Standard errors are clustered at the commuting zone-level and reported in parentheses. Significance levels are reported in the following way: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

VARIABLES	(1) ASC (OLS)	(2) ASC (OLS)	(3) ASC (OLS)	(4) ASC (IV)	(5) ASC (IV)	(6) ASC (IV)
Δ IP (91-07)	-0.021 (0.015)	-0.029 (0.029)	-0.021 (0.033)	-0.014 (0.016)	-0.019 (0.030)	-0.006 (0.033)
Diversity		-0.033 (0.076)	-0.038 (0.082)		-0.019 (0.076)	-0.045 (0.077)
Diversity* Δ IP (91-07)		0.017 (0.040)	0.008 (0.046)		0.009 (0.040)	0.014 (0.041)
Female			-0.009 (0.047)			-0.009 (0.046)
Age			0.003** (0.001)			0.003** (0.001)
University			-0.196*** (0.058)			-0.194*** (0.057)
College			-0.111** (0.051)			-0.111** (0.050)
Married			0.088** (0.040)			0.087** (0.040)
Has children			0.057 (0.049)			0.058 (0.049)
Manufacturing			-0.054 (0.414)			-0.247 (0.435)
% Foreign Born			0.003 (0.002)			0.003 (0.002)
Δ % Foreign Born			-0.007 (0.010)			-0.007 (0.009)
Observations	562	562	562	562	562	562
R-squared	0.002	0.002	0.055			
Czone	177	177	177	177	177	177
Weak ID F stat				173.8	49.91	63.59

Table A.9: Trade Shock Exposure and Authoritarianism (Non-Whites). The table shows results from OLS and IV regressions of the variable ASC on the trade shock measure $\Delta IP (91-07)$, using the variable $\Delta IPO (91-07)$ as an instrument in the IV regressions, for the sample of non-white respondents. Standard errors are clustered at the commuting zone-level and reported in parentheses. Significance levels are reported in the following way: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

VARIABLES	(1) ASC	(2) ASC	(3) ASC	(4) ASC
OLS				
$\Delta IP (91-07)$	0.025 (0.025)	-0.007 (0.027)	0.008 (0.037)	0.047 (0.028)
Diversity		-0.174** (0.084)	-0.177* (0.100)	-0.201*** (0.075)
Diversity* $\Delta IP (91-07)$		0.140*** (0.038)	0.134*** (0.042)	0.126*** (0.038)
Pre-shock values				0.008 (0.017)
IV				
$\Delta IP (91-07)$	0.022 (0.024)	0.002 (0.026)	0.028 (0.039)	0.062 (0.045)
Diversity		-0.091 (0.095)	-0.098 (0.104)	-0.202** (0.084)
Diversity* $\Delta IP (91-07)$		0.089* (0.049)	0.087* (0.048)	0.128*** (0.054)
Pre-shock values				0.008 (0.017)
Observations	472	472	472	751
Commuting zones	209	209	209	150
Weak ID F stat for 2SLS	230	25.94	58.38	86.39
Controls			✓	✓

Table A.10: OLS & IV: Trade Shock Exposure and Authoritarianism (Sorting). The top panel of the table shows results from an OLS regression of the variable ASC on the trade shock measure $\Delta IP (91-07)$, while the bottom panel shows results from an IV regression of the variable ASC on the trade shock measure $\Delta IP (91-07)$ using the variable $\Delta IPO (91-07)$ as instrument. The results in columns 1-3 are based on a sub-sample of respondents that have not moved over the past 20 years. Results in column 4 are from the original sample of respondents after adding a measure of average “pre-shock” regional authoritarian values. Significance levels are reported in the following way: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.