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ABSTRACT

Unemployment, Immigration, and Populism*

This paper examines how unemployment and cultural anxiety have triggered different dimensions of the current populism in the United States. Specifically, I exploit the Great Recession (GR) and the 2014 Northern Triangle immigrant influx (IM) to investigate the effects of recent unemployment and unauthorized immigration on attitudes related to populism. I find that recent unemployment during GR, rather than existing unemployment from before GR, increased the probability of attitudes against wealthy elites by 15 percentage points (PP). Such attitudes are connected with left-wing populism. I identify perceived economic unfairness as a mechanism through which recent unemployment drove left-wing populism. However, cultural anxiety rather than economic distress more likely led to the over 10 PP rise in the probability of anti-immigration attitudes during IM. These attitudes are related to right-wing populism. This study intentionally links distinct economic and cultural driving forces, respectively, to different types of populism, while still accounting for their potential interaction effects. This strategy facilitates disentangling the economic and cultural triggers of the currently surging populism.

JEL Classification: A13, D31, J01, J64, P16

Keywords: populism, unemployment, immigration, Great Recession

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1 Introduction

For a decade or more, during the Great Recession and alongside the recent immigrant influx, populism has been on the rise in many Western democracies including the U.S. (Autor et al., 2020) and part of Europe (Colantone and Stanig, 2018b; Dustmann et al., 2017). The current populism has seen the rise of radical and populist politicians and parties, e.g., Donald Trump and Bernie Sanders in the U.S., the Sweden Democrats in Sweden, Syriza and Golden Dawn in Greece, the National Rally (formerly known as the National Front) in France, and the Five Star Movement in Italy.

An academic debate about the drivers of populism has recently emerged between the economic insecurity perspective and the cultural backlash thesis. How has economic insecurity or cultural anxiety driven different dimensions of the recent populist tide? And are there differentials between the populism triggered by economic factors and that triggered by cultural factors? This study attempts to contribute to the understanding on these questions by investigating how unemployment and unauthorized immigration affected the surge in populism and by examining the resulting various dimensions of populism.

There is no consensus on how populism should be defined in the literature (Guriev and Papaioannou, 2020). However, the vast majority of studies in political economy and political science use Mudde (2004)'s definition which I also borrow for the current study. Populism is defined in that study as an "ideology" that divides society into two antagonistic camps: virtuous people versus corrupt elites and the establishment, or virtuous people versus threatening outsiders (Canovan, 1999; Kriesi and Pappas, 2015; Laclau, 1977; Mudde and Kaltwasser, 2017; Wiles, 1969). Populism usually appears with two compatible forms – left-wing populism and right-wing populism (Aytaç and Öniş, 2014; Kaltwasser, 2018; Mudde and Kaltwasser, 2013; Rodrik, 2018a,b). In the former, "the people" refers to the "common men" with lower income or the "poor" who cannot access power. They are perceived to be exploited by, and thus opposed to, the wealthy and powerful "elites" who control the economy and define its rules. In the latter, "the people" denotes the "nation" against outsiders, i.e., foreigners or immigrants, who are regarded as threats to the popular will (Kriesi and Pappas, 2015; Kaltwasser, 2018; Mudde and Kaltwasser, 2013; Rodrik, 2018a).

In the first step, with the Great Recession (GR)[1] and the 2014 Northern Triangle immigrant influx in the U.S. as two shocks, I investigate the effects of unemployment

[1]The Great Recession has been used as a shock to the labor market in multiple studies (see Algan et al. (2017), Ananyev and Guriev (2019), and Dehdari (2018)).

and unauthorized immigration on populist attitudes, respectively. I perform a difference-in-differences (DID) analysis with individual fixed effects and survey year fixed effects, which accounts for influences of individually distinct unobservables such as personality and ability, and impacts of the general developments of these attitudes across time. More specifically, in the first design I compare changes in attitudes related to populism after the Great Recession between individuals who were laid off during this recession (i.e., the treated) and those that were never unemployed during the data period (i.e., the untreated). These two groups of people are similar in the sense that neither of them were unemployed in the pre-GR phase. To render individuals in the two groups more similar, in a sensitivity analysis I apply nearest neighbors propensity score matching based on pre-treatment characteristics.[2] Moreover, with retrospective employment information, I exclude people who were once unemployed during the ten years preceding 2008, so that the two groups become even more comparable. Even so, the data limitation restricts my capacity from completely ruling out the possibility that the treated and untreated groups may be different due to time-varying unobservables.[3] In addition, I compare individuals who had already been unemployed before the GR to those that were never unemployed to explore the influence of the pre-GR unemployment on populist attitudes.

The 2014 Northern Triangle immigrant influx principally affected the West South Central region of the U.S. in the sense that the great majority of unauthorized Central American immigrants entered the U.S. through this region. This plausibly exogenous inflow (to the US residents) took place in the West South Central region because of the geographic convenience for the immigrants rather than the local (welcoming) attitude to immigration. Hence, the treatment group in this second design consists of residents in the West South Central region, while the control group reflects those in the rest of the U.S. As in the first design, I use propensity score matching to enhance the covariate balance between the treated and the untreated. In both designs, respondents in the treatment group and control group present parallel time trends, measured pre-treatment. More-

[2]Appendix B compares covariates between the treated and the untreated, measured pre-treatment. For most covariates, the difference between the treated and untreated is not significant. The last column reports the p-value of a test for such difference in the matched estimation sample which is used for sensitivity analyses. They arguably support the covariate balance and common support (Atanasov and Black, 2016).

[3]An example of such a possibility could be that the treated group lost their job during the Great Recession owing to an unobserved deterioration in employability triggered by the Great Recession, and that they happened to dislike elites. For this example, I exclude biased belief induced long-term unemployment (Mueller et al., 2021) and job/skill mismatches (Jaimovich and Siu, 2020; Şahin et al., 2014) as reasons for this possible (unobserved) reduced employability. Another example could be that the treated group was selectively fired by their employer for their political views, with the Great Recession as a pretext. For this example, I rule out the preference for unions in the firm as such a political view.

over, immigrants are inclined to settle down in the U.S. based on networks or regions with a higher proportion of previous immigrants from their original country (Munshi, 2003). Following the literature, I perform a sensitivity analysis using the distance from the destination to the Rio Grande Valley border patrol sector as an instrument variable (IV) for the proportion of Northern Triangle immigrants to investigate the effect of the proportion of Northern Triangle immigrants at the state level on the attitude to immigration. Even so, the data limitation and the model specification constrain my ability from completely excluding the influence of potential time-varying confounders, e.g., at a certain geographic level.[4]

I provide evidence that recent unemployment during the Great Recession increased the probability of attitudes against wealthy elites by more than 14 percentage points. Such attitudes are related to left-wing populism. I also find that a mechanism fanning the left-wing populist attitudes was perceived economic unfairness. However, I do not detect that unemployment from before the recession exerted a significant influence on attitudes related to populism. The differential effects of these two types of unemployment suggest that individuals losing their job during the Great Recession blamed wealthy elites for the economic downturn and hence their unemployment. Nonetheless, people who had been already laid off before the recession attributed their joblessness to their own circumstances.[5]

During the 2014 Northern Triangle immigrant influx, the probability of a positive attitude to immigration in the West South Central region decreased by more than 12 percentage points. I argue that cultural anxiety was more likely to be the reason in that I detect backlash only in the ethnic group with more distant culture and identity from the immigrants, and that I rule out several potential economic channels. Even so, the data limitation restricts my capacity from excluding all the possible concerns from the economic perspective. This anti-immigration attitude is connected with right-wing populism. Nonetheless, I do not find effects of unauthorized immigration on left-wing populist attitudes. The effects in the two designs concerning the Great Recession and the 2014 immigrant influx should not be directly compared owing to the different natures of

[4]Concerning such confounders at a geographic level, I perform two sensitivity analyses. First, in Table 7 I further control for time-varying unemployment rate at the county level and its interaction with post-immigrant influx. The results are rather similar. Second, in the appendix I include state-specific linear time trends to capture smooth time variations in unobservables at the state level, and obtain virtually identical results.

[5]Unfortunately, due to the data limitation on specific narratives around unemployment during the Great Recession and unemployment before the Great Recession, I am not able to directly investigate the emergence and proliferation of different narratives during these two periods of time.

formations of treated groups.[6]

Furthermore, I account for the interaction effects of economic and cultural concerns by examining the unemployment rate, immigrant proportion, and their interactions at the regional level in every design. I do not find evidence that immigration exposure was a significant multiplier of the effects of regional unemployment on attitudes related to populism. Nor do I detect that individual or regional unemployment provoked significant extra hostility to immigration during the 2014 immigrant influx, even in the entry region of these unauthorized immigrants. This study intentionally links distinct economic and cultural driving forces, respectively, to different types of populism, while still accounting for their potential interaction effects. This strategy facilitates disentangling the economic and cultural triggers of the currently surging populism.

The current study speaks to several strands of literature. Principally, it adds to the academic debate on the drivers of populism taking place between the economic insecurity perspective and the cultural backlash thesis. A handful of studies investigate both economic and cultural determinants simultaneously, and fewer examine their interactions. Inglehart and Norris (2016) establish the association between voting for populist parties across European countries and economic and cultural characteristics. They find evidence supporting cultural backlash rather than economic insecurity. Dustmann et al. (2017) interact macroeconomic indicators with regional cultural traits. They discover that more authoritarian and traditional cultural characteristics amplify the adverse effects of economic recessions on trust in political institutions, while trust is less sensitive to economic conditions in more liberal and modern areas. Dal Bó et al. (2021) study the politicians and voters of the Sweden Democrats, a major populist radical right party. They find that both these politicians and voters hold strong anti-establishment and anti-immigration attitudes, and overrepresent economically marginalized groups or groups without strong attachments to traditional nuclear families.

The current study contributes to this literature on populism in three respects. First, with distinct shocks to economic distress and cultural backlash respectively, I explore the connections of economic and cultural anxieties to different types of populism, accounting for potential interaction effects of economic and cultural factors. Recent unemployment during the Great Recession may be a cleaner economic trigger than (trade) globalization

[6]The treatment about the 2014 immigrant influx is not as precise or specific as that regarding the Great Recession, even though the information for formations of treated groups is at the individual level, i.e., individual unemployment and individual place of residence respectively, in both treatments. Again, due to the data limitation on specific narratives, I cannot directly examine the emergence and proliferation of anti-immigrant narratives during this immigrant influx.

in the dimension of foreign influence. Trade globalization, as an economic driving force itself, drove up support for populist movements often through culture (Cerrato et al., 2018; Rodrik, 2020) such as *alien* import competitions. A prominent example is the "China shock" (Autor et al., 2013; Cerrato et al., 2018; Autor et al., 2020) and/or the recently prevailing rhetoric of "China has stolen our jobs and ruined our industries." However, recent unemployment during the Great Recession in the United States was not obviously involved with cultural division or foreign (external) impact. Hence such unemployment may more likely extract cleaner effects of economic distress. Likewise, the 2014 Northern Triangle immigrant influx was special in the sense that most of these Central American immigrants were women, unaccompanied children and juveniles, and that they were refugees avoiding the mass violence in their original countries rather than economic immigrants (U.S. Department of Homeland Security).[7] Moreover, I indeed do not find significantly escalated economic concerns among U.S. residents in the impacted regions during this influx. Nor do I find that residents working in industries with high immigrant exposure/competition were more hostile to immigrants during the influx, whether they lived in the impacted regions or not. Thus this tide of immigration from the Northern Triangle facilitates obtaining cleaner effects of cultural anxiety than economic immigration such as the large number of Mexican immigrants before 2010 (Pew Research Center, 2017). Second, with individual panel data, I provide the first quasi-experimental evidence at the individual level for the drivers of various dimensions of populism. The data structure helps to remove the unwanted disturbance owing to individual unobserved heterogeneity such as personality and ability, and owing to the general evolution of various populist attitudes over time. For instance, the common part of influence of the Great Recession or the 2014 immigrant influx on the US population is accounted for. Hence the study is capable to explore the driving forces of the current populism at the more precise individual level rather than the aggregate level. Third, compared to most studies in this literature that focus on political outcomes only (Acemoglu et al., 2013; Algan et al., 2017; Becker et al., 2017; Colantone and Stanig, 2018a; Di Tella and Rotemberg, 2018; Foster and Frieden, 2017; Guiso et al., 2017; Hatton, 2016; Jensen et al., 2017; Boeri et al., 2021), I utilize a richer set of measures to capture different dimensions of populism. A decrease in confidence in people who are running major companies and an increase in a special type of preferences for income redistribution, i.e., imposing higher taxes on the rich rather than economically assisting the poor, indicate attitudes that are against wealthy elites. In the literature these attitudes are related to left-wing populism.

[7]Section 2.2 elaborates the detailed information on the 2014 Northern Triangle immigrant influx.

The anti-immigration attitude is connected with right-wing populism in the literature. Additionally, I explore populist voting behavior in the 2016 U.S. Presidential Election.

Secondly, this paper complements a growing literature on the effects of economic hardship on social capital, especially on trust and confidence. Ananyev and Guriev (2019) exploit the 2009 economic recession in Russia to analyze the effect of income on generalized social trust and find this effect statistically and economically significant. Algan et al. (2017), Dustmann et al. (2017), and Foster and Frieden (2017) conclude that adverse economic shocks and the resulting rise in unemployment exerted negative influences on Europeans' trust in national and EU governments. My study distinguishes between unemployment that existed before the economic downturn and new unemployment caused by the Great Recession. My results show that recent unemployment during the Great Recession, rather than unemployment that existed before the Great Recession, triggered the decrease in trust or confidence in the wealthy. This finding implies that those that were not laid off until the economic recession blamed rich elites for their unemployment. However, those suffering pre-existing economic hardship may merely attribute their joblessness to their own circumstances. I verify this implication when exploring the perception of economic unfairness as a mechanism.

Thirdly, the current study is closely related to studies on preferences for redistribution. Kuziemko et al. (2015) conducted randomized survey experiments, discovering that mistrust in government explains the low support for redistribution in the U.S. However, Americans strongly preferred only one redistribution policy – the estate tax targeting the top 0.1% of U.S. families. This may be interpreted as a wish to prevent the self-perpetuation of extreme wealth. Because of the prevailing attitudes against wealthy elites "respondents might still support (it) if, say, the government merely burns the money it collects (from the rich)." Giuliano and Spilimbergo (2013) exploited three different data sets to support their finding that people who experienced at a young age an economic recession support more distribution and tend to vote for left-wing parties. Alesina and La Ferrara (2005) and Benabou and Ok (2001) argue that people with higher-than-expected income growth are more inclined to oppose redistribution, even when they earn below-average income and benefit from redistribution. Alesina et al. (2018) find strong political polarization in preferences for redistribution and detect that only left-wing respondents react to pessimistic intergenerational mobility perception by increasing their preferences for redistribution. Intuitively, the higher the perceived importance of effort rather than luck in determining one's income, the higher the belief in the fairness of the economy, and thus the lower the preferences for redistribution (Alesina and Angeletos,

2005; Piketty, 1995). I adopt this mechanism of perceived economic unfairness in my study. What is new in my contribution to this literature is that I combine two variables in the data to distinguish two forms of preferences for redistribution, i.e., the request for imposing higher taxes on the rich, and the demand for economically assisting the poor. Preferences for redistribution, especially with the aim of increasing financial burdens on the wealthy, may be an indicator of left-wing populism. If people perceive that elites set unfair rules for the economy and take advantage of these rules to gain unfair benefits, they will request this special type of redistribution by mainly targeting "robbing the rich" rather than "giving to the poor."

Last but not least, this study is part of the large literature on the impact of immigration. The attitude to immigration is studied in two traditions – political economy and socio-psychology (Hainmueller and Hopkins, 2014). The former focuses on competition over resources between immigrants and natives and explains immigration attitudes from the perspective of natives' individual self-interest (e.g., Mayda et al. (2021)). The latter perceives immigration attitudes as symbolic of group identity. In socio-psychology, contact theory states that exposure to and interaction with immigrants will produce a more tolerant and friendly attitude to immigration. Threat theory, however, alleges that natives see the arrival of immigrants as a threat to the national identity, economy, and culture. The greater the number of immigrants, the bigger the threat. I examine both channels of individual self-interest and collective identity concern, and only find evidence for the latter (see also Card et al. (2012), Sniderman et al. (2004), and Tabellini (2020)). The unauthorized Central American immigrants from the Northern Triangle did not significantly exert negative influence on the local labor market. Nor did U.S. residents regard these immigrants as a threat to their jobs in the future or their social security. The negative attitude to immigration more likely arose from cultural and identity concerns.

2 Institutional Background

In this section I briefly discuss the developments of the Great Recession and the 2014 Northern Triangle immigrant influx in the U.S.

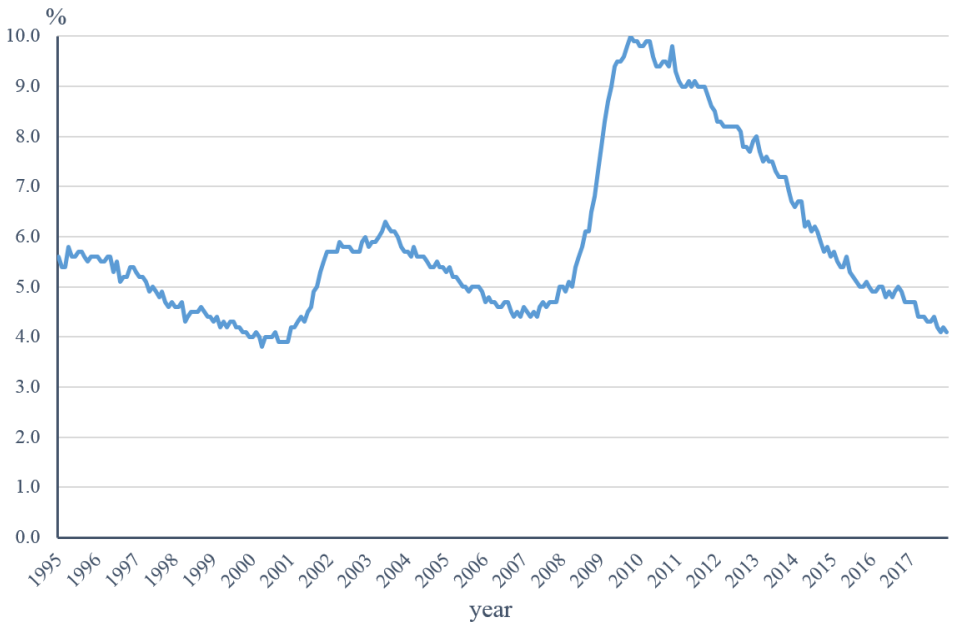
2.1 The Great Recession

The Great Recession has been regarded as the most influential economic recession worldwide since the Great Depression in the 1930s. It originated in 2007 with a crisis in the

U.S. subprime mortgage market and spread to the banking system. Its impact was felt in financial systems around the world, with the bankruptcy of the investment bank Lehman Brothers on September 15th, 2008 as a remarkable initial signal.

Despite a variety of monetary and fiscal policies adopted by governments around the world to reduce the negative impact on the economy, the 2008 financial crisis nevertheless developed into a severe worldwide economic recession. In addition to the collapse of several banks and other financial institutions, the U.S. economy suffered a sharp drop in its output and took a serious hit on its labor market. For instance, compared to the respective previous years, U.S. real GDP decreased by around six percent at an annual rate in the last quarter of 2008 and the first quarter of 2009 (U.S. Bureau of Economic Analysis). Unemployment change is usually lagged, following GDP decline. Figure 1 illustrates the seasonally adjusted monthly unemployment rate in the U.S. The unemployment rate soared to over ten percent in October 2009, the highest level since 1983 and twice as high as before the Great Recession (U.S. Bureau of Labor Statistics).

Figure 1: Unemployment Rate in the U.S. (Seasonally Adjusted); 1995-2017



Source: U.S. Bureau of Labor Statistics

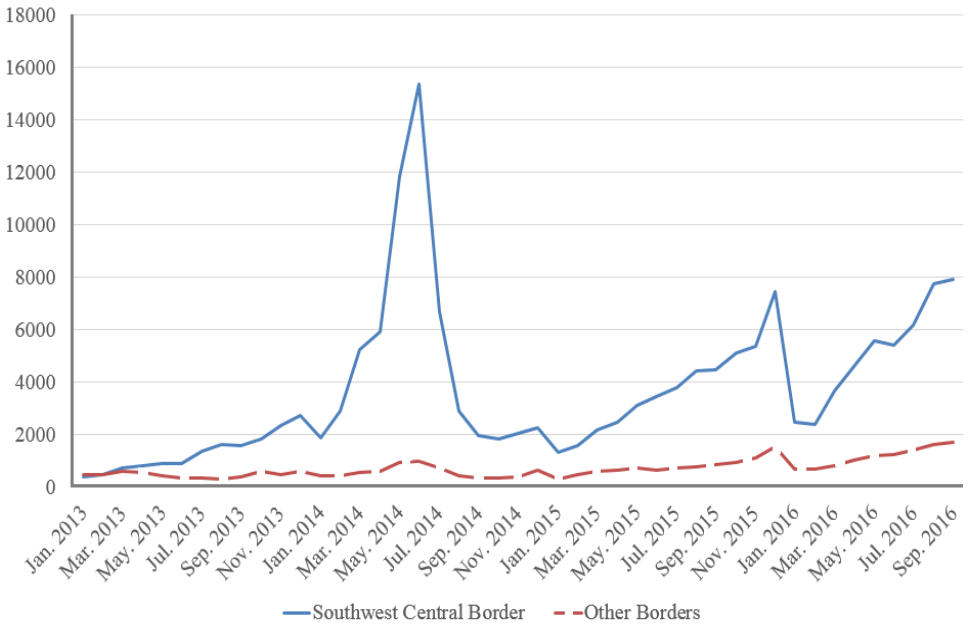
2.2 The 2014 Immigrant Influx

From October 2013 to late 2016, large numbers of unauthorized immigrants from the Northern Triangle of Central America, i.e., El Salvador, Guatemala, and Honduras, traveled to the U.S. southern border with Mexico, leading to a remarkable immigrant influx

that peaked in 2014. It turned out to be the biggest inflow of asylum seekers to the U.S. since the 1980 Mariel boatlift out of Cuba (Greenblatt, 2014). Many of them were women, unaccompanied children and juveniles.

Almost all of these immigrants entered the West South Central region of the U.S., in particular from the Rio Grande Valley area located on the southern edge of Texas.[8] The overwhelming inflow occurred in this region simply owing to the geographic convenience for these immigrants rather than the local (welcoming) attitude to immigration. Figure 2 provides an overview of U.S. border arrests from 2013 to the third quarter of 2016: the blue solid line represents monthly apprehensions at the southwest central patrol sector. The inflow started to soar at the end of 2013 and reached its peak in June 2014. It then dropped dramatically at first, but started to climb again after the end of 2014. The red dashed line denotes apprehensions at other patrol sectors in the U.S. This line is relatively flat and limited. Though this figure does not directly provide information on the number of all unauthorized immigrants actually entering each month, the monthly number of arrests implies a huge inflow variation in different regions.

Figure 2: Family Unit Apprehensions by Month; 2013-Sep.2016



Source: United States Border Patrol

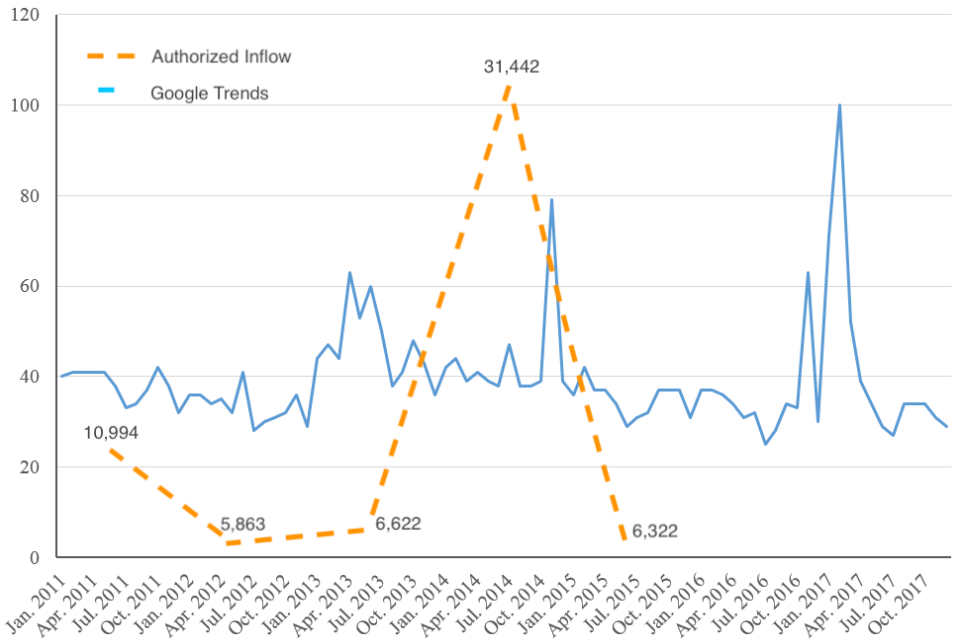
In Figure 3, the orange dashed line shows the inflow of *authorized* immigrants[9] from

[8]Table E.1 in Appendix E lists the numbers of family unit apprehensions by month in different border patrol sectors in the U.S. from October 2012 to September 2016.

[9]The precise records of inflow amount of unauthorized immigrants are unavailable, unfortunately. However, the main analysis does not rely on this information. In a sensitivity analysis, I follow the literature arguing that immigrants are more likely to choose where to live in the U.S. based on networks

the Northern Triangle to Texas which was the main portal during this tide of immigration. In 2014, this number soared to around 31,500, five times as large as that in 2013 and 2015 (American Community Survey). 55% of Northern Triangle immigrants in the U.S. were unauthorized by 2015. In 2014, the estimate of new (authorized) immigrant arrivals in the U.S. from these three Central American countries is around 115,000 (Pew Research Center). Thus, if the immigrant influx in 2014 followed the same pattern as before – and in fact, during this period it is likely that there were more unauthorized entries than authorized ones – the number of Northern Triangle immigrants entering the U.S. would be roughly doubled to 230,000 in 2014.

Figure 3: Authorized Inflow to Texas and U.S. Google Trends on Immigration



Source: American Community Survey, Google Trends
Note: the Google Trends indicator is the scaled daily frequency of the term "immigration" being searched for, relative to the maximum number of daily searches for it on Google in the U.S.

The principal reason that these people abandoned their family and country and took this risky and dangerous journey to the U.S. border was the mass violence in these nations (U.S. Department of Homeland Security).[10] Given this cause, the 2014 immigrant influx has been regarded as both a refugee crisis and a "humanitarian crisis (President Obama)" rather than a tide of economic immigrants.

or regions with a higher density of previous immigrants from their original country. In this analysis, I investigate the effect of the proportion of Northern Triangle immigrants at the state level on the attitude to immigration, and reach the same conclusions.

[10]DHS concluded that "(These immigrants) come from extremely violent regions where they probably perceive the risk of traveling alone to the United States preferable to remaining at home."

The U.S. government took several measures in response: (1) a multimedia awareness campaign; (2) assistance to the Mexican southern border; (3) expedition of the removal process; and (4) raids in January 2016 on individuals that had exhausted their asylum claims (Hiskey et al., 2016). However, these strategies did not prove effective.[11] The Northern Triangle children and juveniles attempting to illegally cross the border are treated differently in the U.S from their Mexican counterparts. Mexican immigrants may be deported immediately, but the U.S. Trafficking Victims Protection Reauthorization Act requires that youth from the Northern Triangle must be given a court hearing before they are either deported or allowed to stay. The extent of the influx meant that in the overwhelming majority of cases, these children and juveniles would wait years for a hearing, either staying with their relatives or family friends who already lived in the U.S., or else placed in foster care (Migration Policy Institute). In fact, by the spring of 2016 most of them have not been deported (Hiskey et al., 2016).

U.S. residents were aware of this immigrant influx and made their concerns known. The blue line in Figure 3 displays the Google Trends indicator on the scaled frequency of the term "immigration" being searched for, relative to the maximum number of searches for this term in the U.S. across time. The indicator is scaled from zero to 100: zero refers to a day that did not have sufficient search volume for "immigration," and 100 is the day with the most searches for it. The high leap in late 2014 during the peak of the immigrant influx shows that U.S. citizens suddenly paid special attention to this issue.

3 Data

The main data I utilize in the analysis are the General Social Survey (GSS) of the U.S. administered by NORC at the University of Chicago. The GSS contains a core of demographic, behavioral, and attitudinal questions. It has been conducted biennially since 1994 and has included in every wave a random sample of around 3000 (until 2004) to 4500 (since 2006) adults that is representative of the U.S. population. Hence the main body of GSS is a repeated cross-sectional dataset.

However, the GSS also includes three three-wave panels at the individual level: the 2006-sample panel, the 2008-sample panel, and the 2010-sample panel. For example, the 2006-sample of 4,510 individuals was initially interviewed in 2006, 1,536 of them drawn

[11] As the U.S. District Court Judge James Boasberg noted in his February 2015 ruling, "Defendants [DHS] have presented little empirical evidence ... that their detention policy even achieves its only desired effect, i.e., that it actually deters potential immigrants from Central America."

randomly were re-interviewed in 2008, and then 1,276 of that 1,536 were interviewed again in 2010. The 2008- and 2010-sample panels were designed in a similar manner.

I exploit the 2006-sample panel to investigate the economic driver of populism, and the 2010-sample panel to study the cultural driver.[12] The former spans the pre- and post-GR periods, and the latter covers the pre- and post-immigrant influx phases. I regard wave 2010 as the post-GR phase with respect to unemployment since unemployment rise is usually a lagged indicator of economic downturns.[13] The immigrant influx erupted in 2014, so in the 2010-sample panel, the 2010 and 2012 waves are the pre-influx phase and the 2014 wave the post-influx. In both cases, I preserve for main analyses only respondents who appeared in all three waves, resulting in two balanced panels with 1,276 individuals in the 2006-sample and 1,304 in the 2010-sample.[14]

Based on the "ideational definition" of populism which has been widely used in the literature (Aytaç and Öniş, 2014; Kaltwasser, 2018; Kriesi and Pappas, 2015; Mudde, 2004; Mudde and Kaltwasser, 2013, 2017; Rodrik, 2018a,b), left-wing or inclusionary populist attitudes refer to attitudes against wealthy elites and the socioeconomic advantaged. In the GSS data, the variables that may most accurately capture such attitudes are confidence in people who are running major companies in the U.S., demand for the government to equalize the income between rich and poor, and request for the government to financially help the poor.[15] The last two variables are two dimensions of preferences for redistribution. An increase in attitudes against wealthy elites will translate to a decrease in confidence in people running big companies, and an increase in preferences for redistribution by merely imposing higher taxes on the rich without necessarily benefiting the poor. Likewise, right-wing or exclusionary populist attitudes refer to attitudes against threatening outsiders such as immigrants or foreigners. Thus I adopt the attitude to immigration to represent the right-wing populist attitudes.[16] All of them are transformed so that a larger score refers to a higher level in each of these outcomes. These outcome variables can more specifically capture left-wing and right-wing populist attitudes,

[12]A limitation of the data is that samples of the two panels contain different individuals, so it is not possible to investigate the impacts of unemployment induced by the Great Recession and of the immigrant influx on the same people.

[13]As shown in Figure 1, from 1995 to November 2008 the variation in unemployment rate displayed the same pattern at roughly the same level. Moreover, all the subjects in the year 2008 were interviewed before October, while the bankruptcy of Lehman Brothers, signaling the beginning of this financial crisis, happened in mid-September.

[14]I also analyze the original samples of unbalanced panels in Table C.8 of Appendix C3 and obtain virtually identical estimates.

[15]Unfortunately, the GSS data do not include exact variables of "hatred of elites" or "hostility to the rich or wealthy."

[16]Details of specific questions about the main outcome variables are in Appendix F.

respectively, than variables such as trust in government or politicians in general.[17]

The main explanatory variable of interest in the first design of the Great Recession is couple unemployment. This is constructed by combining two variables – the respondent's working status in the past week and that of their spouse if they have one.[18] Couple unemployment is a dummy that takes 1 if either partner of the couple became unemployed and takes 0 otherwise. The set of covariates contains the quadratic of respondent's age, marital status dummies, number of siblings, number of children, education attainment dummies, categories of last year's total family income, categories of the population size of respondent's resident place, party self-identification, dummy of liberal ideology, and dummy of home owner.[19] In the second design of the immigrant influx, the explanatory variable of interest is a dummy for residing in the West South Central region, i.e., the states of Arkansas, Louisiana, Oklahoma, and Texas, which was predominantly impacted initially.

To obtain the voting information on the 2016 U.S. Presidential Primary Elections, I turn to the American National Election Studies (ANES) 2016 Time Series Study. This complementary dataset contains 4,271 individuals, a representative random sample of the U.S. eligible voter population. For double-checking, I combine it with the GSS at the aggregate cohort level to study populist voting in Appendix C1.

4 Empirical Strategy

In the main analyses with the two panels at the individual level, I employ the ordered logit fixed effects model (Baetschmann et al., 2015) to account for time-invariant unobserved confounders. I choose this model because of the nature of ordinal dependent variables.[20] The ordered logit fixed effects model in the DID setting is specified as:

$$y_{it}^{*} = \beta Treatment_i \times Post\_crisis_t + x_{it}'\beta_x + \alpha_i + \gamma_t + \epsilon_{it} \tag{1}$$

[17] Trust in government in the U.S. is constantly low (Kuziemko et al., 2015). Its small variations across time thus do not help to accurately capture the effects of economic insecurity or cultural anxiety.

[18] Alternative explanatory variables of job insecurity, including self-unemployment of the respondent, are used for sensitivity analyses in Appendix C2. Details of specific questions about unemployment are in Appendix F too.

[19] The definitions and descriptives of the relevant variables in the baseline models are provided in Appendix A.

[20] In a sensitivity analysis in Table C.9 of Appendix C3, I estimate the linear fixed effects model and draw the same conclusions.

$$y_{it} = \begin{cases} 1, & y^*_{it} \leq c_1 \\ 2, & c_1 < y^*_{it} \leq c_2 \\ \quad ... & \\ J, & y^*_{it} > c_{J-1} \end{cases} \tag{2}$$

where i ($i = 1, 2, ..., n$) refers to individuals, and t ($t = 1, 2, ..., T$) stands for survey waves.

y represents different observed outcome variables including confidence in major companies, preferences for income redistribution by imposing higher tax burdens on the rich and by economically helping the poor, respectively, and attitude to immigration (in the last case it is a logit fixed effects model). y^* denotes the latent counterpart of y.

Treatment represents the dummy for the corresponding treatment group during the Great Recession and the 2014 immigrant influx, respectively. In relation to the Great Recession, the treatment group consists of respondents who became unemployed or whose spouse became unemployed, i.e., couple unemployment has a value of 1, only in wave 2010. The corresponding control group contains respondents who were not unemployed and whose spouse (if they have one) was not unemployed, that is couple unemployment takes a value of 0, in any of the three waves, i.e., 2006, 2008, 2010. As sensitivity analyses displayed in Appendix C2, I use alternative explanatory variables of job insecurity, including self-unemployment of the respondent, and obtain similar results.

As for the immigrant influx, almost all of these immigrants entered the West South Central region of the U.S., in particular from the Rio Grande Valley area, though the precise information is not available for all the entries of these unauthorized immigrants. To be conservative, I rely on the original (also the conventional) classification of U.S. regions in the data, and apply the West South Central region, including the states of Arkansas, Louisiana, Oklahoma, and Texas, as the treated region. Thus the treatment group consists of respondents who lived in this region in wave 2014. The control group covers those that lived in the rest of the U.S. in the same wave. Later, I implement robustness checks in terms of the composition of the treated region (Table C.8 in Appendix C3) reaching the same conclusion. Furthermore, immigrants are more likely to choose where to live in the U.S. based on networks or regions with a higher density of previous immigrants from their original country. Without information on the settlement destinations of these unauthorized immigrants, by following the literature I conduct an IV analysis to investigate the effect of the proportion of Northern Triangle immigrants at the state level on the attitude to immigration. Consistent estimates are reported in

Appendix C2.5.

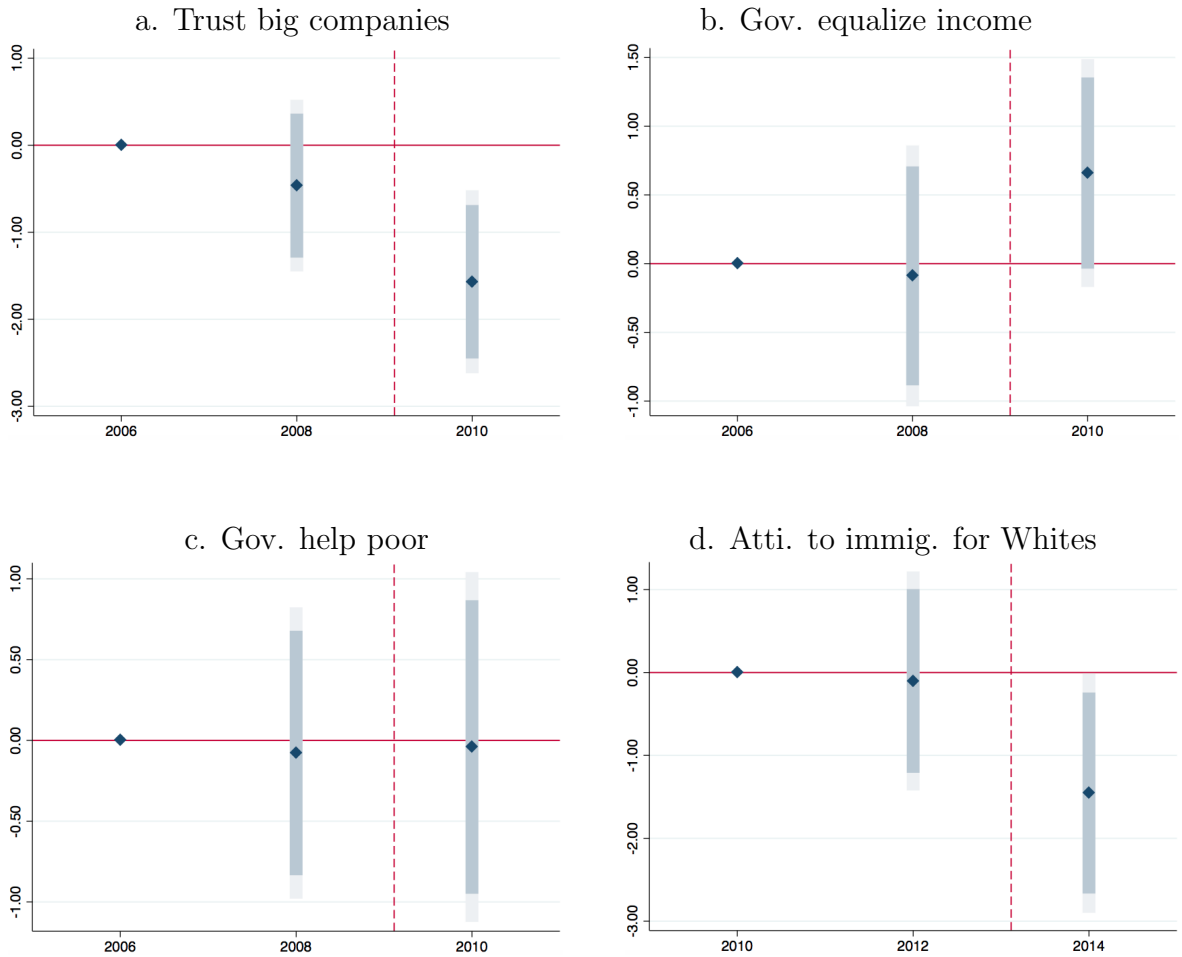
Post_crisis is either the post-GR period (wave 2010) or the post-immigrant influx phase (wave 2014). Furthermore, x denotes the vector of demographic, socio-economic, and political and ideological covariates as enumerated in the data section. In the main analyses, I present estimates with and without controls to examine their robustness. Coefficients of only time-varying explanatory variables can be estimated in the fixed effects model where all the time-invariant variables are dropped. α_i indicates individual fixed effects and γ_t represents survey wave fixed effects. These two sets of fixed effects are vital to capture impacts of time-invariant individual unobservables and the general evolution of the outcome variables across time, respectively.[21] For example, the individually distinct personality, preferences and ability or talent are accounted for by α_i. It is possible that the Great Recession and the immigrant influx had impacts on the US population in general, thus the common part of influence of the Great Recession or the 2014 immigrant influx is seized by γ_t. In Appendix C2.1 as a sensitivity analysis, I further interact the post-GR phase with other individual covariates including family income and home ownership to account for potential responses of these personal characteristics to the Great Recession, and obtain similar estimates of recent unemployment during the GR. Finally, ϵ_{it} is the errors following a logistic distribution, and c_k is the threshold points which are ancillary parameters.

In order to apply the DID approach, the parallel trend assumption between the treatment and control groups should hold. This assumption in the current context implies that during the post-GR or post-immigrant influx period, the outcome variables would follow the same trajectory between the treated and the untreated in the absence of the corresponding crisis. To assess this assumption, I examine whether the pre-crisis time trends in the outcome variables diverge between the treatment and control groups. Specifically, I replace *Post_crisis* in Eq.(1) by dummies for all the waves separately.[22] If the coefficients of the interaction terms of $Treatment$ and the waves pre-crisis are non-significantly distinguishable from zero, it is evidence for the pre-crisis parallel trends. Figure 4 visualizes these interaction estimates for different outcome variables in which I normalize the coefficient of interaction of $Treatment$ and the first wave to be zero for identification. All estimates of the interactions of $Treatment$ and the pre-crisis waves are non-significantly

[21] In another model specification shown in Table C.7 of Appendix C3, I include state-specific linear time trends to capture smooth time variations in unobservables at the state level, and obtain virtually identical results.

[22] It is called the "Auto" model following Autor (2003) or the leads and lags model by Atanasov and Black (2016).

Figure 4: Pre-Treatment Trends: Estimates of Treatment×Every Wave



Note: Panel a to c are for the Great Recession and panel d is for the 2014 immigrant influx. Coefficient estimate of the interaction of treatment and the first wave is normalized to be zero for identification. The segments denote 90% (dark) and 95% (light) confidence intervals of estimated coefficients, respectively.

different from zero. Therefore, we cannot statistically reject the parallel trends measured pre-crisis.

Moreover, in order to establish a relationship between the crisis and the outcome variables, there must not have been other events responsible for the divergence between the treatment and control groups occurring at a time close to the crisis. Falsification tests by applying counterfactual shocks at different times during the pre-crisis period will provide such evidence, if estimates are similar and close to zero before and after the fake shock (Atanasov and Black, 2016). In the current context with the pre-crisis sample, I change the onset of the counterfactual shock in both the Great Recession (Table C.7 of Appendix C3) and the immigrant influx (Table 5), and do not detect a significant treatment effect.

To render individuals in the treatment and control groups even more comparable, two additional approaches are exploited. First, in the design of the Great Recession, I discard all the individuals who had once been unemployed in the ten years prior to 2008 in both groups (Table 4). It is therefore not very likely that the treated individuals and the untreated ones had different employment status during the Great Recession merely because of their divergent time-varying unobservables. Second, I adopt the method of nearest neighbors propensity score matching based on pre-crisis individual characteristics in designs for both the Great Recession and the 2014 immigrant influx (Tables 4 and 8). This is to improve the covariate balance between the treated and the untreated. Only the matched individuals then compose the estimation sample in the DID framework. With these two methods as robustness checks, I obtain virtually identical results.

5 Unemployment and Populist Attitudes

In this section, I use the 2006-sample panel to study the effects of unemployment on populist attitudes. Many people who had not had unemployment experience previously were laid off during the Great Recession. This recent unemployment may be different from unemployment persisting from before the Great Recession in shaping the unemployed's perception on the reason of their unemployment and thus their attitudes. Hence I distinguish between these two types of unemployment and estimate their effects in panel a and panel b of Table 1, respectively.[23]

In panel a with the DID framework, the treatment group consists of respondents who became unemployed or whose spouse became unemployed only in wave 2010. The corresponding control group therefore reflects a situation where neither the respondent nor their spouse (if they have one) were laid off in any of the three waves. In panel b, I compare respondents who or whose spouse had been already unemployed before wave 2010 with respondents who and whose spouse were never unemployed in any of the three waves. The coefficients of the interaction term *Unemployment*×*post-Great Recession* represent the additive effects of couple unemployment during the Great Recession for individuals who or whose spouse had been already unemployed before the recession. The odd columns are estimates without covariates and the even columns are with controls. Robust standard errors clustered at the individual level are reported in parentheses.

[23]Table D.1 in Appendix D presents the parameter estimates of the full model.

Table 1: Effects of Unemployment on Attitudes Related to Populism

	Trust Companies		Gov. Equ. Inc.		Gov. Help Poor		Atti. Immig.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
a. Recent unemp. post-GR								
Treat.×Post-Great Rec.	-1.23***	-1.32***	0.67**	0.70**	0.28	-0.00	-0.37	-0.28
	(0.47)	(0.50)	(0.34)	(0.34)	(0.41)	(0.43)	(0.45)	(0.48)
b. Existing unemp. pre-GR								
Couple Unemployment	-0.61	-0.69	0.26	0.16	0.63	0.40	0.35	0.56
	(0.44)	(0.43)	(0.39)	(0.41)	(0.44)	(0.45)	(0.44)	(0.49)
Unemp.×Post-Great Rec.	1.96	2.02	0.35	0.48	-0.15	0.04	-1.37*	-1.33
	(1.38)	(1.53)	(0.67)	(0.73)	(0.76)	(0.77)	(0.80)	(0.90)
Controls	No	Yes	No	Yes	No	Yes	No	Yes

Note: Panel a is based on 3,570 observations and panel b 3,585 observations. In panel a, the treatment group consists of respondents who became unemployed or whose spouse became unemployed only in wave 2010; the control group contains respondents who were not laid off and whose spouse was not laid off in any of the three waves. Wave 2010 is the post-Great Recession period with respect to unemployment. Panel b excludes the treatment group of panel a and hence compares respondents who were unemployed or whose spouse was unemployed before wave 2010 with the same control group as in panel a. Individual fixed effects and survey wave fixed effects are included in every column. Controls contain extensive demographic and socio-economic variables such as the quadratic of respondent's age, marital status dummies, number of siblings, number of children, academic degree dummies, categories of last year's total family income, categories of the population size of respondent's place, party self-identification, dummy of liberal ideology, and dummy of home owner. Robust standard errors clustered at the individual level are reported in parentheses; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

5.1 Confidence in Major Companies

Lack of confidence in people managing big companies represents distrust in wealthy elites. Such anti-elitist attitude is connected with left-wing populism in the literature. Columns (1) and (2) of panel a show that after the Great Recession, the ordered log-odds of having a higher level of confidence in people running big companies diminished significantly by 1.3 for the recently unemployed relative to those not laid off in the data period, holding other covariates fixed. The estimates with or without covariates in the two columns are rather similar. In terms of the average marginal effect, after the Great Recession the probability of having a great deal of confidence in people running major companies, that is, *trust in companies* = 3, decreased for the newly unemployed by 19 percentage points compared to the untreated individuals.[24]

Panel b does not display significant effects on confidence in major companies among people who had already become unemployed before the Great Recession, even during the post-recession period.

[24]To facilitate understanding the effect magnitude, I report results of the linear fixed effects model in Table C.9 of Appendix C3 for comparison. The linear fixed effects estimate for confidence in big companies is around minus 0.3, sizable when compared to the corresponding adjusted mean in the treated, 0.98, over a range of zero to two.

5.2 Preferences for Redistribution

Preferences for income redistribution, especially with the aim of increasing financial burdens on the wealthy, may be an indicator of left-wing populism. If people perceive that elites set unfair rules for the economy and take advantage of these rules to gain unfair benefits, they will request this special type of redistribution by mainly targeting "robbing the rich" rather than "giving to the poor." The relevant survey question inquires about preferences for redistribution by means of "raising the taxes of wealthy families or giving income assistance to the poor."

Columns (3) and (4) of panel a show the estimates of requesting the government to reduce income differences between the rich and the poor without and with controls, respectively. Ceteris paribus, if the respondent or their spouse recently became unemployed post-Great Recession, their ordered log-odds of requesting a higher level of income redistribution significantly increased by 0.7 compared to those never laid off. In other words, the probability that the newly unemployed would show the highest level of demand for redistribution, that is *government equalizes income* = 7, increased by over 14 percentage points post-GR relative to the untreated individuals.

Income equalization can be realized by raising taxes from the wealthy or by offering financial support to the poor. There is not a direct variable on taxing the rich in the survey. However, one question asks about opinions on the government's responsibility for improving the living standard of poor Americans. The results are presented in columns (5) and (6), both of which are statistically non-significant. In particular, when controlling for available covariates, the coefficient of interest becomes almost zero. In panel b, one observes neither significant estimates for preferences for redistribution.

Such an interesting discovery is noteworthy: unemployment soon after the Great Recession significantly raised demand that the government brings about income equality between rich and poor by "raising the taxes of wealthy families or giving income assistance to the poor." However, it did not increase the specific demand for the government to offer economic assistance to the poor. These two points of view are not mutually exclusive. Their preference may be for the income gap between rich and poor to be reduced by imposing higher taxes on the wealthy, rather than by helping the poor financially. This finding goes along with Di Tella et al. (2017) and Kuziemko et al. (2015).

5.3 Attitude to Immigration

The last two columns in Table 1 examine the potential spillover of unemployment on the attitude to immigration. In both panels a and b, unemployment post-Great Recession seems to lower the positive attitude to immigration, but the coefficients are imprecisely estimated. Therefore, the hypothesis that unemployment does not affect the attitude to immigration cannot be formally rejected.[25]

5.4 Interaction Effects Involving Immigration Exposure and Labor Market Conditions

If left-wing populist attitudes prevail more intensely in areas with higher proportions of immigrants conditional on individual economic situation, cultural or identity concerns may also contribute to these attitudes. To investigate the possible influence of cultural anxiety and its interaction with the economic shock, I include the fraction of immigrants in the state population in every wave and its interaction with the post-Great Recession period in the model. The information on immigrants at the state level is from the American Community Survey (ACS).[26]

In Table 2, the odd columns report relevant results. The estimates of $treatment \times post\text{-}Great\ Recession$ are still close to the baseline estimates in panel a of Table 1. Moreover, neither the immigrant fraction in the state population nor its interaction with the post-Great Recession phase had significant effects on left-wing populist attitudes. Thus, residing in areas with more exposure to immigration did not seem to boost left-wing populist surge.

Job insecurity may originate from one's own and one's family's unemployment, or from anxiety on the local adverse labor market conditions. Even if an individual or their partner is not laid off, the high unemployment rate in their area may induce an attitudinal inclination towards left-wing populism. Hence, in the even columns of the same table, I further add the county unemployment rate and its interaction with post-Great Recession. I acquire the annual county unemployment data from the Bureau of Labor Statistics. I then include the interactions of the immigrant proportion and the county unemployment rate as well as the county unemployment rate×post-Great Recession to account for the

[25] In a sensitivity analysis in Appendix C2.4, I account for the industry heterogeneity in the share of immigrant workers. I find that whether or not they became unemployed, workers in industries with a high proportion of immigrants did not have a more negative attitude to immigration after the Great Recession.

[26] The immigrant data at the county level are only available for part of the counties on the annual basis, and hence insufficient for analysis.

interaction effects of the economic shock and cultural concerns. The estimates in the even columns show that local labor market conditions did not exert significant influence on left-wing populist attitudes, even after the Great Recession. I also do not find that immigrant exposure was an important multiplier of the effects of the Great Recession on either the anti-elite attitudes or the anti-immigration attitude in regions suffering adverse labor market conditions. The coefficients of *treatment*×*post-Great Recession* hardly change. Apparently, individual job insecurity dominated regional labor market concerns in these attitudinal variations.

So far I show that individual unemployment during the Great Recession significantly drove the increase in left-wing populist attitudes but not anti-immigration attitude.[27] I also do not obtain evidence for significant interactions of immigrant exposure and job insecurity. In Section 6, I will continue to explore the impact of unauthorized immigration on both left- and right-wing populist attitudes and its potential interaction effect with job insecurity.

[27]In panel c of Table C.7 in Appendix C3, with the GSS cross sectional data from 1990 to 2008 I confirm again that unemployment before the Great Recession is not significantly associated with confidence in big companies or attitude to immigration. It is indeed positively associated with both our measures of preferences for redistribution significantly – reduction of income gap and economic assistance to the poor. Thus such association suggests the demand for financially helping the disadvantaged rather than the focus on financially punishing the wealthy. This implication from existing unemployment before the Great Recession is different from what recent unemployment during the Great Recession presents.

Table 2: Effects of Recent Unemployment on Attitudes Related to Populism: Interaction with Immigration Exposure

	Trust Companies		Gov. Equ. Inc.		Gov. Help Poor		Atti. Immig.	
Recent Unemp. Post-Rec.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treat.×Post-Great Rec.	-1.26**	-1.22**	0.65*	0.65*	-0.02	0.02	-0.29	-0.40
	(0.51)	(0.51)	(0.34)	(0.34)	(0.44)	(0.43)	(0.48)	(0.48)
Immigrants Proportion	-0.01	-0.01	-0.07	-0.09	-0.03	-0.10*	-0.00	0.04
	(0.04)	(0.06)	(0.05)	(0.07)	(0.04)	(0.06)	(0.06)	(0.07)
Immig. Prop.×Post-Rec.	0.00	0.01	0.01	-0.01	0.01	-0.06	-0.01	-0.06
	(0.02)	(0.09)	(0.01)	(0.06)	(0.01)	(0.07)	(0.02)	(0.08)
County Unemployment		-0.03		0.05		-0.19		0.10
		(0.15)		(0.14)		(0.13)		(0.18)
County Unemp.×Post-Rec.		-0.04		-0.08		-0.03		-0.02
		(0.14)		(0.11)		(0.12)		(0.16)
Immig. Prop.×County Unemp.		-0.00		0.01		0.02**		-0.01
		(0.01)		(0.01)		(0.01)		(0.01)
Immig. Prop.×County Unemp.×Post-Rec.		-0.00		-0.00		-0.00		0.01
		(0.01)		(0.01)		(0.01)		(0.01)

Note: Based on 3,570 observations. Controls are included in every column; see also the footnote of Table 1.

5.5 Mechanism

Earlier, I showed that recent unemployment during the Great Recession increased a special type of preferences for redistribution with the aim to impose financial burdens on the rich. What is the channel? In the literature on preferences for redistribution, Alesina and Angeletos (2005) and Piketty (1995) allege that perceived economic unfairness generates stronger demand for income and wealth redistribution. Following their work, I use the perceived importance of effort in one's success to represent perceived economic fairness. The more important personal effort seems to be in achieving success, the fairer the economy is believed to be. And vice versa.

I explore whether perceived economic unfairness was a mechanism through which recent unemployment during the Great Recession increased this anti-elite or anti-rich type of preferences for redistribution. Specifically, I first examine whether new unemployment post-GR raised the perception that the economy was unfair. Then, I explore the effect of perceived economic unfairness on such preferences for redistribution. Panel a of Table 3 shows the results for the first step. Recent unemployment during the Great Recession indeed increased the perception of economic unfairness, regardless of controls. In panel b, perceived economic unfairness had a significant positive effect on the demand for the government to equalize income between the wealthy and the disadvantaged. Nonetheless, this perception of unfairness did not have a significant effect on the option of assisting the poor financially. Panel c displays the first step results for those already unemployed before the recession. This type of unemployment was not associated with higher perception of economic unfairness.

Table 3: Perceived Economic Unfairness: A Mechanism through which Recent Unemployment Affected Preferences for Redistribution

	(1)		(2)		(3)		(4)	
a. Recent unemp. post-GR	Perceived Economic Unfairness							
Treatment×Post-Great Recession	0.74**	(0.36)	0.77**	(0.36)				
b. Recent unemp. post-GR	Gov. Equalize Income				Gov. Help Poor			
Perceived Economic Unfairness	0.22*	(0.13)	0.22*	(0.13)	0.06	(0.12)	0.10	(0.12)
c. Existing unemp. pre-GR	Perceived Economic Unfairness							
Couple Unemployment	0.07	(0.44)	0.07	(0.49)				
Unemployment×Post-Great Recession	-0.25	(0.90)	-0.31	(0.82)				
Controls	No		Yes		No		Yes	

Note: Panel a and b are based on 3,570 observations and panel c is based on 3,585 observations; see the footnote of Table 1.

The results fit with the conclusion in previous subsections: the recently unemployed during the Great Recession presented distrust in elites. They asked for higher redistri-

bution without compassionate measures for the deprived. They seemed to regard the economy as unfair so that wealthy elites should be responsible for the recession and thus their own unemployment.

5.6 Important Sensitivity Analyses

In order to have even more comparable individuals in the treatment and control groups, I perform two additional important analyses. First, I discard all the individuals who had once been unemployed in the ten years preceding 2008 in both groups. Thus, it is not very likely that individuals in the two groups had different employment status during the Great Recession just because of their divergent time-varying unobservables.

Panel a of Table 4 reports the relevant results. Excluding individuals ever unemployed in the ten years prior to 2008, the estimated effects of recent unemployment during the Great Recession on populist attitudes are qualitatively similar to and larger than the baseline estimates in panel a of Table 1. The conclusions keep unchanged.

Table 4: Effects of Unemployment on Attitudes Related to Populism: Past Unemployment Experience, and Propensity Score Matching

	Trust Companies		Gov. Equ. Inc.		Gov. Help Poor		Atti. Immig.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
a. Exclud. ind. ever	-1.53**	-2.29**	1.30*	1.25*	0.79	0.40	-0.55	-0.28
unemp. past 10 yrs	(0.77)	(1.10)	(0.67)	(0.65)	(0.70)	(0.74)	(0.52)	(0.58)
b. One-nearest	-1.68***	-1.94***	1.04**	1.32***	0.26	0.31	-0.20	-0.16
neighbor matching	(0.54)	(0.60)	(0.41)	(0.45)	(0.48)	(0.50)	(0.55)	(0.81)
c. Five-nearest	-1.26***	-1.50***	0.90**	0.92***	0.27	0.11	-0.27	0.02
neighbors matching	(0.48)	(0.57)	(0.36)	(0.35)	(0.42)	(0.43)	(0.47)	(0.54)
Controls	No	Yes	No	Yes	No	Yes	No	Yes

Note: Panel a is based on 2,553 observations, panel b 687 observations, panel c 1,701 observations; see the footnote of Table 1.

Second, I adopt the method of nearest neighbors propensity score matching based on pre-crisis individual characteristics.[28] This is to improve the covariate balance between the treated and the untreated. More specifically, in every wave before the treatment, I match the individuals in the treatment group with those in the control group based on the whole set of covariates. The propensity score is estimated with a logit model. Then I take the union of these matched individuals in pre-treatment waves to form the estimation sample.

[28]Matching methods are more appropriate for my study than the synthetic control approach because of the short pre-treatment period.

Panels b and c of Table 4 display the estimates of this analysis. Panel b restricts the estimation sample to include only matched treated and untreated individuals with the one-nearest neighbor matching. Panel c takes the same procedure with five-nearest neighbors matching. The results with different numbers of nearest neighbors for all the outcome variables are very close to their counterparts in Table 1.

6 Cultural Anxiety and Populist Attitudes

In this section, I analyze the effects of non-economic unauthorized immigration on populist attitudes. An overwhelming unauthorized immigrant influx may be perceived in the destination country as either an economic threat, or a cultural and identity threat. By excluding several economic channels of this specific immigrant inflow, I argue that cultural concerns were more likely to drive the anti-immigration attitude related to right-wing populism. Tables 5 and 6 present results based on the panel data from 2010 to 2014 at the individual level.[29] The treatment group is composed of respondents who resided in the West South Central region of the U.S. in wave 2014.[30] The control group covers the rest of the U.S. in the same wave. The post-immigrant influx period is wave 2014.

6.1 Attitude to Immigration

In Table 5, the second column for the whole sample of residents reports a significant negative estimate of $treatment \times post\text{-}immigrant\ influx$. In terms of the average marginal effect, for residents in the West South Central region the probability of their having a positive attitude to immigration decreased by over 12 percentage points compared to those in untreated regions, during the immigrant influx.

If cultural and identity concerns lowered positivity towards immigration, such an effect would be milder or even reversed among groups with a cultural background and identity that is closer to the immigrants. I estimate the same model separately for Whites in column (3), and for racial minorities including Hispanics in column (4), respectively. Hispanics are closer to the immigrants from the Northern Triangle in culture and ethnicity. Other non-Whites share the identity of racial minorities with these immigrants. As expected, the effect among the racial minorities (column (4)) is non-negative, while the negative effect among Whites (column (3)) is considerably larger and more significant.

[29] Again, Table D.2 in Appendix D shows the parameter estimates of the full model.

[30] In Table C.8 of Appendix C3, I modify the compositions of the treated region as robustness checks, and find similar results though the estimates are less significant.

Conditional on other individual characteristics, racial minorities especially Hispanics would be more likely to compete with these Northern Triangle immigrants in the labor market. If economic anxiety drove the change in attitude to immigration, we would have seen a larger decrease in the positive attitude to immigration among racial minorities. However, for Whites that share neither cultural background nor racial minority identity with the immigrants, the probability of a positive attitude to immigration significantly declined by 35 percentage points relative to those in the rest of the U.S.[31]

Columns (5) and (6) show the estimates for individuals without a bachelor's degree and for bachelor's degree holders (measured in 2014), respectively. Apparently, the lower educated group was the main driving force of the anti-immigration attitude.

Column (7) is a placebo test using the East South Central region of the U.S. (Kentucky, Tennessee, Alabama, and Mississippi) as the counterfactual treated region. The East South Central region is similar to the West South Central region in many aspects, including political inclinations. However, the 2014 immigrant influx did not notably impact the East South Central region. Thus, the East South Central region is an appropriate counterfactual. The estimate in column (7) excludes individuals living in the West South Central region, the real treatment group. Without direct influence of the 2014 immigrant influx, people in the East South Central region did not significantly change their attitude to immigration relative to the corresponding untreated regions. Column (8) reports the estimate of the same type of placebo test among Whites only, which is also statistically non-significant. Column (9) shows the result of another falsification test with only pre-treatment data (i.e., data of the first two waves) by using wave 2012 as a counterfactual timing of the immigrant influx. The last column is the same test for the version of Whites only. Again, neither of the estimates is significant. Hence these placebo tests deliver evidence that the treatment effect is not produced by other events occurring at a time close to the immigrant influx.

6.2 Left-wing Populist Attitudes

In Table 6, the first three columns display estimated effects of the immigrant influx on attitudes related to left-wing populism. None of the coefficients of $treatment \times post\text{-}immigrant\ influx$ is significant for confidence in big companies, the demand for the government to equalize the income between rich and poor, or the request for the govern-

[31] The corresponding linear fixed effects estimate, shown in panel b of Table C.9 in Appendix C3, is minus 0.14, and also significant. It is substantial compared to the mean attitude to immigration in the treated, 0.52.

ment to financially assist the poor. Thus I do not obtain evidence that the immigrant influx affected these left-wing populist attitudes of anti-elites.

Table 5: Effect of the Immigrant Influx on Attitude to Immigration

Attitude to Immigration							Placebo Immig. Regn.		Placebo Immig. Time	
	All		Whites	Race Mino.	No Collg.	Collg.	All	Whites	All	Whites
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treat.×Post-Immig. Influx	-0.44	-0.50*	-1.40**	0.15	-0.62*	-0.26	-0.30	-0.06	-0.31	-0.27
	(0.28)	(0.30)	(0.60)	(0.50)	(0.33)	(1.09)	(0.47)	(0.57)	(0.40)	(0.68)
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	3,912		2,831	1,078	2,628	1,284	3,504	2,652	2,608	1,885

Note: The treatment group is composed of respondents who resided in the West South Central region of the U.S. in wave 2014, i.e., the states of Arkansas, Louisiana, Oklahoma, and Texas, which the immigrant influx most intensely impacted. The control group covers the rest of the U.S. in the same wave. The post-immigrant influx period is wave 2014. Column (3) restricts the sample to Whites only and column (4) contains racial minorities including Hispanics. Column (5) and (6) show the estimates for individuals without a bachelor's degree and bachelor's degree holders (measured in 2014), respectively. Column (7) is a placebo test by using the East South Central region of the U.S. as the counterfactual treated region and estimating the model excluding the West South Central region. Column (8) is the same type of placebo test for Whites only. Column (9) is another placebo test by using wave 2012 as a counterfactual timing of the immigrant influx and estimating with only pre-(real)treatment data. Column (10) is the same test among Whites only. Individual fixed effects and survey wave fixed effects are included in every column. Controls contain extensive demographic and socio-economic variables such as the quadratic of respondent's age, marital status dummies, number of siblings, number of children, academic degree dummies, categories of last year's total family income, categories of the population size of respondent's place, party self-identification, dummy of liberal ideology, and dummy of home owner. Robust standard errors clustered at the individual level are reported in parentheses;
* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table 6: Effects of Immigrant Influx on Left-wing Populist Attitudes & Individual Labor Market Outcomes

	Trust Companies	Gov. Equl. Inc.	Gov. Help Poor	Actul. Unemp. All	Actul. Unemp. No Collg.	Antcp. Unemp. All	Antcp. Unemp. No Collg.
	(1)	(2)	(3)	(4)	(4I)	(5)	(5I)
Treat.×Post-Immi. Influx	0.18	-0.11	0.01	0.71	0.38	-0.23	-0.17
	(0.32)	(0.28)	(0.34)	(0.45)	(0.53)	(0.34)	(0.37)

Note: Based on 3,912 observations, except columns (4I) and (5I) based on 2,628 observations. Covariates are included in every column; see also the footnote of Table 5.

6.3 Labor Market Outcomes

U.S. residents may also see immigrants as job competitors and social welfare diggers. The last four columns in Table 6 present results for actual unemployment of either partner of the couple and individual anticipated unemployment in the next 12 months. The immigrant influx resulted in a non-significant rise in actual unemployment and non-significant decline in anticipated future unemployment for people in the West South Central region. Note again that the estimates are based on the (ordered) logit model rather than linear probability model specification, so the coefficients are *not* changes in unemployment probability.

The previous subsection documents that lower-educated residents drove the increase in the negative attitude to immigration. The reason may be the competition between immigrants and lower-educated residents in the labor market and for social welfare. Columns (4I) and (5I) include only individuals without a bachelor's degree, corresponding to column (5) in Table 5. However, the coefficient estimates are smaller and remain non-significant.[32]

Therefore, statistically I cannot reject the hypothesis that the 2014 immigrant influx did not impact the local individual labor market outcomes, either actually or anticipatedly.[33] A similar finding has been documented in some studies on immigration, e.g., Card (2001) and Card (2005).

[32]I also investigate the effects of the immigrant influx on family income before taxes and on preferences for redistribution, and do not obtain significant estimates either. Thus, worries on wage reduction and social security crowding out did not seem to be important reasons for the negative attitude to immigration. Even so, the data limitation restricts my capacity from excluding all the possible concerns from the economic perspective.

[33]In Appendix C2.3, I study the influence of the immigrant influx on regional labor market conditions and do not find significant effects either.

6.4 Interaction Effects Involving Labor Market

In the previous subsection, I do not obtain evidence that residents in the entry area of the immigrant influx became increasingly negative towards immigration because of adverse labor market consequences created by the unauthorized immigration. However, it does not exclude the possibility that residents facing individual job insecurity or adverse labor market conditions in their resident place scapegoated immigrants.[34]

In Table 7, I add to the model a dummy for couple unemployment, the unemployment rate in the county of residence, and their interactions with post-immigrant influx. The first three columns show the attitude to immigration for all individuals, and the last three that of Whites only. The estimates of $treatment \times post\text{-}immigrant\ influx$ stay close to those in the baseline model in Table 5. I am interested in the estimates of the other two interactions. After the immigrant influx, individual (couple) unemployment had a non-significantly positive effect on the attitude to immigration (coefficient of $couple\ unemployment \times post\text{-}immigrant\ influx$). Local adverse labor market conditions bore some marginally significantly negative effect among Whites post-immigrant influx (coefficient of $county\ unemployment \times post\text{-}immigrant\ influx$). We should be cautious with this estimate: first, in the alternative linear specification, this 10% level of significance disappears; second, without an exogenous shock to the county unemployment rate, this estimate presents merely correlation.[35] Therefore, neither individual labor market outcomes nor local labor market conditions were important drivers of the anti-immigration attitude connected with right-wing populism.[36]

Overall, I do not find evidence that job insecurity or concerns on social security crowding out contributed to the anti-immigration attitude in this specific non-economic immigrant influx. However, such negative attitudes prevailed much more substantially among non-Hispanic Whites, an ethnic group with cultural background and identity remote from the Northern Triangle immigrants. Thus, cultural or identity concerns are more likely to have driven the negative attitude to immigration. This result is consistent with the conclusions drawn by Card et al. (2012), Sekeris and Vasilakis (2016), and

[34]Bramoullé and Morault (2021) provide a theory on when the minorities will be sacrificed for the elites to maintain their hold on power by conniving violence of the poor majority – an instrumental scapegoating strategy.

[35]By exploiting the Great Recession as a shock to the county unemployment, I use the same model as column (8) of Table 2 to estimate the effect on attitude to immigration among Whites only, and do not find significant coefficients for county unemployment related variables.

[36]Based on columns (1) and (4) of Table 7, I further interact the treated region with couple unemployment and with couple unemployment×post-immigrant influx simultaneously. Neither of them has a significant negative effect on attitude to immigration.

Table 7: Effect of the Immigrant Influx on Attitude to Immigration: Interaction with Individual Labor Market Outcomes and Local Labor Market Conditions

Attitude to Immigration	All Individuals			Whites Only		
	(1)	(2)	(3)	(4)	(5)	(6)
Treat.×Post-Immig. Influx	-0.50*	-0.43	-0.43	-1.38**	-1.32**	-1.30**
	(0.30)	(0.31)	(0.31)	(0.61)	(0.59)	(0.61)
Couple Unemployment	-0.51		-0.51	-0.67		-0.68
	(0.39)		(0.40)	(0.56)		(0.57)
Couple Unemp.×Post-Immig. Influx	0.49		0.52	0.62		0.63
	(0.57)		(0.56)	(0.88)		(0.86)
County Unemployment		-0.09	-0.09		-0.17*	-0.16
		(0.08)	(0.08)		(0.10)	(0.10)
County Unemp.×Post-Immig. Influx		-0.04	-0.05		-0.17	-0.18*
		(0.08)	(0.08)		(0.11)	(0.11)
No. of Obs.		3,912			2,831	

Note: Covariates are included in every column; see also the footnote of Table 5.

Tabellini (2020). Moreover, I do not find that the immigrant influx exerted significant influence on left-wing populist attitudes.

6.5 Propensity Score Matching

As in the first design of the Great Recession, I also exploit the nearest neighbors propensity score matching as a sensitivity analysis here. Table 8 shows the relevant effect of the immigrant influx on the attitude to immigration for Whites, the ethnic group of backlash. The first two columns are for three-nearest neighbors matching and the remaining two are for five-nearest neighbors matching. The results are also similar to that in column (3) of Table 5, even though the number of observations is now halved.[37] Several assumptions such as the conditional independence assumption (CIA), that potential outcomes are independent of treatment conditional on observables, are necessary for the matching method. Here I show that with or without matching, the results are consistent.

7 Additional Analyses

To address concerns on additional issues, I conduct more analyses, and display and discuss the results in appendices, for the sake of the article length restriction. First, in Appendix C1 with a pseudo panel at the cohort level, I examine whether the treated cohorts relating to recent unemployment during the Great Recession were associated with more votes for

[37]The estimated effects on labor market outcomes are non-significant and in similar magnitudes like before as well.

Table 8: Effect of the Immigrant Influx on Attitude to Immigration: Propensity Score Matching

	(1)	(2)	(3)	(4)
	Attitude to Immig. for Whites			
Propensity score matching	3-nearest neighbors		5-nearest neighbors	
Treatment×Post-Immigrant Influx	-1.09**	-1.92**	-1.08**	-1.42**
	(0.54)	(0.84)	(0.53)	(0.67)
Number of observations	1,215		1,597	
Controls	No	Yes	No	Yes

Note: See the footnote of Table 5.

left-wing populist Bernie Sanders, and whether the treated cohorts relating to exposure to the immigrant influx were associated with higher support for right-wing populist Donald Trump in the 2016 U.S. Presidential Election. This cohort study about populist voting is to double-check the previous estimates on populist attitudes at the individual level.

Moreover, in Appendix C2, I interact the post-GR phase with every personal characteristic including family income and home ownership, in order to account for potential responses of these (economic) traits to the Great Recession. Then, I adopt alternative measures of job insecurity in the design related to the GR. Furthermore, I examine the effects of the immigrant influx on local labor market conditions, in addition to the investigation about influence on individual labor market outcomes in Section 6.3. I further rule out that job exposure to immigration boosted the anti-immigration attitude during the immigrant influx. Finally, I perform an IV analysis to study the effect of the proportion of Northern Triangle immigrants at the state level on the attitude to immigration. I follow the literature, using the distance from the state of residence to the Rio Grande Valley border patrol sector as an IV for the proportion of Northern Triangle immigrants.

Additionally, in Appendix C3 as supplementary estimates related to the GR, I add state-specific linear trends to the baseline specification, to account for time variations in unobservables at the regional level; I take a falsification test with the counterfactual post-GR timing in wave 2008; and I re-study effects of pre-GR unemployment using GSS cross-sections 1990-2008 to confirm results in the main analysis. I also change the compositions of states in the treated region related to the 2014 immigrant influx. Then I exploit the original unbalanced panel data. I further display the main results employing the linear fixed effects model. Lastly, I present effects of the cohort mean of couple unemployment during the GR on populist voting. All these analyses show the robustness of the results.

8 Conclusions

Brexit, the rise of numerous radical left and radical right parties in Europe, as well as Donald Trump's presidency and Bernie Sanders's popularity during the 2016 U.S. Presidential Election, present a recent surge in populism. This study has investigated whether it is economic distress represented by unemployment or cultural anxiety induced by the non-economic immigrant influx that has been driving the growth in populism.

The current study attempts to identify the trigger of this growth by using the Great Recession and the 2014 immigrant influx as two distinct shocks for job insecurity and cultural backlash, respectively. This paper empirically distinguishes between left-wing populism and right-wing populism in terms of both attitudes and voting behavior. I find that recent unemployment during the Great Recession, rather than existing unemployment from before the recession, induced attitudes against wealthy elites, such as a decrease in trust in people who manage big companies and a rise in preferences for income redistribution by imposing higher taxes on wealthy families rather than by providing financial assistance to poor people. These anti-elitist attitudes are connected with left-wing populism in the literature. This result is original in that it distinguishes between recent unemployment during the Great Recession and existing unemployment from before the recession. Individuals who became unemployed during the Great Recession perceived the economy as manipulated by elites and thus unjust to them. However, people who had lost their job before the Great Recession did not express that sentiment.

This study also provides evidence that unauthorized immigration generated a more negative attitude to immigration in the more intensely affected region. Such anti-immigration attitude was more likely driven by cultural and identity concerns rather than labor market competition or social security crowding out. This phenomenon is related to right-wing populism in the literature.

In sum, this paper moves a step towards reconciling the economic distress perspective with the cultural backlash thesis. Undoubtedly it is difficult, or even impossible in many cases, to disentangle the economic drivers from the cultural triggers of populism. Nonetheless, with distinct and relatively cleaner shocks to job insecurity and cultural anxiety respectively, the current study documents that without strong interference with each other, job insecurity was prone to stirring the left-wing dimension of populism, while cultural anxiety mainly triggered the right-wing dimension of populism.

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Appendix A: Variables – Definitions and Descriptives

Table A.1 provides an overview of the definitions of variables used in the analysis. Table A.2 presents the descriptives of these variables in the 2006 sample panel (wave 2006 to 2010) for the Great Recession. Table A.3 shows the descriptives in the 2010 sample panel (wave 2010 to 2014) for the immigrant influx.

Table A.1: Definitions of Variables

Variable	Definition
Trust companies	Confidence in people running major companies (one to three)
Gov. equal. inc.	U.S. gov. ought to reduce income difference between rich and poor (one to seven)
Gov. help poor	U.S. gov. should improve living standard of poor (one to five)
Attitude to immig.	Dummy variable if number of immigrants to U.S. should not decrease
Unemploy. couple	Dummy variable if either partner of couple unemployed
Econ. unfairness	Luck & network more important than hard work in one's success (one to three)
Married	Dummy variable if married
Widowed	Dummy variable if widowed
Divorced	Dummy variable if divorced
Separated	Dummy variable if legally separated, i.e., legally living apart but still legally married
Never married	Dummy variable if never married
Children number	Number of children
Sibling number	Number of siblings
Age	Age of respondent
Age squared	Age squared of respondent
Lower high school	Dummy variable if highest degree is lower than high school
High school	Dummy variable if highest degree is high school
College	Dummy variable if highest degree is junior college or bachelor
Graduate	Dummy variable if highest degree is graduate degree
Family income	Categories of total family income before taxes last year
City size	Categories of population size of respondent's place
Democrat	Dummy variable if party self-identification is democrat
Republican	Dummy variable if party self-identification is republican
Liberal	Dummy variable if political view is liberal
Home owner	Dummy variable if home owner

Table A.2: Descriptives in the 2006 Sample Panel; Wave 2006 – 2010

	Treatment			Control		
Variables	Mean	Minimum	Maximum	Mean	Minimum	Maximum
Trust companies	1.98	1	3	1.94	1	3
Gov. equal. inc.	4.45	1	7	4.22	1	7
Gov. help poor	3.29	1	5	3.06	1	5
Econ. unfairness	1.51	1	3	1.47	1	3
Number of children	2.07	0	6	1.95	0	8
Number of siblings	3.96	0	25	3.51	0	32
Age	43.31	22	75	50.06	18	89
Percentages						
Attitude to immig.	0.50	0	1	0.47	0	1
Married	0.54	0	1	0.51	0	1
Widowed	0.02	0	1	0.09	0	1
Divorced	0.16	0	1	0.17	0	1
Separated	0.08	0	1	0.03	0	1
Never married	0.20	0	1	0.20	0	1
Lower high school	0.11	0	1	0.11	0	1
High school	0.57	0	1	0.49	0	1
College	0.26	0	1	0.28	0	1
Graduate	0.06	0	1	0.12	0	1
Family income 10K minus	0.16	0	1	0.17	0	1
Family income 10-20K	0.13	0	1	0.09	0	1
Family income 20-30K	0.13	0	1	0.10	0	1
Family income 30-40K	0.11	0	1	0.11	0	1
Family income 40-50K	0.09	0	1	0.08	0	1
Family income 50-60K	0.07	0	1	0.09	0	1
Family income 60-75K	0.08	0	1	0.10	0	1
Family income 75-90K	0.07	0	1	0.07	0	1
Family income 90-110K	0.05	0	1	0.06	0	1
Family income 110-150K	0.07	0	1	0.07	0	1
Family income 150K plus	0.04	0	1	0.06	0	1
City size 10K minus	0.39	0	1	0.32	0	1
City size 10-100K	0.37	0	1	0.45	0	1
City size 100-1000K	0.16	0	1	0.16	0	1
City size 1000K plus	0.08	0	1	0.07	0	1
Democrat	0.38	0	1	0.34	0	1
Republican	0.19	0	1	0.27	0	1
Liberal	0.26	0	1	0.27	0	1
Home owner	0.38	0	1	0.47	0	1

Based on 243 observations in the treatment group and 3,327 in the control group.

Table A.3: Descriptives in the 2010 Sample Panel; Wave 2010 – 2014

	Treatment			Control		
Variable	Mean	Minimum	Maximum	Mean	Minimum	Maximum
Number of children	2.19	0	8	1.84	0	8
Number of siblings	4.42	0	20	3.36	0	30
Age	46.78	19	89	49.77	18	89
Percentages						
Attitude to immig.	0.52	0	1	0.49	0	1
Unemploy. couple	0.08	0	1	0.07	0	1
Married	0.43	0	1	0.46	0	1
Widowed	0.08	0	1	0.08	0	1
Divorced	0.16	0	1	0.19	0	1
Separated	0.05	0	1	0.03	0	1
High school	0.54	0	1	0.50	0	1
College	0.23	0	1	0.28	0	1
Graduate	0.04	0	1	0.13	0	1
Family income 10-20K	0.19	0	1	0.10	0	1
Family income 20-30K	0.18	0	1	0.10	0	1
Family income 30-40K	0.10	0	1	0.09	0	1
Family income 40-50K	0.07	0	1	0.08	0	1
Family income 50-60K	0.07	0	1	0.08	0	1
Family income 60-75K	0.08	0	1	0.09	0	1
Family income 75-90K	0.03	0	1	0.07	0	1
Family income 90-110K	0.03	0	1	0.07	0	1
Family income 110-150K	0.03	0	1	0.08	0	1
Family income 150K plus	0.06	0	1	0.08	0	1
City size 10-100K	0.24	0	1	0.46	0	1
City size 100-1000K	0.34	0	1	0.17	0	1
City size 1000K plus	0.10	0	1	0.07	0	1
Democrat	0.45	0	1	0.35	0	1
Republican	0.16	0	1	0.24	0	1
Liberal	0.25	0	1	0.29	0	1
Home owner	0.51	0	1	0.53	0	1

Based on 408 observations in the treatment group and 3,504 in the control group.

Appendix B: Covariate Balance Pre-Shock

Table B.1 compares covariates between the treatment group and the control group, measured pre-GR, in the 2006 sample panel. Table B.2 compares covariates between the treated and untreated, measured pre-immigrant influx, in the 2010 sample panel.

Table B.1: Descriptives in the 2006 Sample Panel; Pre-Great Recession Wave 2006 – 2008

	Treatment			Control			Diff. test p-value
Variables	Mean	Min.	Max.	Mean	Min.	Max.	based on matched sample
Number of children	2.00	0	6	1.92	0	8	0.30
Number of siblings	3.85	0	14	3.50	0	32	0.93
Age	42.24	22	73	49.04	18	89	0.22
Percentages							
Married	0.56	0	1	0.52	0	1	0.11
Widowed	0.01	0	1	0.08	0	1	0.71
Divorced	0.17	0	1	0.17	0	1	0.42
Separated	0.07	0	1	0.02	0	1	0.88
Never married	0.19	0	1	0.21	0	1	0.18
High school	0.57	0	1	0.49	0	1	0.89
College	0.27	0	1	0.28	0	1	0.11
Graduate	0.05	0	1	0.12	0	1	0.79
Family income 10K minus	0.18	0	1	0.16	0	1	0.49
Family income 10-20K	0.15	0	1	0.09	0	1	0.21
Family income 20-30K	0.09	0	1	0.10	0	1	0.60
Family income 30-40K	0.09	0	1	0.11	0	1	0.96
Family income 40-50K	0.10	0	1	0.08	0	1	0.93
Family income 50-60K	0.08	0	1	0.10	0	1	0.69
Family income 60-75K	0.07	0	1	0.10	0	1	0.53
Family income 75-90K	0.08	0	1	0.07	0	1	0.62
Family income 90-110K	0.06	0	1	0.06	0	1	0.31
Family income 110-150K	0.07	0	1	0.07	0	1	0.79
Family income 150K plus	0.03	0	1	0.06	0	1	0.81
City size 10K minus	0.40	0	1	0.32	0	1	0.41
City size 10-100K	0.36	0	1	0.45	0	1	0.47
City size 100-1000K	0.17	0	1	0.16	0	1	0.25
City size 1000K plus	0.07	0	1	0.07	0	1	0.12
Democrat	0.37	0	1	0.35	0	1	0.20
Republican	0.20	0	1	0.27	0	1	0.38
Liberal	0.27	0	1	0.27	0	1	0.27
Home owner	0.37	0	1	0.47	0	1	0.46

Based on 162 observations in the treatment group and 2,218 in the control group.

Table B.2: Descriptives in the 2010 Sample Panel; Pre-Immigrant Influx Wave 2010 – 2012

	Treatment			Control			Diff. test p-value
Variables	Mean	Min.	Max.	Mean	Min.	Max.	based on matched sample
Number of children	2.17	0	8	1.81	0	8	0.99
Number of siblings	4.43	0	19	3.36	0	30	0.22
Age	45.80	19	88	48.77	18	89	0.77
Percentages							
Married	0.43	0	1	0.46	0	1	0.89
Widowed	0.07	0	1	0.08	0	1	0.88
Divorced	0.16	0	1	0.19	0	1	0.97
Separated	0.04	0	1	0.03	0	1	0.68
High school	0.56	0	1	0.50	0	1	0.59
College	0.23	0	1	0.28	0	1	0.52
Graduate	0.04	0	1	0.13	0	1	0.30
Family income 10-20K	0.21	0	1	0.11	0	1	0.05
Family income 20-30K	0.18	0	1	0.09	0	1	0.38
Family income 30-40K	0.09	0	1	0.10	0	1	0.51
Family income 40-50K	0.08	0	1	0.08	0	1	0.52
Family income 50-60K	0.06	0	1	0.08	0	1	0.60
Family income 60-75K	0.08	0	1	0.09	0	1	0.26
Family income 75-90K	0.03	0	1	0.07	0	1	0.20
Family income 90-110K	0.02	0	1	0.07	0	1	0.38
Family income 110-150K	0.04	0	1	0.07	0	1	0.52
Family income 150K plus	0.05	0	1	0.08	0	1	0.48
City size 10-100K	0.23	0	1	0.46	0	1	0.17
City size 100-1000K	0.34	0	1	0.17	0	1	0.11
City size 1000K plus	0.10	0	1	0.07	0	1	0.83
Democrat	0.44	0	1	0.35	0	1	0.03
Republican	0.17	0	1	0.24	0	1	0.05
Liberal	0.23	0	1	0.29	0	1	0.47
Home owner	0.42	0	1	0.45	0	1	0.76

Based on 272 observations in the treatment group and 2,336 in the control group.

Appendix C: Additional Analyses

In the first section of this appendix, using a constructed pseudo panel of cohorts, I examine whether the treated group relating to the Great Recession was associated with more votes for left-wing populist Bernie Sanders, and whether the treated group relating to the immigrant influx was associated with higher support for right-wing populist Donald Trump in the 2016 U.S. Presidential Election. In the second section, I perform various sensitivity analyses to address different concerns. The third section provides more supplementary estimates to further verify the robustness of results.

C1. Double Checking: 2016 U.S. Presidential Election

Populism expresses negative attitudes to wealthy elites as well as anti-immigration sentiment. Both types of attitudes may be translated to voting behavior in elections. I focus on the 2016 U.S. Presidential Election, including primaries as well as the General Election. It is well known and documented that Bernie Sanders' rhetoric focused on the division between common people and corrupt wealthy elites and that he fostered a negative attitude towards those wealthy elites (Oliver and Rahn, 2016; Kazin, 2016; Rodrik, 2018a,b; Schoor, 2017; Jensen and Bang, 2017; Gerbaudo, 2018; Lacatus, 2019; Staufer, 2021). At the same time, Donald Trump appealed to xenophobia by using the rhetoric of anti-(unauthorized) immigration to create a cleavage between nationals and the immigrants who threatened them (Oliver and Rahn, 2016; Kazin, 2016; Rodrik, 2018b; Schoor, 2017; Jensen and Bang, 2017; Gerbaudo, 2018; Lacatus, 2019; Piketty, 2020; Staufer, 2021).[38]

C1.1 Pseudo Panel Data of Cohorts

To investigate the associations of the two crises and populist voting in the 2016 U.S. Presidential Election, I turn to the main body of the GSS. However, with its original repeated cross-sectional data, I am not able to link the independent variables in earlier waves to voting variables in later waves or to other external voting data at the individual level. In order to address this problem, I construct a pseudo panel based on the repeated cross-sectional data (Deaton, 1985). Specifically, I aggregate the original data into nine

[38] In the 2016 U.S. presidential campaign, Trump's rhetoric sometimes also included a social dimension describing American workers as the victims of unfair competition from Mexico and China. However, even such an allegation has an apparent nativist dimension targeting foreign countries, which are standard characteristics of right-wing and nationalist rhetoric. Moreover, other large amount of Trump's rhetoric and his administration's policies were mainly nativist, e.g., reducing immigrants, building a border wall, etc. (Piketty, 2020).

ten-year birth cohorts by gender and by the nine U.S. regions where respondents resided. Hence in total there are 162 ($= 9 \times 2 \times 9$) cohorts in the sample of the pseudo panel. The average of individuals within cohort represents the corresponding cohort in every wave for every variable.

Though there are questions about individual voting turnout and which candidate to vote for in the U.S. Presidential General Election, there is no information about the Primary Elections in the GSS survey. Since left-wing populist Bernie Sanders was a candidate only in primaries, I need data on individual voting in the 2016 Primary Elections. These relevant questions exist in the ANES 2016 Time Series Study. I aggregate the 4,271 individuals in that dataset into cohorts in the same way as above and transform the data into a cross-section of 162 averaged cohorts. Merging this ANES 2016 cross-section with the GSS pseudo panel of cohorts, I am able to examine the association of the Great Recession and populist voting, and the association of the 2014 immigrant influx and populist voting in the 2016 U.S. Presidential Election at the cohort level.[39]

C1.2 Statistical Model

To establish the association of the Great Recession and populist voting, and the association of the 2014 immigrant influx and populist voting in the 2016 U.S. Presidential Election, I apply the multivariate OLS model:

$$y_i = \beta_v Treatment_i + x_i'\beta_x + \epsilon_i. \tag{3}$$

where i denotes cohorts now. All the variables except $Treatment$ in Eq.(3) are means within cohort and thus cardinal.

y refers to the averaged dummy of voting for different candidates within cohort, either in the 2016 U.S. Presidential Primary Elections or General Election. $Treatment$ again denotes the corresponding dummy of the treatment group during either the Great Recession or the immigrant influx. With respect to the Great Recession, the treatment group comprises cohorts whose couple unemployment averaged within cohort is greater than or equal to 0.5 in wave 2010 or 2012, and the control group contains cohorts whose couple unemployment average is less than 0.5 in both of these two waves.[40] The reason that I

[39]It is a limitation to exploit the pseudo panel data of cohorts to study populist voting. However, I try to investigate these associations regarding voting for different types of populist candidates, in order to merely provide additional evidence supporting the main results.

[40]In Table C.10 of Appendix C3, I also directly apply the average of couple unemployment within cohort, i.e., a continuous treatment, as the explanatory variable of interest. Though the estimates are not significant, the sign and magnitude are still as expected.

do not consider later waves is that the negative economic impact of the Great Recession was already extinct by 2014 and thereafter. As for the immigrant influx, the treatment and control groups are formed similarly to the case of individual level panel. However, I exploit information about residence in both waves 2014 and 2016. x contains the set of means of covariates in Eq.(1) and averaged voting turnout in the corresponding elections within cohort.[41] As for the Great Recession, the covariates take values in wave 2010. With respect to the immigrant influx, they take values in wave 2014.

C1.3 Great Recession and Populist Voting

There are no questions in the GSS survey asking about voting behavior in the U.S. Presidential Primary Elections, so I utilize the information from the ANES 2016 Time Series Study and combine it with the GSS data. Since it is impossible to link the two data at the individual level, I aggregate the ANES data in the same way as I do to generate the GSS pseudo panel, and then merge the two data at the cohort level. The treatment group is composed of cohorts whose couple unemployment averaged within cohort in wave 2010 or 2012 is greater than or equal to 0.5.[42] The controls take their values in 2010.

The first six columns in panel a of Table C.1 display outcomes for the 2016 U.S. Presidential Primary Elections. Regardless of controls, the treated cohorts were associated with 40 percentage points significantly higher support for left-wing populist Sanders and over 15 percentage points significantly fewer votes for Trump, echoing the findings of Di Tella and MacCulloch (2009). These results are more likely due to the popularity of Sanders among the cohorts that were unemployed during the Great Recession, rather than merely difference in party preferences between the treated and the untreated. Columns (7) to (10), as a placebo test, show the estimates for the General Election in the same year. After including covariates, the coefficients are non-significant and almost zero for both Clinton and Trump votes. Furthermore, columns (1) and (3) in panel a of Table C.2 present results for the 2012 U.S. Presidential General Election between Obama and Romney as another placebo test. The estimates are still non-significant. The results of these two placebo tests suggest that the support for Sanders from the treated cohorts during the Great Recession is not very likely owing to difference in party preferences. Otherwise, we would witness significantly higher votes for Clinton and Obama among the treated cohorts in the 2016 and 2012 Presidential General Election, respectively.

[41] Guiso et al. (2017) argue that turnout incentive is vital for populist voting.

[42] In Table C.10 of Appendix C3, I also directly apply the average of couple unemployment within cohort, i.e., a continuous treatment, as the explanatory variable of interest. Though the estimate of voting for Sanders is not significant, the sign and magnitude are still as expected.

Panel c displays the estimates for the counterpart whose couple unemployment averaged within cohort in wave 2006 or 2008 is greater than or equal to 0.5. The controls take their values in 2008. Including covariates, these cohorts were not significantly correlated with support for either left-wing populist Bernie Sanders or right-wing populist Donald Trump. Instead, they were associated with significantly more votes for Hillary Clinton, who is usually regarded as a left centrist, in the general election. This result is consistent with the story in Section 5: recent unemployment during the Great Recession triggered left-wing populism while existing unemployment from before the Great Recession did not seem to.

C1.4 Immigrant Influx and Populist Voting

Likewise, the data used in this subsection also consist of the GSS pseudo panel and the ANES 2016 Time Series Study. Now the treatment group is formed by the cohorts that were in the West South Central region in wave 2014 or 2016 during the immigrant influx. Covariates take their values in wave 2014 for estimation.

Panel b of Table C.1 reports the relevant results. During the Presidential Primary Elections, the cohorts in the West South Central region were correlated with more than seven percentage points significantly more votes for right-wing populist Trump and significantly lower support for the two Democratic candidates Sanders and Clinton. A similar situation appeared during the Presidential General Election with even a larger advantage for Trump. These results are closely related to the conclusions of Dinas et al. (2019) and Tabellini (2020). One may suspect that they are merely a divergence between party preferences of the treated and untreated regions. However, I conduct a placebo test again in column (2) and (4) in panel a of Table C.2 for the 2012 U.S. Presidential General Election which occurred before the immigrant influx. I no longer find such a divergence between the votes for Democratic candidate Obama and the votes for Republican candidate Romney. Hence higher support for Trump among people in the West South Central region is not very likely due to preferences for the GOP in this region.

Table C.1: Effects of the Great Recession and Immigrant Influx on Populist Voting

	2016 U.S. Presid. Primary Elections						2016 U.S. Presid. General Election			
	Sanders		Clinton		Trump		Clinton		Trump	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
a. Great Recession	0.40**	0.42**	-0.10	-0.11	-0.16***	-0.25***	0.19*	0.03	-0.26***	0.01
	(0.17)	(0.18)	(0.11)	(0.14)	(0.04)	(0.09)	(0.10)	(0.18)	(0.04)	(0.13)
No. of Obs.	135		135		135		136		136	
b. Immigrant influx	-0.15***	-0.10*	-0.08**	-0.11**	0.07**	0.09**	-0.13***	-0.12**	0.15***	0.13***
	(0.04)	(0.05)	(0.04)	(0.05)	(0.03)	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)
No. of Obs.	132		132		132		134		134	
c. Unemp. pre-GR	0.44**	0.19	-0.12	-0.03	-0.12*	-0.19	0.22**	0.23*	-0.21***	-0.18
	(0.17)	(0.15)	(0.11)	(0.09)	(0.07)	(0.12)	(0.09)	(0.13)	(0.07)	(0.12)
No. of Obs.	134		134		134		135		135	
Controls	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

Note: In panel a for the Great Recession, the treatment group is composed of cohorts whose couple unemployment averaged within cohort is greater than or equal to 0.5 in wave 2010 or 2012. Covariates take values in wave 2010. In panel b for the immigrant influx, the treatment group consists of cohorts that resided in the West South Central region of the U.S. in wave 2014 or 2016. Covariates take values in wave 2014. In panel c for existing unemployment pre-Great Recession, the treatment group is composed of cohorts whose couple unemployment averaged within cohort is greater than or equal to 0.5 in wave 2006 or 2008. Covariates take values in wave 2008. All the dependent variables and controls are averages within cohort. Controls contain the mean of voting turnout in the corresponding election, as well as extensive averaged demographic and socio-economic variables such as the quadratic of respondent's age, marital status dummies, number of siblings, number of children, academic degree dummies, categories of last year's total family income, categories of the population size of respondent's place, party self-identification, dummy of liberal ideology, and dummy of home owner. Robust standard errors in parentheses; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

C1.5 Potential Mechanism

I try to distinguish two potential mechanisms through which recent unemployment during the GR and the immigrant influx led to populist voting – accountability theory (Ferejohn, 1986) and issue ownership (Petrocik, 1996). In the current context, the former mechanism states that voters who are dissatisfied with the way the incumbent government is dealing with the Great Recession and the immigrant influx will punish it by turning to an opposition. The latter mechanism claims that dissatisfied voters will support the party or politician they deem competent on the specific issues (Dinas et al., 2019).

As shown in panel a of Table C.1, people losing their job after the Great Recession did not decrease their support for the incumbent – the Democratic Party – or turn to the opposition – the Republican Party – in either primaries or the General Election. Instead, these people were significantly more prone to voting for Bernie Sanders who used anti-elitist rhetoric during his campaign. Thus, accountability theory is not valid in this case, while issue ownership seems to be what appropriately explains the electoral reaction against elites and establishment after the Great Recession.

The results are mixed in panel b of Table C.1. The Democrats, Bernie Sanders and Hillary Clinton, both lost votes from people who were most impacted by the immigrant influx. This is predicted by accountability theory. However, Donald Trump, who used considerable anti-(unauthorized) immigration rhetoric and promised harsh reform of the U.S. immigration policy during his campaign, obtained increasing support from residents of the West South Central region. This is also predicted by issue ownership. In order to disentangle this puzzle, in panel b of Table C.2 I estimate the same model for another two Republican candidates, Ted Cruz and John Kasich, during the 2016 Primary Elections. Ted Cruz held a similar anti-immigration position to that of Donald Trump. He was opposed to providing DREAMers (unauthorized immigrants brought to the U.S. as children) with a path to citizenship (Kapur, 2018). Moreover, he also called for repeal of the clause of the 14th amendment granting citizenship to those born in the U.S. (Farley, 2016). However, from 2014 John Kasich changed his previous conservative opinion on immigration and called for a path to legal status for unauthorized immigrants (Sussman, 2015). In October 2015, he actually criticized Trump's plan for "building a wall along the U.S.–Mexico border and removing immigrants who entered the U.S. illegally" as "just crazy" (Rappeport, 2015). If accountability theory were true, the residents in the West South Central region would increase (or at least not decrease) votes for Republican candidates. If issue ownership were true, these residents would more likely support candidates

with a clear anti-immigration opinion. It is clear from panel b of Table C.2 that they were significantly more prone to voting for Cruz, an anti-immigration candidate, and significantly less likely to support Kasich with his softer attitude to immigration. Once more, this phenomenon fits issue ownership rather than accountability theory.

In this section, I connect recent unemployment during the GR to left-wing populist voting and link the immigrant influx to right-wing populist voting, both delivered through the channel of issue ownership. The effect of recent unemployment during the Great Recession seemed to persist in the long-term. Even more than five years after they had been rendered unemployed during the Great Recession, people were still significantly more prone to voting for a left-wing populist. Such lasting negative effects on electoral support and trust are also documented by Ananyev and Guriev (2019) and Dustmann et al. (2017).

Table C.2: Effects of Recent Unemployment and the Immigrant Influx on the 2012 U.S. Presidential Election & Mechanism Investigation

	(1)	(2)	(3)	(4)
a. Placebo test	2012 U.S. Presidential General Election			
	Obama		Romney	
	GR	Immi Infx	GR	Immi Infx
	0.19	-0.03	-0.19	-0.01
	(0.15)	(0.07)	(0.17)	(0.06)
No. of Obs.	134		134	
b. Mechanism	2016 U.S. Presid. Primary Elections			
investigation	Cruz	Kasich		
Immigrant Influx	0.08**	-0.05***		
	(0.04)	(0.02)		
No. of Obs.	132	132		

Note: Covariates are included in every column; see also the footnote of Table C.1.

C2. Sensitivity Analyses

In this section, I apply alternative methods and combine extra data to perform various sensitivity analyses. The aim is to address concerns on the choice of treatment groups, the impact of the Great Recession on populist attitudes through other individual characteristics rather than unemployment, the alternative measures of individual job insecurity, the effect of the immigrant influx on the labor market at the regional level, and interaction of individuals' unemployment and industry heterogeneity in exposure to immigration.

C2.1 Interaction Effects of Covariates and Great Recession

The Great Recession could exert influence on various characteristics of individuals in addition to unemployment. Such influence might also affect their attitudes related to populism and impair or even cancel out the effect of recent unemployment. To examine this possibility, I interact the post-Great Recession period with every individual characteristic in the set of covariates. Panel a in Table C.3 reports the results including all these interaction terms in the model.

Table C.3: Effects of Recent Unemployment on Attitudes Related to Populism: Sensitivity Analyses

	Trust Companies		Gov. Equ. Inc.		Gov. Help Poor		Atti. Immig.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
a. Interactions GR	-1.38***		0.69**		0.05		0.52	
and every covariate	(0.52)		(0.35)		(0.45)		(0.54)	
Controls	Yes		Yes		Yes		Yes	
Controls×Post-GR	Yes		Yes		Yes		Yes	
b. Altntv. measr.	Self-	Actul &	Self-	Actul &	Self-	Actul &	Self-	Actul &
of job insecurity	unemp.	antp unep	unemp.	antp unep	unemp.	antp unep	unemp.	antp unep
	-1.49**	-0.98**	1.00***	0.68**	0.07	-0.07	-0.61	0.16
	(0.65)	(0.42)	(0.38)	(0.33)	(0.49)	(0.38)	(0.58)	(0.40)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Based on 3,570 observations; see the footnote of Table 1.

Interestingly the estimates are rather similar to the baseline results in Table 1. The conclusion thus remains the same: post-Great Recession, the recently unemployed had significantly lower confidence in big companies than those that were never laid off; they also presented a significantly higher request for the government to equalize the income but not a different level of demand for the government to economically assist the disadvantaged than those never unemployed; moreover, they were not more opposed to immigration than those never laid off. Hence other individual characteristics might change, too, after the Great Recession, but these changes could not threaten the effects of recent unemployment on left-wing populist attitudes.

C2.2 Alternative Measures of Job Insecurity

When regarding individuals rather than couples as economic units, I also show the effects of self-unemployment of the respondents during the Great Recession on populist attitudes in the odd columns in panel b of Table C.3. The conclusions based on these results are not changed.

Job insecurity may have both real and perceived dimensions. The previous treatment group in the case of the Great Recession is based on individual or couple actual unemployment only. To account for the perceived dimension of job insecurity, I use another variable, individual anticipated unemployment in the next 12 months, in the GSS survey. If an individual answered "very likely" or "fairly likely" to the question "Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off – very likely, fairly likely, not too likely, or not at all likely?" in wave 2010 only, they are now added to the treatment group with those recently unemployed during the Great Recession.

The corresponding results are reported in the even columns of the same panel. The estimates for confidence in major companies are smaller in magnitude, indicating that individual or couple actual unemployment had a stronger influence than anticipated future unemployment. The estimates for the demand for the government to equalize income are similar to those in Table 1. The estimates for the request for the government to provide economic assistance to the poor, and for the attitude to immigration, are again non-significant and smaller. These results fit with the previous conclusions.

C2.3 Effects of the 2014 Immigrant Influx on Local Labor Market Conditions

In Section 6.3, I investigate the effects of the 2014 immigrant influx on individual labor market outcomes and do not find significant impact relative to the untreated areas. Nevertheless, the effects of unauthorized immigration on the labor market may be different at the individual level than at the regional level due to changes in inflows and outflows of residents (Dustmann et al., 2017). If residents in the treated area become more negative towards immigration at the same time as the local unemployment rate is increasing, the change in attitude may be (partially) due to concerns on the local labor market. If the immigrant influx were to affect neither individual labor market outcomes nor local labor market conditions, one could be more confident that the more negative attitude to immigration was mainly driven by cultural or identity concerns.

Table C.4 reports relevant estimates. State or county fixed effects and their specific time trends, and state real GDP per capita as well as survey waves fixed effects are included. Columns (1) and (2) present the effects of the immigrant influx on the state unemployment rate and county unemployment rate, respectively. Both of them are statistically and economically non-significant (around 0.2 – 0.3 percentage points). When combined with the results in Section 6.3, it is clear that the immigrant influx did not impact significantly on either individual labor market outcomes or local labor market

conditions in the treated region.

Table C.4: Effects of the Immigrant Influx on Local Labor Market Conditions and Immigrants Proportions

	Unemploy. Rate (%)		Northern Triangle Immig. Prop. (%)	
	(1)	(2)	(3)	(4)
	State	County	State	County
Treatment×Post-Immigrant Influx	0.27	0.17	0.08*	0.08***
	(0.43)	(0.20)	(0.05)	(0.02)
Number of observations	127	692	91	625

Note: State or county fixed effects and survey wave fixed effects are included in every column. Controls containing state real GDP per capital and state- or county-specific time trends are included in every column. Robust standard errors clustered at the state or county level are reported in parentheses; see also the footnote of Table 5.

Columns (3) and (4) report the effects of the immigrant influx on the fraction of (authorized) Northern Triangle immigrants in the state of residence.[43] The covariates are the same as in the first two columns. The immigrant influx increased the proportion of (authorized) Northern Triangle immigrants in the state of residence by around 0.1 percentage points in the treated region compared to the rest of the U.S.[44] In 2015, most of the Northern Triangle immigrants living in the U.S. were unauthorized (Pew Research Center). Thus, if the unauthorized immigration inflow followed the same pattern, the effect would be roughly doubled to 0.2 percentage points. Compared to this proportion in the median state in the sample, 0.85%, the effect of the immigrant influx would not be seen as trivial.

C2.4 Industry Heterogeneity in Immigration Exposure

Even though the immigrant influx did not negatively affect the local labor market in the treated region, it is still possible that workers in industries that were more intensively exposed to immigrants would feel threatened and thus hold a more negative attitude to immigration after this influx. If so, the deterioration of attitude to immigration is more likely attributed to job insecurity rather than to cultural concern.

In Table C.5, the industry heterogeneity in the share of immigrant workers is taken into account. The first two columns set out the top ten industries ranked by share of immigrant workers, namely private households (45%), textile, apparel, leather manufacturing (36%), agriculture (33%), accommodation (32%), food manufacturing (29%),

[43] Again, the available immigrant data at the county level from ACS are too limited on a yearly basis.

[44] The survey estimates for numbers of unauthorized Northern Triangle immigrants by state are imprecise and not on an annual basis. Therefore, I can only use data about authorized immigrants.

Table C.5: Effect of the Immigrant Influx on Attitude to Immigration: Industry Heterogeneity in Immigration Exposure

	(1)	(2)	(3)	(4)
	Attitude to Immigration			
Industry exposure to immig.	Top 10		Top 3	
Treatment×Post-Immigrant Influx	-0.57*	-0.65*	-0.48*	-0.55*
	(0.31)	(0.34)	(0.29)	(0.31)
Immig. Industry×Post-Immig. Influx	0.24	0.18	-0.31	-0.15
	(0.31)	(0.34)	(0.61)	(0.64)
Treatment×Immig. Industry×Post-Immig. Influx	0.58	0.67	1.01	0.93
	(0.67)	(0.71)	(1.15)	(1.18)
Number of observations	3,912		3,912	
Controls	No	Yes	No	Yes

Note: See the footnote of Table 5.

computer and electronic products manufacturing (27%), personal and laundry services (26%), administrative and support services (25%), construction (24%), and miscellaneous and not specified manufacturing (23%) (Pew Research Center). The remaining two columns define immigrant industry in terms of the top three industries. More specifically, the *immigrant industry* is a time-invariant dummy of individuals who worked in one of the immigrant industries before the immigrant influx. Additional interaction terms of *immigrant industry* and *post-immigrant influx*, and of these and *treatment* region are included. Neither of the coefficients of these two interactions is significant, so working in an industry with a high share of immigrant workers did not significantly entail a more negative attitude to immigration after the immigrant influx, whether the respondent lived in the treated region or not. The estimate of *treatment*×*post-immigrant influx* remains similar to that in Table 5.

C2.5 A Different Design for the 2014 Immigrant Influx

Previously the treated area with respect to the 2014 immigrant influx has been the West South Central region. The unauthorized Northern Triangle immigrants entered the U.S. through this region merely for the geographic convenience and hence impacted there most intensely in the short term. However, if these immigrants moved to other areas of the U.S. within a few months, their destinations might form another appropriate treated area. According to the Migration Policy Institute, around 90% of the children and juveniles among these immigrants later stayed with relatives or family friends who were already living in the U.S. Northern Triangle immigrants are already distributed rather unevenly in the U.S., gathering in several states and metropolitan areas (Migration Policy Institute). So the states and areas with higher proportions of Northern Triangle immigrants were

more likely to be destinations for the unauthorized immigrants in 2014.

Nonetheless, the proportion of Northern Triangle immigrants by state is endogenous to the attitude of residents to immigration. There may be a reverse causality in that immigrants move to and concentrate in areas where they are more welcome or tolerated by residents. A potential empirical strategy for addressing this problem is to utilize the distance from the destination to the Rio Grande Valley border patrol sector as an instrument variable (IV) for the proportion of Northern Triangle immigrants. Note that a dominant proportion of these unauthorized immigrants (over 80% in the peak of the 2014 immigrant influx) entered the U.S. via this valley. This strategy relies on the exclusion restriction that the distance to the border patrol sector affected residents' attitude to immigration only through the proportion of Northern Triangle immigrants.[45] The use of distance as an IV in a similar context can be seen in Dinas et al. (2019).

Table C.6: 2SLS Estimates Effect of the Immigrant Influx on Attitude to Immigration: A Different Design of Treated Areas

Attitude to Immigration	All		Whites	
	(1)	(2)	(3)	(4)
	1st Stage	2nd Stage	1st Stage	2nd Stage
Ln Distance	-0.34		-0.79***	
	(0.23)		(0.17)	
Instrumented North Trigl Immig. Prop.		1.02		3.06*
		(2.73)		(1.65)
Instru. North Trigl Immig. Prop.×Post-Influx		-0.56		-0.81*
		(0.45)		(0.44)
County Unemployment	0.02***	-0.12	0.02**	-0.22**
	(0.01)	(0.09)	(0.01)	(0.10)
County Unemp.×Post-Influx	-0.00	-0.03	-0.00	-0.15
	(0.00)	(0.08)	(0.01)	(0.11)
Controls	Yes	Yes	Yes	Yes
No. of Obs.	3,912		2,831	

Note: The distance is measured as the shortest driving distance from the county of residence to the Rio Grande Valley border patrol sector. This distance is the instrument variable for the proportion of Northern Triangle immigrants in the state population; see also the footnote of Table 5.

Table C.6 displays the 2SLS estimates. The distance is measured as the shortest driving distance from the county of residence to the Rio Grande Valley border patrol sector.[46] In the first stage, the natural logarithm of distance to the border sector is negatively associated with the proportion of (authorized) Northern Triangle immigrants in the state of residence, although this association is only statistically significant for the sample of Whites. In the second stage, the proportion of Northern Triangle immigrants is positively

[45] I also try using the proportion of Latin American immigrants and obtain similar results.

[46] Another measure – distance "as the crow flies", the most direct path – yields similar results.

correlated with residents' attitude to immigration. I want to be cautious and conservative when interpreting this effect since the distance to the Rio Grande Valley sector is probably valid as an IV only for the 2014 immigrant influx. After all, Northern Triangle immigrants could previously enter the U.S. using many routes scattered along its southern border. However, with respect to the estimate of the interaction of the proportion of Northern Triangle immigrants and post-immigrant influx, I am more confident. During the 2014 immigrant influx, the increase in the proportion of Northern Triangle immigrants diminished residents' positive attitude to immigration. This is consistent with the conclusion drawn in Section 6.1: the 2014 immigrant influx provoked a more negative attitude to immigration in the impacted areas, especially among White residents.

C3. More Supplementary Estimates

The estimates in this section display further robustness checks. Table C.7 reports results related to the GR design: adding state-specific linear trends to the baseline specification (panel a), taking a falsification test with the counterfactual post-GR timing in wave 2008 (panel b), and studying effects of pre-GR unemployment using GSS cross-sections 1990-2008 (panel c). Table C.8 shows estimates by changing the compositions of states in the treated region related to the 2014 immigrant influx, and by using the original unbalanced panel data. Table C.9 displays the main results using the linear fixed effects model. Table C.10 presents effects of the cohort mean of couple unemployment during the GR on populist voting.

Table C.7: Effects of Unemployment on Attitudes Related to Populism: Location-Specific Trends, Placebo Treatment & Pre-GR Unemployment of Cross Sections

	Trust Companies	Gov. Equ. Inc.	Gov. Help Poor	Atti. Immig.
	(1)	(2)	(3)	(4)
a. Includ. location	-1.35**	0.77**	-0.08	-0.06
specific linear trend	(0.56)	(0.33)	(0.44)	(0.56)
b. Placebo timing GR	-0.41	-0.07	0.00	-0.81
in wave 2008	(0.49)	(0.43)	(0.51)	(0.58)
c. Pre-GR unemp using	-0.13	0.24***	0.17**	-0.21
cross sections 1990-2008	(0.09)	(0.08)	(0.08)	(0.13)

Note: Panel a is based on 3,570 observations, panel b 2,380 observations and panel c 28,150 observations. Covariates are included in every column; see also the footnote of Table 1.

Table C.8: Effect of the Immigrant Influx on Attitude to Immigration: Different Coverage of Treated Region & Original Unbalanced Panel

	Extended Treat Region		Shrunk Treat Region		Original Unbalance Panel	
	All	Whites	All	Whites	All	Whites
Attitude to Immigration	(1)	(2)	(3)	(4)	(5)	(6)
Treat.×Post-Immig. Influx	-0.40	-1.11*	-0.45	-0.71	-0.49	-1.33**
	(0.30)	(0.58)	(0.37)	(0.68)	(0.30)	(0.60)
Number of observations	3,912	2,831	3,912	2,831	4,899	3,481

Note: In the first two columns, the treatment group is extended to contain respondents who resided in wave 2014 in all states bordering with Mexico including Arizona, New Mexico, Texas and neighboring states of Texas such as Arkansas, Louisiana, and Oklahoma; in columns (3) and (4), the treatment group is shrunk to contain respondents who resided in wave 2014 in New Mexico and Texas only. Covariates are included in every column; see also the footnote of Table 5.

Table C.9: Linear Fixed Effects of Recent Unemployment and the Immigrant Influx on Populism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
a. Great Recession	Trust Companies		Gov. Equ. Inc.		Gov. Help Poor		Atti. Immig.			
Adjusted Range	(0–2)		(0–6)		(0–4)		(0–1)			
Treat.×Post-Great Rec.	-0.28***	-0.27***	0.47*	0.48*	0.06	-0.05	-0.03	-0.04		
	(0.08)	(0.08)	(0.25)	(0.25)	(0.15)	(0.15)	(0.06)	(0.06)		
Controls	No	Yes	No	Yes	No	Yes	No	Yes		
Adjusted Mean of Treat. Group	0.98		3.45		2.29		0.50			
b. 2014 Immigrant Influx					Placebo Immi Regn					
Attitude to Immigration	All		Whites	Race Mino.	All	Whites	Couple Unemp.		Antcptd Unemp.	
Adjusted Range	(0–1)		(0–1)		(0–1)		(0–1)		(0–3)	
Treat.×Post-Immig. Influx.	-0.06	-0.06	-0.14**	0.06	-0.01	0.04	0.02	0.04	-0.08	-0.07
	(0.05)	(0.06)	(0.07)	(0.09)	(0.07)	(0.08)	(0.03)	(0.03)	(0.14)	(0.14)
Controls	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes
No. of Obs.	3,912		2,831	1,078	3,504	2,652	3,912		3,912	
Adjusted Mean of Treat. Group	0.52		0.52		0.52		0.08		0.68	

Note: Panel a is based on 3,570 observations. In panel b, column (3) restricts the sample to include non-Hispanic Whites only and column (4) includes racial minorities; column (5) is a placebo test by using the East South Central region of the U.S. as the treated area and estimating the model excluding the West South Central region; column (6) is the same type of placebo test for non-Hispanic Whites only; see also the footnotes of Tables 1 and 5.

Table C.10: Effects of the Great Recession on Populist Voting: Cohort Mean of Couple Unemployment as Explanatory Variable

	2016 U.S. Presid. Primary Elections						2016 U.S. Presid. General Election			
	Sanders		Clinton		Trump		Clinton		Trump	
Great Recession	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Cohort mean of couple unemp.	0.32**	0.25	-0.11	-0.14	-0.16**	-0.16	0.16	-0.02	-0.30***	-0.04
	(0.15)	(0.22)	(0.12)	(0.15)	(0.08)	(0.11)	(0.11)	(0.16)	(0.09)	(0.14)
Controls	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
No. of Obs.	135		135		135		136		136	

Note: All the dependent and explanatory variables are averages within cohort; see also the footnote of Table C.1.

Appendix D: Full Estimates of Main Models

Tables D.1 and D.2 present the full parameter estimates related to the baseline estimates in Tables 1 and 5, respectively.

Table D.1: Effects of Recent Unemployment during the Great Recession on Attitudes Related to Populism; Full Baseline Model

	Trust Companies		Gov. Equ. Inc.		Gov. Help Poor		Atti. Immig.	
Recent Unemp. Post-Rec.	(1)		(2)		(3)		(4)	
Treat.×Post-Great Rec.	-1.32***	(0.50)	0.70**	(0.34)	-0.00	(0.43)	-0.28	(0.48)
Married	-0.47	(0.50)	-0.03	(0.39)	-0.08	(0.35)	-0.99	(0.69)
Widowed	-1.24	(0.80)	0.64	(0.62)	-0.16	(0.56)	-0.11	(0.79)
Divorced	-0.88	(0.61)	0.11	(0.54)	-0.05	(0.51)	-0.38	(0.80)
Separated	-0.81	(0.67)	-0.58	(0.54)	0.28	(0.52)	-1.02	(0.81)
Number of Siblings	0.13**	(0.06)	-0.00	(0.06)	0.12**	(0.06)	0.08	0.08
Number of Children	-0.03	(0.14)	-0.00	(0.13)	0.09	(0.12)	-0.01	(0.18)
Age	-0.12	(0.09)	0.02	(0.09)	0.01	(0.10)	-0.48**	(0.21)
Age Squared	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00*	(0.00)
High School	0.53	(0.50)	-0.12	(0.39)	0.64	(0.52)	-0.85	(0.72)
College	1.12*	(0.60)	-0.06	(0.46)	0.42	(0.59)	-0.54	(0.82)
Graduate	1.14	(0.69)	0.38	(0.63)	0.58	(0.72)	-0.74	(1.04)
Family Income 10-20K	0.29	(0.30)	0.21	(0.28)	-0.51*	(0.28)	-0.57	(0.35)
Family Income 20-30K	0.06	(0.30)	0.24	(0.25)	-0.07	(0.28)	0.48	(0.37)
Family Income 30-40K	-0.16	(0.29)	0.30	(0.24)	-0.06	(0.28)	0.37	0.37
Family Income 40-50K	0.24	(0.31)	0.27	(0.29)	-0.15	(0.29)	-0.29	(0.40)
Family Income 50-60K	0.15	(0.31)	-0.12	(0.27)	-0.46	(0.28)	0.14	(0.37)
Family Income 60-75K	0.09	(0.31)	-0.33	(0.27)	-0.36	(0.28)	0.59	(0.42)
Family Income 75-90K	-0.05	(0.35)	-0.10	(0.32)	-0.36	(0.32)	0.21	(0.45)
Family Income 90-110K	0.14	(0.34)	-0.20	(0.33)	0.07	(0.37)	-0.21	(0.53)
Family Income 110-150K	-0.34	(0.38)	-0.01	(0.32)	0.01	(0.37)	0.17	(0.54)
Family Income 150K Plus	0.35	(0.39)	-0.56	(0.37)	-0.18	(0.39)	-0.19	(0.56)
City Size 10-100K	-0.15	(0.31)	0.39	(0.28)	0.57*	(0.33)	0.22	(0.35)
City Size 100-1000K	-0.05	(0.56)	0.38	(0.55)	0.62	(0.51)	0.33	(0.59)
City Size 1000K Plus	-1.75*	(0.97)	1.57	(1.05)	2.01*	(1.07)	-0.36	(1.39)
Democrat	0.11	(0.25)	0.14	(0.22)	0.15	(0.24)	-0.37	(0.33)
Republican	0.16	(0.26)	0.16	(0.24)	0.05	(0.21)	0.15	(0.33)
Liberal	-0.16	(0.18)	0.07	(0.16)	0.05	(0.19)	0.36	(0.23)
Home Owner	-0.24	(0.40)	-0.01	(0.32)	-0.19	(0.28)	0.15	(0.31)
Wave 2	0.03	(0.15)	-0.04	(0.13)	-0.03	(0.16)	0.74**	(0.33)
Wave 3	-0.46**	(0.20)	-0.78***	(0.20)	-0.37	(0.25)	1.47***	(0.56)

Note: Based on 3,570 observations; see the footnote of Table 1.

Table D.2: Effect of the Immigrant Influx on Attitude to Immigration; Full Baseline Model

Attitude to Immigration	All		Non-Hispanic Whites	
	(1)		(2)	
Treat.×Post-Immig. Influx	-0.50*	(0.30)	-1.40**	(0.60)
Married	-0.01	(0.42)	-0.07	(0.73)
Widowed	-0.18	(0.69)	-0.11	(1.24)
Divorced	-0.50	(0.53)	-0.82	(0.95)
Separated	-0.19	(0.56)	-0.50	(1.13)
Number of Siblings	-0.04	(0.06)	0.01	(0.11)
Number of Children	0.00	(0.15)	-0.20	(0.19)
Age	-0.01	(0.11)	0.09	(0.15)
Age Squared	-0.00	(0.00)	-0.00	(0.00)
High School	0.13	(0.39)	0.50	(0.76)
College	-0.36	(0.52)	0.03	(0.82)
Graduate	-1.01	(0.77)	-2.00	(1.26)
Family Income 10-20K	0.21	(0.29)	0.11	(0.46)
Family Income 20-30K	0.09	(0.33)	-0.31	(0.52)
Family Income 30-40K	0.11	(0.32)	0.07	(0.46)
Family Income 40-50K	-0.20	(0.35)	0.13	(0.50)
Family Income 50-60K	0.11	(0.39)	0.02	(0.53)
Family Income 60-75K	-0.01	(0.41)	-0.11	(0.53)
Family Income 75-90K	-0.16	(0.47)	-0.50	(0.59)
Family Income 90-110K	-0.11	(0.48)	-0.51	(0.60)
Family Income 110-150K	-1.15**	(0.50)	-1.38**	(0.64)
Family Income 150K Plus	-0.33	(0.47)	-0.62	(0.53)
City Size 10-100K	0.05	(0.38)	0.64	(0.52)
City Size 100-1000K	0.47	(0.75)	-0.13	(0.84)
City Size 1000K Plus	1.15	(0.93)	2.53**	(1.16)
Democrat	-0.06	(0.25)	-0.10	(0.36)
Republican	-0.26	(0.28)	-0.34	(0.37)
Liberal	0.13	(0.21)	0.16	(0.32)
Home Owner	0.16	(0.30)	0.30	(0.45)
Wave 2	0.24	(0.19)	0.35	(0.25)
Wave 3	0.76***	(0.28)	1.02***	(0.39)
No. of Obs.	3,912		2,831	

Note: The first two columns use the whole sample and the last two restrict the sample to include non-Hispanic Whites only; see also the footnote of Table 5.

Appendix E: Family Unit Apprehensions during the Immigrant Influx

Table E.1 lists the numbers of family unit apprehensions by month in different border patrol sectors in the U.S. from October 2012 to September 2016.

Table E.1: Total Family Unit Apprehensions by Month; Oct.2012-Sep.2016

a. Fiscal Year 2013

SECTOR	October	November	December	January	February	March	April	May	June	July	August	September	Yearly Total
Miami	12	1	2	6	0	1	1	5	6	5	2	2	43
New Orleans	7	2	4	0	0	0	0	0	0	0	2	3	18
Ramey	2	0	0	0	1	1	0	0	0	0	1	1	6
Blaine	0	1	3	2	3	2	3	1	1	8	4	2	30
Buffalo	1	0	0	0	4	0	0	1	0	10	2	1	19
Detroit	0	0	1	0	0	0	0	0	0	2	2	1	6
Grand Forks	0	0	2	0	0	1	1	0	0	0	0	0	4
Havre	2	0	0	0	0	0	0	0	0	0	0	0	2
Houlton	0	0	0	0	0	0	0	0	0	0	0	0	0
Spokane	9	0	0	0	0	0	0	0	0	1	0	0	10
Swanton	5	3	1	0	0	5	2	13	3	13	5	13	63
Big Bend *(formerly Marfa)*	16	10	9	11	9	3	11	8	3	10	7	5	102
Del Rio	17	26	34	16	34	37	50	55	85	98	139	120	711
El Centro	36	33	23	34	19	38	54	43	29	18	20	18	365
El Paso	29	26	30	18	24	30	26	44	17	15	31	8	298
Laredo	105	114	101	110	98	178	139	155	110	211	193	174	1,688
Rio Grande Valley *(formerly McAllen)*	266	278	231	236	310	484	606	637	698	1,016	1,240	1,263	7,265
San Diego	88	86	110	153	155	177	160	131	119	126	119	152	1,576
Tucson	211	178	183	245	265	336	310	224	178	151	155	194	2,630
Yuma	31	25	25	24	9	27	28	18	11	6	3	13	220
Coastal Border	21	3	6	6	1	2	1	5	6	5	5	6	67
Northern Border	17	4	7	2	7	8	6	15	4	34	13	17	134
Southwest Border	799	776	746	847	923	1,310	1,384	1,315	1,250	1,651	1,907	1,947	14,855
Monthly Total	837	783	759	855	931	1,320	1,391	1,335	1,260	1,690	1,925	1,970	15,056

b. Fiscal Year 2014

SECTOR	October	November	December	January	February	March	April	May	June	July	August	September	Yearly Total
Miami	4	2	4	17	16	5	1	0	12	5	8	13	87
New Orleans	0	1	0	6	4	1	9	2	9	2	1	1	36
Ramey	0	1	0	0	0	0	0	0	0	0	1	0	2
Blaine	0	0	0	3	1	0	3	6	0	2	1	0	16
Buffalo	0	0	0	1	0	2	2	0	0	2	4	1	12
Detroit	0	1	0	0	0	1	2	2	2	0	0	0	8
Grand Forks	1	3	0	1	2	1	1	0	0	0	3	2	14
Havre	0	0	0	0	0	0	0	0	0	0	0	0	0
Houlton	0	0	0	0	0	0	0	0	0	0	2	0	2
Spokane	0	0	0	0	0	0	1	2	2	0	0	0	5
Swanton	1	0	12	2	0	1	6	4	2	20	2	7	57
Big Bend *(formerly Marfa)*	4	1	8	12	11	3	7	8	28	58	25	11	176
Del Rio	150	172	185	179	311	521	467	1,080	1,134	466	173	112	4,950
El Centro	37	21	51	50	36	25	48	59	105	119	41	38	630
El Paso	23	30	29	26	49	44	45	60	113	72	39	32	562
Laredo	164	176	255	171	262	351	315	554	739	316	183	105	3,591
Rio Grande Valley *(formerly McAllen)*	1,472	1,953	2,264	1,509	2,246	4,306	5,098	10,145	13,370	5,792	2,467	1,704	52,326
San Diego	171	129	130	149	106	187	146	175	168	119	137	106	1,723
Tucson	375	294	373	166	185	235	320	576	592	376	176	144	3,812
Yuma	18	10	16	24	75	80	65	115	81	87	55	49	675
Coastal Border	4	4	4	23	20	6	10	2	21	7	10	14	125
Northern Border	2	4	12	7	3	5	15	14	6	24	12	10	114
Southwest Border	2,414	2,786	3,311	2,286	3,281	5,752	6,511	12,772	16,330	7,405	3,296	2,301	68,445
Monthly Total	2,420	2,794	3,327	2,316	3,304	5,763	6,536	12,788	16,357	7,436	3,318	2,325	68,684

c. Fiscal Year 2015

SECTOR	October	November	December	January	February	March	April	May	June	July	August	September	Yearly Total
Miami	6	4	17	1	0	1	6	4	10	5	30	14	98
New Orleans	3	3	8	1	3	0	0	1	2	1	3	0	25
Ramey	0	0	0	0	0	0	2	0	1	4	0	1	8
Blaine	4	10	1	6	2	0	0	5	6	0	3	0	37
Buffalo	0	0	0	1	0	1	0	0	1	0	0	0	3
Detroit	0	0	3	0	0	0	0	0	0	0	1	0	4
Grand Forks	1	0	0	0	2	0	2	1	2	1	0	0	9
Havre	0	0	0	0	0	0	0	0	0	0	0	0	0
Houlton	0	0	0	0	0	0	0	0	0	1	0	0	1
Spokane	0	0	0	0	0	0	0	0	0	0	0	5	5
Swanton	3	2	8	1	1	2	0	0	0	5	2	1	25
Big Bend *(formerly Marfa)*	30	15	31	14	25	21	40	60	49	103	192	227	807
Del Rio	79	83	118	95	72	182	174	269	227	233	322	287	2,141
El Centro	16	47	83	22	31	53	76	38	59	76	79	95	675
El Paso	22	27	45	22	19	67	149	118	144	213	185	209	1,220
Laredo	136	112	108	104	76	90	87	97	113	126	138	185	1,372
Rio Grande Valley *(formerly McAllen)*	1,556	1,809	1,979	1,091	1,404	1,834	2,018	2,584	2,904	3,106	3,577	3,547	27,409
San Diego	119	123	185	129	126	176	133	159	102	85	111	102	1,550
Tucson	180	164	276	95	225	256	296	333	254	258	265	328	2,930
Yuma	24	35	66	50	63	103	114	203	190	303	290	293	1,734
Coastal Border	9	7	25	2	3	1	8	5	13	10	33	15	131
Northern Border	8	12	12	8	5	3	2	6	9	7	6	6	84
Southwest Border	2,162	2,415	2,891	1,622	2,041	2,782	3,087	3,861	4,042	4,503	5,159	5,273	39,838
Monthly Total	2,179	2,434	2,928	1,632	2,049	2,786	3,097	3,872	4,064	4,520	5,198	5,294	40,053

d. Fiscal Year 2016

SECTOR	October	November	December	January	February	March	April	May	June	July	August	September	Yearly Total
Miami	8	2	12	5	3	8	14	0	3	10	3	10	78
New Orleans	6	0	0	0	6	2	1	0	2	0	3	0	20
Ramey	0	2	3	0	0	2	3	0	3	4	1	0	18
Blaine	0	0	0	0	0	3	3	2	4	8	5	4	29
Buffalo	3	0	0	0	0	0	2	0	0	0	0	0	5
Detroit	2	0	0	0	0	0	0	0	0	1	0	0	3
Grand Forks	0	0	0	0	0	3	0	0	0	0	0	0	3
Havre	0	0	0	0	0	0	0	0	0	0	0	0	0
Houlton	0	0	0	0	0	0	0	0	0	0	0	0	0
Spokane	0	0	0	0	0	0	0	2	0	0	0	0	2
Swanton	3	0	3	2	4	0	0	0	4	0	2	7	25
Big Bend *(formerly Marfa)*	240	123	166	53	41	44	29	76	43	47	97	92	1,051
Del Rio	283	314	539	174	188	193	240	397	226	353	293	349	3,549
El Centro	89	110	164	42	47	76	120	155	104	180	211	295	1,593
El Paso	266	424	751	104	152	226	349	433	473	616	866	1,004	5,664
Laredo	151	160	190	130	102	155	151	119	103	119	135	125	1,640
Rio Grande Valley *(formerly McAllen)*	4,172	4,356	5,809	2,020	1,890	3,051	3,851	4,568	4,568	5,038	6,341	6,342	52,006
San Diego	108	134	233	203	194	187	245	200	243	309	372	435	2,863
Tucson	303	376	453	166	104	216	174	257	234	280	333	243	3,139
Yuma	413	474	668	251	332	303	461	578	633	627	705	724	6,169
Coastal Border	14	4	15	5	9	12	18	0	8	14	7	10	116
Northern Border	8	0	3	2	4	6	5	4	8	9	7	11	67
Southwest Border	6,025	6,471	8,973	3,143	3,050	4,451	5,620	6,783	6,627	7,569	9,353	9,609	77,674
Monthly Total	6,047	6,475	8,991	3,150	3,063	4,469	5,643	6,787	6,643	7,592	9,367	9,630	77,857

Source: United States Border Patrol

Appendix F: Details of Survey Questions on Variables

- Confidence in major companies
  - "I am going to name major companies in this country. As far as the people running these major companies are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?"
  - The responses contain "1. A great deal, 2. Only some, 3. Hardly any, 8. Don't know, 9. No answer, IAP. Not applicable".
- Demand for the gov to equalize income
  - "Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think that the government should not concern itself with reducing this income difference between the rich and the poor. Here is a card with a scale from 1 to 7. Think of a score of 1 as meaning that the government ought to reduce the income differences between rich and poor, and a score of 7 meaning that the government should not concern itself with reducing income differences. What score between 1 and 7 comes closest to the way you feel? (CIRCLE ONE):"
  - The answers range from 1 to 7 as well as "8. Don't know, 9. No answer, IAP. Not applicable".
- Request for the gov to assist the poor
  - "Some people think that the government in Washington should do everything possible to improve the standard of living of all poor Americans; they are at Point 1 on this card. Other people think it is not the government's responsibility, and that each person should take care of himself; they are at Point 5. Where would you place yourself on this scale, or haven't you made up your mind on this?"
  - The responses range from 1 to 5 as well as "8. Don't know, 9. No answer, IAP. Not applicable".
- Perception of economic unfairness

- "Some people say that people get ahead by their own hard work; others say that lucky breaks or help from other people are more important. Which do you think is most important?"
- The answers are "1. Hard work most important, 2. Hard work, luck equally important, 3. Luck most important, 8. Don't know, 9. No answer, IAP. Not applicable".

- Attitude to immigration
  - "Do you think the number of immigrants to America nowadays should be"
  - The answers provided are "1. increased a lot, 2. increased a little, 3. remain the same as it is, 4. reduced a little, 5. reduced a lot, 8. can't choose, 9. no answer, and IAP. not applicable".
  - The dummy variable of the attitude to immigration is coded in the way such that it values 1 if respondent reported "1. increased a lot, 2. increased a little, 3. remain the same as it is", and values 0 otherwise.

- Labor market status
  - The questions concerning the labor market status ask "Last week were you (your wife/husband) working full time, part time, going to school, keeping house, or what?" respectively.
  - The answers provided are "1. Working full time, 2. Working part time, 3. With a job, but not at work because of temporary illness, vacation, strike, 4. Unemployed, laid off, looking for work, 5. Retired, 6. In school, 7. Keeping house, 8. Other, 9. No answer, IAP. Not applicable (for spousal working status only)".
  - The couple unemployment variable is coded in the way such that it values 1 if the respondent reported "4. Unemployed, laid off, looking for work" for him/herself or for his or her spouse, and values 0 otherwise.

I see all the answers of "8. Don't know, 9. No answer, IAP. Not applicable" as missing values. All these outcome variables are transformed so that a larger score in each outcome variable refers to a higher level of confidence in major corporations, preferences for income redistribution, and the perception of economic unfairness, respectively.