



# Trade shock, refugee, and the rise of right-wing populism: Evidence from European Parliament elections

Yuchen Lin<sup>a</sup>, Tianyang Xi<sup>b,\*</sup>

<sup>a</sup> Department of Economics, University of Warwick, United Kingdom

<sup>b</sup> China Center for Economic Research, National School of Development, Peking University, China



## ARTICLE INFO

### Keywords:

Trade shocks  
Refugee crises  
Right-wing populism

## ABSTRACT

Recent years have witnessed the rising support for right-wing populism in European politics. We rely on the outcomes of the 2014 European Parliament elections to empirically examine the economic and cultural mechanisms that fuel this trend. Using import competition to measure economic shocks and regional-level refugee shocks, we find that regions exposed to more intense trade shocks are more likely to vote for right-wing parties. We further show the increasing support for economically far-right parties is mainly caused by trade shocks, and the electoral support for culturally far-right parties stems mainly from refugee shocks.

## 1. Introduction

Since the 1980s, economic globalization has been a fundamental feature of contemporary political and economic system. International trade and industrial globalization enable developed and developing economies to make use of their comparative advantage to promote technological progress, facilitating industrial innovation and upgrading, and augmenting productivity and consumer welfare through division of labor and collaboration in trade (Lin and Monga, 2013; Feenstra and Weinstein, 2017). Globalization not only benefits many countries around the world, but also is an inevitable result of production structure adjustments brought by the pursuit of optimal returns by capital in developed economies. In terms of industrial composition, such production structure adjustments led to deindustrialization in developed countries along with the industrialization of developing countries. Developed countries have transferred low value-added labor-intensive industries to developing countries, and upgraded in global value chains through developing high-tech industries and financial industry with increased investment and technological advantages (Antras and Helpman, 2004). However, in addition to consolidating economic growth and ameliorating overall welfare, the industrial transformation under globalization also gives rise to redistributive effects among different industries and regions within a country. For both developed countries and developing countries, the impact of imports on domestic industries could have negative effects on the labor market and threaten social stability (Stiglitz, 2002; Bussmann and Schneider, 2007). If the government fails to make policy adjustments in response to these import shocks and compensate the affected groups, the welfare loss in these regions would give rise to xenophobic and anti-globalization political preferences.

The literature in political economy mainly studies the impacts of globalization on developing countries from the perspectives of resource dependence, infant industries, social inequality as well as ethnic conflicts (Tybout, 2000; Goldberg and Pavcnik, 2007), and generally considers left-wing parties as the main political opponents against globalization (Stokes, 1999; Milner and Judkins, 2004). However, in recent years, anti-globalization political forces have also grown increasingly stronger in Western developed countries and are usually reflected as right-wing populist parties and politicians. For instance, the Republican Party under the leadership of Donald

\* Corresponding author. National School of Development, Peking University, China.

E-mail address: [tyxi@nsd.pku.edu.cn](mailto:tyxi@nsd.pku.edu.cn) (T. Xi).

<https://doi.org/10.1016/j.ceqi.2022.05.005>

Received 17 May 2022; Accepted 19 May 2022

Available online 17 June 2022

2666-9331/© 2022 The Authors. Publishing services by Elsevier B.V. on behalf of KeAi Communications Co. Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Trump launched trade disputes and increased tariffs against major trade partners of the United States. In Europe, far-right parties such as the National Rally of France, the Freedom Party of Austria, and the Dutch Party for Freedom have become major anti-globalization political forces. The approval rate of far-right parties in Western European elections has risen from 5.1% to 13.2%, and the proportion of seats held by far-right parties in the parliament has increased from 3.8% to 12.8% (Inglehart and Norris, 2016).

This situation poses challenges to political economic research: what structural and periodic factors have generated anti-globalization political forces in developed countries? Why anti-globalization political forces are overwhelmingly right-wing populist parties, whose anti-globalization policies generally extend from the economic field to immigration? What are the differences and relations between the right-wing populism caused by the rejection of imported goods and that caused by the rejection of immigrants?

This paper attempts to first clarify the concept of right-wing populism, and then explore the causal relations between globalization and right-wing populism from the dimensions of economic shocks and cultural shocks. Discussions on the existing literature indicate that the import of goods from developing countries resulting from globalization and the inflow of immigrants from developing countries (in an extreme case, refugees) following geopolitical and cultural globalization have posed daunting challenges to the governance capability of developed countries. With slowing economic growth and mounting social problems, people hurt by globalization will vote for right-wing parties who are anti-globalization and limit immigration to express their discontent over deteriorating living conditions. What is worth noting is that economic globalization and immigration are not culprits for the structural problems of developed economies. Rather, inefficient governance system and deficient governance capability of developed countries fail to cope with these structural problems. To some extent, the goods and immigrants from developing countries have actually alleviated rather than exacerbated the governance crisis of Western countries. Therefore, the political populism striving for closure and rejecting openness, though being well-founded, is not the right way to solve the governance troubles of Western countries.

Based on the electoral data of the 2014 European Parliament election, this paper measures the political power of parties by calculating their shares of the vote in Nomenclature of Units for Territorial Statistics Level 2 (NUTS-2, *Nomenclature des unite territoriales statistiques* in French) regions, and investigates the influence of trade shocks and refugee shocks on the political power of different parties. Following Autor et al. (2013), this paper constructs a regional-level trade shock index by weighting the industry-specific labor distribution in different regions. For cultural shocks, a regional-level refugee shock index is constructed based on the flow of refugees and migration routes. To avoid potential endogeneity, this paper has constructed the instrumental variable of trade shocks with trade volumes before the financial crisis in 2008. Empirical results demonstrate that the trade shocks from developing countries have significantly boosted the vote share of right-wing parties, with relevant factors such as economic inequality, income level, living standard, and unemployment rate being controlled. After dividing the far-right parties into economically and culturally far-right parties according to their ideology and policy preference, the analysis shows that trade shocks exert heterogeneous effects on the approval rate for the two categories of parties. We further shed light on the underlying mechanisms based on the heterogeneous effects.

The following analysis is arranged in the following manner: Section 2 reviews relevant literature; Section 3 proposes theoretical hypotheses; data description and descriptive analysis are presented in Section 4; Section 5 introduces regression models and reports empirical results; and Section 6 presents the conclusion.

## 2. Literature review

A large strand of literature focuses on the role of demand-side economic factors on individual voting preferences and electoral results. Empirical studies tend to regard economic conditions and income changes as the primary factors that affect voting preferences (Harrington, 1993; Brender and Drazen, 2008). Recent studies have found that the manufacturing imports from developing countries lead to increased manufacturing unemployment (Autor et al., 2013; Balsvik et al., 2015; Acemoglu et al., 2016; Pierce and Schott, 2016), lower wages (Autor et al., 2014; Utar, 2018) and decreased public support for free trade (Mayda and Rodrik, 2005; Hanson et al., 2007; Margalit, 2012) in developed countries.

Autor et al. (2016) study the political polarization caused by import shocks using data on the US presidential election in 2016, and find that regions experiencing greater trade shocks from China are more likely to vote for the Republican Party. Scholars studying elections in European countries also find that trade shocks have raised the vote share of right-wing populist parties (Dippel et al., 2015; Guiso et al., 2017; Colantone and Stanig, 2018a, 2018b). The study by Colantone and Stanig (2018b) on 14 Western European countries shows that due to the impact of manufacturing imports from China, Western European voters are more supportive of trade protectionist parties.

Globalization also contributes to thriving. Research shows that immigration in Western countries has reduced local employment and wage (Card, 2001; Ottaviano and Peri, 2008), thus exacerbating the resistance of low-skilled workers against immigration (Mayda, 2006; Card et al., 2012). Studies on voters' preferences on parties demonstrate that discontent with immigration is an important reason for the rising support for the right-wing populist parties in Western Europe (Ivarsflaten, 2008; Arzheimer, 2009; Inglehart and Norris, 2016; Rydgren, 2008). Recent studies on the elections of European countries have all found that more immigration will result in stronger support for far-right parties (Barone et al., 2016; Halla et al., 2017), due to economic factors as well as cultural and demographic structure shocks (Mayda et al., 2016).

The inflow of refugees to European countries after the Arab Spring is an extreme form of immigration shocks. On the one hand, as refugees are not eligible to vote and face higher barriers of entering local labor market, their impacts on local residents concentrates in cultural and social arenas. On the other hand, most refugees, instead of returning to their home countries, have stayed and engaged in informal economic activities, which further threatens the stability in local communities. The recent study by Altindag and Kaushal (2007) indicates that the inflow of Syrian refugees has exacerbated the rivalry between supporters of different parties in Turkey, and reduced the support for the ruling party. The study by Dustmann et al. (2016) on Denmark's resettlement of refugees during 1986–1998 reveals that the rising number of refugees has increased the share of the vote of anti-immigration parties.

This paper has enriched the existing literature in the following aspects. First, it has constructed a trade shock index and a refugee shock index at the regional level, which helps distinguish between the influence of economic changes and that of cultural changes on party competition; second, it has collected data covering not only Western European countries, but also traditional Eastern European countries that have converted from the socialist system to the capitalist system, thus making an all-round analysis of the rise of European right-wing populist parties.

### 3. Theoretical hypotheses

A party's share of the vote depends on both voters' preference and its political view and ideology (Lee et al., 2004; Carsey and Layman, 2006), while voters' preference varies with economic and social changes. Even though the global specialization has improved the overall welfare of countries involved, the welfare effects of trade shocks vary across regions and industries, and Pareto improvement is not inevitable (Verhoogen, 2008; Autor et al., 2013).

We build our argument upon Rogowski's (1987) model that composed of land, labor, and capital, and attempt to identify the two channels through which trade affects electoral outcomes. First, people benefiting from trade will further support free trade, while those experiencing welfare loss from trade will require for trade protectionism, thus aggravating internal political polarization. Second, as trade develops, those benefit from globalization would want to transfer economic advantage into political advantage to cast greater policy influence, which leads to more intense conflicts between different parties. The developed economies in the European Union (EU) countries mainly import labor-intensive manufacturing goods. The impact of importing labor-intensive goods from developing countries would reduced the wages of low value-added manufacturing workers in European countries. Therefore, the right-wing populist parties advocating de-globalization will receive stronger support in regions where the manufacturing industry accounts for a large proportion of the local labor force (Autor et al., 2016; Colantone and Stanig, 2018b).

Apart from the political polarization caused by the redistributive effects of trade, the stagnant growth and economic recession of developed countries also breed voters' discontent against political-establishment parties. Voting for anti-establishment parties also mean to hold the ruling party accountable for its poor governance performance and punish it in elections (Barro, 1973; Hillman, 2010; Costas-Perez et al., 2012). Voters in regions where local industries are hit hardest by trade shocks tend to ascribe economic slowdown to globalization and turn to support right-wing populist parties (Rodrik, 2011). To sum up, we put forward the following hypothesis:

**Hypothesis 1.** Greater import shocks from developing countries in a region leads to a higher vote share for right-wing parties.

Xenophobia is another characteristic of right-wing parties in Europe. Lee et al. (2006) have constructed a tax and culture-based two-dimensional electoral competition model, which demonstrates that middle and lower-class voters with strong xenophobia might compromise on tax policies and support right-wing parties advocating the exclusion of immigrants. Alesina et al. (2001) have found mainstream voters repel ethnic minority groups and refuse to pay for their social welfare, which is a major reason for the limited social welfare policies. In European politics, refugee resettlement has occupied public welfare resources, which might result in the rejection of refugees by local residents (Altindag and Kaushal, 2007; Vadiamannati and Kelly, 2017). According to the studies above, we propose the following hypothesis:

**Hypothesis 2.** Greater refugee shocks leads to a higher vote share for right-wing parties in a region.

### 4. Data

This paper chooses NUTS-2 regions as research units to investigate the impacts of economic and social factors at the regional level on the share of the vote of right-wing parties at the regional level.<sup>1</sup> Despite the difference between mainstream right-wing parties and far-right parties in political terms, due to problems such as economic globalization and refugee shocks, populism has wielded influence on both the far-right and mainstream right-wing parties in Europe in recent years. Hence, in addition to the far-right populist parties, this paper also includes general right-wing parties.

#### 4.1. European Parliament election

This paper measures the political support for right-wing parties through their shares of the vote in NUTS-2 regions in the European Parliament elections in 2014. In the first step, we calculate the share of the vote of party  $p$  in NUTS-2 region  $i$ ,  $VoteShare_{ip}$ . Then, we combine the share of the vote of the party and its political stance. We add up the shares of the vote of right-wing parties,<sup>2</sup>  $VoteShare_{ip}$ , to obtain the total share of the vote of right-wing parties in the region  $VoteShare_i$ . Electoral data are collected from the election outcomes of the 2014 European Parliament elections published by governments of various countries.<sup>3</sup>

The European Parliament is directly elected by the citizens of the EU members. Alongside the Council of the EU, the European

<sup>1</sup> NUTS is the code of administrative division developed by the EU for its members, candidates, and free trade agreement countries, which includes three levels. The large area of NUTS-1 regions makes it difficult to measure the effects of different economic and social conditions on election results, and there are limited data about NUTS-3 regions under the European statistical system. Therefore, this paper chooses NUTS-3 regions, which have both clear regional differences and abundant relevant data. However, the electoral data about NUTS-2 regions in the UK and Slovenia are unavailable, and NUTS-1 regions in the two countries are used in the empirical part of this paper.

<sup>2</sup> Party classification will be described in detail in the next section.

<sup>3</sup> Data sources are available upon request.

Parliament is a key institution for drafting laws, reviewing annual budgets of the EU, and deciding upon the legislation concerning tariffs, monetary policies, market competition rules, environmental protection, information security, and immigration policies. Seats in the European Parliament are allocated according to the population of each member state. Elections to the European Parliament take place every five years. The citizens of each member state elect their representatives to the European Parliament by direct popular vote following the principle of proportional representation. These representatives form political groups in the European Parliament according to the political inclination of their parities (Hix et al., 2007).

The 2014 European Parliament elections were the first one after the 2008 global financial crisis. Even though the European Parliament elections are considered as a second-order election, less influential than national elections within a country, voters still vote based on current economic and social conditions. Studies have demonstrated that since members of European Parliament are not involved in domestic policy-making, voters are more likely to express their real political inclination rather than take perfunctory actions in elections (Reif and Schmitt, 1980; Hobolt and Wittrock, 2011). This feature of the European Parliament elections enables us to evaluate the influence of trade shocks and refugee shocks on voters' party preference more accurately, and alleviate the impact of the different electoral systems among countries on election results.

#### 4.2. Party position

We employ the Chapel Hill Expert Survey (CHES) to measure the ideology and policy preferences of parties in EU countries in 2014. CHES estimates party position on ideology, political, economic, and cultural issues for parties in Europe. According to the variable *lrgen* (party position in terms of its overall ideological stance) in the CHES dataset for classifying parties based on ideology (*lrgen* is assigned to 0 for far-left parties, 5 for neutral parties, and 10 for far-right parties), we define parties with *lrgen* larger than 5 as right-wing parties, and those with *lrgen* larger than 8 as far-right parties. At the same time, we have also classified parties based on economic and cultural issues respectively.<sup>4</sup> The variable *lrecon* (party position in terms of its ideological stance on economic issues) in the CHES database is used to measure party position on economic issues, and a general index measuring party position on social and cultural issues is constructed by standardizing the sum of various indexes on social and cultural topics in the database. We then calculate the overall share of the vote of parties belonging to different categories at the NUTS-2 region level by adding up the shares of the vote of parties in the region.

Table 1 presents the number of parties obtaining over 1% of the vote in two European Parliament elections and the number of seats obtained by such parties, and percentages represent their average share of the vote at the regional level. As shown in Table 1, the number of right-wing parties sees larger growth than that of left-wing parties, and besides, the number of far-right parties, their share of the vote, and the number of seats they obtained have all experienced appreciable increase. Among right-wing parties, center-right and traditional right-wing parties are on the wane while far-right parties are gaining momentum, which reflects the political polarization in Europe. Moreover, as the European Parliament elections follow the principle of proportional representation, small parties can be elected members of the Parliament by concentrating on campaigning in some regions, and the limited increase in the share of the vote of far-right parties may result in significant growth in their political power.

#### 4.3. Trade shocks

The import exposure per worker index proposed by Autor et al. (2013) is employed to measure the impact of economic globalization (trade shocks) on a region:

$$IPW_i = \sum_k \frac{L_{ik}}{L_i} \times \frac{\Delta IM_{ck}}{L_{ck}}$$

where  $c$  represents the country,  $i$  denotes the NUTS-2 region, and  $k$  refers to various manufacturing industries as defined in Statistical Classification of Economic Activities in the European Community (NACE) Revision 2.  $\Delta IM_{ck}$  stands for the changes in import of country  $c$  in industry  $k$  in a certain period of time. Since the trade shocks of the manufacturing industry from labor-intensive countries are of our concern, we focus on the changes in imports from the 107 developing countries defined by the United Nations in 2014, the nine representative low-income countries defined by Auer and Fischer (2010),<sup>6</sup> China and the other BRICS countries to EU countries, respectively. Considering that the last European Parliament elections took place in 2009, we employ the change in import between 2010 and 2014.<sup>7</sup>

We standardize the change in import in industry  $k$  of country  $c$  with the total employment in that industry  $L_{ck}$  in 2010. To avoid the impact of the regional differences in trade shocks, we weight the standardized trade shocks with the ratio of the total employment in industry  $k$  in region  $i$  in 2010  $L_{ik}$  to the total employment  $L_i$  in that region in 2010. Finally, trade shocks of different industries are added

<sup>4</sup> Right-wing populist parties in Europe can be further classified into two categories (Betz, 1993, 1994; Mudde and Kaltwasser, 2017). One category includes nativist populist radical right parties, such as the National Rally of France. These parties are now trying to rank among mainstream parties in elections by avoiding radical right-wing rhetoric, and their policies emphasize social and cultural identification, and oppose immigration. The other category includes neoliberal populist parties evolving from mainstream parties, such as the UK Independence Party and Forza Italia. These parties pursue economic neoliberalism, demand trade protectionism due to globalization shocks, and gradually acquire populist features.

<sup>6</sup> The nine countries are China, India, Indonesia, Thailand, Vietnam, Mexico, Brazil, Malaysia, and the Philippines.

<sup>7</sup> In addition, during 2008–2010, NACE Revision 2 superseded NACE Revision 1, changing the classification of the manufacturing activities, and therefore, using data in 2010 has avoided possible measurement errors to some extent.

**Table 1**  
Votes of different types of parties at the regional level.

	# of parties		Vote share		# of seats	
	2009	2014	2009	2014	2009	2014
Left-wing	75	87	41.99%	41.97%	311	314
Right-wing	92	113	54.62%	53.28%	424	417
Far-right	17	23	6.12%	10.12%	42	86

Note: left-wing, right-wing and far-right parties correspond to the parties in the CHES database with *lrgen* smaller than 5, larger than 5, and larger than 8, respectively; vote share for the three types of parties at the regional level is the average of the total share of the vote they have obtained in NUTS-2 regions; the number of seats refers to the total number of seats in the European Parliament the three types of parties have obtained. The electoral data are collected from the results of the 2014 European Parliament elections published by the governments of various countries, and the number of seats of different parties is collected from the official website of the European Parliament.<sup>51</sup>

up to calculate the overall regional trade shock. Trade and employment data<sup>8</sup> are collected from Eurostat. This trade shock index indicates that after controlling for difference in employment among industries at national level, the difference of trade shock across regions can be entirely attributed to the variation in local industry structure. In other words, regions, where employment has concentrated in industries with a large proportion of import, are subject to more intensive trade shocks. We control both local employment structure and local manufacturing industry structure with this index.

Fig. 1 illustrates the changes in the share of manufacturing imports from outside the EU of the 28 EU member states in the EU GDP after 2000. The share of imports from non-EU countries in the EU GDP fluctuates to rise, and the share of imports from developing countries in the EU GDP has increased from 3% to nearly 6%. In Appendix Table 2,<sup>9</sup> we show the industry distribution of EU imports from the representative low-income countries, which concentrate in industries such as electronics, electrical equipments, machinery, and wearing apparel, and the labor-intensive industries in EU countries are thus hit hardest.

#### 4.4. Refugee shocks

As Eurostat has only collected data on asylum applicants at the national level, based on the gravity model, we construct the regional index  $Refugee_i$  with the reciprocal of the logarithm of the distance from the most densely populated city in NUTS-2 region  $i$  to the nearest transit city for refugees:

$$Refugee_i = \frac{RefugeeN_c}{\ln(distance_i)}$$

This proxy variable of refugee shocks is designed to mainly unveil the influence of geographic factors on the distribution of refugees. According to the classification of the main routes chosen by refugees to Europe by the European Border and Coast Guard Agency (Frontex), refugees from North Africa and the Middle East mainly enter Europe from the Mediterranean Sea and the Balkan Peninsula, and then head north along the transportation lines towards more developed Northwestern European countries with more favorable welfare. Therefore, the several port cities along the Mediterranean Sea, as well as cities along main transportation lines, particularly railway lines, accommodate the largest number of refugees. Based on the transportation networks within Europe, we could form a general idea about the route through which refugees enter Europe. Further, with reference to relevant studies, we finally choose 16 major refugee transit cities which are economically developed and along main transportation lines.<sup>10</sup> To exclude the confounding impacts of high-skilled immigration on election results and refugee inflow options, we use the number of foreign-born population at NUTS-2 level from the latest Eurostat population census in 2011 to control for the local immigration before the large flow of refugees.

Fig. 2 displays the changes in the number of asylum applicants registered with Eurostat during 2011–2014. As shown in the figure, the number of refugees in Europe has fluctuated to rise since 2012 and soared after 2014, which is especially true for the number of refugees from North Africa and the Middle East.

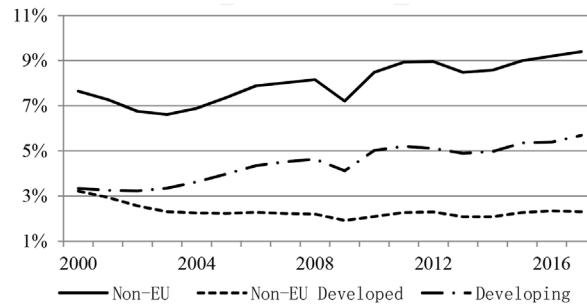
#### 4.5. Control variables

We have used the NUTS-2 level foreign-born population, GDP per capita, disposable income per capita, unemployment rate, and national-level Gini coefficient in 2014 from Eurostat as the control variables in empirical analysis. Descriptive statistics of the explanatory variables and control variables are presented in Table 2.

<sup>8</sup> Missing employment data were calculated based on the employment growth rate, and industries missing too much employment data were removed.

<sup>9</sup> Due to space limitation, Annex Table 2 is not listed but is available upon request.

<sup>10</sup> The transit cities are listed in Annex Table 3 and are available upon request.



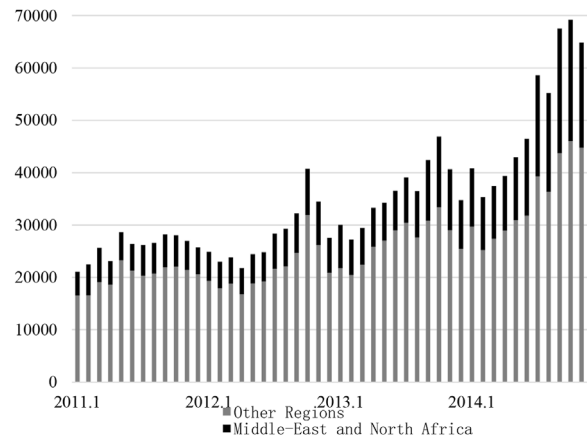
**Fig. 1.** Changes in the share of imports from outside the EU in GDP  
 Note: The data are collected from Eurostat.

**Table 2**

Summary statistics.

Variables	Observations	Max	Min	Mean	s.d.
Vote-right	227	0.939	0.1297	0.5357	0.1644
Trade shock (Developing)	227	19890	-8703	2628	4766
Trade shock (low wage)	227	17968	-5063	1898	3597
Trade shock (China)	227	15317	-15761	1013	2964
Trade shock (BRIC)	227	15257	-15831	1185	3053
Refugee shock	227	202645	26	12637	23374
Foreign-born pop	226	2994930	3572	211526	326131
GDP per capita	227	87600	3800	25582	13248
Income per capita	224	26000	2900	14653	6119
Unemployment rate	227	0.35	0.03	0.11	0.06
Gini coefficient	28	0.36	0.25	0.30	0.03

Note: the share of the vote is collected from the results of the 2014 European Parliament elections published by the governments of various countries, and data about trade, refugees, and control variables are all collected from Eurostat.



**Fig. 2.** Changes in the number of refugees in the 28 EU countries during 2011–2014.

## 5. Empirical analysis

### 5.1. Baseline regression

We have constructed the following baseline regression model to estimate the impacts of trade shock and refugee shock on the share of the vote of right-wing parties.

$$VoteShare_i = \beta_0 + \beta_1 IPW_i + \beta_2 \ln(Refugee_i) + X_i' \gamma + \varepsilon_i$$

where  $VoteShare_i$ ,  $IPW_i$ , and  $\ln(Refugee_i)$  stand for the total share of vote of right-wing parties, trade shock per worker, and refugee shock

<sup>5</sup> The number of seats of different parties is collected from: <http://www.europarl.europa.eu/meps/en/search/advanced>, accessed on October 16, 2017.

in NUTS-2 region  $i$  respectively; and  $X_i$  represents a vector of control variables, including foreign-born population, GDP per capita, disposable income per capita, unemployment rate, and Gini coefficient, and  $\varepsilon_i$  is the error term. Natural logarithms of foreign-born population, GDP per capita, and disposable income per capita are employed in the regression.

Table 3 reports the OLS estimation results. The coefficients of import exposure per worker are all positive and statistically significant at 1% level. From 2010 to 2014, every one standard deviation increase in the import exposure per worker in manufacturing industry from developing countries has resulted in an increase of 2.95 percentage points in the share of the vote of right-wing parties. Estimations using manufacturing imports from representative low-income countries, China, and other BRICS countries yield similar results. On the contrary, refugee shocks exert no significant impact on the share of the vote of right-wing parties. Besides, taking import exposure per worker from developing countries as an example, for every 1% increase in disposable income per capita, the share of vote of right-wing parties will decrease 0.17 percentage points; for every 1 percentage increase in unemployment rate, the share of vote will decrease 0.58 percentage points; and for Gini coefficient increasing 0.1, the share of vote will decrease 18 percentage points.

These results demonstrate that under the impact of imports of manufacturing goods, workers suffering economic loss are more likely to vote for right-wing parties advocating trade protectionism. The coefficient of refugee shocks is insignificant, but robust and positive. Its sign is consistent with the hypothesis that refugee shocks will increase the share of the vote of right-wing parties. We reason that refugee shocks generate heterogeneous influence on the right-wing parties of different types and in different regions. Refugee shocks will raise the share of the vote of right-wing parties pursuing cultural xenophobia and immigration restrictions. However, for the right-wing parties advocating trade protectionism, refugee inflow will not hurt the economic benefit of local voters, and thus will not increase their electoral support, but might even decrease the share of the vote of these parties. The redistribution of votes among right-wing parties has, to a certain extent, explained why refugee shocks generate insignificant impact on the overall share of the vote of right-wing parties.

The estimation results of two control variables are also worth noting. First, disposable income is negatively correlated with right-wing parties' share of the vote. Disposable income mirrors economic and social development. High-income regions are more open-minded and diversified, and voters in these regions are more supportive of European integration and economic policies of the welfare state, and oppose right-wing economic policies. Second, the Gini coefficient and unemployment rate are negatively correlated with right-wing parties' share of the vote. Inequality and higher unemployment rate have led to a lower share of the vote of right-wing parties, which, we think, can be ascribed to the situation that right-wing parties are against social redistribution, and propose to drive economic growth by tax reduction. In terms of European politics, it is not uncommon to see parties implement widely different domestic and foreign economic policies. For instance, the Northern League (Lega Nord) of Italy proposes to restrain free trade while supporting tax reduction. This strategy helps increase the share of the vote of right-wing parties in regions facing fiercer external competition from the emerging markets.

## 5.2. Instrumental variable

In baseline model, we use changes in imports between 2010 and 2014 to calculate trade shocks. A potential challenge to identifying

**Table 3**  
Baseline results.

	( 1 )	( 2 )	( 3 )	( 4 )
Trade shock (Developing)	0.0295*** (0.0086)			
Trade shock (low wage)		0.0329*** (0.0079)		
Trade shock (China)			0.0363*** (0.0080)	
Trade shock (BRIC)				0.0391*** (0.0085)
Refugee shock	0.0003 (0.0063)	-0.0002 (0.0062)	0.0004 (0.0061)	0.0006 (0.0062)
Foreign-born population	-0.0005 (0.0125)	-0.0005 (0.0124)	-0.0002 (0.0123)	-0.0005 (0.0123)
GDP per capita	0.0155 (0.0605)	0.0108 (0.0574)	0.0063 (0.0552)	0.0051 (0.0570)
Income per capita	-0.1747*** (0.0594)	-0.1707*** (0.0558)	-0.1641*** (0.0535)	-0.1640*** (0.0553)
Unemployment rate	-0.5788*** (0.1638)	-0.5606*** (0.1565)	-0.5524*** (0.1546)	-0.5651*** (0.1570)
Gini coefficient	-1.8073*** (0.4156)	-1.8177*** (0.4129)	-1.8847*** (0.4091)	-1.7855*** (0.4086)
Constant	2.6494*** (0.2561)	2.6645*** (0.2519)	2.6570*** (0.2503)	2.6420*** (0.2480)
Observations	223	223	223	223
R <sup>2</sup>	0.3956	0.4020	0.4060	0.4098

Note: the explained variable is the overall share of the vote of right-wing parties at the regional level. Figures in brackets are robust standard errors, and \*\*\*, \*\*, and \* stand for significance at the levels of 1%, 5%, and 10%.

relevant causal relations consists in that economically backward regions are more susceptible to populism, and are also subject to the greater adverse influence of trade shocks than economically developed regions. To alleviate endogeneity, we exploit the import shock per work using the changes in manufacturing imports during 2003–2007 as instrumental variable. On the one hand, the imports during 2003–2007 were closely related to the imports during 2010–2014. On the other hand, during 2003–2007, the global financial crisis and the European debt crisis have not happened, so the populist parties have not taken advantage of the people's discontent with the ruling party to gain momentum. Therefore, this instrumental variable is more effective in distinguishing between the influence of a region's original trade shocks and that of its gradual adoption of political populism, thus being more consistent with the exogenous feature of instrumental variables.

The import exposure per worker in 2007 is defined as follows:

$$IPW07_i = \sum_k \frac{L_{ik}}{L_i} \times \frac{\Delta IM_{ck}}{L_{ck}}$$

where  $k$  represents the manufacturing industries defined in NACE Revision 1.1, and  $\Delta IM_{ck}$  denotes the difference in imports of country  $c$  in industry  $k$  between 2003 and 2007; and  $L_{ck}$ ,  $L_{ik}$ , and  $L_i$  stand for the total employment of country  $c$  in industry  $k$ , the total employment of region  $i$  in industry  $k$ , and the total employment in region  $i$ , respectively. We have calculated the respective import exposure per worker from developing countries, representative low-income countries, China, and other BRICS countries as before.

The first-stage regression model of the instrumental variable is defined as follows.

$$IPW_i = \delta_0 + \delta_1 IPW07_i + \mathbf{Z}_i' \tau + \mu_i,$$

where  $Z_i$  includes the natural logarithm of the proxy variable of refugee shocks and all control variables in the baseline model. Table 4 reports the two-stage least squares estimation results. The Kleibergen-Paap test in the first-stage regression has produced large F-statistics, indicating that weak instrumental variable is not a serious concern. The estimation results of the instrumental variable are similar to the baseline regression results in terms of the sign and significance level of coefficients. Every 1 standard deviation added to the import exposure per worker from developing countries has led to an increase of 2.3 percentage points in right-wing parties' share of the vote. The estimation of import exposure per worker from representative low-income countries, China, and other BRICS countries has yielded similar results.

### 5.3. Far-right parties

Since right-wing parties of different types might adopt varied economic and cultural policies, the same shock may exert

**Table 4**  
Instrumental variable estimations.

	(1)	(2)	(3)	(4)
Trade shock (developing)	0.0226* (0.0122)			
Trade shock (low wage)		0.0265** (0.0112)		
Trade shock (China)			0.0275*** (0.0105)	
Trade shock (BRIC)				0.0250** (0.0113)
Refugee shock	0.0017 (0.0065)	0.0014 (0.0064)	0.0018 (0.0064)	0.0017 (0.0064)
Foreign-born pop	0.0036 (0.0138)	0.0039 (0.0138)	0.0037 (0.0136)	0.0033 (0.0136)
GDP per capita	0.0043 (0.0673)	−0.0019 (0.0652)	−0.0014 (0.0631)	0.0020 (0.0647)
Income per capita	−0.1736*** (0.0618)	−0.1691*** (0.0592)	−0.1665*** (0.0579)	−0.1692*** (0.0597)
Unemployment rate	−0.5705*** (0.1595)	−0.5558*** (0.1537)	−0.5508*** (0.1524)	−0.5624*** (0.1546)
Gini coefficient	−1.8696*** (0.4368)	−1.8666*** (0.4229)	−1.9296*** (0.4171)	−1.8885*** (0.4235)
Constant	2.7073*** (0.2640)	2.7237*** (0.2609)	2.7111*** (0.2595)	2.6977*** (0.2596)
Observations	213	213	213	213
R <sup>2</sup>	0.3980	0.4059	0.4069	0.4078
	First stage estimates			
Trade shock 2007	0.7821*** (0.0523)	0.7422*** (0.0758)	0.7684*** (0.0851)	0.747*** (0.0770)
Kleibergen-Paap F-value	223.81	95.87	81.43	94.15

Note: the explained variable is the overall share of the vote of right-wing parties at the regional level. Figures in brackets are robust standard errors, and \*\*\*, \*\*, and \* stand for significance at the levels of 1%, 5%, and 10%.



heterogeneous influence on right-wing parties focusing on different issues. This section studies the share of the vote of far-right parties by discussing the heterogeneous influence of trade and refugee shocks on economically and culturally far-right parties based on the indexes mentioned in Section 4.2 for measuring party position on economic and sociocultural issues.

As demonstrated in Table 5 and Table 6, for every 1 standard deviation added to import exposure per worker and every 1% increase in refugee shocks, the share of the vote of far-right parties has dropped 3.5 to 4 percentage points and 1.3 percentage points, respectively. Manufacturing import shocks brought by economic globalization have hurt the welfare of manufacturing workers, who then turn to support trade protectionism. However, since economically far-right parties have not upheld radical populist sociocultural policies, stronger refugee shocks will not change voters' attitudes toward such parties.

For culturally far-right parties, every 1 standard deviation increase in import exposure per worker and every 1% increase in refugee shocks have caused their share of the vote to drop by around 4.3–5.1 percentage points and 3.5 percentage points, respectively. In response to the squeezed social welfare, deteriorating community safety, and challenged mainstream social values, voters are more supportive of far-right parties advocating social conservatism and immigration restrictions. One possible explanation for the limited influence of trade shocks on the share of the vote of culturally far-right parties is that these parties fail to pay sufficient attention to economic policies.

#### 5.4. Dynamic changes in the share of the vote

Based on the results of the 2009 European Parliament elections, we further calculate the dynamic changes in the shares of the vote of right-wing parties and the two types of far-right parties in NUTS-2 regions between the two elections to alleviate the estimation bias caused by the influence in the same direction of historical election results on the election results in 2014 as well as the trade and refugee policies during this period.

As demonstrated in Table 7, right-wing parties in regions experience more trade shocks have received a larger increase in the overall share of the vote, which also holds for economically far-right parties. On the contrary, the share of the vote of culturally far-right parties has seen limited growth in regions subject to greater trade shocks, but experienced a larger increase in regions suffering more from refugee shocks. This implies that the rising share of the vote of right-wing and far-right parties since 2009 can be mainly attributed to the intensifying trade shocks, and refugee shocks have caused the share of the vote of culturally far-right parties to rise to a certain extent.

#### 5.5. Mechanisms

We have proposed that imports of manufactured goods from developing countries will hurt the economic interests of manufacturing workers and thus raise the shares of the vote of right-wing and economically far-right parties. In the meanwhile, the impact of refugee inflow on socioeconomic environment and mainstream culture has made voters more xenophobic and increased the share of the vote of culturally far-right parties. We will further examine the vote redistribution mechanism in this section.

Based on the individual data from the seventh round of the European Social Survey in 2014 and 2015, we have tested how the economic threat and attitude toward immigrants affect voters' political position and voting behaviors. Through two questions "which party did you vote for in the last national election" and "is there a particular political party you feel closer to than all the other parties?" in the survey, respondents' political position can be clarified. Then, three dummy variables, whether respondents feel closest to far-right parties in terms of political position, whether they voted for culturally far-right parties, and whether they voted for economically far-right parties, can be obtained and taken as the explained variables. We have measured the economic threat to individuals against the following three variables: whether they have been unemployed for three months, how difficult on present household income (a discrete variable ranging from 1 to 4, with 1 and 4 indicating the least and most difficult respectively), and whether their main source of income is social benefits. For individual attitudes towards immigrants, we measure with three variables, namely, individual opinions on the influence of immigrants on domestic economy, sociocultural environment, and overall development (discrete variables ranging from 0 to 10, with 0 and 10 indicating the least and most negative comments respectively).

**Table 5**  
The vote shares of economically far-right parties.

	(1)	(2)	(3)	(4)
Trade shock (Developing)	0.0406*** (0.0067)			
Trade shock (low wage)		0.0385*** (0.0092)		
Trade shock (China)			0.0343*** (0.0089)	
Trade shock (BRIC)				0.0386*** (0.0091)
Refugee shock	-0.0129*** (0.0042)	-0.0138*** (0.0042)	-0.0136*** (0.0041)	-0.0133*** (0.0041)
Controls	✓	✓	✓	✓
Observations	213	213	213	213
R <sup>2</sup>	0.3349	0.2596	0.2679	0.3137

Note: this table reports the second-stage regression results of the instrumental variable, and the Kleibergen-Paap F-statistics in the first stage are all larger than 10. Figures in brackets are robust standard errors, and \*\*\*, \*\*, and \* stand for significance at the levels of 1%, 5%, and 10%.

**Table 6**  
The vote share of culturally far-right parties.

	(1)	(2)	(3)	(4)
Trade shock (Developing)	−0.0492*** (0.0083)			
Trade shock (low wage)		−0.0501*** (0.0096)		
Trade shock (China)			−0.0436*** (0.0087)	
Trade shock (BRIC)				−0.0513*** (0.0097)
Refugee shock	0.0342*** (0.0070)	0.0351*** (0.0072)	0.0349*** (0.0072)	0.0343*** (0.0071)
Controls	✓	✓	✓	✓
Observations	213	213	213	213
R <sup>2</sup>	0.3310	0.2790	0.2871	0.2916

Note: this table reports the second-stage regression results of the instrumental variable, and the Kleibergen-Paap F-statistics in the first stage are all larger than 10. Figures in brackets are robust standard errors, and \*\*\*, \*\*, and \* stand for significance at the levels of 1%, 5%, and 10%.

**Table 7**  
Dynamic vote changes by the type of parties.

	Right-wing	Economically far-right	Culturally far-right
Trade shock (developing)	0.0267*** (0.0083)	0.0235*** (0.0080)	−0.0388*** (0.0069)
Refugee shock	−0.0058 (0.0046)	−0.0009 (0.0043)	0.0312*** (0.0060)
Trade shock (low wage)	0.0334*** (0.0090)	0.0138* (0.0075)	−0.0332*** (0.0075)
Refugee shock	−0.0059 (0.0046)	−0.0018 (0.0042)	0.0321*** (0.0063)
Trade shock (China)	0.0332*** (0.0089)	0.0090 (0.0065)	−0.0251*** (0.0064)
Refugee shock	−0.0055 (0.0045)	−0.0020 (0.0042)	0.0323*** (0.0065)
Trade shock (BRIC)	0.0332*** (0.0089)	0.0090 (0.0065)	−0.0251*** (0.0064)
Refugee shock	−0.0055 (0.0045)	−0.0016 (0.0042)	0.0316*** (0.0063)

Note: each item of trade shocks and the item of refugee shocks in the next row are a group of regression results corresponding to the explained variable for changes in the shares of the vote of the three types of parties. These results are the second-stage regression results of the instrumental variable, and the Kleibergen-Paap F-statistics in the first stage are all larger than 10. Changes in the share of the vote of right-wing parties are the overall changes of right-wing parties including far-right parties at the regional level; and figures in brackets are robust standard errors, and \*\*\*, \*\*, and \* stand for significance at the levels of 1%, 5%, and 10%.

As demonstrated in Table 8, a negative attitude toward immigration and higher family income risk will cause voters to incline to far-right parties, which is consistent with the baseline regression result that higher disposable income per capita will result in a lower share of the vote of right-wing parties at the regional level. Voters opposing immigration will be more supportive of culturally and economically far-right parties. Income risk and unemployment have generated heterogeneous effects. In other words, the two factors have strengthened voters' support for culturally far-right parties but weakened their support for economically far-right parties. The individual-level empirical results have verified the mechanism we have proposed: trade shocks have enhanced the power of European right-wing parties by affecting income and employment, and refugee inflow has done so by bringing about cultural shocks to local residents.

## 6. Conclusion

This paper empirically analyzes the impacts of trade shock and refugees shock in recent years on the rising power of right-wing parties, using the regional-level share of the vote of parties in European Parliament elections. Results show that the economic shock of manufacturing imports from developing countries and emerging economies is significantly related to the increased share of the vote of right-wing parties in European Parliament elections. Regression results with historical trade shocks as the instrumental variable and the dynamic changes in the share of the vote as the explained variable are consistent with the OLS estimation results. Trade shocks mainly affect economically right-wing parties, and refugee shocks have a more significant impact on culturally right-wing parties.

We can draw implications from the empirical results in the following two respects. First, in addition to boosting the economic growth and overall welfare of different countries, economic globalization might also induce structural shock within these countries, exacerbating inequality in income and economic opportunities. With the increasing participation of developing countries in the global economic competition, this structural shock would be long-term, which further indicates that the political polarization and populist inclination may be long-standing. Just as Dani Rodrik has pointed out in *The Globalization Paradox*, hyper-globalization, national

**Table 8**  
Socioeconomic conditions and individual voting preferences.

	(1)	(2)	(3)
	Pro far-right	Pro culturally far-right	Pro economically far-right
Income vulnerability	0.0051* (0.0031)	0.0051** (0.0024)	−0.0213*** (0.0032)
Unemployed	−0.0059 (0.0042)	0.0122*** (0.0035)	−0.0187*** (0.0047)
Relying on social security	0.0016 (0.0092)	−0.0108 (0.0070)	−0.0112 (0.0084)
Economic impacts by immigrants	0.0055*** (0.0012)	0.0048*** (0.0010)	−0.0025* (0.0013)
Cultural impacts by immigrants	0.0091*** (0.0013)	0.0063*** (0.0010)	0.0036*** (0.0014)
Overall impacts by immigrants	0.0043*** (0.0014)	0.0031*** (0.0012)	0.0032** (0.0016)
Controls	✓	✓	✓
Country fixed effects	✓	✓	✓
Observations	213	213	213
R <sup>2</sup>	0.3426	0.3488	0.3546

Note: explained variables include whether they feel closest to far-right parties in terms of political position, whether they voted for culturally far-right parties, and whether they voted for economically far-right parties; control variables include age, gender, educational level, religious belief, ethnic minority group, citizenship of the residence country, and industry of work; figures in brackets are robust standard errors, and \*\*\*, \*\*, and \* stand for significance at the levels of 1%, 5%, and 10%.

sovereignty, and democracy form a “trilemma.” In other words, to protect public welfare and the groups who suffer from welfare loss, European countries have to limit economic opening-up. Against the backdrop of frequent international trade disputes, understanding the structural causes for such a change is of practical significance to making sense of and coping with the policy shifts of Western countries.

Second, the empirical findings of this paper also reveal the fact that the development of the Western world is not a pluralist and openness-oriented one-way process. To some extent, both the two world wars and the rampant Nazism in the 20th century are political responses to the impact brought about by globalization. On the one hand, the economic failure and multicultural environment of developed economies have challenged social values, and won more people's support for radical right-wing political views. On the other hand, Western countries have intervened in the internal affairs of North Africa and other countries to pursue geopolitical purposes and shift their internal conflicts outwards, which has not only led to political unrest in these countries, but also caused a large inflow of refugees and immigrants to the Western world, posing graver challenges to the welfare system and governance capability of Western countries. Amid global industrial restructuring and the multicultural environment formed by the inflow of immigrants and refugees, unprepared political elites and the people in the Western world turn to embrace right-wing populism in haste. This is meant to close the country in the name of the people, which is a wrong way to address the deep-rooted governance problems, and the Western world will eventually reap the consequences.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Acknowledgements

The authors are grateful to Li Lixing, Justin Yifu Lin, Nie Zhuo, and Yu Miaojie for their comments and the reviewers for their suggestions. Research supports from the National Natural Science Foundation of China (#71874004) and the Ministry of Education of China (#16JJD790003) are acknowledged. The authors are solely responsible for the paper.

### Appendix. Tables for “Trade shock, refugee, and the rise of right-wing populism: Evidence from European Parliament elections.”

**Table A1**  
Sources of data on the 2014 European Parliament elections

Country	Data Sources
Austria	Austrian Ministry of the Interior, Bundesministerium für Inneres
Belgium	Direction des Elections, Belgian Electoral Office
Bulgaria	Bulgarian Central Election Commission, Централна изборителна комисия

(continued on next page)

Table A1 (continued)

Country	Data Sources
Cyprus	Ministry of Internal Affairs of Cyprus, ΥΠΟΥΡΓΕΙΟ ΕΣΣΤΕΡΙΚΩΝ
Czech	Czech Statistics Office, Český Statistický Úřad
Germany	German Federal Electoral Office, Der Bundeswahlleiter
Denmark	Danish Statistics Office, Danmarks Statistik
Estonia	Estonian National Electoral Commission, Valimised
Greece	Greek Ministry of the Interior, Υπουργείο Εσωτερικών
Spain	Spanish Ministry of the Interior, Ministerio del Interior
Finland	Finnish Ministry of Justice, Oikeusministeriö
France	French Ministry of the Interior, Ministère de l'Intérieur
Hungary	Hungarian National Elections Office, Nemzeti Választási Iroda
Croatia	Croatian National Electoral Commission, Državno izborno povjerenstvo
Ireland	Election Ireland
Italy	Ministero dell'Interno, Italian Ministry of the Interior
Lithuania	European Parliament
Luxembourg	Government of Luxembourg, Le Gouvernement du Grand-Duché de Luxembourg
Latvia	European Parliament
Malta	European Parliament
Netherlands	Dutch Electoral Commission, Kiesraad
Poland	Polish National Electoral Commission, Państwowa Komisja Wyborcza
Portugal	Portuguese Ministry of the Interior, Ministério da Administração Interna
Romania	Biroul Electoral Central
Sweden	Swedish National Electoral Office, Valmyndigheten
Slovenia	Slovenian National Electoral Commission, Državna Volilna Komisija
Slovakia	Slovak Statistics Office, Statistický úrad Slovenskej republiky
U.K.	UK Parliament UK Parliament

Table A2

Trade of the EU countries with low-wage countries

Manufacturing classification (NACE Rev.2)	2010–2016 Change in import value (billion euros)	2016 Import share	2010–16 Change in net exports (billion euros)	2016 net exports (billion euros)	2010–2016 Average growth rate of imports
food	33.55	4.31%	0.86	-0.0035	4.06%
drinks	0.95	0.08%	0.33	0.41	6.82%
tobacco products	0.19	0.02%	0.12	0.30	4.69%
textile	31.02	2.55%	-0.20	-0.06	7.90%
clothing	9.46	7.48%	0.20	-0.96	2.17%
Leather/Leather Goods	55.30	4.68%	-0.49	-0.46	6.57%
Wood, cork and wood products	-0.60	0.78%	0.25	0.21	2.70%
Paper/Paper Products	6.97	0.92%	0.15	0.29	8.09%
Prints and Recordings	0.15	0.01%	0.11	0.30	7.12%
Coking coal and refined petroleum products	-26.80	0.51%	0.41	0.33	3.20%
Chemicals and related	59.12	3.96%	0.42	0.60	10.33%
Medicines and pharmaceutical preparations	15.10	1.32%	1.04	0.66	9.55%
Rubber and plastic products	57.37	3.20%	-0.35	-0.03	10.74%
Other non-metallic products	5.78	1.30%	0.13	0.17	5.62%
alkaline metal	35.70	2.63%	-0.58	0.17	15.09%
metal products	64.80	3.70%	-0.40	-0.07	9.73%
Computers, Electronic and Optical Equipment	294.85	29.32%	-2.79	-3.94	8.49%
Electrical Equipment	167.13	8.86%	-1.48	-0.58	11.84%
Other mechanical equipment	110.90	6.86%	-1.03	0.92	9.71%
road vehicle	40.96	2.42%	1.58	1.33	8.90%
other transport equipment	-30.56	1.91%	2.20	0.87	9.19%
furniture	14.71	2.08%	0.02	-0.01	6.00%
Other manufacturing	72.62	5.60%	-0.52	-0.46	7.68%
Total Manufacturing	1018.67	94.50%	-194.66	-2066	7.74%

Table A3

Major transit cities for refugee migration in Europe

nation	City	nation	City
Italy	Messina	Germany	Hamburg
Italy	Rome	Germany	Frankfurt
Italy	Milan	Germany	Munich
France	Paris	Austria	Vienna

(continued on next page)

**Table A3 (continued)**

nation	City	nation	City
Belgium	Brussels	Hungary	Budapest
Netherlands	Amsterdam	Croatia	Zagreb
Denmark	Copenhagen	Serbia	Belgrade
Sweden	Stockholm	Greece	Athens

**Table A4**

Correlation Matrix of Key Variables

	Vote-Right	Trade shock (BRIC)	Trade shock (China)	Trade shock (low wage)	Trade shock (Developing)	Refugee shock	Foreign-born Pop	GDP per capita	Income per capita	unemployment rate	Gini Coefficient
Vote-Right	1										
Trade shock (BRIC)	0.2633*	1									
Trade shock (China)	0.2483*	0.9787*	1								
Trade shock (low wage)	0.2401*	0.8921*	0.8761*	1							
Trade shock (Developing)	0.2324*	0.8918*	0.8154*		0.9126*	1					
Refugee shock	-0.1788*	-0.0872	-0.0718		-0.0576	-0.0745	1				
Foreign-born Pop	-0.154	0.0456	0.0457	0.0605	0.0401	0.2906*	1				
GDP per capita	-0.130	0.168	0.140		0.3557*	0.3122*	0.4299*	0.4130*	1		
Income per capita	-0.2261*	0.2350*	0.2071*		0.2932*	0.2780*	0.4386*	0.3574*	0.8977*	1	
unemployment rate	-0.3089*	-0.1985*	-0.1857*		-0.2584*	-0.2257*	-0.2839*	-0.0228	-0.3892*	-0.3804*	1
Gini Coefficient	-0.3632*	-0.3358*	-0.2771*		-0.3918*	-0.4005*	-0.0429	0.0794	-0.4214*	-0.3676*	0.5086*

Note: \* means significant at the 5% level.

**Table A5**

The impact of trade shocks and refugee shocks on right-wing political parties in Eastern and Western Europe

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Eastern Europe				Western Europe			
Dependent variable: Vote-Right Wing Parties								
Trade shock (Developing)	0.1528** (0.0691)				0.0438*** (0.0161)			
Trade shock (low wage)		0.1818*** (0.0392)				0.0544*** (0.0148)		
Trade shock (China)			0.1509*** (0.0361)				0.0538*** (0.0140)	
Trade shock (BRIC)				0.1567*** (0.0363)				0.0513*** (0.0152)
Dependent variable: Vote- Culturally extreme right parties								
Trade shock (Developing)	-0.3728*** (0.0746)				-0.0709*** (0.0134)			
Trade shock (low wage)		-0.3416*** (0.0726)				-0.0675*** (0.0155)		
Trade shock (China)			-0.2965*** (0.0463)				-0.0567*** (0.0131)	
Trade shock (BRIC)				-0.2779*** (0.0497)				-0.0713*** (0.0160)
Refugee shock	0.0090 (0.0260)	0.0479** (0.0193)	0.0521*** (0.0150)	0.0601*** (0.0151)	-0.0015 (0.0065)	-0.0005 (0.0067)	0.0015 (0.0060)	-0.0009 (0.0066)
Dependent Variable: Vote- Economically extreme right wing parties								
Trade shock (Developing)	0.0630*** (0.0196)				0.0548*** (0.0094)			
Trade shock (low wage)		0.0522** (0.0256)				0.0463*** (0.0126)		
Trade shock (China)			0.0503** (0.0203)				0.0365*** (0.0116)	
Trade shock (BRIC)				0.0417** (0.0189)				0.0468*** (0.0124)
Refugee shock	0.0158** (0.0079)	0.0082 (0.0074)	0.0085 (0.0065)	0.0062 (0.0061)	-0.0032 (0.0054)	-0.0043 (0.0054)	-0.0058 (0.0050)	-0.0042 (0.0051)

Note: This table reports the two-stage regression results of instrumental variables with control variables. The KP F statistics in the first stage are all greater than 10. Robust standard errors are in the brackets. \*\*\*, \*\*, \* represent significant at 1%, 5% and 10.

## References

- Acemoglu, D., Autor, D., Dorn, D., Hanson, G.H., Price, B., 2016. Import competition and the great US employment sag of the 2000s. *Journal of Labor Economics* 34 (1), 141–198.
- Alesina, A., Edwar, G., Sacerdot, B., 2001. Why Doesn't the US Have a European-Style Welfare System?," National Bureau of Economic Research. No. w8524.
- Altindag, O., Kaushal, N., 2007. Do refugees impact voting behavior in the host country? ZA Discussion Paper. In: Evidence from Syrian Refugee Inflows in Turkey," 1, 10849.
- Antras, P., Helpman, E., 2004. Global sourcing. *Journal of Political Economy* 112 (3), 552–580.
- Arzheimer, K., 2009. Contextual factors and the extreme right vote in western Europe, 1980–2002. *American Journal of Political Science* 53 (2), 259–275.
- Auer, R., Fischer, A.M., 2010. The effect of low-wage import competition on US inflationary pressure. *Journal of Monetary Economics* 57 (4), 491–503.
- Autor, D., Dorn, D., Hanson, G.H., 2013. The China syndrome: local labor market effects of import competition in the US. *American Economic Review* 103 (6), 2121–2168.
- Autor, D., Dorn, D., Hanson, G.H., Song, J., 2014. Trade adjustment: worker-level evidence. *The Quarterly Journal of Economics* 129 (4), 1799–1860.
- Autor, D., Dorn, D., Hanson, G.H., Majlesi, K., 2016. Importing Political Polarization? the Electoral Consequences of Rising Trade Exposure," National Bureau of Economic Research. No. w22637.
- Balsvik, R., Jensen, S., Salvanes, K.G., 2015. Made in China, sold in Norway: local labor market effects of an import shock. *Journal of Public Economics* 127, 137–144, 2015.
- Barone, G., D'Ignazio, A., Blasio, G., Naticchioni, P., Rossi, Mr, Hu, Mr, 2016. Politics: the role of immigration in shaping natives' voting behavior. *Journal of Public Economics* 136, 1–13.
- Barro, R., 1973. The control of politicians: an economic model. *Public Choice* 14 (1), 19–42.
- Betz, H.G., 1993. The two facts of radical right-wing populism in western Europe. *Review of Politics* 55 (4), 663–685.
- Betz, H.G., 1994. *Radical Right-Wing Populism in Western Europe*. Springer, London.
- Brender, A., Drazen, A., 2008. How do budget deficits and economic growth affect reelection prospects? Evidence from a large panel of countries. *American Economic Review* 98 (5), 2203–2220.
- Bussmann, M., Schneider, G., 2007. When globalization discontent turns violent: foreign economic liberalization and internal war. *International Studies Quarterly* 51 (1), 79–97.
- Card, D., 2001. Immigrant inflows, native outflows, and the local labor market impacts of higher immigration. *Journal of Labor Economics* 19 (1), 22–64.
- Card, D., Dustmann, C., Preston, I., 2012. Immigration, wages, and compositional amenities. *Journal of the European Economic Association* 10 (1), 78–119.
- Carsey, T., Layman, G., 2006. Changing sides or changing minds? Party identification and policy preferences in the American electorate. *American Journal of Political Science* 50 (2), 464–477.
- Colantone, I., Stanig, P., 2018a. Global competition and brexit. *American Political Science Review* 112 (2), 201–218.
- Colantone, I., Stanig, P., 2018b. The trade origins of economic nationalism: import competition and voting behavior in western Europe. *American Journal of Political Science* 62 (4), 936–953.
- Costas-Perez, E., Sole-Olle, A., Sorribas-Navarro, P., 2012. Corruption scandals, voter information, and accountability. *European Journal of Political Economy* 28 (4), 469–484.
- Dippel, C., Gold, R., Heblich, S., 2015. Globalization and its (Dis-) Content: Trade Shocks and Voting Behavior," National Bureau of Economic Research. No. w21812.
- Dustmann, C., Vasiljeva, K., Damm, A.P., 2016. Refugee Migration and Electoral Outcomes," vols. 1–71. Centre for Research and Analysis of Migration.
- Feenstra, R., Weinstein, D., 2017. Globalization, markups, and US welfare. *Journal of Political Economy* 125 (4), 1040–1074.
- Goldberg, P.K., Pavcnik, N., 2007. Distributional effects of globalization in developing countries. *Journal of Economic Literature* 45 (1), 39–82.
- Guiso, L., Herrera, H., Morelli, M., Sonno, T., 2017. Demand and Supply of Populism," Centre for Economic Policy Research.
- Halla, M., Wagner, A.F., Zweimuller, J., 2017. Immigration and voting for the far right. *Journal of the European Economic Association* 15 (6), 1341–1385.
- Hanson, G., Scheve, K., Slaughter, M., 2007. Public finance and individual preferences over globalization strategies. *Economics & Politics* 19 (1), 1–33.
- Harrington, J., 1993. Economic policy, economic performance, and elections. *American Economic Review* 83 (1), 27–42.
- Hillman, A., 2010. Expressive behavior in economics and politics. *European Journal of Political Economy* 26 (4), 403–418.
- Hix, S., Noury, A.G., Roland, G., 2007. *Democratic Politics in the European Parliament*. Cambridge University Press, Cambridge.
- Hobolt, S.B., Wittrock, J., 2011. The second-order election model revisited: an experimental test of vote choices in European parliament elections. *Electoral Studies* 30 (1), 29–40.
- Ivarsflaten, E., 2008. What unites right-wing populists in western Europe? Re-examining grievance mobilization models in seven successful cases. *Comparative Political Studies* 41 (1), 3–23.
- Lee, D., Moretti, E., Butler, M., 2004. Do voters affect or elect policies? Evidence from the U.S. House. *The Quarterly Journal of Economics* 119 (3), 807–859.
- Lee, W., Roemer, J., Straeten, K.V., 2006. Racism, xenophobia, and redistribution. *Journal of the European Economic Association* 4 (2–3), 446–454.
- Lin, J.Y., Monga, C., 2013. Comparative Advantage: the Silver Bullet of Industrial Policy," *the Industrial Policy Revolution I*, vols. 19–38. Palgrave Macmillan, London.
- Inglehart, R., Norris, P., 2016. Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash," Harvard Kennedy School Working Paper. No. RWP16–026.
- Margalit, Y., 2012. Lost in globalization: international economic integration and the sources of popular discontent. *International Studies Quarterly* 56 (3), 484–500.
- Mayda, A.M., 2006. Who is against immigration? A cross-country investigation of individual attitudes toward immigrants. *Review of Economics and Statistics* 88 (3), 510–530.
- Mayda, A.M., Rodrik, D., 2005. Why are some people (and countries) more protectionist than others? *European Economic Review* 49 (6), 1393–1430.
- Mayda, A.M., Peri, G., Steingress, W., 2016. Immigration to the U.S.: A Problem for the Republicans or the Democrats?," National Bureau of Economic Research. No. w21941.
- Milner, H., Judkins, B., 2004. Partisanship, trade policy, and globalization: is there a left-right divide on trade policy? *International Studies Quarterly* 48 (1), 95–119.
- Mudde, C., Kaltwasser, C.R., 2017. *Populism: A Very Short Introduction*. Oxford University Press, Oxford.
- Ottaviano, G., Peri, G., 2008. Immigration and National Wages: Clarifying the Theory and the Empirics," National Bureau of Economic Research, No. w14188.
- Pierce, J.R., Schott, P.K., 2016. The surprisingly swift decline of US manufacturing employment. *American Economic Review* 106 (7), 1632–1662.
- Reif, K., Schmitt, H., 1980. Nine second-order national elections—A conceptual framework for the analysis of European election results. *European Journal of Political Research* 8 (1), 3–44.
- Rodrik, D., 2011. *The Globalization Paradox: Why Global Markets, States, and Democracy Can't Coexist*. Oxford University Press, Oxford.
- Rogowski, R., 1987. Political cleavages and changing exposure to trade. *American Political Science Review* 81 (4), 1121–1137.
- Rydgren, J., 2008. Immigration sceptics, xenophobes or racists? Radical right-wing voting in six west European countries. *European Journal of Political Research* 47 (6), 737–765.
- Stiglitz, J.E., 2002. *Globalization and its Discontents*. Norton, New York.
- Stokes, S., 1999. Political parties and democracy. *Annual Review of Political Science* 2, 243–267.
- Tybout, J.R., 2000. Manufacturing firms in developing countries: how well do they do, and why? *Journal of Economic Literature* 38 (1), 11–44.
- Utar, H., 2018. Workers beneath the floodgates: low-wage import competition and workers' adjustment. *The Review of Economics and Statistics* 100 (4), 631–647.
- Vadlamannati, K.C., Kelly, G., 2017. Welfare Chauvinism? Refugee Flows and Electoral Support for Populist-Right Parties in Industrial Democracies," MPRA Paper. No. 81816.
- Verhoogen, E.A., 2008. Trade, quality upgrading, and wage inequality in the Mexican manufacturing sector. *The Quarterly Journal of Economics* 123 (2), 489–530.