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Migration shocks and voting:

Evidence from Ukrainian migration to Poland

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Abstract

This paper examines the impact of two massive and unexpected inflows of Ukrainians on voting behavior in Poland. The two migration shocks, caused by Russia's aggression against Ukraine in 2014 and 2022, allow us to compare the effects of conflict-induced labor migration and those of refugee inflows. Using an instrumental variable approach, we find that greater exposure to labor migrants reduces support for conservative parties in the short run and subsequently shifts voter preferences toward pro-redistribution parties. We do not find similar effects for refugees, who, unlike temporary labor migrants, had access to social benefits. Exposure to both types of Ukrainian migration leads to a decrease in far-right voting. This effect emerges only after the salience of Ukrainian migrants increases due to the escalation of Russia's aggression and the rise of anti-Ukrainian rhetoric from the Polish far-right. The backlash from Polish voters against the far-right rhetoric is ten times stronger in areas exposed to refugees than to labor migrants. Our results are robust to the use of a number of instruments and several sensitivity checks.

JEL Classification: D72, F22, J61, P16, R23

Keywords: Immigration; Refugees; Political Economy; Voting; Poland; Ukraine

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1 Introduction

Over the past decade, Europe has experienced several large-scale immigration waves, driven primarily by ongoing conflicts in the Middle East and Eastern Europe. Although Western Europe has previously seen substantial inflows of refugees and labor migrants, Russia's aggression against Ukraine – ongoing since 2014 – stands out as the largest conflict-induced migration in recent European history. Most notably, post-communist Central and Eastern European (CEE) countries, which have traditionally been countries of emigration rather than immigration, have now absorbed a significant share of these migrants.

These demographic changes have occurred alongside a political transformation. Across Europe, there has been a broad shift to the right, with far-right parties often focusing on refugees' access to welfare systems in their anti-immigration rhetoric. Recent literature shows that rising immigration can increase support for anti-immigration laws (Tabellini, 2020) and foster political polarization through media coverage of migration (Schneider-Strawczynski and Valette, 2025). However, the extensive literature on the political impact of immigration reports mixed results across different contexts. Furthermore, despite a growing interest in the political consequences of immigration, there remains a lack of empirical evidence on this topic from post-communist CEE countries. This gap is especially relevant given recent findings by Lange (2021), who shows that historical exposure to state socialism continues to influence attitudes towards immigration.

In this paper, we examine the impact of Ukrainian migration on voting behavior in Poland. This unique context allows us to provide first evidence from a post-communist country and to compare the effects of two different types of immigration: (1) conflict-induced labor migration following Russia's aggression against Ukraine in 2014, without direct access to social benefits, and (2) refugee inflow following the full-scale invasion of Ukraine in 2022, with direct access to social benefits. Using administrative data on migration and relying on three different instruments, we provide novel evidence on the

¹For instance, the Polish far-right party *Konfederacja* strongly opposes granting child support to Ukrainian refugees in Poland (Konfederacja, 2025b).

²Some examples include Otto and Steinhardt (2014), Barone et al. (2016), Hangartner et al. (2019), Dustmann, Vasiljeva, and Piil Damm (2019), and Steinmayr (2021).

heterogeneous effects of local exposure to different types of migration on the voting behavior of natives.

To examine the impact of the Ukrainian migration on voting behavior in Poland, we exploit the spatial variation in the exposure to Ukrainian migrants across Polish counties. For identification, we employ three variants of the instrumental variable approach. Specifically, we use as instruments: (1) the distance to historical hotspots of Ukrainian networks, (2) the distance to the Ukrainian border, and (3) a novel instrument based on the distance to Polish cities that hosted UEFA Euro 2012.

The results show that the effects of the two migration shocks are different and change over time. Specifically, greater exposure to labor migration reduces support for the conservative parties in the short term and subsequently shifts voter preferences towards pro-redistribution parties. The initial decline in support for conservative parties may reflect preferences for greater openness, as shown in our mechanisms analysis, likely driven by the positive impact of Ukrainian temporary workers on local labor markets. The subsequent rise in support for pro-redistribution parties may reflect a desire among the local population to secure a stronger safety net and to benefit from the improved economic situation, especially given that Ukrainian temporary workers were not eligible for social benefits. However, we find no effect on pro-redistribution parties when we examine the effect of exposure to refugees who were eligible for social benefits. Moreover, we find no effect on voting for conservative parties, likely due to the similar attitude of conservative and liberal parties towards Ukrainian refugees after Russia's full-scale invasion.

When analyzing changes in support for the Polish far-right, we find that regions more exposed to both types of Ukrainian migration exhibit a lower share of votes for far-right parties. However, this effect appears for labor migrants only after the salience of Ukrainian migration increases. This may be due to the fact that *Konfederacja*'s anti-Ukrainian rhetoric emerged after the inflow of Ukrainian refugees in 2022. As a result, although *Konfederacja*'s vote share has increased, their far-right, anti-Ukrainian rhetoric may have led to a smaller increase in support in regions with a high concentration of Ukrainians, particularly after Ukrainian migration became more salient. Furthermore, this backlash

from Polish voters against the far-right rhetoric is ten times stronger in areas exposed to refugees than in those exposed to labor migrants.

Using data on election results before each of the migration shocks, we find no evidence of different pre-treatment trends in political outcomes between counties with high and low exposure to Ukrainian migration. Moreover, the results are not driven by pre-treatment economic conditions or other county characteristics. The results are also robust to using alternative definitions of the outcome variables, controlling for potential confounders, accounting for spatial spillovers, dropping possible outliers, and a number of additional robustness checks.

While we cannot fully rule out that some of the observed differences between the two shocks are driven by variations in migrant composition - for instance, the share of female migrants was approximately 74% during the 2022 influx, compared to 56% prior to 2022, and refugees in 2022 predominantly originated from Eastern Ukraine, whereas earlier migrants largely came from Central and Western regions - the overall size of the shocks is relatively comparable (Zaika and Vakhitov, 2024) and both migration waves were conflict-induced, with migrants having direct access to the host country's labor markets and coming from the same country. Furthermore, both our analysis of underlying mechanisms and existing studies indicate that the Polish labor market reacted similarly to both shocks (Pham, Talavera, and Wu, 2023; Zuchowski, 2025).

One strand of the existing literature examines whether immigration changes preferences for right-wing and far-right parties. The results are mixed. On the one hand, many studies find that the presence of immigrants increases the vote share of the right-wing and far-right parties. For instance, Otto and Steinhardt (2014) and Edo et al. (2019) show that immigration increases support for the far-right in Germany and France, respectively. Barone et al. (2016) show that immigration boosts support for center-right parties in Italy, indicating that the impact of immigration is not limited to the far-right. In addition, Fonseca, Peralta, and Pereira dos Santos (2025) find that repatriates from Portuguese-speaking African countries also increase voting for right-wing parties in Portugal.

Focusing on the impact of refugees, Tomberg, Stegen, and Vance (2021) and Bredtmann

(2022) find an increase in support for the far-right in areas with stronger exposure to refugees in Germany. Similarly, Rozo and Vargas (2021) find a shift to the right in areas more affected by the inflow of refugees in Colombia. Some studies show that even very brief exposure to refugees can increase far-right support. Hangartner et al. (2019), examining Greece, Gessler, Tóth, and Wachs (2022) focusing on Hungary, and Steinmayr (2021), studying Austria, find that regions through which refugees passed experienced an increase in far-right support. However, Steinmayr (2021) finds the opposite effect in regions where refugees have settled and had the opportunity to interact with locals.

Moreover, some studies find that immigration decreases support for the right-wing in general. For example, Lonsky (2021) finds that immigrants reduce far-right support in Finland, and Vertier, Viskanic, and Gamalerio (2023) find similar effects for refugees in France. Furthermore, Mykhailyshyna (2025) finds that temporary labor migrants in the US, particularly those working in non-agricultural low-skill occupations, reduce support for the Republican Party.

One possible explanation for this discrepancy in results is that different types of migrants lead to different outcomes. For instance, the skill level of immigrants appears to play a role. Halla, Wagner, and Zweimüller (2017) and Moriconi, Peri, and Turati (2022) find that while low- and medium-skilled migrants increase the support for far-right and nationalistic parties, high-skilled migrants have no effect or a negative effect. Mayda, Peri, and Steingress (2022) find a similar pattern in the US. Another important factor is the ethnic background of migrants. Mendez and Cutillas (2014) suggest that in Spain, immigrants from Latin America increase support for left-wing parties, while immigrants from Africa increase support for the right. Local characteristics of host communities also matter. For instance, Dustmann, Vasiljeva, and Piil Damm (2019) find that anti-immigration parties gain support when immigration increases in rural areas, but this effect does not hold for urban areas.

Another strand of literature related to this paper examines the effect of migration on preferences for redistribution. Again, the results are mixed. While some papers find that migration reduces the desired amount of redistribution (Tabellini, 2020; Dahlberg,

Edmark, and Lundqvist, 2012), others reach more ambiguous conclusions. For instance, Moriconi, Peri, and Turati (2019) suggest that low-skilled immigration leads to reduced support for redistribution, while high-skilled immigration increases it. In addition, Alesina, Murard, and Rapoport (2021) point out the importance of immigrants' country of origin.

This paper contributes to the literature on several fronts. First, it provides the first evidence from a CEE country - specifically Poland - which experienced two large and unexpected inflows of Ukrainian migrants within a relatively short time span. Second, the unique context of Ukrainian migration to Poland allows us to examine the heterogeneous effects of different types of migration: one group with direct access to the host country's social benefits and another without. Importantly, both migration waves were conflict-induced, involved migrants from the same country, and had access to the local labor markets. Third, we contribute by analyzing the dynamics of the effects over time. Finally, this paper introduces a novel instrument and, together with two additional instruments, demonstrates the strong robustness of the results.

The remainder of this paper is organized as follows. Section 2 provides background on the public debate on Ukrainian migration to Poland. Section 3 discusses the empirical framework and the underlying data. Section 4 presents the main results. Section 5 discusses the results and the underlying mechanisms. Section 6 focuses on the robustness of the findings. Section 7 concludes.

2 Background and public debate on Ukrainian migration in Poland

2.1 Conflict-induced labor migration before February 2022

In September 2015, shortly before the parliamentary elections in October 2015, Janusz Korwin-Mikke from the *KORWiN* party (the predecessor of the *Konfederacja* party) stated that current migration policies were causing Europe to be flooded with "human garbage who do not want to work". He further claimed that Poland did not have a problem with

immigration per se, but only with immigrants unwilling to work. According to him, such immigrants do not wish to stay in Poland but rather want to move to countries with more generous social benefits (Onet, 2015). This reflects the generally hostile attitudes of the Polish far-right at that time toward refugees with access to social benefits, but not necessarily toward labor migrants.

Furthermore, while in 2016 Polish conservative politicians, including former President Andrzej Duda and former Prime Minister Beata Szydlo, spoke of thousands or even millions of Ukrainian refugees in Poland, in reality, prior to February 2022, Poland had only experienced an inflow of Ukrainian labor migrants. In fact, in 2015, only two Ukrainians were granted refugee status (Dziennik.pl, 2016).

In contrast to most Western and Southern European countries, Poland was not affected by the inflow of refugees in 2015, driven mainly by the conflict in the Syrian Arab Republic. In fact, Poland, along with the Czech Republic and Hungary, refused to accept refugees under the European Union's refugee relocation scheme (European Commission, 2017). However, after the destabilization of the Ukrainian economy caused by Russia's aggression in 2014, Poland experienced a massive and unexpected inflow of temporary labor migrants.

This massive inflow of Ukrainian labor migrants into neighboring Poland was driven by the economic instability caused by Russia's annexation of Crimea in 2014 and the ongoing Russian aggression in Eastern Ukraine, which forced many Ukrainians to seek employment abroad. In addition, numerous Ukrainian labor migrants who had previously worked in Russia chose to migrate to Poland in search of jobs (Piontkivska et al., 2018). Based on an employer's declaration of intention to hire, Ukrainians were allowed to work in Poland for up to six months in a 12-month period without a work permit. Around 90% of Ukrainian workers were employed in manual labor. Because Poland was experiencing an oversupply of highly educated workers at the time, Ukrainian workers complemented rather than competed with locals (Zuchowski, 2025).

2.2 Refugee migration following the full-scale invasion of Ukraine

On February 24, 2022, Russia launched a full-scale invasion of Ukraine, escalating a conflict that had previously been limited to Ukraine's eastern regions. The sudden expansion of the conflict across Ukraine resulted in a massive wave of refugee migration, with neighboring Poland experiencing a massive inflow of Ukrainian refugees.

Ukrainian refugees under the Temporary Protection Directive, invoked by the European Union, had unrestricted access to the Polish labor market. However, this refugee inflow differs significantly from the earlier inflow of temporary labor migrants from Ukraine to Poland before 2022. Whereas earlier migration was primarily driven by economic motives, after February 2022, Ukrainians, mostly women and children, were fleeing an immediate threat to their lives. In fact, only about 5.6% of Ukrainian refugees reported that a job offer influenced their decision to move to their current host country (Vyshlinskyi and Mykhailyshyna, 2025).

About 90 percent of Polish society was in favor of accepting Ukrainian refugees in the immediate aftermath of Russia's full-scale invasion of Ukraine (CBOS, 2023). Solidarity with Ukraine in the face of Russia's aggression appeared to transcend political divisions, as not only left-wing activists but also Polish nationalists spoke out against the invasion. Soon, however, "war fatigue" set in, and anti-Ukrainian public discourse, led by the far-right *Konfederacja* party, became increasingly widespread (Gazeta.pl, 2023).

In the wake of the 2023 parliamentary elections, *Konfederacja*'s political campaign featured nationalist, anti-Ukrainian rhetoric. One focal point of their campaign was the Polish government's spending on social aid for Ukrainians. However, slogans such as "Poland only for Poles" clearly signaled a rise in anti-immigrant and nationalist sentiments, extending beyond opposition to redistributive policies (OKO.press, 2023).³ In fact, a recent survey among Ukrainian refugees indicates that they perceive Poland as the least welcoming country (Vyshlinskyi and Mykhailyshyna, 2025).

 $^{^3}$ Figure A1 in the Appendix shows an example of an anti-Ukrainian poster distributed by Konfederacja, which suggests an abusive attitude of Ukraine towards Poland and calls for an end to "naivety towards Ukraine".

3 Empirical strategy and data

3.1 Baseline approach

To examine the impact of the presence of Ukrainian migrants on the voting behavior in Poland, we estimate the following baseline equation in first differences:

$$\Delta y_c = \beta \Delta m_c + \tau + \Delta \varepsilon_c, \tag{1}$$

where $\Delta y_c = y_{c,t} - y_{c,2011}$ and it represents the change in the share of votes for conservative, pro-redistribution, or far-right parties, as defined in Table A1, between election year t and the last pre-treatment election in 2011 in county c.⁴ We measure the intensity of the exposure to the labor migration shock as $\Delta m_c = M_{c,2019}/L_{c,2013}$, where $M_{c,2019}$ is a proxy for the number of Ukrainian labor migrants in county c standardized by the pre-shock working-age local population $L_{c,2013}$.⁵ Furthermore, we measure the exposure intensity to the refugee inflow as $\Delta m_c = M_{c,2022}/L_{c,2021}$ where $M_{c,2022}$ is the number of Ukrainian refugees in county c standardized by the pre-shock local population $L_{c,2021}$.⁶ The constant term, τ , represents the common time trend, and $\Delta \varepsilon_c$ is the error term.

Estimating the first differences model allows us to remove county-specific factors that do not change over time, while τ captures the overall time trend and any shocks that impact all counties in the same way. Furthermore, we use heteroskedasticity-robust standard errors, clustered at the NUTS-3 level (one level above the county), to account for potential serial correlation in voting patterns within regions.

Although the inflow of Ukrainians, both after Russia's aggression in 2014 and the full-scale invasion in 2022, was unexpected, the distribution of Ukrainians across Polish

⁴We assign parties to groups based on whether they can be described as conservative (versus liberal), pro-redistribution (versus pro-free market), and far-right (versus non-far-right). For example, the Polish party *Sojusz Lewicy Demokratycznej* is pro-redistribution but liberal, so it is assigned only to the pro-redistribution parties group. In contrast, *Prawo i Sprawiedliwosc* can be described as both pro-redistribution and conservative, so it is assigned to both categories.

⁵While the shock started in 2014, due to the absence of reliable county-level data before 2019 we follow the definition of treatment from Zuchowski (2025) and use data from the first available year as treatment. Thus, we assume here that the spatial variation of the labor supply shock was constant over time.

⁶By definition, $M_{c,2019}$ is not part of $L_{c,2021}$, as the former measures temporary migrants who have not resided in the country permanently.

counties may be correlated with local characteristics that could influence electoral outcomes. In particular, the location decision of Ukrainian temporary workers, due to the nature of the shock, was primarily driven by local labor market prospects across Polish regions. This, in turn, could affect the impact of immigration on electoral outcomes, as people in areas with better labor market prospects may respond differently to the migration shock than those in counties with worse labor market prospects.

Thus, in addition to our baseline approach, we use three variations of the instrumental variable approach. Specifically, we employ the following three instruments: (1) the distance to historical hotspots of Ukrainian networks, (2) the distance to the Ukrainian border, and (3) a novel instrument based on the distance to cities that hosted UEFA Euro 2012 in Poland, which we discuss in detail in the next section.

Furthermore, we test whether our treatment variables and instruments are correlated with several pre-treatment county characteristics that could potentially affect voting behavior. The balancing tests - presented in Figure A2 for labor migrants and Figure A3 for refugees - reveal that local labor market characteristics, which may influence voting patterns, are strongly correlated with the location of Ukrainians. In particular, Ukrainians are more likely to choose counties with higher initial wages and lower unemployment. While two of our instruments are also at least somewhat correlated with local labor market characteristics, the direction of the correlation is opposite. Thus, we argue that if the results are similar across instruments, it demonstrates the robustness of our findings.⁷

3.2 Instrumental variable approach

Akcja Wisla.

To capture the exogenous variation in the location of Ukrainian migrants across Polish counties, we first use the instrument proposed by Zuchowski (2025). This instrument is based on historical data derived from military documents on the "Akcja Wisla" (Operation Vistula). During this military operation, around 140,000 ethnic Ukrainians living in Poland

⁷Our results are robust to the inclusion of these local labor market characteristics as control variables. We discuss those results in Chapter 6.

were forcibly resettled in 1947. This has led to the emergence of new hotspots of Ukrainian networks in Poland. We instrument the current distribution of Ukrainian migrants with the distance to the historical hotspots of Ukrainian networks that emerged due to Akcja Wisla. This instrument allows us to identify the local average treatment effect (LATE) of the inflow of Ukrainians whose location decision was influenced by the spatial distance to their networks. Table 1 shows that the instrument is relevant for the labor migration shock, with a first-stage F-statistic of 27.9. However, it is a very weak instrument for the refugee shock, with a first-stage F-statistic of around 2. Therefore, while we present all results using the Akcja Wisla instrument for consistency in the refugee migration case, those results are clearly affected by weak instrument problems.

[Table 1 about here.]

Border instrument.

As a second instrument, we use the distance to the border of the migrants' country of origin, a common instrument in the migration literature. Specifically, we instrument the local exposure to migration shocks with the distance from the centroid of each Polish county to the nearest Polish-Ukrainian border crossing. Figure 1a presents the generated border instrument. This instrument allows us to identify the LATE of the inflow of Ukrainians whose location decision was influenced by the spatial distance to the Ukrainian border. Table 1 shows that the border instrument is relevant for both the labor migration shock, with a first-stage F-statistic of 79.3, and the refugee shock, with a first-stage F-statistic of 26.2. Thus, unlike Akcja Wisla, this instrument is not affected by weak instrument problems and allows us to obtain meaningful results also for the refugee shock.

[Figure 1 about here.]

⁸Due to the further persecution of the Ukrainian culture and language after the Akcja Wisla, which led to their (forced) assimilation or de facto Polonization, the Ukrainian culture and language could not survive in the places with a small number of resettled Ukrainians. As a result, the historical share of Ukrainians is not predictive of the contemporary location choices of Ukrainians. Thus, the instrument is based on a distance to the hotspots of the historical Ukrainian network, rather than a shift-share instrument commonly used in the migration literature.

Euro 2012 instrument.

Finally, we propose a novel instrument based on the distance to cities that hosted UEFA Euro 2012 in Poland. In 2012, Poland, together with Ukraine, hosted the UEFA European Football Championship, commonly referred to as Euro 2012. A total of eight cities hosted the games, four of which were located in Poland. We construct the Euro 2012 instrument by calculating the distance from each Polish county to the four Polish cities that co-hosted Euro 2012: Warsaw, Wroclaw, Gdansk, and Poznan. Figure 1b illustrates the generated Euro 2012 instrument. We argue that the distance to these cities enables us to estimate the LATE for Ukrainians whose location decisions were influenced by proximity to these cities. This effect could be driven by the networks established during Euro 2012, the improved infrastructure between Ukraine and these Polish cities, or simply the increased visibility of these cities in the Ukrainian media in the years prior to the migration shocks. Table 1 shows that the Euro 2012 instrument is relevant for both the labor migration shock, with a first-stage F-statistic of 49.2, and the refugee shock, with a first-stage F-statistic of 19.3. Thus, this instrument should also provide meaningful results for both shocks.

3.3 Data sources

We obtain data for our outcome variables from the data repository of the National Election Committee in Poland. Specifically, we use data on the results of the 2007, 2011, 2015, 2019, and 2023 parliamentary elections. By focusing on this type of election, which takes place every four years, we are able to examine election results from the years immediately following the two immigration shocks. To account for the emergence of new parties and the disappearance of some parties, as well as changes in party names, we create three categories to which we assign parties. In particular, we classify parties by the following dimensions: conservative (as opposed to liberal), pro-redistribution (as opposed to pro-free market), far-right (as opposed to non-far-right) parties, as shown in Table A1.9

⁹We do not use existing classifications because they lack data for recent elections and focus on major parties, excluding smaller parties, which are also relevant to our analysis. Therefore, we create our own classification to ensure comprehensive coverage.

To assess the spatial distribution of Ukrainian immigrants across Polish counties, we use data from the PESEL database, Poland's mandatory nationwide identification system, to measure the spatial distribution of Ukrainian refugees across Polish counties. Furthermore, similarly to Zuchowski (2025), we use variation across Polish counties in firms' statements on the employment of Ukrainian citizens in 2019 as a proxy for the intensity of exposure to the labor migration shock. This data is derived from county-level administrative records from the Ministry of Family, Labor, and Social Policy.

Finally, we use county-level data from Statistics Poland for other variables. In addition to the Akcja Wisla instrument from Zuchowski (2025), we generate our two other instruments based on official data on geocoordinates of Euro 2012 cities and border crossings between Poland and Ukraine. Table A2 in the Appendix provides descriptive statistics for all variables included in the empirical analysis.

4 Main results

4.1 Conflict-induced labor migration

Panels (a) to (c) of Table 2 and Figure 2 show the electoral impact of labor migration from Ukraine resulting from Russia's aggression in 2014. Specifically, we present results from the three Polish parliamentary elections following this migration shock: 2015 in Panels (a), 2019 in Panels (b), and 2023 in Panels (c) of Table 2 and Figure 2.

[Table 2 about here.]

[Figure 2 about here.]

Panel a of Table 2 and Figure 3 shows that in the first election after the inflow of conflict-induced labor migrants, counties more exposed to this migration shock experience a decrease in the vote share for conservative parties, which are typically more anti-immigration than liberal parties. While the exact point estimates differ slightly between

OLS and instrumental variable specifications, they are all statistically significant. A local increase in the share of Ukrainian workers by 1 percentage point leads to a decrease in the combined vote share of conservative parties by about 0.3 percentage points. There is no evidence of an immediate effect on the vote share for pro-redistribution or far-right parties.

Next, we examine the subsequent election in 2019 in Panels b. The point estimate for the vote share for conservative parties is similar to the 2015 election, but the confidence intervals become larger in the specifications with instrumental variables. Furthermore, the results show that exposure to foreign workers shifts voters' preferences toward more redistribution-oriented parties. Looking at the point estimate using the Akcja Wisla and the border instrument, the magnitude of the point estimates indicates that an increase in the share of Ukrainian workers in a county by 1 percentage point leads to an increase in votes for pro-redistribution parties by about 0.7 to 0.87 percentage points. ¹⁰ Moreover, similar to the 2015 elections, we find no evidence of an effect on the vote share of far-right parties.

Panels c show the results based on the 2023 elections, the last elections in our dataset. In this case, the results for the pro-redistribution and conservative parties turn out to be statistically insignificant in almost all cases. However, as a late reaction to the labor supply shock, we observe a decrease in the vote share of the far-right parties. In particular, the magnitude of the point estimates indicates that a local increase in the share of Ukrainian workers by 1 percentage point leads to a decrease in the far-right share of votes by about 0.15 to 0.27 percentage points.

¹⁰The point estimate using the Euro 2012 instrument is much smaller and not statistically different from zero. However, a leave-one-out robustness check shows that the point estimate is statistically significant and of similar magnitude to all other instruments, except when we include Warsaw to generate the instrument. Compared to other Polish regions, Warsaw, being the capital and the largest city in Poland, had already experienced higher levels of exposure to international migration prior to the conflict-induced inflows of Ukrainians, so the effect of Ukrainian migration may not be as pronounced. In Figure A4 in the Appendix, we present the results in the case where Warsaw is omitted for the generation of the Euro 2012 instrument.

4.2 Refugee inflow

Panel (d) of Table 2 and Figure 3 show the electoral impact of refugee migration from Ukraine, resulting from Russia's full-scale invasion in 2022. Specifically, we present the effect on the results of the 2023 parliamentary elections, which took place after the refugee migration shock. In contrast to the effect of the inflow of temporary migrant workers, we do not find statistically significant results on support for either pro-redistribution or conservative parties.

[Figure 3 about here.]

Similar to the effects of the inflow of labor migrants on election results in 2023, counties more exposed to Ukrainian refugees experience a decline in far-right voting. There are, however, two key differences compared to the effects of labor migrants: (1) for refugees, this effect is immediate and does not occur only after a couple of years, and (2) the size of the effect is about ten times higher for refugees than for labor migrants. Specifically, the magnitude of the point estimates suggests that a 1 percentage point increase in the share of Ukrainian refugees leads to a 1.1 to 1.9 percentage point decrease in the vote share of the far-right parties.

5 Discussion and underlying mechanisms

5.1 Conservative and redistribution-oriented parties

The results show that greater exposure to labor migration immediately reduces support for conservative parties in the short run and subsequently shifts voter support toward pro-redistribution parties. The initial decline in support for conservative parties may reflect preferences for greater openness of the country, while the subsequent rise in support for pro-redistribution parties could signify a desire to secure a stronger safety net and benefits. We argue that improvements in the economic conditions of counties with greater exposure to Ukrainian workers drive both channels.

To investigate the mechanisms, we provide supportive evidence of the positive impact of Ukrainian migration on the local labor markets in Figure A5. Specifically, we examine changes in wages and unemployment in areas with greater exposure to Ukrainian migrants between the baseline year 2011 and the election years 2015, 2019, and 2023. Consistent with the literature, the results suggest that temporary labor migrants from Ukraine positively impact local labor markets. In particular, we find that local wages increase and unemployment decreases.¹¹

These findings are in line with the literature showing that Ukrainian migrant workers did not compete with native workers but rather complemented them. Most Ukrainian labor migrants worked in Poland in simple occupations (Ukrainian Service of Statistics, 2017), complementing native workers. Thus, locals benefited economically from the Ukrainian labor migration and sought to ensure it would not be halted. As a result, locals more exposed to the inflow of migrants further supported Poland's openness by voting for more liberal rather than conservative parties. Furthermore, the literature has shown that the inflow of Ukrainian workers, due to their complementarity with native emigrants, has led to an enlargement of local labor markets and a decrease in emigration in affected regions (Zuchowski, 2025). The absorption of potential emigrants into the local labor markets could also explain the lower support for conservative parties in counties with stronger exposure to Ukrainian workers, as the Polish emigrants are more likely to vote for left-wing parties (Giesing and Schikora, 2023).

Over time, locals in areas that benefit from Ukrainian temporary workers become more supportive of pro-redistribution parties, potentially to ensure they benefit from these improved conditions and to guarantee themselves a safety net in case Ukrainian migrants outcompete them in the labor market.¹²

The lack of a statistically significant positive effect of refugee migration on pro-

 $^{^{11}}$ The coefficient on the unemployment rate is not statistically significant when using the Euro 2012 instrument. However, this instrument could be unreliable for investigating the impact on unemployment because, unlike our other two instruments, it is correlated with pre-treatment unemployment.

 $^{^{12}}$ Although, as discussed earlier, Ukrainian labor migrants were complements rather than substitutes to local workers, locals may still fear losing their jobs to migrants, as the *perception* of economic threat can exist even in the absence of an *actual* threat.

redistribution parties may be due to the fact that Ukrainian refugees, unlike temporary labor migrants, were eligible for social benefits. As a result, instead of benefiting alone from increased redistribution, natives would share the increased benefits with migrants, making redistribution less attractive. Furthermore, the lack of an effect on the conservative parties can be explained by the fact that both conservative and liberal parties took similar stances toward Ukrainian refugees after the Russian full-scale invasion of Ukraine.

5.2 The Polish far-right

We find that counties more exposed to both types of Ukrainian migration experience a decline in support for far-right. This effect, however, emerges only after the massive inflow of Ukrainian refugees in 2022. Furthermore, the effect size is about ten times higher for refugees than for labor migrants.

The initial absence of a link between labor migrants and votes for the far-right can be explained by the fact that, prior to 2022, the far-right rhetoric focused on refugees from Muslim countries rather than Ukrainian labor migrants. However, after the inflow of Ukrainian refugees in 2022, Poland saw a rise in anti-Ukrainian rhetoric from the Polish far-right.

In particular, during the 2023 election campaign, *Konfederacja* used anti-Ukrainian slogans, with one of the focal points being government spending on aid for Ukrainians. Moreover, its anti-Ukrainian stance extended beyond opposition to welfare policies, incorporating nationalist slogans such as "Let Poland be Polish" (Konfederacja, 2025a) or "Poland only for Poles" (OKO.press, 2023).

This ultra-nationalist narrative of *Konfederacja*, directly targeting Ukrainians, could have led to a decrease in voting for the far-right among the local population who had previously had positive experiences with Ukrainians. As a result, the far-right's anti-Ukrainian rhetoric began to deter Polish voters once the opposition to Ukrainian migration became more prominent in the far-right discourse.

Not only the previous positive experience with temporary labor migrants but also the

successful integration of Ukrainian refugees into Polish labor markets (Zyzik et al., 2023) made the Polish population in regions with higher exposure to Ukrainian migration less susceptible to right-wing propaganda. Thus, our results are in line with Allport's contact hypothesis, suggesting that local exposure to refugees can reduce prejudice among the native population (Allport, Clark, and Pettigrew, 1954), and therefore, decrease support for far-right parties. However, our findings contradict Rozo and Vargas (2021), who show that the anti-immigrant campaign of right-wing parties was more successful in regions of Colombia with more Venezuelan refugees through 'strategic electoral misinformation'. There, the right-wing managed to associate Venezuelan migrants with Venezuela's economic collapse. Our findings show that the strategic misinformation of the far-right was less successful in places with higher exposure to Ukrainian migrants in Poland.

Furthermore, the aggressive anti-Ukrainian rhetoric may have mobilized Ukrainians to show their opposition to *Konfederacja* more openly and to persuade their local acquaintances not to vote for this party. Additionally, public protests by Ukrainian refugees advocating for support for Ukraine may have further discouraged support for the far right, even if they were not directly aimed at *Konfederacja*.

Taken together, the results suggest that before the massive inflow of refugees, economic factors were the main drivers of the voting behavior. However, after the salience of the Ukrainian migrants increased following the Russian full-scale invasion of Ukraine, non-economic factors related to the contact hypothesis became more important. In particular, the difference in the timing and magnitude of the effects can be explained by the much greater salience of the refugee inflow compared to that of labor migrants. This aligns with the literature, which has shown that media coverage influences how immigration affects public attitudes (Schneider-Strawczynski and Valette, 2025).

6 Robustness checks

Pre-treatment trends.

Our identification strategy relies on the common trend assumption. We first examine the

validity of this assumption. Using pre-migration shock election results, we find no evidence of differential pre-treatment trends in political outcomes between counties with high and low exposure to Ukrainian migration. We present the results in Figure A6 for the labor migration shock and in Figure A7 for the refugee inflow.

Alternative definitions of outcome variables.

We then examine whether the results are sensitive to changing the definition of the outcome variable. In the baseline results, we define the outcome variable as the change in the share of votes for conservative, pro-redistribution, or far-right parties between year t and the last pre-treatment election in 2011. For robustness, we test whether the results hold when the outcome variable is defined as the change in the vote share for parties in the respective category between election year t and election year t - 1. Figures A8 and A9 in the Appendix show that the results are robust to using this alternative definition of the outcome variable.

Potential confounders.

Next, we test whether the baseline results are sensitive to controlling for potential confounders. The balancing tests presented in Figures A2 and A3 indicate that, for instance, local labor market characteristics, which may affect voting patterns, are highly correlated with the location of Ukrainians. While we show results using three different instruments, the Euro 2012 instrument, is also correlated with local labor market characteristics, and the border instrument, is correlated with the unemployment rate. Thus, we test whether the results are robust to controlling for the potential confounders listed in Figures A10 and A11 in the Appendix. The results are robust to this sensitivity test.

$Spatial\ spillovers.$

We also test the robustness of the results to the inclusion of potential spatial spillovers. In particular, in Figures A12 to A19 in the Appendix, we present results using Conley standard errors that account for spatial spillovers (Conley, 1999; Conley, 2008). The results remain robust to accounting for spatial correlation within different cutoff distances,

i.e., we test for the inclusion of spatial spillovers at 25km (Figure A12 and A13), 50km (Figure A14 and A15), 100km (Figures A16 and A17), and 150km (Figures A18 and A19).

Potential outliers.

Finally, we examine whether the results are driven by potential outliers, such as large cities or counties with high emigration rates.¹³ First, we exclude 5 percent of the counties with the highest emigration rates in 2013. Figures A20 and A21 in the Appendix show that the results remain robust. Then, we split the initial sample of 379 counties and run the regressions separately for cities with county rights (Figures A22 and A23), and all other counties (Figures A24 and A25).¹⁴ The results remain robust to this sensitivity test as well.

7 Concluding remarks

This paper examines the impact of two massive and unexpected inflows of Ukrainians resulting from Russia's aggression against Ukraine in 2014 and 2022 on the voting behavior in Poland. In particular, we exploit the spatial variation in the exposure to Ukrainian migrants across Polish counties to examine the impact of Ukrainian migration on parliamentary elections in Poland. For identification, we take advantage of an instrumental variable approach.

Although the impact of immigration on political outcomes has been widely studied, our paper contributes to the literature by examining a novel context with recent migration inflow, analyzing the dynamics of the effect, and introducing a new instrument. Most importantly, however, the unique nature of the two shocks enables us to complement existing research by comparing the effects of two distinct types of immigration: conflict-induced labor migration without direct access to the host country's social benefits, and refugee inflows with direct access to such benefits. At the same time, both migration

¹³Giesing and Schikora (2023) show that selective emigration from Poland leads to a decline in the vote share for left-wing parties and an increase in support for right-wing parties.

¹⁴A city with county rights is a special type of local government unit in Poland, where a municipal government operates independently, fulfilling county-level responsibilities.

inflows come from the same country, thus keeping the cultural effect of both migration waves constant and allowing us to examine the differences that arise due to differential access to benefits.

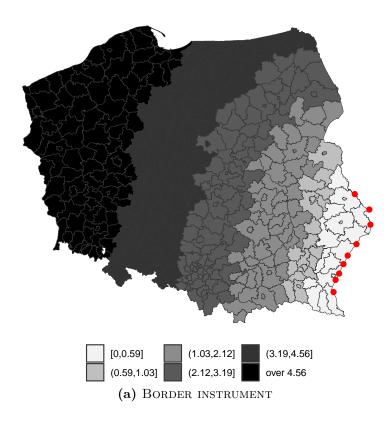
We find that greater exposure to labor migration moves local voter preferences away from conservative parties in the short run and subsequently shifts local voter support towards pro-redistribution parties. Moreover, areas more exposed to Ukrainian migration experience a decline in far-right voting, an effect that is immediate for refugee inflows but not for labor migration. The results are robust to employing three different instruments and to a number of robustness checks.

Figures and Tables

	La	bor migrar	$_{ m nts}$	Refugees			
Instrument	(1)	(2)	(3)	(1)	(2)	(3)	
Akcja Wisla	-0.0121*** (0.0030)			-0.0007 (0.0009)			
EU 12	,	-0.0332***		,	-0.0046***		
		(0.0076)			(0.0017)		
Border with Ukraine			0.0113***			0.0017^{***}	
			(0.0023)			(0.0006)	
Observations	379	379	379	379	379	379	
\mathbb{R}^2	0.06903	0.17386	0.11542	0.00526	0.06507	0.04879	
F-test	27.955	79.337	49.191	1.9934	26.240	19.336	

 Table 1: FIRST STAGE

Notes: This table reports the results of first-stage regressions, using separate regressions for each of our three instruments and either labor migrants or refugees. Robust standard errors clustered at NUTS-3 region level are reported in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.



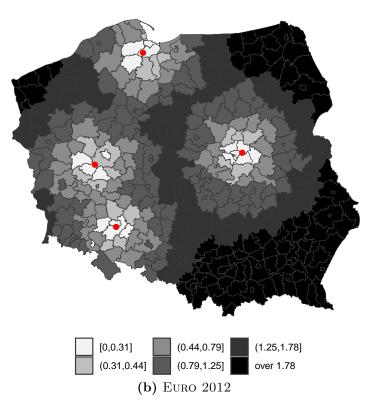


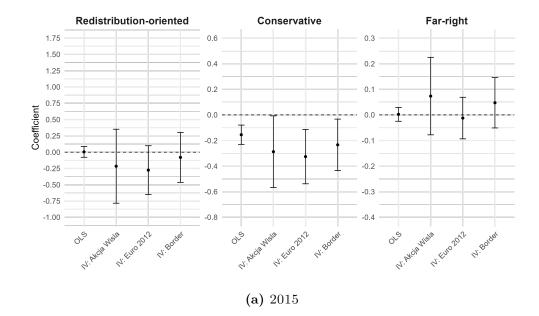
Figure 1: DISTANCE INSTRUMENTS

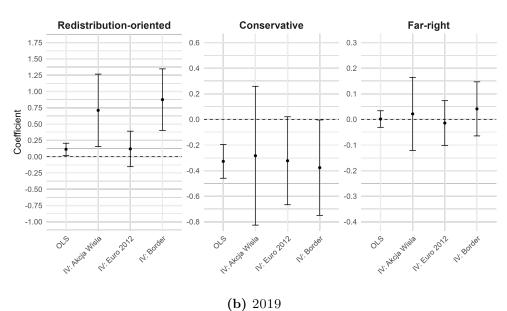
Notes: Figure (a) presents the variation in the distance (in 100km) from the centroid of each Polish county to the nearest Polish-Ukrainian border crossing (red points). Figure (b) presents the variation in the distance (in 100km) from the centroid of each Polish county to cities that hosted UEFA Euro 2012 in Poland (red points). The continuous distance instruments are shown here with a discrete scale for visualization purposes.

	Redistribution				Conservative			Far right				
	ots .	M. Akcija Wiel	a Th. Edgo 2019	, W. Boider	ots .	M. Akira Mish	a [V. Kino 2012	W:Border	ots	M. Akeja Wigh	W. Euro 2017	V. Border
Panel A: 2015												
Labor migrants	0.005	-0.216	-0.276	-0.080	-0.155***	-0.287**	-0.326***	-0.234**	0.002	0.074	-0.012	0.048
((0.043)	(0.290)	(0.191)	(0.196)	(0.038)	(0.143)	(0.108)	(0.103)	(0.014)	(0.077)	(0.041)	(0.050)
Panel B: 2019												
Labor migrants (0.113**	0.711**	0.119	0.875^{***}	-0.328***	-0.284	-0.323*	-0.377^*	0.001	0.021	-0.014	0.041
((0.048)	(0.284)	(0.139)	(0.241)	(0.067)	(0.277)	(0.175)	(0.190)	(0.016)	(0.073)	(0.045)	(0.054)
Panel C: 2023												
Labor migrants	0.096	0.353	-0.032	0.590**	-0.385***	0.057	-0.301	-0.231	-0.064***	-0.194**	-0.151***	-0.275***
((0.058)	(0.329)	(0.190)	(0.253)	(0.073)	(0.374)	(0.223)	(0.247)	(0.016)	(0.079)	(0.050)	(0.066)
Panel D: 2023												
Refugees	0.275	5.69	-0.237	4.04*	-1.60***	0.921	-2.20	-1.58	-0.132	-3.13	-1.10**	-1.89**
((0.263)	(8.07)	(1.40)	(2.28)	(0.299)	(6.47)	(1.44)	(1.67)	(0.088)	(3.69)	(0.479)	(0.736)
Observations							379					

Table 2: Ukrainian migrants and political outcomes in Poland

Notes: This table reports the results of second-stage regressions, using separate regressions for each of our three instruments and either labor migrants or refugees. Panels (a), (b), and (c) present the results for labor migrants from Ukraine and parliamentary elections in 2015, 2019, and 2023, respectively. Panel (d) shows the results for Ukrainian refugees and the 2023 parliamentary elections. Robust standard errors clustered at NUTS-3 region level are reported in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.





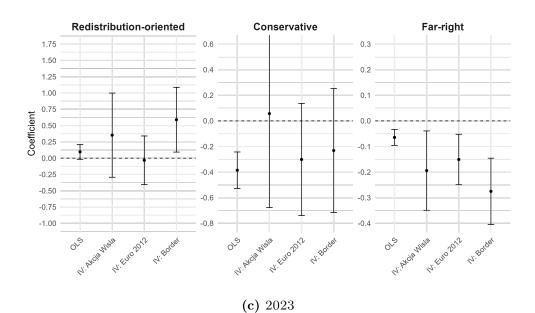


Figure 2: UKRAINIAN LABOR MIGRATION AND POLITICAL OUTCOMES IN POLAND *Notes:* Panels (a), (b), and (c) present the results for parliamentary elections in 2015, 2019, and 2023, respectively. Coefficients are depicted with 95% confidence intervals.

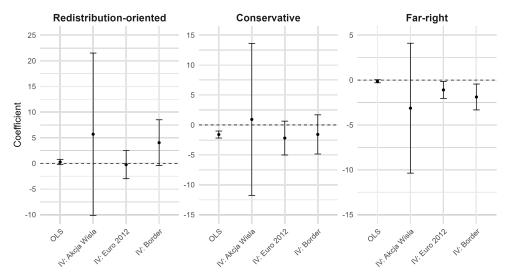


Figure 3: UKRAINIAN REFUGEE INFLOW AND POLITICAL OUTCOMES IN POLAND *Notes:* This figure presents the results for parliamentary elections 2023. Coefficients are depicted with 95% confidence intervals.

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Online Appendix

(intended for online publication)



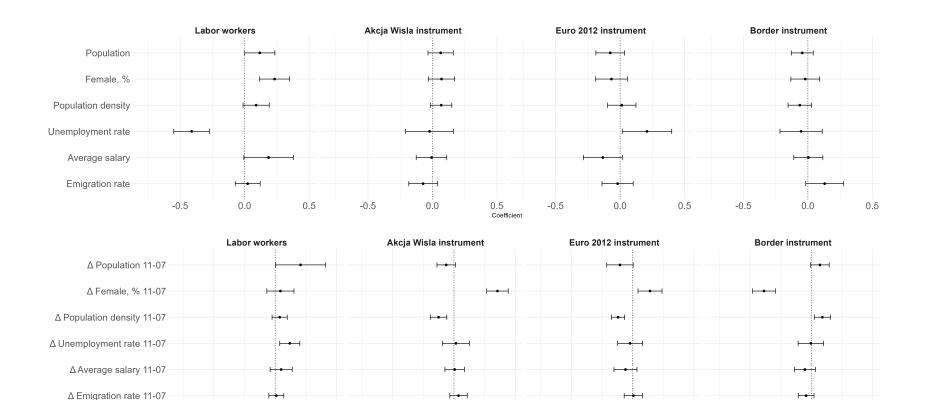
Figure A1: EXAMPLE OF AN ANTI-UKRAINIAN POSTER DISTRIBUTED BY KONFEDERACJA Source: https://konfederacja.pl/grafika/dosc-frajerstwa-w-polityce-wschodniej/.

Table A1: CLASSIFICATION OF POLITICAL PARTIES

Election year	Pro-redistribution parties	Conservative parties	Far-right parties		
2023	KW Prawo i Sprawiedliwosc; KW Polska jest jedna; KW Wyborcow Ruchu Dobrobytu i Pokoju; KW Antypartia; KW Trzecia Droga Polska 2050 Szymona Holowni - Polskie Stronnictwo Ludowe; KW Nowa Lewica	KW Prawo i Sprawiedliwosc; KW Konfederacja Wolnosc i Niepodleglosc; KW Polska jest jedna; KW Wyborcow Ruchu Dobrobytu i Pokoju; KW Normalny Kraj; KW Ruch Naprawy Polski	KW Konfederacja Wolnosc i Niepodleglosc		
2019	KW Prawo i Sprawiedliwosc; KW Polskie Stronnictwo Ludowe; KW Sojusz Lewicy Demokratycznej	KW Prawo i Sprawiedliwosc; KW Konfederacja Wolnosc i Niepodleglosc; KW Prawica	KW Konfederacja Wolnosc i Niepodleglosc		
2015	KW Prawo i Sprawiedliwosc; KW Wyborcow Zbigniewa Stonogi; KW Samoobrona; KW Polskie Stronnictwo Ludowe; Koalicyjny KW Zjednoczona Lewica SLD+TR+PPS+UP+Zieloni	KW Prawo i Sprawiedliwosc; KW KORWiN; KW Wyborcow Grzegorza Brauna "Szczesc Boze"; KW Kongres Nowej Prawicy; KW Wyborcow "Kukiz'15"; KW Wyborcow Zbigniewa Stonogi; KW Wyborcow Ruch Spoleczny Rzeczpospolitej Polskiej; KW Samoobrona	KW KORWiN; KW Wyborcow Grzegorza Brauna "Szczesc Boze"; KW Kongres Nowej Prawicy		
2011	KW Prawo i Sprawiedliwosc; KW Polska Partia Pracy - Sierpien 80; KW Polska jest Najwazniejsza; KW Nasz Dom Polska - Samoobrona Andrzeja Leppera; KW Polskie Stronnictwo Ludowe; KW Ruch Palikota; KW Sojusz Lewicy Demokratycznej	KW Prawo i Sprawiedliwosc; KW Prawica; KW Nowa Prawica - Janusza Korwin-Mikke; KW Polska Partia Pracy - Sierpien 80; KW Polska jest Najwazniejsza; KW Nasz Dom Polska - Samoobrona Andrzeja Leppera	KW Nowa Prawica - Janusza Korwin-Mikke		
2007	KW Prawo i Sprawiedliwosc; KW Polska Partia Pracy; KW Liga Polskich Rodzin; KW Polskie Stronnictwo Ludowe; KW Samoobrona; KW Partia Kobiet; KW Samoobrona Patriotyczna; KW Lewica i Demokraci	KW Prawo i Sprawiedliwosc; KW Polska Partia Pracy; KW Liga Polskich Rodzin; KW Samoobrona; KW Samoobrona Patriotyczna	KW Liga Polskich Rodzin		

Table A2: DESCRIPTIVE STATISTICS

	20	13	20	021
Variable	Mean	SD	Mean	SD
Redistribution oriented	0.64	0.12	0.69	0.10
Conservative	0.34	0.10	0.54	0.12
Extreme right	0.01	0.01	0.06	0.01
Population	101,260.50	117, 150.60	99,747.87	124,023.60
Share of Female	0.51	0.01	0.51	0.01
Population density	377.43	672.79	355.67	632.14
Unemployment rate	0.10	0.03	0.05	0.02
Average salary	3,297.37	471.71	5,209.51	639.11
Share of Graduates	0.005	0.01	0.003	0.01
Emigration rate	0.001	0.001	0.0003	0.0004
Labor migrants per cap (2019)	0.05	0.06	0.05	0.06
Refugees per cap (2021)	0.03	0.01	0.03	0.01
Akcja Wisla	1.77	1.20	1.77	1.20
Euro 2012	1.32	0.69	1.32	0.69
Border	3.32	1.65	3.32	1.65
Observations	379			



0.0 Figure A2: Balancing test: Correlates of Ukrainian Labor Migrants

-0.5

0.0

0.5

-0.5

Notes: This figure presents standardized beta coefficients from univariate OLS regressions of the share of Ukrainian labor migrants on various county characteristics measured in 2013. Coefficients are depicted with 95% confidence intervals. Panel (a) presents standardized beta coefficients from univariate OLS regressions of the share of Ukrainian labor migrants on various county characteristics measured in 2013. Panel (b) presents standardized beta coefficients from univariate OLS regressions of the share of Ukrainian refugees on various county characteristics measured in 2021. Coefficients are depicted with 95% confidence intervals.

0.5

-0.5

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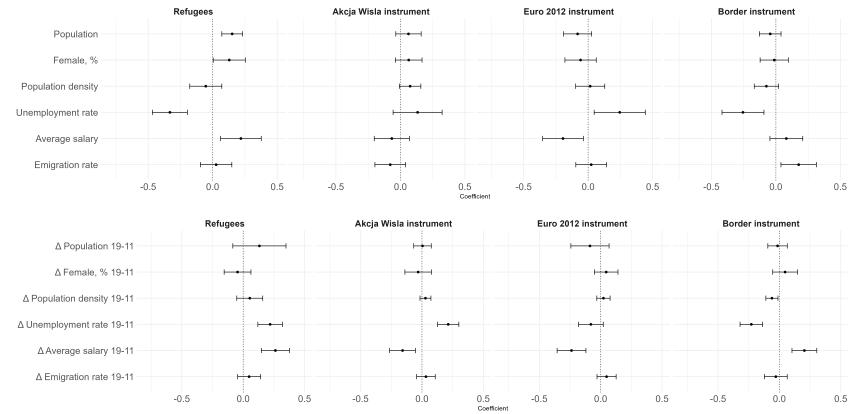
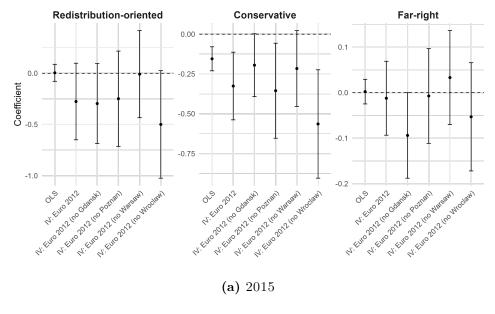
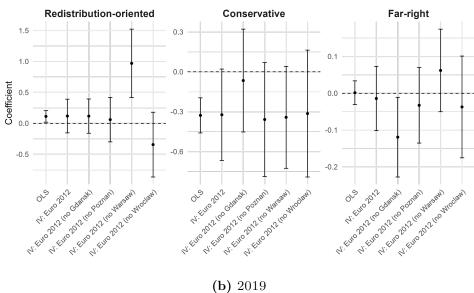


Figure A3: Balancing test: Correlates of Ukrainian refugee share

Notes: This figure presents standardized beta coefficients from univariate OLS regressions of the share of Ukrainian refugees on various county characteristics measured in 2021. Coefficients are depicted with 95% confidence intervals. Panel (a) presents standardized beta coefficients from univariate OLS regressions of the share of Ukrainian labor migrants on various county characteristics measured in 2013. Panel (b) presents standardized beta coefficients from univariate OLS regressions of the share of Ukrainian refugees on various county characteristics measured in 2021. Coefficients are depicted with 95% confidence intervals.





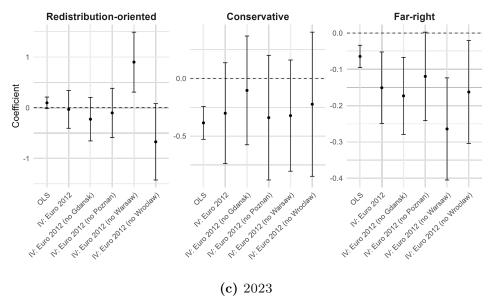


Figure A4: UKRAINIAN LABOR MIGRATION AND POLITICAL OUTCOMES IN POLAND: LEAVE-ONE-OUT *Notes:* This figure shows the results when the indicated city is omitted when generating the Euro 2012 Instrument. Panels (a), (b), and (c) present the results for parliamentary elections in 2015, 2019, and 2023, respectively. Coefficients are depicted with 95% confidence intervals.

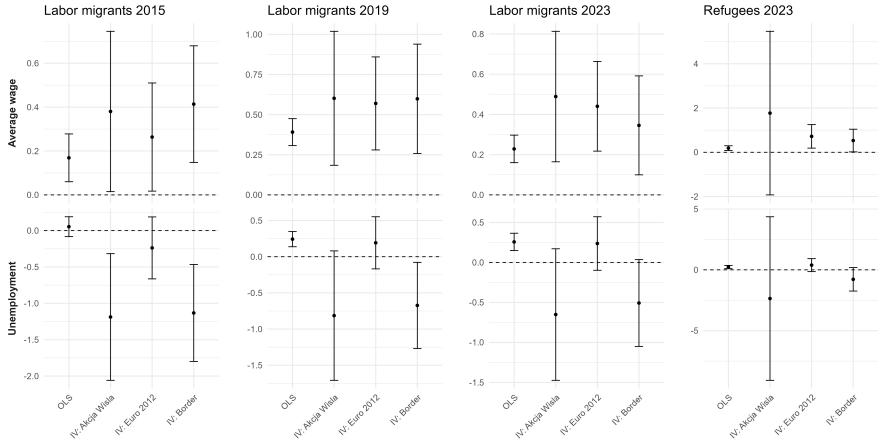


Figure A5: Ukrainian migration and political outcomes in Poland: Mechanisms

Notes: This figure shows standardized beta coefficients. First three columns present the results for the Ukrainian labor migration and parliamentary elections in 2015, 2019, and 2023, respectively. The last column presents the results for the Ukrainian refugee inflow and parliamentary elections in 2023. Coefficients are depicted with 95% confidence intervals.

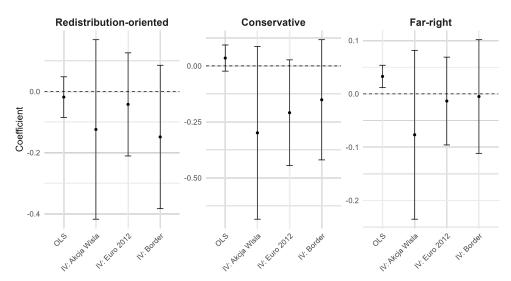


Figure A6: Ukrainian labor migration and political outcomes in Poland: pre-treatment trends

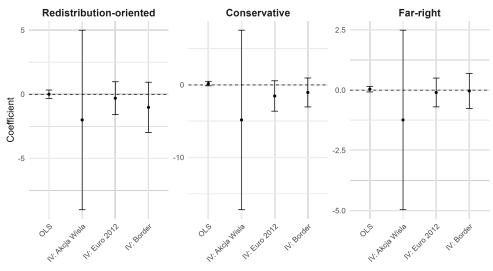
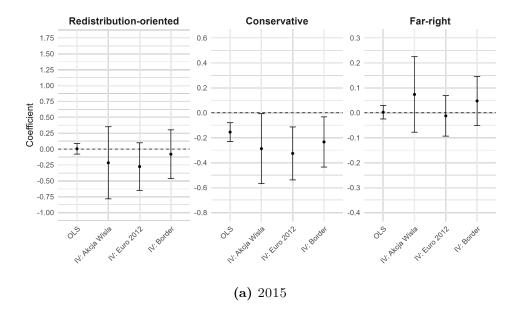
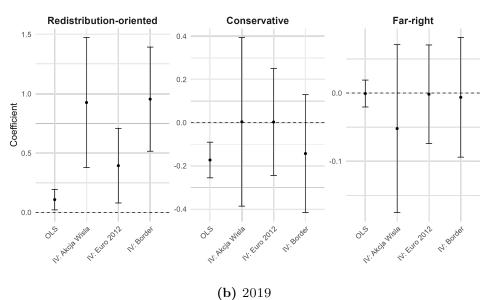


Figure A7: Ukrainian refugee inflow and political outcomes in Poland: pre-treatment trends





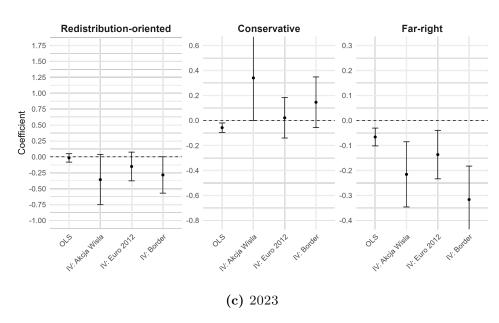


Figure A8: Ukrainian labor migration and political outcomes in Poland: Alternative definitions of outcome variables

Notes: Panels (a), (b), and (c) present the results for parliamentary elections in 2015, 2019, and 2023, respectively. Outcome variables are defined as the change in the vote share for parties in the respective category between election year t and election year t-1. Coefficients are depicted with 95% confidence intervals.

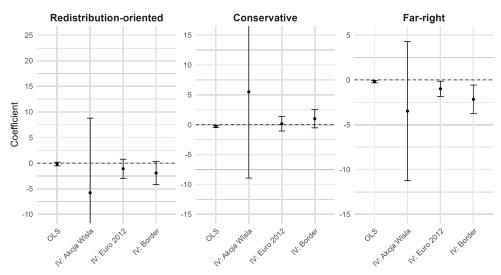
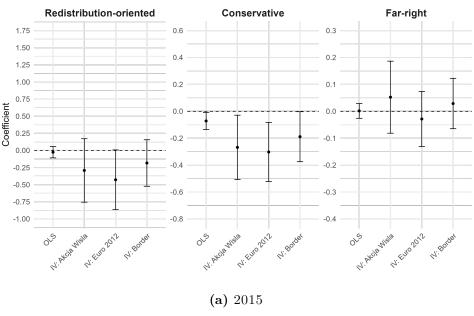
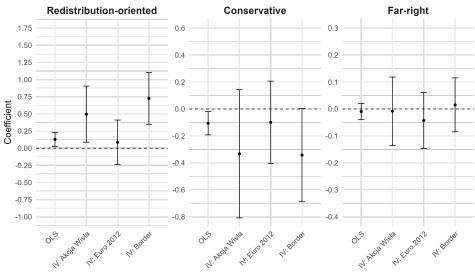


Figure A9: Ukrainian refugee inflow and political outcomes in Poland: Alternative definitions of outcome variables

Notes: This figure presents the results for parliamentary elections 2023. Outcome variables are defined as the change in the vote share for parties in the respective category between election year t and election year t-1. Coefficients are depicted with 95% confidence intervals.





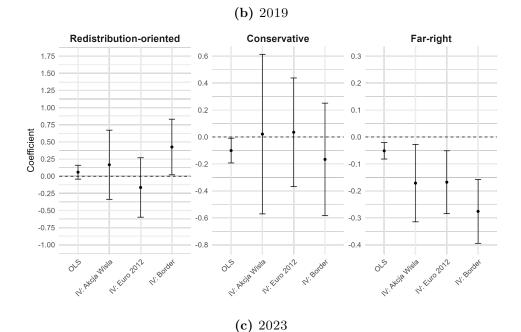


Figure A10: Ukrainian labor migration and political outcomes in Poland: Controlling for potential confounders

Notes: Panels (a), (b), and (c) present the results for parliamentary elections in 2015, 2019, and 2023, respectively. We control for all potential confounders measured in 2011 and their pre-treatment changes between 2007 and 2011, as listed in the balancing tests in Figures A2 and A3. Coefficients are depicted with 95% confidence intervals.

Appendix p. 11

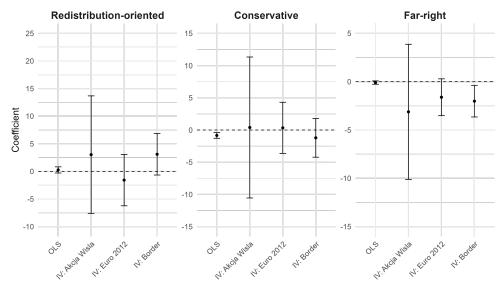
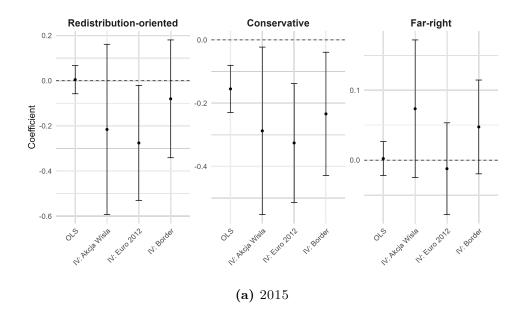
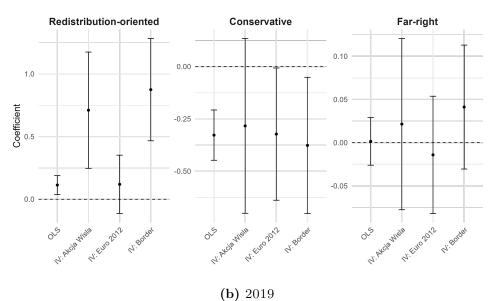


Figure A11: Ukrainian refugee inflow and political outcomes in Poland: controlling for potential confounders

Notes: This figure presents the results for parliamentary elections 2023. We control for all potential confounders measured in 2011 and their pre-treatment changes between 2007 and 2011, as listed in the balancing tests in Figures A2 and A3. Coefficients are depicted with 95% confidence intervals.





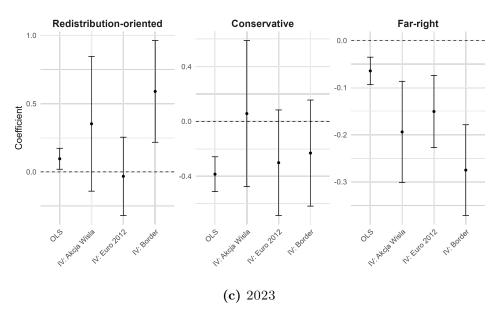


Figure A12: Ukrainian labor migration and political outcomes in Poland: Conley Standard Errors 25 km

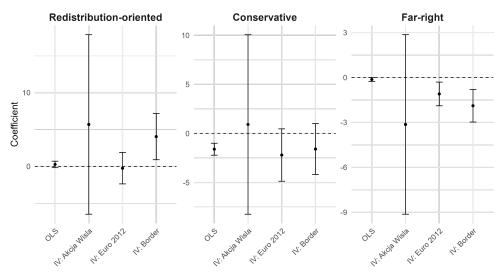
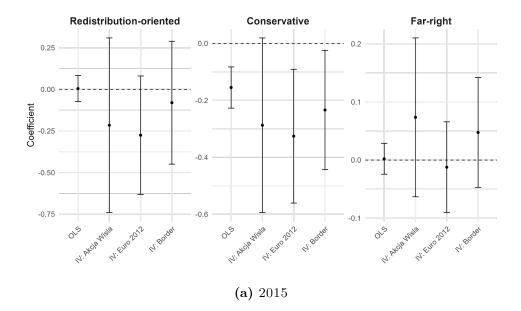
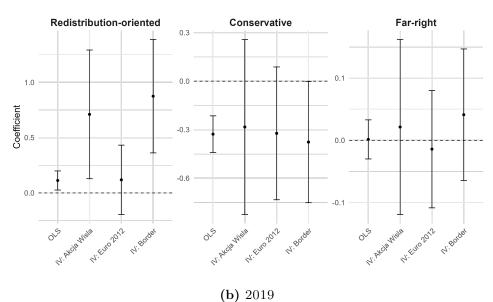


Figure A13: Ukrainian refugee inflow and political outcomes in Poland: Conley Standard Errors 25 km $\,$





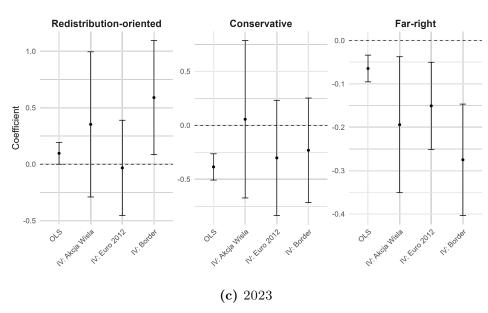


Figure A14: Ukrainian labor migration and political outcomes in Poland: Conley Standard Errors $50~\mathrm{km}$

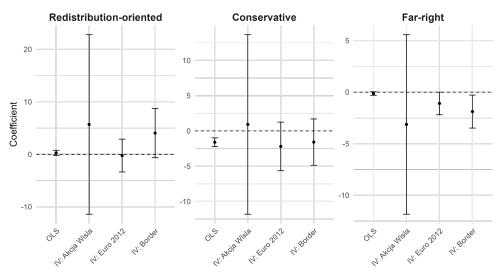
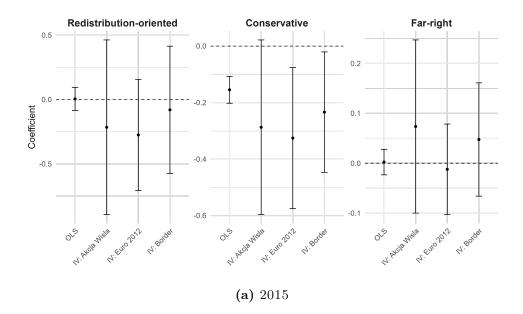
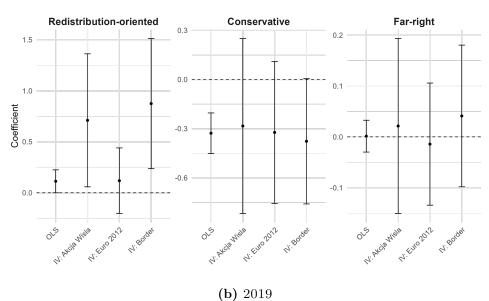


Figure A15: Ukrainian refugee inflow and political outcomes in Poland: Conley Standard Errors 50 km $\,$





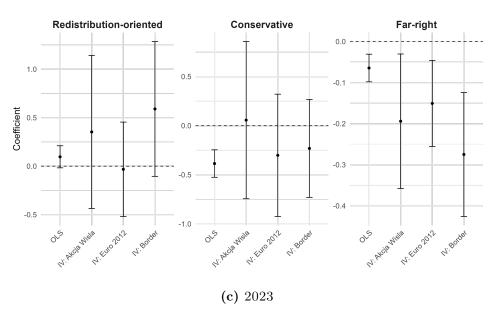


Figure A16: Ukrainian labor migration and political outcomes in Poland: Conley Standard Errors 100 km

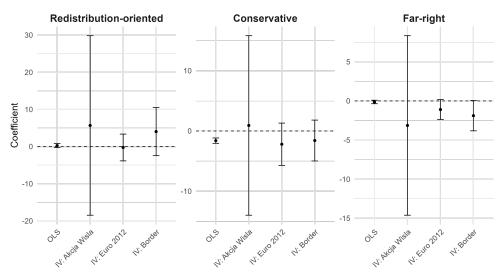
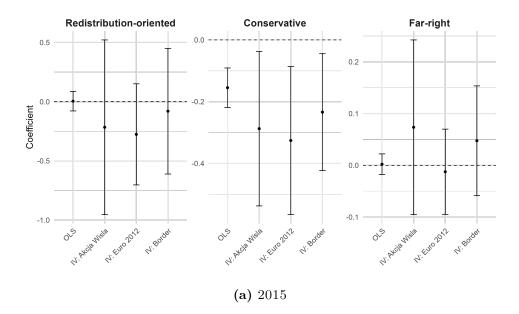
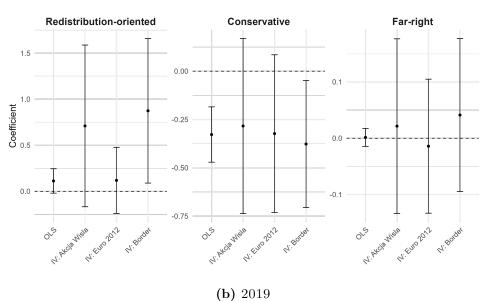


Figure A17: Ukrainian refugee inflow and political outcomes in Poland: Conley Standard Errors 100 km





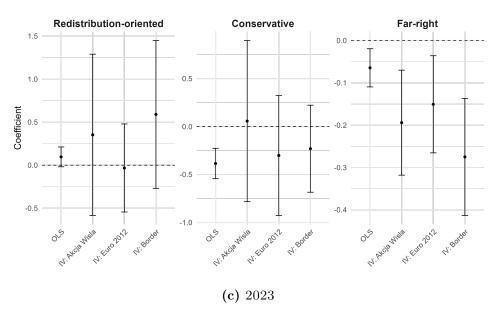


Figure A18: Ukrainian labor migration and political outcomes in Poland: Conley Standard Errors 150 km

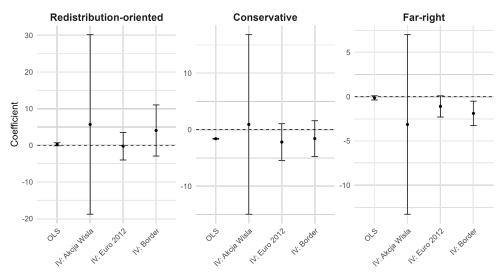
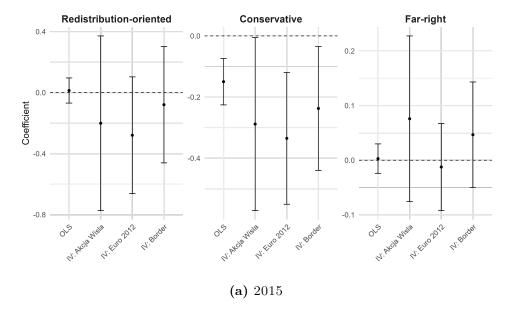
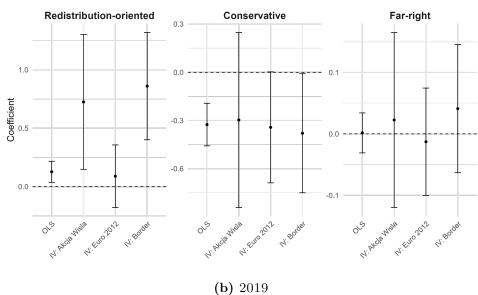


Figure A19: Ukrainian refugee inflow and political outcomes in Poland: Conley Standard Errors $150~\mathrm{km}$





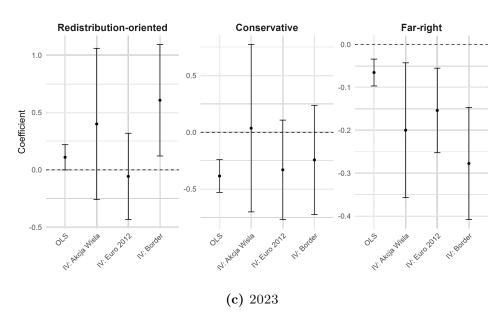


Figure A20: Ukrainian labor migration and political outcomes in Poland: excluding counties with high emigration rates

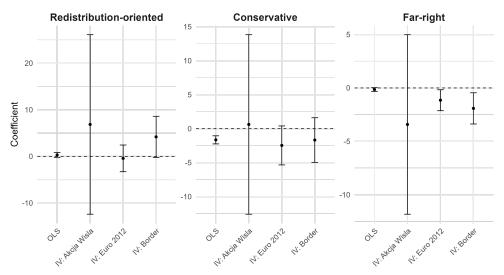
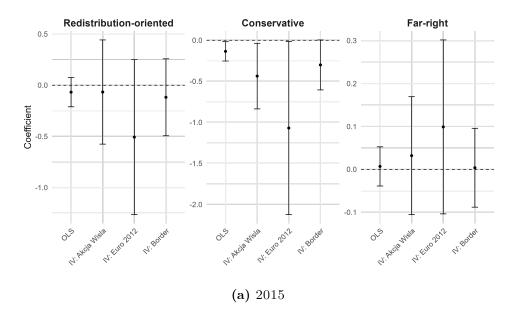
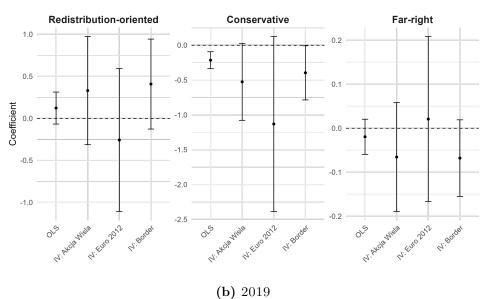


Figure A21: UKRAINIAN REFUGEE INFLOW AND POLITICAL OUTCOMES IN POLAND: EXCLUDING COUNTIES WITH HIGH EMIGRATION RATES





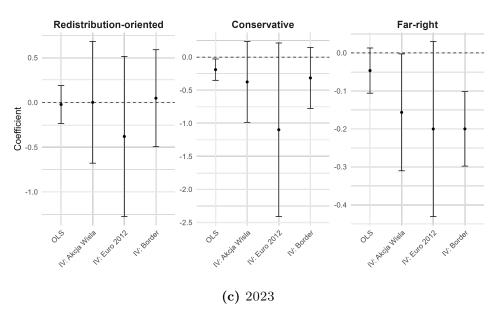


Figure A22: Ukrainian labor migration and political outcomes in Poland: only cities with county rights

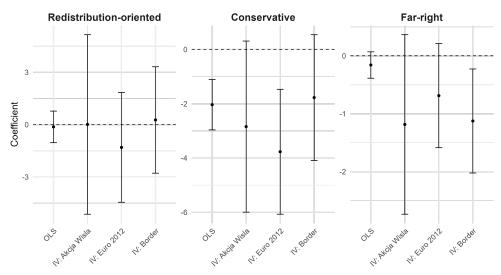
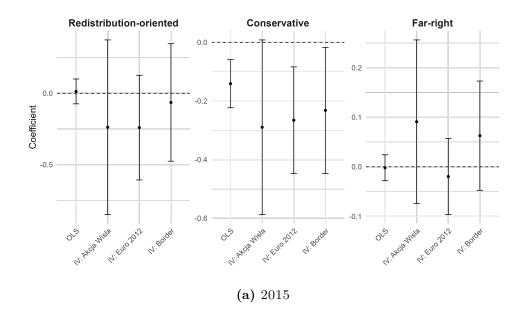
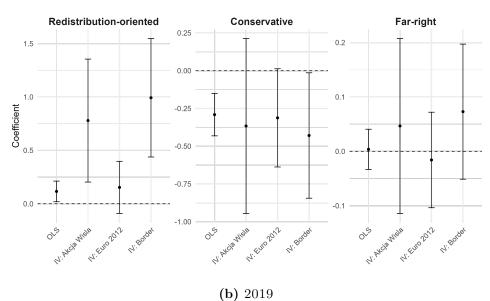


Figure A23: UKRAINIAN REFUGEE INFLOW AND POLITICAL OUTCOMES IN POLAND: ONLY CITIES WITH COUNTY RIGHTS





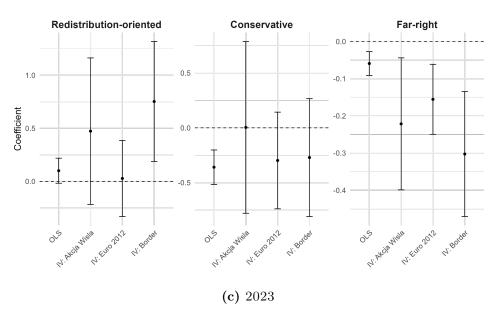


Figure A24: Ukrainian labor migration and political outcomes in Poland: excluding cities with county rights

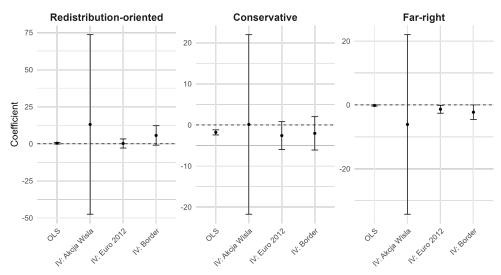


Figure A25: Ukrainian refugee inflow and political outcomes in Poland: excluding cities with county rights