

# The Political Impact of Refugees in Africa

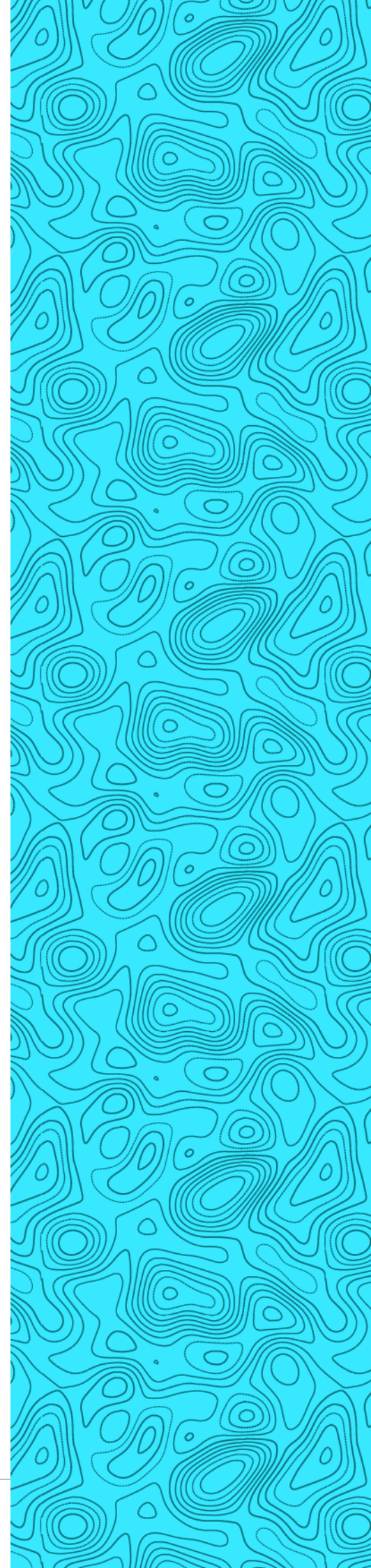
Cansu Demir, Anna Maria Mayda and Jean-François Maystadt

December 2025



# Contents

Abstract	1
1. Introduction	2
2. Importance of Inclusive Refugee Policies	5
3. Data	7
4. Identification Strategy	11
5. Main Results	14
6. Additional Analysis	22
7. Conclusion	27
References	30
Figures and Tables	35
Appendix	41



# The political impact of refugees in Africa\*

Cansu Demir<sup>†</sup> Anna Maria Mayda<sup>‡</sup> Jean-François Maystadt<sup>§</sup>

December 8, 2025

## Abstract

The political impact of refugees is largely unknown in low-income countries, although these destinations host the majority of forcibly displaced people, and more specifically refugees. We exploit yearly variation in the number of refugees in refugee camps and election data at the sub-national level in 16 African countries in 2000-2016. The estimates show that the arrival of refugees *increases* local support to the national incumbent and reduces political competition, but only when hosting countries implement inclusive policies towards refugees. Inclusive policies play a crucial role also when we estimate the impact of refugees on individual-level satisfaction with the government and with provision of local public goods (education, health care and infrastructure), in the Afrobarometer, and on local economic activity, using night light data.

**JEL-Classification:** O15, I15

---

\*Acknowledgements: We thank Jerome Gonnor, Katrina Kosec, Liangzhi You and participants to the internal seminar at Yeditepe University, the IRES Lunch Seminar at UCLouvain, the CERDI Research Seminar at Clermont Auvergne University, the LACEA/World Bank/IDB Humans Conference on Migration, the Economics Department Seminar at University La Sapienza, the 4th edition of the International Workshop on Migration and Family Economics, the CEPII Migration Workshop and the Policy seminar “Mobility in a Fragile World: Evidence to Inform Policy” at the International Food Policy Research Institute (IFPRI) for useful feedbacks. This work is supported by the International Food Policy Research Institute and the CGIAR’s Food Frontiers and Security Program. We would like to thank all funders who supported this research through their contributions to the CGIAR Trust Fund: <https://www.cgiar.org/funders/>

<sup>†</sup>Yeditepe University, Economics Department, Türkiye.

<sup>‡</sup>Georgetown University and CEPR.

<sup>§</sup>IREs/LIDAM, UCLouvain; FNRS - Fonds de la Recherche Scientifique, Belgium; Lancaster University, Economics Department, UK.

# 1 Introduction

During the past two decades, the global number of forcibly displaced people has increased, from 38 million in 2000 to 117 million in 2023 (United Nations High Commissioner for Refugees, 2024). Refugees comprise more than one third of this population and are overwhelmingly based in low- and middle-income nations, with 75% of them residing in these countries. The academic literature has found that, in high- and upper-middle-income countries, large numbers of immigrants and refugees often provoke a public backlash, driven by concerns about the strain on welfare systems, labor-market competition, and cultural differences (Edo et al., 2019; Card and Peri, 2016). Little is known about the political consequences of hosting refugees in developing countries.<sup>1</sup>

In this paper, we analyze yearly variation in the number of refugees in refugee camps and link it to election data at the sub-national level in 16 African countries between 2000 and 2016. Our results indicate that the arrival of refugees *increases* local support to the national political incumbent and reduces electoral competition, but only when the host countries implement inclusive policies toward refugees (which Blair et al. (2022a) denote as *liberal* asylum policies). We investigate the mechanisms behind these effects using attitudes data from the Afrobarometer, as well as economic data. We show that the impact of refugees on: trust in the government; perceived performance of the government; perceptions regarding public goods' provision (education, health care, and infrastructure) and crime reduction; as well as local economic development, becomes significantly less negative or turns positive when refugee inclusive policies are in place. We also find that these policies switch the effect of refugee presence, on feelings of national identity, from positive to negative. In general, inclusive policies make refugees less of a liability and more of an asset in political terms.

Our empirical specification exploits variation in the share of refugees across regions within countries and over time. We carefully assess potential threats to identification of a causal effect. We investigate whether our estimates are driven by pre-treatment trends in political outcomes, which we show is not the case using a placebo test and an event study. We also find no evidence of reverse causality, that is, it is not the case that refugee camps are opened in locations and times when political incumbents perform better. Moreover, we examine how robust our results are to relaxing the assumption of homogeneous treatment effects.<sup>2</sup> Finally, we show that the results on the interaction

---

<sup>1</sup>A notable exception is Zhou et al. (2025), which we describe in detail below.

<sup>2</sup>Two-way FE estimates (like ours), which are weighted sums of difference-in-difference coefficients, might be biased due to heterogeneous treatment effects – this is the case when a large fraction of weights in the sum is negative. We derive the distribution of weights of our estimates, to assess the problem, and also use an alternative estimator.

of refugees with inclusive policies are robust to controlling for the effect of the drivers of these policies on the impact of refugees.

Our paper contributes to the political economy literature on the electoral effects of refugees and immigrants, as well as to the literature on the impact of refugees in low and middle income countries. While 75% of refugees are hosted in developing countries, academic research on the political impact of refugee (and immigrant) arrivals has predominantly focused on high- and upper-middle-income countries. In these destinations, (low-skilled) immigrants and refugees are found to trigger a backlash with shifts in voters' preferences toward anti-migration and far-right parties (Halla et al., 2017; Dustmann et al., 2022; Sekeris and Vasilakis, 2016; Dinas et al., 2019; Mayda et al., 2022). Similar results hold in upper middle-income countries such as Colombia (Rozo and Vargas, 2021), Turkey (Fisunoğlu and Sert, 2019), and South Africa (Bedasso and Jaupart, 2020). These results may not extend to poor countries for the following reasons.

In high- and upper-middle-income destinations, some parties have capitalized on cultural, social, and economic concerns related to immigration, building their identity around the need for anti-migration policies. In contrast, in low-income countries, although ethnic identity certainly matters for politics (De Luca et al., 2018), immigration is not as politically salient as in other locations. Moreover, like in high and middle-income countries, there is evidence of a positive contribution of refugees to local economic development in low-income settings. However, in poor countries, fiscal concerns are likely to be less pronounced due to the smaller size of the welfare system and to the fact that local communities often do not bear the full fiscal burden of hosting refugees, thanks to humanitarian assistance. Rather, under certain conditions, foreign aid to refugees can produce positive fiscal spillovers on hosts (Cruz and Schneider, 2017; Masterson and Lehmann, 2020a; Zhou and Grossman, 2023; Zhou et al., 2023), and incumbents can benefit politically from these effects.

The only other paper that we are aware of, which analyzes how the presence of refugees influences electoral outcomes in low-income destinations, is Zhou et al. (2025). The authors focus on Uganda, which is often portrayed as one of the most refugee-inclusive countries in the world, currently hosting over 1.6 million refugees primarily from South Sudan, the Democratic Republic of Congo, and Burundi (United Nations High Commissioner for Refugees, 2024). The authors find that the arrival of refugees leads to greater incumbent support, particularly after the 2014 refugee influx and a reform towards a more inclusive refugee policy. Increased support for the incumbent is driven by improvements in public service delivery and infrastructure, facilitated by international aid targeting both refugees and

host communities.

Our findings align with [Zhou et al. \(2025\)](#), providing support for the external validity of their results. More in general, compared to previous studies on the political impact of immigrants and refugees, that have largely focused on single-country contexts, our paper carries out the analysis for 16 countries, providing a cross-country perspective. To the best of our knowledge, we are the first to link the CLEA electoral dataset with the UNHCR refugee dataset at the GADM-1 level, which allows us to understand the interplay between refugee inflows and political outcomes across and within countries. The evidence we provide, showing that the results hold in multiple countries, is of great importance because it helps make a case for refugee-friendly policies.<sup>3</sup>

Most of the literature on the political effects of immigration focuses on the voting outcomes of right-wing vs. other parties which, in the context of rich and upper-middle-income countries, can usually be associated with, respectively, anti-migration vs. pro-migration positions. In poor countries like in Sub-Saharan Africa, political cleavages are often related to other factors, for example ethnicity, as opposed to positions on immigration. Thus, it is difficult to categorize political parties in terms of migration policy preferences. For this reason, we focus on the impact (of refugees) on political support *for the incumbent party*. Our approach is in line with a large body of research by political scientists showing that voter behavior can be explained by a simple model: when times are good, voters reward the incumbent, but when times are bad, they vote for the challenger.<sup>4</sup> Our findings that, in countries with refugee inclusive policies, the political incumbent share increases when refugees arrive, suggest that the latter are perceived as welfare-improving in those locations.

Previous research on low-income countries has largely focused on the socio-economic and environmental impacts of refugees. It has shown that even large-scale refugee arrivals produce benefits, on average, for local economies near refugee camps, in part due to humanitarian assistance and new infrastructure. The effects can be uneven within the population, but also long-lasting.<sup>5</sup> At the same

---

<sup>3</sup>As suggested by [Gronau and Ruesink \(2021\)](#), Zambia is one of the examples. Following a mass immigration from the Democratic Republic of Congo (DRC), northern Zambia became a key destination for refugees as thousands of Congolese crossed the border. In response to the refugee crisis, the Zambian government established the “Mantapala settlement,” launched the Comprehensive Refugee Response Framework (CRRF) in November 2017, and began developing a national strategy for a whole-of-society approach to address the situation. Another example is Kenya. In 2021, Kenya enacted the Refugee Act, which granted refugees rights to work, freedom of movement, and access to financial services. Detailed information can be found at [https://kituochasheria.or.ke/wp-content/uploads/2023/11/Refugees-Act-2021-plus-Cover-B\\_compressed.pdf](https://kituochasheria.or.ke/wp-content/uploads/2023/11/Refugees-Act-2021-plus-Cover-B_compressed.pdf).

<sup>4</sup>This pattern holds in a variety of contexts regardless of which party happens to be the incumbent at the time. In the economics literature this approach is used by, for example, Mayda, Oldenski and Steingress (2025).

<sup>5</sup>[Maystadt and Verwimp \(2014\)](#) examine the impact of Burundian and Rwandan refugees on the Kagera region of Tanzania, using data from 1991 and 2004. They find that, while refugees boosted average economic welfare, the effects within the population: agricultural workers were relatively worse off, while self-employed farmers benefited the

time, refugees can lead to the spread of malaria, HIV, and other communicable diseases (Montalvo and Reynal-Querol, 2007; Ibáñez et al., 2021; Baez, 2011; Dagnelie et al., 2023).<sup>6</sup> These papers, along with other studies, attribute these negative health impacts to direct transmission of infectious diseases from the refugee population, which often brings high disease prevalence from conflict-affected home countries. Finally, large-scale displacement often intensifies population pressure on already vulnerable environments, accelerating the depletion of natural resources in host regions (Berry, 2008; Alix-Garcia et al., 2013; Maystadt et al., 2020; Salemi, 2021).<sup>7</sup> Our paper contributes to this growing literature on the impact of refugees in low-income settings by showing the political effects of refugee arrivals, which adds another important piece to our understanding of refugee complex emergencies.

The rest of the paper is structured as follows. Section 2 discusses the significance of inclusive refugee policies. Section 3 describes the data while Section 4 elaborates the identification strategy. We present our main results on electoral outcomes, discuss the identification threats, and conduct a series of robustness checks in Section 5. We present the complementary analysis, aimed at identifying the underlying mechanisms, in Section 6. Finally, Section 7 offers concluding remarks.

## 2 Importance of Inclusive Refugee Policies

Cross-border migration is increasingly acknowledged by practitioners and policymakers as a critical dimension of economic development, particularly for low- and middle-income countries where the majority of migrants are hosted (World Bank, 2023). This reality underscores the importance of effective management to ensure that migration contributes positively to development and to mitigate potential pressures on host communities. When effectively managed, migration can serve as a powerful driver

---

most. In the long term, the refugee inflow had a positive impact on local welfare, driven by infrastructure investments like roads to serve refugee camps (Maystadt and Duranton, 2019; Verme and Schuettler, 2021). See also Taylor et al. (2016), Loschmann et al. (2019), Kreibaum (2016), Kadigo and Maystadt (2023), Marco d’Errico and Rosati (2022), Alix-Garcia et al. (2018).

<sup>6</sup>Ibáñez et al. (2021) find that higher refugee inflows from Venezuela to Colombia are associated with an increase in vaccine-preventable diseases, including chickenpox and tuberculosis. Similarly, Baez (2011) documents a rise in cases of diarrhea, fever, and mortality in Northwestern Tanzania following the arrival of over 500,000 refugees from Burundi and Rwanda. Dagnelie et al. (2023) estimate the effect of refugees on children’s anthropometrics, based on data from 84 Demographic and Health Surveys (DHS) in 34 African countries. The paper documents a robust negative impact driven by malaria transmission.

<sup>7</sup>In Tanzania, the arrival of refugees significantly increased deforestation rates and depleted soil nutrients, exacerbating soil erosion and adversely affecting agricultural production and food security (Berry, 2008). Similarly, competition for land between internally displaced persons and local populations in Darfur has resulted in a marked decline in vegetation (Alix-Garcia et al., 2013). Maystadt et al. (2020) and Salemi (2021) document the phenomenon across Sub-Saharan Africa. The former stresses the role of land conversion and agricultural expansion close to refugee camps. The later highlights increased demand for fuelwood and construction materials by refugees and humanitarian actors.

of prosperity and contribute significantly to achieving the United Nations' Sustainable Development Goals (World Bank, 2023). A key element of effective management is the integration of immigrant populations to ensure mutual benefits for destination countries and immigrants themselves. In this context, it is crucial to emphasize the significance of *refugee* integration, for several interrelated reasons. First, voluntary return is rarely a viable option for most refugees, especially those escaping war and civil unrest. Empirical evidence indicates that the desire to return to one's home country remains exceptionally low among displaced populations, with the average duration of displacement now surpassing 26 years (Kayaoglu et al., 2022; Zhou et al., 2025). On a global scale, fewer than 1% of refugees return to their country of origin annually (Blair and Wright, 2022), largely constrained by ongoing insecurity, limited access to livelihoods, fear of military conscription, and the absence of critical infrastructure and services (RPIS, 2019). Similarly, opportunities for resettlement in high-income countries remain extremely scarce, with less than 0.5% of the global refugee population resettled each year (Albu, 2023). Consequently, with voluntary return and resettlement available to less than 2% of refugees, the vast majority remain in protracted displacement, predominantly in developing countries, which host over 75% of the world's refugees (United Nations High Commissioner for Refugees, 2024). Against this backdrop, facilitating the integration of refugees into their host communities emerges not only as a policy priority but also as a necessary strategy to ensure long-term social cohesion and economic resilience.

As mentioned by Zhou et al. (2025), one potential obstacle to successful integration lies in restrictive refugee-hosting policies that limit refugees' access to formal employment, entrepreneurship, property ownership, freedom of movement, and residence outside of designated camps. Evidence shows that more than half of the world's refugees are hosted in countries that impose significant restrictions on their right to work (Ginn et al., 2022). Such constraints not only impose material hardships but also generate adverse social and psychological consequences for refugees themselves (Hussam et al., 2022). Crucially, these restrictions stand in contrast to a growing body of evidence demonstrating that refugee labor can contribute positively to the economies of developing host countries (Bove and Elia, 2017), while also generating fiscal benefits for the state (Hernandez, 2024). Therefore, we contend that inclusive policies play a vital role in maximizing the potential benefits of migration for both refugees and host societies. When refugees' skills and attributes align with the labor market needs of destination countries, the economic gains are considerable – not only for the refugees themselves but also for their countries of origin and the host economy (World Bank,

2023). These benefits arise regardless of migrants' motives for moving or their legal status; however, formal access to the labor market significantly amplifies these positive outcomes. Refugees granted with the right to work, change employers, and have their qualifications recognized are more likely to earn higher wages, access better services, and avoid exploitation. Moreover, inclusive policies facilitate their social and economic integration, enabling them to invest in human capital, learn the local language, and contribute more productively to the economy (World Bank, 2023). For host countries, policies that ensure legal access to employment, fair treatment, and social inclusion are therefore essential to unlocking the full benefits of migration. In the absence of such rights, refugees often remain confined to low-quality, informal employment, limiting their economic contribution and increasing their vulnerability. Importantly, refugee success abroad generates positive spillovers for their countries of origin through remittances, knowledge transfer, and long-term development. Conversely, restrictive policies – such as exclusion from basic services – undermine both refugees' well-being and the economic returns to host societies. Ultimately, in a global context where most refugees face protracted displacement with limited prospects for return or resettlement, the adoption of inclusive policies is not merely desirable but essential – making refugee integration a first-order policy priority for achieving sustainable development and social stability in host countries.

## 3 Data

We first merged detailed data about the location and size of refugee camps with information from local elections. Next, we complemented these data with recently released information about asylum policies. Finally, we used data from the Afrobarometer surveys to shed light on the main mechanisms of impact.

### 3.1 Refugee Data

In order to capture the presence of refugees at the time of elections, we use information collected by the United Nations High Commissioner for Refugees (UNHCR) on refugee camps. The dataset provides time-series information on refugee camps with data on their location (longitude and latitude), size, and composition by country of origin. The dataset covers the years between 2000 and 2016, and includes 1,453 refugee camps across the world. A key feature of this dataset is that it contains the most comprehensive information on refugees at the local level, but has been utilized in previous research

only in few papers, to investigate the impact of refugees on environmental degradation (Maystadt et al., 2020), health outcomes of children in local communities through the spread of malaria (Dagnelie et al., 2023) and diversity and conflict (Bertinelli et al., 2025). The precise location of the refugee camps allows us to aggregate the number of refugees at the GADM1 level and merge the refugee data with the election data, which are also available at this level (see below). For the countries of interest (see Appendix Table A.1), we end up with 202 refugee camps for 328 GADM-1 regions. As can be seen from Figure 1, the majority of refugee camps are located in peripheral areas, along the borders. It is not surprising, since refugee camps are often established in areas near conflict zones, where refugees are fleeing from violence (Bertinelli et al., 2025).

### 3.2 Electoral Data

The main source of the electoral data is the Constituency-Level Elections Archive (CLEA). CLEA provides comprehensive information on election results at the constituency level for both upper and lower chamber legislative elections around the world. We solely focus on lower house legislative election outcomes (namely, parliamentary elections) in our research. It is a rich dataset that covers the years from 1963 to 2021. Electoral outcomes – only for the first round of lower chamber elections – include month and year of elections, number of eligible voters, votes cast, valid and invalid votes, voter turnout, party names, and votes for the competing parties and their corresponding vote shares. Given refugee data availabilities, we focus on the elections held in 20 African countries between 2000 and 2016.

Electoral data are available at the constituency or subnational levels. After aggregating the CLEA data at the country, year, and GADM-1 levels, we merged the information about vote shares by party with the UNHCR Refugee data.<sup>8</sup> We exclude 57 observations whose electoral data could not be matched at the GADM1 level.<sup>9</sup> We also exclude Angola, Cameroon, Gambia, and Guinea-Bissau where there were no refugees during the corresponding election years (and the year before). We end up with 700 GADM1-year observations across 276 regions from 16 countries and 44 elections (328 regions from 20 countries and 53 elections when Angola, Cameroon, Gambia, and Guinea-Bissau are

---

<sup>8</sup>We select African countries from the CLEA dataset based on two criteria: (1) the availability of data for more than one election, and (2) the ability to identify GADM-1 regions. As a result, some major refugee-hosting countries in the UNHCR dataset—such as the Democratic Republic of Congo, Ivory Coast, Sudan, and Togo—are excluded from our analysis, either because CLEA provides data for only a single election or because GADM-1 regional identifiers are unavailable.

<sup>9</sup>56 observations are excluded from Uganda since in 2006, 54 subnational regions could not be matched with the GADM1 level and 2 regions in 2016. The same is true for one region in Gambia in 2012.

included). We present descriptive statistics in Table 1 for CLEA variables and other covariates. The average incumbent party vote share is 0.385, which suggests that, on average, incumbents have a sizeable but not overwhelming share of the vote. However, the standard deviation is 0.224, indicating some variation in the vote share across observations. This can raise rightful concerns about electoral manipulation. In Appendix Figure A.2, we show the percent distribution of the incumbent party vote share. The relatively even distribution of vote shares is reassuring with respect to the competitive nature of the African electoral environment.<sup>10</sup>

Our research design exploits variation in the number of refugees prior to elections. Figure 2 illustrates the variation in the presence and number of refugees across election years, focusing on the changes in refugee numbers relative to the preceding election year. For example, in Ghana, refugees were present during the 2000 election year, with an increase observed by the subsequent election in 2004. However, the number of refugees declined in the 2008 election year compared to 2004. A similar trend is evident for the 2012 election, with a further decline relative to 2008. In contrast, for countries such as Angola, Cameroon, Gambia, and Guinea-Bissau, there were no refugees recorded during the observed election years. We proceed in a similar way by aggregating at the cluster level when working with the Afrobarometer data.

### 3.3 Refugee policy data

To account for the inclusive nature of the refugee policy of each destination country, we rely on the Developing World Refugee and Asylum-Seeker Policy (DWRAP) dataset provided by Blair et al. (2022b). The data are available from 1952 to 2017 for 92 countries. We restrict the dataset to our countries of interest (16 and 20 African countries) and period of investigation (2000–2016). This dataset tracks both temporal and spatial variation in countries’ formal policies regarding forcibly displaced populations under specific conditions. In particular, the authors generate a comprehensive refugee and asylum *policy index*, ranging between 0 and 1 for each country-year pairs. It accounts for five key concepts when constructing the index: (i) access, which refers to the ease of entry and security of legal status; (ii) services, involving the availability of public services and welfare support; (iii) livelihoods, including the right to work and own property; (iv) movement, related to policies on

---

<sup>10</sup>We can nonetheless not exclude that incumbent party’s vote share is in some cases manipulated through fraudulent means (Van Ham and Lindberg, 2015; do Rosário and Guambe, 2023). However, the normal distribution we observe in Appendix Figure A.2 suggests it is not distorting completely the data and that these data can be used to reveal preferences towards the incumbent. We further discuss heterogeneous results based on the democratic nature of the studied regimes in Section 4.2.

encampment; and (v) participation, encompassing citizenship and political rights.

### 3.4 Afrobarometer data

To explore the channels through which the refugee flows translate into a change in incumbent support and political competition, we exploit geo-referenced individual-level data from the Afrobarometer between 2000 and 2015. The Afrobarometer is a pan-African research project that conducts public attitude surveys on democracy, governance, economic conditions, and related issues across Africa. The Afrobarometer includes nine rounds between 1999 and 2022 and provides data at the individual level in a cross-sectional setting. The surveys cover a wide range of topics including political participation, trust in institutions, perceptions of corruption, and socio-economic conditions. They employ rigorous sampling methods to ensure nationally representative samples, capturing the views of diverse populations across various regions. Key variables in the Afrobarometer dataset include demographic characteristics (age, gender, education, urban/rural residence), socio-economic indicators (employment status, living conditions), and attitudinal measures (trust in political and social institutions, satisfaction with democracy, and perceptions of safety and security). Its rigorous methodology employs nationally representative samples and standardized questionnaires to ensure comparability across nations and over time.

We match Afrobarometer data with UNHCR data, exploiting georeferenced information from both datasets. We exploit data from Round 1 to Round 6, from 2000 to 2015. We cannot exploit Round 7 (2016) of the Afrobarometer surveys since no geographic coordinates are provided. Compared to our CLEA-based sample, we do not have information for Angola, Djibouti, Gambia and Guinea-Bissau in the Afrobarometer Rounds 1 to 6. In total, we are left with information on 112,044 individuals, coming from 7,346 clusters, 74 surveys, and 16 countries. The detailed information on countries of interest and the corresponding data availability with respect to Afrobarometer rounds can be found in Table [A.1](#). We also present the spatial distribution of Afrobarometer clusters and refugee camps in Appendix Figure [A.3](#). Additionally, a detailed view showing a 150 km radius around a specified cluster is provided in Appendix Figure [A.4](#).

## 4 Identification strategy

### 4.1 Main specification

Our research design aims to compare the change in electoral outcomes of regions exposed to the refugees with regions that are not (or little) exposed, while at the same time accounting for the existence of refugee inclusive policies at the country level. More specifically, our empirical specification is as follows:

$$Y_{rct} = \beta_0 + \beta_1 \left( \frac{Refugees_{rt}}{Pop_{r2000}} \right) + \beta_2 \left( \frac{Refugees_{rt}}{Pop_{r2000}} \times Policy_c \right) + \gamma' X'_{rt} + \delta_t + \delta_r + \delta_{ct} + \epsilon_{rct} \quad (1)$$

$Y_{rct}$  stands for the political outcome defined for each GADM-1 region  $r$  in country  $c$  in election taking place at year  $t$ . We borrow from [Zhou et al. \(2025\)](#) in focusing on two electoral outcomes: (i) the incumbent party vote share (IPVS) and (ii) political competition (PC). First, the incumbent party vote share (IPVS) – which ranges between 0 and 1 – is defined as the share of total valid votes received by the incumbent party.<sup>11</sup> We define the incumbent party as the party running the parliament at the time of the election (i.e., winning the previous national election). In almost 95% of cases, the ruling party is directly associated with the incumbent president: Out of a total of 53 elections, only three cases cannot be linked to the ruling president, as these candidates ran as independents. Second, political competition (PC) corresponds to the Laakso-Taagepera measure of the effective number of parties ( $N = \frac{1}{\sum_{i=1}^n p_i^2}$ ), where  $n$  is the number of parties with at least one vote and  $p$  is their vote share. The underlying idea is to proxy for electoral competitiveness by weighting the number of parties by their relative strength.<sup>12</sup> Following [Zhou et al. \(2025\)](#), we expect the results on electoral competitiveness to be opposite in sign compared to those for the incumbent party vote share.

The variable of interest  $\frac{Refugees_{rt}}{Pop_{r2000}}$  represents the number of refugees in each GADM-1 region ( $r$ ) divided by the 2000 population of the corresponding region  $r$ .<sup>13</sup> The interaction term,  $\frac{Refugees_{rt}}{Pop_{r2000}} \times$

<sup>11</sup>Given missing information for valid votes in 2008 and 2013 for Zimbabwe, we use regional population instead.

<sup>12</sup>We slightly differ from [Zhou and Grossman \(2023\)](#) who utilize the effective number of candidates rather than effective number of parties. Given the high frequency of missing observations in candidate votes in CLEA, we prefer to rely on effective number of parties rather than candidates.

<sup>13</sup>Using the 2000 population provides a fixed point of comparison across all GADM-1 regions. Population sizes fluctuate over time, and using a fixed population base from a particular year (in our case, it is 2000) ensures that refugee inflows are compared relative to a consistent population size. This makes the refugee data across different time

$Policy_c$ , captures the additional impact of refugee presence when inclusive policies are adopted, over and above the direct effect of refugees. The nature of the refugee policy is defined at baseline (year of the first election) for each country.<sup>14</sup> There could be concerns that refugee policies change in response to anticipated political events, such as elections, or shifts in incumbent support. By using the policy index at baseline, we reduce the risk of reverse causality. We discuss further the risk of endogeneity in Section 5.2. We apply the inverse hyperbolic sine transformation (IHS) to our treatment variable to deal with zeroes and to ease the interpretation following Bellemare and Wichman (2020).<sup>15</sup> We also show our main results using the (IHS) lagged share of refugees ( $\frac{Refugees_r(t-1)}{Pop_r2000}$ ), as our treatment variable, because refugee numbers are provided on each year’s December.

Political instability and negative weather shocks might both impact the incumbent vote share (Fujiwara et al., 2016; Zelin and Smith, 2023) and contribute to refugee arrivals (Salehyan, 2006; Zhou and Shaver, 2021). Hence, we augment our main specification with additional time-varying GADM-1 region attributes: (1) conflict incidence, as measured by a dummy taking the value of 1 if fatalities as a result of a conflict are greater than 0, and 0 otherwise; (2) mean temperature per land area and its square; and (3) mean precipitation per land area and its square.  $\delta_t$  denotes (election) year fixed effects to account for macroeconomic shocks at the country level. Furthermore, we utilize GADM-1 region fixed effects,  $\delta_r$ , to control for time-invariant heterogeneity across GADM-1 regions. We further augment our specification with country-year fixed effects,  $\delta_{ct}$ , to control for all unobserved factors that are specific to each country in a given election year. For instance, changes in migration or asylum policies that could be implemented in anticipation of elections will be captured by such fixed effects. Finally,  $\epsilon_{rct}$  stands for the error terms. Standard errors are clustered at the GADM-1 region level.

---

periods more comparable. Also, if we use contemporaneous population, we might introduce an endogeneity risk into the analysis. For example, if refugees impact the population size by increasing or decreasing it (through migration or demographic shifts), using the population of the same year could create a misleading relationship between the refugee variable and other variables of interest. That is, we assume that the population in 2000 is exogenous to refugee flows in later years.

<sup>14</sup>More specifically, we begin by calculating the annual median values of the policy index across the 16 sample countries for each year between 2000 and 2016. This results in a single median value per year, reflecting the central tendency of policy inclusiveness in that year. Next, we identify each country’s policy index score in the year of its first observed election—referred to as its baseline policy score. A country is classified as inclusive if its baseline score exceeds the median value of the corresponding election year. Otherwise, it is classified as restrictive. Our results are also robust when considering the median value over the sample period as a cut-off criterion.

<sup>15</sup>In applied economics, it is a widespread practice to transform right-skewed variables (e.g., our treatment variable) that include zero and/or negative values. One limit of the IHS transformation is that it is scale variant (Chen and Roth, 2024). We show in Section 5.3 that our results do not depend on the IHS transformation.

## 4.2 Additional specifications

To investigate the underlying mechanisms, we utilize the Afrobarometer dataset. Table [A.1](#) provides a comprehensive summary of the Afrobarometer countries included in our analysis, along with details on data availability for each. Our empirical strategy to explore the potential mechanisms using the Afrobarometer data is as follows:

$$Y_{icjt} = \beta_1 \text{Refugees}_{jt} + \beta_2 (\text{Refugees}_{jt} \times \text{Policy}_c) + \theta H'_{icj} + \gamma X'_{cjt} + \alpha_j + \alpha_t + \alpha_{ct} + \epsilon_{icjt} \quad (2)$$

$Y_{icjt}$  represents the outcome variables based on the survey questions, for individual  $i$ , living in cluster  $j$  of country  $c$ , in year  $t$ . Following [Bertinelli et al. \(2025\)](#), we define locations using information from the Afrobarometer Enumeration Areas. Hereinafter, we refer to the Afrobarometer Enumeration Areas as clusters, denoted by  $j$ .<sup>16</sup> In total, we have 7,346 clusters in Afrobarometer data. Since the Afrobarometer provides geo-referenced information at the cluster level,  $\text{Refugees}_{jt}$  denotes the number of refugees located within a certain distance from the cluster. We start with a buffer of 150 km.<sup>17</sup> We also test the robustness of our results by adopting lower (i.e., 80 km and 120 km) and higher (i.e., 200 km) buffers. The interaction term  $\text{Refugees}_{jt} \times \text{Policy}_c$  captures the additional effect of refugees on the outcome variable  $Y_{icjt}$ , when country  $c$  has an inclusive refugee policy. We control for observed and unobserved characteristics.  $H'_{icj}$  denotes the individual level characteristics, notably age, age squared, gender, education status, and rural versus urban residence.  $X_{cjt}$  includes a conflict indicator, mean temperature, and its square – each of which are defined at the cluster level. To control for unobserved heterogeneity and changes within a given cluster, we introduce cluster and year fixed effects (i.e.,  $\alpha_j$  and  $\alpha_t$ , respectively). Similar to Equation (1), country-year fixed effects are also added. Individual sampling weights are used to render our estimates representative at the country level. Finally, standard errors are clustered at the cluster level.

---

<sup>16</sup>Clusters represent categories defined by geographic locations, encompassing administrative divisions like states or provinces, populated areas such as cities or villages, and infrastructure elements like buildings, bridges, or roads. They also include natural features such as rivers, mountains, or national parks, with geographic coordinates that may be either precise or estimated.

<sup>17</sup>The choice of a 150 km buffer is subjective and adapted to the research context. Reducing the buffer size significantly lowers the proportion of treated observations, falling below 2% with a 20 km buffer, 6% with a 40 km buffer, 15% with an 80 km buffer, and 22% with a 120 km buffer. While higher spatial resolution is crucial for analyses like deforestation, it is less critical for conflict studies, where conventional methods often rely on 50, 100, and 150 km intervals ([Salemi, 2021](#); [Tapsoba, 2023](#); [Bertinelli et al., 2025](#)). Being agnostic regarding the distance that matters for the Afrobarometer outcomes we are interested in, we will assess the robustness of our results to alternative buffers in Section [5.3](#).

## 5 Main Results

In Section 5.1, we present the baseline results for the incumbent party vote share (IPVS) and political competition (PC). We discuss potential threats to identification in Section 5.2. Finally, in Section 5.3, we conduct a series of robustness checks to validate our findings.

### 5.1 Incumbent Support and Political Competition

Panel A of Table 2 presents the estimates for the incumbent party vote share, while Panel B displays the results for political competition. Both panels use the refugee-to-population ratio at time  $t$  (i.e., at the year of election).<sup>18</sup> In columns (1) and (2), we regress the outcome variables on the refugee-to-population ratio alone. We introduce the interaction term, between refugees and refugee policy, in columns (3) and (4). Columns (1) to (3) show the estimates with year and GADM-1 region fixed effects, while columns (2) to (4) additionally control for unobserved, time-varying factors that are specific to each country and could influence the outcome of interest. Our preferred specification is column (4).

Starting with incumbent support, our estimates in column (1) of Panel A suggest a positive but marginally significant effect (at the 10% level) of refugees on incumbent support. To be more precise, column (1) suggests that increasing the refugee-to-population ratio by 10 percentage points leads to a 1.9 percentage point rise in incumbent party support, representing an increase of about 5% relative to the mean value of 0.38. When we introduce the controls and fixed effects, the effect seems to become insignificant (see column (2)). The introduction of the interaction term with the baseline refugee policy in column (3) shows that refugees in countries with inclusive policies increase the vote share of the incumbent – although hosting refugees alone, without an inclusive policy, does not seem to help the incumbent party. The size of the effect is slightly larger in our preferred specification, column (4), indicating that a 10 percentage point increase in the refugee-to-population ratio under inclusive policies leads to an increase of approximately 2.5 percentage points in incumbent support. This corresponds to a 6.6% change relative to the mean. Our key finding here is that the refugee presence in inclusive settings translates into greater incumbent support. Our finding confirms previous research conducted by Zhou and Grossman (2023) for Uganda, which is one of the most liberal countries in terms of refugee policies.

---

<sup>18</sup>We also present the results using the refugee-to-population ratio at time  $t-1$  in Appendix Table A.2.

In Panel B, we estimate the impact of refugee hosting on the effective number of parties. In column (1), the estimate of the impact of the refugee-to-population ratio is negative and significant at the 10% level but becomes non significant in column (2). Similar to the estimates for incumbent support, the introduction of the interaction term shows the critical role played by inclusive policies in shaping political competition. Column (4) implies that a 10 percentage point increase in the refugee-to-population ratio leads to a decrease of approximately 0.3% of political competition in countries with inclusive policies. Overall, our results indicate that refugee-inclusive policies strengthen incumbents’ political control, thereby diminishing electoral competition (what [Zhou and Grossman \(2023\)](#) call the mirroring effect). Our findings are in line with [Zhou and Grossman \(2023\)](#), who measure electoral competition using the effective number of presidential and parliamentary candidates in Uganda.

## 5.2 Identification Threats

In this Section, we explore possible threats to identification of a causal effect. Table [3](#) summarizes the results for the incumbent party vote share, based on the following specifications: (i) a model with heterogeneous treatment effects based on Gardner (2021)’s two-stage difference-in-differences design; (ii) robustness checks excluding specific geographical areas that may drive the results; and (iii) robustness checks that control for potential determinants of refugee policy, such as neighboring conflict exposure, aid dependence and economic activity. Across all specifications, we report the direct effect of the refugee ratio, its interaction with the baseline refugee policy index and the total effect, focusing on the specifications that include all control variables as well as year, GADM-1, and country-year fixed effects. Other potential threats – such as the endogenous placement of refugees and pre-existing trends – are also addressed in the following paragraphs.

**Heterogeneous treatment effect.** When a treatment of interest is applied across different locations and time periods, researchers commonly utilize two-way fixed effects to account for location-specific and period-specific shocks, estimating an average treatment effect across these dimensions. However, recent studies have shown that such estimates (or, two-way fixed effects estimator) can be significantly biased – and may even yield incorrect signs – if treatment effects vary over time within the treated units (see [De Chaisemartin and d’Haultfoeuille \(2020\)](#); [Goodman-Bacon \(2021\)](#); [Sun and Abraham \(2021\)](#); [Butts and Gardner \(2021\)](#) for detailed and theoretical explanations). Essentially, there is a risk of comparing units treated later with those treated earlier. In the presence of het-

erogeneous treatment effects, negative weights can lead to biased estimates. Here, we first apply the [Gardner \(2022\)](#) estimator that allows us to handle a continuous treatment variable switching on and off in GADM-1 region and year pairs across countries. While the coefficients for the interaction term are slightly larger in magnitude, the [Gardner \(2022\)](#) method produces positive total effects for incumbent support in inclusive countries, as can be seen in Panel A of Table [3](#).<sup>19</sup>

Next, we investigate the presence of negative weights by following [Jakiela \(2021\)](#)'s simple diagnostics for two-way fixed effects in Appendix Figure [A.9](#). The weights shown in Appendix Figure [A.9](#) come from the residuals of a regression of the treatment variable (i.e., Refugees IHS x Policy) on a set of year, GADM-1 fixed effects, and country-year fixed effects. As anticipated, the weights sum to zero across both the treatment and control observations. However, some treated observations are assigned negative weights, while some untreated observations receive positive weights, meaning the weights for the treatment group do not necessarily sum to one. Around 24 percent of all treated observations are assigned negative weights in the estimation of the treatment effect. Therefore, we conduct a robustness check following [Jakiela \(2021\)](#), where we exclude the years that receive the highest fraction of negative weights (2003, 2004, and 2009). The underlying assumption is that the removal of certain treated years from the dataset should not influence the expected value of the estimated treatment effect (under the assumption of common trends). In that sense, we drop 2003, 2004, and 2009 from the analysis as a robustness check to test whether the treatment effects are homogeneous. We present our results in Appendix Figure [A.10](#) for incumbent support and in Appendix Figure [A.11](#) for political competition. The coefficients remain almost the same as the main results, confirming the positive effect for incumbent support and the negative effect for political competition.

**Urban and non-bordering regions.** Refugees are often hosted in peripheral regions, which are usually rural and close to borders, far from economic and political centers ([Bertinelli et al., 2025](#)). Urban regions, however, tend to have different political dynamics compared to rural regions due to factors such as greater access to public services, abundant employment opportunities, higher levels of economic development, increased diversity (e.g., different ethnic backgrounds and/or socio-economic status), and higher levels of media influence and communication. Our data on refugees also do not include dispersed refugees (outside of camps) or internally displaced people, more likely to direct themselves towards large cities. Thereby, urban regions may not respond to refugee presence in the same way as rural regions. In line with this, we expect urban areas (and/or non-bordering regions)

---

<sup>19</sup>The detailed results for both incumbent support and political competition can be seen in Appendix Table [A.3](#)

to have different baseline political conditions, making it challenging to isolate the effect of refugees. For example, refugees in urban centers might blend more easily into the urban population and may not have a clear or immediate effect on the incumbent’s support, unlike refugees in rural areas who may face more visible, concentrated challenges. One possible solution to tackle this problem can be excluding the urban and non-bordering areas from the analysis. The exclusion of urban regions (and/or non-bordering regions) helps us focusing on political dynamics in refugee-affected regions, where the effects of refugees on incumbent support and political competition may be most pronounced. First, we utilise data from PRIO-GRID to classify GADM-1 regions as urban and rural. Based on the Globcover 2009 dataset, the PROD-GRID provides the percentage area of the cell covered by urban area (resolution of 0.5 x 0.5 decimal degrees).<sup>20</sup> We aggregate the percentage area of cells covered by urban area at the GADM-1 region level. As a result, we could match 477 observation out of 791, corresponding to 162 GADM-1 regions (and 413 observations out of 700, corresponding to 152 GADM-1 regions when excluding Angola, Cameroon, Gambia, and Guinea-Bissau) due to missing values in the PRIO-GRID dataset. Given the left-skewed distribution of the `urban_gc` variable, which indicates that most regions are heavily rural (with low urban coverage), we classify regions into urban and rural categories using the 75th percentile of the `urban_gc` distribution. Second, we create a dummy variable taking the value of 1 if a GADM-1 region of interest has a border to another country, and 0 otherwise given the high volume of missing data in determining urban regions. Out of a total of 328 GADM-1 regions, 165 are classified as bordering regions while 163 are classified as non-bordering regions (138 are bordering and 148 are non-bordering when excluding Angola, Cameroon, Gambia, and Guinea-Bissau). Third, we use the proximity to the capital because it often correlates with urbanization, political engagement, and government influence. We calculate the shortest travel distance between each GADM-1 region and each country’s capital city (center). Then, we interact distance-to-capital with year.<sup>21</sup> We present our results, using the most complete specification, in Panel B of Table 3 for incumbent support.<sup>22</sup> Despite the larger magnitudes, the

---

<sup>20</sup>We extract `urban_gc` variable to determine urban areas. Detailed information on Globcover 2009 dataset can be found at [https://due.esrin.esa.int/page\\_globcover.php](https://due.esrin.esa.int/page_globcover.php)

<sup>21</sup>GADM-1 regions near the capital city might experience different levels of impact from the refugee flows, with the dynamics changing over time. For example, refugees may initially be concentrated near major cities but then disperse over time, potentially changing the political or social landscape. The interaction between distance-to-capital and year help capturing these changing dynamics. In a similar fashion, national policies may affect areas differently depending on their location relative to the capital over time. For example, development initiatives or resource allocation may be more focused on regions that are closer to the capital, but the effects could change over time, especially if there are shifts in how resources are distributed in rural vs urban areas.

<sup>22</sup>The detailed results can be seen in A.4. In Appendix Table A.5, we provide the results for political competition.

results confirm the positive effect on incumbent support when urban-classified and non-bordering regions are excluded. Finally, controlling for distance-to-capital (interacted with year) does not seem to distort the estimates, ensuring the robustness of our results.

**Controlling for the determinants of refugee policies.** Refugee policies can be influenced by a range of factors, such as security concerns and foreign aid, which could have an independent impact on voting shares in political elections. In additional results, we investigate the robustness of our results by controlling for the interaction of the refugee share with the main determinants of refugee policies. Blair et al. (2022a) discuss the following determinants of refugee policy. First, intense armed conflicts in the region can push countries to revise their refugee policies, because displacement across borders can enable the transnational movement of arms and fighters and increase the risk of conflict spillovers (Salehyan, 2006). Displacement can provoke clashes within the host nation and between the host nation and neighboring countries of origin (Salehyan (2008)).<sup>23</sup> Second, Blair et al. (2022a) point out that higher dependency on external aid may lead developing economies to relax their refugee policies. Developed nations are eager to divert immigration flows away from them and can put pressure on low-income countries to adopt more open policies, in exchange for foreign aid (Blair et al., 2022a).

In line with this, we test the robustness of our results by controlling for the interaction of neighboring conflict and external aid dependency with the refugee share. To account for intense armed conflict in neighboring countries, we use the ACLED dataset. We construct the variable *intense armed conflict* by calculating the total number of the following sub-events, in neighboring countries, during the five years preceding the election year: armed clashes, non-state actors overtaking territory, and government regaining territory.<sup>24</sup> We then interact *intense armed conflict* at t-5 in each country with refugee presence in each GADM-1 region. Moreover, OECD (2025) provides annual statistics on official development assistance (ODA) (i.e., Aid I) and humanitarian aid (i.e., Aid II).<sup>25</sup> We divide these two types of external aid by each country’s gross domestic product (GDP) per capita, and interact with refugee presence in each GADM-1 region of interest. The results are shown in Panel B of Table 3.<sup>26</sup> The estimates for our main variables are close to the baseline results, confirming the

---

<sup>23</sup>Note that these results have been qualified by Zhou and Shaver (2021); Coniglio et al. (2023); Bertinelli et al. (2025).

<sup>24</sup>These sub-events are categorized under the event type *battle*.

<sup>25</sup>ODA is government aid that promotes and specifically targets the economic development and welfare of developing countries. Detailed information on ODA can be found at <https://www.oecd.org/en/topics/official-development-assistance-oda.html>.

<sup>26</sup>The detailed results for incumbent support can be seen in Appendix Table A.6 and for political competition in Appendix Table A.7.

positive effect (negative effect) of refugees under inclusive policies for incumbent support (political competition).

**Endogenous location of refugees.** The UNHCR or national government may select places to locate refugee camps based on some particular characteristics (e.g., transport costs, sanitary water access, and land availability). If these characteristics are somehow correlated with the support to the incumbent, such a selection may render the location of refugees endogenous, potentially biasing our estimates. By regressing refugee camp openings on previous incumbent support, we aim to test whether there is a systematic political bias in refugee camp placement decisions. We present our results in Appendix Table [A.8](#). The negative coefficient suggests that regions with higher incumbent support in the previous election are less likely to see refugee camps being opened. That is consistent with the stylized fact that camps are often located in peripheral areas, far from the centers of economic and political power. However, this result is not statistically significant, meaning that there is no strong evidence to confirm a systematic relationship. The same is true for political competition or when splitting between countries with inclusive or restrictive refugee policies. Overall, this result can alleviate concerns that the relationship between refugee camps and political outcomes is biased by political considerations in camp placement.

**Pre-existing trends.** Ideally, one anticipates that before the event of interest (in this case, the initial arrival of refugees in a given GADM-1 region), the treated and control groups (GADM-1 regions with and without refugee influx) should exhibit similar trends in the outcome variable (incumbent party vote share). In the spirit of an event study, we check if the support to the incumbent is higher or lower when an election takes place before or after the first year refugees are observed in each region. The key idea here is that, in the absence of the event (first year of refugee arrival in a given GADM-1 region), the treatment and control regions should have followed the same trend over time. If the coefficients on the pre-event dummies (e.g., any negative value) are statistically indistinguishable from zero, it would suggest that the pre-event trends are parallel, meaning the parallel trends assumption holds. As can be seen from Appendix Figure [A.5](#) for all sample and Appendix Figure [A.6](#) for inclusive country sample, it seems to be the case.<sup>27</sup> Pre-event dummies for both samples are not statistically

---

<sup>27</sup>To address the sparsity of observations in certain pre-treatment periods, we group leads and lags of the treatment into broader event-time bins. The motivation is that very few regions experience a camp opening in the years immediately before elections: for example, only two regions have a camp opening (or refugee arrival for the first time) at t-1, two at t-2, and none at t-3. Estimating separate coefficients for these years would therefore be uninformative. By pooling these years into bins (e.g., camps opening within 1–2 years after an election, and within 3–4 years). This allows

significant while post-event dummies confirm the positive effect.

### 5.3 Robustness checks

We conduct a series of robustness and sensitivity checks to ensure the accuracy of our baseline results presented in Table 2. To do so, we use (a) an alternative sample, (b) alternative transformations, and (c) a placebo test. We also disaggregate the refugee policy index.

**Alternative sample.** There are four particular countries (i.e., Angola, Cameroon, Gambia, and Guinea-Bissau) that did not host any refugee population at the year of election. That is, the refugee numbers corresponding to the election years in these countries are all zeroes. In other words, there is no variation in our main treatment variable during the period of investigation in these countries. Thereby, we exclude Angola, Cameroon, Gambia, and Guinea-Bissau from the main analysis in our baseline results. However, our result might be sensitive to such an exclusion. In this respect, we re-estimate the main specifications by including them. We present the results for incumbent support in Panel A of Appendix Table A.10 and for political competition in Panel A of Appendix Table A.11. For both outcomes, the estimates remain fairly similar to those presented in Table 2.<sup>28</sup>

**Alternative transformations.** Another potential concern might be related to the utilization of the IHS transformation in our main treatment variable. To rule out the possibility that IHS might distort our results, we re-estimate our main results shown in Table 2. We first show the results where the IHS transformation is not applied to the refugee-to-population ratio variable (see Panel B of Appendix Table A.10 for incumbent support, and Panel B of Appendix Table A.11 for political competition). For incumbent support, the results suggest that an increase in the refugee-to-population ratio by one standard deviation (about 7 refugees per 100 voters) corresponds to a 1.2 percentage point increase in support for the incumbent (about 3% change at the mean), assuming the government implements an inclusive refugee policy (see Column (3)). Inclusion of time-varying controls and country-year fixed effects amplifies the magnitude of the interaction term in Column (4), corresponding to a 1.5 percentage points increase in incumbent vote share (about 4% change at the mean). This suggests

---

for a plausible assessment of whether future arrival of refugees are systematically correlated with incumbent party vote share. We also acknowledge that the estimates based on the subsample with inclusive policies are less precise. This is expected given the reduction in sample size, which naturally leads to wider confidence intervals.

<sup>28</sup>In Appendix Table A.13 and Appendix Table A.14, we also present the results where treatment variable is defined at t-1.

a meaningful effect on the incumbent party vote share, particularly when inclusive policies are in place. Later, we utilize logarithmic transformation (i.e.,  $\log(\text{refugee ratio} + 1)$ ) as an alternative transformation in Panel C of Appendix Table [A.10](#) and Appendix Table [A.11](#).<sup>29</sup> The results are qualitatively similar to the baseline results.

**Placebo exercise.** In an effort to deal with confounding trends at the aggregate level that potentially affect voter behaviour, such as changes in macroeconomic trends, we add country-year fixed effects in the most complete specifications. Yet, there is still a possibility that the voters exposed to the presence of refugees would follow a similar trend in terms of casting a vote for incumbent, absent the treatment, as those who are not. In addition, detecting whether the relationship between incumbent support and refugee presence is spurious and/or coincidental constitutes another legitimate concern that must be tested. To validate that the observed positive effect is mainly due to the treatment itself and not due to other confounding factors, we therefore conduct a placebo exercise by assigning the future value of the treatment to past outcomes. If the treatment effect is found to be statistically significant in a placebo test, it suggests that the baseline results might be driven by spurious correlations or unobserved confounding factors rather than an actual causal relationship. In Panel D of Appendix Table [A.10](#), we present the results for incumbent party vote share. The negative sign on baseline refugees and the interaction term (albeit insignificant) seem to suggest that peripheral areas that are most likely to host refugees are, on average, less supportive to the incumbent prior to refugee inflow. Overall, since the null results for baseline and interaction are not significant at any conventional level, we rule out the possibility that the observed effect is due to co-founders. The same conclusion is valid for political competition (as can be seen in (Panel D of Appendix Table [A.11](#))).

**Disaggregation of policy.** [Blair et al. \(2022a\)](#) conceptualize refugee and asylum policy as comprising five core dimensions: access, service, livelihood, movement, and participation. As part of our robustness analysis, we examine whether support for the incumbent may also be systematically associated with these five overarching dimensions. Our results reported in Appendix Table [A.12](#) confirm the observed positive impact in our baseline regressions.

---

<sup>29</sup>In Appendix Table [A.13](#) and Appendix Table [A.14](#), we also present the results where treatment variable is defined at  $t-1$ .

## 6 Additional Analysis

### 6.1 Institutional performance and trust

To complement the previous analysis, we now turn to the Afrobarometer dataset. The Afrobarometer surveys include questions assessing the performance of government bodies, such as the president and parliament, as well as questions gauging trust in these institutions. To proxy for support for the incumbent government, we focus on two key sets of questions: (i) those related to the performance of government bodies and (ii) those concerning trust in government institutions. The questions and their availability across Afrobarometer rounds can be found in Appendix Table [A.15](#).

The results presented in Panel A of Table [4](#) summarize the relationship between refugee presence and, respectively, government performance and trust indicators, within a two-year window from the previous election, using a 150 km buffer.<sup>[30](#)</sup> The coefficients and standard errors in columns (1) and (2) represent the direct effects of refugee presence (measured as the IHS of refugee numbers), while columns (3) and (4) capture the interaction between refugee presence and inclusive refugee policies. The results suggest that, in countries without refugee inclusive policies, higher refugee presence is associated with a decrease in the perceived performance of and trust in the government (column (1)). However inclusive policies, which are accounted for in the interaction term (column (3)), shift the effects in the opposite direction. The interaction terms suggest that the impact of refugees on trust in the government and perceived performance of the government becomes significantly less negative or turns positive when refugee inclusive policies are in place. Some of the results are not statistically significant but, overall, they paint a picture which is very consistent with the results we found in the previous section.<sup>[31](#)</sup>

Overall, these findings underscore the importance of inclusive refugee policies in shaping public perceptions, particularly with respect to the president — who, in nearly 95% of cases, is directly associated with the ruling party in CLEA dataset. Although refugee presence is often associated with diminished perceptions of government performance and trust, in contexts with inclusive refugee

---

<sup>30</sup>The timing of elections can impact individuals' perceptions of government performance. Voters' assessments can be influenced by the election cycle, with clearer views following elections, but potential confusion as subsequent electoral events occur. To mitigate bias in measuring government performance, we limit the sample to observations within two years following an election, thus focusing on opinions formed during the post-election period (the "two-year window"). For further context, see literature on retrospective voting and economic voting, such as [Markwat \(2020\)](#), [Fumarola \(2020\)](#), [Ecker et al. \(2016\)](#), and [Augenblick and Nicholson \(2016\)](#).

<sup>31</sup>We test different buffer sizes in Appendix Table [A.16](#) and the results remain mostly consistent with those obtained using the 150 km buffer.

policies these effects are reversed, leading to greater public support, especially for the president. This underscores the importance of policy context in mediating the effects of refugee presence on political outcomes.

## 6.2 Exploring Channels

To explore the mechanisms of impact, we focus on three main channels: (i) feelings of satisfaction towards local public goods (using Afrobarometer data), (ii) feelings of national identity (using Afrobarometer data), and (iii) economic development (as measured by nightlight intensity). The summary results are presented in Panels B and C of Table 4. Notably, each column presents estimates from the most complete specification, incorporating both controls and fixed effects. We also present our results without controls in Appendix Table A.17 and using different buffers in Appendix Tables A.18, A.19, and A.20.

**Satisfaction towards local public goods.** Results from a handful of developing and developed countries suggest that immigration may put a strain on the government’s spending (see Ratha et al. (2011) for a detailed literature review for developing nations, Preston (2014) for the UK, Bove et al. (2023) for Italy). Such a strain is likely to affect local public goods provision in the forms of healthcare, education, and security. In addition to public finance concerns, arrival of refugees is likely to cause congestion effect on the local public goods due to unprecedented demand shocks. For instance, Aygün et al. (2021) confirm that the Syrian refugee flow to Türkiye reduces the per capita availability of healthcare facilities and professionals. Therefore, sub-optimal utilization of local public goods or congestion effect can trigger natives to reduce the support for Justice and Development Party (AKP) (i.e., the party running the Turkish government). The results of Altındağ and Kaushal (2021) are in line with this argument, implying a slight but a significant drop in the AKP’s vote share.

Nevertheless, hosting refugees does not necessarily cause a fiscal burden and/or a congestion impact in the context of low-income countries due partly to international financial aids, as suggested by Zhou et al. (2025). Potentially driven both by international burden-sharing norms and willingness to deter irregular immigrant flows from poor countries, entities such as the European Union and the World Bank have been elevating their aid contributions to nations hosting refugees (Clemens and Postel, 2018). However, a sizeable portion of the aid allocated for assisting refugees is being extended to benefit the host communities as well (Maystadt and Verwimp, 2014; Taylor et al., 2016;

Masterson and Lehmann, 2020b). Zhou et al. (2025) argue that whether natives are able to benefit from foreign aid that originally targets refugee hosting areas can determine political preferences of local population. The underlying rationale relies on the following for low-income countries: (i) access to public goods -*even to clean water and sanitary conditions*-, is a primary problem and the provision is also at sub-sufficient levels (Grossman and Slough, 2022), (ii) external aids have been shown to alleviate the financial burden on local infrastructure which in turn can boost local development (Zhou et al., 2025), and (iii) albeit limited control over the foreign aids, incumbent government can claim credit to improve public goods utilization for natives as well as refugees - *which in turn makes natives to reward the incumbent government*- (Dietrich et al., 2018). Thereby, aid-induced local development and the corresponding increase in the provision of local public goods can constitute a plausible mechanism in explaining the increased support for the incumbent government. In the Ugandan context, Zhou et al. (2025) show that better access to local public goods plays a significant role in rewarding incumbent government. They content that such an increase in the vote share of the incumbent government stems from the spillover effect in which natives benefit from. To test this hypothesis, they utilize the following outcome variables: access to public primary and secondary schools, access to healthcare facilities, and road density. In line with the expectations, refugee presence is found to positively correlate with access to the aforementioned services. Third, natives' assessment regarding the incumbent government performance, as measured by presidential approval and trust in president, and assessment of educational services, are shown to be improved with refugee presence over time. The results align with their hypothesis, indicating that the incumbent's enhanced electoral support in regions with significant refugee populations could be attributed to the spillover effect of humanitarian and development assistance, leading to improved public services that resonate with the local population. Altogether, following Zhou et al. (2025), one can argue that conditional on the natives' reaping benefits from aid-induced improved access to local public goods, incumbent governments can gain electoral victory despite large immigration flows.

Our results demonstrate that the Uganda case is a particular case of a general pattern observed in countries with inclusive refugee policies. Extending Zhou et al. (2025), we incorporate the following questions to measure the level of satisfaction regarding the local public goods: the government's ability to (i) address educational needs, (ii) improve basic health services, (iii) improve infrastructure, as measured by maintaining roads and bridges, and (iv) reduce crime. The results in Panel B of Table 4 highlight several important patterns about the effect of refugees on local public goods.

Refugee presence alone is associated with significant negative effects on perceptions of educational needs, healthcare provision, and infrastructural maintenance, indicating increased pressure on public services. However, the interaction terms for refugee presence and inclusive policies suggest that inclusive refugee policies play a mitigating role. For example, the interaction term for healthcare provision is positive and significant, indicating that inclusive policies help offset the strain on healthcare systems. Similarly, for infrastructure maintenance, the interaction term, almost fully reversing the negative effect of refugee presence. In terms of reducing crime, refugee presence alone does not have a significant effect, but in inclusive-policy contexts, the interaction term is positive and significant, suggesting improved perceptions of safety. Pseudo event studies – similar to Appendix Figures [A.5](#) and [A.6](#) confirm the positive effect of refugees on satisfaction with respect to education, health, infrastructure and safety in countries with inclusive policies (see Appendix Figure [A.7](#)). Absent or opposite pre-existing trends cannot explain these results. Overall, these findings underscore the challenges refugee presence poses for local public services and infrastructure but highlight the critical role of inclusive policies in addressing these challenges and fostering positive outcomes in host communities.

**National Identity.** The presence of refugees can strengthen the salience of national identity by heightening the distinction between the in-group and the out-group, especially during moments that emphasize national unity, such national crises (e.g., a national crisis can be triggered by an unprecedented refugee flows).<sup>32</sup> For the particular case of low-income countries, [Zhou \(2019\)](#) examines how the presence of refugees influences national identity formation among host citizens in Tanzania. Focusing on one of the Tanzania’s bordering regions, which has hosted over 230,000 Burundian refugees since 2015, [Zhou \(2019\)](#) theorizes that exposure to refugees leads host citizens to strengthen their national identity to distinguish themselves from the migrant out-group. Her findings indicate that greater exposure to refugees significantly increases national identification. Thereby, we test whether refugee-induced reinforced national identity may lead to greater support to the incumbent.<sup>33</sup>

The results in Panel B of Table [4](#) for national identity suggest a complex relationship between refugee presence and inclusive refugee policies. Refugee presence alone is associated with a positive

---

<sup>32</sup>Studies show that increased contact with refugee communities can promote solidarity among native citizens, reinforcing a more unified sense of national identity (e.g., see [Dinas et al. \(2019\)](#) who report that European regions exposed to higher numbers of refugees reported greater expressions of national pride among locals).

<sup>33</sup>We provide the question in Appendix Table [A.15](#). This question gives respondents five choices: they can identify in (i) ethnic terms only, (ii) more ethnic than national, (iii) equally ethnic and national, (iv) more national than ethnic and (v) national only. We combine the last two response categories to measure the number of people who identify themselves primarily in national terms. This approach is consistent with previous works on national identity in Africa, which evaluate national attachment vis-a-vis ethnic attachment. See footnote 35 in [Koter \(2019\)](#).

and statistically significant effect on national identity. This finding aligns with what Zhou (2019) documents for Tanzania, suggesting that refugee presence can heighten national identity as a unifying response to external influences. However, the interaction term between refugee presence and inclusive policies shows a negative and statistically significant effect. This indicates that inclusive policies dampen the effect of refugee presence on national identity. One possible interpretation is that inclusive policies reduce the social or cultural tensions that might otherwise prompt a stronger emphasis on national identity. By fostering integration and reducing perceived *otherness*, these policies may diminish the need for a heightened sense of national identity as a defensive response to refugee presence. In summary, while refugee presence initially strengthens national identity, the implementation of inclusive policies moderates this effect, likely by mitigating underlying tensions and fostering a more cohesive societal response. Altogether, we cannot attribute our results to the national identity in inclusive contexts.

**Economic activity: Nightlights.** One possible mechanism that may explain the increased support for the incumbent party in refugee-inclusive contexts is the potential for economic development that benefits the local host population. There are a number of indicators to proxy economic development. These include, but are not limited to, GDP per capita, income distribution, unemployment rate, and poverty rates. However, one difficulty here is to find the aforementioned variables at the most possible granular level - *considering that our treatment variable is defined at the subnational level*. We turn to nightlight data introduced by Henderson et al. (2011, 2012) through PRIO-GRID. Nightlight data, typically derived from satellite imagery that captures visible light emitted from the Earth's surface at night, is increasingly used as a proxy for economic development in the emerging literature. This is based on the assumption that areas with higher levels of economic activity tend to have more artificial lighting, which can be detected by satellites. Nightlight data is particularly useful in contexts where traditional economic indicators, such as GDP or income data, are either unavailable or unreliable, especially in low-income countries and rural settings (Addison and Stewart, 2015; Gibson et al., 2021; Pérez-Sindín et al., 2021). We extract yearly nightlight data for our sample countries at a resolution of 0.5 x 0.5 decimal degrees from PRIO-GRID. Instead of conducting our analysis using the Afrobarometer cluster, we aggregate the nightlight data at the GADM-1 level. One key advantage of this approach is that it allows us to work with a balanced panel dataset, which provides more robust and reliable estimates compared to the Afrobarometer data, due to its cross-sectional nature. To do so, we specifically use calibrated nightlight data. It measures average nighttime light

emission from the DMSP-OLS Nighttime Lights Time Series Version 4, calibrated to account for intersatellite differences and interannual sensor decay using calibration values from [Elvidge et al. \(2013\)](#). Thus, they might be more suitable for time-series data analysis. Values are standardized to be between 0 and 1, where 1 is the highest observed value in the time-series, and 0 is the lowest. The times-series are available from 1992 to 2012. Therefore, our period of investigation for the nightlight data comprises a balanced panel between 2000 and 2012.<sup>34</sup> In our nightlight regression –where the results are shown in Panel C of Table [4](#)–, we also include climate and controls as well as country by year and GADM-1 fixed effects.

The result displayed in Panel C of Table [4](#) for nightlights confirm our hypothesis on economic development in refugee-inclusive settings at 1% level of significance.<sup>35</sup> That is, refugee presence alone shows no significant impact on nightlights, but the interaction term with inclusive policies is positive and significant. This suggests that inclusive policies foster economic activity and development in refugee-hosting regions. These results cannot be explained by pre-existing trends as shown in Appendix Figure [A.8](#). Our finding of improved economic activity for refugee-inclusive sample is consistent with what [Zhou et al. \(2025\)](#) find for Uganda. Their findings on increased incumbent support is attributed to the local development, which is proxied by access to healthcare facilities, schools, roads, and nightlights.

## 7 Conclusion

This study sheds light on the nuanced political implications of hosting refugees in Africa, particularly in low-income countries. By leveraging data from 16 African nations between 2000 and 2016, our analysis highlights a complex interplay between refugee presence, inclusive policy frameworks, and political outcomes. We document that refugee presence translates into increased support for the incumbent government and reduced political competition, but only in countries that implement inclusive policies toward refugees. These policies, which facilitate refugees’ access to rights, services, and economic opportunities, appear to play a pivotal role in mediating the political consequences of

---

<sup>34</sup>More information can be found on <https://grid.prio.org/extensions/PRI0-GRID-Codebook.pdf>

<sup>35</sup>In addition, we conduct a complementary analysis by using two subjective wellbeing measures from Afrobarometer: (i) present living conditions as measured by better (=1) or worse (=0), and (ii) probability of being cashless over the past year. The underlying rationale of utilizing subjective wellbeing measures is that if the presence of refugees promotes economic development, the natives are likely to be better off perhaps via having better living standards and less financial struggle. Our results, presented in Appendix Table [A.21](#) are in line with our expectations, indicating that while refugee presence alone negatively impacts perceptions of living conditions and increases financial hardship, inclusive policies appear to offset these effects, improving both living conditions and financial stability in host communities.

refugee hosting.

Through complementary Afrobarometer data, we also find the same mediating pattern with respect to perception towards the President. Such a boost in institutional trust and satisfaction under inclusive policies is not explained by more salient national identity, but by improved satisfaction with local public goods and heightened economic activity. In refugee-inclusive contexts, humanitarian and development aid targeting refugees also benefits host communities, leading to positive spillover effects on public service provision. Natives in these settings report greater satisfaction with education, healthcare, infrastructure, and crime reduction. Furthermore, the significant increase in nightlight intensity for local economic development supports the hypothesis that inclusive policies foster economic growth, which bolsters incumbent support. While refugees strengthens national identity in restrictive contexts, inclusive policies mitigate this effect, likely by reducing social tensions and fostering integration. This attenuation suggests that inclusive policies shift the narrative from one of perceived competition or threat to one of coexistence and mutual benefit.

Our research makes three key contributions. First, we extend the literature on the political economy of refugees by focusing on developing nations, which host the majority of the world's refugee population. Second, we provide cross-country evidence, moving beyond the single-country focus predominant in previous studies, thereby enhancing the external validity of our findings. Third, we underscore the critical role of inclusive policies in shaping not only the socio-economic but also the political outcomes of refugee hosting. These findings carry important implications for policymakers. They emphasize the potential of inclusive policies to transform refugee presence into an opportunity for host countries, fostering political stability and economic development. As global forced displacement continues to rise, understanding these dynamics is crucial for designing policies that not only address humanitarian concerns but also promote sustainable development and political cohesion in host nations.

From a policy standpoint, our study demonstrates that countries with inclusive refugee policies benefit from increased local support for incumbent governments and economic development. This highlights the importance of designing and implementing refugee policies that foster inclusion rather than exclusion. Policymakers should recognize that refugees are not merely a fiscal burden but can positively impact local economies provided they receive the rights to do so. The positive trend in inclusive policies in the Global South suggests that it is the case in many low-income countries, much less in the Global North. Our estimates underscore that humanitarian and development aid,

which often accompany refugee influxes, can improve living conditions and economic activity in host communities under an inclusive refugee policy. This suggests that leveraging aid effectively can lead to political stability by maintaining or increasing support for incumbent governments. It provides a direction for governments and international organizations to focus on strengthening the distribution of aid and ensuring it benefits both refugees and local populations. More research is still needed to understand how the lower support to forcibly displacement people in high-income countries may limit the ability of low-income countries to deal with new massive displacements. In such a context, there is also a need to better understand the remaining institutional and organizational barriers to such inclusive policies.

## References

- Addison, D. M. and Stewart, B. (2015). Nighttime lights revisited: the use of nighttime lights data as a proxy for economic variables. *World Bank Policy Research Working Paper*, (7496).
- Albu, D. (2023). World development report 2023: Migrants, refugees, and societies. *Drepturile Omului*, page 81.
- Alix-Garcia, J., Bartlett, A., and Saah, D. (2013). The landscape of conflict: Idps, aid and land-use change in darfur. *Journal of Economic Geography*, 13(4):589–617.
- Alix-Garcia, J., Walker, S., Bartlett, A., Onder, H., and Sanghi, A. (2018). Do refugee camps help or hurt hosts? the case of kakuma, kenya. *Journal of Development Economics*, 130:66–83.
- Altındağ, O. and Kaushal, N. (2021). Do refugees impact voting behavior in the host country? evidence from syrian refugee inflows to turkey. *Public Choice*, 186:149–178.
- Augenblick, N. and Nicholson, S. (2016). Ballot position, choice fatigue, and voter behaviour. *The Review of Economic Studies*, 83(2):460–480.
- Aygiin, A., Kırdar, M. G., and Tuncay, B. (2021). The effect of hosting 3.4 million refugees on native population mortality. *Journal of health economics*, 80:102534.
- Baez, J. E. (2011). Civil wars beyond their borders: The human capital and health consequences of hosting refugees. *Journal of development economics*, 96(2):391–408.
- Bedasso, B. E. and Jaupart, P. (2020). South-south migration and elections: evidence from post-apartheid south africa. *IZA Journal of Development and Migration*, 11(1).
- Bellemare, M. F. and Wichman, C. J. (2020). Elasticities and the inverse hyperbolic sine transformation. *Oxford Bulletin of Economics and Statistics*, 82(1):50–61.
- Berry, L. (2008). The Impact of Environmental Degradation on Refugee-Host Relations: A Case Study from Tanzania. *Research Paper United nations High Commissioner for Refugees Evaluation and Policy Analysis unit*, 151.
- Bertinelli, L., Cömertpay, R., and Maystadt, J.-F. (2025). Ethnic diversity and conflict in sub-saharan africa: Evidence from refugee-hosting areas. *Journal of Development Economics*, 172:103393.
- Blair, C. W., Grossman, G., and Weinstein, J. M. (2022a). Forced displacement and asylum policy in the developing world. *International Organization*, 76(2):337–378.
- Blair, C. W., Grossman, G., and Weinstein, J. M. (2022b). Liberal displacement policies attract forced migrants in the global south. *American Political Science Review*, 116(1):351–358.
- Blair, C. W. and Wright, A. L. (2022). Refugee return and conflict: Evidence from a natural experiment. *University of Chicago, Becker Friedman Institute for Economics Working Paper*, (2021-82).
- Bove, V. and Elia, L. (2017). Migration, diversity, and economic growth. *World Development*, 89:227–239.
- Bove, V., Elia, L., and Ferraresi, M. (2023). Immigration, fear of crime, and public spending on security. *The Journal of Law, Economics, and Organization*, 39(1):235–280.

- Butts, K. and Gardner, J. (2021).  $\{did2s\}$ : Two-stage difference-in-differences. *arXiv preprint arXiv:2109.05913*.
- Card, D. and Peri, G. (2016). Immigration economics by george j. borjas: a review essay. *Journal of Economic Literature*, 54(4):1333–1349.
- Chen, J. and Roth, J. (2024). Logs with zeros? some problems and solutions. *The Quarterly Journal of Economics*, 139(2):891–936.
- Clemens, M. A. and Postel, H. M. (2018). Deterring emigration with foreign aid: An overview of evidence from low-income countries. *Population and Development Review*, 44(4):667.
- Coniglio, N. D., Peragine, V., and Vurchio, D. (2023). The effects of refugees’ camps on hosting areas: social conflicts and economic growth. *World Development*, 168:106273.
- Cruz, C. and Schneider, C. J. (2017). Foreign aid and undeserved credit claiming. *American Journal of Political Science*, 61(2):396–408.
- Dagnelie, O., Mayda, A. M., and Maystadt, J.-F. (2023). Refugees, children’s health and malaria transmission in africa. Technical report.
- De Chaisemartin, C. and d’Haultfoeulle, X. (2020). Two-way fixed effects estimators with heterogeneous treatment effects. *American economic review*, 110(9):2964–2996.
- De Luca, G., Hodler, R., Raschky, P. A., and Valsecchi, M. (2018). Ethnic favoritism: An axiom of politics? *Journal of Development Economics*, 132:115–129.
- Dietrich, S., Mahmud, M., and Winters, M. S. (2018). Foreign aid, foreign policy, and domestic government legitimacy: Experimental evidence from bangladesh. *The Journal of Politics*, 80(1):133–148.
- Dinas, E., Matakos, K., Xeferis, D., and Hangartner, D. (2019). Waking up the golden dawn: does exposure to the refugee crisis increase support for extreme-right parties? *Political analysis*, 27(2):244–254.
- do Rosário, D. M. and Guambe, E. (2023). Decentralising fraud: New models of electoral manipulation during the 2019 general elections in mozambique. *Journal of Southern African Studies*, 49(4):677–695.
- Dustmann, C., Ku, H., and Arendt, J. (2022). Refugee migration and the labor market: Lessons from 40 years of post-arrival policies in denmark.
- Ecker, A., Glinitzer, K., and Meyer, T. M. (2016). Corruption performance voting and the electoral context. *European Political Science Review*, 8(3):333–354.
- Edo, A., Giesing, Y., Öztunc, J., and Poutvaara, P. (2019). Immigration and electoral support for the far-left and the far-right. *European Economic Review*, 115:99–143.
- Elvidge, C. D., Zhizhin, M., Hsu, F.-C., and Baugh, K. E. (2013). Viirs nightfire: Satellite pyrometry at night. *Remote Sensing*, 5(9):4423–4449.
- Fisunoğlu, A. and Sert, D. (2019). Refugees and elections: The effects of syrians on voting behavior in turkey. *International Migration*, 57(2):298–312.

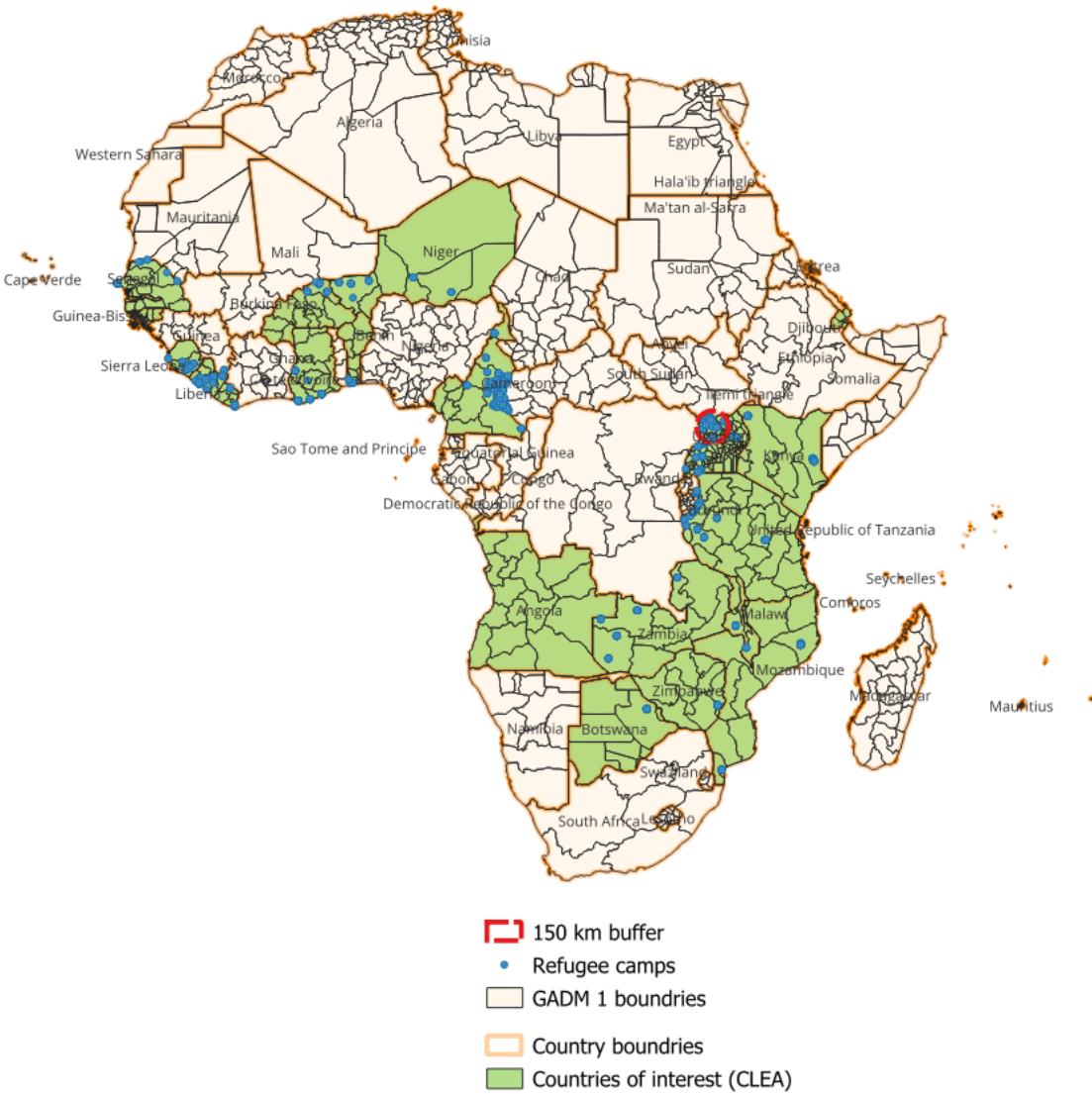
- Fujiwara, T., Meng, K., and Vogl, T. (2016). Habit formation in voting: Evidence from rainy elections. *American Economic Journal: Applied Economics*, 8(4):160–88.
- Fumarola, A. (2020). The contexts of electoral accountability: electoral integrity performance voting in 23 democracies. *Government and Opposition*, 55(1):41–63.
- Gardner, J. (2022). Two-stage differences in differences. *arXiv preprint arXiv:2207.05943*.
- Gibson, J., Olivia, S., Boe-Gibson, G., and Li, C. (2021). Which night lights data should we use in economics, and where? *Journal of Development Economics*, 149:102602.
- Ginn, T., Resstack, R., Dempster, H., Arnold-Fernández, E., Miller, S., Ble, M. G., and Kanyamanza, B. (2022). Global refugee work rights report. *Center for Global Development*.
- Goodman-Bacon, A. (2021). Difference-in-differences with variation in treatment timing. *Journal of econometrics*, 225(2):254–277.
- Gronau, S. and Ruesink, B. (2021). What makes me want you here? refugee integration in a zambian settlement setting. *Sustainability*, 13(15):8380.
- Grossman, G. and Slough, T. (2022). Government responsiveness in developing countries. *Annual Review of Political Science*, 25:131–153.
- Halla, M., Wagner, A. F., and Zweimüller, J. (2017). Immigration and voting for the far right. *Journal of the European economic association*, 15(6):1341–1385.
- Henderson, J. V., Storeygard, A., and Weil, D. N. (2012). Measuring Economic Growth from Outer Space. *American Economic Review*, 102(2):994–1028.
- Henderson, V., Storeygard, A., and Weil, D. N. (2011). A Bright Idea for Measuring Economic Growth. *American Economic Review*, 101(3):194–199.
- Hernandez, Z. (2024). *The truth about immigration: Why successful societies welcome newcomers*. St. Martin’s Press.
- Hussam, R., Kelley, E. M., Lane, G., and Zahra, F. (2022). The psychosocial value of employment: Evidence from a refugee camp. *American Economic Review*, 112(11):3694–3724.
- Ibáñez, A. M., Rozo, S. V., and Urbina, M. J. (2021). Forced migration and the spread of infectious diseases. *Journal of Health Economics*, 79:102491.
- Jakiela, P. (2021). Simple diagnostics for two-way fixed effects. *arXiv preprint arXiv:2103.13229*.
- Kadigo, M. and Maystadt, J. (2023). How to cope with a Refugee Shock? Evidence from Uganda. *World Development*, forthcoming.
- Kayaoglu, A., Şahin-Mencütek, Z., and Erdoğan, M. M. (2022). Return aspirations of syrian refugees in turkey. *Journal of Immigrant & Refugee Studies*, 20(4):561–583.
- Koter, D. (2019). Presidents’ ethnic identity and citizens’ national attachment in africa. *Nationalism and Ethnic Politics*, 25(2):133–151.

- Kreibaum, M. (2016). Their suffering, our burden? how congolese refugees affect the ugandan population. *World Development*, 78:262–287.
- Loschmann, C., Bilgili, Ö., and Siegel, M. (2019). Considering the benefits of hosting refugees: evidence of refugee camps influencing local labour market activity and economic welfare in rwanda. *IZA Journal of Development and Migration*, 9(1):5.
- Marco d’Errico, Rama Dasi Mariani, R. P. and Rosati, F. C. (2022). Refugee-host proximity and market creation in uganda. *The Journal of Development Studies*, 58(2):213–233.
- Markwat, N. (2020). The policy-seeking voter: evaluations of government performance beyond the economy. *SN Social Sciences*, 1(1):26.
- Masterson, D. and Lehmann, M. C. (2020a). Does humanitarian aid reduce anti-refugee violence? evidence from syrian refugees in lebanon. *American Political Science Review*, 114(4):1335–1342.
- Masterson, D. and Lehmann, M. C. (2020b). Refugees, mobilization, and humanitarian aid: Evidence from the syrian refugee crisis in lebanon. *Journal of Conflict Resolution*, 64(5):817–843.
- Mayda, A. M., Peri, G., and Steingress, W. (2022). The political impact of immigration: Evidence from the united states. *American Economic Journal: Applied Economics*, 14(1):358–389.
- Maystadt, J.-F. and Duranton, G. (2019). The Development Push of Refugees. *Journal of Economic Geography*, 19(2):299–334.
- Maystadt, J.-F., Mueller, V., Van Den Hoek, J., and van Weezel, S. (2020). Vegetation changes attributable to refugees in africa coincide with agricultural deforestation. *Environmental Research Letters*, 15(4):044008.
- Maystadt, J.-F. and Verwimp, P. (2014). Winners and losers among a refugee-hosting population. *Economic development and cultural change*, 62(4):769–809.
- Montalvo, J. G. and Reynal-Querol, M. (2007). Fighting against malaria: prevent wars while waiting for the “miraculous” vaccine. *The Review of Economics and Statistics*, 89(1):165–177.
- Pérez-Sindín, X. S., Chen, T.-H. K., and Prishchepov, A. V. (2021). Are night-time lights a good proxy of economic activity in rural areas in middle and low-income countries? examining the empirical evidence from colombia. *Remote Sensing Applications: Society and Environment*, 24:100647.
- Preston, I. (2014). The effect of immigration on public finances. *The Economic Journal*, 124(580):F569–F592.
- Ratha, D., Mohapatra, S., and Scheja, E. (2011). Impact of migration on economic and social development: A review of evidence and emerging issues. *World Bank Policy Research Working Paper*, (5558).
- Rozo, S. V. and Vargas, J. F. (2021). Brothers or invaders? how crisis-driven migrants shape voting behavior. *Journal of Development Economics*, 150:102636.
- RPIS (2019). Fifth round of unhcr’s return perceptions and intention surveys. <https://www.unhcr.org/>.

- Salehyan, I. (2006). Refugees and the Spread of Civil War. *International Organization*, 60(2):335–366.
- Salehyan, I. (2008). The externalities of civil strife: Refugees as a source of international conflict. *American Journal of Political Science*, 52(4):787–801.
- Salemi, C. (2021). Refugee camps and deforestation in sub-saharan africa. *Journal of Development Economics*, 152:102682.
- Sekeris, P. and Vasilakis, C. (2016). The mediterranean refugees crisis and extreme right parties: Evidence from greece.
- Sun, L. and Abraham, S. (2021). Estimating dynamic treatment effects in event studies with heterogeneous treatment effects. *Journal of econometrics*, 225(2):175–199.
- Tapsoba, A. (2023). The cost of fear: Impact of violence risk on child health during conflict. *Journal of Development Economics*, 160:102975.
- Taylor, J., Filipski, M., and Alloush, M. (2016). Economic impact of refugees. *Proceedings of the National Academy of Sciences*, 113(27):7449–53.
- United Nations High Commissioner for Refugees (2024). *Global Trends: Forced Displacement in 2023*. Geneva.
- Van Ham, C. and Lindberg, S. I. (2015). From sticks to carrots: Electoral manipulation in africa, 1986–2012. *Government and Opposition*, 50(3):521–548.
- Verme, P. and Schuettler, K. (2021). The impact of forced displacement on host communities: A review of the empirical literature in economics. *Journal of Development Economics*, 150:102606.
- World Bank (2023). *World development report 2023: Migrants, refugees, and societies*. Technical report, Washington DV: World Bank.
- Zelin, W. A. and Smith, D. A. (2023). Weather to vote: How natural disasters shape turnout decisions. *Political Research Quarterly*, 76(2):553–564.
- Zhou, Y.-Y. (2019). How refugee resentment shapes national identity and citizen participation in africa. Technical report.
- Zhou, Y.-Y. and Grossman, G. (2023). When refugee presence increases incumbent support through development: Evidence from uganda. 166:106203.
- Zhou, Y.-Y., Grossman, G., and Ge, S. (2023). Inclusive refugee-hosting can improve local development and prevent public backlash. *World Development*, 166:106203.
- Zhou, Y.-Y., Grossman, G., Liu, N., and Ge, S. (2025). Refugee-hosting and electoral response: Challenging the generalizability of the backlash hypothesis.
- Zhou, Y.-Y. and Shaver, A. (2021). Reexamining the Effect of Refugees on Civil Conflict: A Global Subnational Analysis. *Amerian Political Science Review*, 115(4):1175–1196.

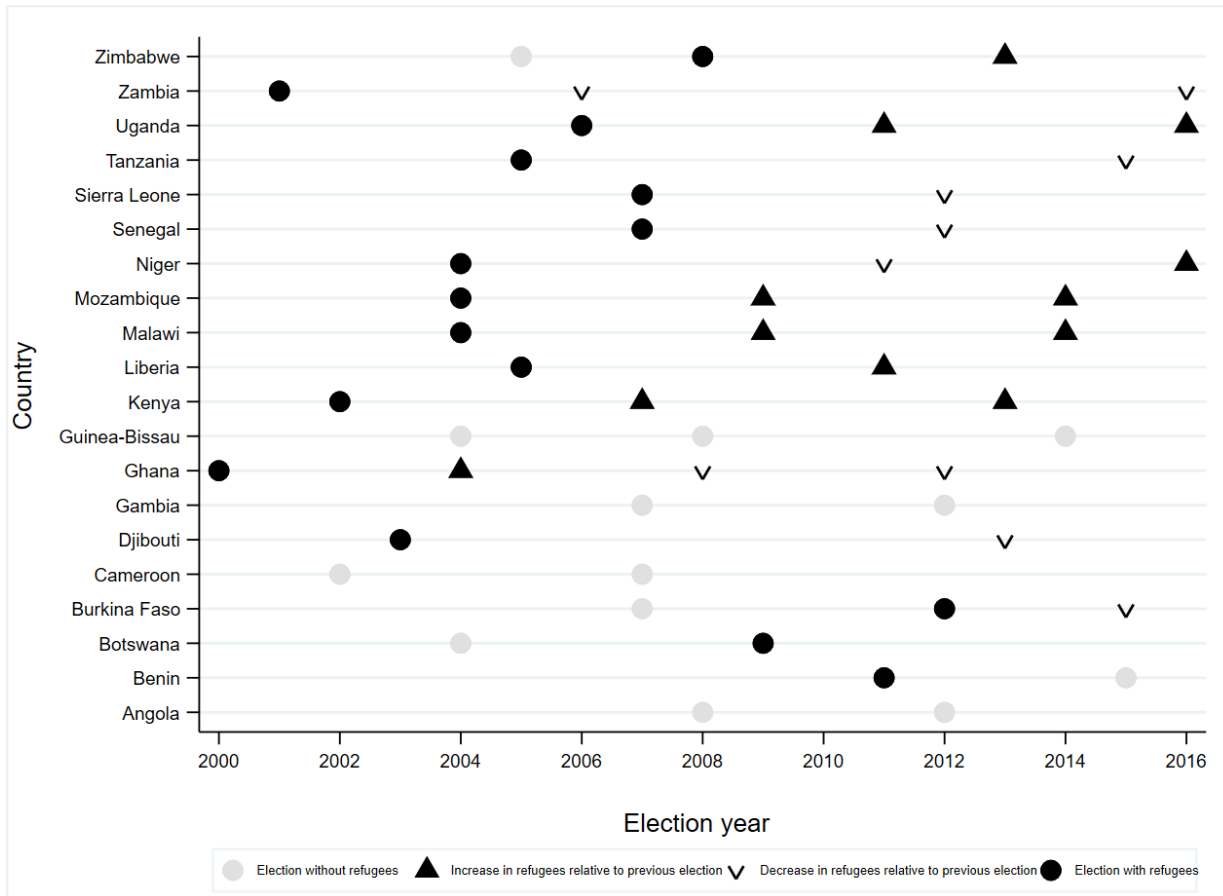
# Figures and Tables

Figure 1: Refugee camps in 20 CLEA countries (GADM-1 divisions)



Note: Authors' own calculations. We further illustrate the geographical detail of our data by zooming on one particular area in Figure [A.1](#)

Figure 2: Refugee trends in CLEA countries by election years



Note: Authors' own calculations.

Table 1: Descriptive statistics

	<b>Obs.</b>	<b>Mean</b>	<b>Std.Dev.</b>	<b>Min.</b>	<b>Max.</b>
<b>Dependent variables from CLEA</b>					
Incumbent party vote share (IPVS)	700	0.385	0.224	0.002	0.968
Political competition (PC)	700	0.042	0.100	0.010	1.651
<b>Refugees and Refugee Policy</b>					
Refugees (non-IHS transformed, not adjusted with population)	700	3,135.975	21,790.49	0	405,183
Population (2000) in 100 meter	700	744,834.5	634,072	355.624	3,680,178
Refugees to 2000-population ratio (non-IHS transformed)	700	0.008	0.069	0	1.383
Refugees to 2000-population ratio (IHS transformed)	700	0.007	0.060	0	1.128
Refugee policy (Baseline)	700	0.579	0.493	0	1
Refugees IHS x Baseline Policy	700	0.002	0.032	0	0.821
<b>Time-varying GADM-1 level covariates</b>					
Conflict Intensity	700	0.314	0.464	0	1
Mean temperature over land area	700	0.021	0.117	0	1.474
Mean temperature over land area (sq)	700	0.014	0.146	0	2.175
Mean precipitation over land area	700	0.962	5.992	0	92.946
Mean precipitation over land area (sq)	700	35.955	503.907	0	8,639.084

Notes: Authors' own calculations.

Table 2: Effect of refugees on Incumbent support and Political competition  
(Excluding Angola, Cameroon, Gambia and Guinea-Bissau)

	(1)	(2)	(3)	(4)
Panel A	Incumbent Party Vote Share			
IHS Refugee Ratio (at t)	0.1914*	0.1179	0.0743	-0.0367
	(0.0995)	(0.1259)	(0.0983)	(0.0988)
IHS Refugee Ratio (at t) x Baseline Policy			0.2157**	0.2848***
			(0.1011)	(0.1028)
Total Effect			0.2899***	0.2480***
			(0.0262)	(0.0272)
Panel B	Political Competition			
IHS Refugee Ratio (at t)	-0.0352*	-0.0170	-0.0095	0.0035
	(0.0200)	(0.0090)	(0.0053)	(0.0134)
IHS Refugee Ratio (at t) x Baseline Policy			-0.0473**	-0.0377***
			(0.0183)	(0.0084)
Total Effect			-0.0567***	-0.0342***
			(0.0150)	(0.0048)
Observations	700	700	700	700
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Country-Year Fixed Effects	No	Yes	No	Yes
Time-varying controls	No	Yes	No	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level)

Table 3: Summary of Results on Identification Threats to Incumbent Party Vote Share

Model	IHS Refugee Ratio	IHS Refugee Ratio $\times$ Baseline Policy	Total Effect	Obs
<b>Panel A. Heterogeneous Treatment</b>				
Gardner (2021) <sup>a</sup>	0.1032 (0.0765)	0.2192** (0.1169)	0.3225*** (0.0902)	700
<b>Panel B. Robustness I: Geographic</b>				
Exclude Urban <sup>b</sup>	-0.0346 (0.0698)	1.3536** (0.6523)	1.2821* (0.6561)	264
Exclude Non-bordering <sup>b</sup>	-0.0628 (0.1326)	0.2940** (0.1367)	0.2238*** (0.0414)	354
Distance-to-Capital $\times$ Year <sup>b</sup>	-0.0361 (0.1018)	0.2795*** (0.1042)	0.2434*** (0.0283)	700
<b>Panel C. Robustness II: Policy Determinants</b>				
Conflict $\times$ Ref Pres <sup>c</sup>	-0.1050 (0.1053)	0.3524*** (0.1056)	0.2473*** (0.0257)	700
Aid I $\times$ Ref Pres <sup>c</sup>	-0.0322 (0.0997)	0.2921*** (0.1060)	0.2598*** (0.0337)	700
Aid II $\times$ Ref Pres <sup>c</sup>	-0.0328 (0.0994)	0.2903*** (0.1099)	0.2574*** (0.0462)	700
GDP $\times$ Ref Pres <sup>c</sup>	-0.0197 (0.0978)	0.2740** (0.1011)	0.2543*** (0.0283)	700

Notes: Standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . All models include time-varying controls as well as year, region (i.e., GADM-1), and country-year fixed effects. Standard errors clustered at the region level (i.e., GADM-1 level).

<sup>a</sup> Full set of results can be seen in Appendix Table [A.3](#)

<sup>b</sup> Full set of results can be seen in Appendix Table [A.4](#)

<sup>b</sup> Full set of results can be seen in Appendix Table [A.6](#)

Table 4: Combined Results: Government Performance, Trust, and Policy Mechanisms

	Refugees IHS		Refugees IHS x Baseline Policy		Total Effect		Obs
	Coef	SE	Coef	SE	Coef	SE	N
<b>Panel A: Government Performance Indicators and Trust</b>							
President performance	-0.2499***	(0.0586)	0.3085***	(0.0703)	0.0585	(0.0384)	43,095
Parliament performance	-0.0814	(0.0675)	0.0854	(0.0723)	0.0040	(0.0243)	38,340
President trust	-0.0546	(0.0490)	0.0826	(0.0543)	0.0280	(0.0231)	43,356
Parliament trust	-0.0021	(0.0321)	0.0268	(0.0386)	0.0246	(0.0205)	39,476
<b>Panel B: Afrobarometer Policy Mechanisms</b>							
<u>Public goods</u>							
Educational needs	-0.1610***	(0.0499)	0.1337**	(0.0562)	-0.0273	(0.0242)	39,960
Improving healthcare	-0.2245***	(0.0491)	0.2294***	(0.0556)	0.0048	(0.0248)	40,006
Infrastructural maintenance	-0.4967**	(0.2125)	0.4875**	(0.2156)	-0.0091	(0.0378)	29,825
Reducing crime	-0.1275***	(0.0305)	0.1729***	(0.0428)	0.0454	(0.0297)	39,464
<u>Identity</u>							
National identity	0.0758**	(0.0316)	-0.0504	(0.0428)	0.0254	(0.0289)	38,627
<b>Panel C: Economic Mechanism</b>							
<u>Economic Development</u>							
Nightlights	-0.0002**	(0.0000)	0.0004***	(0.0001)	0.0002	(0.0001)	598

**Notes:** \*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ). All specifications (Panel A and B) include control variables, year, **country-year**, and cluster fixed effects. Individual-level controls: (1) age and age square, (2) sex, (3) education status, and (4) rural versus urban residence. Time-varying controls: (1) conflict incidence, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The robust standard errors are clustered at the cluster level.

# Online Appendix

Appendix Tables and Figures for:

The political impact of refugees in Africa

December 8, 2025

This document contains a set of appendixes with supplemental material.

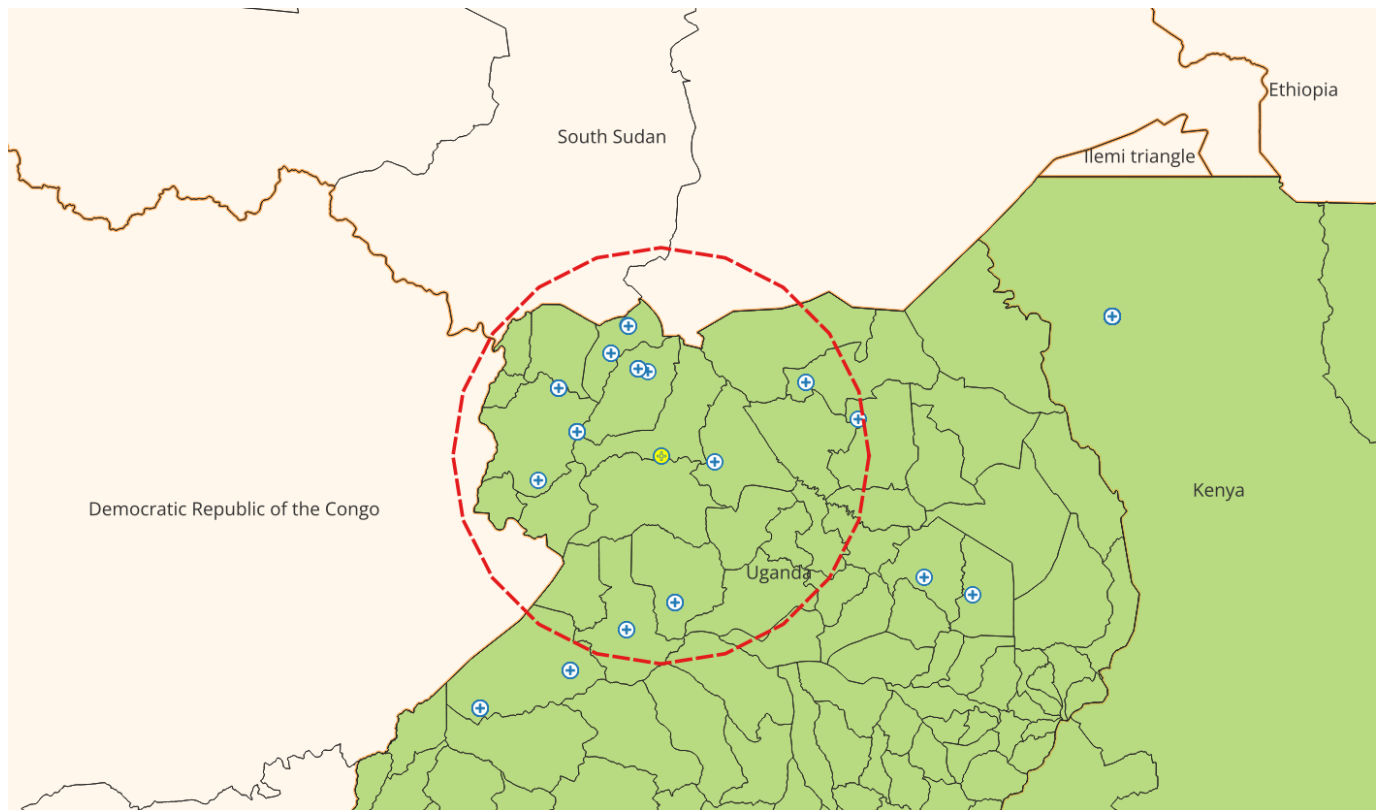
# Appendix A Additional Tables and Figures

Table A.1: Summary table for data availability for AB and CLEA countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Data	Afrobarometer (AB)						UNHCR camps	CLEA Elections
	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6		
Survey year	1999–2001	2002–2003	2005–2006	2008–2009	2012–2013	2014–2015	2000–2016	2000–2016
Angola <sup>C</sup>							2000–2006	2008, 2012
Benin <sup>A,C</sup>		1,198	1,200	1,200	1,200	1,200	2001–2012	2011, 2015
Botswana <sup>A,C</sup>	1,200	1,200	1,200	1,200	1,200	1,200	2000–2016	2004, 2009, 2014
Burkina Faso <sup>A,C</sup>				1,200	1,200	1,200	2012–2016	2007, 2012, 2015
Cameroon <sup>A,C</sup>					1,200	1,182	2012–2016	2002, 2007
Djibouti <sup>C</sup>							2000–2016	2003, 2013
Gambia <sup>C</sup>							2000–2003	2007, 2012
Ghana <sup>A,C</sup>	2,004	1,200	1,197	1,200	2,400	2,400	2000–2016	2000, 2004, 2008, 2012, 2016
Guinea-Bissau <sup>C</sup>							2000–2011	2004, 2008, 2014
Kenya <sup>A,C</sup>		2,398	1,278	1,104	2,399	2,397	2000–2016	2002, 2007, 2013
Liberia <sup>A,C</sup>				1,200	1,199	1,199	2004–2016	2005, 2011
Malawi <sup>A,C</sup>	1,208	1,200	1,200	1,200	2,407	2,400	2000–2016	2004, 2009, 2014
Mozambique <sup>A,C</sup>		1,400	1,198	1,200	2,400	2,400	2005–2016	2004, 2009, 2014
Niger <sup>A,C</sup>					1,199	1,200	2010–2016	2004, 2011, 2016
Senegal <sup>A,C</sup>		1,200	1,200	1,200	1,200	1,200	2000–2010	2007, 2012
Sierra Leone <sup>A,C</sup>					1,190	1,191	2002–2011	2007, 2012
Tanzania <sup>A,C</sup>	2,198	1,223	1,304	1,208	2,400	2,386	2000–2016	2005, 2015
Uganda <sup>A,C</sup>	2,271	2,400	2,400	2,431	2,400	2,400	2000–2016	2006, 2011, 2016
Zambia <sup>A,C</sup>	1,198	1,198	1,200	1,200	1,200	1,199	2000–2016	2001, 2006, 2016
Zimbabwe <sup>A,C</sup>	1,200	1,104	1,048	1,200	2,400	2,400	2000–2014	2005, 2008, 2013
<b>Total</b>	AB surveys and clusters						Camps	Elections
	74 surveys and 7,346 clusters						202	53

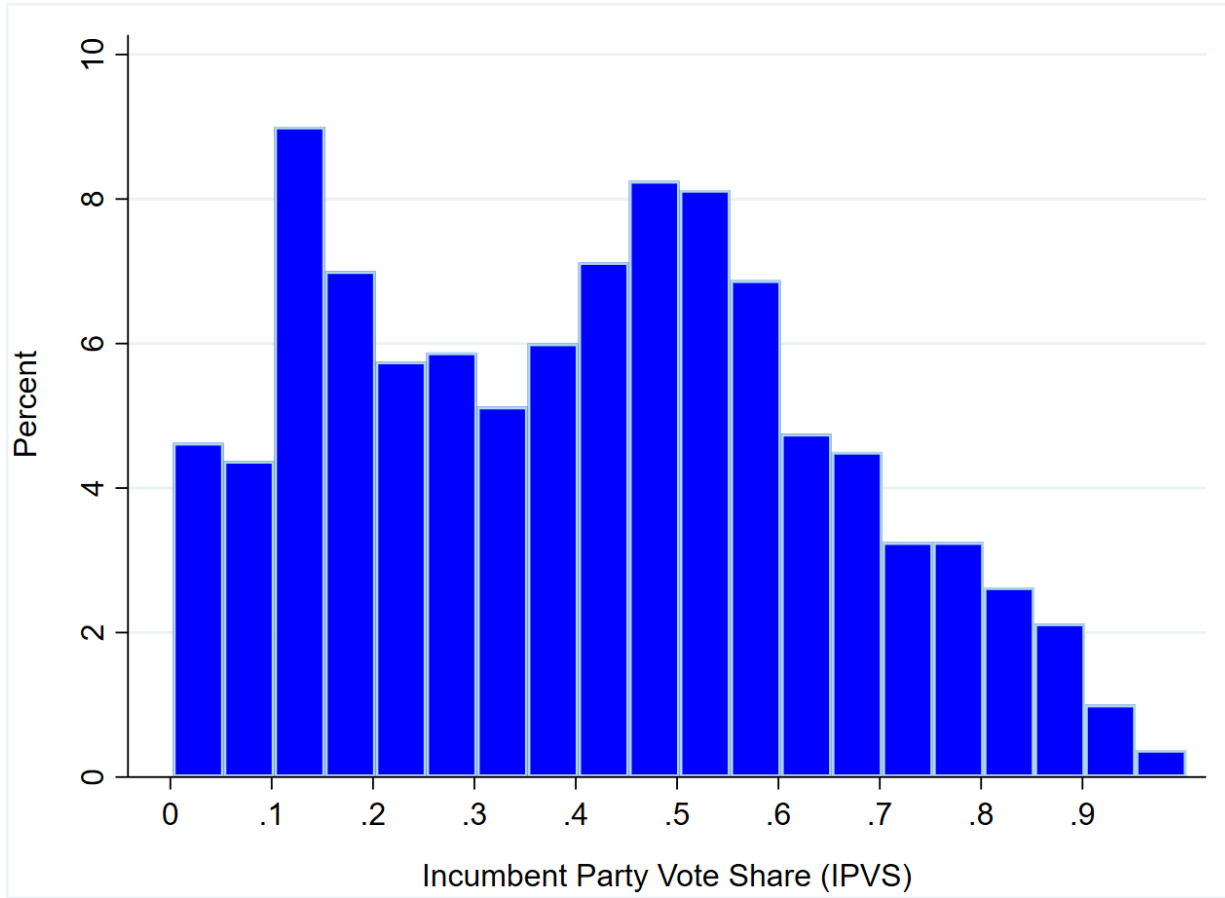
Note: The superscript A,C indicates that the country of interest is present in both Afrobarometer (A) and CLEA (C) dataset. If it is only present in CLEA, we use C and vice versa.

Figure A.1: Refugee camps in 20 CLEA countries detailed (GADM-1 divisions)



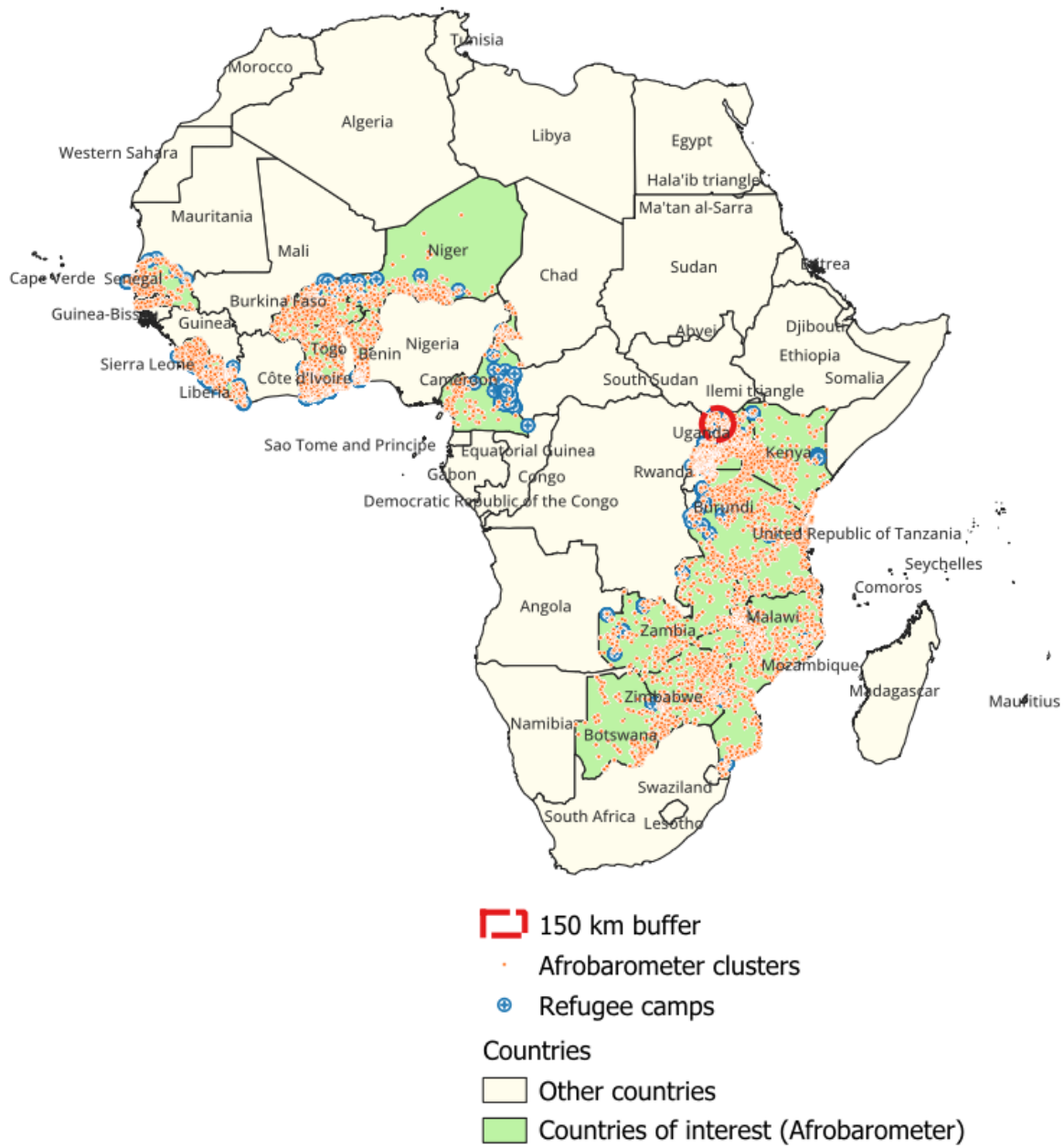
Note: Authors' own calculations. The red dash line shows a 150 km buffer around the specified refugee camp (i.e., highlighted in yellow).

Figure A.2: Percent distribution of incumbent party vote share (IPVS)



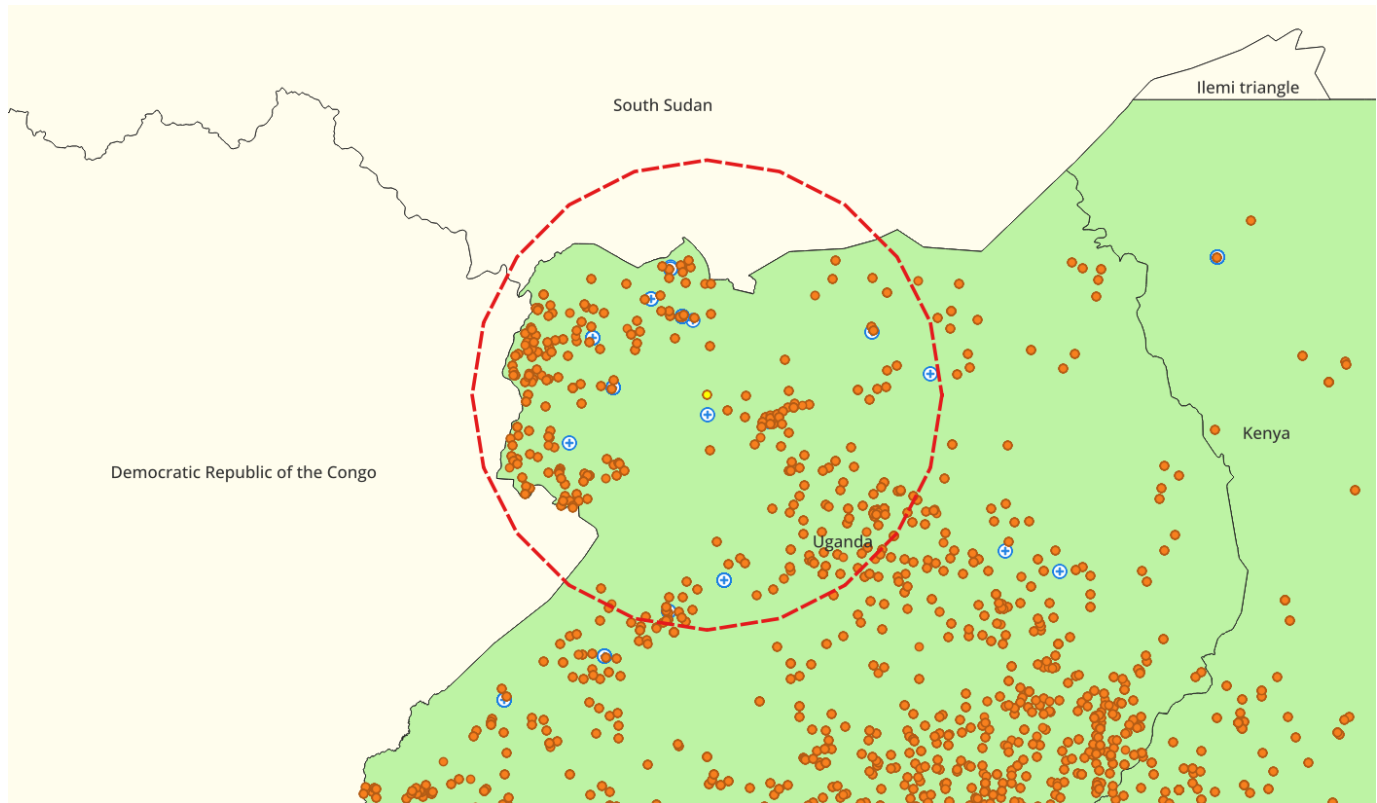
Notes: Authors' own calculations.

Figure A.3: Refugee Camps and Afrobarometer Clusters



Note: Authors' own calculations.

Figure A.4: Refugee Camps and Afrobarometer Clusters (Detailed)



Note: Authors' own calculations. The red dash line shows a 150 km buffer around the specified Afrobarometer cluster (i.e., highlighted in yellow).

Figure A.5: Testing pre-trends for all sample

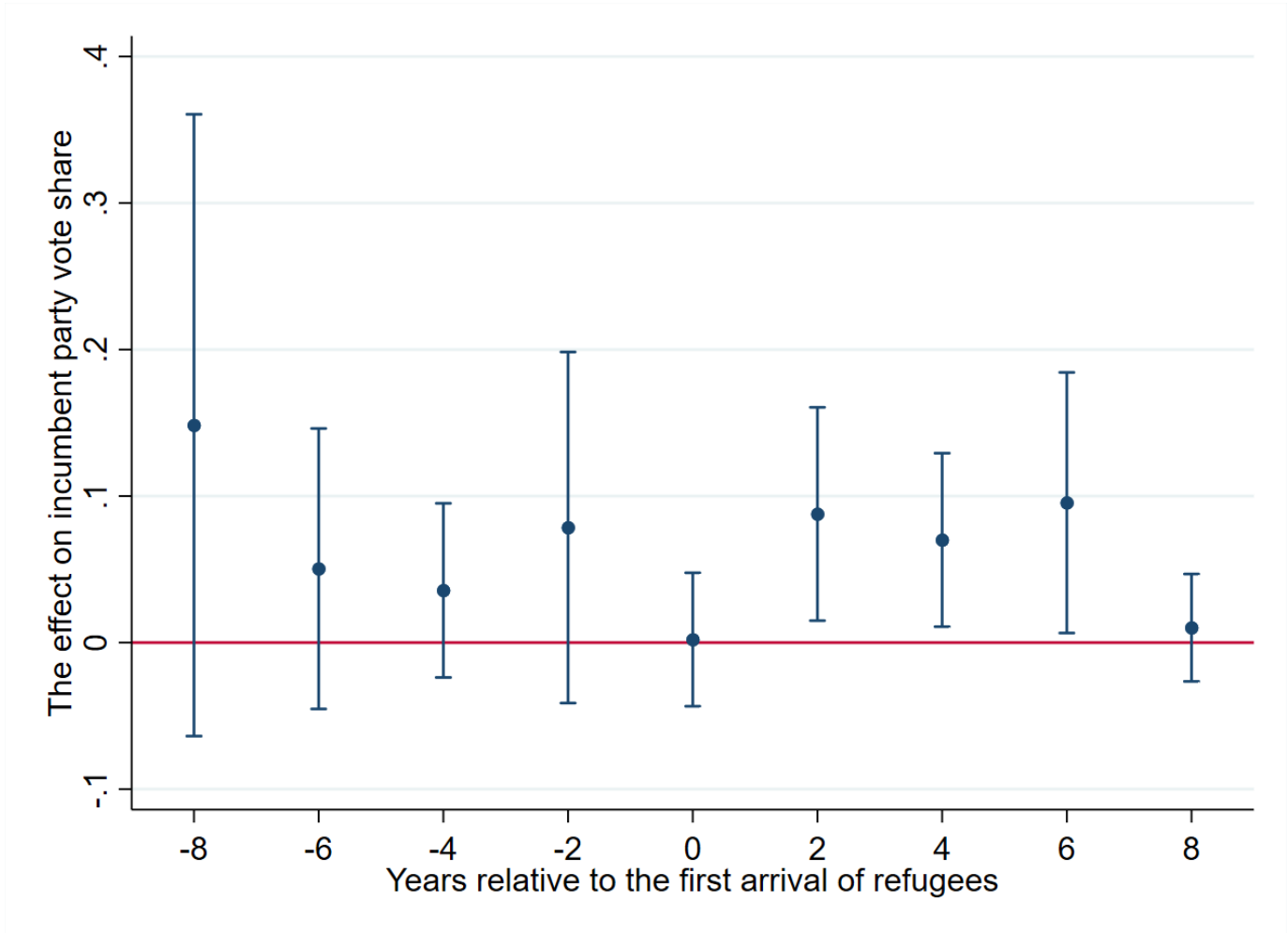


Figure A.6: Testing pre-trends for inclusive sample

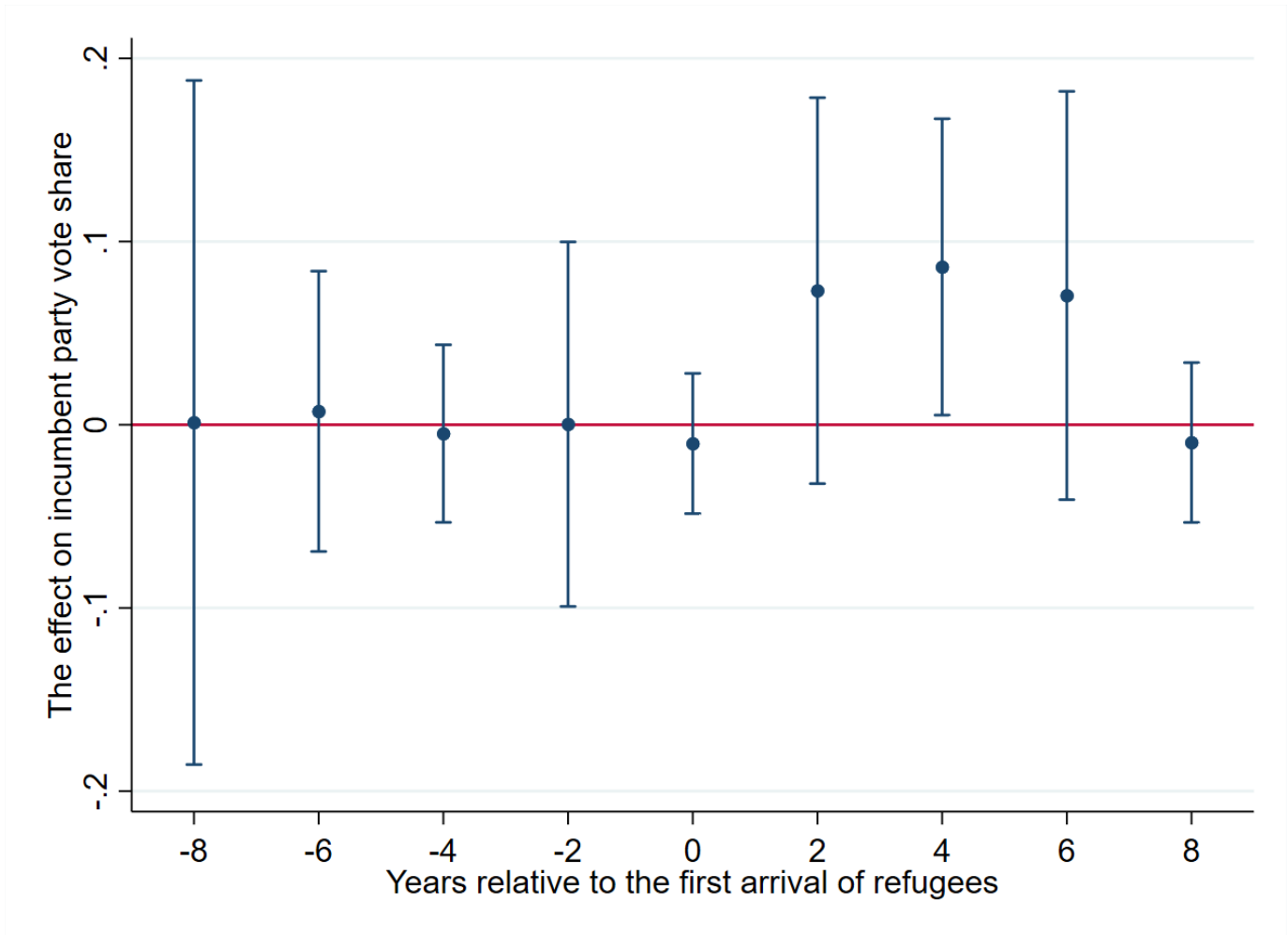
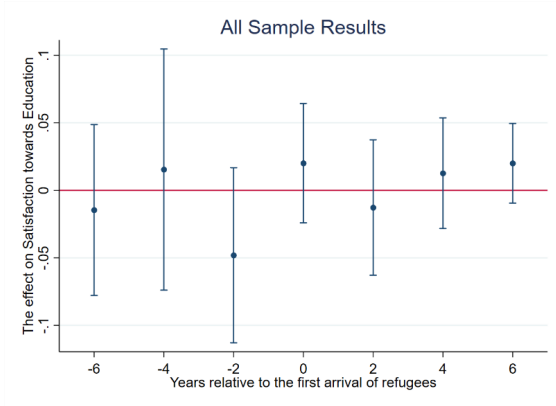
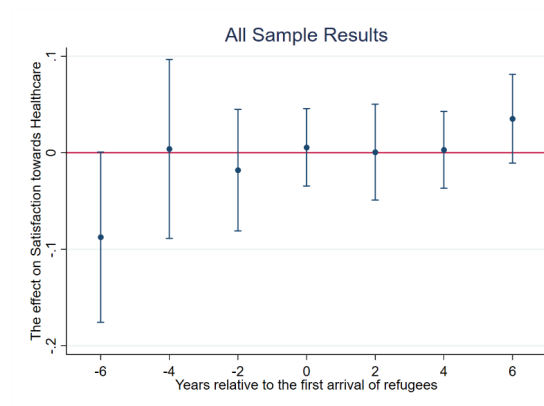


Figure A.7: Testing pre-trends for AB Channels I

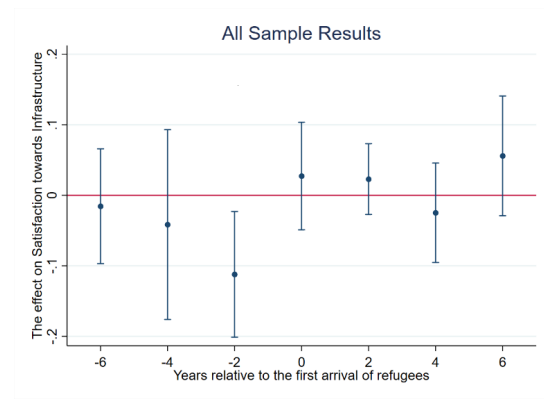
Panel A – Education



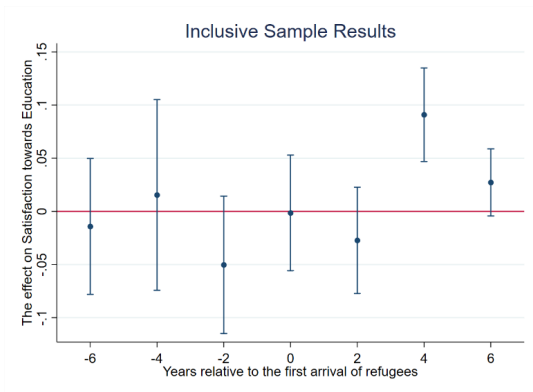
Panel B – Healthcare



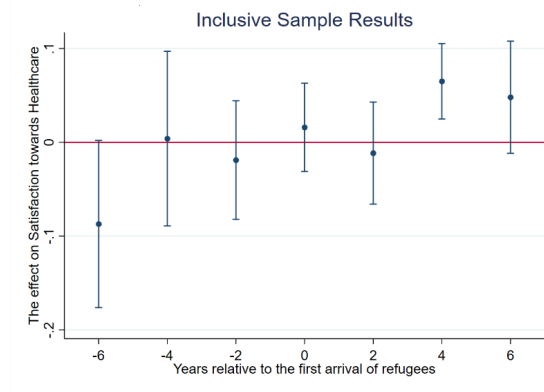
Panel C – Infrastructure



Inclusive Sample Results



Inclusive Sample Results



Inclusive Sample Results

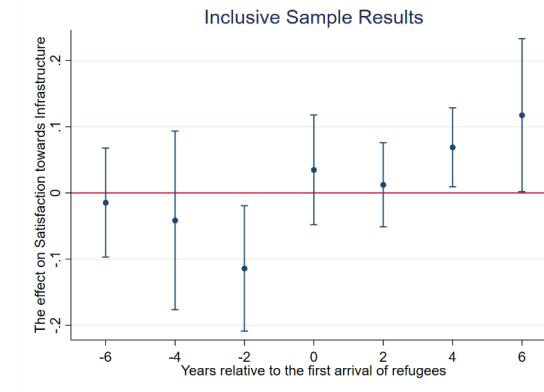
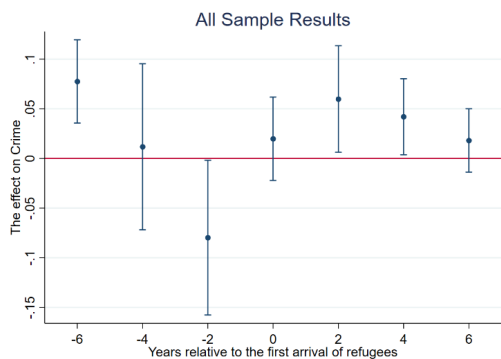
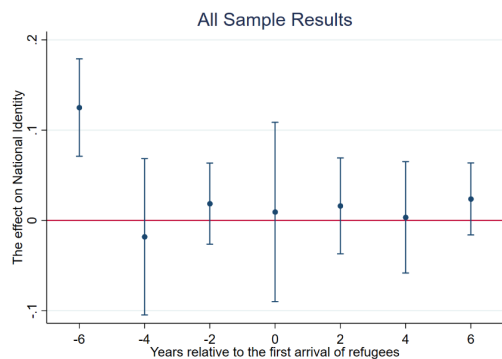


Figure A.8: Testing pre-trends for AB Channels II and Nightlights

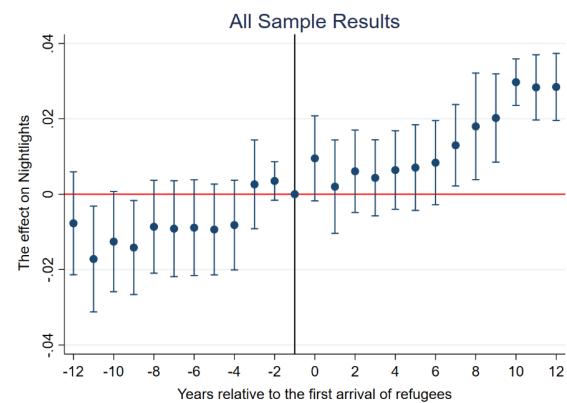
Panel A – Crime



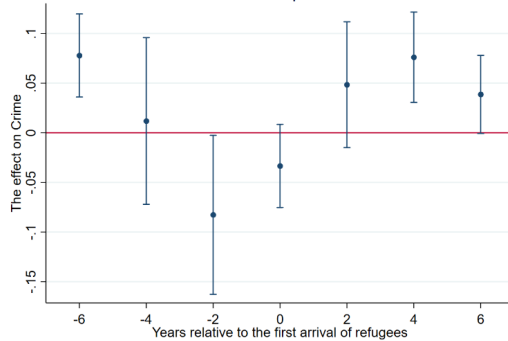
Panel B- National Identity



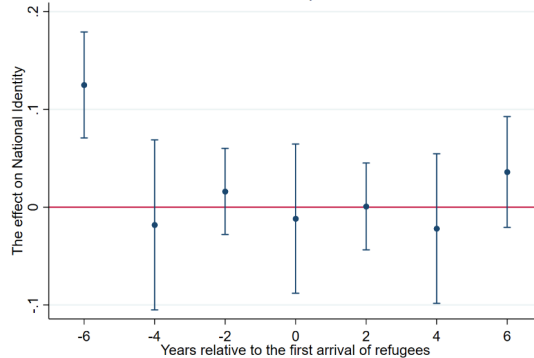
Panel C – Nightlights



Inclusive Sample Results



Inclusive Sample Results



Inclusive Sample Results

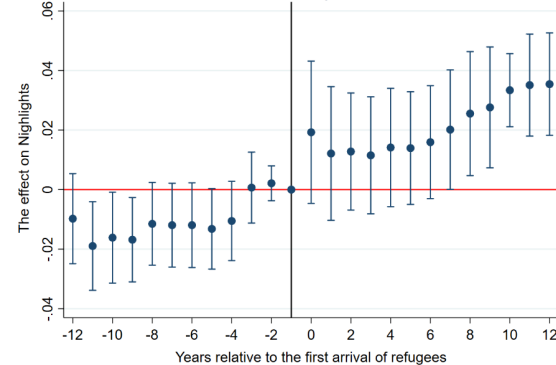
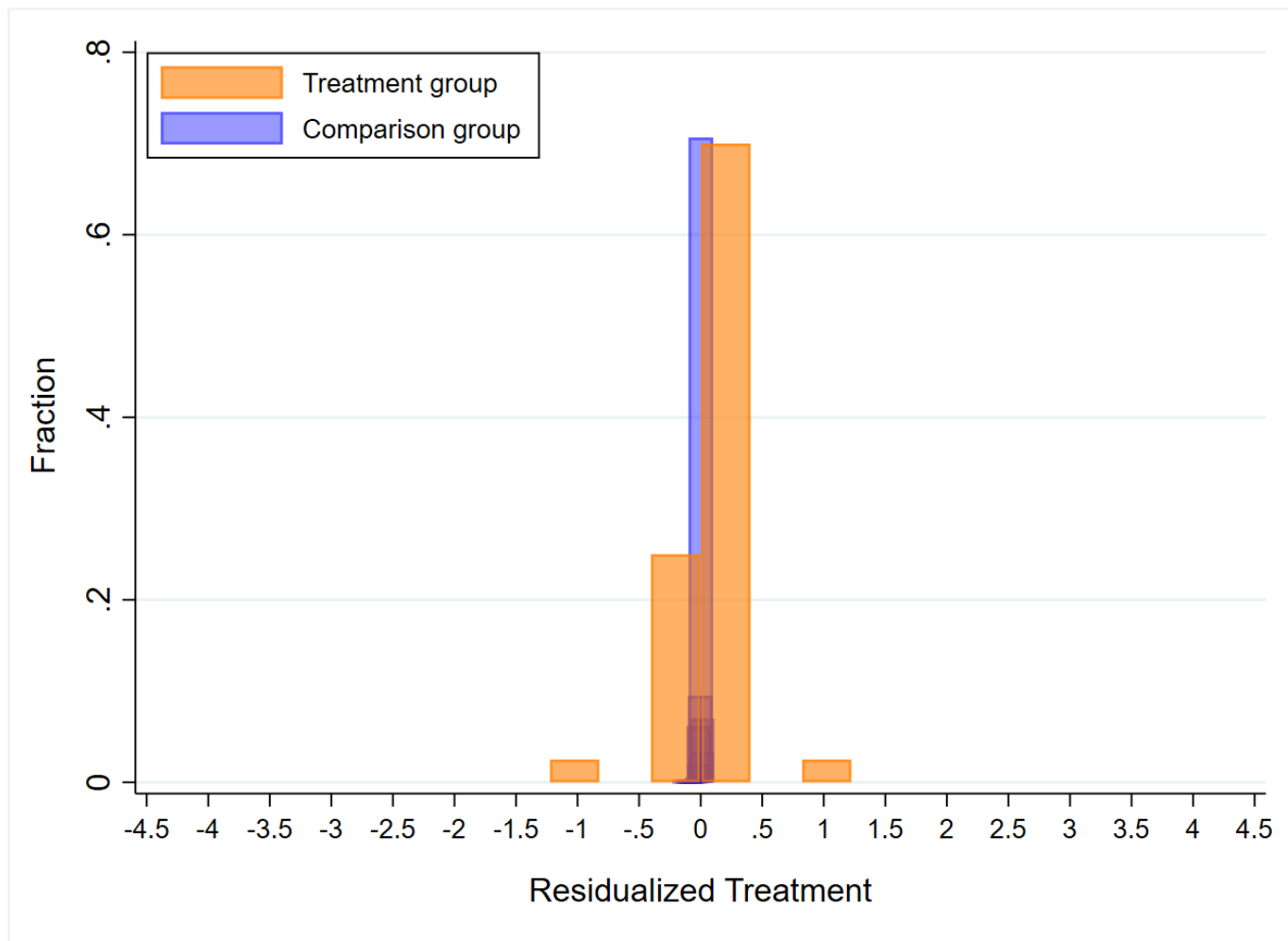
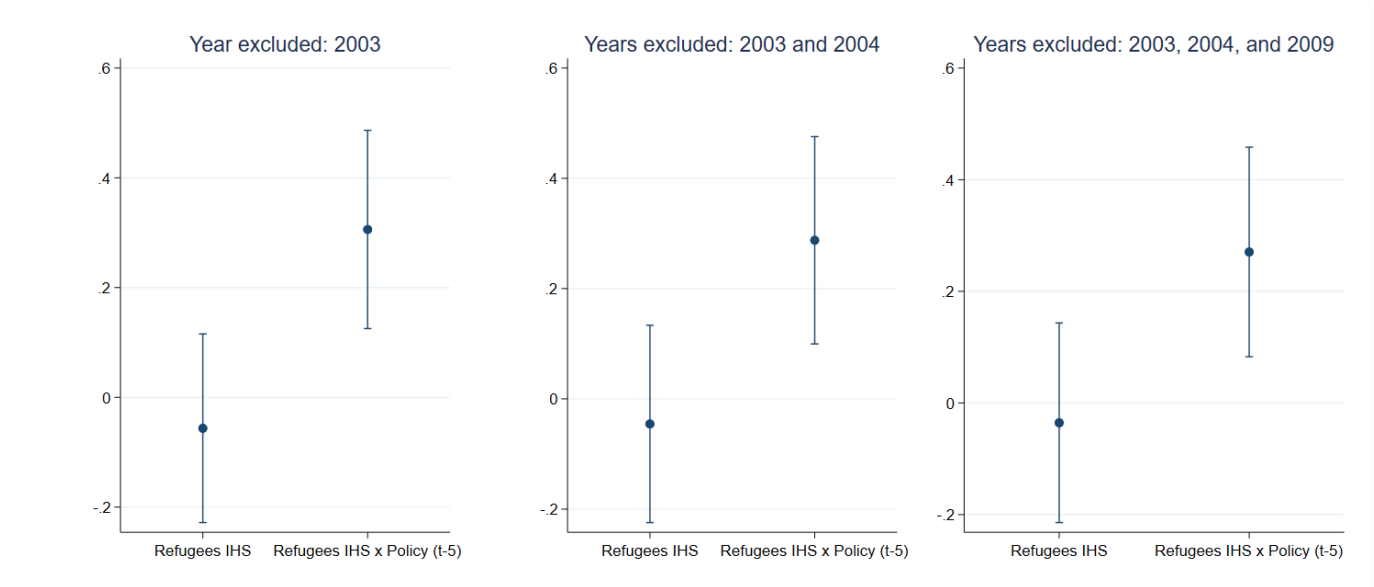


Figure A.9: Two-Way Fixed Effects Weights, by Treatment Status (Jakiela (2021))



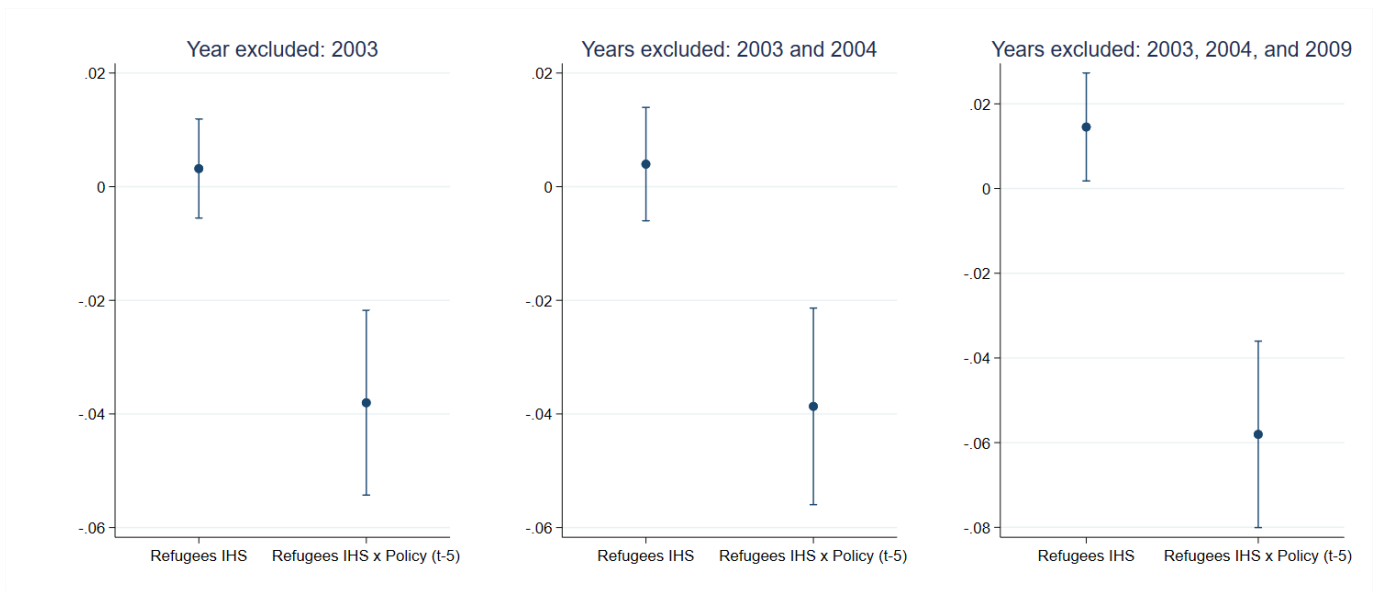
Note: Authors' own calculations.

Figure A.10: Robustness to exclusion of selected years for IPVS (Jakiela (2021))



Note: Authors' own calculations. The dependent variable is incumbent party vote share (IPVS). The estimates include year, GADM-1, and country-year fixed effects as well as time varying controls.

Figure A.11: Robustness to exclusion of selected years for PC (Jakiela (2021))



Note: Authors' own calculations. The dependent variable is political competition (PC). The estimates include year, GADM-1, and country-year fixed effects as well as time varying controls.

Table A.2: Effect of refugees on Incumbent support and Political competition (Using stock numbers)

	(1)	(2)	(3)	(4)
Panel A	Incumbent Party Vote Share			
IHS Refugee Ratio (at t-1)	0.1484 (0.1319)	0.0864 (0.1584)	0.0552 (0.0778)	-0.0409 (0.0835)
Elasticity	0.0025	0.0014	0.0010	-0.0007
IHS Refugee Ratio (at t-1) x Baseline Policy			0.3317*** (0.1167)	0.4532*** (0.0965)
Elasticity			0.0065	0.0081
Panel B	Political Competition			
IHS Refugee Ratio (at t-1)	-0.0175 (0.0241)	-0.0140 (0.0159)	-0.0098 (0.0073)	0.0010 (0.0040)
Elasticity	-0.0026	-0.0021	-0.0016	0.0001
IHS Refugee Ratio (at t-1) x Baseline Policy			-0.0274 (0.0676)	-0.0535*** (0.0091)
Elasticity			-0.0046	-0.0088
Observations	700	700	700	700
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Country-Year Fixed Effects	No	Yes	No	Yes
Time-varying controls	No	Yes	No	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level)

Table A.3: Gardner (2021) two-stage DID

Dep. var.	Incumbent Party Vote Share		
	Coefficient	SE	Obs
IHS Refugee Ratio (at t)	0.1032	(0.0765)	700
IHS Refugee Ratio (at t) x Baseline Policy	0.2192**	(0.1169)	700
Dep. var.	Political Competition		
	Coefficient	SE	Obs
IHS Refugee Ratio (at t)	-0.0442***	(0.0135)	700
IHS Refugee Ratio (at t) x Baseline Policy	-0.0727**	(0.0372)	700

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. All specifications include control variables, year, region (i.e., GADM-1), and country-year fixed effects. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level).

Table A.4: Robustness by urban, non-bordering regions and distance-to-capital

	(1)	(2)	(3)
	Incumbent Party Vote Share		
	Exclude urban regions	Exclude non-bordering regions	Distance-to-capital x Year
IHS Refugee Ratio	-0.0346 (0.0698)	-0.0628 (0.1326)	-0.0361 (0.1018)
IHS Refugee Ratio x Baseline Policy	1.3536** (0.6523)	0.2940** (0.1367)	0.2795*** (0.1042)
Observations	264	354	700
Year Fixed Effects	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes
Country-Year Fixed Effects	Yes	Yes	Yes
Time-varying controls	Yes	Yes	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. All specifications include control variables, year, region (i.e., GADM-1), and country-year fixed effects. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level).

Table A.5: Robustness by urban, non-bordering regions and distance-to-capital

	(1)	(2)	(3)
	Political Competition		
	Exclude urban regions	Exclude non-bordering regions	Distance-to-capital x Year
IHS Refugee Ratio	0.0014 (0.0038)	-0.0028 (0.0041)	0.0075 (0.0052)
IHS Refugee Ratio x Baseline Policy	-0.0562 (0.0386)	-0.0202*** (0.0051)	-0.0392*** (0.0081)
Observations	264	354	700
Year Fixed Effects	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes
Country-Year Fixed Effects	Yes	Yes	Yes
Time-varying controls	Yes	Yes	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. All specifications include control variables, year, region (i.e., GADM-1), and country-year fixed effects. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level).

Table A.6: Robustness by refugee-policy determinants

	(1)	(2)	(3)	(4)
	Incumbent Party Vote Share			
	Neighboring conflict (t-5) x Ref Pres	Aid I x Ref Pres	Aid II x Ref Pres	GDP x Ref Pres
IHS Refugee Ratio	-0.1050 (0.1053)	-0.0322 (0.0997)	-0.0328 (0.0994)	-0.0197 (0.0978)
IHS Refugee Ratio x Baseline Policy	0.3524*** (0.1056)	0.2921*** (0.1060)	0.2903*** (0.1099)	0.2740** (0.1011)
Observations	700	700	700	700
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Country-Year Fixed Effects	Yes	Yes	Yes	Yes
Time-varying controls	Yes	Yes	Yes	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. All specifications include control variables, year, region (i.e., GADM-1), and country-year fixed effects. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level).

Table A.7: Robustness by refugee-policy determinants

	(1)	(2)	(3)	(4)
	Political Competition			
	Neighboring conflict (t-5) x Ref Pres	Aid I x Ref Pres	Aid II x Ref Pres	GDP x Ref Pres
IHS Refugee Ratio	-0.0109 (0.0176)	0.0042 (0.0059)	0.0090 (0.0107)	-0.0008 (0.0056)
IHS Refugee Ratio x Baseline Policy	-0.0211 (0.0191)	-0.0364*** (0.0093)	-0.0297* (0.0156)	-0.0349*** (0.0080)
Observations	700	700	700	700
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Country-Year Fixed Effects	Yes	Yes	Yes	Yes
Time-varying controls	Yes	Yes	Yes	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. All specifications include control variables, year, region (i.e., GADM-1), and country-year fixed effects. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level).

Table A.8: Relationship between refugee camp opening and previous incumbent support

Dep. var.	Pr (Refugee Camp Opening) at t			
	Coefficient	SE	Obs	R-squared
Previous incumbent support (t-1)	0.0052	(0.0152)	471	0.98
Previous political competition (t-1)	-0.0066	(0.0146)	471	0.98

Note: Authors' own calculations. We regress probability of opening a refugee camp at time t in the GADM-1 region of interest on IPVS (and PC) at time t-1 (or, IPVS and PC in the previous election). To do so, we create a variable, previous IPVS and PC, and assign t-1 values of IPVS and PC. The specifications include year, GADM-1, and country-year fixed effects. We control for the peripheral areas by utilizing an indicator variable taking value of 1 if a GADM-1 region has a border to another country and 0 otherwise, distance to border, distance to capital, as well as conflict and climate controls. The standard errors clustered at the GADM-1 level.

Table A.9: Relationship between refugee camp opening and previous incumbent support

Dep. var.	Pr (Refugee Camp Opening) at t			
	Coefficient	SE	Obs	R-squared
Previous incumbent support	0.0302	(0.0549)	471	0.97
Previous incumbent support x Baseline Policy	-0.0541	(0.0969)	471	0.97
Previous political competition	-0.1204	(0.4297)	471	0.97
Previous political competition x Baseline Policy	0.1136	(0.4228)	471	0.97

Note: Authors' own calculations. We regress probability of opening a refugee camp at time t in the GADM-1 region of interest on IPVS (and PC) at time t-1 (or, IPVS and PC in the previous election). To do so, we create a variable, previous IPVS and PC, and assign t-1 values of IPVS and PC. The specifications include year, GADM-1, and country-year fixed effects. We control for the peripheral areas by utilizing an indicator variable taking value of 1 if a GADM-1 region has a border to another country and 0 otherwise, distance to border, distance to capital, as well as conflict and climate controls. The standard errors clustered at the GADM-1 level.

Table A.10: Summary robustness checks table for Incumbent Party  
Vote Share

	(1)	(2)	(3)	(4)
Panel A	All countries included			
IHS Refugee Ratio (at t)	0.1857*	0.1191	0.0593	-0.0353
	(0.1041)	(0.1262)	(0.0974)	(0.0992)
Elasticity	0.0032	0.0021	0.00103	-0.0006
IHS Refugee Ratio (at t) x Baseline Policy			0.2328**	0.2844***
			(0.0655)	(0.0668)
Elasticity			0.0044	0.0047
Observations	791	791	791	791
Panel B	Non-IHS refugee ratio			
Refugee Ratio (at t)	0.1391	0.0765	0.0430	-0.0405
	(0.0910)	(0.1098)	(0.0622)	(0.0624)
Refugee Ratio (at t) x Baseline			0.2156***	0.2627***
			(0.0655)	(0.0668)
Observations	700	700	700	700
Panel C	Log (x+1) refugee ratio			
Ln Refugee Ratio (at t)	0.2671**	0.1705	0.1217	-0.0312
	(0.1221)	(0.1577)	(0.1557)	(0.1576)
Ln Refugee Ratio (at t) x Baseline Policy			0.2478	0.3438**
			(0.1592)	(0.1628)
Observations	700	700	700	700
Panel D	Placebo exercise			
IHS Refugee Ratio (at t+1)	0.0055	-0.1291	0.0724	-0.0344
	(0.1349)	(0.1616)	(0.1316)	(0.1326)
Elasticity	8.97e-05	-0.0021	0.0013	-0.0006
IHS Refugee Ratio (at t+1) x Baseline Policy			-0.7541	-1.0748
			(0.6127)	(0.7028)
Elasticity			-0.0135	-0.0202
Observations	700	700	700	700
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Country-Year Fixed Effects	No	Yes	No	Yes
Time-varying controls	No	Yes	No	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level).

Table A.11: Summary robustness checks table for Political Competition

	(1)	(2)	(3)	(4)
Panel A	All countries included			
IHS Refugee Ratio (at t)	-0.0286 (0.0246)	-0.0171 (0.0135)	0.0068 (0.0096)	0.0035 (0.0049)
Elasticity	-0.0050	0.0012	-0.0030	0.0006
IHS Refugee Ratio (at t) x Baseline Policy			-0.0653*** (0.0204)	-0.0379*** (0.0085)
Elasticity			-0.0114	-0.0066
Observations	791	791	791	791
Panel B	Non-IHS refugee ratio			
Refugee Ratio (at t)	-0.0272 (0.0175)	-0.0124 (0.0117)	-0.0076 (0.0065)	0.0023 (0.0035)
Refugee Ratio (at t) x Baseline Policy			-0.0440*** (0.0148)	-0.0330*** (0.0066)
Observations	700	700	700	700
Panel C	Log (x+1) refugee ratio			
Ln Refugee Ratio (at t)	-0.0458* (0.0259)	-0.0228 (0.0168)	-0.0118 (0.0133)	0.0055 (0.0079)
Ln Refugee Ratio (at t) x Baseline Policy			-0.0579** (0.0265)	-0.0482*** (0.0116)
Observations	700	700	700	700
Panel D	Placebo exercise			
IHS Refugee Ratio (at t+1)	-0.0053 (0.0278)	0.0135 (0.0152)	-0.0064 (0.0117)	0.0056 (0.0119)
Elasticity	-0.0007	0.0019	-0.0010	0.0021
IHS Refugee Ratio (at t+1) x Baseline Policy			0.0130 (0.2863)	0.0892* (0.0468)
Elasticity			0.0021	0.0017
Observations	700	700	700	700
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Country-Year Fixed Effects	No	Yes	No	Yes
Time-varying controls	No	Yes	No	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level).

Table A.12: Results by 5 Policy Components

	(1)	(2)	(3)	(4)	(5)
Dep Var	Incumbent Party Vote Share (IPVS)				
	Access	Service	Livelihood	Movement	Participation
Panel A	With GADM-1 and Year FEs				
IHS Refugee Ratio (at t)	0.0791 (0.1024)	0.0879 (0.1070)	0.0786 (0.1013)	0.0411 (0.0830)	0.0727 (0.0984)
IHS Refugee Ratio (at t) x Baseline Policy	0.2019* (0.1055)	0.1851* (0.1098)	0.2027* (0.1036)	0.2711*** (0.0930)	0.2134** (0.1016)
Panel B	With GADM-1, Year FEs, and Country-Year FEs				
IHS Refugee Ratio (at t)	-0.0330 (0.1008)	-0.0225 (0.1067)	-0.0269 (0.1039)	-0.0626 (0.0851)	-0.0350 (0.0998)
IHS Refugee Ratio (at t) x Baseline Policy	0.2785*** (0.1050)	0.2584** (0.1118)	0.2670** (0.1085)	0.3320*** (0.0924)	0.2816*** (0.1039)
Observations	700	700	700	700	700

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. Panel A includes GADM-1 and year FEs while Panel B introduces country-year FEs in addition to GADM-1 and year FEs. The standard errors are clustered at the region level (i.e., GADM-1 level)

Table A.13: Summary robustness checks table for Incumbent Party Vote Share (Using stock numbers)

	(1)	(2)	(3)	(4)
Panel A	All countries included			
IHS Refugee Ratio (at t-1)	0.1291 (0.1302)	0.0867 (0.1583)	0.0295 (0.0704)	-0.0402 (0.0835)
Elasticity	0.0021	0.0014	0.0005	-0.0007
IHS Refugee Ratio (at t-1) x Baseline Policy			0.3558*** (0.1137)	0.4528*** (0.0963)
Elasticity			0.0064	0.0075
Observations	791	791	791	791
Panel B	Non-IHS refugee ratio			
Refugee Ratio (at t-1)	0.0844 (0.0926)	0.0382 (0.1097)	0.0307 (0.0483)	-0.0406 (0.0509)
Refugee Ratio (at t-1) x Baseline Policy			0.3405*** (0.0923)	0.4330*** (0.0679)
Observations	700	700	700	700
Panel C	Log (x+1) refugee ratio			
Ln Refugee Ratio (at (t-1))	0.1949 (0.1725)	0.1452 (0.2148)	0.0918 (0.1238)	-0.0384 (0.1347)
Ln Refugee Ratio (at (t-1)) x Baseline Policy			0.3647** (0.1732)	0.5381*** (0.1487)
Observations	700	700	700	700
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Country-Year Fixed Effects	No	Yes	No	Yes
Time-varying controls	No	Yes	No	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level).

Table A.14: Summary robustness checks table for Political Competition (Using stock numbers)

	(1)	(2)	(3)	(4)
Panel A	All countries included			
IHS Refugee Ratio (at t-1)	-0.0008 (0.0285)	-0.0131 (0.0158)	0.0093 (0.0111)	0.0020 (0.0037)
Elasticity	-0.0001	-0.0021	0.0016	0.0003
IHS Refugee Ratio (at t-1) x Baseline Policy			-0.0362 (0.1137)	-0.0539*** (0.0963)
Elasticity			-0.0062	-0.0094
Observations	791	791	791	791
Panel B	Non-IHS refugee ratio			
Refugee Ratio (at t-1)	-0.0084 (0.0170)	-0.0081 (0.0110)	-0.0072 (0.0053)	0.0009 (0.0027)
Refugee Ratio (at t-1) x Baseline Policy			-0.0310 (0.0616)	-0.0511*** (0.0080)
Observations	700	700	700	700
Panel C	Log (x+1) refugee ratio			
Ln Refugee Ratio (at (t-1))	-0.0096 (0.0402)	-0.0195 (0.2148)	-0.0130 (0.0103)	0.0012 (0.0059)
Ln Refugee Ratio (at (t-1)) x Baseline Policy			-0.0204 (0.0920)	-0.0634*** (0.0121)
Observations	700	700	700	700
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Country-Year Fixed Effects	No	Yes	No	Yes
Time-varying controls	No	Yes	No	Yes

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ), all for two-sided hypothesis tests. Control variables at the GADM 1 level are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The standard errors are clustered at the region level (i.e., GADM-1 level).

Table A.15: Afrobarometer Questions and Round Availability

Question	Response	Rounds
<b>Performance of President</b>		
<i>Do you approve or disapprove of the way the following people have performed their jobs over the past twelve months, or haven't you heard enough about them to say: President</i>	0=Unsatisfied/Disapprove, 1=Satisfied/Approved	1-6
<b>Performance of Parliament</b>		
<i>Do you approve or disapprove of the way the following people have performed their jobs over the past twelve months, or haven't you heard enough about them to say: Your Member of Parliament?</i>	0=Unsatisfied/Disapprove, 1=Satisfied/Approved	1-6
<b>Trust in President</b>		
<i>How much do you trust each of the following, or haven't you heard enough about them to say: The President?</i>	0=Do not Trust, 1=Trust	1-6
<b>Trust in Parliament</b>		
<i>How much do you trust each of the following, or haven't you heard enough about them to say: The Parliament?</i>	0=Do not Trust, 1=Trust	2-6

### **Addressing Educational Needs**

*How well or badly would you say the current government is handling the following matters, or haven't you heard enough about them to say: Addressing educational needs?*

0=Not handling well, 1=Handling well 1-6

---

### **Improving Basic Health Services**

*How well or badly would you say the current government is handling the following matters, or haven't you heard enough about them to say: Improving basic health services?*

0=Not handling well, 1=Handling well 1-6

---

### **Maintaining Roads and Bridges**

*How well or badly would you say the current government is handling the following matters, or haven't you heard enough to say: Maintaining roads and bridges?*

0=Not handling well, 1=Handling well 3-6

---

### **Ability to Reduce Crime**

*How well or badly would you say the current government is handling the following matters, or haven't you heard enough about them to say: Reducing crime?*

0=Not handling well, 1=Handling well 1-6

---

### **National Identity**

*Let us suppose that you had to choose between being a [National identity] and being a [Ethnic identity]. Which of these two groups do you feel most strongly attached to?*

0=Not handling well

---

Table A.16: Government performance indicators and trust (Two-year window, Different buffers)

	(1)	(2)	(3)	(4)	(5)
	Refugees IHS		Refugees IHS x Baseline Policy		Obs
	Coef	SE	Coef	SE	N
President performance (80 km)	-0.3051	(0.3421)	0.3295	(0.3443)	43,095
Parliament performance (80 km)	-0.1122	(0.1792)	0.1032	(0.1820)	38,340
President trust (80 km)	-0.1682	(0.1645)	0.1907	(0.1669)	43,356
Parliament trust (80 km)	-0.0262	(0.1160)	0.0531	(0.1190)	39,476
President performance (120 km)	-0.4052	(0.2520)	0.4734*	(0.2554)	43,095
Parliament performance (120 km)	0.0009	(0.1315)	-0.0059	(0.1342)	38,340
President trust (120 km)	-0.2352*	(0.1310)	0.2684**	(0.1334)	43,356
Parliament trust (120 km)	-0.0416	(0.0662)	0.0662	(0.0700)	39,476
President performance (200 km)	-0.1714***	(0.0337)	0.2129***	(0.0502)	43,095
Parliament performance (200 km)	-0.0779*	(0.0402)	0.0732	(0.0487)	38,340
President trust (200 km)	-0.0459*	(0.0263)	0.0817**	(0.0355)	43,356
Parliament trust (200 km)	-0.0231	(0.0355)	0.0630	(0.0422)	39,476
Year Fixed Effects	Yes	Yes	Yes	Yes	
Cluster Fixed Effects	Yes	Yes	Yes	Yes	
Time-varying controls	Yes	Yes	Yes	Yes	
Country-Year Fixed Effects	Yes	Yes	Yes	Yes	

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ). Control variables at the individual level are (1) age and age square, (2) sex, (3) education status, and (4) rural versus urban residence. Control variables are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The robust standard errors are clustered at the cluster level.

Table A.17: Summary Table for Mechanisms without Controls (150 km buffer)

	(1)	(2)	(3)	(4)	(5)
	Refugees IHS		Refugees IHS x Baseline Policy		Obs
	Coef	SE	Coef	SE	N
<b><u>Public goods</u></b>					
Educational needs	-0.1637***	(0.0529)	0.1348**	(0.0582)	40,652
Improving healthcare	-0.2266***	(0.0512)	0.2326***	(0.0570)	40,696
Infrastructural maintenance	-0.4675**	(0.2052)	0.4541**	(0.2085)	30,233
Reducing crime	-0.1272***	(0.0328)	0.1701***	(0.0442)	40,137
<b><u>Identity</u></b>					
National identity	0.0702**	(0.0296)	-0.0426	(0.0418)	39,222
<b><u>Economic Development</u></b>					
Nightlights	-0.3901***	(0.0889)	0.4019***	(0.0922)	27,235
Year Fixed Effects	Yes	Yes	Yes	Yes	
Cluster Fixed Effects	Yes	Yes	Yes	Yes	
Country-Year Fixed Effects	Yes	Yes	Yes	Yes	
Time-varying controls	No	No	No	No	

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ). The robust standard errors are clustered at the cluster level.

Table A.18: Summary Table for Mechanisms with controls and fixed effects (80 km buffer)

	(1)	(2)	(3)	(4)	(5)
	Refugees IHS		Refugees IHS x Baseline Policy		Obs
	Coef	SE	Coef	SE	N
<b><u>Public goods</u></b>					
Educational needs	-0.4788*	(0.2454)	0.4763*	(0.2480)	39,960
Improving healthcare	-0.3397	(0.2622)	0.3603	(0.2645)	40,006
Infrastructural maintenance	-0.0671*	(0.0352)	0.0961***	(0.0363)	29,825
Reducing crime	-0.0656	(0.1700)	0.1493	(0.1735)	39,464
<b><u>Identity</u></b>					
National identity	0.1418	(0.1745)	-0.0722	(0.1774)	38,627
<b><u>Economic Development</u></b>					
Nightlights	-0.2637***	(0.0801)	0.2212**	(0.0898)	22,669
Year Fixed Effects	Yes	Yes	Yes	Yes	
Cluster Fixed Effects	Yes	Yes	Yes	Yes	
Country-Year Fixed Effects	Yes	Yes	Yes	Yes	
Time-varying controls	Yes	Yes	Yes	Yes	

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ). Control variables at the individual level are (1) age and age square, (2) sex, (3) education status, and (4) rural versus urban residence. Control variables are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The robust standard errors are clustered at the cluster level.

Table A.19: Summary Table for Mechanisms with Controls and FEs (120 km buffer)

	(1)	(2)	(3)	(4)	(5)
	Refugees IHS		Refugees IHS x Baseline Policy		Obs
	Coef	SE	Coef	SE	N
<b><u>Public goods</u></b>					
Educational needs	-0.2887	(0.2015)	0.2775	(0.2035)	39,960
Improving healthcare	-0.2456	(0.1968)	0.2648	(0.1988)	40,696
Infrastructural maintenance	-1.2006***	(0.1311)	1.2238***	(0.1369)	29,825
Reducing crime	-0.1408	(0.0980)	0.2227**	(0.1022)	39,464
<b><u>Identity</u></b>					
National identity	0.0420	(0.0931)	-0.0029	(0.0989)	38,627
<b><u>Economic Development</u></b>					
Nightlights	-0.2779***	(0.1054)	0.3007***	(0.1054)	26,669
Year Fixed Effects	Yes	Yes	Yes	Yes	
Cluster Fixed Effects	Yes	Yes	Yes	Yes	
Country-Year Fixed Effects	Yes	Yes	Yes	Yes	
Time-varying controls	Yes	Yes	Yes	Yes	

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ). Control variables at the individual level are (1) age and age square, (2) sex, (3) education status, and (4) rural versus urban residence. Control variables are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The robust standard errors are clustered at the cluster level.

Table A.20: Summary Table for Mechanisms with Controls and FEs (200 km buffer)

	(1)	(2)	(3)	(4)	(5)
	Refugees IHS		Refugees IHS x Baseline Policy		Obs
	Coef	SE	Coef	SE	N
<b><u>Public goods</u></b>					
Educational needs	-0.1178***	(0.0303)	0.1070**	(0.0432)	39,960
Improving healthcare	-0.1230***	(0.0442)	0.1354**	(0.0548)	40,006
Infrastructural maintenance	-0.1689	(0.1301)	0.1457	(0.1364)	29,825
Reducing crime	-0.0855***	(0.0297)	0.1198***	(0.0461)	39,464
<b><u>Identity</u></b>					
National identity	0.0147	(0.0314)	-0.0218	(0.0424)	38,627
<b><u>Economic Development</u></b>					
Nightlights	-0.1758**	(0.0828)	0.1008	(0.0948)	26,669
Year Fixed Effects	Yes	Yes	Yes	Yes	
Cluster Fixed Effects	Yes	Yes	Yes	Yes	
Country-Year Fixed Effects	Yes	Yes	Yes	Yes	
Time-varying controls	Yes	Yes	Yes	Yes	

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ). Control variables at the individual level are (1) age and age square, (2) sex, (3) education status, and (4) rural versus urban residence. Control variables are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The robust standard errors are clustered at the cluster level.

Table A.21: Living conditions and Income (150 km buffer)

	(1)	(2)	(3)	(4)	(5)
	Refugees IHS		Refugees IHS x Baseline Policy		Obs
	Coef	SE	Coef	SE	N
Better present living conditions	-0.2028*	(0.1083)	0..1749	(0.1160)	38,402
Ever gone without cash	0.1401***	(0.0478)	-0.1258**	(0.0519)	40,653
Year Fixed Effects	Yes	Yes	Yes	Yes	
Cluster Fixed Effects	Yes	Yes	Yes	Yes	
Country-Year Fixed Effects	Yes	Yes	Yes	Yes	
Time-varying controls	Yes	Yes	Yes	Yes	

Notes:\*\*\* denotes statistical significance at the 1 percent level ( $p < 0.01$ ), \*\* at the 5 percent level ( $p < 0.05$ ), and \* at the 10 percent level ( $p < 0.10$ ). Control variables at the individual level are (1) age and age square, (2) sex, (3) education status, and (4) rural versus urban residence. Control variables are as follows: (1) conflict incidence as measured by a dummy taking value of 1 if fatalities as a result of a conflict is greater than 0, and 0 otherwise, (2) mean temperature per land area and its square, and (3) mean precipitation per land area and its square. The robust standard errors are clustered at the cluster level.

Table A.22: Rationale for Determining the Incumbent Party in Angola

Country	Year	Election Type	Elected Party	Pty vote	Elected President	Pres vote	Incumbent	Notes
Angola	1999	General	Movimento Popular de Libertação de Angola (MPLA)	53.74%	José Eduardo dos Santos	49.56%	Movimento Popular de Libertação de Angola (MPLA)	In 1992, Angola held both presidential and parliamentary elections separately. José Eduardo dos Santos, the MPLA candidate, won the presidential election with 53.74% of the vote. The parliamentary elections were held under a proportional representation system, and the MPLA won 49.56% of the vote in those elections. The presidential and parliamentary vote shares are different because voters cast separate ballots for the president and for legislative representatives. Political affiliation of José Eduardo dos Santos is MPLA.
	2008	Parliamentary	Movimento Popular de Libertação de Angola (MPLA)	81.64%			Movimento Popular de Libertação de Angola (MPLA)	
	2012	General	Movimento Popular de Libertação de Angola (MPLA)	20.40%	José Eduardo dos Santos	71.84%	Movimento Popular de Libertação de Angola (MPLA)	In 2012, Angola used a proportional representation system for both presidential and parliamentary elections. José Eduardo dos Santos, the MPLA candidate, won 71.84% of the vote in both the presidential and parliamentary elections, which made their vote shares the same for both elections.
Benin	2007	Parliamentary	Forces Cauris pour un Bénin émergent (FCBE)	58.69%			Union pour le Bénin du futur (UBF)	In 2003, the ruling party was UBF. This is the main reason of UBF being incumbent in 2007 elections.
	2011	General	Forces Cauris pour un Bénin émergent (FCBE)	33.30%	Yaya Boni	53.14%	Forces Cauris pour un Bénin émergent (FCBE)	In 2007 parliamentary elections, the FCBE won the 35 of the 83 seats. Turnout was estimated at 58.690%. This is the main reason of the FCBE being incumbent in 2011 elections. Political affiliation of Yaya Boni is independent.
	2015	Parliamentary	Forces Cauris pour un Bénin émergent (FCBE)	30.19%			Forces Cauris pour un Bénin émergent (FCBE)	

Country	Year	Election Type	Elected Party	Party Voteshare	Elected President	President Vote-share	Incumbent	Notes
Botswana	1999	General	Botswana Democratic Party (BDP)	57.14%	Festus Mogae	57.14%	Botswana Democratic Party (BDP)	Political affiliation of Festus Mogae is BDP.
	2004	General	Botswana Democratic Party (BDP)	51.73%	Festus Mogae	51.73%	Botswana Democratic Party (BDP)	
	2009	General	Botswana Democratic Party (BDP)	53.26%	Ian Khama	53.26%	Botswana Democratic Party (BDP)	Political affiliation of Ian Khama is BDP.
	2014	General	Botswana Democratic Party (BDP)	46.45%	Ian Khama	46.45%	Botswana Democratic Party (BDP)	
Burkina Faso	2002	Parliamentary	Congrès pour la Démocratie et le Progrès (CDP)	49.52%			Congrès pour la Démocratie et le Progrès (CDP)	The president in 2002 elections was Blaise Compaoré whose political affiliation was CDP.
	2005	Presidential			Blaise Compaoré	80.35%	Congrès pour la Démocratie et le Progrès (CDP)	
	2007	Parliamentary	Congrès pour la Démocratie et le Progrès (CDP)	58.85%			Congrès pour la Démocratie et le Progrès (CDP)	
	2010	Presidential			Blaise Compaoré	80.21%	Congrès pour la Démocratie et le Progrès (CDP)	
	2012	Parliamentary	Congrès pour la Démocratie et le Progrès (CDP)	48.66%			Congrès pour la Démocratie et le Progrès (CDP)	
	2015	General	Mouvement du Peuple pour le Progrès (MPP)	53.49%	Roch Marc Christian Kaboré	53.49%	Congrès pour la Démocratie et le Progrès (CDP)	Political affiliation of Roch Marc Christian Kaboré is MPP.
Cameroon	1997	Presidential			Paul Biya	92.57%	Rassemblement démocratique du Peuple Camerounais (RDPC)	Political affiliation of Paul Biya was RDPC.

Country	Year	Election Type	Elected Party	Party Voteshare	Elected President	President Vote-share	Incumbent	Notes
	2002	Parliamentary	Rassemblement démocratique du Peuple Camerounais (RDPC)	NA				The president in 2002 elections was Paul Biya whose political affiliation was RDPC.
	2004	Presidential			Paul Biya	70.92%	Rassemblement démocratique du Peuple Camerounais (RDPC)	
	2007	Parliamentary	Rassemblement démocratique du Peuple Camerounais (RDPC)	67.30%			Rassemblement démocratique du Peuple Camerounais (RDPC)	
Djibouti	1999	Presidential			Ismail Omar Guelleh	74.02%	Rassemblement populaire pour le Progrès (RPP)	The incumbent party is RPP because in 1997 elections it was the winning party. Political affiliation of Ismail Omar Guelleh was RPP.
	2003	Parliamentary	Union pour la Majorité Présidentielle (UMP)	62.73%			Rassemblement populaire pour le Progrès (RPP)	UMP is a coalition that supports Ismail Omar Guelleh. The coalition is composed of four parties; the RPP, the FRUD, the PSD, and the UPR.
	2005	Presidential			Ismail Omar Guelleh	100%	Union pour la Majorité Présidentielle (UMP)	
	2008	Parliamentary	Union pour la Majorité Présidentielle (UMP)	94.06%			Rassemblement démocratique du Peuple Camerounais (RDPC)	
	2011	Presidential			Ismail Omar Guelleh	80.63%	Union pour la Majorité Présidentielle (UMP)	
	2008	Parliamentary	Union pour la Majorité Présidentielle (UMP)	61.50%			Union pour la Majorité Présidentielle (UMP)	
Gambia	2006	Presidential			Yahya Jammeh	67.30%	Alliance for Patriotic Re-orientation and Construction (APRC)	The incumbent party is APRC due to the fact that it was the winning party in previous (2002) parliamentary elections. Political affiliation of Yahya Jammeh was APRC.

Country	Year	Election Type	Elected Party	Party Voteshare	Elected President	President Vote-share	Incumbent	Notes
	2007	Parliamentary	Alliance for Patriotic Reorientation and Construction (APRC)	59.70%			Alliance for Patriotic Reorientation and Construction (APRC)	
	2011	Presidential			Yahya Jammeh	71.10%	Alliance for Patriotic Reorientation and Construction (APRC)	
	2012	Parliamentary	Alliance for Patriotic Reorientation and Construction (APRC)	51.82%			Alliance for Patriotic Reorientation and Construction (APRC)	
Ghana	1996	General	National Democratic Congress (NDC)	52.97%	Jerry Rawlings	57.40%	National Democratic Congress (NDC)	The incumbent party is NDC due to the fact that NDC winning the previous (1992) parliamentary elections. Political affiliation of Jerry Rawlings is NDC.
	2000	General	New Patriotic Party (NPP)	44.98%	John Kufuor	56.90%	National Democratic Congress (NDC)	Political affiliation of John Kufuor is NPP.
	2004	General	New Patriotic Party (NPP)	49.04%	John Kufuor	52.45%	New Patriotic Party (NPP)	
	2008	General	National Democratic Congress (NDC)	44.17%	John Atta Mills	50.20%	New Patriotic Party (NPP)	Political affiliation of John Atta Mills is NDC.
	2012	General	National Democratic Congress (NDC)	46.41%	John Mahama	50.70%	National Democratic Congress (NDC)	Political affiliation of John Atta Mills is NDC.
	2016	General	New Patriotic Party (NPP)	52.48%	Nana Akufo-Addo	53.72%	National Democratic Congress (NDC)	Political affiliation of Nana Akufo-Addo is NPP.

Country	Year	Election Type	Elected Party	Party Voteshare	Elected President	President Vote-share	Incumbent	Notes
Guinea Bissau	1999	General	Partido da Renovação Social (PRS)	29.71%	Kumba Lalá	72.00%	Partido Africano da Independência de Guiné e Cabo Verde (PAIGC)	The incumbent party is PAIGC due to the fact that PAIGC winning the previous (1994) parliamentary elections. Political affiliation of Kumba Lalá is PRS.
	2004	Parliamentary	Partido Africano da Independência de Guiné e Cabo Verde (PAIGC)	33.88%			Partido da Renovação Social (PRS)	Political affiliation of John Kufuor is NPP.
	2008	Parliamentary	Partido Africano da Independência de Guiné e Cabo Verde (PAIGC)	49.52%			Partido Africano da Independência de Guiné e Cabo Verde (PAIGC)	
	2014	General	Partido Africano da Independência de Guiné e Cabo Verde (PAIGC)	47.98%	José Mário Vaz	50.70%	Partido Africano da Independência de Guiné e Cabo Verde (PAIGC)	Political affiliation of José Mário Vaz Mills is PAIGC.
Kenya	1997	General	Kenya African National Union (KANU)	NA	Daniel Arap Moi	40.40%	Kenya African National Union (KANU)	The incumbent party is KANU due to the fact that KANU winning the previous (1992) parliamentary elections. Political affiliation of Daniel Arap Moi is KANU.
	2002	General	National Rainbow Coalition (NARC)	61.00%	Mwai Kibaki	62.20%	Kenya African National Union (KANU)	Political affiliation of Mwai Kibaki is NARC.
	2007	General	Party of National Unity (PNU)	46.42%	Mwai Kibaki	46.42%	National Rainbow Coalition (NARC)	The Party of National Unity (PNU) is a political party in Kenya originally founded as a political coalition. In 2007, Kenyan President Mwai Kibaki announced the party's formation and declared that he would run as its presidential candidate in the 2007 Kenyan elections.
	2013	General	The National Alliance	47.98%	Uhuru Kenyatta	50.51%	National Rainbow Coalition (NARC)	Political affiliation of Uhuru Kenyatta is the National Alliance.

Country	Year	Election Type	Elected Party	Party Voteshare	Elected President	President Vote-share	Incumbent	Notes
Liberia	1997	General	National Patriotic Party (NPP)	75.33%	Charles Taylor	75.33%	National Democratic Party of Liberia (NDPL)	The incumbent party is NDPL due to the fact that KANU winning the previous (1985) general elections. Political affiliation of Charles Taylor is NPP.
	2005	General	Unity Party (UP)	59.40%	Ellen Johnson Sirleaf	59.40%	National Patriotic Party (NPP)	Political affiliation of Ellen Johnson Sirleaf is UP.
	2011	General	Unity Party (UP)	46.42%	Ellen Johnson Sirleaf	17.76%	Unity Party (UP)	
Malawi	1999	General	United Democratic Front (UDF)	47.32%	Bakili Muluzi	52.38%	United Democratic Front (UDF)	The incumbent party is UDF due to the fact that UDF winning the previous (1994) general elections. Political affiliation of Bakili Muluzi is UDF.
	2004	General	United Democratic Front (UDF)	25.34%	Bingu wa Mutharika	35.97%	United Democratic Front (UDF)	Political affiliation of Bingu wa Mutharika is UDF.
	2009	General	Democratic Progressive Party (DPP)	39.99%	Bingu wa Mutharika	66.17%	Unity Party (UP)	
	2014	General	Democratic Progressive Party (DPP)	21.98%	Peter Mutharika	36.42%	Democratic Progressive Party (DPP)	Political affiliation of Peter Mutharika is DPP.
Mozambique	1999	General	Mozambique Liberation Front (FRELIMO)	48.54%	Joaquim Chissano	52.29%	Mozambique Liberation Front (FRELIMO)	The incumbent party is FRELIMO due to the fact that FRELIMO winning the previous (1994) general elections. Political affiliation of Joaquim Chissano is FRELIMO.
	2004	General	Mozambique Liberation Front (FRELIMO)	62.03%	Armando Guebuza	63.74%	Mozambique Liberation Front (FRELIMO)	Political affiliation of Armando Guebuza is FRELIMO.
	2009	General	Mozambique Liberation Front (FRELIMO)	74.66%	Armando Guebuza	75.01%	Mozambique Liberation Front (FRELIMO)	
	2014	General	Mozambique Liberation Front (FRELIMO)	55.68%	Filipe Nyusi	57.00%	Mozambique Liberation Front (FRELIMO)	Political affiliation of Filipe Nyusi is FRELIMO.

Country	Year	Election Type	Elected Party	Party Voteshare	Elected President	President Vote-share	Incumbent	Notes
Niger	1999	General	Mouvement National de la Societé de Développement(NASSARA)	34.65%	Olusegun Obasanjo	54.42%	Convention Démocratique et Sociale (RAHAMA)	The incumbent party is RAHAMA due to the fact that RAHAMA winning the previous (1993) general elections. Political affiliation of Olusegun Obasanjo is NASSARA.
	2004	General	Mouvement National de la Societé de Développement(NASSARA)	37.13%	Mamadou Tandja	65.33%	Mouvement National de la Societé de Développement(NASSARA)	Political affiliation of Mamadou Tandja is NASSARA.
	2011	General	Mouvement National de la Societé de Développement(NASSARA)	33.00%	Mahamadou Issoufou	58.04%	Mouvement National de la Societé de Développement(NASSARA)	Political affiliation of Mahamadou Issoufou is NASSARA.
	2016	General	Mouvement National de la Societé de Développement(NASSARA)	35.73%	Mahamadou Issoufou	92.49%	Mouvement National de la Societé de Développement(NASSARA)	
Senegal	2007	General	SOPI Coalition	69.21%	Abdoulaye Wade	55.90%	Senegalese Democratic Party (PDS)	The incumbent party is RAHAMA due to the fact that PDS winning the previous (2001) parliamentary elections. Political affiliation of Abdoulaye Wade is Senegalese Democratic Party (PDS). The Sopi Coalition was the ruling political alliance in Senegal under Abdoulaye Wade's presidency. It included the Senegalese Democratic Party (PDS) along with several smaller parties. Wade served as the Secretary-General of the PDS
	2012	General	SOPI Coalition	37.13%	Macky Sall	65.80%	SOPI Coalition	Political affiliation of Macky Sall is Alliance for the Republic-Yakaar (APR).
Sierra Leone	2007	General	All People's Congress (APC)	40.73%	Ernest Bai Koroma	54.62%	Sierra Leone People's Party (SLPP)	The incumbent party is SLPP due to the fact that SLPP winning the previous (2002) general elections. Political affiliation of Ernest Bai Koroma is APC.
	2007	General	All People's Congress (APC)	53.67%	Ernest Bai Koroma	58.65%	All People's Congress (APC)	
Tanzania	2005	General	Chama cha Mapinduzi (CCM)	69.99%	Jakaya Kikwete	80.28%	Chama cha Mapinduzi (CCM)	The incumbent party is CCM due to the fact that CCM winning the previous (2000) general elections. Political affiliation of Jakaya Kikwete is CCM..

Country	Year	Election Type	Elected Party	Party Voteshare	Elected President	President Vote-share	Incumbent	Notes
	2015	General	Chama cha Mapinduzi (CCM)	55.06%	John Magufuli	58.46%	Chama cha Mapinduzi (CCM)	Political affiliation of Jakaya Kikwete is CCM.
Uganda	2006	General	National Resistance Movement (NRM)	NA	Yoweri Museveni	59.26%	National Resistance Movement (NRM)	The incumbent party is NRM due to the fact that NRM winning the previous (2001) general elections. Political affiliation of Yoweri Museveni is NRM. NRM won 213 seats out of 319 in the parliament.
	2011	General	National Resistance Movement (NRM)	51.56%	Yoweri Museveni	68.38%	National Resistance Movement (NRM)	
	2016	General	National Resistance Movement (NRM)	49.95%	Yoweri Museveni	60.62%	National Resistance Movement (NRM)	
Zambia	2001	General	Movement for Multiparty Democracy (MMD)	28.02%	Levy Mwanawasa	59.26%	Movement for Multiparty Democracy (MMD)	The incumbent party is MMD due to the fact that MMD winning the previous (1996) general elections. Political affiliation of Levy Mwanawasa is MMD.
	2006	General	Movement for Multiparty Democracy (MMD)	39.05%	Levy Mwanawasa	42.98%	Movement for Multiparty Democracy (MMD)	
	2011	General	Patriotic Front (PF)	38.42%	Michael Sata	42.85%	Movement for Multiparty Democracy (MMD)	Political affiliation of Michael Sata is PF
	2016	General	Patriotic Front (PF)	42.01%	Edgar Lungu	50.35%	Patriotic Front (PF)	Political affiliation of Edgar Lungu is PF.
Zimbabwe	2005	Parliamentary	Zimbabwe African National Union-Patriotic Front (ZANU-PF)	59.59%			Zimbabwe African National Union-Patriotic Front (ZANU-PF)	The incumbent party is ZANU-PF due to the fact that ZANU-PF winning the previous (2000) parliamentary elections.
	2008	General	Zimbabwe African National Union-Patriotic Front (ZANU-PF)	45.84%	Robert Mugabe	90.22%	Zimbabwe African National Union-Patriotic Front (ZANU-PF)	Political affiliation of Robert Mugabe is ZANU-PF.

Country	Year	Election Type	Elected Party	Party Voteshare	Elected President	President Vote-share	Incumbent	Notes
	2013	General	Zimbabwe African National Union-Patriotic Front (ZANU-PF)	63.16%	Emmerson Mnangagwa	61.88%	Zimbabwe African National Union-Patriotic Front (ZANU-PF)	Political affiliation of Emmerson Mnangagwa is ZANU-PF.



CGIAR is a global research partnership for a food-secure future. CGIAR science is dedicated to transforming food, land, and water systems in a climate crisis. Its research is carried out by 13 CGIAR Centers/Alliances in close collaboration with hundreds of partners, including national and regional research institutes, civil society organizations, academia, development organizations and the private sector. [www.cgiar.org](http://www.cgiar.org)

The CGIAR Food Frontiers and Security Science Program is focused on building resilience in three key "frontier" food systems: fragile and conflict-affected settings, urban and peri-urban environments, and small island states. It generates research-based solutions to address the specific vulnerabilities of these systems, such as resource scarcity, climate risks, and food insecurity, working with diverse partners to create locally grounded, globally relevant, and equitable food systems for a sustainable and resilient future. <https://www.cgiar.org/cgiar-research-portfolio-2025-2030/food-frontiers-andsecurity/>