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Destroy and Build? Economic Effects of *Centres de Regroupement* in the Algerian War

Riga Qi

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Abstract

Urbanization is generally accompanied by development. However, whether abrupt unintended urbanization can stimulate future progress is an open question. The French government constructed thousands of *Centres de Regroupement* (resettlement centers) in Algeria during the Independence War, to which the army forcefully relocated around 2.5 million civilians. The policy took these civilians away from their previous agricultural lives, and concentrated them within prison camps. Using the heterogeneity in treatment across regions, Difference-in-Differences estimates show that the policy has a persistent negative impact on the population growth overall but a continuing positive impact on urbanization. To address the endogeneity, I use the facts that i) the army implemented the policy out of purely military concerns and ii) the whole process lacked coherent planning from the authority. The findings provide novel insights into the long-run economic impacts of unintended urbanization.

JEL-Classification: F54, J11, N47, O15.

Keywords: Colonial Policy, Forced Resettlement, Urbanization.

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^{*}CERGE-EI — a joint workplace of Charles University and the Economics Institute of the Czech Academy of Sciences, Politickych veznu 7, 111 21 Prague, Czech Republic, e-mail: riga.qi@cerge-ei.cz.

1. Introduction

Cities rarely emerge based on simple population concentration in random locations. The urban economics literature distinguishes between first-nature geography—natural advantages such as territorial features, climate, and/or resource endowments that foster initial agglomeration—and second-nature geography, which stresses the larger role of human-driven mechanisms. The latter includes agglomeration effects (Combes et al., 2010), increasing returns to scale (Peters, 2022), market access and connectivity (Jedwab and Moradi, 2016; Alvarez-Palau et al., 2024), and path dependence (Davis and Weinstein, 2002; Bleakley and Lin, 2012), which all contribute to persistence and expansion of cities. Typically, cities originate from first-nature geographic advantages and expand and endure through second-nature mechanisms. In relatively rare cases, however, large-scale and widely distributed urbanization can arise purely from second-nature geography—for instance, by concentrating rural populations in randomly chosen locations—mimicking a near-experimental setting.¹

This paper examines one such exceptional setting: the Algerian War of Independence (1954–1962), during which the French army forcibly resettled roughly 2.5 million Muslim Algerians—about one-third of the population—into thousands of prison camps all across the country (centres de regroupement in French) to diminish rural support for partisan fighters.² The establishment of these camps was chaotic, decentralized, and directed by local military authorities with little economic planning. Their placement varied widely in location, size, and infrastructure, as they were driven by military operations rather than development motives (Sutton, 1999). This quasi-random exposure to forced resettlement thus provides a rare natural experiment to study how large-scale, exogenous urbanization shocks shape long-term population distribution and regional development.

¹More common cases involve modern planned capitals, such as Brasília in Brazil or Astana in Kazakhstan, established for strategic or political reasons. Large-scale, geographically widespread examples are not common.

²Throughout the paper, Muslim Algerians refers to the indigenous population, as distinguished from the approximately one million European settlers in pre-war censuses. The latter were largely urban; including or excluding them in the analysis produces only minor differences in results.

Following Algerian independence in 1962, many of the camps established during the war persisted, with some eventually evolving into permanent urban settlements. Exploiting this spatial and temporal variation, and using both pre- and post-treatment census data, I examine how the forced resettlement policy shaped Algeria's long-term population dynamics and urbanization patterns within a Difference-in-Differences (DiD) framework. I use population growth to capture overall regional development and the share of the population residing in urban areas to measure urbanization. To quantify treatment intensity, I construct a policy exposure measure, the share of forcibly resettled individuals relative to the total Muslim population in each municipality, and transform it into a binary treatment variable using the sample median as the cutoff. This facilitates interpretability and ensures comparability with alternative estimators that require binary treatment assignment. To further address potential endogeneity and differences in pre-treatment trajectories, I implement the Synthetic Difference-in-Differences (SDiD) approach of Arkhangelsky et al. (2021), which reweights control municipalities to match the pre-war development path of treated municipalities, thereby improving causal identification.

Generally, I find that the resettlement policy exerted a persistent negative effect on population growth overall and a positive effect on urbanization. The decline in population growth reflects the policy's adverse impact on regional development. Although the increase in urbanization might superficially suggest a positive developmental outcome, a closer examination reveals a less favorable mechanism. Specifically, the rise in the share of population residing in urban areas primarily results from the "emptying" of rural regions rather than from genuine urban expansion. The resettlement policy significantly reduced rural population growth, while having no discernible effect on urban population growth. In magnitude, municipalities with above-median exposure to forced resettlement experienced, on average, 35.9% lower population growth and 4.9% higher urbanization in the post-war period. Resettlements increased the share of non-agricultural employment by roughly 5%, consistent with the higher urbanization rate. Following independence, around one million European settlers and their descendants left Algeria for France, generating a temporary demographic shock. However, including or excluding this population in the analysis

does not materially affect the estimated results.

Mechanism analysis reveals important heterogeneity. Regions with higher pre-war European shares, greater road density, and/or higher urbanization experienced stronger negative effects on population growth and stronger positive effects on urbanization. Similarly, regions with less productive land or that are located farther from major cities also exhibit amplified policy effects. These patterns reflect two distinct dynamics: in more connected regions, a "pull effect" facilitates rural depopulation, as residents more easily migrate to more developed regions in the long run; in more remote or less productive regions, a "push effect" dominates, as limited economic opportunities drive people away. Overall, the resettlement policy exerts its strongest impact on both the most and the least developed regions, albeit through different channels of "pull" and "push".

The resettlement policy primarily targeted rural populations, with municipalities having a larger rural share being more exposed. This raises concerns about potential endogeneity and the validity of the empirical strategy, even if the parallel trend assumption holds. The Synthetic Difference-in-Differences (SDiD) approach mitigates this issue by assigning weights based on pre-treatment trends. However, to further test the robustness of the results, I employ Inverse Probability Weighting (IPW) and Double Robust DiD (DRDiD) (Callaway and Sant'Anna, 2021) estimators, incorporating pre-treatment covariates including transportation network density, pre-war urbanization rate, pre-war share of European settlers, and soil quality to obtain appropriate weights. The estimates obtained from these alternative methods are consistent with the main results. In addition, when constructing the treatment variable using an alternative data source from Cornaton (1967) at the higher administrative level of districts,³ I obtain qualitatively similar findings, reinforcing the robustness of the conclusions. Finally, because the policy affected regions differently and induced population movements across municipalities, the Stable Unit Treatment Value As-

³The resettlement data available at the district level generally record a larger share of the population than the municipality-level data used in the main analysis. Given that the French historian, Cornaton, who compiled it in the 1960s, is a specialist on the resettlement policy and conducted extensive fieldwork during and after the war, the district-level data are likely to be relatively more accurate. However, the smaller sample size limits the scope of the analysis and constrains my ability to explore underlying mechanisms in detail.

sumption (SUTVA) is likely to be violated.⁴ To partially address this concern, I conduct additional analyses at the higher administrative level of districts—where cross-border spillovers are less likely—and employ Conley spatial standard errors (Conley, 1999), which account for spatial correlation among geographically proximate observations.

This paper relates first and foremost to the literature in urban economics, particularly studies on the long-run impacts of place-based policies. Related contributions include Schweiger et al. (2022), who examine the effects of Soviet scientific cities on innovation and development; Méndez and Van Patten (2022), who show the positive impact of the investment in hospitals and educational institutions by the United Fruit Company within the cities of the "Banana Republic" in Costa Rica; Kline and Moretti (2013), who analyze the positive outcomes in the manufacturing sector and productivity improvements achieved by the Tennessee Valley Authority. A key difference is that, unlike these development-oriented efforts, the Algerian resettlement program was driven by military strategy, with only minimal or symbolic interests in capital or infrastructure development. This distinction allows my setting to better isolate the pure effects of agglomeration from confounding factors such as geography or coordinated investment into infrastructure.

Second, this paper contributes to the literature on conflicts and wars. Dell and Querubin (2017) and Miguel and Roland (2011) examine the long-term consequences of bombing during the Vietnam war on development in later decades. Davis and Weinstein (2002) trace Japanese urbanization from the Stone Age to the modern era and show that long-run urban patterns are driven by first-nature geography and agglomeration, with temporary shocks such as bombings having little effect. This paper demonstrates that wartime resettlement policies can generate lasting divergences in regional development paths, aligning with a growing body of research that emphasizes the enduring economic and spatial consequences of conflict-driven shocks (Ochsner, 2023; Feigenbaum et al., 2022; Wahl, 2017).

⁴SUTVA assumes that each unit's outcome depends only on its own treatment status, implying no spillover effects. In this context, the policy likely violates SUTVA, as forced migration and displacement could affect outcomes in neighboring municipalities.

Third, the paper speaks to the literature on forced migration. Studies such as Becker et al. (2020) and Eckert et al. (2022) highlight how displacement influences human capital and income trajectories. Research on the expulsion of ethnic Germans from Sudetenland (Testa, 2020; Braun and Kvasnicka, 2014; Guzi et al., 2021) and on Soviet occupation of Styria in Austria (Ochsner, 2023) further illustrates long-term effects of forced migration. Most of this work, however, considers outcomes either in the origin or destination region. In contrast, the Algerian case allows me to examine both sides simultaneously, because displacement and resettlement occurred within the same geographic units: areas were depopulated while new centers were established.

Finally, this paper contributes to the literature on colonialism, which documents wide-ranging and persistent effects on institutions (Acemoglu et al., 2002), consumption (Dell, 2010), trust (Lowes and Montero, 021a), health (Lowes and Montero, 021b), and industrialization (Dell and Olken, 2019). While much of this literature emphasizes long-lasting negative impacts, this paper adds to the smaller set of studies identifying more complex or partially positive legacies. In particular, I find that greater exposure to resettlement centers is associated with higher urbanization. Comparable forced urbanization programs were implemented in other colonies, such as Vietnam, Kenya, and Malaysia, but quantitative assessments remain scarce. The closest study is Hsu (2024), who analyze British forced migration of ethnic Chinese in Malaysia, finding that productivity gains are offset by ethnic tensions. My paper differs in that, following independence, European settlers disappeared almost entirely from Algeria. This allows me to isolate the effects of forced urbanization without the confounding influence of ethnic divisions.

The remainder of the paper is structured as follows. Section 2 provides the historical background. Section 3 describes the data sources. Section 4 sets out the identification strategy. Section 5 presents the empirical results. Section 6 explores the underlying mechanisms. Finally, Section 7 concludes.

2. Historical Background

2.1 War of Independence

Algeria, located in North Africa, is the tenth-largest country globally and the largest by area in Africa. It was colonized by France from 1830 to 1962. In 1954, the French government faced a nationwide insurgency in Algeria. Several factors contributed to the rise of this movement, including the recent independence of neighboring countries, persistent economic hardship, systemic discrimination that relegated Muslim Algerians to second-class citizenship, and the ineffective governance of local administrations. When political and diplomatic efforts failed, organizations such as the National Liberation Front (Front de libération nationale in French or shortened as FLN) launched an armed campaign for independence. The French Fourth Republic responded with military force and little inclination toward compromise. While urban centers and coastal regions remained under firm French control, the vast rural hinterlands posed significant challenges, often serving as strongholds and supply bases for insurgent forces. Figure 1 illustrates the timeline of the key events during this period.

Independence war

Peak era of resettlement

Peak era of resettlement

1830

1954

1955

1957

1959

1961

1962

Degroupement

Le Figaro

exposed the horrible condition of centres

Le Figaro

exposed the horrible condition of centres

Figure 1: The timeline of major events

Note: The figure illustrates the timeline of the Algerian War of Independence. Algeria was a French colony from 1830 until 1962. The war began in 1954, and the first resettlement center was established in 1955. Between 1957 and 1959, the construction of resettlement centers expanded substantially as part of the counterinsurgency campaign. Following public exposure of the policy by *Le Figaro*, its implementation was largely halted. In 1962, Algeria gained independence through a national referendum. Sources: Henni (2019).

Facing substantial challenges in identifying and eliminating insurgent groups, the French army implemented a widely used counterinsurgency strategy known as centre de regroupement (or resettlement centers policy) beginning in 1955. The policy sought to geographically separate civilians from armed groups. Similar tactics had been employed by Britain in Malaysia and Kenya, and previously by France in Indochina and other parts of the Maghreb. As conventional military approaches proved ineffective, the resettlement policy expanded from its initial implementation in the Aurès region to encompass much of rural Algeria. Although precise data are unavailable, some estimates suggest that approximately 2.5 million Muslim Algerians (around one-third of the local population, excluding about one million Europeans) were directly affected by the policy (Sutton, 1999). The impact on European settlers, primarily from France, Spain, and Italy, who had begun to arrive in significant numbers after 1870, was limited.

Between 1957 and 1959, about 3,000 resettlement centers were established, accommodating heterogeneous populations ranging from as few as 76 to over 5,000 individuals (Sutton, 1999). The expansion of these centers slowed only after *le Figaro*, a major French newspaper, exposed their negative impacts to the French public, provoking public outrage. Following the fall of the Fourth Republic, the newly formed Fifth Republic sought to reframe the strategy as a development initiative. Under this revised framework, the government distinguished between permanent and temporary centers. The former were to receive greater investment and evolve into urban settlements, while the latter were to be gradually dissolved (so-called *degroupement* in French). However, this plan remained largely theoretical and was interrupted by Algeria gaining independence in 1962.

In 1962, the war ended in success for Algerian independence. This was achieved primarily through diplomacy and international pressure rather than military means. The European population, which had dominated the colony's pre-war economic and political life, fled the country almost entirely. Policymakers at the time expected Algerians who had been forcefully resettled to return to their home villages when freedom of movement was restored. To their surprise, a large proportion chose to

remain in the new centers.⁵ Possible explanations include their adaptation to an urban lifestyle and the high costs associated with rebuilding their former hamlets, though the precise reasons remain unclear. The legacy of this policy continues to shape Algeria's spatial and socio-economic landscape today.

2.2 Forbidden Zones and Resettlement Centers

The resettlement policy forced relocation of populations from dispersed hamlets and isolated family dwellings into designated centers that could be more easily controlled and monitored, thereby cutting potential links between civilians and insurgent groups. To implement this, the French army first designated certain areas as forbidden zones, which were off-limits to civilians because of their strategic importance. These zones were believed to harbor insurgent groups or to lie along their supply routes. Residents within them were evacuated and transferred to resettlement centers.⁶ The boundaries and numbers of forbidden zones were frequently adjusted in response to changing military conditions. Figure 2 illustrates the distribution of the forbidden zones in 1959. The gray areas indicate the extent of these zones at that time. The zones were geographically widespread across all regions but, as would be expected, were most heavily concentrated in rural areas. Individuals found within these zones without military authorization were subject to suspicion and, in some instances, could be shot without warning.

Official accounts described the resettlement centers as adequately equipped and supplied, with proper housing, sanitation, and informed consent from the relocated population. Later anecdotal reports and evidence, however, revealed a starkly different reality. In many cases, residents were given only a few hours' notice before forced eviction, and were offered no alternatives (see Appendix A.1 for historical photos). Their homes were destroyed to prevent reoccupation or use by insurgents, reflecting a broader scorched-earth strategy (Cornaton, 1967). On average, the centers, typi-

⁵The exact share remains unclear. French historian Cornaton collected data on a number of centers shortly after the war, but his study was limited in scope (Cornaton, 1967).

⁶It is more accurate to call them prison camps, as the centers significantly restricted the freedom of the residents.

cally located 5 to 10 kilometers from the original hamlets, lacked the basic provisions promised by authorities (Sutton, 1999). Some initially consisted of little more than open land, leaving displaced populations without shelter or resources. Contemporary accounts reported high mortality rates in several centers due to severe mismanagement, particularly among children and the elderly (Sutton and Lawless, 1978).

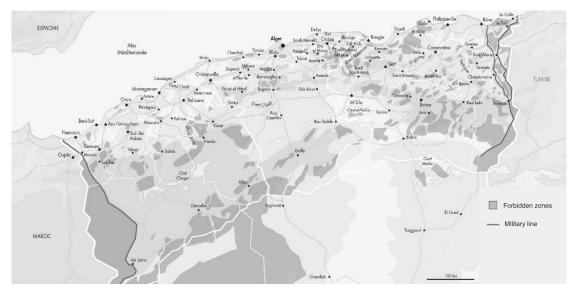


Figure 2: The forbidden zones in northern Algeria in 1959.

Note: The figure depicts the northern region of Algeria, with dots representing the main cities. The shaded areas indicate the forbidden zones established by the French army in 1959. The size, location, and shapes of these zones were continuously revised in response to changing military conditions. The two lines along the western and eastern borders denote the military barriers constructed to prevent the inflow of arms and fighters across the frontier. Source: Henni (2019).

The resettlement centers were typically located near major road networks and in plains, and featured wide streets, newly built housing,⁷ and schools,⁸ designed so as to facilitate military control (see the historical photos in Appendix A.2). Their levels of development varied significantly; some were newly constructed, while others were expansions of existing villages (Sutton, 1999). Although limited in scope, the French army introduced certain public facilities such as post offices, electric lighting, and

⁷In certain instances, newly resettled populations even lived in temporary tents for prolonged periods.

⁸The French army established French-style schools in the centers, which differed markedly from the traditional schools previously found in rural Algeria, where religious instruction had played the dominant role.

running water, often for the first time in these rural areas. For many inhabitants, such infrastructure was an entirely new experience.

Estimates of the total number of centers differ, but most sources suggest that at least 3,000 were established, directly affecting around 2.5 million rural inhabitants, approximately one-third of Algeria's rural population (Cornaton, 1967). On average, each center housed about one thousand residents (Sutton, 1999). The relocation process, however, was highly disruptive. Traditional economic and social structures were dismantled as households were uprooted from dispersed hamlets and merged into these new settlements. Farms became more distant from homes, and access to agricultural land was restricted, with farmers required to obtain work permits that were often difficult to secure. Livestock losses were widespread during the forced relocations, further undermining rural livelihoods.

Social hierarchies also eroded; community elders who once held authority in the hamlets lost their traditional roles as families from different villages were merged into new settlements. Although the French authorities later portrayed the policy as a rural development initiative, the centers were hastily constructed and poorly planned. By 1959, reliance on the regroupment policy had grown so extensive that even government officials struggled to track its scale and consequences.

3. Data

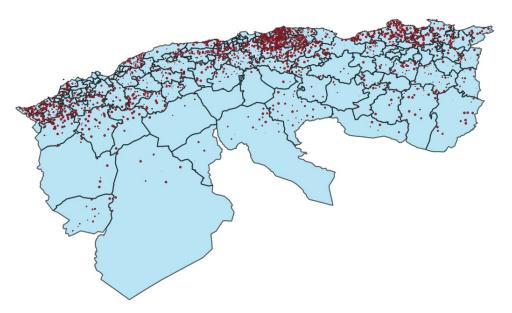
The period of interest covers 1948 to 2008, with the main treatment occurring between 1954 and 1962. I primarily use census data for my main analysis. The observation unit is municipality, the third-level administration divisions below province and district. The municipalities are all located in Northern Algeria (covering three colonial-era departments: the department of Oran, Alger, and Constantin), excluding the less populated southern Saharan region because of the lack of qualitative data.

Main Treatment. To estimate the impact of the policy on regional development, as my main treatment variable, I use the share of Muslim Algerians (excluding European settlers and their descendants) who were forcibly resettled within a municipality. Figure 3 illustrates the precise geographic distribution and population size of the resettlement centers. Each red dot represents a center, with its size proportional to the number of residents. The largest centers housed over 4,000 people, while the smallest contained around 70. Importantly, the number of centers in a municipality does not necessarily correspond to the intensity of the policy—that is, the share of the forcibly resettled population. For instance, in some southern municipalities, fewer but larger centers, or smaller overall populations, resulted in higher relative resettlement shares than in the more densely populated northern regions.

The map was created using Quantum Geographic Information System (QGIS) software, based on the map provided by Algerian historian Samia Henni (see Appendix A.4), and center-level data shared by French historian Fabian Sacriste. The original map was compiled by the Algerian government shortly after independence, and the population figures primarily correspond to 1961—the final full year of the war—although center sizes varied over time. For a subset of centers, information on the number of buildings is also available. A limitation of this dataset is its incomplete coverage, as it likely underrepresents smaller or temporary centers, potentially introducing selection bias toward larger and better-documented sites.

⁹Certain unclassified documents indicate that a small number of Europeans were also subject to resettlement. However, their number was negligible, and it is difficult to imagine that they experienced conditions comparable to those imposed on the Muslim population.

Figure 3: Map of Northern Algeria with the distribution of the centers in 1962



Note: The map shows the location and population size of each regroupement center across northern Algeria around 1961. The size of the dots indicates the population size. The map was created using QGIS, based on a map kindly provided by Samia Henni and data from Fabien Sacriste. The observation unit is municipality, based on the municipality border in 1948. I merged certain municipalities to balance all across the years. See Appendix A.4 for the original map. Courtesy of Michel Cornaton, Samia Henni, and Fabien Sacriste.

I use the 1948 municipality (commune in French) boundaries as the geographic base. For each municipality, ¹⁰ I aggregate the population of all resettlement centers located within its borders and divide this total by the Muslim population recorded in the 1954 census, as shown in Equation 1. The resulting ratio captures the intensity of exposure to the resettlement policy, with higher values indicating stronger impact. I use the 1954 census because it is the last comprehensive one conducted before the war, and thus avoids distortions caused by wartime displacement. Although the French administration attempted another census in 1961, the effort was incomplete and is therefore excluded from the analysis.

¹⁰Algeria was divided into three provinces, Algier, Oran and Constantine (*département* in French). Inside provinces were districts (*arrondisement* in French) and municipalities.

$$RegroupedShare_{m} = \frac{\sum_{i}^{M} Population resettled in centre_{im}}{Total Muslim population_{m}}$$
(1)

As shown in Appendix A.5, the defined policy intensity has a mean of 0.217 and a standard deviation of 0.229. The share of the resettled population ranges from 0% to 117.6%. The maximum value exceeding 100% results from using the 1954 census population as the denominator and the number of resettled individuals in 1961 as the numerator, suggesting that, in some cases, resettlement likely occurred across municipal boundaries. The corresponding balance table and histogram are presented in Appendix A.5 and Appendix A.6, respectively.

In addition, I construct the impact of the resettlement policy using a different source Cornaton (1998). The French historian Cornaton conducted extensive research into the resettlement centers beginning after the war. In the book, he applied the same definition of the impact of the resettlement policy as in this paper (the share of the resettled population relative to the total Muslim population), but at a higher, district, level. He used data from 1961 on 76 districts (see the map at Appendix A.7). Extensive heterogenity existed regarding the impact across the districts, from 0% (districts like Alger and Paul-Gazelles) to 100% (Méchéria and Geryville). Though not in my main result, I use this dataset for a robustness check, because its impacted population is larger than the one of aggregated municipality-level, and therefore is potentially more reliable.

Main Outcomes. I use population growth and urbanization as the main outcome variables. I measure population growth as the logarithm of total population. Urbanization, however, carries a broader meaning in the Algerian context. Before the war, a significant share of the rural population lived in kin-based hamlets, and urbanization entailed not only spatial concentration but also the dissolution of traditional social structures and the emergence of agglomeration centers with administrative institutions, schools, hospitals, and non-tribal forms of association.

In the census data, three types of settlements are distinguished. L'agglomération chef-lieu (ACL, or chief-town agglomeration) designates the main urban core and administrative center. L'agglomération secondaire (AS, or secondary agglomeration) refers to semi-urban areas that lie between urban and rural classifications. The remaining zones éparses (ZE, or scattered areas) are rural territories. For the main analysis, I classify agglomerations labeled ACL before the war as urban, while douars (tribal communities) and ZE zones are treated as rural. In the post-war Algerian censuses, AS categories were introduced, which I classify as rural following the existing literature. As robustness checks, I also test alternative classifications that include pre-war villages, AS areas, and other special zones (such as dam or mining settlements) as either urban or rural.

I obtained and digitized the two pre-independence census of 1948 and 1954 from the Octaviana digital archive of the Paris 8 University Vincennes-Saint-Denis. I do not use the partial 1936 census or the war-time 1960 census in my analysis. As for the post-war era, the Algerian government conducted five censuses, in 1966, 1977, 1987, 1998, and 2008. I accessed the first three post-war censuses through Bibliothèque Nationale de France (French National Library). I obtained the 1998 and 2008 censuses from the website of the Algerian Statistical Office. The census data includes information on demography, literacy, marital status, and the occupation structure at the municipality level (commune in French). The French government also stored pre-war budget data (for example, cattle tax, number of patents, police fines, and property taxes) online. I obtained the data on post-war public provision from the Algerian online statistical journal, including the hospital budget, and the number of schools.

Algeria experienced five rounds of administrative border changes between 1948 and 2008. Those around 1960, 1965, and 1987 were major rearrangements, and those around 1949 and 1962 were minor. The number of municipalities, the administrative level of the main analysis, changed substantially over the years. From 419 in 1948, the number of municipalities increased to 1,540 in 2008. I used the 1948 municipality border as a base and merged stragglers, leaving 159 observations, shown in

Table ??. As shown in the last two rows of Table ??, certain balanced municipalities are large from the perspective of population and are comparable to districts (or the traditional second-level administrative unit). As a relatively sparsely populated developing country, Algeria had a large administrative unit.

Controls. I use various sources for the main control variables. For agricultural productivity as a proxy for abundance in rural areas, I use the data of maximum calories an area can produce from Global Agro-Ecological Zones (GAEZ) version 4, Food and Agriculture Organization of the United Nations (FAO). For the infrastructure level, I use road networks including railways and highways from a 1930 historical map divided by the total land area. The map is from the digital library Gallica of the French National Library. Other control variables, for example, the pre-war share of European population and pre-war urbanization, are calculated using the pre-war census. I measure the distance to main cities, to the coast, and to the border, using the Quantum Geographic Information System (QGIS).

The data for forbidden zones and other details of resettlement centers is complemented by materials from the Defence Historical Service (Service Historique de la Défense or SHD) in Paris. Samples of forbidden zones and centers from the service are shown in Appendix A.3. The Centre des Archives de l'Outre-Mer (CAOM) in Aix-en-Provence provides additional materials. Figure 3 shows the distribution of resettlement centers across northern Algeria is shown.

Summary Statistics. The summary statistics for outcome variables and controls at the municipality level appear in Appendix A.5. Table 9 shows certain statistics for two pre-treatment years at the municipality level. The first row shows that on average, around 21.7% of Muslim Algerians in a municipality were resettled, though some remained untouched and some reached 100% or more (meaning that some people were resettled from neighboring regions). Generally, Algeria was an agricultural country with only around 24% of population living in urban areas, and 80% of workers occupied in agriculture. The last row shows that an average municipality had around 55,598 inhabitants in 1954.

4. Identification Strategy

I employ a Difference-in-Differences (DiD) framework as the main identification strategy. Given the non-random implementation of the policy across regions, I further apply the Synthetic Difference-in-Differences (SDiD) estimator developed by Arkhangelsky et al. (2021). In the second part of this section, I discuss pre-treatment characteristics related to the treatment assignment.

4.1 Difference-in-Differences

The primary identification relies on a standard Difference-in-Differences (DiD) design, exploiting the availability of both pre- and post-treatment data. The treatment intensity variable introduced in Equation 1 in the data section is continuous (the share of the Muslim population forcibly resettled relative to the total Muslim population in each municipality). However, I transform it into a binary variable for the main specification. This facilitates a clearer interpretation and ensures comparability with other estimation approaches I use, including SDiD and IPW, which require binary treatment. The histogram of the continuous treatment variable is shown in Appendix A.6. Municipalities above the sample median of this share are classified as treated, while those below the median serve as the control group. Results using the continuous measure of treatment intensity are shown as robustness checks later.

The empirical specification is given by:

$$Y_{mt} = \beta_1 Regrouped_m \times Post_t + \gamma X_{mt} + \lambda_m + \lambda_t + \epsilon_{mt}$$
 (2)

where Y_{mt} denotes the outcome for municipality m in year t, capturing local developments through indicators including population growth (a proxy for economic activity and regional attractiveness) and urbanization rate (the share of urban res-

idents). The coefficient of interest, β , measures the average treatment effect of the resettlement policy. $Regrouped_m$ is a binary indicator equal to one if municipality m has a resettled Muslim population share above the sample median. $Post_t$ equals one for post-independence years. λ_m and λ_t denote municipality and time fixed effects, respectively. The standard errors ϵ_{mt} are clustered at the municipality level. Robustness checks using Conley (spatially correlated) standard errors are reported in Appendix A.12.

The control variables X_{mt} includes interactions between year fixed effect and different time-invariant local characteristics: soil quality, minimum distance to the three largest cities, pre-war urbanization rate, pre-war European population share, longitude and latitude, transportation network density in 1930, and the logarithm of municipal area. When the digitization process is complete, I will include an additional variable, FZ_m , representing the intensity of military damage during the war, measured as the share of land designated as forbidden zones by the French army within each municipality.

4.2 Pre-Treatment Balance

The ideal identification scenario would involve a treatment that is completely exogenous—i.e., the French army implemented the policy randomly across regions. In practice, I rely on two key features of the policy design to approximate exogeneity: i) the policy was implemented throughout Northern Algeria in an uncoordinated and unsystematic manner; ii) the designation of forbidden zones and resettlement centers was made primarily by regional or low-level military officers responding to immediate military tactical needs—such as the presence of rebel hideouts or the intersection of supply routes—rather than economic or demographic criteria. However, complete exogeneity is unlikely. It is plausible that areas that were more hostile to the French army were also subjected to more intensive resettlement. Anecdotal and historical evidence (Cornaton, 1967) suggests that such regions tended to be more rural and

had higher shares of Muslim Algerians.¹¹ This raises an important concern: municipalities more affected by the policy may have been systematically different from those less affected, even in the absence of the policy, thereby threatening the credibility of causal inference.

Table 1 compares pre-treatment characteristics between treated and control municipalities. The results confirm significant baseline differences. Municipalities with higher resettlement intensity were generally more rural, had a larger share of Muslim population, poorer infrastructure, and a greater dependence on agriculture before the war. For instance, the treated group had, on average, 0.149 km of railway or highway per square kilometer, compared with 0.237 km/km² in the control group. Similar significant disparities are observed for pre-war urbanization rates, non-agricultural employment share, and the proportion of European settlers.

By contrast, treatment intensity is not systematically correlated with geographic fundamentals including soil quality, the minimum distance to the three provincial capitals—Algiers, Oran, and Constantine¹²—or with longitude and latitude. The size of a municipality correlates slightly with the treatment, indicating that larger municipality is more likely to be treated more.

With the potential heterogeneity noted above, the traditional DiD estimator may produce biased estimates even if the parallel trend assumption holds. To address this concern, I employ the Synthetic Difference-in-Differences (SDiD) estimator proposed by Arkhangelsky et al. (2021), which combines features of the Synthetic Control Method (SCM) and DiD approaches to improve robustness against non-parallel pre-trends. I report the SDiD estimates as the main results, alongside standard DiD estimates for comparison.

 $^{^{11}}$ European settlers were concentrated in urban regions, where the French army also maintained tighter control. Consequently, major combat and population displacement occurred predominantly in rural areas.

¹²These three cities served as the capitals of the major provinces encompassing all of Northern Algeria. They were the country's primary economic, political, and cultural centers. A greater minimum distance from them typically indicates a more peripheral or less developed region.

Table 1: Balance table

	Control	Treatment	Difference	SD of	p
	Mean	Mean	(T-C)	Diff.	Value
	(1)	(2)	(3)	(4)	(5)
Transportation line density in 1930	0.237	0.149	-0.088	0.026	0.001
Maximum calories (soil quality)	8.650	8.553	-0.096	0.107	0.368
Urbanization rate in 1954 before the war	0.304	0.178	-0.126	0.033	0.000
Share of Europeans in 1954 before the war	0.129	0.062	-0.067	0.017	0.000
Minimum distance to three main cities	4.646	4.879	0.234	0.180	0.196
Share of non-agricultural workers	0.287	0.159	-0.128	0.034	0.000
Logarithm of area	5.917	6.368	0.451	0.280	0.109
Longitude	35.965	35.922	-0.043	0.122	0.726
Latitude	2.863	2.788	-0.074	0.460	0.872

Notes: The table reports the mean values of key pre-war characteristics for the treated and control groups, where treatment is defined using the median of the policy intensity (the share of the local Muslim population affected by the policy) as the cutoff. I compare several important pre-war variables, including transportation line density in 1930, the pre-war urbanization rate, the pre-war share of Europeans, the pre-war share of non-agricultural workers, soil quality, and the logarithm of municipal area. The results show that transportation line density, pre-war urbanization rate, European share, and non-agricultural employment share are negatively correlated with the treatment, while other geographical features exhibit no significant relationship. The share of urban population in the pre-treatment period is defined as the proportion of residents living in either ACLs (main administrative centers) or other designated centers. Statistical significance follows standard notation: * p < 0.1, *** p < 0.05, and **** p < 0.01.

To further mitigate endogeneity concerns, I apply weighting-based estimators—Inverse Probability Weighting (IPW) and Double Robust DiD (DRDiD)—as robustness checks to balance the treatment and control groups. The balance test using IPW weights (Table 15, Appendix A.10) shows that all pre-treatment characteristics become statistically indistinguishable between treated and control municipalities after weighting. The corresponding results are discussed in the robustness check section.

5. Empirical Results

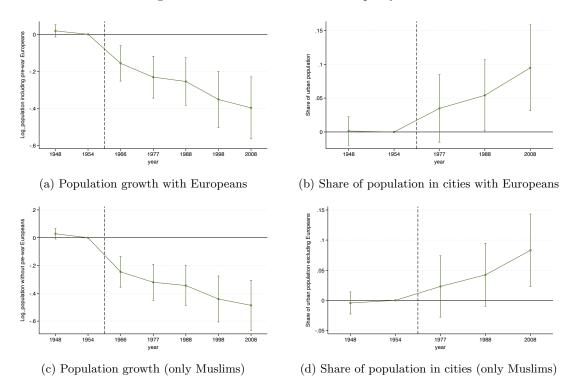
This section presents the main findings. Section 5.1 reports the results from both the standard Difference-in-Differences (DiD) and Synthetic Difference-in-Differences (SDiD) estimations. Section 5.2 discusses robustness checks and extensions.

5.1 Main Results

Population Dynamics. Before reporting the regression results, I conduct an event-study analysis to test the parallel trends assumption of the DiD model, using the binary treatment defined by the median threshold of treatment intensity. Figure 4 shows that population growth and urbanization rates exhibit no systematic differences between treated and control municipalities before the treatment, but diverge sharply afterward. This holds regardless of whether municipalities' pre-war European-origin populations are included or not. I include both specifications because nearly all Europeans left for France after independence, which could confound post-war outcomes. The results suggest that excluding them does not materially change the findings.

The estimates indicate that the policy exerted a persistent negative effect on population growth and a persistent positive effect on urbanization. Municipalities with above-median resettlement intensity experienced about 20% lower population growth initially, increasing to 40% by 2008, and about 5% higher urbanization in the postwar period. The parallel trends assumption appears broadly satisfied for population growth. Following Roth (2018), the visual evidence does not violate the "straight-line" criterion, which supports the validity of the DiD identification in this case. However, the pre-treatment dynamics for urbanization are less stable, suggesting that the parallel trends assumption may not hold as strongly for this outcome.

Figure 4: Event studies at the municipality level



Note: The figures present event-study estimates for the logarithm of total population and the share of urban population. Urban areas are defined as all locations labeled ASL in the census (for results using alternative definitions, see Appendix A.16). No control variables are included. The treatment is defined as a binary indicator based on whether the continuous measure of policy intensity—the share of Muslim Algerians forcibly resettled within a municipality—exceeds the sample median. The confidence interval is set at 95%. The vertical line marks the onset of the treatment period.

I show my main results in Table 2. Columns (1) and (2) present the baseline DiD estimates, comparing specifications with and without accounting for pre-war European populations. Municipalities with an above median exposure to the resettlement policy (i.e., places with more than 12.9% of resettled Muslim population) experienced 38.3% lower population growth (the sample mean is 21.7%. For the histogram of the share of forcibly resettled persons, see Appendix A.6) than those below the median¹³. Approximately one million Europeans, along with a much smaller number of Muslim Algerians, emigrated to France immediately after the war. Although Europeans were

 $^{^{13}}$ Regressions using the mean as the threshold report similar results.

heavily concentrated in large urban centers, some resided in rural municipalities as well. The results show that the effect of the exodus is limited.

Column (3) shows that the same municipalities exhibit 5.2% higher urbanization.¹⁴ The 1948 census does not distinguish urban residents of European descent from Muslim Algerians. For Column (3), I assume that the share of Europeans living in urban areas remained constant between the 1948 and 1954 censuses to construct the variable for 1948. This is a plausible assumption given the short time span and pre-war stability.

Table 2: The impact of the policy on population growth and urbanization

		DiD			SDiD		
	Europeans plus	uropeans plus Only Share of url Muslims Muslims Muslim po		Europeans plus	Only	Share of urban	
	Muslims			Muslims	Muslims	Muslim pop.	
	(1)	(2)	(3)	(4)	(5)	(6)	
Binary Regrouped $_m$	-0.293***	-0.383***	0.052**	-0.276***	-0.359***	0.049***	
$\times \operatorname{Post}_t$	(0.058)	(0.066)	(0.022)	(0.055)	(0.060)	(0.017)	
Control for:							
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	
Observation:	1113	1113	795	1113	1113	795	
\mathbb{R}^2 :	0.976	0.972	0.892	-	-	-	

Notes: This table shows the results on population and urbanization, using both standard DiD and SDiD. The treatment variable is defined as binary, transformed from the continuous policy intensity variable of the share of forcibly resettled population compared to the total Muslim population in a municipality. The sample median is used as the threshold. In Columns (1) and (4), the pre-war European population is included in the analysis, but it is dropped in the results in Columns (2) and (5). The share of the urban population in Columns (3) and (6) use the share of the population living in the ACLs (agglomerations where administration is located) as the outcome variable. The significance level is set as: * p < 0.1, ** p < 0.05, and *** p < 0.01. The standard error is clustered at the municipality level.

The parallel trend assumption is satisfied in the event studies, however, it does not guarantee that the endogeneity issue is solved. As shown in Table 1, several prewar characteristics, such as the pre-war transportation line density, are correlated

¹⁴The effect for the urbanization is slightly stronger when Europeans are included in the pre-war population, with the coefficient equaling 0.061 positive effect (standard error of 0.023). This pattern is consistent with expectations: Europeans were mostly concentrated in highly urbanized, less-treated areas. Their departure reduced population and urbanization in the control group, thereby amplifying the estimated positive effect of resettlement on urbanization and dampening its negative impact on population growth.

with treatment intensity. The mass exodus of Europeans after the war, along with wartime destruction and casualties, further complicates identification. To address these concerns, I employ the Synthetic Difference-in-Differences (SDiD) approach of Arkhangelsky et al. (2021) on the same outcome variables. The results appear in Columns (4) to (6) of Table 2. The method requires a binary treatment variable, which I construct using the same median split of the continuous resettlement share. For calculating the standard error, I follow Arkhangelsky et al. (2021) and use the bootstrap procedure, which is appropriate for settings with multiple treated units and moderate computational requirements (in contrast to jackknife or placebo-based methods).¹⁵

The SDiD and DiD estimations yield broadly consistent results. The estimated effects from the SDiD are slightly smaller in magnitude but statistically more significant. Conceptually, the SDiD method combines the standard Difference-in-Differences framework with the SCM, constructing weighted averages of control units to better approximate the counterfactual outcomes of treated municipalities. By using pre-treatment outcomes to generate these weights, SDiD improves the balance between treatment and control groups and enhances the credibility of causal inference. In the present setting, however, a limitation is that the pre-treatment period spans only two periods, which reduces the precision of the weighting procedure; a longer pre-treatment window would typically yield more convincing results. Additionally, the weights computed and used by the SDiD do not correct imbalances in the pre-treatment controls, but instead mean that the outcomes in the treated group feature the same trends as in the control group. In the robustness check section, I use additional methods to balance the pre-treatment controls to recheck the results.

Sector Shares. In Table 3, Columns (1) and (2) report results for occupational structure, including and excluding Europeans before the war. The findings are consistent with the urbanization results: in municipalities more heavily affected by the policy, a larger share of workers shifted into non-agricultural sectors after the war.

¹⁵The placebo is used in the case of single treated unit, while the Jackknife method demands less computational power and is mainly used for settings with large numbers of observations and variables.

In line with the positive effect of around 5% on urbanization, the resettlement policy has approximately 3.7% to 6.2% positive impact on the non-agricultural sector when a municipality's over-median share of Muslim population was forcibly resettled. This indicates that former farmers relocating to cities were more likely to transition into non-agricultural employment. Column (3) shows that the policy had a slightly negative effect on the overall labor-force participation rate among the Muslim population. The underlying mechanism is hard to estimate currently, due to data restriction. Columns (4) to (6) show the same results using the SDiD approach. This shows a similar impact of the policy in terms of magnitude and significance.

Table 3: The impact of resettlement on non-agricultural sector shares

		DiD			SDiD		
	Share worker	Share Mus.	Muslim job	Share worker	Share Mus.	Muslim job	
	non-agri	work. non-agri	part. rate	non-agri	work. non-agri	part. rate	
	(1)	(2)	(3)	(4)	(5)	(6)	
Binary Regrouped $_m$	0.062***	0.037***	-0.019*	0.059***	0.043***	-0.019*	
$\times \operatorname{Post}_t$	(0.021)	(0.019)	(0.011)	(0.018)	(0.016)	(0.011)	
Control for:							
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	
Observation:	632	632	632	632	632	632	
\mathbb{R}^2 :	0.923	0.939	0.847	-	-	-	

Notes: This table shows the results on the share and job participation rate of non-agricultural workers, using both standard DiD and SDiD. The treatment variable is defined as binary, transformed from the continuous policy intensity variable of the share of population forcibly resettled compared to the total Muslim population in a municipality. Sample median is used as the threshold. In Columns (1) and (4), the pre-war European population is included in the analysis, but is dropped in the results in Columns (2) and (5). The 1954 census does not distinguish occupation types of workers of European descent from those of Muslim Algerians at the municipality level. For Columns (2) and (5), I assume that the share of Europeans occupied in the non-agricultural sector remained constant between the 1948 and 1954 censuses to construct the variable for 1954. This is a plausible assumption given the short time span and pre-war stability. The significance level is set as: * p < 0.05, and *** p < 0.01. The standard error is clustered at the municipality level.

Overall, the policy exerted contradictory effects on regional development. Municipalities more strongly affected by forced resettlement experienced lower population growth, which, at Algeria's early stage of industrialization, implies weaker development potential. Conversely, the positive effect on urbanization indicates that a larger share of the remaining population resided in urban areas. While higher urbaniza-

tion is generally associated with economic development, its interpretation here is less straightforward given the accompanying population loss in rural areas.

In a typical development process, population growth and urbanization move together (Henderson, 2022; Robert, 2004): as productivity rises, labor shifts from agriculture to manufacturing and services, fertility increases, and mortality declines, making urban areas more attractive. In contrast, Algeria's experience reflects a forced and distorted urbanization process. The resettlement policy disrupted normal demographic and economic transitions and led to higher urban concentration driven by displacement rather than by structural transformation.

5.2 Robustness Checks

In the main specification, I used the binary treatment variable, with the sample median of the share of the forcibly resettled population as the threshold. Though easy to interpret and comparable to the results from weighting methodologies, the binary treatment variable suffers from a loss of information, especially when the defined continuous policy intensity has a wide distribution, as shown in the histogram in Appendix A.6. In Appendix A.8, I report results using the original continuous treatment, where the coefficient can be interpreted as the marginal treatment effect. The estimates suggest that a 1% increase in the share of the Muslim population forcibly resettled during the war is associated with a 0.69% decrease in subsequent population growth and a 0.09% increase in urbanization, excluding Europeans from the pre-war analysis. The magnitude of the result is slightly higher than than those from the binary treatment, where the impact on the population growth is around 0.38% and the urbanization share is 0.05%.

My main treatment variable relies on municipality-level data illustrated in Figure 3. However, this dataset likely underreports smaller resettlement centers, potentially biasing the estimates. To address this concern, I construct an alternative treat-

 $^{^{16}}$ When Europeans are included in the pre-war population, the estimated effects are a 0.49% decrease in population growth and a 0.12% increase in urbanization.

ment measure using data from Cornaton (1967), defined analogously as the share of forcibly resettled individuals relative to the Muslim population but aggregated at the district level for 1960. As shown in Appendix A.7, Northern Algeria was divided into 76 districts at that time. The Cornaton dataset, compiled during the late war period, generally reports higher figures than the one I use in my main analysis at the municipality-level—likely due to its broader coverage and inclusion of additional centers. The corresponding estimates in Appendix A.9 show negative effects on population growth and positive effects on urbanization, consistent with the municipality-level results.

While the SDiD framework's weighting procedure helps to mitigate selection bias, it cannot fully eliminate potential endogeneity. As Table 1 shows, several pretreatment characteristics significantly predict treatment assignment. To further address these differences, I implement Inverse Probability Weighting (IPW) and Double Robust Difference-in-Differences (DRDiD) estimators following Callaway and Sant'Anna (2021). The results, presented in Appendices A.10 and A.11, confirm that post-weighting, pre-treatment covariates are well balanced (see balance table in Appendix A.10). IPW assigns propensity-score-based weights to improve comparability between treated and control municipalities, while DRDiD combines IPW with an outcome regression, ensuring robustness to potential misspecification of either model. Both methods yield results consistent with the main analysis, though with slightly smaller magnitudes and weaker statistical significance.

Finally, given the spatial nature of the policy, municipalities are unlikely to be fully independent, as both forced migration and subsequent population movements often crossed administrative boundaries. Such spatial spillovers could lead to underestimated standard errors. To account for this, I apply Conley standard errors (Conley, 1999), which allow for spatial correlation among geographically proximate observations. The results using this correction are reported in Appendix A.12.

6. Mechanism

In this section, I examine the potential mechanisms underlying the results presented above. Section 6.1 investigates the mechanism behind the higher urbanization rate induced by resettlement by estimating its effects separately on rural and urban population growth. Sections 6.2 and 6.3 then explore additional mechanisms by dividing the sample according to different pre-treatment characteristics. Specifically, I split the sample into two equally sized subsamples based on the median of each selected pre-treatment characteristic and estimate the SDiD regressions separately for each group. Finally, I briefly discuss two additional potential mechanisms—education and fertility—for which data limitations preclude a full empirical investigation.

6.1 Rural/Urban Population Growth Dynamics

To understand the main driver behind the increase in urbanization, I examine separate effects on urban and rural population growth in Columns (1) to (4) in Table 4. Similarly, I use both the standard DiD and SDiD for the outcome variables. The resettlement policy has no significant effect on urban population growth, but has a significant negative effect on rural population growth, implying that higher urbanization likely reflects the "emptying" of rural areas rather than genuine urban expansion.¹⁷

¹⁷This pattern is more plausibly explained by rural outmigration than by lower fertility, as fertility decline at Algeria's development stage would be expected mainly in urban settings. I will examine the exact mechanism when more detailed fertility data becomes available.

Table 4: The effects of resettlement on urbanization at the municipality level

	Log urban	Log urban	Log rural	Log rural
	population	Mus. pop.	population	Mus. pop.
	(1)	(2)	(3)	(4)
Binary DiD results:				
$Regrouped_m$	0.116	0.120	-0.235**	-0.387***
$\times \operatorname{Post}_t$	(0.193)	(0.203)	(0.104)	(0.102)
Observation:	795	795	795	795
\mathbb{R}^2 :	0.889	0.896	0.896	0.870
SDiD results:				
Regrouped $_m$	0.114	0.120	-0.251**	-0.340***
$\times \operatorname{Post}_t$	(0.184)	(0.189)	(0.101)	(0.085)
Observation:	795	795	795	795
\mathbb{R}^2 :	-	-	-	-
Control for:				
Time-fixed:	Yes	Yes	Yes	Yes
Municipality-fixed:	Yes	Yes	Yes	Yes

Notes: This table reports the effects of resettlement on population and urbanization using both standard Difference-in-Differences (DiD) and Synthetic Difference-in-Differences (SDiD) estimators. The treatment variable is a binary indicator derived from the continuous policy intensity measure—the share of the Muslim population forcibly resettled within each municipality—using the sample median as the cutoff. Columns (1) and (3) include the pre-war European population, while Columns (2) and (4) exclude it. In Columns (1)–(4), urban areas are defined as all locations labeled ACLs (agglomerations where administrative offices were located) in the census, with the remaining areas classified as rural. The significance level is set as: *p < 0.1, **p < 0.05, and **p < 0.01. The standard error is clustered at the municipality level.

The results for rural population growth exhibit a similar pattern to those for overall population growth reported in the main results. The magnitudes are also comparable. For instance, municipalities with above-median resettlement intensity experienced 23.5% lower rural population growth when pre-war Europeans are included and 38.7% lower growth when they are excluded. These effects are close to the corresponding estimates of -29.3% and -38.3% for overall population growth in the main analysis.

6.2 Push Factors

By "push," I refer to circumstances under which certain regions experience lower population growth, net outmigration, or reduced fertility due to disadvantages in economic opportunities, security, or perceived future potential—factors that "push" residents away from the area. I use natural endowment and minimum distance to major cities to study this factor.

All dependent variables in this section refer exclusively to the pre-war Muslim population. The European population—most of whom left Algeria after the Algerian independence—is excluded from the analysis, as their inclusion does not materially alter the results. Within each subsample, the treatment variable is redefined as a binary indicator equal to one for municipalities above the median share of forcibly resettled Muslims relative to the total pre-war Muslim population.

Natural Endowment. Natural endowments are fundamental to regional economic development, as they provide inherent advantages that enhance productivity and living standards. In the context of Algeria, a predominantly agricultural economy, soil quality is among the most critical determinants of local socioeconomic conditions. It serves as a proxy for agricultural productivity and, consequently, for the economic well-being of rural households. In this analysis, soil quality is measured by the maximum caloric yield that can theoretically be produced per unit of land.

To examine how natural endowments shape the long-term impacts of resettlement, I divide the sample into two groups—high and low soil quality—using the median value as the threshold (Table 5). Columns (1)–(3) show that the policy's effect on population growth does not differ significantly between agriculturally productive and less productive regions: both groups experience a similar negative impact.

Table 5: Sample divided w.r.t. soil quality

	Soil Quality									
	Pop	ulation Gro	owth	Share of	f Urban Po	pulation	Share of Workers in Non-Agri			
	(only Muslims)			(o	(only Muslims)			Sectors (only Muslims)		
	All	High	Low	All	High	Low	All High		Low	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
$Regrouped_m \! \times \! Post_t$	-0.359*** (0.060)	-0.319*** (0.112)	-0.348*** (0.075)	0.049*** (0.017)	0.020 (0.030)	0.092*** (0.034)	0.043*** (0.016)	0.053* (0.029)	0.025 (0.024)	
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Observation:	1113	560	553	795	400	395	636	320	316	

Notes: The table reports SDiD estimates after the sample is divided by soil quality, measured as the maximum potential caloric yield per land unit. The treatment variable is a binary indicator of above-median policy intensity (share of Muslims forcibly resettled), defined separately within each subsample. Urban areas are locations labeled ACLs in the census. Columns (1), (4) and (7) repeat the main results from Table 2 and Table 4. Standard errors are clustered at the municipality level, with bootstrapped variance estimation. Significance levels: *p < 0.1, **p < 0.05, and ***p < 0.01.

Column (4) shows the previous main result from Table 2, that on average, the policy created a 4.9% higher urbanization rate in the whole sample. However, when comparing regions by soil quality, Columns (5) and (6) reveal that the policy increased urbanization by approximately 9.2% in low soil quality areas, while the effect is statistically insignificant in regions with high-quality soil. This pattern aligns with the observations of Sutton (1999), who noted that in areas characterized by harsher geographic and agricultural conditions—such as low soil fertility, mountainous terrain, or limited precipitation—resettled inhabitants were more reluctant to return to their damaged villages after the war. These findings suggest that the potential profitability of resuming agricultural livelihoods plays a critical role in determining whether displaced populations return to rural areas, thereby influencing long-term urbanization trajectories.

Columns (7) to (9) examine the impact on the industrial structure, represented by the share of workers working in any non-agricultural sector. Overall, the forced resettlement increases the share of non-agricultural workers by around 4.3% but has only significant impact in high soil quality regions. This is in line with results from existing literature (Gollin et al., 2002), which finds that more productive land has a

larger non-agricultural sectors, as the higher profit free up agricultural labor in the long run.

Minimum Distance to Major Cities. A shorter distance to one of the three major cities (Alger, Oran, and Constantine) indicates closer proximity to economic hubs, typically associated with higher population growth and urbanization. When the resettlement policy is introduced, however, the effects diverge across space, as shown in Table 6. Columns (1)–(6) show that both nearby and remote regions experience lower population growth, but the positive effect on urbanization appears only in remote municipalities. Appendix A.13 further shows that resettlement significantly reduces rural population growth in remote areas, while having no notable effect in regions closer to the cities. This pattern suggests that the higher urbanization observed in more connected areas likely results from rural outmigration from remote municipalities rather than from genuine urban expansion.

Regarding the results in Columns (7)-(9) of the share of non-agricultural employment, the resettlement policy exhibits a stronger effect in municipalities located closer to major cities, likely reflecting greater exposure to capital investment and technology transfer during the construction and operation of the centers.

Table 6: Sample divided w.r.t. distance to main cities

	Distance to Main Cities									
	Pop	ulation Gro	owth	Share o	Share of Urban Population			Share of Workers in Non-Agri		
	(only Muslims)			(0	(only Muslims)			s (only Mu	slims)	
	All	High	Low	All	High	Low	All	High	Low	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
$Regrouped_m \times Post_t$	-0.359*** (0.060)	-0.393*** (0.084)	-0.321*** (0.106)	0.049*** (0.017)	0.087*** (0.034)	0.031 (0.029)	0.043*** (0.016)	0.035 (0.025)	0.069** (0.031)	
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Observation:	1113	560	553	795	400	395	636	320	316	

Notes: The table reports SDiD estimates after the sample is divided by the minimum distance of a municipality to one of the three major cities. The treatment variable is a binary indicator of above-median policy intensity (share of Muslims forcibly resettled), defined separately within each subsample. Urban areas are locations labeled ACLs in the census. Columns (1), (4) and (7) repeat the main results from Table 2 and Table 4. Standard errors are clustered at the municipality level, with bootstrapped variance estimation. Significance levels: * p < 0.1, ** p < 0.05, and *** p < 0.01.

6.3 Pull Factors

Compared to "push" factors, where residents are driven to leave less developed areas, "pull" factors operate through attraction—rural population in a more connected municipality is easier to leave due to lower costs in transportation. In this part, I study the "pull" factor through the characteristics of pre-war infrastructure level and path dependence using the pre-war European population share and pre-war urbanization rate. Similar to Section 6.2, all dependent variables in this section refer exclusively to the pre-war Muslim population. Within each subsample, the treatment variable is redefined as a binary indicator equal to one for municipalities above the median share of forcibly resettled Muslims relative to the total pre-war Muslim population.

Pre-War Infrastructure Level. Regions with better market access are generally more likely to prosper. Greater transportation connectivity, improved infrastructure, and proximity to major markets all facilitate investment, trade, and population mobility (Michaels et al., 2012; Jedwab and Moradi, 2016). In this section, I examine the role of road density in 1930, measured by the combined length of railways and

highways per square kilometer. Greater road density is typically associated with faster urbanization and stronger long-term development.

Table 7 divides the sample into municipalities with above- and below-median road density. Columns (1)–(6) show that the forced resettlement policy had a stronger effect in more connected regions, leading to both a higher share of urban population and lower overall population growth. Denser transportation networks likely facilitated population movement from rural areas to urban centers, either by reducing migration costs—since resettlement centers were often established near existing roads and railways—or by providing more non-agricultural employment opportunities, as suggested by the positive coefficient in Column (8).

Table 7: Sample divided w.r.t. road density

	Road Density									
	Population Growth Share of Urban Population Share of Workers in									
	(only Muslims)			(0	(only Muslims)			Sectors (only Muslims)		
	All	High	Low	All	High	Low	All	High	Low	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
$Regrouped_m {\times} Post_t$	-0.359*** (0.060)	-0.420*** (0.090)	-0.132 (0.081)	0.049*** (0.017)	0.085*** (0.033)	0.012 (0.026)	0.043*** (0.016)	0.053* (0.030)	-0.017 (0.022)	
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Observation:	1113	560	553	795	400	395	636	320	316	

Notes: The table reports SDiD estimates after the sample is divided by the railway and highway density in 1930. The treatment variable is a binary indicator of above-median policy intensity (share of Muslims forcibly resettled), defined separately within each subsample. Urban areas are locations labeled ACLs in the census. Columns (1), (4) and (7) repeat the main results from Table 2 and Table 4. Standard errors are clustered at the municipality level, with bootstrapped variance estimation. Significance levels: *p < 0.1, **p < 0.05, and ***p < 0.01.

Although prior studies (Michaels et al., 2012; Jedwab and Moradi, 2016) find that better infrastructure generally promotes population growth through higher development and in-migration, the resettlement policy appears to have reversed this trend. As Column (2) shows, municipalities with denser road networks experienced lower population growth, likely because improved connectivity made it easier for displaced rural residents to relocate permanently to far-away cities.

Path Dependence. Urbanization and economic growth are path-dependent, meaning that initial conditions can have long-lasting effects on a region's development trajectory (Bleakley and Lin, 2012; Redding et al., 2011). To examine this, I use two highly correlated pre-war variables: the share of Europeans in each municipality and the pre-war urbanization rate. Municipalities with larger European populations were typically more urbanized, as Europeans occupied the most fertile coastal regions and led industrialization efforts there.

I first use the pre-war European share as a proxy for initial development. A larger European share indicates a more prosperous region prior to the war. Such areas were less affected by the resettlement policy, likely because they experienced fewer partisan activities. However, when I divide the sample using this variable (Panel A in Table 8), the results show that the policy significantly affected only municipalities with a large pre-war European share. One plausible explanation is the combined effect of the wartime displacement of rural Muslim Algerians and the mass postwar outmigration of Europeans. The departure of Europeans created a "vacuum" in urban non-agricultural sectors that was partly filled by displaced rural populations.

Regarding population growth, even when focusing exclusively on the Muslim population to exclude the direct mechanical effect of European outmigration, the policy's negative impact appears only in large-European-share regions. This could reflect broader migration patterns: when Europeans left, rural Algerians not only moved into nearby towns but also migrated to larger urban centers, resulting in a net population loss in rural population of these municipalities. While one might suspect that war-related casualties could explain lower growth, historical accounts indicate that areas with fewer Europeans suffered greater destruction, suggesting that war damage alone cannot explain the stronger negative effect in large-European-share areas.

Finally, if a large European share signals pre-war development, path dependence would suggest that these areas should have recovered more quickly after the shock. The opposite pattern observed here implies that a stronger, countervailing mechanism was at work—the large-scale European exodus likely inflicted a severe economic shock on local economies, offsetting any potential resilience. Regarding occupational outcomes, the policy has no statistically significant effect on non-agricultural employment in either group.

Table 8: Sample divided w.r.t. pre-war European share and urbanization rate

				Pa	th Depender	nce				
	Pop	ulation Gro	wth	Share o	f Urban Pop	oulation	Share of	Share of Workers in Non-Agri		
	(0	only Muslims	s)	(0	only Muslim	s)	Sectors (only Muslims)			
	All	High	Low	All	High	Low	All	High	Low	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Panel A: pre-war	European	population	share:							
$Regrouped_m$	-0.359***	-0.394***	-0.102	0.049***	0.102***	-0.011	0.043***	0.028	0.005	
$\times Post_t$	(0.060)	(0.089)	(0.081)	(0.017)	(0.033)	(0.024)	(0.016)	(0.031)	(0.020)	
Panel B: pre-war	urbanizati	on rate:								
$Regrouped_m \! \times \! Post_t$	-0.359***	-0.454***	-0.147*	0.049***	0.089***	0.011	0.043**	0.051*	-0.003	
	(0.060)	(0.081)	(0.085)	(0.017)	(0.034)	(0.027)	(0.016)	(0.030)	(0.021)	
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Observation:	1113	560	553	795	400	395	636	320	316	

Notes: The table reports SDiD estimates after the sample is divided by path dependence, or more exactly the pre-war European population share and the pre-war urbanization rate. The treatment variable is a binary indicator of above-median policy intensity (share of Muslims forcibly resettled), defined separately within each subsample. Urban areas are locations labeled ACLs in the census. Columns (1), (4) and (7) repeat the main results from Table 2 and Table 4. Standard errors are clustered at the municipality level, with bootstrapped variance estimation. Significance levels: *p < 0.1, **p < 0.05, and ***p < 0.01

In Panel B of Table 8, I use the pre-war urbanization rate—the share of both European and Muslim populations living in urban areas—as an alternative proxy for initial development. As discussed earlier, this measure is highly correlated with the pre-war European share, and the results show a similar pattern to Panel A. Municipalities with higher pre-war urbanization experienced greater urbanization and lower population growth when a larger share of their Muslim population was forcibly resettled. The key difference lies in the occupational outcomes: in more urbanized municipalities, resettlement has a positive and significant effect on the share of non-agricultural employment. This likely reflects the greater capacity of already-urbanized areas to

absorb displaced rural populations and integrate them into non-agricultural sectors following the disruption of resettlement.

6.4 Potential Unexplored Mechanisms

An important unexplored mechanism concerns the level of direct wartime destruction, such as housing damage and casualty rates.¹⁸ Greater wartime damage likely reduced local population growth and accelerated urbanization, as rural areas suffered more heavily and their displaced populations moved toward urban centers. Unfortunately, detailed municipality-level data on wartime destruction are not available.

Two additional mechanisms likely play important roles: overall educational attainment and fertility rates. Both are closely related to the forced resettlement policy. These two mechanisms are difficult to study due to data constraints. Before the war, rural Algerians were largely illiterate, with limited access to schooling beyond religious instruction. As part of the resettlement effort, the French authorities sought to "Europeanize" the local population by providing French-language education, often through schools established within the centers. Anecdotal evidence suggests that this policy raised overall educational attainment and, in some cases, expanded access to schooling for girls—potentially generating long-term effects on gender equality.

Higher education levels, particularly among women, are associated with increased participation in non-agricultural employment and delayed marriage, which in turn tend to reduce fertility. Following this logic, the resettlement policy may have indirectly contributed to lower fertility rates. However, the available data on education and fertility—collected only at the arrondissement (district) level—are too coarse to allow for robust statistical testing, so the analysis is left for future work.

¹⁸There are works on long lasting negative impacts of war on long-run development (Riaño and Valencia Caicedo, 2024). The case apply to the Algerian case as the casualties mounted to over one million. Riaño and Valencia Caicedo (2024) found that the bombings in Laos by American army caused long-lasting persistent negative impact on regional development.

7. Conclusion

Colonial powers often impose mass migration on a population. Migrants may seek greater economic opportunities, as did many of the European settlers in Algeria. Alternatively, resettlement may focus on specific natives from land where resources or wealth are found. Particularly in the case of natives, the process can be traumatic and often imposes negative legacies on development and institutions. However, the relationship between colonialism and urbanization may be less negative overall than other legacies. Many colonizers seem to have preferred to concentrate native populations in urban locations and to encourage urbanization generally. This may be driven by a belief that urban centers are superior to rural outposts, or colonial authorities may feel that it is easier to exploit the benefits of economic scale and security in urban settings. This paper examines the possible causal relationship between colonialism and urbanization, using the Algerian Centres de Regroupement policy.

Around 2.5 million rural Muslim Algerians were forcefully resettled by military orders from forbidden zones, such as areas near borders, to prison-like centers during the Algerian War for Independence. Because the military aspect provides near exogeneity in the treatment, I use DiD and SDiD with pre and post-war census data to examine the impact. I find that if a region is more intensively impacted by resettlement, it will experience a lower population growth overall but higher urbanization persistently in the long run.

This paper contributes to the literature on the economic impacts of colonialism, mass migration, urbanization, and war. Despite its tremendous impact on Algerian society, there is little prior quantitative analysis on the topic. In the process of adding to this area of knowledge, this paper analyses the mechanism behind urbanization. I find that the higher urbanization in this setting is mainly caused by more outmigration of rural populations. Similarly, the resettlement more profoundly impacted

both least developed municipalities and most connected municipalities with denser transportation infrastructure.

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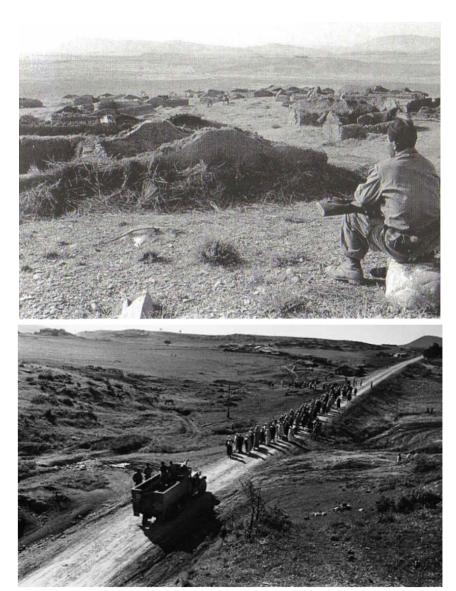
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Appendix A

A.1. Expulsion from a Hamlet



Notes: The photographs were taken by Marc Garanger in 1960 during the Algerian War of Independence. They document the process of forced resettlement, including the destruction of hamlets and the displacement of local populations. The images were obtained from publicly available online sources.

A.2. Centres de Regroupement





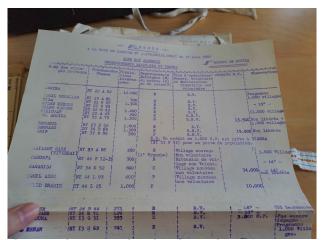
Notes: The photographs were taken by Marc Garanger in 1960 during the Algerian War of Independence. They present aerial views of two resettlement camps at unidentified locations. The images were obtained from publicly available online sources.

A.3. Samples of Military Documents

Forbidden zones in the province of Constantin

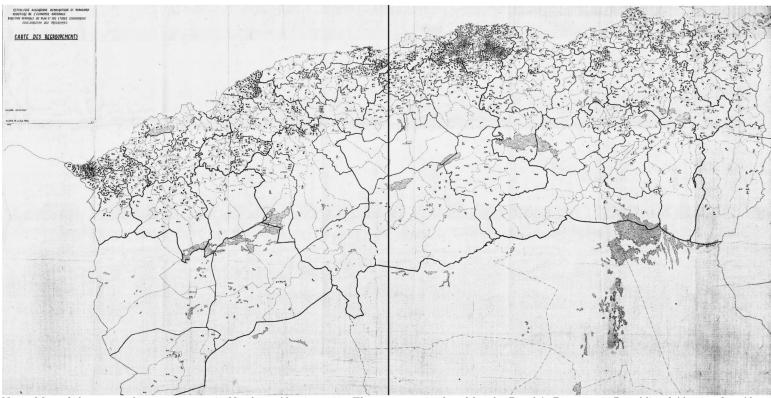


Data on resettlement centers



Notes: The photographs were taken by the author on a visit to the Defence Historical Service (Service Historique de la Défense or SHD) in Paris in 2023. They show the forbidden zone map and data on population size in certain centers.

A.4. Distribution of the Centers across Northern Algeria in 1962



Note: Map of the *camps de regroupement* in Northern Algeria, 1962. The map was produced by the People's Democratic Republic of Algeria after Algeria gained its independence from France. Each point represents a *camp de regroupement* that the French army had created. Courtesy of Michel Cornaton and Samia Henni. First published in Samia Henni, Architecture of Counterrevolution: The French Army in Northern Algeria (Zurich: gta Verlag, 2017, EN; Paris: Editions B42, 2019, FR).

A.5. Summary Statistics of Certain Pre-Treatment Variables

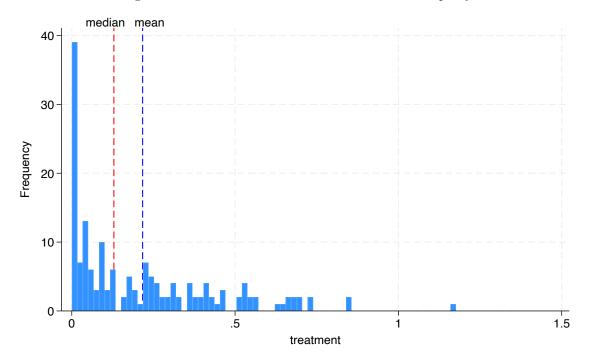
Table 9: Summary statistics

Variables	Obs	Mean	Std.dev.	Min	Max
Share of resettled locals					
	159	0.2166	0.2291	0	1.1760^{1}
Share of European population					
in 1948	159	0.1025	0.1223	0.0003	0.6698
in 1954	159	0.0949	0.1122	0.0004	0.5934
Share of urban population					
in 1948	159	0.2336	0.2238	0	0.9819
in 1954	159	0.2404	0.2182	0	0.9656
Share of non-agricultural occupation	on				
in 1948	159	0.1643	0.1927	0.0068	0.9529
in 1954	158*	0.2223	0.2193	0.0172	0.9689
Employment rate					
in 1948	159	0.4067	0.0689	0.2416	0.5527
in 1954	158*	0.3852	0.0660	0.2526	0.5640
Employment rate for Muslim popu	lation				
in 1948		0.4075	0.0743	0.2219	0.5642
in 1954	158*	0.3847	0.0723	0.2419	0.5853
Total population					
in 1948	159	50,385	63,131	1726	529,079
in 1954	159	55,598	73,498	1826	641,606

Notes: The table shows the pre-treatment statistics for certain characteristics in both the 1948 and 1954 censuses. The observation unit is at the municipality level. * The occupation data for the municipality of Orléansville is missing. ¹ The maximum share here exceeds one. This suggests that some of the population was resettled from a neighboring municipality.

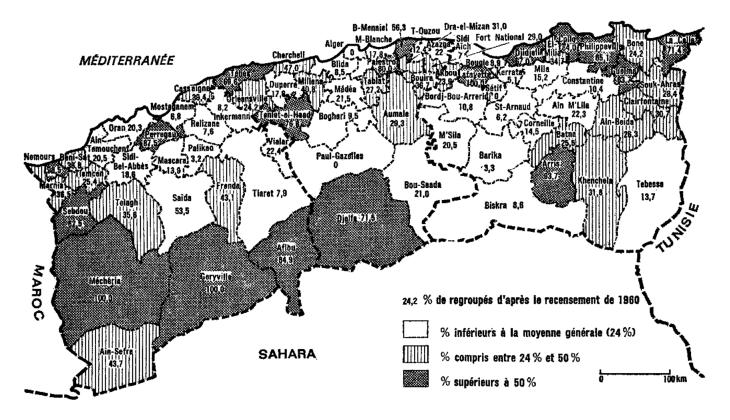
A.6. Histogram of the Share of Muslim Algerians Resettled in a Municipality

The histogram of continuous treatment variable at the municipality level



Note: The figure shows a histogram of the continuous policy intensity—defined as the share of Muslim Algerians forcibly resettled relative to the total Muslim population in each municipality. The red line indicates the median value (12.9%), and the blue line indicates the mean (21.7%).

A.7. Map of Northern Algeria



Note: The map illustrates the share of Muslim Algerians forcibly resettled across districts in northern Algeria. Dark areas represent districts where over 50% of the population was resettled, grey areas indicate 24–50%, and white areas less than 24%. The figure is reproduced from Cornaton (1967).

A.8. The Results Using a Non-Binary Continuous Treatment Variable

Table 10: The resettlement policy on the municipality level

			DiD	
	Europeans plus	Only	Share of urban	Share of urban
	Muslims	Muslims	pop.	Muslim pop.
	(1)	(2)	(3)	(4)
$Regrouped_m$	-0.485***	-0.686***	0.116**	0.090**
$\times \ Post_t$	(0.140)	(0.165)	(0.050)	(0.049)
Control for:				
Time-fixed:	Yes	Yes	Yes	Yes
Municipality-fixed:	Yes	Yes	Yes	Yes
Observation:	1113	1113	795	795
R^2 :	0.975	0.971	0.883	0.892

Notes: This table reports the effects of resettlement on population and urbanization using the Difference-in-Differences (DiD) estimator with a continuous treatment variable. The treatment variable is the continuous policy intensity measure, the share of the Muslim population forcibly resettled within each municipality. Columns (1) and (3) include the pre-war European population, while Columns (2) and (4) exclude it. In Columns (3) and (4), urban areas are defined as all locations labeled ACLs (agglomerations where administrative offices were located) in the census, with the remaining areas are classified as rural. The significance level is set as: * p < 0.1, ** p < 0.05, and *** p < 0.01. The standard error is clustered at the municipality level.

Table 11: Effects of Resettlement on Urbanization

	Log of urban population	Log of urban mus. pop.	Log of rural population	Log of rural mus. pop.	Share of work. non-agri	Share of mus. work. non-agri	Muslim job part. rate
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
$Regrouped_{m}$	0.326	0.362	-0.277	-0.591**	0.113**	0.082	-0.052*
\times $Post_t$	(0.311)	(0.481)	(0.231)	(0.236)	(0.056)	(0.050)	(0.030)
Control for:							
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observation:	795	795	795	795	476	476	477
\mathbb{R}^2 :	0.889	0.897	0.895	0.868	0.936	0.952	0.841

Notes: This table reports the effects of the policy on population and urbanization using the Difference-in-Differences (DiD) estimator with a continuous treatment variable. The treatment variable is the continuous policy intensity measure, the share of the Muslim population forcibly resettled within each municipality. Columns (1), (3), and (5) include the pre-war European population, while Columns (2), (4), and (6) exclude it. In Columns (1)–(4), urban areas are defined as all locations labeled ACLs (agglomerations where administrative offices were located) in the census, with the remaining areas classified as rural. The significance level is set as: *p < 0.1, **p < 0.05, and ***p < 0.01. The standard error is clustered at the municipality level.

A.9. Difference-in-Differences at the District Level

The French historian Cornaton studied the impact of the centers intensively (Cornaton (1967), Cornaton (1998)). In addition to creating substantial, detailed accounts of the economic and social life of the locals both during the war and the post-war period, he constructed a reliable indicator of the degree of the impacts of the reset-tlement policy (see the map in Appendix A.7), quantifying the impact as the share of Muslim population resettled compared to the total Muslim population in 1960 in each district. Compared to the treatment variable defined using the detailed map at the municipality level in my main analysis (see Figure ??), Cornaton's 1967 map provides more accurate data on the degree of impact, because municipality-level treatment does not exhaustively include each center and its respective population size. As a result, I additionally analyze the resettlement at the district level using Cornaton's definition as a robustness exercise. In 1960, there were 76 districts in Northern Algeria belonging to three provinces. The main identification strategy at the district level is as follows:

$$Y_{dt} = \beta Regrouped_d \times Post_t + \gamma X_{dt} + \lambda_d + \lambda_t + \epsilon_{dt}$$
 (3)

where Y_{dt} is an outcome in district d. Y_{dt} measures the population growth and urbanization rate in each district. The coefficient of interest is β , where $Regrouped_d$ measures the share of the rural population forcefully resettled in centers within district d to the total local population of d. $Regrouped_d$ is a non-binary indicator for the magnitude of the impact of the resettlement policy. The rest of the variables are similar to the municipality level analysis. The error term ϵ_{dt} is clustered at the district level.

Figure 5 shows event studies for the population growth and urbanization rates at the district level using the continuous treatment variable of Cornaton (1998). The figure shows that the parallel trend assumption is satisfied. The policy has a persistent negative impact on population growth and a persistent positive impact on urbanization. If 10% of Muslim Algerians were forcibly resettled in centers, the district

will have 3% lower population growth persistently. On urbanization, the impact of the policy is less persistent but shows an increasing trend. For example, in 2008, if 10% of the population of a district was resettled, the district will have a 2% higher urbanization rate. Here I do not distinguish between Muslims and the European population of Algeria before the treatment, as the result does not differ significantly.

(a) Population growth (log)

(b) Share of population in cities

Figure 5: Event study at the district level

Note: The figures show the event study of logarithm of total population and the share of urban population in each district without adding any controls. The confidence interval is 95%. The dashed line indicates the time when the treatment happened.

Table 12 shows the result of the baseline DiD model with various control variables. In the table, Column (1) shows the result with only the year and district fixed effects. One percentage point increase in the population that was resettled during the war decreases the population growth by around 0.35 percentage point in the long run. In Column (2), I include the 1960 war period census for a robustness check. The 1960 census was conducted immediately following the implementation of the main resettlement during the independence war. The table shows that it does not have significant impacts. For robustness checks, the interaction between the time fixed effect and the time unvarying variables are added, including the distance of a district to the coast, the distance to a large city, the distance to a border and the share of Muslim in 1954.

The distance to the coast measures the distance from the regional capital of a district

to the nearest coastline, and is included because population density decreases consistently as the distance increases in Algeria. This may relate to overall development. The distance to a large city measures the shortest distance from each district capital to the closest major cities (in the Algerian context, there are three major cities that have significant impacts on the whole country in almost every aspect: Alger, Oran, and Constantine). The cities have long served as administrative and economic hubs for both European and Muslim Algerians, and as a result, may need to be controlled in the estimation. The distance to a border is the shortest distance from a district capital to either the border with Morocco or Tunisia, whichever is closer. During the war, La ligne Morice (the Morice line in English) was constructed to prevent the movement of fighters and ammunition across the borders of the two countries. Accordingly, the regions closer to borders were impacted more significantly by resettlement during wartime. In Columns (3) to (8), the inclusion of various controls does not have substantial impacts on the results.

Table 12: Effects on population growth

				populat	ion (log)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$Share \ Regrouped_d \times Post_t$	-0.312*** (0.076)	-0.297*** (0.067)	-0.318*** (0.065)	-0.306*** (0.068)	-0.277*** (0.064)	-0.264*** (0.071)	-0.287*** (0.069)	-0.239*** (0.069)
Data 1960	No	Yes						
Year FE	Yes							
District FE	Yes							
$Dis_Coast \times Year$	No	No	Yes	No	No	No	No	Yes
$Dis_City \times Year$	No	No	No	Yes	No	No	No	Yes
$\operatorname{Dis_Border} \times \operatorname{Year}$	No	No	No	No	Yes	No	No	Yes
Share_Muslim 1954×Year	No	No	No	No	No	Yes	No	No
Share of Muslim	No	No	No	No	No	No	Yes	Yes
\overline{N}	532	605	605	605	605	605	605	605
R^2	0.968	0.966	0.970	0.968	0.967	0.967	0.966	0.971

Note: The table shows the regression results of the DiD model, using census data from 1945 to 2008. Column (1) shows the result without 1960 data. Columns (2)-(8) show the results with various time-invariant fixed effects interacted with year fixed effects, and pre-treatment covariates interacted with year fixed effects. The standard error of the error term is clustered at the district level. * p<0.1, *** p<0.51, *** p<0.01.

The result illustrates that the policy has approximately a 0.27 to 0.35 percentage point negative impact on long-term population growth, as the resettled population increases one percentage point. If the common assumption of population as an index for the overall development holds true for this case, the result indicates that resettlement has a persistent negative impact on development.

Table 13 tests for the long-run impact of the resettlement on urbanization rates. Column (1) shows the results of the baseline specification, where each percentage point of increase in the populations resettled during the war has around a 0.145 percentage point positive impact on urbanization. The agglomerations labeled villages or other special regions (barrages, dams, or mining centers) before the war are also included as robustness checks in Columns (2) and (3). I include semi-urban areas (AS) in Column (4) as a robustness check and find no significant impact on the re-

sult. The rest of the columns test inclusion of different control variables and show no significant difference from the results of the baseline model. When all the control variables are added as in the last column, significance level decreases to 5 percentage points.

Table 13: Urbanization effects

	Share of	Share of	Share of	Share of				
	urb. pop.	urb. pop.	urb. pop.	urb. pop.				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$Share \ Regrouped_d \\ \times Post_t$	0.145** (0.0706)	0.199** (0.0940)	0.200** (0.0940)	0.133** (0.0517)	0.0990** (0.0492)	0.127** (0.0560)	0.117** (0.0541)	0.104^* (0.0544)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
pre-war Centre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
pre-war Village	No	Yes	Yes	No	No	No	No	No
pre-war Other	No	No	Yes	No	No	No	No	No
post-war ACL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
post-war AS	No	No	No	Yes	No	No	No	No
$Dis_Coast \times Year$	No	No	No	No	Yes	Yes	Yes	Yes
$Dis_City \times Year$	No	No	No	No	No	Yes	Yes	Yes
${\bf Dis_Border}{\bf \times}{\bf Year}$	No	No	No	No	No	No	Yes	Yes
Share of Muslim	No	No	No	No	No	No	No	Yes
N	380	380	380	380	380	380	380	380
R^2	0.866	0.719	0.719	0.929	0.904	0.907	0.910	0.911

Note: The table shows the regression results of DiD. Different columns show the results with various controls as robustness checks.

In conclusion, the results at the district level are generally in line with those at the municipality level, which further strengthen my findings.

The standard error of the error term is clustered at the district level.

^{*} p < 0.1, ** p < 0.05, ***p < 0.01

A.10. Robustness Check Using Inverse Probability Weighting (IPW)

In Table 1 in the main text, I show the mean difference of the pre-treatment controls between the treated and control groups. The table shows that certain characteristics, including transportation line density in 1930 (both railway and highway), pre-war urbanization rate, pre-war European share, and pre-war share of non-agricultural workers, have significant correlations with the treatment. To construct inverse probability weights, I model the probability of treatment assignment as a function of the above correlated pre-treatment characteristics. Given the limited sample size (N=159) and the presence of highly correlated historical covariates, I assess the potential for multicollinearity that may destabilize the estimated propensity scores.

Table 14 reports Variance Inflation Factors (VIFs) for specifications of the treatment model. The full model—including controls for transportation line density in 1930 (both railway and highway), pre-war urbanization rate, pre-war European share, and pre-war share of non-agricultural workers—shows a mean VIF of 3.50, with individual VIFs exceeding 3.50 for several variables. This indicates moderate multicollinearity among historical and spatial characteristics, especially the three variables of pre-war urbanization rate, pre-war European share, and pre-war share of non-agricultural workers.

To ensure numerical stability and avoid extreme or unstable weights, I adopt a parsimonious specification using only the European population share in 1954 as the main predictor of treatment assignment. This variable is the strongest historical correlate of treatment exposure and captures much of the cross-sectional heterogeneity across

municipalities. Including transportation line density in 1930 does not have a significant impact.

Table 14: VIF table for certain pre-treatment controls

	VIF	1/VIF
Transportation line density in 1930	1.78	0.561
Urbanization rate in 1954 before the war	3.99	0.251
Share of Europeans in 1954 before the war	3.65	0.274
Share of non-agricultural workers	4.60	0.218
Mean VIF	3.50	

Notes: The table reports the VIF for certain pre-treatment regional characteristics that have some correlations with the treatment variable. The treatment is defined using the median of the resettlement policy (share of local Muslim population forcibly resettled) as the cutoff. The table shows that three variables; the urbanization rate in 1954 before the war, share of Europeans in 1954 before the war and share of non-agricultural workers, have a moderate multicollinearity problem.

Appendix Table 15 shows that the resulting IPW improves covariate balance substantially across pre-treatment characteristics, without generating excessively large weights (mean = 2.018, SD = 0.778, max = 9.325 before trimming). Trimming the top 1% of weights stabilizes the distribution (mean = 1.986, SD = 0.552, max = 4.034). I use the trimmed weights in the following results. Before weighting, certain controls, including transportation line density, urbanization rate, European share, and non-agricultural employment share, are negatively correlated with treatment, while geographical features show no significant differences. After applying IPW weights, all mean differences become statistically insignificant.

Table 15: Balance table before and after weighting

	Mean	Mean	Stand. Diff.	Stand. Diff.
	Treated	Control	(Unweighted)	(Weighted)
	(1)	(2)	(3)	(4)
Transportation line density in 1930	0.149	0.237	-0.088***	-0.031
			(0.026)	(0.027)
Maximum calories (soil quality)	8.553	8.650	-0.096	-0.074
			(0.107)	(0.109)
Urbanization rate in 1954 before the war	0.178	0.304	-0.126***	-0.038
			(0.033)	(0.035)
Share of Europeans in 1954 before the war	0.062	0.129	-0.067***	-0.013
			(0.017)	(0.017)
Minimum distance to three mega cities	4.879	4.646	0.234	0.215
			(0.180)	(0.154)
Share of non-agricultural workers	0.159	0.287	-0.128***	-0.045
			(0.034)	(0.035)
Logarithm of area	6.368	5.917	0.451	-0.045
			(0.280)	(0.289)
Longitude	35.922	35.965	-0.043	-0.027
			(0.122)	(0.123)
Latitude	2.788	2.863	-0.074	-0.664
			(0.460)	(0.485)

Notes: The table reports the unweighted and weighted mean differences in key pre-war characteristics between the treated and control groups. Treatment is defined using the median of the policy intensity measure (share of local Muslim population forcibly resettled) as the cutoff. The comparison includes several important pre-war variables: transportation line density in 1930, pre-war urbanization rate, pre-war European population share, pre-war non-agricultural employment share, soil quality, the logarithm of municipal area, latitude, and longitude. Before weighting, some pre-war characteristics—transportation line density, urbanization rate, European share, and non-agricultural employment share—are negatively correlated with treatment, while geographical features show no significant differences. After applying IPW weights, all mean differences become statistically insignificant, indicating improved balance across groups. The pre-treatment urban population share is defined as the proportion of residents living in either ACLs (main administrative centers) or other designated centers. Statistical significance levels are denoted as follows: * p < 0.1, *** p < 0.05, and **** p < 0.01.

In Table 16, I present the DiD results after applying the IPW weights. The findings are broadly consistent with the main DiD and SDiD estimates, except that the effect on urbanization becomes statistically insignificant. To further probe the robustness

of the urbanization results, I modify the definition of urban areas in Column (3). In Columns (2), (4), and (5), urban areas were defined as regions classified ACLs (agglomerations where administration is located) in both pre- and post-war censuses. In Column (3), I expand this definition to also include areas labeled AS (agglomération secondaire) in the post-war period—communities characterized by close social and economic ties, which correspond to villages, towns, small cities, and urban districts. The resulting significant positive coefficient suggests that resettlement increased the share of population residing in both ACL and AS areas. However, this result should be interpreted with caution, as the expanded definition is used primarily for reference.

Table 16: The resettlement policy at the municipality level with the IPW

			DiD with II	PW weights		
-	Log. only	Share of urban	Share of urban	Log. urban	Log. rural	Share of
	Muslims	Muslim pop. ¹	Muslim pop. ²	Muslim pop. ¹	Muslim pop. ¹	non-agri
	(1)	(2)	(3)	(4)	(5)	(6)
$Regrouped_m$	-0.264***	0.036	0.057**	-0.107	-0.320***	0.010
$\times Post_t$	(0.074)	(0.023)	(0.026)	(0.208)	(0.109)	(0.020)
Control for:						
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes
Observation:	1113	795	795	795	795	632
R^2 :	0.971	0.895	0.912	0.897	0.895	0.940

Notes: This table presents the DiD results estimated with IPW weights. The outcome variables are identical to those used in the DiD and SDiD estimations, except in Column (3), where I broaden the definition of urban areas to include locations classified as AS (agglomération secondaire) in the post-war census—communities characterized by close social and economic ties, which correspond to villages, towns, small cities, and urban districts. Columns (2), (4), and (5) use the more standard definition of urban areas, comprising locations labeled ACLs (agglomerations where administration is located). The treatment variable is defined using the median of the policy intensity measure—the share of the local Muslim population affected by the policy—as the cutoff. Column (6) reports the policy's effect on the share of non-agricultural Muslim workers. Standard errors are clustered at the municipality level. No control variables are included other than year and municipality fixed effects. Significance levels are indicated as follows: * p < 0.1, ** p < 0.05, and *** p < 0.01. The logit model is used when calculating the weights.

A.11. Results with Double Robustness DiD Method

To test the robustness of the results, I apply the Double Robust Difference-in-Differences (DRDiD) estimator, which combines outcome regression with inverse probability weighting (IPW). This approach is robust to misspecification in either the outcome model or the treatment model. Given that my setting includes multiple pre- and post-treatment periods, I implement the method using the csdid package of Callaway and Sant'Anna (2021). For consistency with the IPW specification, I include only one control variable—the share of European population in 1954—as adding additional controls does not substantially improve model fit and instead introduces noise. The results, presented in Table 17, are consistent with those obtained from the IPW estimation.

Table 17: The resettlement policy at the municipality level with DRDiD

			Results fro	om DRDiD		
-	Log. only	Share of urban	Share of urban	Log. urban	Log. rural	Share of
	Muslims	Muslim pop. ¹	Muslim pop. ²	Muslim pop. ¹	Muslim pop. ¹	non-agri
	(1)	(2)	(3)	(4)	(5)	(6)
$Regrouped_m$	-0.221***	0.026	0.052**	-0.120	-0.239***	0.017
$\times Post_t$	(0.066)	(0.021)	(0.025)	(0.229)	(0.092)	(0.017)
Control for:						
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes
Observation:	1113	795	795	795	795	632

Notes: This table presents the results using the csdid package in DRDiD method (Callaway and Sant'Anna, 2021). The outcome variables are identical to those used in the DiD and SDiD estimations, except in Column (3), where I broaden the definition of urban areas to include locations classified as AS (agglomération secondaire) in the post-war census—communities characterized by close social and economic ties, which correspond to villages, towns, small cities, and urban districts. Columns (2), (4), and (5) use the more standard definition of urban areas, comprising locations labeled ACLs (agglomerations where administration is located). The treatment variable is defined using the median of the policy intensity measure—the share of the resettled local Muslim population—as the cutoff. Column (6) reports the policy's effect on the share of non-agricultural Muslim workers. Standard errors are clustered at the municipality level. No control variables are included other than year and municipality fixed effects. Significance levels are indicated as follows: * p < 0.1, ** p < 0.05, and *** p < 0.01.

A.12. Results with Conley Standard Errors

Table 18: The resettlement policy at the municipality level

_		DiI	O with Conley Spa	atial Standard Er	rors	
	Log. only	Share of urban	Share of urban	Log. urban	Log. rural	Share of
_	Muslims	Muslim pop. ¹	Muslim pop. ²	Muslim pop. ¹	Muslim pop. ¹	non-agri
	(1)	(2)	(3)	(4)	(5)	(6)
$Regrouped_m$	-0.383***	0.052***	0.071***	0.120	-0.387***	0.037***
$\times Post_t$	(0.053)	(0.017)	(0.015)	(0.092)	(0.115)	(0.014)
Control for:						
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes
Observation:	1113	795	795	795	795	632
R^2 :	0.132	0.019	0.030	0.002	0.030	0.016

Notes: This table presents the DiD results estimated using the Conley Spatial Standard Errors. The outcome variables are identical to those used in the DiD and SDiD estimations, except in Column (3), where I broaden the definition of urban areas to include locations classified as AS ($agglom\acute{e}ration\ secondaire$) in the post-war census—communities characterized by close social and economic ties, which correspond to villages, towns, small cities, and urban districts. Columns (2), (4), and (5) use the more standard definition of urban areas, comprising locations labeled ACLs (agglomerations where administration is located). The treatment variable is defined using the median of the policy intensity measure—the share of the resettled local Muslim population—as the cutoff. Column (6) reports the policy's effect on the share of non-agricultural Muslim workers. Standard errors are clustered at the municipality level. No control variables are included other than year and municipality fixed effects. Significance levels are indicated as follows: *p < 0.1, **p < 0.05, and ***p < 0.01.

A.13. Results with Divided Samples for Rural and Urban Population Growth

Table A.13.1. Sample split: rural Muslim population growth (only excluding ACL)

					Log of run	al Muslim	population					
	Base	Min.	Dis.	European	n Share	5	Soil	Ro	ad	Urbani	Urbanisation	
	Result	Result to C		ties before War		Quality		Density		before War		
		high	low	high	low	high	low	high	low	high	low	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	-0.340***	-0.514***	-0.151	-0.514***	-0.071	-0.139	-0.510***	-0.430***	-0.212**	-0.546***	-0.171	
	(0.085)	(0.123)	(0.134)	(0.158)	(0.104)	(0.124)	(0.122)	(0.167)	(0.104)	(0.145)	(0.114)	
Control for:												
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Municipality-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Observation:	795	400	395	400	395	400	395	400	395	400	395	

Notes: This table reports the effects of the policy on rural population growth using the Synthetic Difference-in-Differences (SDiD) estimator. The treatment is a binary indicator based on the median of the policy intensity measure—the share of the Muslim population forcibly resettled in each municipality. Column (1) presents the baseline result; Columns (2)–(11) show results from samples divided by pre-treatment characteristics. Rural areas are defined as all regions not labeled ACLs ($L'agglom\acute{e}ration~chef-lieu$, agglomerations where administrative offices were located) in the census. Standard errors are clustered at the municipality level. Significance levels: *p < 0.1, **p < 0.05, and ***p < 0.01.

Table A.13.2. Sample split: rural Muslim population growth (excluding both ACL and AS in post-war)

					Log of rur	al Muslim	population				
	Base	Min.	Dis.	European Share		Soil		Re	oad	Urbanisation before War	
	Result	to Ci	ties	before	War	Quality		Density			
		high	low	high	low	high	low	high	low	high	low
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	-0.274**	-0.507***	-0.010	-0.427**	-0.015	0.022	-0.486***	-0.325	-0.284*	-0.467**	-0.069
	(0.107)	(0.169)	(0.142)	(0.181)	(0.135)	(0.141)	(0.166)	(0.202)	(0.156)	(0.186)	(0.152)
Control for:											
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
${\bf Municipality-fixed:}$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observation:	795	400	395	400	395	400	395	400	395	400	395

Notes: This table reports the effects of the policy on rural population growth using the Synthetic Difference-in-Differences (SDiD) estimator. The treatment is a binary indicator based on the median of the policy intensity measure—the share of the Muslim population forcibly resettled in each municipality. Column (1) presents the baseline result; Columns (2)–(11) show results from samples divided by pre-treatment characteristics. Rural areas are defined as all regions not labeled either ACLs ($L'agglom\'eration\ chef-lieu$, agglomerations where administrative offices were located) or AS ($l'agglom\'eration\ secondaires$, which can be smaller cities or villages) in the census. Standard errors are clustered at the municipality level. Significance levels: *p < 0.1, **p < 0.05, and ***p < 0.01.

Table A.13.3. Sample split: urban Muslim population growth (only including ACL)

					Log of urb	an Muslim	population				
	Base	Min.	Dis. European Sha			re Soil		Re	oad	Urbanisation	
	(1) 0.120 (0.189)	to C	ities	befor	e War	Quality		Density		before War	
		high	low	high	low	high	low	high	low	high	low
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	0.120	0.333	0.278	-0.029	0.117	0.083	0.118	0.149	-0.195	-0.185	0.010
	(0.189)	(0.364)	(0.267)	(0.164)	(0.392)	(0.298)	(0.295)	(0.194)	(0.398)	(0.135)	(0.338)
Control for:											
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
${\bf Municipality-fixed:}$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observation:	795	400	395	400	395	400	395	400	395	400	395

Notes: This table reports the effects of the policy on urban population growth using the Synthetic Difference-in-Differences (SDiD) estimator. The treatment is a binary indicator based on the median of the policy intensity measure—the share of the Muslim population forcibly resettled in each municipality. Column (1) presents the baseline result; Columns (2)–(11) show results from samples divided by pre-treatment characteristics. Urban areas are defined as all regions labeled ACLs ($L'agglom\'eration\ chef-lieu$, agglomerations where administrative offices were located) in the census. Standard errors are clustered at the municipality level. Significance levels: *p < 0.1, *** p < 0.05, and **** p < 0.01.

Table A.13.4. Sample split: urban Muslim population growth (including both ACL and AS in post-war)

					Log of urb	an Muslim	population				
	Base	Min.	Dis. European Share			S	oil	Re	oad	Urbanisation	
	Result	to C	Cities	befor	e War	Qua	ality	Der	nsity	befor	e War
		high	low	high	low	high	low	high	low	high	low
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	0.148	0.298	0.307	-0.054	0.147	0.124	0.065	0.168	-0.209	-0.192	-0.058
	(0.208)	(0.370)	(0.303)	(0.197)	(0.411)	(0.318)	(0.288)	(0.221)	(0.413)	(0.156)	(0.350)
Control for:											
Time-fixed:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
${\bf Municipality-fixed:}$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observation:	795	400	395	400	395	400	395	400	395	400	395

Notes: This table reports the effects of the policy on urban population growth using the Synthetic Difference-in-Differences (SDiD) estimator. The treatment is a binary indicator based on the median of the policy intensity measure—the share of the Muslim population forcibly resettled in each municipality. Column (1) presents the baseline result; Columns (2)–(11) show results from samples divided by pre-treatment characteristics. Urban areas are defined as all regions labeled either ACLs ($L'agglom\'eration\ chef-lieu$, agglomerations where administrative offices were located) or AS ($l'agglom\'eration\ secondaires$, which can be smaller cities or villages) in the census. Standard errors are clustered at the municipality level. Significance levels: *p < 0.1, **p < 0.05, and ***p < 0.01.

A.14. Results with Sample Divided

Table A.14.1. Sample split: share of urban population (including Europeans before the war)

	1										
	Base	Min	Dis.	Europea	an Share	S	oil	Re	oad	Urban	isation
	Result	to C	Cities	befor	e War	Qua	ality	Density		before War	
		high	low	high	low	high	low	high	low	high	low
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
											0.0377 (0.0555)
Control for:											
Time-fixed:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
${\bf Municipality-fixed:}$	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observation:	795	400	395	400	395	400	395	400	395	400	395
\mathbb{R}^2 :	0.883	0.873	0.893	0.856	0.919	0.895	0.870	0.862	0.922	0.830	0.888

Notes: This table reports the effects of the policy on share of urban population including the Europeans before the war, using the Synthetic Difference-in-Differences (SDiD) estimator. The treatment is a binary indicator based on the median of the policy intensity measure—the share of the Muslim population forcibly resettled in each municipality. Column (1) presents the baseline result; Columns (2)–(11) show results from samples divided by pre-treatment characteristics. Urban areas are defined as all regions labeled ACLs (L'agglomération chef-lieu, agglomerations where administrative offices were located) in the census. Standard errors are clustered at the municipality level. Significance levels: * p < 0.1, ** p < 0.05, and *** p < 0.01.

Table A.14.2. Sample split: urban population growth (including Europeans before the war)

					Size of	Urban Po	pulation				
	Base	Min.	Dis.	European Share Soil			Soil	Re	oad	Urban	isation
	Result	to C	ities	befor	e War	Qu	ality	Der	nsity	befor	e War
		high	low	high	low	high	low	high	low	high	low
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	0.389	0.131	0.358	0.0382	-0.212	0.357	-0.00186	0.523*	-0.403	-0.163	-0.117
	(0.291)	(0.432)	(0.374)	(0.320)	(0.349)	(0.360)	(0.445)	(0.303)	(0.506)	(0.267)	(0.338)
Control for:											
Time-fixed:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
${\bf Municipality-fixed:}$	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observation:	791	396	395	400	391	398	393	400	391	400	391
R^2 :	0.940	0.934	0.951	0.949	0.960	0.951	0.934	0.938	0.957	0.957	0.962

Notes: This table reports the effects of the policy on urban population growth including the Europeans before the war, using the Synthetic Difference-in-Differences (SDiD) estimator. The treatment is a binary indicator based on the median of the policy intensity measure—the share of the Muslim population forcibly resettled in each municipality. Column (1) presents the baseline result; Columns (2)–(11) show results from samples divided by pre-treatment characteristics. Urban areas are defined as all regions labeled ACLs (L'agglom'eration chef-lieu, agglomerations where administrative offices were located) in the census. Standard errors are clustered at the municipality level. Significance levels: * p < 0.1, ** p < 0.05, and *** p < 0.01.

Table A.14.3. Sample split: share of workers in non-agricultural sector (including Europeans before the war)

				Share	of Workers	in Non-Ag	ricultural S	Sectors				
	Base	Min.	Dis.	Europea	European Share before War		Soil Quality		oad	Urbanisation		
	Result to high (1) 0.117** 0.0289	to C	Cities	befor					isity	before War		
		high	low	high	low	high	low	high	low	high	low	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	0.117**	0.0289	0.152**	0.120*	-0.0145	0.137**	0.0280	0.172***	-0.0388	0.144*	0.0000716	
	(0.0449)	(0.0729)	(0.0590)	(0.0717)	(0.0436)	(0.0567)	(0.0748)	(0.0649)	(0.0519)	(0.0731)	(0.0458)	
Control for:												
Time-fixed:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
${\bf Municipality-fixed:}$	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Observation:	635	319	316	319	316	319	316	319	316	319	316	
R^2 :	0.923	0.931	0.920	0.915	0.952	0.922	0.930	0.902	0.954	0.905	0.950	

Notes: This table reports the effects of the policy on the share of non-agricultural workers including Europeans before the war, using the Synthetic Difference-in-Differences (SDiD) estimator. The treatment is a binary indicator based on the median of the policy intensity measure—the share of the Muslim population forcibly resettled in each municipality. Column (1) presents the baseline result; Columns (2)–(11) show results from samples divided by pre-treatment characteristics. Standard errors are clustered at the municipality level. Significance levels: *p < 0.1, **p < 0.05, and **** p < 0.01.

A.15. Results of Heterogenous Analysis with Different Control Variables

A.15.1. Results: heterogenous analysis

		Log popul	lation (only	Muslims)			Share	of urban pop	oulation			Size o	f urban popu	lation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
${\it Treatment} \times {\it Post}$	-0.686*** (0.165)	-0.546*** (0.143)	-0.831*** (0.180)	-0.957*** (0.278)	-1.012*** (0.179)	0.116** (0.0501)	0.0812* (0.0466)	0.145*** (0.0515)	0.205** (0.0900)	0.195*** (0.0604)	0.389 (0.291)	0.689** (0.340)	0.931*** (0.323)	-0.304 (0.385)	0.783** (0.390)
$\begin{aligned} & \operatorname{Treatment} \times \operatorname{Post} \ \times \operatorname{Higher} \\ & \operatorname{Min. Dist. to Cities} \end{aligned}$		-0.453* (0.234)					0.111 (0.0752)					-0.967** (0.415)			
$\begin{aligned} & \text{Treatment} \times \text{Post} \ \times \text{Higher} \\ & \text{European Share in 1954} \end{aligned}$			0.483** (0.208)					-0.0967 (0.0674)					-1.814*** (0.367)		
$\begin{aligned} & \operatorname{Treatment} \times \operatorname{Post} \\ & \times \operatorname{Higher\ Soil\ Quality} \end{aligned}$				0.384 (0.239)					-0.126 (0.0787)					0.979** (0.421)	
$\begin{aligned} & \text{Treatment} \times \text{Post} \times \\ & \text{Better Infrastructure in 1930} \end{aligned}$					0.685*** (0.173)					-0.166** (0.0638)					-0.828* (0.425)
Control for:															
Year-fixed:	\checkmark	✓	\checkmark	✓	✓	\checkmark	\checkmark	\checkmark	\checkmark	✓	\checkmark	✓	✓	\checkmark	\checkmark
Municipality-fixed:	\checkmark	\checkmark	\checkmark	\checkmark	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	✓	✓	✓
Observation:	1113	1113	1113	1113	1113	795	795	795	795	795	791	791	791	791	791
R^2 :	0.971	0.971	0.971	0.971	0.972	0.883	0.884	0.883	0.884	0.885	0.940	0.942	0.946	0.942	0.942

Notes: the share of the urban population and the size of the urban population use the definition of the population living in the ACLs (agglomerations where the administration is located) divided by the total municipality population. The significance level is shown as standard in the literature: *p < 0.1, *** p < 0.05, and **** p < 0.01. The standard error is clustered at the municipality level.

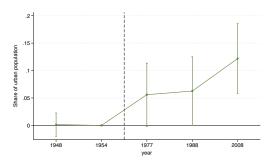
A.15.2. Results: heterogenous analysis

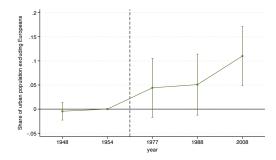
	Sha	re of worker	s in non-agri	icultural sec	tors	Job	participatio:	n rate (exclu	ding Europ	eans)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
$Treatment \times Post$	0.117**	0.157***	0.189***	0.00655	0.155***	-0.0446*	-0.0502*	-0.0805**	-0.0295	-0.0981**
	(0.0449)	(0.0459)	(0.0478)	(0.0641)	(0.0530)	(0.0259)	(0.0292)	(0.0333)	(0.0360)	(0.0325)
$Treatment \times Post$		-0.130**					0.0179			
\times Min. Dis. Cities (log)		(0.0598)					(0.0353)			
$Treatment \times Post$			-0.240***					0.120***		
\times Share Europeans 1954			(0.0590)					(0.0354)		
Treatment×Post				0.156***					-0.0215	
×Soil quality (log)				(0.0589)					(0.0362)	
Treatment × Post					-0.0809					0.112***
$\times Infrastructure (log)$					(0.0623)					(0.0308)
Control for:										
Time-fixed:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Municipality-fixed:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observation:	635	635	635	635	635	636	636	636	636	636
R^2 :	0.923	0.924	0.926	0.924	0.923	0.838	0.838	0.844	0.838	0.844

Notes: the significance level is set as: * p < 0.1, ** p < 0.05, and *** p < 0.01. The standard error is clustered at the municipality level

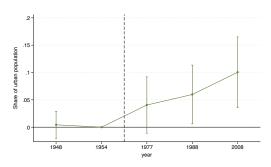
A.16. Event Studies at the Municipality Level with Other Definitions of Urban Areas

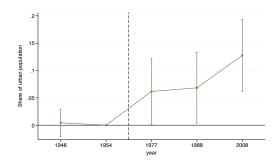
Figure 6: Event studies at the municipality level





- (a) ACL in pre- and ACL+AS in post-war eras
- (b) ACL in pre- and ACL+AS in post-war eras





- (c) ACL+centre in pre- and ACL in post-war eras
- (d) ACL+centre in pre- and ACL+AS in post-war eras

Note: The figures show the event study of the share of urban population using different definitions for the urban areas. In Subfigure (a), an urban area is any place with an ACL label in the pre-war census, and a label either with ACL or AS in the post-war census. Subfigure (a) includes European population in the pre-war census but Subfigure (b) not. ACL is a place where administrative government located, and AS is a place that has some characteristics of urban areas but does not have the administrative government centers. In Subfigure (c) and Subfigure (d), I add any place that is labeled centre in the pre-war census. These areas differ slightly from more standard rural regions in population and economic structure. It is important to notice that places labeled centre in the pre-war census are not the resettlement centers I use as my main treatment. The treatment variable is a binary one using the median as the threshold. The confidence interval is at 95%. The vertical line indicates the time when the treatment occurred.

Abstrakt

Urbanizace je obecně provázena rozvojem. Otevřenou otázkou však zůstává, zda může náhlá a nezamýšlená urbanizace podnítit budoucí pokrok. Francouzská vláda během války za nezávislost v Alžírsku vybudovala tisíce *Centres de Regroupement* (přesidlovacích center), do nichž armáda násilně přesunula přibližně 2,5 milionu civilistů. Tato politika odtrhla civilisty od jejich dosavadního zemědělského života a soustředila je do táborů připomínajících vězení. Využitím heterogenity v intenzitě zásahu mezi regiony ukazují odhady metodou rozdílů v rozdílech, že politika má trvalý negativní dopad na celkový růst populace, ale zároveň dlouhodobě pozitivní dopad na urbanizaci. Abych se vypořádal s endogenitou, opírám se o fakta, že i) armáda tuto politiku uplatňovala výhradně z vojenských důvodů a ii) celý proces postrádal ze strany úřadů ucelené plánování. Zjištění poskytují nový vhled do dlouhodobých ekonomických dopadů nezamýšlené urbanizace.

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Phone: + 420 224 005 153 Email: office@cerge-ei.cz Web: https://www.cerge-ei.cz/

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