

BORDER EXTERNALIZATION AND VIOLENCE ALONG MIGRATION ROUTES: EVIDENCE FROM “REMAIN IN MEXICO”^{*}

Elena Barham[†]

Marco Alcocer[‡]

July 30, 2026

Abstract

How does migration enforcement in transit countries affect security? As border externalization — where migration destination states pressure transit countries to intensify migration enforcement — becomes a central tool of migration governance, its downstream effects remain poorly understood. We theorize that border externalization can increase violence along migration routes by creating incentives for high capital criminal organizations to enter and control the migrant sector. We evaluate this theory by studying the 2019 Migrant Protection Protocols (or “Remain in Mexico”), which pushed Mexico to crack down on migration along its own southern border. Using original data on migration routes, we show that Remain in Mexico increased homicides along migrant routes, and is associated with increased cartel presence and cartel exploitation of migrants. By tracing the consequences of migration policy beyond the borders of destination states, this study shows how externalized border enforcement can undermine security.

Keywords: Border externalization, Migration, Criminal Violence, Security

Word Count: 9,991

^{*}We thank Hannah Baron, Julián Gerez, Danny Hirschel-Burns, Isabel Laterzo-Tingley, Megan Stewart, Andres Uribe, and workshop audiences at the Latin American Studies Association Annual Conference and University of Michigan CPRD for helpful comments. We thank Bryan Avelar for exceptional support in fieldwork. We are also thankful for the research assistance of Salma Sherif, Jeremy Garcia, Damara Lopez Gomez, and Emily Acosta. The fieldwork for this project was supported by a fellowship from the Alexander von Humboldt Foundation.

[†]LSA Collegiate Fellow, University of Michigan.

[‡]Assistant Professor of Political Science, University of California - Merced.

Migration is among the most salient and contested policy issues in the contemporary Global North. In both the United States and Europe, right-wing populist political movements have adopted nativist stances, dragging political consensus towards anti-migration policies across the political spectrum (Shehaj, Shin and Inglehart, 2019; Alrababah et al., 2025). Policy actions on this front have varied, from reducing the quota of migrants and refugees accepted each year, to enacting bans on certain sending countries, to militarizing the policing of land and sea borders (Topak and Vives, 2020). Alongside these well-studied domestic policies, destination countries also increasingly pressure nearby transit countries – from Mexico, to Libya, to Turkey, to Malaysia – to prevent the advancement of migrants to their destination.

Border externalization shifts border enforcement from the physical borders of destination countries to migration routes within transit countries. In externalizing their borders, destination countries outsource the repression, humanitarian support, and temporary hosting of migrants to transit countries, which are tasked with controlling migration flows and preventing them from reaching destination country borders. In outsourcing anti-migrant enforcement, border externalization shifts control over policing migration to the generally weaker institutional environments of transit countries. With the global turn towards the securitization of migration control (Menjívar, 2014) and the blending of immigration and criminal law (Menjívar, Gómez Cervantes and Alvord, 2018), border externalization typically entails intensified punitive enforcement by third countries against migrants (Menjívar, 2014; Savino, 2019; Zaiotti, 2016; Casas, Cobarrubias and Pickles, 2010). Despite the centrality of border externalization in global migration governance and the policy shock it exerts on transit migration, its impacts in transit countries remain largely unstudied in political science.

We examine the impacts of border externalization on violence and security along transit migration routes. We argue that the enforcement shock entailed in border externalization leads to increases in violence against migrants as well as non-migrants along migration routes by criminalizing the market for human mobility. Border externalization limiting migrants' mobility creates a geographic concentration of exploitable migrants in need of migrant services (Tinti and Reitano, 2017). Defining criminal capital as the stock of assets that can be used to facilitate organized criminal enterprise, we suggest that the enforcement shock of border externalization increases the return to criminal capital within the migrant sector, attracting the entry of high-capital criminal organizations who can better evade and corrupt enforcement officials. Yet, high-capital criminal organizations lack migration-specific criminal capital and therefore enter the migration sector by incorporating lower-capital smuggling and criminal networks that

provide the specialized knowledge and local connections needed to enter and consolidate control over the market. Consequently, as high-capital criminal organizations move to control the migration market, violence along migration routes increases against non-migrants to consolidate control over migration routes and migrants to increase rent extraction.

The United States' 2019 border externalization policy the Migrant Protection Protocols (MPP) – better known as “Remain in Mexico” – provides a striking opportunity to test our theory. In addition to requiring U.S.-bound migrants to await their asylum hearings in Mexico, Remain in Mexico pushed the Mexican government to increase migration enforcement throughout Mexico and thus limit migrants reaching the U.S.-Mexico border. In response, the Mexican government launched an intensive and highly punitive crackdown on transit migration through southern Mexico, including dispatching the National Guard to control migration flows and implementing a program of internal deportations in which undocumented migrants are moved from Mexico's northern border back to southern Mexico. Despite long-running policing of migration on the U.S.-Mexico border, Remain in Mexico brought a historically unprecedented influx of migration enforcement into Mexico's highly-transited southern border state of Chiapas.

In this empirical context, we combine multiple original data sources to evaluate our theory linking border externalization to spikes in violence due to the entry of high-capital criminal organizations into the migrant sector. First, we employ a spatial difference-in-difference design based on original maps of migration routes, original data on the location of migrant-facing institutions, and granular homicide data to show that Remain in Mexico increased violence against both migrants and non-migrants along the migration routes, with much violence clustering near to stranded and exploitable migrant populations. Second, we triangulate between survey data, original data on criminal presence in Chiapas, and qualitative evidence from fieldwork to provide evidence for the mechanism of drug cartel takeover of the migrant sector in Chiapas. Taken together, the main findings show that the enforcement shock led to increases in violence along valuable migration routes and where vulnerable migrant populations were stranded, while mechanism evidence highlights how cartels leveraged violence to control the migrant market and drive up profits from migrant exploitation.

This study advances three main contributions at the intersection of comparative politics and international relations with relevance to broader debates on migration, violence, and criminal organization.

First, we contribute to studies of the politics of migration by conceptualizing migration as a distinct

economic sector, shaped by enforcement regimes, and using this conceptualization to shed light on how migration policy by destination states has violent consequences beyond destination state borders. In demonstrating that border externalization can create economic opportunities that reshape illicit migration markets in transit countries, we fill a gap in a literature which broadly focuses on receiving-country policies and politics (i.e. Rojas et al., 2025; Alrababah et al., 2025; Topak and Vives, 2020), political opinion towards migrants (i.e. Bandiera et al., 2026; Wimmer et al., 2025; Holland, Peters and Zhou, 2024), and migrant assimilation (i.e. Hainmueller, Hangartner and Pietrantuono, 2017; Gaikwad and Nellis, 2021; Peters and Vink, 2024).¹ Because transit countries often possess weaker state institutions and larger illicit economies than destination countries, border externalization produces distinct consequences for violence that existing migration scholarship has largely overlooked. Our empirical analysis also complements a rich ethnographic and interdisciplinary literature documenting the lived experiences of migrants under border externalization by providing systematic evidence that these policies attract organized crime and increase violence (Menjívar, 2014; Vogt, 2018; De León, 2022; Díaz de León, 2023).

Second, we contribute a novel theoretical perspective to a broad debate around the relationship between enforcement, criminal organizations, and violence. We introduce the concept of criminal capital to differentiate the capabilities and specializations of actors within the illicit sector.² By unpacking variation in criminal capital, we explain why border externalization induces different forms of adaptation across criminal organizations. The concept of criminal capital provides nuance to a literature that has largely emphasized organizational capacity when explaining variation in criminal violence, despite engaging such different actors as neighborhood gangs and drug trafficking organizations (i.e. Barham and Daly, 2026; Alcocer and Erickson, 2026; Trejo and Ley, 2020; Lessing, 2021). Empirically, we find that enforcement targeting illicit markets dominated by lower-capital criminal actors can create a more organized and consolidated illicit sector by attracting high-capital criminal organizations. This finding challenges existing literature which links enforcement shocks to fragmentation in the criminal landscape (Esberg, 2025; Alcocer and Toscana, 2025; Calderón et al., 2015; Phillips, 2015), with our findings suggesting that both the type of enforcement shock and the pre-shock composition of the criminal economy likely bear heavily on the consequences of enforcement shocks. Counterintuitively, we find that violence increases following

¹ Ajzenman, Aksoy and Guriev (2022)’s study of exposure to transit migration and entrepreneurship attitudes is a notable exception.

² We distinguish our organizational definition of criminal capital from the individual human capital definition put forward by Sviatschi (2022).

market consolidation under high-capital criminal organizations, as criminal organizations that can employ significantly more capital towards violence are the ones which consolidate control over migration markets. This challenges the often implicit assumption in existing studies that consolidation is intrinsically less violent than criminal competition (i.e. Daly and Barham, 2024; Castillo and Kronick, 2020), and points towards coercive control as a tactic of monopolistic criminal governance (Aponte González, Hirschel-Burns and Uribe, 2023; Campos-Contreras, Nieto-Matiz and Schenoni, 2025).

Third, our paper provides essential evidence for the challenging debate around the link between migration and the spread of organized crime. In contrast to studies which examine whether migrants themselves create crime (i.e. Masterson and Yassenov, 2021; Bianchi, Buonanno and Pinotti, 2012; Bell, Fasani and Machin, 2013; Dancygier and Laitin, 2014), we instead document how *criminalizing migrants can create organized crime*. In doing so, we build on important findings which show that criminal organizations thrive under contexts of border enforcement (Izcara Palacios, 2012; Slack and Campbell, 2016; Badillo-Sarmiento, Bravo-Hernández and Mercado-Ramos, 2023) and that migration under illegality can lead to the spread of organized crime (Dipoppa, 2025). Our design advances this debate by leveraging an exogenous change in the in de facto criminalization of the migrant condition to show how it is precisely the condition of illegality which induces organized criminal entry into the migration sector. Our findings show that organized crime entrenches along migration routes to capitalize in the aftermath of enforcement shocks, suggesting that organized crime responds to the economic incentives created by migration policy and is not a static feature of migrant populations.

1 Theory

We argue that there is a causal link between border externalization and growing violence against migrants and non-migrants along migration routes, driven by the entrance of high-capital organized criminal actors into migrant exploitation. Border externalization reshapes the migrant condition towards illegality and exposure to enforcement. This enforcement shock incentivizes high-capital organized criminal groups to enter into the migration market by increasing the profits to be had by migrant exploitation as well as increasing the returns to organized criminal capital. The result, we suggest, is growing violence against both migrants and non-migrants along migration routes following border externalization shocks.

1.1 Border Externalization and Stranded Migrant Populations in Transit

Border externalization is the process by which powerful migrant-receiving states extend migration control into migrant-sending and transit countries to delay and detain migrants en route to destination countries (Menjívar, 2014). Within the framework of securitization and criminalization of migration (Menjívar, 2014; Menjívar, Gómez Cervantes and Alvord, 2018), border externalization has been characterized by the implementation of punitive migration enforcement policies in migrant sending and transit countries that focus on detention and deportation (Menjívar, 2014; Savino, 2019; Zaiotti, 2016; Casas, Cobarrubias and Pickles, 2010). Border externalization implies not only increased attention at border crossings, but also increased inland checkpoints along major roads, surveillance at bus and train stations, increased patrols in towns and cities, and operations targeting known migrant locations. Enforcement agents, tasked with increasing detention and deportation, make the movement of migrants along migration routes more difficult and costly for individual migrants and smugglers moving migrants.

The effect of this increased enforcement along migration routes is to limit migrants' independent mobility, exposing them to the risk of enforcement and thus creating geographically concentrated clusters of large, stranded migrant populations along migration routes. As checkpoints, patrols, and surveillance limit migrant mobility following border externalization, choke-points emerge stranding large migrant populations down-route of key enforcement locations. Migrants concentrate geographically, often in camps, shelters, and informal settlements, relying on the support of migrant-serving NGOs, personal savings, family support, and informal employment to survive while planning the next steps of their journey. Indefinite delays and increased uncertainty pose substantial challenges for migrants: the risk of exposure to enforcement causes migrants to delay their journeys and attempt to find work-arounds to evade enforcement,³ while alienation from state institutions (i.e. Alsan and Yang, 2024; Kirksey, 2021; Vargas and Pirog, 2016) and local populations (Barham and Alcocer, 2026) increase stranded migrants' vulnerability. Unprotected by law enforcement and excluded from host populations, stranded migrants in transit are highly vulnerable to criminal exploitation both for their demand for smuggling and their lack of recourse following victimization.

³ Author fieldwork, Chiapas, Mexico, January-February 2025.

1.2 Entry of High-Capital Criminal Organizations into Migration Markets

We contend that the geographic concentration of exploitable migrants and the incentives generated by an enforcement shock push high-capital criminal organizations to move into and control the migrant sector for three interrelated reasons: greater returns to criminal capital for higher capital criminal groups, increased profits from migrant service provision, and expanded opportunities for rent extraction from migrants. We expect these high-capital criminal organizations to enter the migration sector by integrating or displacing lower-capital smuggling and criminal networks involved in migrant smuggling and exploitation.

We define *criminal capital* as the stock of tangible and intangible assets accumulated by criminal organizations that can be deployed or invested to produce illicit goods and services, facilitate criminal exchange, corrupt or coerce state actors, and generate criminal profits. Criminal organizations vary in their stock of criminal capital, from high-capital organizations capable of sustaining significant territorial governance, illicit market control, and extended linkages with state actors, to low-capital organizations that operate with more limited resources and rely on more specialized, sporadic or local forms of illicit production. We distinguish between fungible, general criminal capital and sector-specific expertise and assets, with criminal capital representing assets that organizations can mobilize and invest, whereas sector-specific expertise and assets denotes their ability to operate in a particular licit or illicit sector. Criminal organizations may therefore possess substantial capital while lacking the sector-specific expertise necessary to operate efficiently in a new illicit market.

Transit migration corridors are often characterized by a vibrant mix of illicit and criminal actors. First are the providers of “migrant services”, mainly smugglers, who facilitate mobility along global migration routes (Tinti and Reitano, 2017). Smuggling networks that provide migrants with mobility are often low-capital local or kin-based networks (Campana and Gelsthorpe, 2021) who rely on their reputations for trustworthiness, honesty, competence, and good treatment to attract customers (Slack and Martínez, 2018). Large flows of marginalized migrants often also attract local lower-capital criminal actors who seek to exploit irregular migrants through predatory crimes, such as robbery, theft, and extortion. Lastly, as migration routes often coincide with goods smuggling and trafficking routes, transit migration corridors often overlap with the presence of high-capital transnational criminal networks like cartels and mafias.

We suggest that border externalization – alongside other enforcement shocks – generates returns to criminal capital for higher capital criminal organizations who can leverage their assets to better evade and

corrupt enforcement officials relative to lower capital criminal actors. Here, we build on Dipoppa (2025) who suggests that the risk of enforcement itself can generate demand for higher capacity criminal actors, as the “intermediation of agents specialized in illegality allows these actors to violate laws without facing high risks of being detected and prosecuted” (p.557). In this context, the criminal capital which enables organized crime to traffic illicit goods is highly translatable to trafficking migrants who are newly subject to detection and punishment under border externalization regimes. In addition to knowledge of routes and infrastructure (such as trucks and busses) to physically move items, high-capital organized crime can deploy their capital to evade, corrupt, or coerce migration enforcement agents in ways that individual migrants or small smuggling networks cannot. Border externalization thus raises the barriers to entry for the movement of migrants. While local smugglers are vulnerable to the application of the law under border externalization, high-capital criminal groups have greater organizational capacity, political linkages, coercive strength, and other assets they can deploy to the migrant sector. These assets make high-capital criminal organizations better suited to exploit migrants’ demand for mobility under the threat of enforcement.

Given the increased barriers to entry, we further suggest that border externalization increases the profitability for high capital organized crime of providing services to migrants, such as smuggling and temporary informal employment. Evidence from other illicit markets shows that the threat of enforcement can raise profitability by tightening supply and increasing prices, leading to increased violent competition over them by criminal actors (Castillo, Mejía and Restrepo, 2020; Kronick, 2020) and attracting new criminal actors seeking to exploit the new market opportunity (Esberg, 2025; Estancona and Tiscornia, 2025; Alcocer, 2025). Border externalization operates similarly: enforcement shocks demand for smuggling services and weakens migrants ability to discriminate across smugglers or sanction violent smugglers, increasing potential profits to be gleaned from both smuggling and exploiting migrants. As migrants have worse outside options, criminal organizations are able to charge more migrants higher prices for less reputable smuggling services, driving up profit margins on each of these axes.

However, the opportunity to extract rents from stranded migrants extends beyond the provision of legitimate services to include exploitation, through practices such as kidnapping, extortion, forced labor, and human trafficking. Border externalization makes these rent generation schemes more profitable as well for high-capital criminal organizations: migrants are geographically immobile, excluded from state-based protection due to their condition of illegality, and often identifiable based on phenotype or other physical differences, accent, or linguistic difference. The sum of these conditions makes migrants iden-

tifiable to organized crime and highly vulnerable to these distinct forms of exploitation, all of which are highly profitable for organized crime, particularly those that can enact these activities at scale.

Despite the financial incentives to enter the migration sector for high-capital criminal organizations and their comparative advantage under increased enforcement, these organizations are constrained by their industry-specific knowledge and assets that only partially translate into the migration sector. They lack specialized knowledge on migration corridors, migrant smuggling, and migrant exploitation, and assets including connections with migration authorities, shelters, migrant networks, local middlemen and recruiters. To enter the migrant sector, high-capital criminal organizations must therefore invest their criminal capital to acquire the necessary capabilities. Because these are costly to develop, we expect high-capital criminal organizations entering the migration sector to integrate lower-capital smuggling and criminal networks through acquisition or hostile takeover while displacing or eliminating those rejecting integration. Beyond providing specialized knowledge and local connections, lower-capital criminal networks also supply additional coercive capacity that high-capital criminal organizations can deploy to subjugate migrants, eliminate competitors, and deter entry by rival high-capital organizations.

1.3 Violence Against Rivals and Migrants

Across contexts, marginalized populations alienated from state institutions find both protection and exploitation from criminal actors, with violence increasing as a result (Cordova, 2025; Aponte González, Hirschel-Burns and Uribe, 2023). As border externalization induces high-capital criminal actors to enter the migrant services and exploitation sectors, we expect violence against migrants and non-migrants along migration routes to increase, particularly in locations where large migrant populations become stranded. We hypothesize two ways in which high-capital organized crime uses violence to consolidate this control: violence against non-migrants to secure territorial and commercial control, and violence against migrants to increase extortion rents.

First, as high-capital organized crime moves to control the migrant market, they must beat out organizational rivals to control territory and eliminate or co-opt lower-capital smuggling competitors to exploit the trade. A vast empirical literature suggests that criminal organizations leverage violence against established rival groups when they contest territorial control (i.e. Alcocer, 2025; Barnes, 2017; Daly and Barham, 2024; Magaloni et al., 2020; Trejo and Ley, 2020; Yashar, 2018). Violence emerges as groups jostle to control territory, attempting to win violent conflicts against other criminal organizations and

establish territorial control.

Salient models of criminal competition predict that increasing the value of certain territories will lead to criminal competition to control these territories (i.e. Bueno de Mesquita, 2020; Castillo and Kronick, 2020), with studies of shocks to the value of drug markets finding subsequent increases in violence (Sobrino, 2019; Castillo, Mejía and Restrepo, 2020; Alcocer, 2025). While these studies examine the effects of market shocks on established illicit markets already controlled by high-capital criminal actors, we probe a policy shock which functionally creates a new illicit market ripe for control by criminal organizations.

We suggest that, following the policy shock, high-capital criminal organizations moving to control the migrant sector will use violence to contest control of the migration sector, force the vertical integration of existing lower-capital smuggling and criminal networks, and project control to local populations. Prior to the entrance of high-capital criminal organizations, small-scale smugglers provide mobility services to migrants and small criminal networks also often predate on migrants. When organized crime moves in, smugglers are both organizational rivals as well as potentially valuable labor for organized crime in its control of the migration trade. Organized crime, we expect, will use violence to coerce smugglers to integrate into their organization in order to capture their rents and leverage their specialized capacity in smuggling (such as network, reputation, and knowledge of local terrain), or to eliminate low-capital criminal networks that refuse integration. Alongside this violence, we expect high-capital organizations to use violence to contest control of migration routes amongst each other, as well as to signal their presence and dominance to local populations (Campos-Contreras, Nieto-Matiz and Schenoni, 2025; Aponte González, Hirschel-Burns and Uribe, 2023).

Second, in addition to the violence enacted by high-capital organized crime to establish and maintain territorial control vis-à-vis rivals, we suggest that violence is used strategically by organized crime to shape rent extraction from migrant populations themselves. Organized crime extracts rents from migrants by exploiting migrant vulnerability to expose them to extortion, kidnapping for ransom, forced labor, and human trafficking, as well as exploiting legitimate demand for mobility to charge migrants for smuggling services. Exploitation-based rent-generation strategies imply a certain risk of victimization – i.e. kidnapping for ransom is backed by a threat of harm in cases where the migrant is not able to pay – which results in increasing victimization of migrants. While using violence against migrants may seem counterproductive, it is a core mechanism by which criminal groups establish control over markets and populations (Lessing, 2021), even under conditions of criminal hegemony (Aponte González, Hirschel-Burns and Uribe, 2023;

Campos-Contreras, Nieto-Matiz and Schenoni, 2025). Violence signals dominance and control, creating fear within migrants and forcing compliance while limiting potential challenges. The periodic use of violence against migrants sends a credible signal and assures kidnapping, extortion, and other victims pay. We therefore expect increases in violence against migrants in order to sustain kidnapping, extortion, and other forms of criminal exploitation of migrants.

Hypothesis 1: Border externalization increases violence against migrants and non-migrants along migration routes.

We further expect this violence to be exacerbated in the most profitable areas, where criminal actors will most fiercely contest territorial control:

Hypothesis 2: Increases in violence along migration routes following border externalization will be heightened in locations with large stranded migrant populations.

2 U.S. Migration Policy and Migration Enforcement in Mexico

We study the impacts of border externalization in Mexico, the primary transit country for asylum-seekers and undocumented migrants seeking to enter the U.S. This section presents our empirical case: the implementation of the U.S.'s Remain in Mexico policy in Mexico's southern border state of Chiapas. We include additional details on Chiapas and U.S.-Mexico relations on migration in [Appendix A](#).

2.1 Transit Migration Routes in Chiapas

The southern Mexican state of Chiapas ([Figure 1](#)) shares 871 kilometers of porous border with Guatemala and is the primary route for transit migrants seeking to enter the U.S. The geography of the Mexico-Guatemala border pushes the vast majority of the over-land migration traffic into Mexico through Chiapas: Mexico's other border states abut the forbidding and sparsely populated rainforest of Guatemala's Petén.

There are three migration routes through Chiapas. The coastal migration route runs from the border of Tecun Uman (Guatemala)/Ciudad Hidalgo (Mexico) with the first bottleneck in the border hub city of Tapachula. After Tapachula, it continues up a coastal highway and ends in the city of Arriaga, in the north of Chiapas, from where one branch of the shipping train line which many migrants ride north

departs. The central or highland route begins with crossings around La Mesilla (Guatemala)/Ciudad Cuauhtémoc (Mexico) and continues through the central highlands mostly along two major highways (but with myriad documented alternative routes) and ends in the capital city of Tuxtla Gutiérrez, from which migrants historically departed on buses towards the north. Finally, the lowland route involves blind crossings through the Petén rainforest, passing through the Marqués de Comillas municipality on the Chiapas side of the border, and continuing up through Palenque (Chiapas) to the industrial trains into Tabasco and Veracruz.⁴

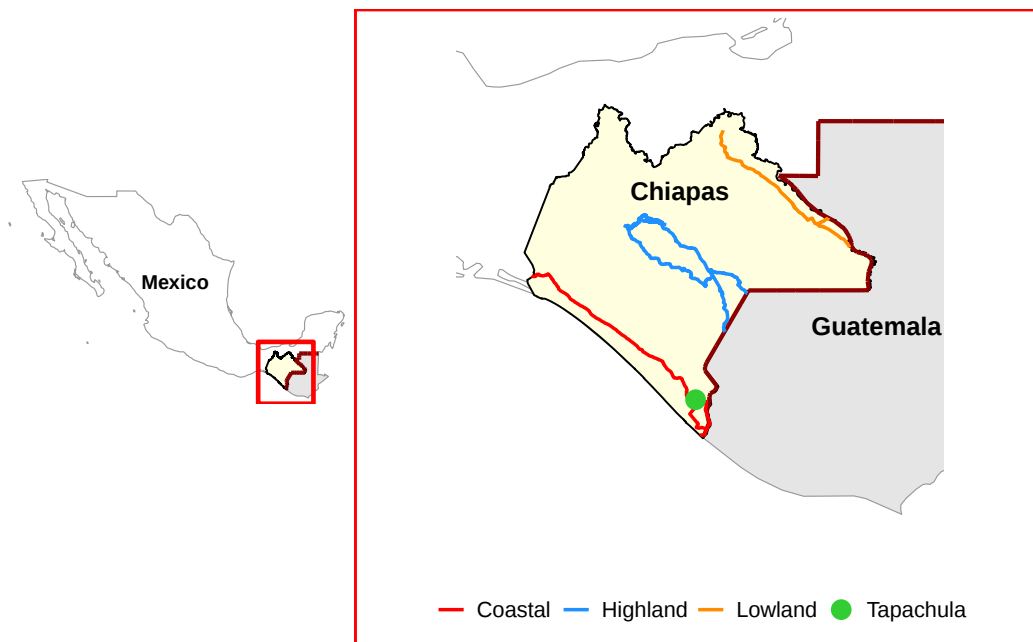


Figure 1: Chiapas and migration routes in Chiapas. From left to right are the Coastal, Highland, and Lowland routes. Tapachula, the primary city of entry for migrants, is shown by a green dot.

The coastal migration corridor is by far the most transited through the south of Mexico, and is a bottleneck for through-migration: between 2021 and 2023, over 60% of all asylum requests made in *all of Mexico* were made in Tapachula (Avelar, 2024). Experts estimate that this figure accounts for no more than half of all migrants passing through Tapachula, as many migrants do not request asylum and therefore leave no official record (Avelar, 2024). While numbers on aggregate informal or undocumented migration through Chiapas are unavailable for obvious reasons, experts agree that the vast majority of migrants

⁴We create original spatial data on migration routes in Chiapas by drawing on journalistic accounts, NGO reports, and our own fieldwork. A complete list of sources consulted to develop these routes, along with more information about migration flows along these routes, is available in Appendix B.1.

through the state of Chiapas traverse the coastal migration route.⁵

The city of Tapachula is the bureaucratic and administrative hub for migrants traveling along Chiapas' coastal route. Offices for Mexico's key migrant-facing bureaucracies – the Instituto Nacional de Migración (INM) and the Comisión Mexicana de Ayuda a Refugiados (COMAR) are in Tapachula, alongside a humanitarian sector to serve populations in transit. Following *Remain in Mexico*, INM has become the key agency for migrants as they must obtain documentation such as a humanitarian visa or a transit waiver in order to proceed north by legal transit systems.⁶

Tapachula is the beginning of the coastal route for migrant smuggling as well as migrants moving independently in caravans or on foot. From Tapachula, the coastal route proceeds north on Highway 200, which provides the only corridor from there to northern Chiapas.⁷ The geography of this route constrains migrants and smugglers from adjusting their route in response to law enforcement presence. Rather, smugglers hold migrants at different points along the route until they receive confirmation from their organization that the next *plaza* (territory) is clear to bring migrants through.⁸ Migrants along the coastal route without smuggling support, meanwhile, remain vulnerable to detention as they travel along the highway.

The central and lowland migration routes through the state of Chiapas differ considerably from the coastal route. Both routes are much less traveled, have much reduced migrant-facing bureaucratic infrastructure, and the routes themselves vary more due to small local deviations taken by migrants and smugglers enabled by a more complex road system and a high density of small towns. Interviews with smugglers reveal that they are able to strategically adjust their paths taken along both the central and the lowland migration routes, in ways which are much less viable on the coastal route.⁹

⁵There are infrastructural, informational, and bureaucratic reasons for the predominance of the coastal route. Only the coastal route is connected with Guatemala's highway system, and the presence of the train at the top of the coastal route in Arriaga provides connectivity for migrants on the other end of the route. Over time, the predominance of the coastal route has also become self-reinforcing by shaping the networked knowledge accessible to migrants coming from migrant-sending communities.

⁶Migrants who pursue this route can wait for over a year for their documentation to work its way through the system legally.

⁷There are few options for deviation and no continuous alternative routes.

⁸Author interviews, February 2025.

⁹Romero, Gaspar. "Crimen usa 5 rutas para traficar con migrantes en Chiapas," *Excelsior*, June 9, 2019; Author interviews February 2025.

2.2 Border Externalization and ‘Remain in Mexico’

In January 2017, Donald Trump became U.S. president with a platform of punitive anti-migration policies. Between December 2018 and January 2019, the U.S. government announced and implemented the Migrant Protection Protocols (Remain in Mexico), which required asylum seekers to stay in Mexico while they awaited their asylum hearings in the U.S.

The U.S. then sought to informally extend this migration control policy beyond its borders. In May 2019, The Trump administration began pressuring the Mexican government to implement domestic migration enforcement policies to prevent migrants from reaching the U.S. border, threatening escalating import taxes of 5% for each month until the Mexican government ‘acted’ on the issue. Stronger leverage on this point arose during NAFTA renegotiations in June 2019. The Mexican government conceded and agreed to reduce the flows of transit migrants through domestic anti-migration enforcement. To assure compliance, the U.S. gave Mexico 45 days to significantly reduce migration flows. This policy brought about the widespread deployment of the Mexican *Guardia Nacional* to both of Mexico’s borders, and yielded a surge of detentions: over three times as many migrants were detained in Mexico in June and July of 2019 compared to the previous year.

Chiapas was a central component of this policy. Remain in Mexico led to an initial deployment of 6,300 *Guardia Nacional* troops to Chiapas beginning in June 2019, with other agencies supporting the effort. The Naval Police increased surveillance and patrols along the Suchiate River separating Chiapas from Guatemala, and hundreds of additional INM agents were deployed to detain irregular migrants.

In Chiapas, the shock to migration enforcement impacted all three migration routes, with every municipality bordering Guatemala receiving *Guardia Nacional* deployments. Appendix B.2 maps the municipalities where troops were initially deployed and provides further details about the migration crack-down in June 2019. *Guardia Nacional* deployments focused on two main tasks, setting up migration checkpoints and patrolling roads, trails, and designated areas where vehicles (trucks and buses) carrying Central American migrants regularly pass. Along the coastal migration route, for instance, ten migration checkpoints were set up between Tapachula and Arriaga.¹⁰ Analysis of detention data reveal that detentions increased lastingly on the coastal route by approximately 380 migrants per month per municipality,

¹⁰One author rode a standard budget bus from Tapachula to Arriaga in fieldwork in February 2025 and the bus was stopped at 10 checkpoints, documents were checked at all checkpoints for all travelers, and the bus was fully unloaded with all passengers searched and questioned at one checkpoint. See map in Appendix Figure B.3.

almost tripling detention rates along the coastal route prior to the policy (Appendix B.4.1).

Remain in Mexico also created large stranded migrant population in Chiapas, most notably in the city of Tapachula and along the coastal migration route. The initial deployment of the *Guardia Nacional* to Mexico's southern border reduced the migrant flow to the northern border by over 40% in the span of just one month.¹¹ One month after Remain in Mexico went into effect, COMAR in Tapachula reported a backlog of over 16,000 asylum requests. Migrant services organizations estimated between 35,000 and 100,000 migrants were stranded in Tapachula as of July 2019, far exceeding the capacity of the three migrant shelters and one detention center of the city to absorb.¹² Workers in migrants support services in Tapachula highlighted how increases in enforcement against migrants had led to the development of large informal settlements of migrants near to the INM and COMAR.¹³ The numbers of migrants stranded in Tapachula and along the coastal route continued to swell as more migrants entered, becoming an 'open-air prison' for migrants who were unable to proceed due to the threat of detention and deportation.¹⁴

3 Empirical Strategy

To assess the violent consequences of border externalization (Hypothesis 1 and 2), we leverage a difference-in-differences (DID) design using original data on migration routes and granular administrative data on migrant and non-migrant fatalities. We use a canonical DID design with non-staggered binary-treatment, comparing monthly locality-level outcomes before and after MPP between localities along migration routes and similar, nearby localities just-off the migration route. We expect these effects to be most pronounced along the coastal migration route, which has the vast majority of migrant traffic, is the most difficult to route for migrants to evade enforcement on, and experienced the most dramatic growth of stranded migrant populations.

We define localities as on the migration route when they fall within 5KM of the route, and use localities which fall $> 5\text{KM}$ but $\leq 35\text{KM}$ from that migration route as a control group. Of the 3,648 localities in our Chiapas sample, roughly 23% fall within 5KM of a migration route (in red in Figure 1). In Figure 2,

¹¹See <https://animalpolitico.com/2019/08/orden-inm-que-explica-por-que-migrantes-africanos-protestan>.

¹²See <https://www.bbc.com/mundo/noticias-america-latina-48915848>.

¹³Author interview with an NGO worker in Tapachula, February 2025.

¹⁴See <https://elpais.com/mexico/2021-09-12/el-laberinto-de-tapachula-una-carcel-a-cielo-abierto-en-la-frontera-sur.html>.

we highlight in light magenta the area in our sample – a 35KM buffer around migration routes. We code our variable ‘On Route’ as equal to 1 for localities which fall within 5KM of the migration route, and include in our control group localities $> 5\text{KM}$ from a migration route but within the 35KM magenta buffer.

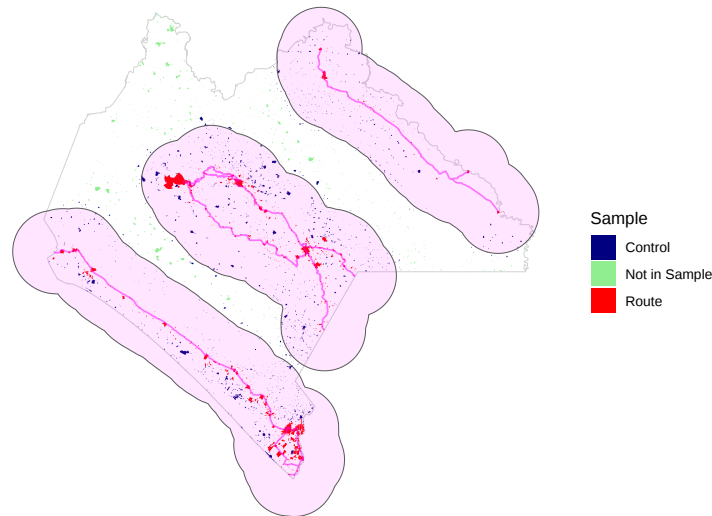


Figure 2: Localities in Chiapas and analytical samples. Red lines show migrations routes. Pink areas with black outlines show analytical buffer zones around migrations routes. Dots represent localities, with red localities indicating treated units, blue localities indicating control units, and green localities outside of the boundaries indicating excluded units.

To characterize violence, we use fatality data on migrant and non-migrant deaths from homicide between 2010 and 2023 at the locality-month level from the national mortality statistics available from the Instituto Nacional de Estadística y Geografía (INEGI). We use data on locality population to normalize homicides of non-migrants by calculating homicide rates per 100,000. We use homicides of non-Mexicans to measure homicides of migrants and use count variables given the lack of information on the population of migrants per locality across time. Our estimating equation is Equation 1:

$$Y_{i,t} = \alpha_{i,m} + \gamma_i + \eta_t + \beta(\text{On Route}_i \times \text{Post}_t) + \omega(\text{Post}_t \times X_i) + \epsilon_{i,t} \quad (1)$$

$Y_{i,t}$ captures our outcomes, which include migrant and non-migrant homicides. Our coefficient of inter-

est is β : the interaction of a locality's position on the migration route (On Route_i) and the indicator for the post-Remain in Mexico period (Post_t).

We code the post Remain in Mexico period starting in July 2019 to reflect the timing of the deployment of the *Guardia Nacional* throughout Chiapas. We include a vector of time-invariant controls in all models (X_i) interacted with the post-period. Control variables include distances to the highway network, municipal government, to migrant shelters, to COMAR, INM and National Guard installations, as well as basic demographic information about the localities.¹⁵ Data on the location of migration related institutions, including INM and COMAR, National Guard bases, and all migrant shelters in Chiapas is original data created using Google Maps. Demographic measures are fixed at 2010 levels to avoid introducing endogenous controls in our DID estimation.

We additionally include locality fixed effects γ_i to address time-invariant traits of each locality, date fixed effects η_t to control for common shocks which affect all localities, and a locality-month fixed effect $\alpha_{i,m}$ to account for localized seasonal shocks. We use standard OLS estimators, which are the appropriate DID estimator given our empirical setting with non-staggered adoption and binary treatments (Callaway and Sant'Anna, 2021).

The identifying assumption of this estimation strategy is that – conditional on modeled confounding – localities just off the migration route (and thus not exposed to increased enforcement and stranded migrants) represent a credible counterfactual to localities on the migration route. Since we consider localities within a narrow geographic bandwidth in our control group, we believe that this assumption is plausible *prima facie*. However, we nonetheless probe the validity of this assumption in a range of ways which are standard to difference-in-differences estimation, including validating the shock to migration enforcement produced by Remain in Mexico (Table B.2), assessing the plausibility of our conditional parallel trends assumption by presenting standard event study plots for our pre-treatment period (Figures B.4 and B.5), and leading our treatment structure 1, 2, and 3 years (Table B.3). We find no evidence of pre-treatment departure from parallel trends, leading credence to our assumption that the just off route localities serve as a plausible counterfactual to on-route localities. We additionally include our vector of controls to address other factors – such as highway access – which might correlate with migration routes, thus ensuring appropriate comparisons in our estimators.

¹⁵Urban or rural, whether it is the municipal headquarter (*cabecera*), population, share of Indigenous population, and share of the population which is very poor. Data from 2010 Census.

Hypothesis 2 expects increases in violence to concentrate where stranded migrant populations cluster along migration routes. We operationalize stranded migrant populations by interacting our measures of reverse distance to INM headquarters (where stranded migrant populations became most concentrated) with our main DID estimator. This estimator is displayed in Equation 2. The coefficient of interest is β_1 , which we expect to be positive, indicating that following Remain in Mexico areas along the migration route closer to INM headquarters became more violent.

$$\begin{aligned}
 Y_{i,t} = & \alpha_{i,m} + \gamma_i + \eta_t + \beta_1(\text{On Route}_i \times \text{Post}_t \times \text{Rev. Distance to INM}_i) + \\
 & \beta_2(\text{On Route}_i \times \text{Post}_t) + \\
 & \beta_3(\text{Post}_t \times \text{Rev. Distance to INM}_i) + \\
 & \omega(\text{Post}_t \times X_i) + \epsilon_{i,t}
 \end{aligned} \tag{2}$$

The identifying assumption here is that the fixed geography of migrant-facing institutions induces additional exogenous variation in areas where migrants become concentrated following Remain in Mexico. Interview evidence confirms that this was the case: migrant service workers and journalists described how onerous visa processes following Remain in Mexico led to the formation of multi-day registration queues, as well as months-long wait times for appointments and fear of missing appointments which would be unpredictably rescheduled, cumulating in the development of large informal settlements outside of the two main INM installations in Tapachula (López and Larrat-Smith, 2026).¹⁶ In order to hold places in line, respond to rapidly shifting appointment schedules and INM policies, as well as to find safety in numbers when shelters reached capacity, migrants formed large informal encampments around INM offices, exceeding tens of thousands of migrant residents.¹⁷

4 Results

4.1 Violence Along Migration Routes

Consistent with Hypothesis 1, we find that deaths of migrants and non-migrants from homicides increase following Remain in Mexico along the busy and geographically constrained coastal route but not

¹⁶ Author interviews, February 2025.

¹⁷ Author interviews with migrant services workers and with journalist, February 2025.

the highland and lowland routes, as shown in Table 1. Localities on the coastal migration route (Table 1 Columns 1 and 4) see differential increases of 0.0020 migrant deaths from homicide and 0.60 non-migrant deaths per 100K from homicide each month relative to changes in non-route localities following the enforcement shock. These effects correspond to increases of 44% for migrant homicides and 138% for non-migrant homicide rates compared with pre-MPP averages in these same localities. Back of the envelope calculations shows these estimates to correspond to an additional 37 migrant deaths from homicides as well as an additional 196 non-migrant deaths from homicide following the policy change in 2019 through the end of the study period in 2023, just along the coastal route.

Results for the highland (columns 2 and 5) and lowland (columns 3 and 6) routes do not uncover similar increases in migrant or non-migrant deaths. Coefficients for migrant homicides are very small and insignificant, while the coefficients for non-migrant homicide rates are positive but do not attain statistical significance.

Table 1: Remain in Mexico Increases Violence Along Chiapas' Coastal Migration Route

Dependent Variables: Model:	Homicides of Migrants			Non-Migrant Homicide Rate (Per 100K)		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Variables</i>						
Post × Migration Route - Coast	0.0020*** (0.0007)			0.6003** (0.2579)		
Post × Migration Route - Highland		-0.0002 (0.0002)			0.0739 (0.1317)	
Post × Migration Route - Lowland			0.0006 (0.0007)			0.5170 (0.8037)
<i>Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fixed-effects</i>						
Date	Yes	Yes	Yes	Yes	Yes	Yes
Locality	Yes	Yes	Yes	Yes	Yes	Yes
Locality-Month	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>						
Observations	173,880	260,400	79,296	173,880	260,400	79,296
R ²	0.26274	0.08923	0.12974	0.07709	0.08250	0.07516
Within R ²	0.00214	2.66×10^{-5}	0.00356	0.00046	8.55×10^{-5}	0.00026

Clustered (Locality) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

4.1.1 Robustness and Threats to Inference

We control for a range of alternative explanations to isolate the impacts of the enforcement shock. To address concerns that migration routes overlap with trafficking routes for other illicit goods, we create a measure of distance from highways to capture the accessibility and connectivity of each locality, distinguishing between general connectivity for trafficking and the specific traits of the migration route. To address concerns of heterogeneity due to National Guard deployments, we control for distance to National Guard bases. To address equilibrium effects along the routes, we control for distance from the INM, COMAR and all privately operated migrant shelters in the state of Chiapas. Finally, we include a set of socio-demographic and state presence controls to address factors that may be generally related to violence. Each of these controls is interacted with the post-Remain in Mexico period, and we report complete results in Table B.4. The robustness of our estimates to the inclusion of this set of relevant controls bolsters our confidence that the results are not driven by alternative explanations, and rather reflect the theorized effects of the enforcement shock.

We then conduct several exercises to probe the robustness of our coastal route findings. To assess robustness to design choices, we estimate our main effects without controls in Appendix Table B.6 and with binary dependent variables in Appendix Table B.7. Our results effects are robust to the exclusion of controls and FEs, and hold when we examine only the extensive margin of violence for both migrant and non-migrant homicides. We further probe the robustness of our results to different width of control group buffers, assessing both 25KM and 45KM control group buffers around migration routes; our results hold across each of these alternative definitions of the control group as we report in Appendix Table B.8. Our results additionally hold when we split our sample into municipal headquarters and non-headquarter localities, as we report in Appendix Table B.9.

Next, we assess a set of threats to inference from potential violations of our identification assumptions. The first main concern could be that our conditional parallel trends assumption may be violated in ways that our pre-trend tests do not fully detect. Although our sample is powered to detect such effects, we nonetheless assess the robustness of our results to this possibility. First, we create unit-specific pre-trends, and include them as a control in our main estimates, which we report in Appendix Table B.10. The robustness of our results to pre-treatment, unit-level trends allows us to rule out unit-level linear violations of the parallel trends assumption driving our findings. We also conduct complementary testing of Rambachan and Roth (2023)'s "breakdown values", which reveal that our estimates can absorb

large manually induced post-treatment bias, indicating that our results are likely robust to high levels of unmodeled post-treatment bias. Randomization inference further reveals that our estimated treatment effects are extremely unlikely to occur by chance under a null of no relationship between treatment assignment and outcomes (Appendix Figure B.8).

The second main concern would be from unmodeled confounding, which we address in three ways. Following Eggers, Tuñón and Dafoe (2024), we leverage two placebo outcome tests (falsification tests). If an unmodeled confounder such as greater migration flows was driving our finding on increases in migrant deaths from homicides, then we should expect to see simultaneous increases in migrant deaths from chronic disease. We do not find an increase in migrant deaths from chronic disease (Appendix Table B.12), suggesting that confounding from changes in migration flows are not driving our results. Second, if confounding changes to violence and the rule of law along the migration route unrelated to the shock of Remain in Mexico, then we would expect to see changes in other sorts of violence such as domestic violence. We do not find differential increases in domestic violence along the migration route following the policy shock (Appendix Table B.13), suggesting that our results are not driven by some other process reshaping violence. Finally, if our results are driven by the migration enforcement shock then measuring closer (further) to the migration route should strengthen (attenuate) the results. We find this to be the case, and report results in Appendix Table B.11. These tests bolster our confidence that unmodeled confounding or violations of design assumptions are not driving our results.

4.2 Violence Near Stranded Migrant Populations

Hypothesis 2 expects violence against both migrants and non-migrants to be particularly acute in areas where large migrant populations are stranded. Based in qualitative evidence from fieldwork, extensive reporting, and prior studies, we model this as near INM installations along migration routes. Given the results in Table 1, we focus on the coastal route in exploring these effects. Table 2 displays these results. We find that violence against both migrants and non-migrants increases with proximity to informal migrant settlements near to the INM. We include in this regression an identical set of controls and fixed effects as in the previous analysis, ruling out the same set of alternative explanations. We additionally rule out migrants themselves systematically committing crimes against non-migrants (Appendix Table B.14).

Table 2: Increases in Violence Along Coastal Route Concentrate Along Routes and Near Stranded Migrant Populations

Dependent Variables: Model:	Migrant Homicides (1)	Non-Migrant Homicide Rate (2)
<i>Variables</i>		
Post $\times$ Migration Route - Coast	0.0085** (0.0038)	3.550*** (1.048)
Post $\times$ Inverse Distance - INM	0.0010 (0.0007)	0.3166 (0.2223)
Post $\times$ Migration Route - Coast $\times$ Inverse Distance - INM	0.0020** (0.0010)	0.9207*** (0.2681)
<i>Controls</i>		
	Yes	Yes
<i>Fixed-effects</i>		
Date	Yes	Yes
Locality	Yes	Yes
Locality-Month	Yes	Yes
<i>Fit statistics</i>		
Observations	173,880	173,880
R ²	0.26279	0.07732
Within R ²	0.00220	0.00071

Clustered (Locality) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

In sum, we find that Remain in Mexico was associated with plausibly causal increases in violence along the coastal migration route, and that these increases to violence affected both migrants and non-migrants and were heightened around locations with large, stranded migrant populations.

5 Mechanism: Cartel Entry into Chiapas' Migrant Sector

We now turn to investigating the role of organized crime in producing violence against migrants and non-migrants along migration routes following border externalization. We employ a mixed-methods approach triangulating evidence from a qualitative case study, original data on the presence of criminal organizations in Chiapas, and quantitative analysis of individual-level survey data on Central American migrants traveling through Chiapas. The case study draws on information from government, expert, and journalistic reports and evidence from fieldwork conducted in early 2025 in Chiapas.

5.1 Cartel Entry into the Migrant Sector

Prior to Remain in Mexico, Chiapas had a dynamic criminal landscape composed of a powerful drug cartel involved in large-scale drug trafficking, local migrant smuggling rings, and street gangs exploiting migrants. The Sinaloa Cartel managed drug trafficking operations to Chiapas since the 1990s, including in central Chiapas where drugs are produced and along main trafficking corridors for drug shipments like Tapachula. In the early 2000s, Mara Salvatrucha (MS13) and Barrio 18 – street gangs from Central America – entered southern Chiapas and exerted control over migrant routes to predate on migrants. Around 2006, the Zetas Cartel entered central Chiapas by incorporating local groups and extracting rents from their involvement in various small-scale criminal activities, including drug dealing, small-scale migrant smuggling, and extortion, among other activities. However, the Zetas were weakened after 2013 due to organizational decay in their home state. Evidence points to Cartel Jalisco New Generation (CJNG), a powerful Sinaloa Cartel rival, entering Chiapas through small cells by 2018 at the latest. Up to Remain in Mexico, MS13, Barrio 18, and migrant smugglers – all relatively local actors with limited reach – were involved in smuggling and extracting rents from migrants, with the Sinaloa Cartel using Chiapas primarily as a route for large-scale drug trafficking.

After Remain in Mexico, we find strong evidence of high-capital cartels entering the migration sector by displacing gangs to extort migrants directly, vertically integrating local smugglers to smuggle and traffic migrants, and deploying gangs to both impose themselves over migrants and smugglers and combat rival cartels. According to experts and author interviews, local criminal actors, including MS13, Barrio 18, and smugglers, have been subordinated and put to work by the Sinaloa Cartel and more recently the CJNG.

To profit from migrant services, the Sinaloa Cartel consolidated control over local smugglers through coercion: from the *balseros* (rafters) who cross migrants from Guatemala, to the *polleros* (small-scale smugglers) who transport small groups of migrants as far as the Northern border, each of these organizations began to pay protection fees to Sinaloa.¹⁸ The Sinaloa Cartel killed smugglers who failed to pay them their requisite fees, leaving public messages to other smugglers that they were required to operate as part of the Sinaloa Cartel from then on.¹⁹ As stated by a smuggler in an interview, “I charge between US\$9,000 and US\$11,000, depending on how migrants want to travel. From that I pay the [cartels] US\$6,000” ([Insight Crime 2024b](#)). As organized crime consolidated control over these services, even migrant-facing NGOs

¹⁸ Author interview with journalist in Tapachula, February 2025.

¹⁹ Author interview with journalist in Tapachula, February 2025.

became forced to conduct their work ‘neutrally’, for example, by not discouraging migrants from seeking smugglers or purchasing a place in line for an appointment at the INM from organized crime, so as not to run the risk of being viewed as competition.²⁰

To take over migrant exploitation and fight rivals, cartels displaced MS13 and Barrio 18 from the migrant sector and instead put gang members to work as enforcers, laborers, and foot soldiers. Interviews reflected this increased cartel control and vertical integration of the gangs: the cartels became “los que mandan” (those who command), using gang labor for everything from smuggling migrants (for which the cartels arrange protection along the route in the plazas they control) to distributing drugs within migrant settlements.²¹ The gangs were also used by the Sinaloa Cartel and CJNG as foot soldiers, contracting them for specific attacks, enforcement in migrant shelters, or operations against rivals. For instance, when the CJNG entered to compete for control of Tapachula, they began kidnapping tattooed Central Americans, assuming they were gang members, and forcing them to work for the cartel.²²

To exploit migrants directly, locations with large stranded populations provided valuable new opportunities. The most salient and widespread revenue stream which cartels have developed are migrant “express” kidnappings, where they kidnap migrants who have recently crossed into southern Chiapas near Tapachula and take them to “safe houses” where they are charged between \$80 and \$500 for their immediate release.²³ Cartels even installed cameras on the points where the trails from the river meet the highway so that they can kidnap migrants immediately upon them reaching the highway.²⁴ Migrants are also given the option at that point to pay \$8,000 to \$10,000 to be smuggled directly to the Northern border by the same cartel. Upon payment, migrants are branded with a seal to make it clear that they were recently kidnapped and spare them from further kidnapping in territories controlled by the same cartel. To monitor migrants’ mobility, cars and busses moving migrants along the route were checked for stamps by cartel gunmen, and migrants who had not paid these extortion fees (or lacked a stamp to show for it)

²⁰ Author interview with NGO worker, Tapachula, February 2025.

²¹ Author interview with MS13 gang member, Tapachula, February 2025.

²² Author interview with MS13 gang member, Tapachula, February 2025.

²³ Dynamic pricing is based on country of origin and perceptions that Middle Eastern and African migrants have access to more wealth or family support, while Haitian and Venezuelan migrants tend to be very poor. Interview with journalist in Tapachula, February 2025; Interview with migrant in Tapachula, February 2025.

²⁴ Interview with journalist in Tapachula, February 2025.

were turned back.²⁵ These kidnappings are backed by violence: migrants who cannot pay face human trafficking, sexual exploitation, and violent deaths.

5.2 Implications for Cartel Presence

To examine the geographic implications of high-capital cartel entry into the migrant sector, we create a hand-coded dataset mapping the municipal presence of the Sinaloa Cartel, CJNG, Zetas, Cartel del Golfo, Central American gangs (MS13 and Barrio 18), and other local criminal actors at the municipality-year level for 2018-2020 through systematic online searches.²⁶ Figure 3 Panel A shows the average number of cartels per municipality, while Panel B shows the proportion of municipalities each criminal organization is present in, both comparing municipalities along the coastal route and municipalities not along any migration route. Consistent with expectations, we find that the Sinaloa Cartel and CJNG significantly expanded their presence following Remain in Mexico, and that this increase concentrated along the coastal migration route, indicating their entry into the migrant sector. We also find an increase in Central American gang presence in municipalities along the coastal route, which we interpret as gangs being deployed by the Sinaloa Cartel and CJNG to take over the migration sector and fight each other through these proxies.

5.3 Impacts on Migrant Smuggling Markets

High-capital cartels consolidating control of the migrant sector in response to Remain in Mexico implies they can increase smuggling prices and shift the mode of smuggling towards smuggling at scale to maximize profits.

We examine this by leveraging repeated cross-sections of surveys capturing the experiences of transit migrants that entered Chiapas from 2016-2023 to compare experience before and after Remain in Mexico. Survey evidence comes from La Encuesta Sobre Migración en la Frontera Sur de México (Emif Sur), which is conducted quarterly by El Colegio de la Frontera Norte. Emif Sur surveys migrants from Guatemala, Honduras, and El Salvador seeking to migrate to the U.S. but that are apprehended and returned to their countries of origin by Mexican or U.S. immigration authorities.

We examine a subsample of Emif Sur respondents who responded affirmatively that they had used a

²⁵<https://www.newsandsentinel.com/news/local-news/2024/10/how-mexican-cartels-manage-the-flow-of-migrants-on-their-way-to-the-u-s-border/>.

²⁶See Appendix C for data construction details.

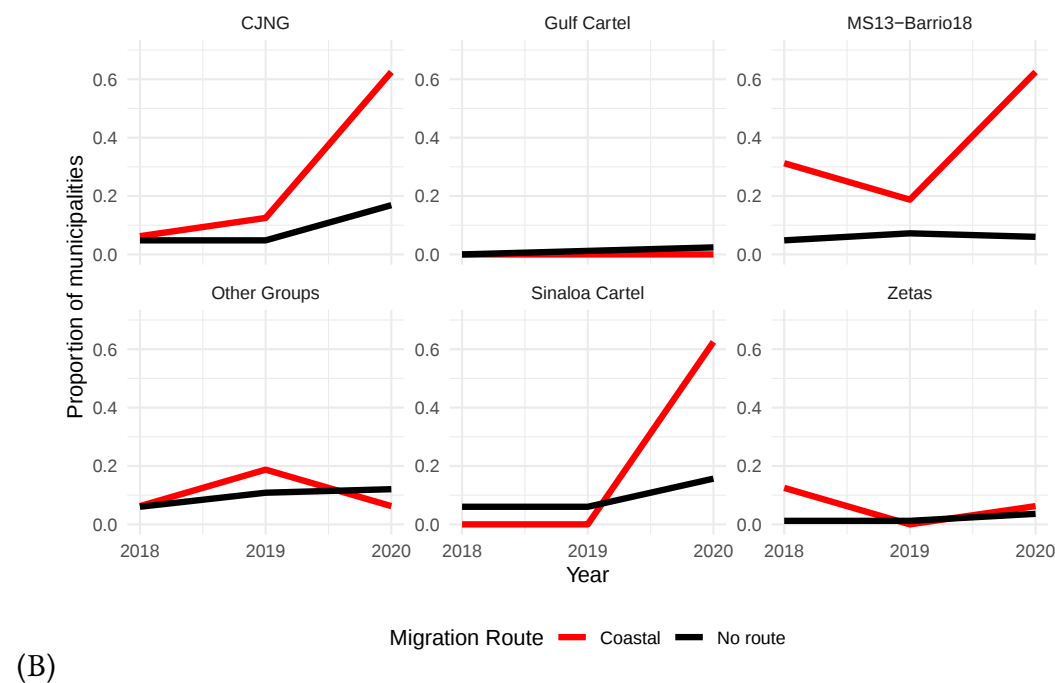
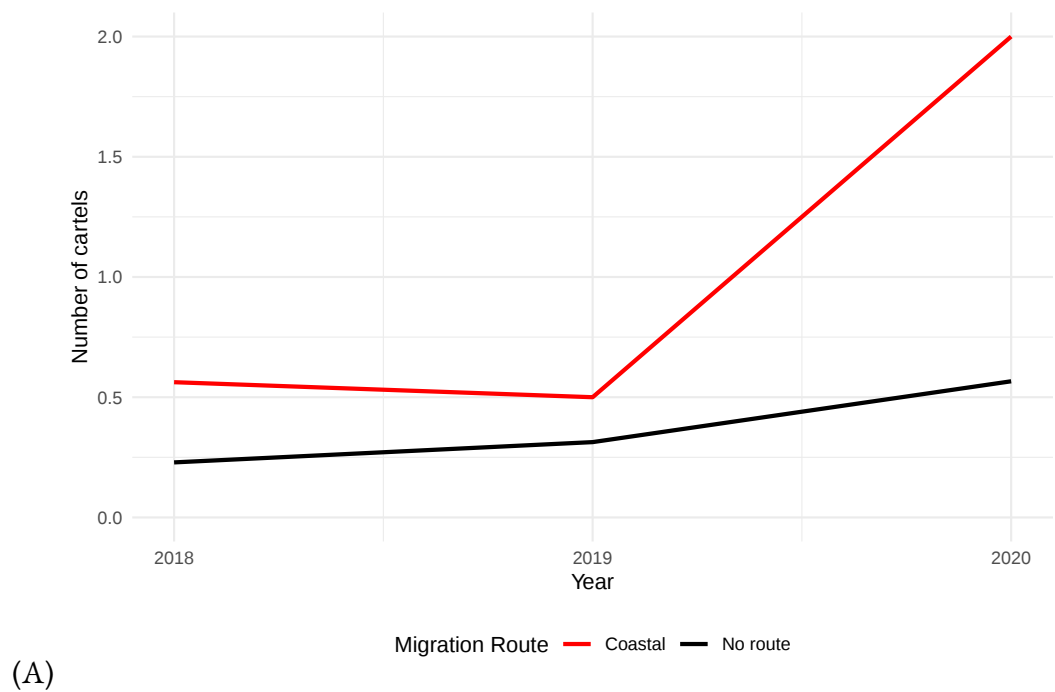


Figure 3: (A) Average number of cartels per municipality and (B) proportion of municipalities with presence of criminal actor, by migration route status (Coastal route vs. no route), Chiapas 2018–2020.

smuggler on their migration journey along the coastal route. We examine two key outcomes smuggling market outcomes: price paid to smugglers and mode of smuggling. While small-scale smugglers take migrants on foot or in personal vehicles, cartels possess the capital to facilitate large-scale migrant smuggling, mostly using trailer trucks. Estimating equations for this analysis, alongside a description of comprehensive migrant-level controls and how we address alternative explanations, is presented in Appendix D.

Table 3: Smuggling Costs and Modalities Post-Remain in Mexico

Dependent Variables: Model:	Smuggling Cost (1)	Smuggled in Trailer Truck (2)
<i>Variables</i>		
Post-Remain in Mexico	0.5428*** (0.0515)	0.8136*** (0.2890)
<i>Controls</i>	Yes	Yes
<i>Model</i>	OLS	Logit
<i>Fixed-effects</i>		
Municipality stuck longest	Yes	Yes
Country of origin	Yes	Yes
Reached US	Yes	Yes
<i>Fit statistics</i>		
Observations	2,574	3,109
R ²	0.358	0.187
Adjusted R ²	0.319	0.141

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 3 highlights how migrants entering the coastal route following Remain in Mexico paid higher prices for smugglers, paying 0.54 standard deviations or approximately \$930 more in constant 2018 dollars after Remain in Mexico, compared to a pre-Remain in Mexico median of \$4,000. We also find that migrants along the coastal route who report using a smuggler were about 115% more likely to be smuggled in trailers – the industrial mode employed by cartels – following Remain in Mexico. These results indicate that Remain in Mexico was associated with higher smuggling prices for migrants and higher likelihood of being smuggled in high-capital modalities, both of which are consistent with high-capital cartels taking control of the market for human mobility.

6 Discussion and Conclusion

Our findings demonstrate that shifting U.S. border enforcement to southern Mexico prompted high-capital criminal organizations to enter the migrant sector, increasing violence against both migrants and non-migrants along the most transited coastal migration route. These increases in lethal violence were concentrated along the heavily trafficked coastal route, particularly extreme where large populations of vulnerable migrants were stranded by up-route enforcement, and associated with the entry of high-capital criminal organizations into the migration sector. This pattern is consistent with our argument that border externalization increases violence where enforcement creates large, geographically concentrated stranded migrant populations, which can generate substantial rents for high-capital criminal organizations. The coastal route combines the highest volume of migration flows with a small number of transportation corridors, facilitating territorial control and rent extraction by cartels. By contrast, the more dispersed and less traveled inland lowland and highland routes offer numerous alternative paths that migrants and local smugglers can use to circumvent enforcement, limiting the potential of border externalization to create stranded migrant populations and reducing incentives for organized violence.

Managing borders inherently presents administrative and governance challenges. Border externalization, however, shifts enforcement challenges to the weaker institutional environment of migration transit countries, with violent consequences for both migrants and host populations. Shifting enforcement further back on migration routes does little to address root causes of migration; rather, it increases the danger of the migration journey and increases the appeal of migration markets to organized crime. We showcase these dynamics in an important and politically salient case of border externalization: Remain in Mexico.

Our findings make important contributions and suggest new avenues for research on migration and organized crime. First, we advance debates on migration and migration governance by theorizing and testing how enforcement in transit states impacts organized crime along migration routes. In studying this, we open up new important areas of interest for both literatures on drivers of migration and outcomes of migration, for example understanding how victimization on migration journeys shapes integration and long-term outcomes for migrants, or how expectations of victimization shape who selects into migration. Second, our data and empirical context provide rare nuance and insight into how policy interacts with criminal capital in shaping which criminal actors select into new markets. Our findings suggest that as enforcement becomes more harsh and comprehensive, the barriers to criminal entry increase, providing

high-capital criminal organizations both financial incentives and a comparative advantage to control illicit markets. Future research building on this could consider how a range of different policies can shape the returns to criminal capital, impacting the internal dynamics and social externalities of illicit markets beyond migration.

Finally, our findings raise political and policy implications surrounding the use of border externalization as a tool of border control and migration policy. Back-of-the-envelope calculations show that Remain in Mexico was associated with an additional 37 homicides of migrants and an additional 196 homicides of non-migrants along Chiapas' coastal migration route from June 2019 through December 2023. These costs represent only the most extreme impacts of the policy in a very small portion of Mexico where the traits of the empirical setting enabled us to gain causal leverage. The cumulative trauma of exposure to kidnapping, sexual exploitation, human trafficking, extortion and other forms of abuse at the hands of organized crime also impose substantial welfare costs on migrant populations, while the collective victimization of local populations enduring the criminal occupation of migration routes is widespread and serious despite being challenging to quantify. Given the ubiquity of border externalization in transit regions such as Mexico and beyond, scholars and policy-makers must consider how prohibiting human mobility may undermine security. Our findings urge policymakers to integrate security and humanitarian policies alongside migration enforcement to address the threat of organized crime and the safety of migrants and non-migrant populations in transit countries.

References

- Ajzenman, Nicolás, Cevat Giray Aksoy and Sergei Guriev. 2022. “Exposure to transit migration: Public attitudes and entrepreneurship.” *Journal of Development Economics* 158:102899.
- Alarcón, Rafael. 2011. “US Immigration policy and the mobility of Mexicans (1882-2005).” *Migraciones internacionales* 6(1):185–218.
- Alcocer, Marco. 2025. “Drug Wars, Organized Crime Expansion, and State Capture: Evidence from Mexico.” *Working Paper*.
- Alcocer, Marco and Lucía Hesles Toscana. 2025. “Criminal Fragmentation: The Logic of Splintering in Organized Crime.” *Working paper*.
- Alcocer, Marco and Megan Erickson. 2026. “The Transformation of Mexican Cartels and Violence Against Government Officials.” *Journal of Peace Research*. Forthcoming.
- Alrababah, Ala, Andreas Beerli, Dominik Hangartner and Dalston Wald. 2025. “The Free Movement of People and the Success of Far-Right Parties: Evidence from Switzerland’s Border Liberalization.” *American Political Science Review* 119(3):1426–1445.
- Alsan, Marcella and Chrystal S. Yang. 2024. “Fear and the Safety Net: Evidence from Secure Communities.” *The Review of Economics and Statistics* 106(6):1427–1441.
- Aponte González, Andrés, Daniel Hirschel-Burns and Andres Uribe. 2023. “Contestation, Governance, and the Production of Violence Against Civilians: Coercive Political Order in Colombia.” *Journal of Conflict Resolution* 68(4):616–641.
- Avelar, Bryan. 2024. “Pandillas y narcos: el vértice de todos los males en Tapachula, México.” *Insight Crime*.
- Badillo-Sarmiento, Reynell, Amparo Judith Bravo-Hernández and Alberto Mercado-Ramos. 2023. “Violencia contra migrantes: comprensión del crimen organizado más allá de la violencia.” *Estudios Fronterizos* 24.
- Bandiera, Antonella, Mateo Vásquez-Cortés, Stephanie Zonszein and Abraham Aldama. 2026. “Immigrant Narratives Promote Inclusionary Attitudes Towards Immigration in a Middle-Income Country.” *British Journal of Political Science* 56:1–10.
URL: <https://doi.org/10.1017/S0007123426101331>
- Barham, Elena and Marco Alcocer. 2026. “Border Externalization and Migrant Welfare in Transit.”

- Barham, Elena and Sarah Daly. 2026. "Uprooting the gang: Public housing demolition, organizational decline, and gang violence in Chicago." *Working Paper*.
- Barnes, Nicholas. 2017. "Criminal Politics: An Integrated Approach to the Study of Organized Crime, Politics, and Violence." *Perspectives on Politics* 15(4):967–987.
- Bell, Brian, Francesco Fasani and Stephen Machin. 2013. "Crime and immigration: evidence from large immigrant waves." *The Review of Economics and Statistics* 95(4):1278–1290.
- Bianchi, Milo, Paulo Buonanno and Paulo Pinotti. 2012. "Do immigrants cause crime?" *Journal of the European Economics Association* 10(6):1318–1347.
- Bueno de Mesquita, Ethan. 2020. "Territorial Conflict over Endogenous Rents." *Journal of Politics* 81(2):162–181.
- Calderón, Gabriela, Gustavo Robles, Alberto Díaz-Cayeros and Beatriz Magaloni. 2015. "The Beheading of Criminal Organizations and the Dynamics of Violence in Mexico." *Journal of Conflict Resolution* 59(8):1455–1485.
- Callaway, Brantly and Pedro H.C. Sant'Anna. 2021. "Differences-in-Differences with Multiple Time Periods." *Journal of Econometrics* 225(2):200–230.
- Campana, Paolo and Loraine Gelsthorpe. 2021. "Choosing a smuggler: Decision-Making among migrants smuggled to Europe." *European Journal on Criminal Policy and Research* 27:5–21.
- Campos-Contreras, Juan Felipe, Camilo Nieto-Matiz and Luis Schenoni. 2025. "Spraying Conflict: Aerial Drug Eradication and Armed Violence in Colombia." *British Journal of Political Science* 55(e96):1–25.
- Casas, Maribel, Sebastian Cobarrubias and John Pickles. 2010. "Stretching Borders Beyond Sovereign Territories? Mapping EU and Spain's Border Externalization Policies." *Geopolítica(s)* 2(1):71–90.
- Castillo, Juan Camillo, Daniel Mejía and Pascual Restrepo. 2020. "Scarcity without leviathan: The violent effects of cocaine supply shortages for the Mexican drug war." *The Review of Economics and Statistics* 102(2):269–286.
- Castillo, Juan Camilo, Daniel Mejía and Pascual Restrepo. 2020. "Scarcity without leviathan: The violent effects of cocaine supply shortages in the Mexican drug war." *The Review of Economics and Statistics* 102(2):269–286.
- Castillo, Juan Camilo and Dorothy Kronick. 2020. "The logic of violence in drug war." *American Political Science Review* 64(7-8):1499–1523.

- Castillo, Manuel Angel. 2006. "Mexico: Caught Between the United States and Central America." *Migration Policy Institute*.
- Cordova, Abby. 2025. *Violence against Women in Multi-Violence Contexts: Militarization and Organized Criminal Groups' Territorial Control*. Unpublished Book Manuscript.
- Córdova, Abby and Helen Kras. 2020. "Addressing violence against women: The effect of women's police stations on political legitimacy." *Comparative Political Studies* 53(3):775–808.
- Córdova, Abby and Helen Kras. 2022. "State action to prevent violence against women: The effect of women's police stations on men's attitudes towards gender-based violence." *The Journal of Politics* 84(1):1–17.
- Daly, Sarah and Elena Barham. 2024. "A Bargaining Theory of Criminal War." *International Studies Quarterly* 68(3):sqae083.
- Dancygier, Rafaela and David Laitin. 2014. "Immigration into Europe: Economic discrimination, violence, and public policy." *Annual Review of Political Science* 22(17):43–64.
- De León, Jason. 2022. *Soldiers and Kings: Survival and Hope in the World of Human Smuggling*. Viking Press.
- Dell, Melissa. 2010. "The Persistent Effects of Peru's Mining *Mita*." *Econometrica* 78(6):1863–1903.
- Dipoppa, Gemma. 2025. "How criminal organizations expand to strong states: Migrant exploitation and political brokerage in Northern Italy." *Journal of Politics* 87(2):556–571.
- Díaz de León, Alejandra. 2023. *Walking Together: Central Americans and Transit Migration Through Mexico*. University of Arizona Press.
- Eggers, Andrew C., Guadalupe Tuñón and Allen Dafoe. 2024. "Placebo tests for causal inference." *American Journal of Political Science* 68(3):1106–1121.
- Esberg, Jane. 2025. "Criminal fragmentation in Mexico." *Political Science Research and Methods*.
- Estancona, Chelsea and Lucía Tiscornia. 2025. "From Cocaine to Avocados: Criminal Market Expansion and Violence." *International Organization* 79(3):417–455.
- Gaikwad, Nikhar and Gareth Nellis. 2021. "Overcoming the Political Exclusion of Migrants: Theory and Experimental Evidence from India." *American Political Science Review* 115(4):1129–1146.

- Hainmueller, Jens, Dominik Hangartner and Giuseppe Pietrantuono. 2017. “Catalyst or Crown: Does Naturalization Promote the Long-Term Social Integration of Immigrants?” *American Political Science Review* 111(2):256–276.
- Holland, Alisha, Margaret Peters and Yang-Yang Zhou. 2024. “Left Out: How Political Ideology Affects Support for Migrants in Colombia.” *Journal of Politics* 86(4).
- Izcara Palacios, Simón Pedro. 2012. “Coyotaje y grupos delictivos en Tamaulipas.” *Latin American Research Review* 47(3):41–61.
- Kirksey, Jacob J. 2021. “Immigration arrests and educational impacts: Linking ICE arrests to declines in achievement and safety in California.” *AERA*.
- Kronick, Dorothy. 2020. “Profits and Violence in Illegal Markets: Evidence from Venezuela.” *Journal of Conflict Resolution* 114(3):874–887.
- Lessing, Benjamin. 2021. “Conceptualizing Criminal Governance.” *Perspectives on Politics* 19(3):854–873.
- López, Miguel Paradela and Charles Larrat-Smith. 2026. “Amplifying vulnerability: State policy and the consolidation of a migratory chokepoint on Mexico’s southern border.” *Political Geography* 125:103474.
- Magaloni, Beatriz, Gustavo Robles, Aila Mattanock, Vidal Romero and Alberto Diaz-Cayeros. 2020. “Living in Fear: The dynamics of extortion in Mexico’s Drug War.” *Comparative Political Studies* 53(7):1124–1174.
- Masterson, Daniel and Vasil Yassenov. 2021. “Does Halting Refugee Resettlement Reduce Crime? Evidence from the US Refugee Ban.” *American Political Science Review* 115(3):1066–1073.
- Menjívar, Cecilia, Andrea Gómez Cervantes and Daniel Alvord. 2018. “The expansion of “crimmigration,” mass detention, and deportation.” *Sociology Compass* 12(4):e12573.
- Menjívar, Cecilia. 2014. “Immigration law beyond borders: Externalizing and internalizing border controls in an era of securitization.” *Annual Review of Law and Social Science* 10:353–369.
- Peters, Floris and Maarten Vink. 2024. “Heterogeneous Naturalization Effects of Dual Citizenship Reform in Migrant Destinations: Quasi-Experimental Evidence from Europe.” *American Political Science Review* 118(3):1541–1548.

URL: <https://doi.org/10.1017/S0003055423001193>

- Phillips, Brian. 2015. "How Does Leadership Decapitation Affect Violence? The Case of Drug Trafficking Organizations in Mexico." *Journal of Politics* 77(2):324–336.
- Rambachan, Ashesh and Jonathan Roth. 2023. "A More Credible Approach to Parallel Trends." *The Review of Economic Studies* 90:2555–2591.
- Rojas, Daniel, Alfredo Trejo III, Margaret Peters and Yang-Yang Zhou. 2025. "Protecting Irregular Migrants: Evidence from Colombia." *Migration Studies* 13(4):mnaf046.
- Savino, Mario. 2019. Refashioning Resettlement: from Border Externalization to Legal Pathways for Asylum. In *EU External Migration Policies in an Era of Global Mobilities: Intersecting Policy Universes*, ed. Sergio Carrera, Arie Pieter Leonhard den Hertog, Marion Panizzon and Dora Kostakopoulou. Brill Nijhoff pp. 81–104.
- Shehaj, Albana, Adrian Shin and Ronald Inglehart. 2019. "Immigration and right-wing populism: An origin story." *Party Politics* 27(2):282–293.
- Slack, Jeremy and Daniel E. Martínez. 2018. "What Makes a Good Human Smuggler? The Differences between Satisfaction with and Recommendation of Coyotes on the U.S.-Mexico Border." *The ANNALS of the American Academy of Political and Social Science* 676(1):152–173.
- Slack, Jeremy and Howard Campbell. 2016. "On Narco-coyotaje: Illicit Regimes and Their Impacts on the US–Mexico Border." *Antipode* 48(5):1380–1399.
- Sobrinho, Fernanda. 2019. "Mexican Cartel Wars: Fighting for the US Opioid Market." *Working Paper*.
- Sviatschi, Maria Michaela. 2022. "Making a Narco: Childhood exposure to illegal markets and criminal life paths." *Econometrica*.
- Tinti, Peter and Tuesday Reitano. 2017. *Migrant, Refugee, Smuggler, Savior*. Hurst Publishers.
- Topak, Özgün and Luna Vives. 2020. "A comparative analysis of migration control strategies along the Western and Eastern Mediterranean routes: Sovereign interventions through militarization and deportation." *Migration Studies* 8(2):66–89.
- Trejo, Guillermo and Sandra Ley. 2020. *Votes, Drugs, and Violence: The Political Logic of Criminal Wars in Mexico*. Cambridge: Cambridge University Press.
- Vargas, Edward D. and Maureen A. Pirog. 2016. "Mixed-status families and WIC uptake: The effects of risk of deportation on program use." *Social Science Quarterly* 97(3):555–572.
- Vogt, Wendy. 2018. *Lives in Transit: Violence and Intimacy on the Migrant Journey*. New York: University of California Press.

- Wimmer, Andreas, Bart Bonikowski, Charles Crabtree, Zheng Fu, Matt Golder and Kiyoteru Tsutsui. 2025. "Geo-Political Rivalry and Anti-Immigrant Sentiment: A Conjoint Experiment in 22 Countries." *American Political Science Review* 119(2):1018–1035.
- Yashar, Deborah. 2018. *Homicidal ecologies: Illicit economies and complicit states in Latin America*. New York: Cambridge University Press.
- Zaiotti, Ruben. 2016. *Externalizing Migration Management: Europe, North America and the spread of 'remote control' practices*. Routledge.

Appendices

Appendix Contents

A	Appendix: Empirical Context	A1
A.1	U.S.-Mexico Relations on Migration Policy	A1
A.2	Additional Context on Migration Routes in Chiapas	A2
B	Appendix: Main Results	A3
B.1	Migration Routes Data and Qualitative Description	A3
B.2	Geography of Enforcement Following Remain in Mexico	A4
B.3	Descriptive Statistics: Chiapas Localidad Sample	A7
B.4	Difference-in-Difference Design Assumptions	A7
B.5	Complete Reporting: Spatial Panel Difference-in-Differences Results Net Effects . . .	A13
B.6	Complete Reporting: Spatial Panel Difference-in-Differences Results Heterogeneous Effects	A14
B.7	Robustness	A15
B.8	Assessing Threats to Inference: Attenuation, Falsification, and Placebo Tests	A20
C	Cartel Presence in Chiapas	A23
C.1	Cartel Presence Along Migration Routes	A24
D	Appendix: EMIF Sur Estimation	25

A Appendix: Empirical Context

A.1 U.S.-Mexico Relations on Migration Policy

Mexico and the U.S. have a long history of relations with respect to migration, first with Mexico as a sending country but more recently as a transit country.

Some scholars note the 1882 Chinese Exclusion Act as the beginning of Mexican labor migration into the U.S. In the 1920s, widespread anti-immigration sentiments in the U.S. resulted in increasingly restrictive migration policies based on national origins and the massive deportations of Mexicans in the 1930s. As part of these policies, the U.S. Border Patrol was “created in 1924 to originally control illegal crossings from Asian and Southern and Eastern European migrants through the U.S.–Mexico border” (Alarcón, 2011, 193). However, most migration from Mexico was Mexican migrants seeking temporary work in the U.S.

During the Second World War, the U.S. implemented the *Braceros* program in collaboration with the Mexican government to provide temporary work to Mexican migrants in the U.S. Between 1947 and 1949, the U.S. and Mexico also agreed to a practice of allowing undocumented Mexican migrants to cross back into Mexico to be processed into the Braceros program at migratory stations in Mexicali, Ciudad Juárez, and Reynosa. During this period, in 1947 and 1954, the U.S. undertook massive deportation campaigns that were supported by the Mexican government. Between 1954 and 1964, the Mexican government accepted the U.S. establishing Bracero recruitment centers along the U.S.-Mexico border. In 1963, as the Bracero Program was coming to an end due to pressure from domestic labor unions and religious groups in the United States, the U.S. conceded to extending it one more year due to Mexican arguments that its suspension would have serious negative consequences. The program was then ended unilaterally in 1964.

From 1965 onward, undocumented migration from Mexico into the U.S. gradually increased along with stricter border enforcement. In 1986, the U.S. passed the Immigration Reform and Control Act (IRCA), which granted amnesty to undocumented workers but also created sanctions for employers that knowingly hire undocumented workers and increased border enforcement along the southern border. In 1994, the U.S. heightened border enforcement by substantially increasing the budget of the U.S. Customs Service (incorporated in the the Department of Homeland Security in 2002) and installing walls and electronic surveillance equipment along key migration routes along the U.S.-Mexico border. The U.S. Border Patrol adopted the strategy of ‘prevention through deterrence’, reasoning that increasing enforcement at the southern border would deter migration through increasing its difficulty. Targeting ports of entry and major cities, this strategy increased apprehensions in controlled locations but pushed growing migration flows to cross the border in remote areas and increased migrant deaths as a result. These increasingly punitive policies and their implications pushed the Mexican government to seek frequent dialogue with the U.S. government.

Following the September 11 attacks, the Patriot Act was signed into law in November 2001, which made immigration a national security matter. With the creation of the Department of Homeland Security in 2002, resources devoted by the U.S. government to stem migration have increased sharply over time, swelling the ranks of U.S. Border Patrol from 4,300 agents in 1994 to 20,000 agents in 2020. Seeing this change in U.S. priorities towards security, Mexico showed its willingness to cooperate on migration issues, giving rise to the concept of “shared responsibility.” By 2022, DHS had a budget of over \$50 billion.

Within this context, Mexico transformed from a sending into a transit country. While seasonal migration of Guatemalan workers had existed for decades, it was largely localized to Mexico’s southern border. However, civil wars in Central America in the 1980s displaced populations and pushed many to emigrate.

Even following the termination of these conflicts, endemic poverty and skyrocketing criminal violence continued to drive out-migration from Central America from the 1990s through the 2020s. Detentions of potentially deportable foreigners rose from 131,486 in 1999 to 240,269 in 2005, most of which were from Central America (Castillo, 2006). This rise in transit migration triggered concern within both U.S. and Mexican authorities. Under U.S. pressure to stem transit migration, Mexico chose to increase interior enforcement rather than bolstering its southern border and signed deportation agreements with Central American governments. This increase in interior enforcement coincided with the Mexican government's deployment of federal forces to combat drug trafficking, which created spillovers, as migration enforcement began taking a law enforcement bent. At the same time, in attempts to be consistent with how Mexico wanted the U.S. to treat its own migrants and in response to high-profile instances of migrant killings by organized crime, the Mexican government enacted a new migration law in 2011 recognizing its obligation to ensure humane conditions for transit migrants in Mexico.

A.2 Additional Context on Migration Routes in Chiapas

The Mexico-Guatemala border region and particularly the state of Chiapas is characterized by cross-border cultural ties, economic integration, and seasonal migration (Castillo, 2006). In the 1990s and early 2000s, seasonal migration flows historically were often in excess of 50,000 Guatemalans working in Chiapas (Castillo, 2006).

Migration along the coastal route generally begins with crossing the Suchiate river on the Guatemala-Mexico border on a rafts operated by local smugglers. The rafts mostly operate in the areas surrounding the Tecún Umán (Guatemala) - Ciudad Hidalgo (Mexico) border town. Once crossed to the Mexican side of the river, migrants walk until they reach a highway. Some then proceed independently to Tapachula, whether by taxi, bus, or on foot, which is a little under an hour by vehicle or about seven hours walking. Increasingly starting in 2023, migrants are kidnapped upon reaching the highway and brought to safe houses operated by the Cartel Jalisco Nueva Generación or the Cartel de Sinaloa, and must pay a fee to be released and brought to Tapachula.²⁷ Migrants who are unable to pay are kept in captivity until they are sent money to be released.²⁸

The city of Tapachula, which lies 35km north of Ciudad Hidalgo, is the bureaucratic and administrative hub for these migrants. Offices for Mexico's key migrant-facing bureaucracies – the Instituto Nacional de Migración (INM) and the Comisión Mexicana de Ayuda a Refugiados (COMAR) are in Tapachula, alongside a humanitarian sector to serve populations in transit. Tapachula is also the beginning of the coastal route for migrant smuggling. The coastal smuggling route proceeds straight up Highway 200 from Tapachula in the south to the town of Arriaga near the Chiapas-Oaxaca border, with several plazas along the way at which smugglers can stop and keep migrants if they fear enforcement further up the route. This highway provides the one transit corridor up the border of Chiapas, with few options for deviation and no continuous alternative routes. The geography of this route constrains migrants from adjusting the route in response to law enforcement presence. Rather, smugglers will hold migrants at different points along the route until they receive confirmation from their organization that the next plaza is clear to bring migrants through.²⁹ Although modes of transit vary, the train which many migrants ride

²⁷ Author interview, January 2025.

²⁸ Author interview, January 2025.

²⁹ Author interviews, February 2025.

to get north (“The Beast” or “La Bestia”), runs through Arriaga, at the top of the coastal Chiapas route, anchoring the destination of much of the informal migration along the Chiapan coast.

The central and lowland migration routes through the state of Chiapas differ considerably from the coastal route. Both routes are much less traveled, and much more varied in terms of the small local deviations taken by different smugglers and different migrants. Indeed, there are more complex road systems as well as a density of small towns and geographically viable deviations from the routes. Interviews with smugglers reveal that they are able to strategically adjust their paths taken along both the central and the lowland migration routes, in ways which are much less viable on the coastal route.³⁰ There is also much more limited migration bureaucracies along those routes. The INM has an installation in Comitán de Domínguez, which lies a ways in to the central route. COMAR has an installation in Palenque, which falls at the end of the lowland route through Chiapas. However, there is much weaker bureaucratic presence along these routes, reflecting both the much lower levels of migrant traffic and the more diffuse migration paths taken through these other corridors.

B Appendix: Main Results

B.1 Migration Routes Data and Qualitative Description

We create our original maps of migration routes in Chiapas during our study period by triangulating across interviews, written sources, and participant observation. Our aim is not to document every possible route which migrants could take or have taken through Chiapas. Indeed, these trips are highly variable, particularly along highland and inland lowland routes where road and path networks fragment considerably and leave many potential options. Rather, we identify the most common routes which are taken by migrants systematically across time. We note that in cases where multiple viable pathways link identified nodes on migration routes and we are not able to identify new nodes which help discern which pathway is standard, we include all viable pathways between these nodes in our routes. Written sources provided in-depth information about the different nodes to distinct migration routes. Interview sources enabled researchers to probe the dynamics of routes over time, to understand which routes operated continuously throughout our period of study. Participant observation in assisting migrants as well as traveling along routes enriched our qualitative understanding of migration dynamics in Chiapas, as well as the routine application of mobility enforcement and control.

Interview Sources (January-February 2025):

- Professor at Centro de Investigación y Estudios Superiores (CIESAS - Sureste), 20+ years of research experience on migrant populations in Chiapas.
- Professor at ECOSUR, 14 years of research experiences on migration’s impacts in Chiapas.
- Migrant Advocate and Service Worker at the Coalition for Humane Immigrant Rights (CHIRLA), 8 years of migrant accompaniment in Chiapas.
- Journalist, 3 years covering migration in Tapachula and throughout Chiapas.

³⁰Romero, Gaspar. “Crimen usa 5 rutas para traficar con migrantes en Chiapas,” *Excelsior*, June 9, 2019; Author interviews February 2025.

Written Sources:

- FOCA A.C. and La Red Mesoamericana Mujer Salud y Migración. “Una Cartografía de las mujeres en las migraciones. El corredor Huehuetenango, Guatemala-Comitán, Chiapas, México,” (2015).
- “La tierra de nadie, otra ruta que utilizan los traficantes.” *Oye Chiapas*, June 28, 2019.
- Gaspar Romero. “Crimen usa 5 rutas para traficar con migrantes en Chiapas,” *Excelsior*, June 9, 2019.
- Miriam Ramírez. “Una trampa migratoria llamada Chiapas,” *El Universal*, 2024.

Participant Observation:

- Researcher personal experience supporting family member to migrate from Guatemala city to Tapachula, Mexico January-March 2023.
- Researcher riding standard transit bus up coastal migrant routes from Tapachula, Mexico to Arriaga, Mexico, February 2025.

Triangulation across these sources yielded our defined routes, as visualized in Figure B.1. In Figure B.1, the coastal route is colored in red with the hub for stranded migrant populations Tapachula represented with a green dot. The inland migration routes (highland and lowland) are colored in blue.

The highland (middle) blue migration route begins with migrants crossing the Guatemala-Mexico border through unmonitored border crossing points near the Guatemalan towns of La Mesilla and Gracias a Dios. This route ends in the capital city of Tuxtla Gutiérrez, and from there migrant routes fragment due to bus and car traffic following myriad roads out of the capital city.

Migrants into the lowland (right blue) route cross the Mexico-Guatemala border into Mexico through the Petén Rainforest in Guatemala. They then follow side paths, trails, and highways along the Palenque-La Trinitaria highway, before crossing into the neighboring state of Tabasco at the northwest corner of Chiapas.

Migrants on Chiapas’ coastal route (red) begin with crossing the Suchiate river on the Guatemala-Mexico border on a rafts operated by local smugglers. The rafts mostly operate in the areas surrounding the Tecun Uman (Guatemala) - Ciudad Hidalgo (Mexico) border town. Once crossed to the Mexican side of the river, migrants walk until they reach a highway. Migrants then proceed to Tapachula, which is a little under an hour by vehicle or about seven hours walking. The coastal route is constrained by one coastal highway which reaches from Tapachula to Arriaga (the northernmost locality along the coastal route in Chiapas), which is about a five hour trip by vehicle without stops or traffic. Migration control stops along the coastal highway operate stopping busses and some private vehicles. Upon reaching Arriaga, migrant routes fragment with some continuing to proceed along the pacific coast, and others aiming towards central Mexico, depending on their goal port of entry upon reaching the U.S.-Mexico border.

B.2 Geography of Enforcement Following Remain in Mexico

The National Guard was deployed in June 2019 to every municipality on the Mexico-Guatemala border. This included the following municipalities, which are also mapped in Figure B.2.

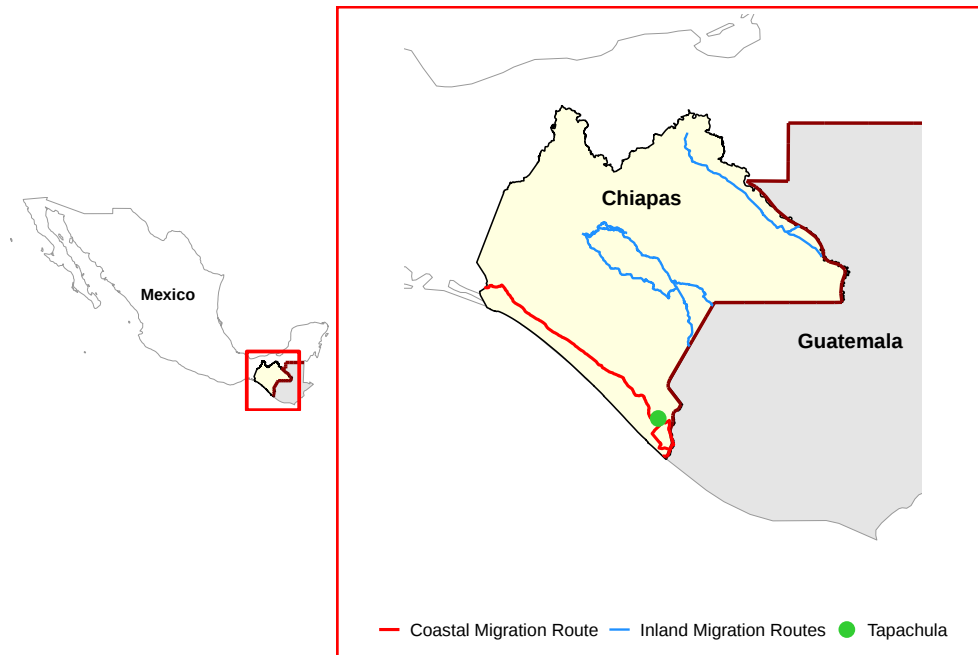


Figure B.1: Migration Routes

- **In Chiapas:** Palenque, Ocosingo, Benemérito de las Américas, Marques de Comillas, Maravilla Tenejapa, Las Margaritas, La Trinitaria, Frontera Comalapa, Amatenango de la Frontera, Mazapa de Madero, Motozintla, Cacahoatán, Tapachula, Unión Juárez, Tuxtla Chico, Metapa, Frontera Hidalgo, and Suchiate.
- **In Tabasco:** Tenosique.
- **In Campeche:** Calakmul, Candelaria, Balancán.
- **In Quintana Roo:** Othón P. Blanco

National Guard Migration Crackdown, June 2019

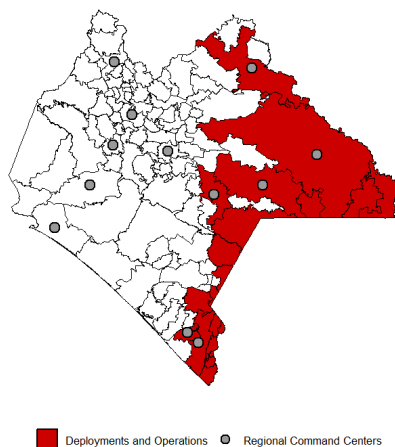


Figure B.2: National Guard Operations in Chiapas in June 2019



Figure B.3: Migration Control Checkpoints Along Coastal Route

This crackdown was the first step of the ongoing program of internal migration control developed in Chiapas. Following the initial border-wide crackdown, enforcement concentrated in the city of Tapachula and along Chiapas' coastal route, creating an uneven topography of enforcement across the state of Chiapas. Migration control points for vehicle traffic rolled out after Remain in Mexico is visualized in Figure B.3.³¹ These migration control points include points in which INM personnel board buses or stop cars and inspect identification, as well as locations in which buses and cars are disembarked and individuals put through full passport control, bag searches, and person searches. Enforcement focused along this route as it is by far the most utilized migration route in the state and the most straightforward to monitor due to the geographic limitations of the coastal highway.

Despite this uneven enforcement, migration flows through Tapachula and onto the coastal route continued throughout our study period. While there is not available data on the number of migrants transiting the coastal route, data on migrant detentions show large increases in migrant detentions along the coastal route following the Remain in Mexico crackdown and lasting throughout up through the end of 2024. The sustained flow of migrants along all routes was further increased by political crises in Venezuela, Ecuador, and Haiti following the migration crackdown in Mexico, alongside continuously high through-migration from Central America throughout this time period.

³¹The documentation for these checkpoints were created through participant-observation fieldwork by the authors.

B.3 Descriptive Statistics: Chiapas Localidad Sample

Table B.1: Descriptive Statistics

Variable	N	Mean	Median	SD	Min	Max
Year	648984	2016.500	2016.500	4.031	2010.000	2023.000
Month	648984	6.500	6.500	3.452	1.000	12.000
Route and Buffer Regions						
Within 35KM of Coastal Route	648984	0.268	0.000	0.443	0.000	1.000
Within 35KM of Highland Route	648984	0.401	0.000	0.490	0.000	1.000
Within 35KM of Lowland Route	648984	0.122	0.000	0.327	0.000	1.000
On Coastal Route (Within 5KM)	648984	0.089	0.000	0.285	0.000	1.000
On Highland Route (Within 5KM)	648984	0.114	0.000	0.318	0.000	1.000
On Lowland Route (Within 5KM)	648984	0.021	0.000	0.143	0.000	1.000
Treatment Timing						
Post Remain-in-Mexico	648984	0.321	0.000	0.467	0.000	1.000
Outcomes						
Homicides of Migrants (Count)	648984	0.001	0.000	0.033	0.000	6.000
Homicides of Non-Migrants (Population Scaled)	648984	0.345	0.000	14.882	0.000	4324.324
Traits of Localidades						
Total Population (in thousands)	648984	1.076	0.367	9.974	0.010	537.102
Municipal Head	648984	0.030	0.000	0.171	0.000	1.000
Urban Area	648984	0.048	0.000	0.215	0.000	1.000
Distance from Highway	648984	2.530	1.024	3.720	0.000	27.005
Distance from COMAR	648984	67.520	61.288	38.758	0.381	189.474
Distance from Guardia Nacional	648984	29.324	25.883	19.004	0.168	144.446
Distance from INM	648984	38.601	34.639	24.114	0.100	140.151
Distance from Migrant Shelter	648984	59.555	51.717	37.414	0.090	191.658
Percent Indigenous	648984	0.410	0.103	0.447	0.000	1.000
Percent Very Poor	648984	0.202	0.136	0.189	0.000	1.000

B.4 Difference-in-Difference Design Assumptions

B.4.1 Remain in Mexico Produces a Shock to Migration Enforcement

Table B.2 examines whether the post-Remain in Mexico period is associated with differences in detention of migrants by the INM. This analysis is at the municipality-month, and leverages data from the INM on monthly detentions at the municipality level. The trade-off of these data is that they are only reported by municipality, not locality, which is the unit of analysis in our main analyses. These data are inappropriate for the spatial design of our main analysis, but enable us to assess whether the post-Remain in Mexico period is associated with a shock to migration enforcement across our different migration routes.

The dependent variable in Table B.2 is the number of migrants detained in a municipality-month. Across the table, we split our sample into each migration route: the coastal route, the highland inland route, and the lowland inland route, and assess changes to enforcement across all three routes. The variable “Post” is identical to in the main analysis, and turns 1 in all observations after June 2019. Across all specifications, we include a control for the COVID-19 pandemic (which we define as April 2020 through

July 2021) during which migration slowed considerably as did enforcement. Results displayed in Table B.2 do not hinge on this control, and are robust to its omission. We also include fixed effects for municipality, to address time-invariant traits of the municipality such as ease of enforcement, as well as a time fixed effect to capture common shocks such as seasonal patterns in migration and enforcement.

Results presented in Table B.2 show that the post-Remain in Mexico period was associated with a large spike in detentions only along the coastal migration route. On average, approximately 380 migrants were detained per municipality per month along the coastal route following Remain in Mexico, representing an increase of an additional 170% of the baseline rates of detention along the route. This estimate is statistically significant at a .01 level. This shock is not replicated along highland or lowland routes, due to the targeting of the coastal route as well as the more challenging geography of highland and lowland routes which challenge the efficacy of enforcement.

Table B.2: Validating the Shock to Enforcement

Dependent Variable: Model:	Migrants Detained		
	(1)	(2)	(3)
<i>Variables</i>			
Post	379.5** (132.9)	17.26 (20.79)	46.20 (25.84)
<i>Route</i>			
	Coastal	Highland	Lowland
<i>Fixed-effects</i>			
Municipality	Yes	Yes	Yes
Date	Yes	Yes	Yes
<i>Fit statistics</i>			
Observations	1,536	1,536	480
R ²	0.48458	0.51663	0.81601
Within R ²	0.07714	0.00864	0.03327
<i>Clustered (municipality) standard-errors in parentheses</i>			
<i>Signif. Codes: ***: 0.01, **: 0.05, *: 0.1</i>			

B.4.2 Pre-Remain in Mexico Parallel Trends

The parallel trends assumption holds that untreated units represent a credible counterfactual for treated units. In our case, our identifying assumption therefore requires that localities surrounding migration routes represent a plausible counterfactual to localities along migration routes. This assumption is plausible in this context because it does not require that migration is randomly assigned nor that on-route localities are identical to neighboring off-route localities. Rather, it holds that the trends across localities on and slightly off the migration route would proceed in parallel in the absence of treatment. Our parallel trends assumption requires that, in the absence of Remain in Mexico, the violence outcomes of localities on the migration route would have proceeded parallel to the violence outcomes of localities just off the migration route.

We assess the plausibility of this assumption in several ways. First, we present a standard event-study plot to visualize our pre-treatment outcomes. Second, we formally test for pre-treatment divergence from parallel trends by leading the treatment structure. Both of these tests allow us to examine the pre-

treatment evolution of outcomes across our treatment groups (localities within 5KM of migration routes) and our control groups (localities between 5KM and 35KM of migration routes).

Pre-treatment trends are reported in Figures B.4 and B.5. Across coastal and highland routes, on-route localities display no pre-treatment departure from route-adjacent localities. These plots show no evidence of departures from parallel trends across either migrant homicides or non-migrant homicide rates when comparing localities right on the migration route to localities just off the migration route. The pre-treatment trends for the lowland route are noisy due to the very small sample of localities on the route (just 81 localities per monthly observation). While these estimates are therefore much noisier, we nonetheless do not observe consistent differences from on-route localities compared to just-off-route localities along the lowland route.

Our second test to assess the plausibility of parallel trends leads our treatment structure 1 year, 2 years, and 3 years, re-estimating our main estimating equations to assess pre-treatment departure from parallel trends. This is distinct from the event study plots because it averages placebo treatment effects across all periods re-defined as ‘post-treatment’ by leading our actual treatment structure. We display the results of leading our treatment structure by 1, 2, and 3 years and dropping the post-treatment period across each of the three migration routes in Table B.3. Across all specifications, we find no statistically detectable differences on-route vs. off route in the years leading up to the policy shock of border externalization, suggesting that prior to treatment each of our migration routes exhibited roughly parallel trends. Point estimates across each of the coastal route pre-treatment estimates are also quite small relative to the treatment effects recovered in the coastal route analysis. Results in Table B.3 are consistent with the validity of a of parallel trends assumption in the pre-treatment period.

B.4.3 Unit Independence (SUTVA)

The Stable Unit Treatment Assumption (SUTVA) is the other key assumption for inference in two-period binary treatment DiD designs such as ours. SUTVA in our case suggests non-interference across units, such that the treatment status of one unit does not affect the outcomes of another unit. There are two types of potential spillovers: from treated units to other treated units, and from treated units to control units.

Spillovers from treated units to other treated units are likely in our context, as the value of control of one part of the route for a criminal organization is intrinsically linked to their control of other parts of the migration route (Dell, 2010; Bueno de Mesquita, 2020). We investigate this explicitly by assessing heterogeneity along the migration route with respect to more valuable territories. These spillovers do not represent a threat to inference in our main estimators, as they essentially would act to spread the effects of treatment out across all treated units, which is what we recover through estimating an average effect in any case.

Spillovers from treatment to control, in our empirical context, would likely entail anti-migrant crack-downs along migration routes pushing migrants to deviate from established routes, potentially increasing the value to criminal organizations of holding territory in localities in the control group. While this is certainly possible in our empirical context, this structure of these spillovers would attenuate our effects, such that in the presence of spillovers our recovered effects would be a floor on the actual treatment effects.

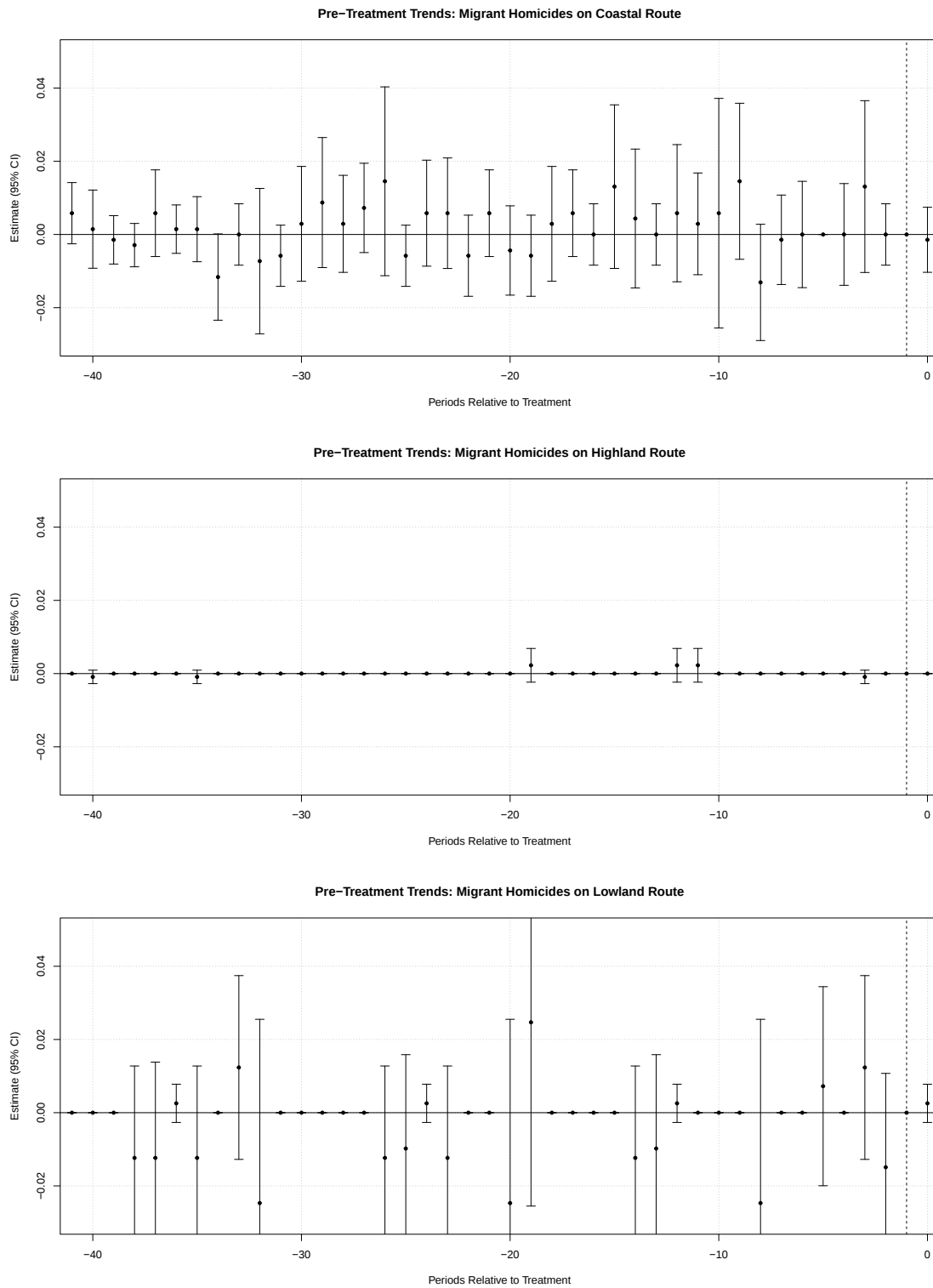


Figure B.4: Pre-Treatment Trends in Migrant Homicides Across Routes

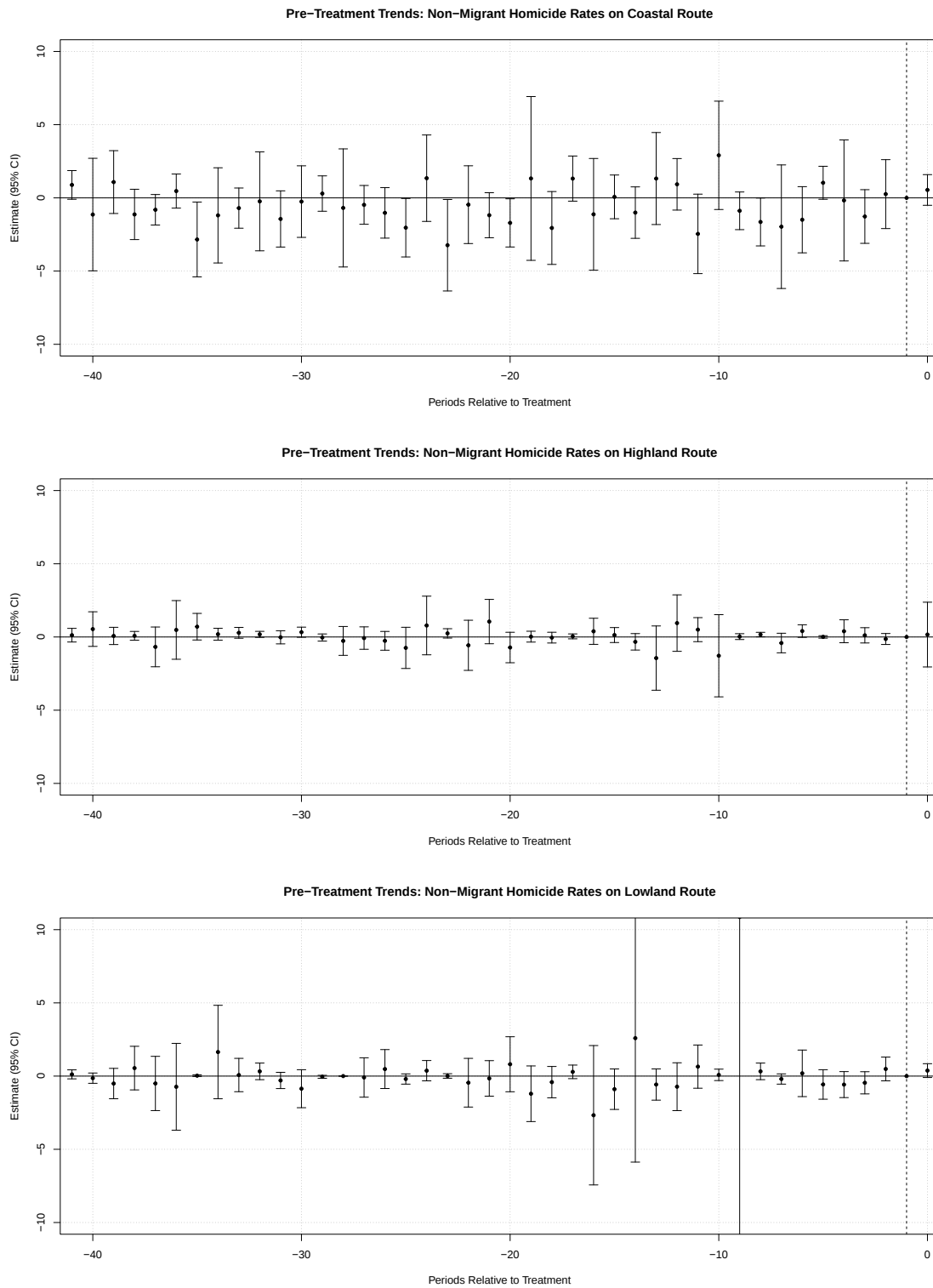


Figure B.5: Pre-Treatment Trends in Non-Migrant Homicide Rates Across Routes

Table B.3: Leading the Treatment Structure

Panel A: Coastal Route						
Dependent Variables:	Migrant Homicides			Non-Migrant Homicides Per 100K		
Model:	(1)	(2)	(3)	(4)	(5)	(6)
<i>Variables</i>						
Lead 1 Year $\times$ On Coastal Route	0.0002 (0.0010)			0.3298 (0.4189)		
Lead 2 Years $\times$ On Coastal Route		9.37×10^{-5} (0.0009)			0.3147 (0.3085)	
Lead 3 Years $\times$ On Coastal Route			0.0014 (0.0016)			0.2505 (0.2934)
<i>Fixed-effects</i>						
Date	Yes	Yes	Yes	Yes	Yes	Yes
Locality	Yes	Yes	Yes	Yes	Yes	Yes
Locality-Month	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>						
Observations	117,990	117,990	117,990	117,990	117,990	117,990
R ²	0.32386	0.35087	0.34376	0.11058	0.11076	0.11097
Within R ²	0.04414	0.08234	0.07228	0.00028	0.00049	0.00072
Panel B: Highland Route						
Dependent Variables:	Migrant Homicides			Non-Migrant Homicides Per 100K		
Model:	(1)	(2)	(3)	(4)	(5)	(6)
<i>Variables</i>						
Lead 1 Year $\times$ On Highland Route	-9.54×10^{-5} (0.0002)			-0.1047 (0.1578)		
Lead 2 Years $\times$ On Highland Route		-0.0001 (0.0003)			-0.2254 (0.1481)	
Lead 3 Years $\times$ On Highland Route			-0.0002 (0.0003)			-0.1572 (0.1116)
<i>Fixed-effects</i>						
Date	Yes	Yes	Yes	Yes	Yes	Yes
Locality	Yes	Yes	Yes	Yes	Yes	Yes
Locality-Month	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>						
Observations	176,700	176,700	176,700	176,700	176,700	176,700
R ²	0.11786	0.11809	0.11790	0.15893	0.15906	0.15932
Within R ²	0.00041	0.00067	0.00046	0.00017	0.00032	0.00062
Panel C: Lowland Route						
Dependent Variables:	Migrant Homicides			Non-Migrant Homicides Per 100K		
Model:	(1)	(2)	(3)	(4)	(5)	(6)
<i>Variables</i>						
Lead 1 Year $\times$ On Lowland Route	-0.0013 (0.0015)			0.8859 (0.9792)		
Lead 2 Years $\times$ On Lowland Route		-0.0008 (0.0009)			0.2502 (0.5499)	
Lead 3 Years $\times$ On Lowland Route			-0.0007 (0.0007)			0.2287 (0.3708)
<i>Fixed-effects</i>						
Date	Yes	Yes	Yes	Yes	Yes	Yes
Locality	Yes	Yes	Yes	Yes	Yes	Yes
Locality-Month	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>						
Observations	53,808	53,808	53,808	53,808	53,808	53,808
R ²	0.17812	0.17329	0.16854	0.10822	0.10936	0.10996
Within R ²	0.01712	0.01134	0.00566	0.00076	0.00204	0.00272

Clustered (Locality) standard-errors in parentheses

Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

B.5 Complete Reporting: Spatial Panel Difference-in-Differences Results Net Effects

Table B.4: Complete Results Reporting: Difference-in-Differences Net Effects

Dependent Variables: Model:	Migrant Homicides			Non-Migrant Homicides Per 100K		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Variables</i>						
Post $\times$ Migration Route - Coast	0.0020*** (0.0007)			0.6003** (0.2579)		
Post $\times$ Migration Route - Highland		-0.0002 (0.0002)			0.0739 (0.1317)	
Post $\times$ Migration Route - Lowland			0.0006 (0.0007)			0.5170 (0.8037)
Post $\times$ Inverse Distance - Highway	4.75×10^{-5} (0.0002)	-0.0002 (0.0001)	-0.0001 (0.0001)	0.0212 (0.1432)	0.1310 (0.1700)	-0.0732 (0.2266)
Post $\times$ Population	-0.0008*** (7.27×10^{-5})	3.86×10^{-6} (5.58×10^{-6})	-0.0016*** (0.0004)	-0.0026 (0.0036)	0.0004 (0.0023)	-0.0180 (0.0536)
Post $\times$ Pct. Indigenous	-0.0001 (0.0004)	3.62×10^{-5} (0.0001)	0.0002 (0.0004)	0.6746 (0.7533)	-0.0179 (0.1988)	0.1086 (0.4635)
Post $\times$ Pct. Very Poor	-0.0016 (0.0010)	-0.0005** (0.0002)	-0.0007 (0.0005)	-2.066*** (0.7855)	-0.6292 (0.5865)	-0.0398 (0.5650)
Post $\times$ Municipal Head	0.0041 (0.0079)	0.0005 (0.0018)	0.0007 (0.0179)	-0.3604 (0.4017)	-0.2126 (0.2468)	3.224 (2.291)
Post $\times$ Urban Locality	0.0077 (0.0055)	-0.0004 (0.0003)	0.0104** (0.0046)	0.2522 (0.2681)	-0.1971 (0.1636)	-2.433 (2.900)
Post $\times$ Inverse Distance - Shelter	0.0003 (0.0006)	-0.0002 (0.0002)	-0.0007 (0.0006)	-0.1732 (0.1497)	-0.1764 (0.4157)	-0.1866 (0.1648)
Post $\times$ Inverse Distance - COMAR	-0.0010** (0.0005)	8.17×10^{-5} (0.0002)	0.0003 (0.0003)	-0.0026 (0.1179)	-0.0140 (0.3789)	-0.5291 (0.7675)
Post $\times$ Inverse Distance - National Guard	-0.0012** (0.0006)	-4.7×10^{-5} (0.0001)	-0.0008 (0.0007)	-0.5380*** (0.1746)	-0.1007 (0.0999)	-0.7240 (0.7065)
Post $\times$ Inverse Distance - INM	0.0019* (0.0011)	-6.49×10^{-5} (0.0001)	0.0001 (0.0005)	0.7211** (0.2826)	0.3439 (0.3495)	0.8824 (0.9468)
<i>Sample</i>						
	Coastal	Highland	Lowland	Coastal	Highland	Lowland
<i>Fixed-effects</i>						
Date	Yes	Yes	Yes	Yes	Yes	Yes
Locality	Yes	Yes	Yes	Yes	Yes	Yes
Locality-Month	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>						
Observations	173,880	260,400	79,296	173,880	260,400	79,296
R ²	0.26274	0.08923	0.12974	0.07709	0.08250	0.07516
Within R ²	0.00214	2.66×10^{-5}	0.00356	0.00046	8.55×10^{-5}	0.00026

Clustered (locality) standard-errors in parentheses

Signif. Codes: ***, 0.01, **, 0.05, *, 0.1

B.6 Complete Reporting: Spatial Panel Difference-in-Differences Results Heterogeneous Effects

Table B.5: Complete Results Reporting: Difference-in-Difference Heterogeneous Effects

Dependent Variables: Model:	Homicides of Migrants (1)	Non-Migrant Homicide Rate (2)
<i>Variables</i>		
Post × Migration Route - Coast	0.0050* (0.0027)	2.473*** (0.8470)
Post × Inverse Distance - INM	0.0002 (0.0004)	0.0620 (0.1962)
Post × Inverse Distance - COMAR	5.02×10^{-5} (0.0003)	0.3087* (0.1643)
Post × Inverse Distance - National Guard	-0.0012** (0.0006)	-0.5484*** (0.1747)
Post × Inverse Distance - Shelter	0.0002 (0.0006)	-0.2337 (0.1512)
Post × Inverse Distance - Highway	-0.0001 (0.0002)	-0.0648 (0.1280)
Post × Population	-0.0008*** (7.09×10^{-5})	-0.0046 (0.0036)
Post × Pct. Indigenous	-8.95×10^{-6} (0.0004)	0.7139 (0.7481)
Post × Pct. Very Poor	-0.0020* (0.0011)	-2.193*** (0.8153)
Post × Municipal Head	0.0041 (0.0077)	-0.3277 (0.4121)
Post × Urban Locality	0.0080 (0.0054)	0.3663 (0.2505)
Post × Migration Route - Coast × Inverse Distance - INM	0.0037** (0.0018)	1.430*** (0.4187)
Post × Migration Route - Coast × Inverse Distance - COMAR	-0.0023* (0.0013)	-0.7243** (0.2861)
<i>Fixed-effects</i>		
Date	Yes	Yes
Locality	Yes	Yes
Locality-Month	Yes	Yes
<i>Fit statistics</i>		
Observations	173,880	173,880
R ²	0.26282	0.07738
Within R ²	0.00224	0.00078

Clustered (Locality) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

B.7 Robustness

B.7.1 No Controls

In the main text we report results using a vector of controls interacted with the post-treatment period to address potential alternative explanations. In Table B.6, we drop controls for our two main analyses, omitting our fixed effects in Columns (1) and (3) and including our date, locality, and locality-month fixed effects in Columns (2) and (4). Relationships uncovered in the main text are robust to the omission of controls across migrant and non-migrant homicides, although the specification including fixed effects but no controls for migrant homicides is nudged above the 5% threshold of statistical significance ($p = 0.06$).

Table B.6: Coastal Route Effects - No Controls

Dependent Variables: Model:	Migrant Homicides		Non-Migrant Homicides Per 100K	
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Constant	0.0004*** (0.0001)		0.1098*** (0.0277)	
Post	-9.59×10^{-5} (0.0001)		0.2528*** (0.0770)	
Migration Route - Coast	0.0040 (0.0025)		0.1725*** (0.0597)	
Post $\times$ Migration Route - Coast	0.0014** (0.0007)	0.0014* (0.0007)	0.5509*** (0.1909)	0.5473*** (0.1956)
<i>Fixed-effects</i>				
Date		Yes		Yes
Locality		Yes		Yes
Locality-Month		Yes		Yes
<i>Fit statistics</i>				
Observations	173,880	173,880	173,880	173,880
R ²	0.00147	0.26119	0.00082	0.07803
Within R ²		4.1×10^{-5}		0.00015

Clustered (Locality) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

B.7.2 Binary Dependent Variables

In Table B.7, we use the same estimators as in the main text but replace the dependent variable with a binary indicator that takes the value 1 for observations with any homicides. We find that our results are robust to this alternative operationalization of the DV, suggesting that our findings are not driven by large outliers in the outcomes.

Table B.7: Binary Dependent Variables

Dependent Variables: Model:	Any Migrant Homicides (1)	Any Non-Migrant Homicides (2)
<i>Variables</i>		
Post $\times$ Migration Route - Coast	0.0021*** (0.0007)	0.0063*** (0.0019)
Controls	Yes	Yes
<i>Fixed-effects</i>		
Date	Yes	Yes
Locality	Yes	Yes
Locality-Month	Yes	Yes
<i>Fit statistics</i>		
Observations	173,880	173,880
R ²	0.23192	0.23351
Within R ²	0.00231	0.03758

Clustered (locality) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

B.7.3 Varying Control Buffers

Here, we assess the robustness of our findings to varied control buffers. Given our choice of 35KM buffers in the main text, we choose 25KM and 45KM buffers as alternative measures. Table B.8 thus reports the results of alternative versions of our main analysis using a control group of localities which fall between 5KM and 25KM of the route or between 5KM and 45KM of the route. We find that our results are robust to alternative buffer widths (which define slightly larger or slightly smaller control groups).

Table B.8: Robustness to Varied Width of Control Group Buffers

Dependent Variables: Model:	Migrant Homicides		Non-Migrant Homicide Rate	
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Post $\times$ Migration Route - Coast	0.0018*** (0.0007)	0.0019** (0.0007)	0.6267** (0.2620)	0.5300** (0.2476)
<i>Control Buffer Width</i>	25KM	45KM	25KM	45KM
<i>Fixed-effects</i>				
Date	Yes	Yes	Yes	Yes
Locality	Yes	Yes	Yes	Yes
Locality-Month	Yes	Yes	Yes	Yes
<i>Fit statistics</i>				
Observations	156,072	193,200	156,072	193,200
R ²	0.26421	0.26161	0.07756	0.07579
Within R ²	0.00228	0.00200	0.00065	0.00036

Clustered (Locality) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

B.7.4 Municipal Headquarters and Non-Municipal Headquarters Samples

Here, we split our results into samples of municipal headquarters (*cabeceras*) and non-headquarters. We do this to address concerns that biased reporting towards places with greater administrative presence might correlate with the migration route and thus predispose to greater measurement of both migrant and non-migrant homicides along the migration route due to the greater presence of municipal headquarters rather than due to actual changes along the migration route. Instead, in Table B.9, we find that our effects hold up across both municipal headquarter and non-headquarter samples for both analyses, bolstering our confidence that our findings are not due to bias in reporting.

Table B.9: Splitting the Sample by Local State Presence

Dependent Variables: Model:	Migrant Homicides		Non-Migrant Homicide Rates	
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Post $\times$ Migration Route - Coast	0.0017*** (0.0006)	0.0257** (0.0110)	0.6140** (0.2618)	1.478*** (0.4798)
<i>Sample</i>				
	Not Cabeceras	Cabeceras	Not Cabeceras	Cabeceras
<i>Fixed-effects</i>				
Date	Yes	Yes	Yes	Yes
Locality	Yes	Yes	Yes	Yes
Locality-Month	Yes	Yes	Yes	Yes
<i>Fit statistics</i>				
Observations	169,848	4,032	169,848	4,032
R ²	0.09442	0.31781	0.07679	0.13296
Within R ²	0.00054	0.00387	0.00049	0.00278
<i>Clustered (locality) standard-errors in parentheses</i>				
<i>Signif. Codes: ***: 0.01, **: 0.05, *: 0.1</i>				

B.7.5 Unit Specific Pre-Trends as a Control

Drawing on intuitions from Rambachan and Roth (2023), we examine whether unit-specific deviations from parallel trends could plausibly be driving our outcomes. To do this, we define unit-specific pre-treatment trends which model homicides as a function of time. We extend these trends in the post-treatment period through including unit-level pre-trends as a predictor interacted with the treatment structure. As presented in Table B.10, our results are robust to the extension of unit-level pre-treatment trends into the post-period.

Table B.10: Unit-Specific Pre-Trends as a Control

Dependent Variables: Model:	Migrant Homicides (1)	Non-Migrant Homicide Rate (2)
<i>Variables</i>		
Post $\times$ Migration Route - Coast	0.0025*** (0.0010)	0.5923** (0.2595)
Period $\times$ Unit Migrant Homicide Pretrend	0.0892 (0.0815)	
Period $\times$ Unit Non-Migrant Homicide Rate Pretrend		0.0122 (0.0106)
<i>Fixed-effects</i>		
Date	Yes	Yes
Locality	Yes	Yes
Locality-Month	Yes	Yes
<i>Fit statistics</i>		
Observations	173,880	173,880
R ²	0.26800	0.07714
Within R ²	0.00926	0.00052

Clustered (Locality) standard-errors in parentheses

Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

B.7.6 Breakdown Parameter for DiD Estimates

In addition to probing the plausibility of our parallel trends assumption in Figures B.4 and B.5 and Table B.3 and addressed threats to inference from extrapolated pre-treatment violations of parallel trends in the analysis presented in Table B.10, we address the concern that our estimates might be driven by secular *post-treatment* divergence from parallel trends not caused by the treatment itself. The logic of this exercise is to test how large post-treatment violations of parallel trends could be before the results break down. The value at which these results break down is the "breakdown value" – of the largest value of post-treatment bias to which the identified effect is still significant. Depicted graphically in Figure B.6, Rambachan and Roth (2023) aim to identify the breakdown value M at which the effect remains significant.

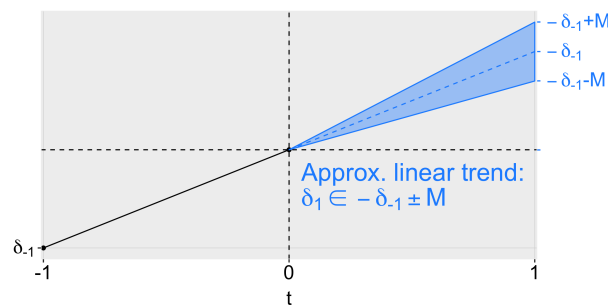


Figure B.6: Visualizing the Intuition of Rambachan and Roth (2023)

Following recommendations from Rambachan and Roth (2023), we insert varying degrees of post-treatment violations of parallel trends into our estimators. We carry our unit-specific pre-treatment trends

and mechanically introduce bias into our post-treatment outcomes by interacting the unit-specific pre-trend with the post-treatment period and increasingly large M s. The induced bias takes the following form:

$$\text{Migrant Homicides}_{i,t,M} = \text{Migrant Homicides}_{i,t} + \text{Pre-Trend}_i \times \text{Post}_{i,t} \times M \quad (\text{B.1})$$

Rambachan and Roth (2023) defines the breakdown parameter $\bar{M}$ as the greatest value at which the examined effect finding retains statistical significance. We examine the robustness of our results for demolitions and units to $M \in [1, 9]$ for migrant homicides and $M \in [10, 30]$ for non-migrant homicide rates, and present results in Figure B.7.

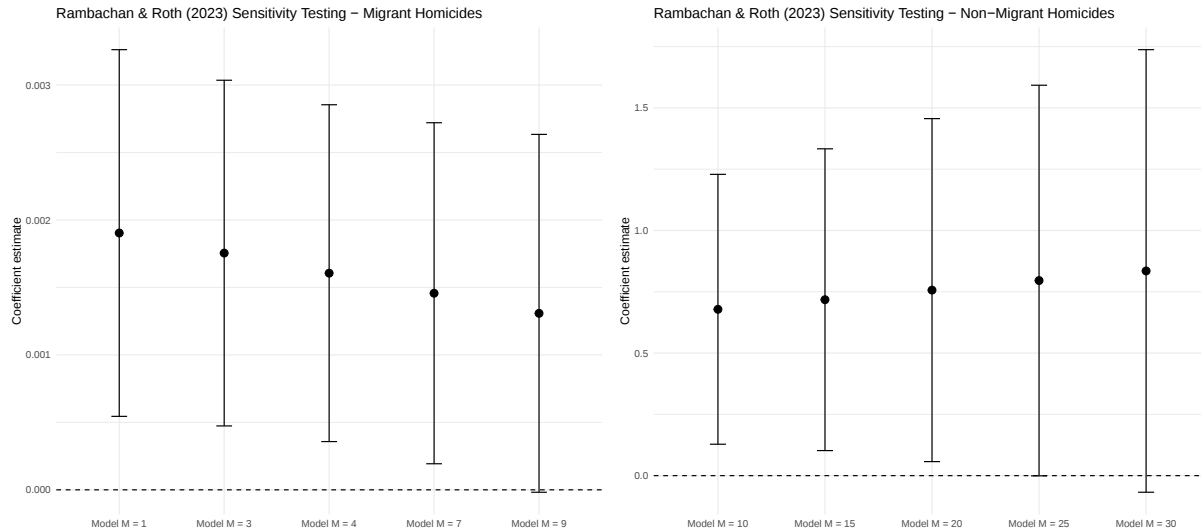


Figure B.7: Post-Treatment Bias Breakdown Values for Difference-in-Difference Estimates

B.7.7 Randomization Inference

We conduct a randomization inference (RI) exercise to assess whether our estimated treatment effect could arise by chance under the null of no relationship between treatment assignment and outcomes. Specifically, we repeatedly reassign the treatment indicator to the same number of localities at random, re-estimate our main DiD specification, and compare the resulting distribution of placebo coefficients to our observed estimate. We conduct this exercise for our main results on homicides along the coastal route. The results show that the estimated effect is unlikely to emerge under random assignment (p-value = 0.002 for migrant homicides and 0.002 for non-migrant homicides), providing additional support that our findings are not driven by chance.

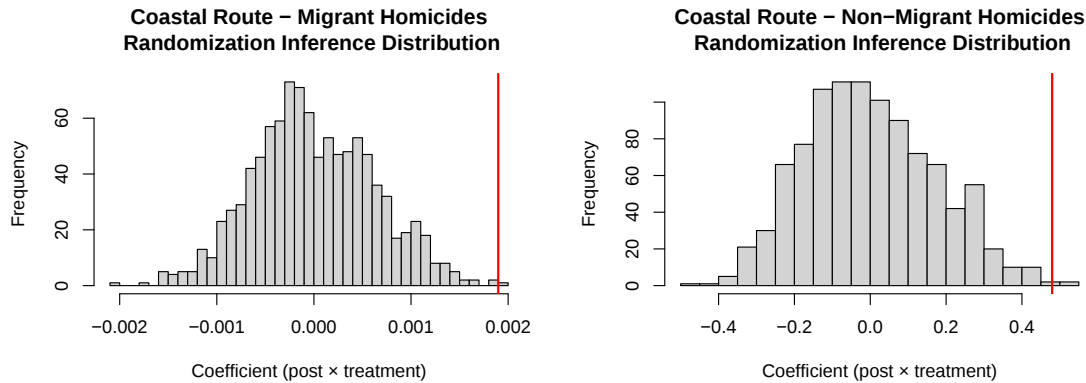


Figure B.8: Randomization inference.

B.8 Assessing Threats to Inference: Attenuation, Falsification, and Placebo Tests

B.8.1 Attenuation Test

We use an attenuation test to examine whether the effects of our shock are attenuated (increased) by increasing (decreasing) the distance from the route defined as treatment. To do this, we re-define our treatment group as within 7KM (3KM) of the route, compared to the base specifications of 5KM presented in the main text. If our account is correct, we would expect the effects to be larger closer to the route. Findings presented in Table B.11 align with these expectations, as point estimates on the 3KM bandwidth are slightly larger than main text effects, while point estimates on the 7KM bandwidth around the route are slightly smaller than the main text effects.

Table B.11: Attenuation Test: Proximity to Migration Route Shapes Results

Dependent Variables: Model:	Migrant Homicides		Non-Migrant Homicide Rate	
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Post × Migration Route - Coast (3KM)	0.0021** (0.0008)		0.7399** (0.3059)	
Post × Migration Route Coast (7KM)		0.0018** (0.0007)		0.5468** (0.2340)
<i>Fixed-effects</i>				
Date	Yes	Yes	Yes	Yes
Locality	Yes	Yes	Yes	Yes
Locality-Month	Yes	Yes	Yes	Yes
<i>Fit statistics</i>				
Observations	173,880	173,880	173,880	173,880
R ²	0.26274	0.26273	0.07712	0.07708
Within R ²	0.00214	0.00213	0.00050	0.00045

Clustered (Locality) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

B.8.2 Falsification Tests

Here we use a falsification test, or placebo outcome test following the logic of Eggers, Tuñón and Dafoe (2024). The logic of this test is that we are checking to ensure that our treatment does not impact outcomes which it should not impact if our theoretical account is correct. If we were to find an association between our treatment and outcomes to which it should not have a causal link, this would suggest confounding in our main analysis. We first examine migrant deaths from chronic disease as a placebo outcome, to examine migration flows as a confounder to our main findings. If increased migration flows following Remain in Mexico were driving increases in migrant homicides, we should also find increases in migrant deaths from chronic disease (which should correlate with increasing migration flows). As we show in Table B.12, there are no statistically detectable increases in migrant deaths from chronic disease along the coastal route following the policy shock, suggesting that effects recovered in our main analysis are not due to confounding from increased migration flows but similar rates of migrant homicides.

Table B.12: Falsification Test - Migrant Deaths from Chronic Disease

Dependent Variable: Model:	Migrant Deaths from Chronic Disease (1)
<i>Variables</i>	
Post × Migration Route - Coast	-8.82×10^{-5} (0.0002)
<i>Fixed-effects</i>	
Date	Yes
Locality	Yes
Locality-Month	Yes
<i>Fit statistics</i>	
Observations	173,880
R ²	0.31983
Within R ²	0.00756
<i>Clustered (Locality) standard-errors in parentheses</i>	
<i>Signif. Codes: ***: 0.01, **: 0.05, *: 0.1</i>	

Our second falsification test is meant to address confounding in the non-migrant estimates and rule out shocks to the rule of law not coming from organized crime during our period of study. Here, we consider whether there are changes to violence along the migration route not linked to organized crime, for example due to shifting allocation in enforcement to prioritize migration enforcement, or other changes which would perhaps lead to changes in the non-migrant homicide rate through an omitted variable rather than through increased competition from organized crime. To examine this explanation, we consider the case of domestic violence homicides. If changes in the homicide rate among non-migrants were attributable to confounding deterioration of the rule of law, we would expect that to show up in domestic violence which evidence suggests is responsive to the allocation of policing (Córdova and Kras, 2020, 2022) but is not a type of violence principally associated with organized criminal presence. Using deaths from domestic violence as an outcome, we find no statistically detectable increase along the migration route following the policy shock of Remain in Mexico, presenting these results in Table B.13. This result bolsters our confidence that the changes in the homicide rate of the non-migrant population are likely due to our hypothesized mechanism of the expansion of organized crime, rather than due to unmodeled confounding

from other shocks to local rule of law or law enforcement.

Table B.13: Falsification Test - Non-Migrant Deaths from Domestic Violence

Dependent Variable:	Non-Migrant Domestic Violence Homicide Rate
Model:	(1)
<i>Variables</i>	
Post $\times$ Migration Route - Coast	0.0108 (0.0122)
<i>Fixed-effects</i>	
Date	Yes
Locality	Yes
Locality-Month	Yes
<i>Fit statistics</i>	
Observations	173,880
R ²	0.07237

Clustered (Locality) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

B.8.3 Placebo Treatment Test

Finally, we address the potential concern that stranded migrants themselves are perpetrating the increase in violence, rather than that organized crime capturing migrant populations is causing this violence. To conduct this analysis, we drop our route variable and consider as our main explanatory variable the role of distance to migrant shelters following Remain in Mexico. If a surging migrant population following the application of Remain in Mexico is associated with migrants committing violent crime, we should expect to see concentrated increases in violence against non-migrants surrounding migrant shelters. Following the guidelines advanced by Eggers, Tuñón and Dafoe (2024), this can be considered a placebo treatment test, and is meant to address confounding in the treatment (as opposed to confounding in the outcome).

As displayed in Table B.14, we find no increases in violence against either migrants or non-migrants associated with proximity to migrant shelters along the coastal route sample. This suggests that it is not the *presence of migrants themselves* which is driving violence during this period, but rather the presence of migrants vulnerable to exploitation *attracting competition from organized crime*.

Table B.14: Placebo Treatment: Distance to Migrant Shelters

Dependent Variables: Model:	Migrant Homicides (1)	Non-Migrant Homicide Rate (2)
<i>Variables</i>		
Post $\times$ Inverse Distance to Migrant Shelters	0.0007 (0.0005)	-0.0500 (0.1286)
<i>Fixed-effects</i>		
Date	Yes	Yes
Locality	Yes	Yes
Locality-Month	Yes	Yes
<i>Fit statistics</i>		
Observations	173,880	173,880
R ²	0.26269	0.07699
Within R ²	0.00208	0.00036

Clustered (Locality) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

C Cartel Presence in Chiapas

To measure criminal organization presence in Chiapas, we constructed an original municipality-cartel-year dataset covering all municipalities in the state between 2018 and 2020. The unit of analysis is the municipality-cartel-year. For each municipality and year, we coded whether there was credible evidence that a given criminal organization operated within the municipality.

The dataset covers the major criminal organizations active in Chiapas during the study period identified through our qualitative research, including the Sinaloa Cartel, Jalisco New Generation Cartel (CJNG), Zetas, Gulf Cartel, Cartel de Chamula, Mara Salvatrucha (MS-13) and Barrio 18 (MS-13 and Barrio 18 were coded together), and “other” to record any other criminal organization. Data were collected through systematic searches of publicly available sources, including local and national newspapers, investigative journalism, NGO reports, government statements, and law-enforcement releases. Four research assistants conducted searches in Spanish using combinations of cartel names, municipality names, and year-specific search terms. Searches were restricted to information available for the relevant calendar year.

We coded a criminal organization as present in a municipality-year when at least one credible source indicated that the group operated, maintained presence, exercised territorial influence, participated in criminal activity, engaged in violence or illicit activities, had members arrested locally, or was publicly identified by authorities or journalists as active in the municipality. For each positive coding decision, coders recorded supporting sources and notes. Coding followed a conservative protocol. We did not infer presence from state-level reports, neighboring municipalities, or the residence of arrested individuals operating elsewhere. Municipality-years with insufficient information were coded as missing rather than absent. Cases involving ambiguous or conflicting evidence were flagged for review and adjudicated by the authors in group discussions with the research assistants.

The resulting dataset provides a transparent and replicable measure of criminal organization presence across municipalities in Chiapas and allows us to identify patterns of cartel presence during the study period. As with other media-based measures of organized crime, the data are subject to reporting biases and variation in media coverage across municipalities. To mitigate these concerns, we relied on multiple

source types and applied uniform coding rules across all observations.

C.1 Cartel Presence Along Migration Routes

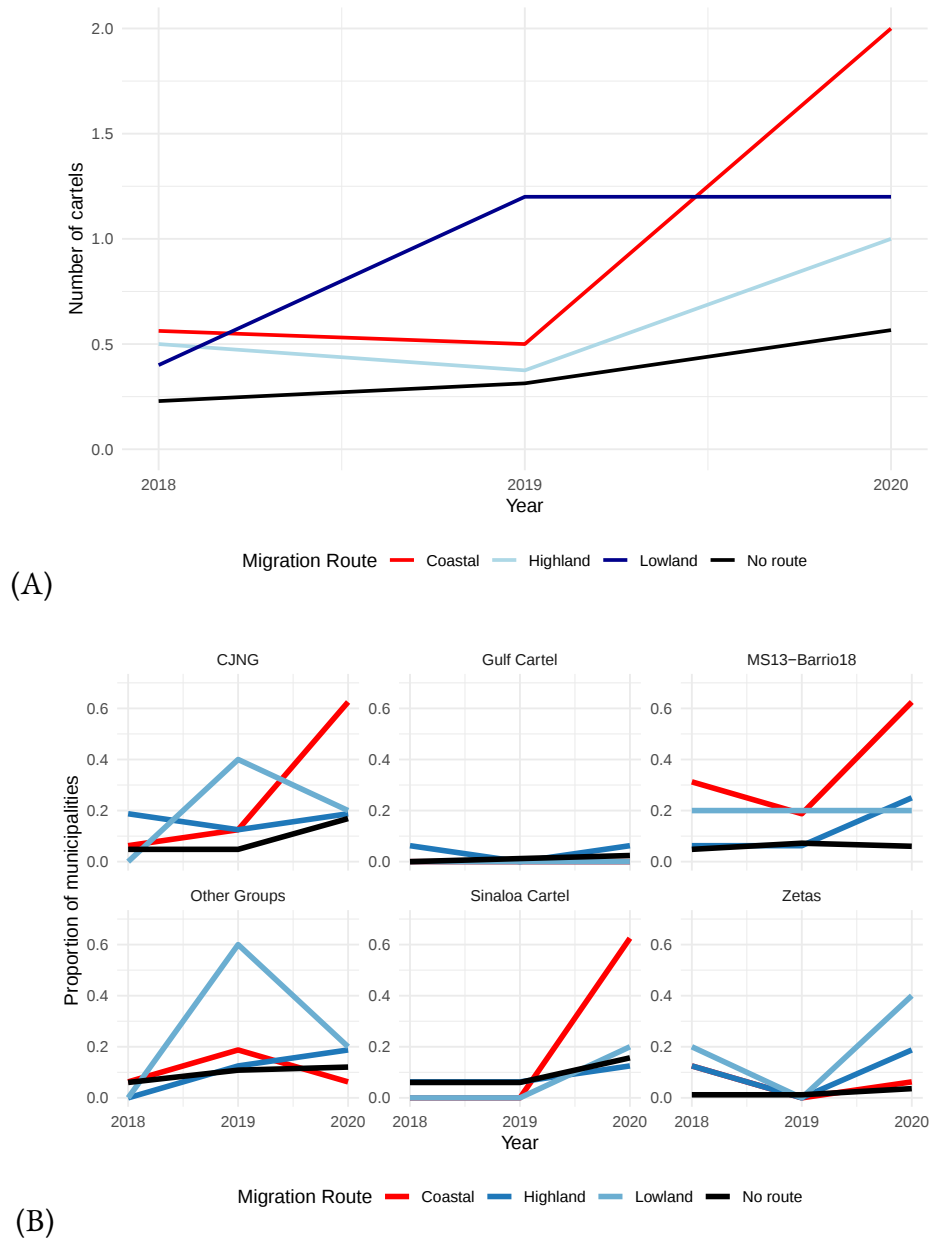


Figure C.1: (A) Average number of cartels per municipality and (B) proportion of municipalities with presence of criminal actor, by migration route status, Chiapas 2018–2020.

D Appendix: EMIF Sur Estimation

We estimate the effects of Remain in Mexico on migrant smuggling using the following estimating equation:

$$\text{Migrant Outcome}_i = \beta_1(\text{Post}) + \beta X_i + \gamma_{MT} + \sigma_C + \delta_{US} + \epsilon \quad (\text{D.1})$$

Migrant Outcome_{*i*} denotes our outcome measures, which include smuggling price and mode of smuggling. Mode of smuggling is a dummy variable taking the value of 1 if the migrant was smuggled in a trailer and 0 otherwise. Post MPP is a binary indicator that takes a value of 1 if the approximate migration date of a migrant is after the implementation of MPP in June 2019 and 0 if it was before. X_i is a vector of individual level controls measuring migrant's sex, age, secondary education, whether they are Indigenous or Afrodescendant, speak English, travel with children, hired a smuggler, and the number of days spent in Mexico. We also include a set of fixed effects: γ_{MT} is a fixed effect for the municipality in which migrants spent the majority of their time in Mexico, σ_C is a fixed effect for migrant country of origin, and δ_{US} is a fixed effect for migrants that made it to the US.

We account for a number of alternative explanations for these changes in the controls and fixed effects included in the models. First, we might expect changes in experiences on migration journeys due to changes in the duration of migration journeys as such, with delays from enforcement risks making migration journeys longer and therefore increase migrants potential opportunities to be exposed to risks. In all specifications, we control for the length of the migration journey in Mexico in order to address this alternative explanation. Second, changing risk of enforcement might also shift the composition of migrants to those coming from different countries or having different traits which could predispose them to risk. In order to address this, we include a battery of individual covariates including race, indigeneity, age, sex, education level, and whether they travel with children or not, as well as a country-of-origin fixed effect. The inclusion of these controls bolsters our confidence that it is not compositional changes to the types of migrants migrating following Remain in Mexico which drive these results. A third alternative explanation might suggest that security conditions for migrants are only worse because migrants are choosing new, riskier routes following Remain in Mexico. To address this, we include a fixed effect for the municipality where migrants spent the majority of their time in Mexico. The inclusion of these controls and the focus on this sample suggests that migrants making similar journeys experienced worse conditions and treatment following Remain in Mexico than those who migrated prior.