Queenpins: Women Leadership and Violence in Organized Crime

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Abstract

Criminal organizations govern over millions across the world. Analyzing factors that influence criminal violence and territorial control is crucial. This article examines the role of gender and leadership. It argues that women leaders should be less violent when their socialization, trajectory, and ascension follow gender dynamics in these deeply patriarchal organizations. Exploiting the ascension of Enedina Arellano Félix to leadership of the Tijuana Cartel in Mexico in 2008 following the arrest of her male sibling and the synthetic control method, we find that Enedina's leadership resulted in less cartel-related violence, violence against women, violence against the state, and territorial expansion, but not changes in drug trafficking patterns or government enforcement. We then construct 35 case studies of women criminal leaders across the world, finding that those who succeed male kin are remarkably like Enedina, suggesting that our results may generalize to these cases.

Keywords: gender, leadership, organized crime, violence, Mexico

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1 Introduction

Women's involvement in rebel groups has significant consequences for their provision of governance (Loken and Matfess 2024), use of sexual violence (Wood 2009; Mehrl 2022; Ju 2023), violence against civilians (e.g., Mehrl 2023; Harrell 2023), and prospects for peace (e.g. Krause et al. 2018; Brannon et al. 2024). Like rebel groups, criminal organizations impact the well-being of millions around the world: they control territory, provide governance to members and nonmembers alike, and perpetrate violence against civilians, rivals, and state actors. Yet, we know little about the consequences of women's involvement, and more specifically, women's *leadership* in organized crime. This is despite scholars suggesting that leaders in organized crime profoundly shape their organizations' goals, structure, internal governance, and member behavior (Lessing and Willis 2019; Chopin and Dupont 2024), and that women leaders have distinct profiles and rule differently than their male counterparts. For example, some anecdotal accounts and case studies portray women leaders as needing to be more ruthless than men to reach the top and rule,[1] while others as less violent and more inclined to maintain low profiles (Olvera 2022; Sampó et al. 2023).

This article analyzes the consequences of women's leadership in organized crime, focusing on its impact on the violent behavior and territorial control of the organizations they lead. While recent studies have begun to identify these women and trace their paths to leadership, the literature has yet to systematically examine whether and how women leadership matters. Existing research highlights that while organized crime is a male-dominated sphere characterized by patriarchal and masculine norms, women can and do play active, sometimes even key, roles. However, their influence is often indirect and tends to be exerted through or stem from their male partners or kin. A central consequence is the differential access women have to coercive means, as they tend to participate in non-violent gendered roles. Gender roles also impact *which* women rise to power and *how.* Women leaders are not those who fight their way up from lower ranks, but precisely those with gendered roles whose male partner or relative, who previously held the leadership role, is arrested or killed. Given women's distinct socialization, experiences, and ascension within organized crime, we expect women leaders to be less likely to exercise violence than their male counterparts, including against rival criminal organizations, women, and the state, which limits their willingness or ability to contest territory.

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[1] For example, "Quien es Delia Patricia Buendía, 'Ma Baker', líder del Cártel de Neza?" *MVS Noticias*, 12/31/2023. "Griselda Blanco and the female drug barons of Latin America," *BBC*, 01/17/2024.

To evaluate these expectations, we turn to Mexico, where powerful criminal organizations that operate across the country began significantly expanding their territorial presence in the mid-2000s, and are responsible for tens of thousands of homicides and hundreds of political assassinations since 2000. We focus on the Tijuana Cartel, which was founded by the Arellano Félix family in the late 1980s and became one of Mexico's most powerful drug cartels, and Enedina Arellano Félix, who leads the cartel since 2008. Through a case study, we highlight how Enedina's entry, trajectory, and rise to power were distinctively shaped by gender in ways that very closely resemble the gendered pathways highlighted by exiting studies.

To test the effect of Enedina's leadership on the Tijuana Cartel's violent behavior and territorial control, we exploit the arrest of the last male sibling of the Arellano Félix family in late 2008 that resulted in the ascension of Enedina Arellano Félix to leadership. Using the synthetic control method (SCM) (Abadie et al. 2010, 2015; Abadie 2021) and a cartel-year dataset measuring the presence and violent behavior of each large drug cartel in Mexico between 2000 and 2018, we find that Enedina's leadership resulted in less in less cartel-related homicides, homicides of women, and violence against the state than male leaders, but did not affect disappearances, a less visible form of violence. This does not mean Enedina was incapable of or did not perpetrate violence, as the disappearances results indicate, rather that she did so less than male leaders. These results challenge the prevailing argument that kingpin strategies invariably escalate criminal violence (e.g., Calderón et al. 2015; Phillips 2015; Velasco 2023) by showing that a women taking power following leadership decapitation can exert a stabilizing influence under certain conditions. These findings are therefore more consistent with Jones (2013), who finds that leadership turnover in the Tijuana Cartel does not increase violence when there are respected successors. We further find that Enedina concentrated territorial control rather than expanding geographically like her male counterparts. Additional results suggest that these findings are unlikely to be driven by changes in drug trafficking patterns or government enforcement.

To assess the potential generalizability of our findings, we create a novel qualitative dataset of women who have led their own criminal organization across 6 continents and 16 countries. Through in-depth research, we identify 35 women leaders, create short case studies for each, and analyze key gendered characteristics associated with their violent behavior. To our knowledge, this is the most comprehensive data on women leaders compiled to date. Centrally, we find that women who become leaders as a result of their male partner or family member being arrested or killed closely follow the gendered trajectory outlined by the theory and are remarkably similar to Enedina: Before leadership, these women tend to exercise power through their male kin, hold relatively privileged positions given that their male relative or partner leads the organization, and take on gendered non-violent roles (oftentimes related to finances). This suggests that our results likely generalize to this subset of women leaders. However, we unexpectedly find women who hold leadership positions because they establish and lead their own criminal organizations. These women leaders have been largely excluded from existing research and seem to differ systematically from women who inherit power from male kin: They appear to have experienced more private violence prior to becoming leaders, do not enter or have positions of privilege prior to founding and leading their own criminal organizations, and tend to have more violent reputations. Not only do these leaders necessitate further research, but they delineate a clear scope condition for our findings. Furthermore, we only find two instances of women rising the ranks and attaining leadership, highlighting the uniquely gendered barriers to leadership in organized crime that restrict women's power: women either attain leadership through their male kin or by establishing their own criminal syndicates.

This article contributes to our understanding of gender and leadership effects in armed non-state actors in important ways. First, while recent studies of criminal organizations have shifted the question from *whether* women are involved in organized crime to *how* they participate, this study further shifts it to the *consequences* of their involvement. Likewise, existing research on rebel groups examines the participation and effects of women in rank-and-file positions while this article focuses on women *leaders*. We thus complement recent research showing that women hold leadership roles in rebel (Henshaw 2016; Henshaw et al. 2019; Loken and Matfess 2022, 2024; Loken 2024) and criminal organizations (see Gillespie et al. 2024), though we go further by examining the consequence of their leadership. In doing so, our findings extend the women-and-peace hypothesis—that women in rebel groups positively affect peace processes (e.g. Krause et al. 2018; Brannon et al. 2024)—to the study of criminal non-state actors. In doing so, we provide a much needed addition to work on criminal governance, which often excludes gender and women, by showing that gender dynamics and women's leadership matter.

Second, we also speak more broadly to nascent research on women *political* leaders and their proclivity to use or prevent violence, including violence against women, differentially than male leaders (e.g. Dube and Harish 2020; Bochenkova et al. 2023; Alcocer et al. 2025). Finally, by showing the gendered pathway of women criminal leaders who succeed male kin, this article mirrors findings showing the benefits of dynastic ties for women politicians succeeding their male kin (e.g. Folke et al. 2021), and that factors limiting male political leadership open spaces for their female relatives to attain leadership (e.g. Labonne et al. 2019). Through these contributions, this study highlights how gender shapes organizational behavior, violence, and territorial control within organized crime, offering valuable insights into the broader political dynamics of power, authority, and governance in contexts where state authority is contested or undermined by non-state actors.

2 A Theory of Women Leadership in Organized Crime

Our central argument is that women leaders whose trajectories and ascension to power are shaped by gender dynamics are likely to use less violence and exercise more limited territorial control than their male counterparts. Given the dearth of studies in political science on the topic, we build our argument by drawing on research from disciplines like feminist criminology, anthropology, and sociology, and topics including narco-culture, gender studies, conflict studies, and women leadership effects. In doing so, we highlight that women experiencing organized crime differently than men is not to reduce everything to gender, but rather to acknowledge gendered perspectives. We also take intersectionality seriously by acknowledging that gender differences are also a result of other structural conditions, such as inequality, race, ethnicity, economic class, and social status.

2.1 Gender Dynamics and Women Leaders

Organized crime presents an especially important context for studying gender because it is a male-dominated sphere characterized by patriarchal and masculine norms (see Arsovska and Allum 2014; Selmini 2020; Guerreiro et al. 2022) that are perpetuated through its hierarchy, traditions, and constant reliance on the use or threat of violence. Not surprisingly, the gender gap in crime (the difference in the rates of offending between men and women) is even larger in organized crime than in other types of criminal activities (see Arsovska and Allum 2014; Selmini 2020; Guerreiro et al. 2022). Naturally, longstanding views of women involvement in organized crime are based on traditional gender stereotypes and either omitted them or portrayed them as passive and non-violent actors without agency or as victims (e.g., wives, sisters, mothers, love interests, or prostitutes) (see Arsovska and Allum 2014; Selmini 2020; Guerreiro et al. 2022). Early work by feminist scholars contested these views by showing that women play active roles and exert power, though these tend to follow gendered dynamics.

We now know that while women leadership in organized crime is much less common than male leadership, women do occasionally become leaders. Yet, it has also became clear that the trajectories and socialization of women leaders are deeply shaped by gender dynamics, with some suggesting this impacts how they rule. For example, some anecdotal accounts and case studies portray women leaders as needing to be more ruthless than men to reach the top and rule, while others as less violent and more inclined to maintain low profiles. To build expectations about the behavior of women leader, we contend that it is crucial to first understand *which* women come to power and *how*, as these factors shape their gendered experiences and socialization both before and after attaining leadership.

Crucially, existing studies find that women leaders are rarely those who work or fight their way up from lower ranks, but rather those with some degree of privilege who succeed a male partner or family member that previously held the leadership role. That is, women leaders tend not to be those that enter as low-ranking members and work their way up, which may be precisely the women that have to use more violence to prove their status and worthiness. Instead, it is women with relative privilege who often hold important or high-ranking positions that gain leadership—they are the partners, sisters, or daughters of male leaders. Furthermore, women's ascension to leadership appears more likely during crises when male leaders are heavily targeted—whether by rivals or the government—and are unable to continue leading, often due to arrest or death (Fiandaca 2007; Massari and Motta 2007; Ingrasci 2007; Allum and Marchi 2018; Otomo 2007; Campbell 2008; Guerreiro et al. 2022; Sampó et al. 2023; Fleetwood and Leban 2023). This suggests women are not seen as natural successors, but a last resort in moments of instability. Thus, women seem to serve the role of a "reserve army" for men rather than their leadership reflecting female emancipation in organized crime, with some going as far as claiming that women leaders would not make it on their own without male relatives (Pizzini-Gambetta 2009). While women leaders are in command once they assume leadership, some argue that they nevertheless rely on male approval given that these are male-dominated spaces (Selmini 2020).

Given who these women leaders are, before assuming leadership they tend to access and exercise power differently than men. Anderson (2005) argues that in organized crime, male "power-over" (defined by dominance and control over others) is made possible by women's agency and "power-to" (defined as relational power used to benefit others and the self), making women both subservient but active and essential. Case studies of criminal organizations across different countries support this theory by showing that women play active, sometimes even key, roles, but that their influence is often through their male partners or kin and thus indirect, hidden, and unrecorded (Ingrasci 2007; Di Maria and Lo Verso 2007; Pizzini-Gambetta 2009; Requena et al. 2014; Jaraba 2024).

Other scholars have showed that women not only exercise power indirectly through their male relative or partner, but also *directly* through positions with power (Rossi 2007; Allum 2007; Campbell 2008). This is consistent with results showing that women are commonplace and fundamental to drug trafficking organizations (Fleetwood and Leban 2023) and have high centrality positions, with some being decisive and key actors (Guerreiro et al. 2023). Some scholars have also highlighted that the direct influence of women in organized crime can shift in response to several factors, such as changes in civil society, criminal wars, and the organization's flexible internal structure (Allum 2007) or market and organizational changes (Otomo 2007).

Nevertheless, despite scholars debunking ideas that women in organized crime are passive subjects or victims, researchers largely agree that this does not result in the emancipation of women in these spaces (i.e., parity with men), but rather a pseudo- or ambiguous-emancipation. This is even found in cases where women hold positions of power, though higher positions do provide greater degrees of empowerment and autonomy from male dominance, with women's social class and rank also affecting the degree of freedom vis-à-vis men (Campbell 2008).

2.2 Impacts of Women Leadership in Organized Crime

To the extent that leadership matters in criminal organizations, we argue that women leaders will impact their organization's behavior and outcomes differently than men leaders given their gendered roles and trajectories. This argument builds on scholars suggesting that the type of leadership in organized crime matters (see Chopin and Dupont 2024), and that leaders function as key brokers (Calderoni 2014, 2016; Calderoni and Superchi 2019) and are highly influential for the organizations' goals, structure, internal governance, and member behavior (Chopin and Dupont 2024; Lessing and Willis 2019). We argue that women leadership is likely to matter for four key outcomes: criminal violence, violence against women, violence against the state, and territorial control.

First, we argue that women leaders will be less likely to use violence, in general, than male leaders. As illegal actors, criminal organizations cannot rely on legal state institutions to enforce contracts, adjudicate disputes, or protect property rights. They thus rely on informal systems of rules and mechanisms to control and regulate member behavior, many of which rely on violence. If access to violence and expectations about the use of violence are shaped by gender dynamics, then women may be less violent. Moreover, if women's pre-leadership roles push them to specialize in nonviolent strategies to business management, then women may rely on internal governance mechanisms that require less violence once they attain leadership.

On the one hand, the drug trafficker, or member of a criminal organization more broadly, represents key pillars of masculinity: social status, wealth, and access to women. Existing research finds that the use of violence in organized crime is often a means for boys and men to construct, measure, and redeem their manhood and masculinity (Penglase 2010; DaMatta 2010; McMillan and Paul 2011; Plaza and Sánchez 2016; Núñez Noriega and Espinoza Cid 2017), so men, in particular, may believe that the use of violence is necessary. Not surprisingly, the expression of masculinity through violence is often glorified in these spaces (Gillespie et al. 2024) and may partly explain levels of violence in organized crime (Yánez and Salas 2019). Inversely, women are often not socialized to integrate violence into their gender identity in organized crime in the same way as men, particularly those with privileged positions, and instead are generally expected to be non-violent, naive, tender, and passive (e.g., Mejías and Latorre 2022; Leboeuf 2022). To the extent that this difference is salient, women may be less likely to engage in violent behavior.

Beyond masculinity and expectations of violence, gendered differences in participation may also prevent women from having equal access to means of violence. In the Americas, Olvera (2022) argues that women in positions of power prefer less violence. Research finds that women in criminal organizations generally hold non-violent roles, particularly those related to finances, such as business management and money laundering (Fiandaca 2007; Requena et al. 2014; Giacomello and Youngers 2020; Sampó et al. 2023). Thus, the gendered market hypothesis argues that conditions increasing the number of non-violent roles in organized crime increase women involvement, particularly in management roles (Savona and Natoli 2007; Zhang et al. 2007; Kleemans et al. 2014). Others argue that entrepreneurial, less hierarchical criminal organizations provide spaces for individuals with nonviolent skills (i.e., women) to fill openings related to running business activities (Pizzini-Gambetta 2009). This is not to say that women do not exercise violence, because they do in some cases, even when they experience private violence and remain largely subordinate to men (Siebert 2007; Massari and Motta 2007; Ingrasci 2007; Allum 2007). Nevertheless, women's access to and use of violence appears to remain limited compared to men.

Additionally, given that women who ascend to leadership often hold key non-violent roles prior to their ascension, including positions in administration, business negotiations, financial planning and management, personnel management, and overseeing business operations, these roles enable them to develop specialized skills in non-violent business and organizational management. This may lead them to adopt internal mechanisms and structures once they gain leadership that rely on less violence. For example, (Lessing and Willis 2019) argue that the PCC in Brazil have adopted a rational-bureaucratic internal structure that allows them to adjudicate internal disputes with minimal violence. If women leaders are more prone to adopting organizational structures and management styles that rely less on coercion, then the criminal organizations they lead can successfully operate with less violence.

In sum, women who become leaders tend to have held non-violent administrative positions that help them develop non-violent management skills, depended on the male kin they succeed, have been less socialized to use violence, and have had limited experience wielding violence. Even more, some argue that women in organized crime have a stronger preference for collaboration (De Seranno and Colman 2023), which may additionally lead them to run their organizations with fewer conflicts with other criminal organizations. Alternatively, women leaders may use less violence *even if* they seek to use the same violence as male leaders, either because they have less experience using violence effectively or male subordinates being less likely to exercise violence on behalf of women leaders. As Gillespie et al. (2024) pouts out, even women leaders seeking to use violence rely on other members (primarily men) to commit violence on their behalf.

Hypothesis 1 (H1): *Women leaders in organized crime are less likely to use violence than male leaders.*

Second, it may be reasonable to believe that violence against women may be a form of violence that women leaders are particularly sensitive to given their own experiences in hyper-masculine spaces, their (often) gendered roles in organized crime, and that they are subject to more private violence than male leaders (Siebert 2007; Massari and Motta 2007; Ingrasci 2007). Additionally, some studies argue that women attain positions of power more often in human smuggling organizations because this market relies on care giving, interpersonal networks, and concern for clients (Zhang et al. 2007), suggesting that women in organized crime may be more prone to this type of behavior. These expectations align with research indicating that increased female participation in rebel groups is associated with a reduction in the organization's use of sexual violence (Wood 2009; Mehrl 2022; Ju 2023).

Hypothesis 2 (H2): *Women leaders in organized crime are less likely to use violence against women than male leaders.*

Third, women leaders may also be less likely to violently confront the state than men leaders if they use less violence in general or if they benefit from less scrutiny from law enforcement institutions. Scholars contend that individuals in law enforcement and judicial institutions often view women in organized crime through prevalent gender stereotypes portraying them as subservient to men, passive actors, and victims (Rossi 2007; Dino et al. 2007; Campbell 2008; Fleetwood 2015; Selmini 2020; Farfán-Méndez 2020; Olvera 2022; Sampó et al. 2023). This makes women less visible and therefore less likely to come under scrutiny. Some scholars further argue that women's everyday lives in these patriarchal organizations are more private than those of men, making them harder to investigate (Sampó et al. 2023). Moreover, women have agency and may strategically use or manipulate their image and stereotypes to their advantage to maintain lower profiles and remain less suspicious to law enforcement (Campbell 2008; Olvera 2022; Sampó et al. 2023). Some argue that these factors lead to a "paradox of invisibility" where gender stereotypes invisibilize the functions of women to law enforcement institutions, benefiting the organizations they work for or lead (Farfán-Méndez 2020). In the face of reduced oversight, violence as a defense mechanism against state enforcement is therefore less necessary.

Hypothesis 3 (H3): *Women leaders in organized crime are less likely to use violence against the state than male leaders.*

Fourth, if women leaders generally prefer to maintain lower profiles, resort less to violence, and their identities rely less on using violence, this may translate to women also seeking less territorial control if it is not central to their business. Their expertise in non-violent roles before gaining leadership (e.g., business management or finances) may simply mean they prioritize non-violent strategies to run their organization and achieve profits. This follows some studies arguing that women participation is higher in markets where territorial control is less prominent as an organizing feature (Savona and Natoli 2007; Zhang et al. 2007; Kleemans et al. 2014). Alternatively, women leaders may be more constrained in gaining territorial control even when they pursue this goal if it requires violence and women leaders have less experience using violence effectively or male subordinates are less likely to exercise violence on behalf of women leaders.

Hypothesis 4 (H4): *Women leaders in organized crime are less likely to extend their territorial control than male leaders.*

3 Mexico's Drug Cartels

To test the consequences of women leadership in organized crime, we turn to Mexico and its powerful drug cartels. Since the late 1980s, a handful of powerful criminal organizations specializing in trafficking drugs to international markets, known as "drug cartels," have dominated the criminal underworld. In December of 2006, the newly elected president declared war against drug trafficking and drug cartels and incrementally deployed the military throughout the country. Key components of this government crackdown included drug interdiction and kingpin strategies where the government sought to capture or kill cartel leaders. In response, drug cartels began attacking the state (Lessing 2017), diversifying their activities (Alcocer 2022; Herrera and Martinez-Alvarez 2022), expanding their geographic presence (Alcocer 2022), and fragmenting (Alcocer 2024).

Within this context, we focus on the case of Enedina Arellano Félix, leader of the Tijuana Cartel since 2008. We believe Enedina provides an important case to study because she is the first woman to lead a contemporary drug cartel in Mexico, she operates within a gendered context, and she exemplifies the prototypical woman leader identified by the literature. Mexico is generally considered a traditional country with strong patriarchal norms, where *machismo* (a stereotypical form of masculinity) was deeply interwoven into the construction of national identity (Gutmann 2007). Within Mexican drug cartels, these views are exacerbated, with "narco masculinities" pushing traditional gender roles and the use of violence to extremes (García-Reyes 2022). These norms are most most visibly reflected in "narcoculture"[2] in Mexico, where there is a near-total overlap between what is valued in drug trafficking and what is masculine (Plaza and Sánchez 2016), pushing those involved to accept and even internalize these gender dynamics (Noriega 2017). This includes establishing male-dominated power dynamics where women are subordinate (Scott 2015) and often reduced to mere objects of simple use and satisfaction to men (Plaza and Sánchez 2016). Nevertheless, women have been historically involved in drug trafficking in Mexico, albeit primarily through gendered or low-level roles, with only three documented cases of women leaders prior to the 1990s (Santamaría Gómez 2012).

3.1 The Tijuana Cartel

This section presents a case study of the Tijuana Cartel and Enedina Arellano Félix.[3] The case highlights the gender dynamics of her involvement and trajectory within the Tijuana Cartel, which very closely reflect those of women leaders identified in the literature–suggesting she provides a good case to test the theory.

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[2] Narcoculture is broadly defined as the social and cultural norms, values, behaviors, and aesthetics associated with the world of drug trafficking and organized crime.

[3] Refer to the Online Appendix for a complete list of sources used in constructing the case studies.

The origins of the structure that eventually became known as the Tijuana Cartel are rooted in the 1980s with the Arellano Félix siblings: seven men (only five have been linked to organized crime: Rafael, Benjamin, Ramón, Francisco Javier, and Eduardo) and four women (though only Enedina and Alicia have been linked to organized crime). The family is originally from the state of Sinaloa, where the siblings were born. Benjamin and Eduardo were involved in drug trafficking since at least the early 1970s, with Benjamin becoming an important distributor in California for powerful regional drug traffickers like Pedro Aviles Perez and Jorge Favela Escobosa. During the 1980s, Benjamin gained favor with Mexico's major traffickers who headed a trafficking network later known as the Guadalajara Cartel: Rafael Caro Quintero, Miguel Ángel Félix Gallardo, and Ernesto Fonseca Carrillo. With these connections, Benjamin began taking control of drug trafficking along the western portions of the US-Mexico border. Some media accounts claim that the Arellano Félix siblings are the nephews of Miguel Ángel Félix Gallardo, though Benjamin Arellano Félix once denied these claim during an interview. In 1985, the Arellano Félix siblings were allegedly formally given the Tijuana corridor along the California-Mexico border as their territory by the leaders of the Guadalajara Cartel. With the arrests of Caro Quintero and Carrillo Fuentes in 1985 and Félix Gallardo in 1989, Benjamin, with the support of his male siblings, gained independence and began operating as an autonomous criminal organization with its base Tijuana. Some accounts suggest that by 1989 Benjamin controlled virtually all drug trafficking routes towards California and Arizona.

Through the 1990s, the Tijuana Cartel consolidated itself as one of the most powerful drug cartels in Mexico due to their control of drug trafficking routes along the western US. This did not go without conflict. From 1989 to 2003, the Tijuana Cartel fought the Juarez Cartel over key trafficking routes along the US-Mexico border. Since at least 1988, the Arellano Félix Organization has been at war with the Sinaloa Cartel, leading to the arrest of the eldest brother, Francisco Rafael, in 1993 (released in 2008) and his assassination in 2013, as well as the assassination of a younger brother, Ramón, in February, 2002.

In October of 2002, Benjamin, the family leader, was arrested, leaving Francisco Javier as the head of the organization. In 2004, a high-ranking government official stated that the Tijuana Cartel had forged a short-lived alliance with the Gulf Cartel through the imprisoned Benjamin, who shared prisons with Osiel Cardenas Guillen, leader of the Gulf Cartel. In August of 2006, Francisco Javier was arrested by US authorities and Eduardo—the last active male sibling—gained leadership. In late 2007, internal disputes began between the Arellano Félix family and Teodoro García Simental, a high-ranking member of the Tijuana Cartel, which broke into all out war in April 2008 and escalated when García Simental forged a military alliance with the Sinaloa Cartel that same year. On October 26, 2008, Eduardo was apprehended by the Federal Police, leaving Enedina Arellano Félix in charge with the support of her nephew Fernando Sánchez Arellano, son of Alicia.[4]

3.2 Enedina Arellano Félix

> [Enedina] is not into the wars of her brothers. She is into making alliances and making money. Her beauty may also have helped her make alliances with powerful traffickers.[5]
>
> —*Mike Vigil, former Chief of International Operations for the DEA*

Enedina was born in 1961 in Mazatlan, Sinaloa, Mexico, and was protected by her family from her brothers' drug trafficking activities during her childhood. According to some accounts, Enedina hoped to compete in a beauty pageant at the Mazatlan Carnival when she was 16 years old, but was unable to given that her brothers were wanted by the authorities. She attended a private university in Guadalajara, Jalisco and graduated with a degree in accounting, after which, according to some accounts, she began helping her mother manage the family's legal businesses.

In 1985, at the age of 24, Enedina married Luis Raúl Toledo Carrejo, a businessman, in Guadalajara, and the couple moved to Tijuana to manage family businesses. According to most credible accounts, this is when Enedina began her involvement in her bothers' drug trafficking operations by using the legal businesses she managed to launder money. In the early 1990s, she became more directly involved when her and her husband acquired a pharmaceutical company that was allegedly used to import precursor chemicals that the nascent Tijuana Cartel used to produce synthetic drugs. This is also when Enedina is said to have begun directly advising her brothers on the financial matters of the Tijuana Cartel.[6]

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[4] Some reports claim Fernando is Enedina's son, not Alicia's, leading to confusion in media reports. However, leading experts on the Arellano Félix Organization and official reports from Mexico's Prosecutor's Office state that he is Alicia's son.

[5] Grillo, Ioan. "Meet the First Woman to Lead a Mexican Drugs Cartel." Time. July 7, 2015.

In early 2000, Jesús Labra Avilés, the financial mastermind of the Tijuana Cartel, was arrested and Enedina allegedly replaced him, putting her in charge of the finances and money laundering operations of the cartel. This event coincides with the United States Department of the Treasury sanctioning Enedina under the Foreign Narcotics Kingpin Designation Act in 2000.

In 2002, Enedina's role expanded and became even more central after Ramon was killed and Benjamin was arrested, leaving the family weakened. In 2005, a U.S. investigation into the Tijuana Cartel identified Enedina and various companies she managed as the backbone of the organization's money laundering operations. With the arrest of Francisco Javier in 2006, Enedina became the key advisor to Eduardo, the last standing male sibling.

On October 26, 2008, Eduardo was arrested following a shootout with the Federal Police in Tijuana, and Enedina took charge of the Tijuana Cartel during the apex of a brutal war against García Simental. Enedina was supported by her nephew Fernando, who took on a prominent role as head of operations, and her sister Alicia. More than a year into her reign, the war ended and the Tijuana Cartel declared victory when García Simental, supported by the Sinaloa Cartel, was arrested in early 2010. Some accounts claim that following the war, Enedina negotiated a business deal with the Sinaloa Cartel that allowed them to traffic through Tijuana for a price, avoiding another war, though this is contested.

Very little information exists about Enedina's leadership, likely reflecting both reporting bias and her own low profile approach. Most accounts claim that Enedina never liked the wars of her brothers and prefers to negotiate. Some also state that her role as money launderer and head of finances before her leadership made her business oriented, calculating, and savvy. Compared to her brothers, her and her sister, Alicia, prefer more private, low-profile lives, with virtually no private information existing about either of them.

Some experts claim that Enedina was preparing her nephew Fernando as her successor. However, in 2014, Fernando was arrested in Tijuana, leaving Enedina without the support of a male family member. In 2016, some members of the Tijuana Cartel forged an alliance with the Jalisco New Generation Cartel, a faction that adopted the named Tijuana New Generation Cartel.

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[6] An account that only recently emerged that lacks credibility and is not substantiated by reliable evidence or sources, but which illustrates gender bias in reporting, is that in 1988/89, Enedina fell in love with Armando Lopez, a high-ranking member of the Sinaloa Cartel, and that her brothers, upon discovering the relationship, prohibited it and killed Armando, which initiated the conflict with the Sinaloa Cartel.

As of late 2024, Enedina remains the leader of the Tijuana Cartel, and her public image continues to be frequently portrayed through gender stereotypes. For example, media outlets have nicknamed her "La Jefa" (*the female boss*), "La Madrina" (*the godmother*), and "Narco mami" (*narco mommy*)—all nicknames referencing her gender. The most well-known nickname, "La Narcomami," uses the term "mami" which is generally used to sexualize women and reference their physical appearance. Not surprisingly, despite the most recent pictures of Enedina being from more than two decades ago, media outlets often continue to mention her physical beauty, with many asserting that it helps her conduct business with men, illustrating the gendered stereotypes through which her, her image, and her actions continue to be seen, portrayed, and understood. These narratives have helped build a certain gendered mythology around her that continues to be perpetuated by (primarily male) journalists, reporters, and security experts.

4 Data

To test the impact of Enedina Arellano Félix rising to power within the Tijuana Cartel, we follow existing research and employ the SCM, which has been used to study leadership effects, including the effects of populist political leaders (Grier and Maynard 2016; Funke et al. 2023), women political leaders (Imamverdiyeva and Shea 2022), and the consequences of leadership turnover in criminal organizations (Calderón et al. 2015). The SCM was developed to advance the comparative case study method by creating a "synthetic" control from units in the control group, or donor pool, that closely resembles the treated unit, thus acting as a counterfactual (Abadie et al. 2010, 2015; Abadie 2021).

In our case, the SCM uses data on Mexico's major cartels to compare the Tijuana Cartel with a synthetic Tijuana Cartel before and after Enedina's rise to power. The SCM relies on the argument that a synthetic Tijuana Cartel can better resemble the Tijuana Cartel than comparisons with a single other cartel, for example, the Juarez Cartel. The SCM is particularly useful and appropriate in our case for multiple reasons. First, the SCM was designed in cases with one treated unit, as is our case with the rise of Enedina in the Tijuana Cartel. Second, the SCM was developed specifically for interventions implemented at an aggregate level affecting a small number of large units, which fits our cartel-level design. Third, the SCM is appropriate in instances with a few units and small samples just like our data structure.

To estimate the SCM, we create a cartel-year dataset on the violent behavior and territorial control of each major drug cartel between 2000 and 2018 by combining data on the local geographic presence of each drug cartel per year from Sobrino (2023) with data on violence and territorial control. We introduce each variable below. Summary statistics are provided in the Online Appendix.

4.1 Control Group

We focus on the Tijuana Cartel given the rise of Enedina in October 2008, and use the other seven major Mexican drug cartels as control units, or the donor pool, to create the synthetic Tijuana Cartel. These include the Sinaloa Cartel, Beltran Leyva Organization, Juarez Cartel, Gulf Cartel, Zetas-Northeast Cartel, Michoacan Family-Knights Templar Cartel, and Milenio Cartel-Jalisco New Generation Cartel. Following the extensive qualitative data collection effort by Alcocer (2024), we consider the Knights Templar a continuation of the Michoacan Family Cartel since the main leaders remained the same and was more of a re-branding, the Northeastern Cartel as a continuation of the Zetas given that this was also a re-branding, and the Jalisco New Generation Cartel a continuation of the Milenio Cartel since they are the faction that won the succession battle in 2010.

While Mexico has dozens of other powerful criminal organizations, we restrict our donor pool to these seven cartels for substantive reasons. These are all networks that established themselves during the 1990s. They are also the organizations that dominated drug trafficking when our time period of analysis began. That is, they are large drug trafficking organizations and thus comparable to some degree as opposed to smaller more localized criminal groups, many of which do not traffic drugs.

4.2 Treatment

Only one woman rose to leadership in the main drug cartels during the time period under analysis. Enedina assumed the leadership of the Tijuana cartel following the arrest of her brother in October 26, 2008. Our main independent variable is a dummy variable that takes on the value of 1 for the Tijuana Cartel between 2009 and 2018, and 0 otherwise. This variable also takes on a value of 0 for all other cartels.

4.3 Violent Behavior and Territorial Control

To investigate the violent behavior of each cartel, we combine data on local geographic presence with data on different forms of violence to create three variables: cartel-related violence, disappearances, violence against women, and violence against the state.

First, we create two different variables to measure general violence by cartels (H1). We first create a variable for cartel-related homicides using official data on homicides and following existing research that measures cartel-related homicides as the homicides of young men (ages 15-34) (Calderón et al. 2015). Combining this measure with data on municipal population and cartel presence, we calculate cartel-related homicide rates in the municipalities where each cartel had presence per year, and aggregate to the cartel-year level. This variable therefore measures the mean cartel-related homicide rates in the municipalities where each cartel operated each year.

Additionally, we also measure disappearances, a less visible form of violence that is also prevalent in Mexico. We use data from the National Registry of Data on Missing or Disappeared Persons (*RNPED*), which identifies the municipality where individuals disappeared between 2000 and 2017. This data only includes individuals reported as missing to authorities, but unless these reports differ systematically for municipalities where the Tijuana Cartel operates per year post-2008, it should not bias the results. Using this data, we calculate disappearance rates in the municipalities where each cartel had presence per year, and aggregate to the cartel-year level.

Second, to examine violence against women (H2), we use official homicide data to calculate the homicides rates of young women (ages 15-44) in the municipalities where each cartel had presence per year. We use this age range given that women in this age group are particularly vulnerable to gender-based violence in Mexico (SEGOB et al. 2017) and Latin America (ECLAC 2021).

Third, to measure cartels violently confronting the state (H3), we use data on political assassinations from Alcocer and Erickson (2024). This data identifies all politicians (mayors, municipal council members, governors, state legislators, and federal legislators) assassinated in Mexico between 2000 and 2018 and the municipality where they were killed. Using this data, we calculate the total number of political assassinations in the municipalities where each cartel had presence per year.

Finally, we operationalize territorial control (H4) as the total number of municipalities that each cartel had presence in per year. While this measure cannot tell us *how* or *whether* each cartel controlled these municipalities, it does identify where they operate and the extent of their territorial presence across time.

4.4 Covariates

To create the synthetic control, we identify key variables in the literature that influence the operations and violent behavior of cartels: government crackdowns, leadership decapitation, criminal conflicts, and vertical political alignment.

First, tough-on-crime crackdowns against organized crime have generally been found to increase criminal violence and violence against the state (e.g. Osorio 2015; Lessing 2017; Magaloni et al. 2020; Barnes 2022; Blair and Weintraub 2023). To account for Mexico's crackdown that began in December of 2006, we use data on the year anti-drug operations began in each state from Alcocer (2022) and the geographic location of each cartel's stronghold in 2006 from Alcocer (2024) to identify the year these operations began in the strongholds of each cartel.

Second, leadership turnover, particularly from government kingpin strategies that arrest or kill leaders, has been found to increase violence as it can create intra-cartel infighting, inter-cartel conflicts, and fragmentation (e.g., Jones 2013; Calderón et al. 2015; Phillips 2015; Velasco 2023; Alcocer 2024). We use data from Alcocer (2024), who identify the leaders of each cartel across time and the reason for leadership turnover, to create two variables: the number of leaders arrested per cartel per year, and the number of leaders that died per cartel per year. These variables capture key dynamics: government actions targeting high-ranking members of each cartel, the fragmentation of cartels stemming from leadership turnover, internal rearrangements resulting from leadership succession struggles, and moments of leadership vulnerability and instability.

Third, criminal conflicts have been identified as one of the main, if not the main sources of violent outbreaks. To account for this dynamic, we use data on each cartel's geographic presence and create two separate variables that together capture the extent of conflict they are involved in. We first measure contested territories per year by calculating the number of municipalities each cartel operates where other cartels also operate. We also consider territories not actively contested by using the number of municipalities where they were present without other cartels each year.

Fourth, intergovernmental coordination, in the form of vertical political alignment, has been generally found to help combat criminal organizations and reduce violence (Rios 2015; Durán-Martínez 2017; González and Cáceres 2019; Alberti et al. 2023). We take this factor into consideration by measuring (1) the number of municipalities that each cartel operates in where there is both vertical political alignment with state and federal executives, (2) the number of municipalities that each cartel operates in where there is only vertical alignment with state executives, and (3) the number of municipalities that each cartel operates in where there is only vertical alignment with the federal executive.

In addition to these factors, the research design controls for important covariates through time and unit trends that account for time-varying and time and unit-invariant unobserved confounders.

4.5 Alternative Explanation: Changes in Law Enforcement

If we observe differential uses of violence, one important question is whether it is due to changes in violent behavior by Enedina or changes to the drug business or in drug enforcement against the Tijuana Cartel. Ideally we would have independent measures for drug trafficking and drug enforcement for each cartel, but this data does not exist. Thus, to measure changes in drug trafficking patterns and state enforcement against each cartel, we calculate the number of kilograms of drugs seized per year in municipalities where each cartel was present between 2000 and 2017 using drug interdiction data from the Mexican military (*SEDENA*). We create two variables, the first measuring the total amount of kilograms of all drugs and another measuring the total number of kilograms of all drugs except marijuana since the amount of marijuana seized is far greater than other drugs.

5 Empirical Strategy

For the SCM, we have data on $J+1$ cartels, the first, ($j = 1$) of which receives the treatment—a woman becoming leader. The other units, $j = 2, \cdots, J+1$, are the potential control cartels, or "donor pool." Our data includes T periods (2000 - 2018), with the first T_0 periods corresponding to the pre-treatment period (2000-2008). For each cartel, we also observe a set of k covariates. The outcomes are represented by Y_{it}.

The synthetic control is represented by a $J \times 1$ vector of weights, W, which are used to create the synthetic Tijuana Cartel. The weights, W, represent the contribution of each control cartel to the synthetic control and are restricted to be non-negative and sum to one. The weights are estimated in a way that the synthetic Tijuana Cartel best resembles the pre-treatment covariate values of the Tijuana Cartel. That is, the SCM optimizes the weights, W, that minimize the distance between the covariate values of the Tijuana Cartel and the synthetic control during the pre-treatment period. Next, the weights, W, are used to estimate the outcomes for the synthetic Tijuana Cartel as follows:

$$\hat{Y}_{it}^{N} = \sum_{j=2}^{J+1} w_j Y_{jt} \tag{1}$$

Since we denote the Tijuana Cartel as $j = 1$, the estimated treatment effect of having a woman, Enedina, become the leader of the Tijuana Cartel in 2009 at $t = T_0 + 1, \cdots, T$ is given by:

$$\hat{\tau}_{1t} = Y_{1t} - \hat{Y}_{it}^{N} \tag{2}$$

Pre-treatment predictors include the number of municipalities each cartel has presence in without rival presence, number of contested municipalities, proportion of municipalities with party alignment with the state, proportion of municipalities with party alignment with the president, proportion of municipalities with party alignment with both state and federal governments, number of arrested leaders, and number of killed leaders. As is recommended by the literature (Abadie et al. 2010; Ferman et al. 2020), we include pre-treatment outcome trends as predictors for all models. This has been found to improve the model's ability to control for unobserved confounders (Ferman et al. 2020). For models looking at geographic presence, this includes the total number of municipalities with cartel presence, the number of contested municipalities, and the number of non-contested municipalities.

5.1 Robustness Tests

For each model, we conduct a series of tests to show the robustness of the results. First, we estimate placebo results by iteratively assigning the treatment to each cartel in the control group and estimating the placebo effect. Comparing the main result against the placebo permutations shows how extreme the main results is compared to the full set of placebo effects. To test these differences formally, we follow Abadie et al. (2010, 2015) and Abadie (2021) and calculate the set of pre- and post-treatment root mean squared prediction error (MSPE) values using the main and placebo results, with which we calculate the post/pre-treatment MSPE ratio. MSPE ratios measure the quality of the fit of a synthetic control in the post-treatment period relative to the pre-treatment period, with higher values denoting better synthetic controls. The comparison of the treated unit's MSPE ratio with the placebos is used for inference in the SCM.

We also follow recommendations by Abadie et al. (2015) and Abadie (2021) and perform a leave-one-out robustness test where iteratively re-estimate the main models excluding one cartel in the donor pool each iteration. This is a type of sensitivity test to evaluate whether the results are driven by any particular unit in the donor pool. Finally, we follow the literature and conduct backdating where we set the start of the treatment period as 2005, 2006, and 2007 rather than 2009 to assess the credibility of the synthetic control (Abadie et al. 2015; Abadie 2021).

6 Results

We first provide the results for cartel-related violence. Figure 1 shows the (A) trends for the Tijuana Cartel and its synthetic control, (B) estimated effect across time along with the distribution of placebos, (C) weight assigned to each unit in the donor pool, and (D) RMSE for the main model and the placebos. These plots not only show the main results but also their robustness. We then present the other main findings on violence in Figure 2 and territorial control in Figure 3 by plotting the trends of the Tijuana Cartel and its synthetic control, with the robustness tests for each included in the Online Appendix. For every outcome, we find that the pre-treatment trends of the Tijuana Cartel and its synthetic control closely resemble each other, giving us confidence in the results.

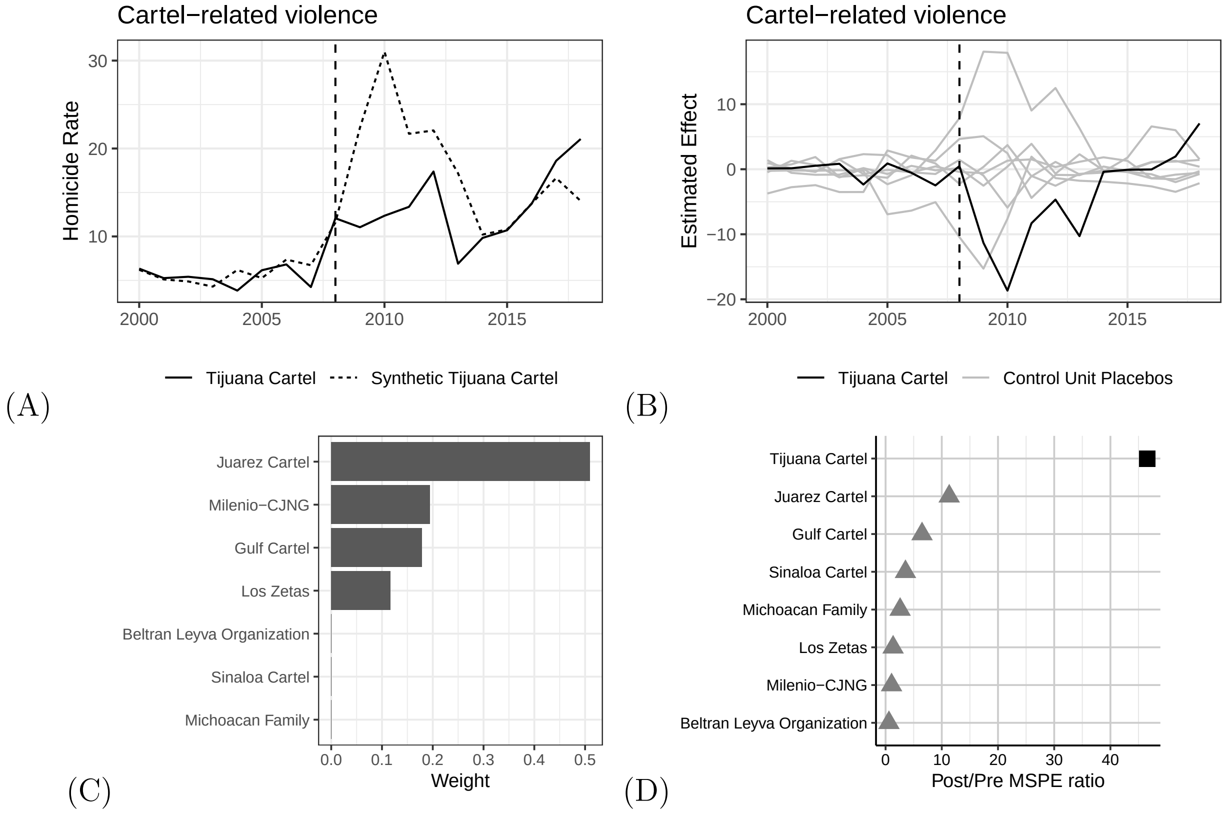

Figure 1: Results for cartel-related homicides. (A) Tijuana Cartel and synthetic control outcome trends. (B) Main effect and placebo effects. (C) Donor pool weights. (D) MSPE for treated and control units. Vertical lines in (A) and (B) denote last pre-treatment year.

Our results are clear: The Tijuana Cartel under Enedina is less violent than the counterfactual with respects to homicides, but just as violent if not more when looking at disappearances, or "less visible" forms of violence. First, while cartel-related homicides were increasing starting in 2008, they remained relatively stable with the ascension of Enedina but increased for the synthetic control and remained lower for her first six years in power, with a subsequent increase. The increase in cartel-related homicide rates in 2014 coincides with the arrest of Fernando Sánchez Arellano, nephew of Enedina, who supported her aunt and was seen as her possible future successor. He was also the last remaining male family member supporting Enedina. This may suggest that while Enedina had been able to rely on her last name for legitimacy when she rose to power, she may have needed to showcase her coercive powers following the arrest of the last male figurehead in the Tijuana Cartel. Nevertheless, even considering the 2014-2018, the negative effects of Enedina's reign are substantively large, with the mean cartel-related homicide rate in the post-treatment period being 13.5 for the Tijuana Cartel and 17.97 for the synthetic Tijuana Cartel. These results are robust to a series of tests. As Figure 1 shows, the synthetic control is a good fit according to the pre-treatment trends, the distribution of the placebo effects, and the MSPE ratio. In the Online Appendix we also show that they are also robust to the leave-one-out test and backdating.

Second, disappearances under Enedina seem to have increased much more than the counterfactual between 2011 and 2012 in the aftermath of the war against García Simental, suggesting she may have used less visible forms of violence to retake control over her territories. This indicates that Enedina is not incapable of coercion, but instead prefers more subtle, lower-profile violence. Yet, the overall effect is not robust and seems to be null, pointing to her perpetrating fewer homicides but the same number of dissappearances as her male counterparts.

Third, we find that the Tijuana Cartel under Enedina is also associated with fewer homicides of young women during the first seven years of her leadership, with these homicides increasing significantly starting in 2016. Before this sharp increase, the mean post-treatment homicide rate of young women was 0.9 for the Tijuana Cartel and 1.25 for the Synthetic Tijuana Cartel, though this difference is essentially erased with the substantial increase after 2015. The increase of violence against women also coincides with the arrest of her nephew, though with a year lag. Moreover, even before 2016, the difference between the Tijuana Cartel and its counterfactual is not as large for violence against women than those of cartel-related violence or territorial presence, perhaps suggesting the entrenched nature of patriarchal norms that have allowed violence against women to increase in Mexico over the past two decades and make it hard for Enedina to combat this form of violence.

Fourth, results show that Enedina appears to have used less violence against the state, though these results are less robust given the small number of pre-treatment assassinations. However, they

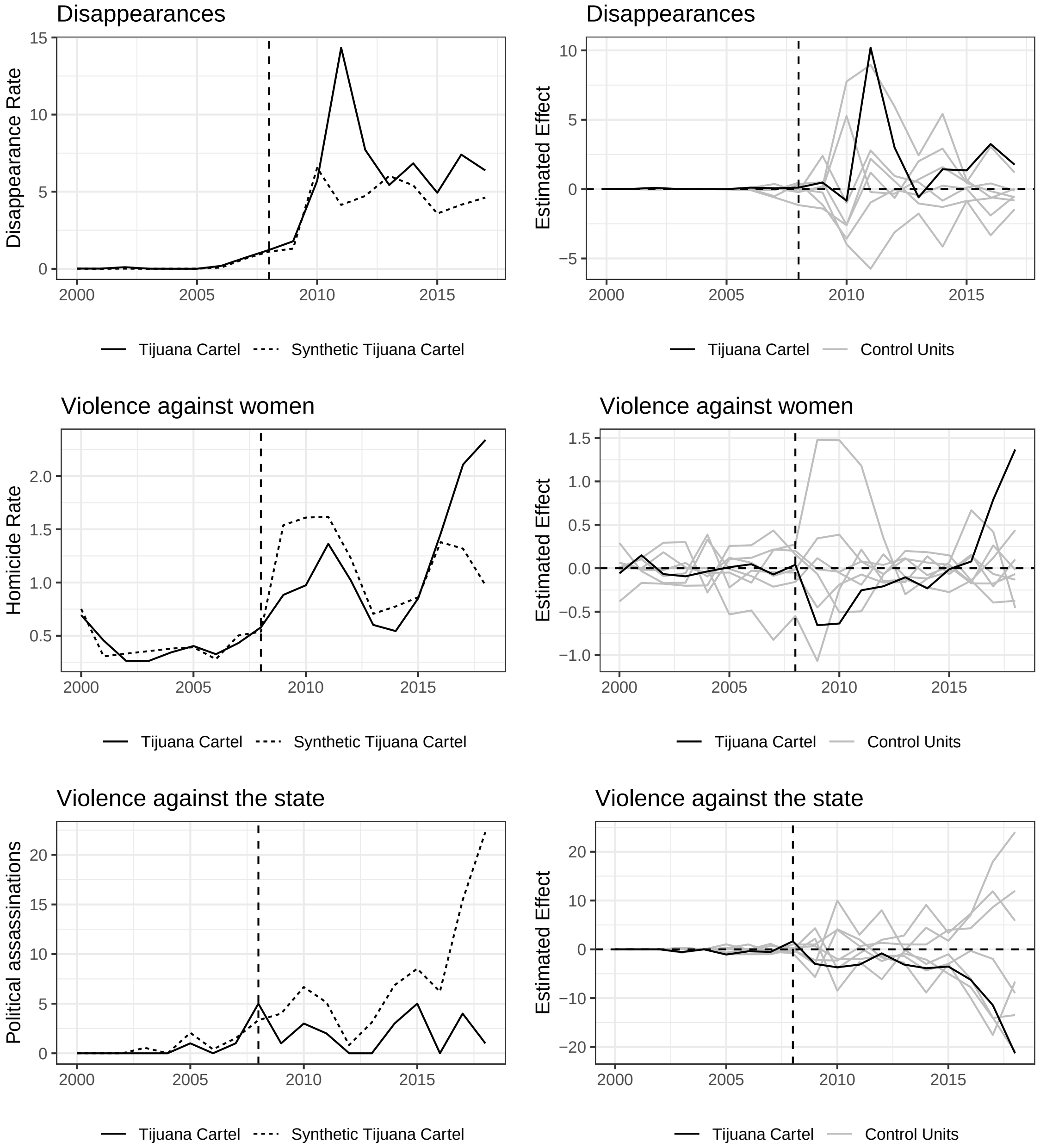

Figure 2: Results for disappearances, violence against women, and assassination of politicians. Trends show the Tijuana Cartel and its synthetic control. Vertical line denotes the last pre-treatment year.

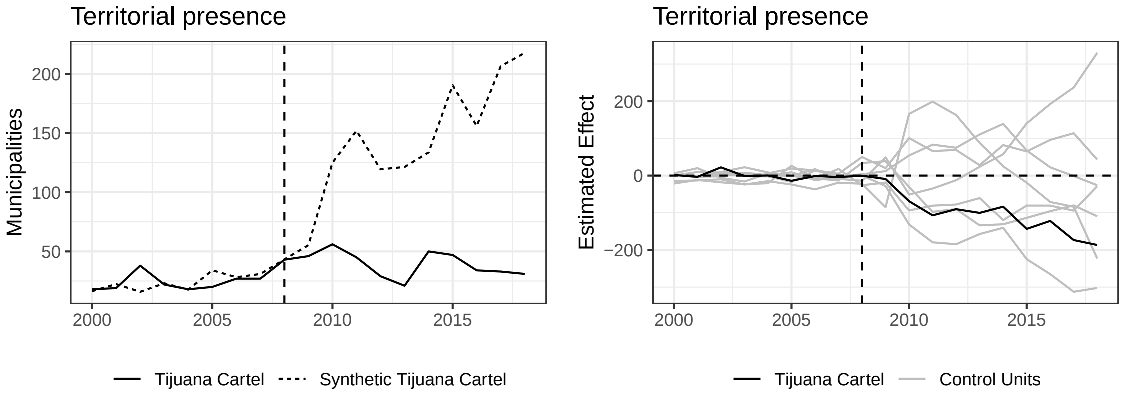

Figure 3: Results for territorial control. Trends show the Tijuana Cartel and its synthetic control. Vertical line denotes the last pre-treatment year.

do suggest that Enedina had a less violent approach to deal with the state. Estimates suggest that Enedina's reign up to 2018 averaged 1.9 assassinations per year, while the counterfactual has a post-treatment mean of 7.9. These results may suggest both her less violent approach and less scrutiny from the state leading to less need to violently confront the state. However, results on drug interdiction (see below) show no effect, casting doubt on the latter.

Turning to territorial control, results show a clear divergence, more than for other results. The Tijuana Cartel did not expand geographically like other cartels under Enedina, suggesting that they instead entrenched their presence and operations in their strongholds. This effect could be due to different explanations. It could be an explicit decision by Enedina to strategically remain in their strongholds, it could reflect her inability to effectively use the coercive means of the cartel to extend their territorial control, it could be due to male subordinates who wield coercive means refusing her orders to expand, or a weakening given the arrest of the last male sibling and an inability to expand. Given the secretive nature of organized crime, it is difficult for us to parse these explanations and attribute the effect to one of them. However, we find no indications of internal mutinies, fragmentations, or new attacks from rivals that would have weakened the Tijuana Cartel when Enedina gains leadership. In fact, she gained leadership during a deadly war and was able to win that war within two years.

One concern is that the differential uses of violence and territorial control may not due to changes in violent behavior by Enedina, but changes to the drug business or drug enforcement against the Tijuana Cartel. Figure 4 plots the results for both measures of drug interdiction and shows essentially no effect on the amounts of drugs seized in territories under the control of the Tijuana Cartel. Since interdiction numbers reflect both government actions and drug flows by cartels, these results could stem from different explanations. One interpretations is that the rise of Enedina did not affect the government's anti-drug operations in territories where the Tijuana Cartel operated. Alternatively, they could indicate that the Tijuana Cartel's drug trafficking operations were unaffected by Enedina's reduced violent behavior. If less attention was given the Tijuana Cartel with the rise of a woman to leadership and this resulted in a fewer proportion of their drug shipments being interdicted, they could also indicate that the Tijuana Cartel began trafficking more drugs under Enedina. Given existing data limitations, it is difficult to adjudicate between these interpretations. However, they clearly indicate that the reduced levels of violence and territorial expansion are not a result of the Tijuana Cartel trafficking fewer drugs or the government interdicting fewer or more of their drugs.

Overall, the results indicate that the Tijuana Cartel under Enedina was less violent, confronted the state less, and victimized fewer women than the synthetic Tijuana Cartel. This differential use of violence may also have impacted territorial control, as the Tijuana Cartel under Enedina did not expand to new territories like the counterfactual. However, the precise mechanisms contributing to lower violence remain unclear given the lack of information on the internal dynamics of the Tijuana Cartel under Enedina's rule. One explanation could be that the unique gendered path women take to leadership limits their expertise in managing the coercive elements of their criminal organizations and hence their use of violence. Another explanation could be that their gendered socialization reduces their preferences and tolerance for violence. Alternatively, women leaders may use nonviolent strategies (e.g., power-to, alliances, co-optation, and nonviolent enforcement) more effectively given their previous nonviolent managerial roles, reducing their need for coercion. Similarly, the limited territorial expansion could be due to a strategic choice, internal resistance to female leadership by male subordinates, or heightened resistance from rival organizations who perceive a woman leader as more vulnerable. According to most accounts, Enedina does have a different preference for violence and is highly skilled in nonviolent managerial strategies, but it is difficult to state with certainty whether these are the precise mechanisms underlying the effects.

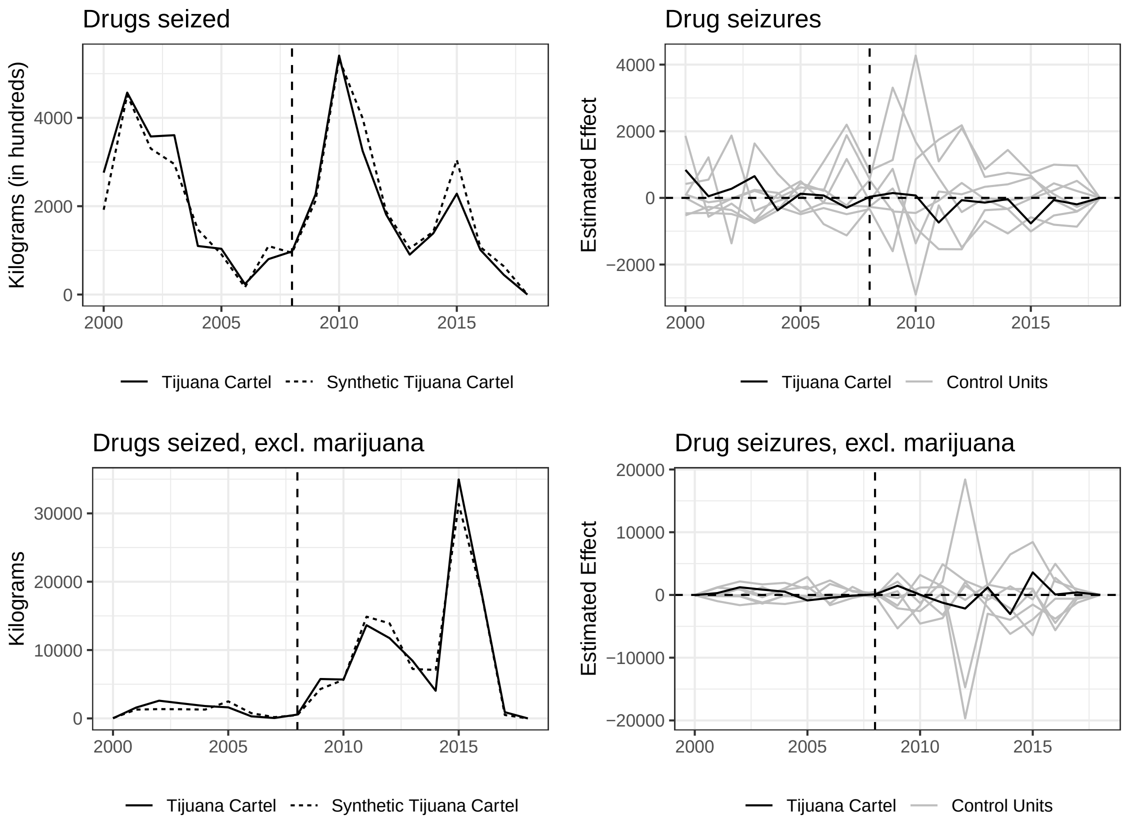

Figure 4: Results for government drug interdiction. Trends show the Tijuana Cartel and its synthetic control. Vertical line denotes the last pre-treatment year.

7 Generalizability of Results

To assess the potential generalizability of our findings beyond contemporary Mexico and our specific treated unit (Tijuana Cartel under Enedina), we create a novel qualitative dataset of women who have led their own criminal organization from across the world and argue that to the extent that their trajectories follow those outlined in the theory and share similar characteristics with Enedina Arellano Félix, then our results are likely to generalize to these cases. Through in-depth research, we identify 35 women leaders in organized crime in different countries, regions, and time periods, create case studies for each, and analyze key gendered characteristics associated with their violent behavior. To our knowledge, this is the most comprehensive data on women leaders compiled to date.[7] This sample is largely composed of better-known cases, but it is unclear how it compares to the broader population of women leaders due to a general under-reporting of women in organized crime. In the Online Appendix, we include case selection details, a full list of sources used to construct each case study, and a discussion about the potential impacts of gender bias in reporting that may affect the information we collect.

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[7] Gillespie et al. (2024) offer the most comparable dataset, focusing on "36 female drug lords." However, their dataset primarily includes non-leadership high-level women, whereas ours exclusively features women *leaders*.

To analyze the case studies and assess the generalizability of our results, we draw on the literature to identify key characteristics associated with the violent behavior of women leaders and determine whether each woman leader possess these using the case studies. We track the following characteristics:

Background information: Country of operation and name of criminal organization, if applicable. Leadership period. Main illicit market criminal organization is involved in. *Gendered involvement prior to leadership*: Did they found the criminal organization or did they become leaders of a pre-existing criminal organization. Did they hold positions associated with exercising violence before ascending to leadership. Did they rise through the ranks and win their place or did they enter and attain leadership through positions of privilege. *Gendered ascension*: Did they ascended to power by succeeding a male kin. When they came to power, did they have an important male right-hand that clearly benefited their nascent leadership. Was their ascendance to leadership seen as legitimate.[8]

Table 1 presents the main findings. Centrally, we find that women who become leaders as a result of their male partner or family member being arrested or killed follow the trajectory outlined by the theory to a large degree and that they are qualitatively remarkably similar to Enedina Arellano Félix. Before leadership, these women tend to exercise power through their male kin, hold relatively privileged positions given that their male relative or partner leads the organization, tend to take on gendered non-violent roles (oftentimes related to finances), and they rise to leadership due to the arrest or death of their male partner or relative. These similarities span across countries, types of criminal organization, and time period. This strongly suggests that our results likely generalize to these subset of women leaders. Also, with three exceptions, they all took over very well-established criminal organizations, with the exceptions taking over less-established organizations and greatly expanding them. These three cases seem to share some characteristics with those who inherit power and others with those who found their own organizations.

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[8] Unfortunately, while we would ideally be able to measure other factors from the theory, including violent expectations and gender bias by law enforcement, data limitations prevent us from doing so.

Second, we unexpectedly find a number of women leaders that are qualitatively different: women who begin as low-level offenders and come to hold leadership positions because they establish and grow their own criminal enterprises. The experiences and trajectories of these women leaders deviate from the proposed theory and seem to differ systematically from women who inherit power from male partners or family members: they experience more private violence and do not enter or have positions of privilege prior to leading their criminal organizations. In this way, they are similar to women leading criminal networks that traffic women for sexual exploitation in Europe, many of which begin as prostitutes or victims of trafficking themselves and then come to lead their own human trafficking networks (Siegel and De Blank 2010; Siegel 2014). However, unlike most accounts of these human traffickers, the women we identify tend to have very violent reputations. Not only do these leaders necessitate further research as they are largely excluded from existing research,[9] but they delineate a clear scope condition for our findings. Furthermore, we only find two instances of women rising the ranks and attaining leadership, highlighting the uniquely gendered barriers to leadership in organized crime that restrict women's power: women either attain leadership through their male kin or by establishing their own criminal syndicates.

To illustrate our main findings, this section includes three case studies of women leaders who succeed their male kin (Marllory Chacón Rossel, Yoshiko Matsuda, and Thelma Wright) and one that established their own criminal organization (Shashikala Ramesh Patank). We include the other 25 case studies in the Online Appendix. These cases illustrate that women who succeed male kin share similar trajectories and experiences, and that these differ substantially from women who establish their own organizations.

Marllory Chacón Rossel, known as "La Reina del Sur" (*The Queen of the South*), was born on October 4, 1972, in Santa Rosa, Guatemala, into a middle-class family. She studied psychology for three years before dropping out of university to start her textile business and later a home decorating business with her first husband, whom she later divorced. In 2001, she married Jorge

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[9] Women founders are also overlooked in the rebel group literature, with Loken (2024) only recently identifying nine cases, though they are largely women with relative privilege.

Table 1: Women leaders and key factors identified by literature that may shape their violent behavior (Page 1).

Woman leader	**Background**			**Gendered involvement**			**Gendered ascension**		
	Country (criminal organization name)	*Leadership period*	*Type of market*	*Founded organization*	*Rose ranks*	*Violent roles*	*Succeed male kin*	*Male support*	*Inherited legitimacy*
Enedina Arellano Félix	Mexico (Tijuana Cartel)	2008 - present	Drugs	X	X	X	✓	✓	✓
Raffaella D'alterio	Italy	2002 - 2012	Drugs	X	X	NEI	✓	X	✓
Raquel de Oliveira	Brazil	1998 - 2005	Drugs	X	X	✓	✓	X	✓
Sebastiana Cottón Vásquez	Guatemala	2011-2014	Drugs	X	X	NEI	✓	X	✓
Marllory Chacón Rossell	Guatemala	2002-2014	Drugs	X	X	X	✓	X	✓
Yoshiko Matsuda	Japan (Matsuda-Gumi)	1946-1947	Extortion	X	X	X	✓	X	✓
Chizue Anzai	Japan	1980s - ?	Drugs	X	X	X	✓	✓	✓
Paola Torrisi	Italy (Laudani Clan)	1992 - 2016	Drugs	X	X	NEI	✓	✓	✓
Maria Scuderi	Italy (Laudani Clan)	1992 - 2016	Drugs	X	X	NEI	✓	✓	✓
Concetta Scalisi	Italy (Laudani Clan)	1992 - 2016	Drugs	X	X	NEI	✓	✓	✓
Jasiane Silva Teixeira	Brazil	2014 - 2019	Drugs	X	X	NEI	✓	✓	✓
Thelma Wright	USA	1986-1991	Drugs	X	X	X	✓	X	✓
Perrion Roberts	USA	1984 - 2004	Drugs	X	X	X	✓	X	✓
Maria Angela di Trapani	Italy (Resuttana Clan)	2017	Drugs	X	X	X	X	X	✓
María Baldemar León	US (The Avenues Gang)	1986 - 2008	Drugs	X	✓	✓	X	NEI	X
Vũ Thị Hoàng Dung (Dung Hà)	Vietnam	1990 - 2000	Illegal Casinos	X	X	X	✓	X	✓
Simone Jasmin	South Africa (The Cartel)	20XX - 2020	Drugs	X	X	NEI	✓	X	X
Fumiko Taoka	Japan (Yamaguchi-gumi)	1981 - 1984	Extortion	X	X	X	✓	X	✓
Isel Suñiga	Guatemala (Los Pochos)	2019 - present	Drugs	X	X	X	✓	✓	✓

Notes: NEI = Not enough information. NA = Not applicable. X = No. ✓= Yes.

Table 1 cont.: Women leaders and key factors identified by literature that may shape their violent behavior (Page 2).

Woman leader	**Background**			**Gendered involvement**			**Gendered ascension**		
	Country (criminal organization name)	*Leadership period*	*Type of market*	*Founded organization*	*Rose ranks*	*Violent roles*	*Succeed male kin*	*Male support*	*Inherited legitimacy*
Maria Serraino	Italy (Serraino-Di Giovine clan)	1960 - 1994	Drugs	✓	X	NA	X	✓	✓
Angie Sanclemente	México-Argentina	2009-2010	Drugs	✓	X	NA	X	✓	X
Cheng Chui Ping	US-China	1981 - 2000	Human Smuggling	✓	X	NA	X	X	X
Delia Patricia Buendía	Mexico (Neza Cartel)	19XX - 2002	Drugs	✓	X	NA	X	✓	X
María Dolores Estévez Zuleta	Mexico	1919 - 1957	Drugs	✓	X	NA	X	✓	X
Luz Irene Fajardo Campos	Mexico	1997 - 2017	Drugs	✓	X	NA	X	X	X
Maria Licciardi	Italy (The Licciardi)	1994 - 2001, 2011 - 2021	Drugs	✓	X	X	✓	✓	✓
Griselda Blanco	Colombia-USA	1960 - 1985	Drugs	✓	X	NA	X	✓	X
Yang Fenglan	Tanzania	1998 - 2014	Ivory	✓	X	NA	X	✓	X
María Dolores MG	Spain (El Clan de Las Loles)	? - 2023	Drugs	✓	X	NA	X	NEI	X
Jemeker Thompson-Hairston	US	1980 - 1992	Drugs	✓	X	NA	X	X	X
Ignacia Jasso	Mexico (Nacha Organization)	1930 - 1970s	Drugs	✓	✓	X	✓	X	✓
Mery Valencia de Ortiz	Colombia-USA	Mid-1980s - 1997	Drugs	✓	X	NA	X	X	X
Shashikala Patankar	India	1980 - 2015	Drugs	✓	X	NA	X	X	X
Matilda Mary Devine	Australia	1927 - 1968	Prostitution	✓	X	NA	X	X	X
Kathleen Mary Josephine	Australia	1919 - 1954	Drugs & alcohol	✓	X	NA	X	X	X
Stephanie St. Clair	US	1916 - 1938	Numbers racket	✓	X	NA	X	✓	X
Xie Caiping	China	2000-2009	Illegal casinos	✓	X	NA	X	✓	X
Olive Yang	Myanmar	1952 - 1963	Drugs	X	X	NA	X	X	X
Fredericka Mandelbaum	US	1850 - 1884	Fencing	✓	X	X	X	X	X

Notes: NEI = Not enough information. NA = Not applicable. X = No. ✓= Yes.

Andrés Fernández Carbajal, a Honduran who managed financial transactions for Colombian cartels in Central America. After his arrest in 2002, Colombian drug traffickers encouraged Marllory to take over his operations. Despite Fernández Carbajal being released six months later, Marllory had already seized control. By 2003, she was laundering money for at least three cartels, handling hundreds of millions of dollars. Through this work, she began not only managing money and brokering deals but also trafficking drugs herself. By 2008, Marllory's power and network, centered in Guatemala but extending to Honduras and Panamá, had grown so extensive that her husband's involvement was no longer necessary. In 2012, the DEA identified Marllory as a prominent leader of a drug trafficking organization. After two years of negotiations, she voluntarily surrendered to the authorities in 2014 and was sentenced to 12 years in prison. However, she was released in 2019, presumably as part of a deal, with her whereabouts remaining unknown.

Yoshiko Matsuda, known as the "Queen of the Yakuza," was born Matsunga in Yokohama, Japan, around 1916 or 1917, into a financially stable family that provided her with a decent education. Her life dramatically changed after World War II when her family struggled to make ends meet in the postwar economy. Yoshiko and her sister turned to sex work, where they gained recognition and praise for their beauty. Yoshiko soon met and became involved with Giichi Matsuda, founder of the Kanto Matsuzakaya Matsuda Gumi, commonly known as the Matsuda-gumi, a yakuza criminal organization founded in 1945. While women's exclusion is often informal in other criminal organizations, it is institutionalized within the Yakuza: women cannot become official members and can only gain affiliation through their partners. However, once integrated into the gang, they often hold significant roles. The "Ane-san," which translates to "big sister" but refers to the boss's wife, has financial responsibilities and oversees the care of its members. Yoshiko became the "Ane-san" when she married Giichi Matsuda and took on her gendered role. Soon, war with a rival broke out, and Giichi Matsuda was killed in July 1946, with one account claiming that it was a coup attempt and another that it was a rival yakuza member. Yoshiko Matsuda assumed leadership following her husband's death. By some accounts, she found leadership too difficult. The Matsuda-gumi allegedly lost some territory to a rival soon after the death of Giichi. In 1947, the Allied Command ordered the dissolution of the Matsuda-gumi. Despite Yoshiko's attempts at diplomacy, the group disbanded later that year following alleged attacks from the U.S. military.

According to an interview with a popular magazine, Yoshiko Matsuda stated that the yakuza must be wiped out, that media glorifying the yakuza should be banned, and that she would devote herself to social welfare. Afterward, records of Yoshiko's whereabouts became scarce, and by 1956, it was presumed she had died from a drug overdose.

Thelma Wright, "The Gangster Queen of Philadelphia," was born on August 8, 1956, into a working-class Catholic family in South Philadelphia. Thelma's childhood was relatively stable and she enjoyed a fairly typical upbringing, even attending Catholic school. After high school, Thelma worked at a bank and later took a job as a government secretary. In November 1977, Thelma began dating Jackie Wright, a former Black Mafia member who had left the organization to establish his own heroin business. Jackie's drug use spiraled into addiction, and he became increasingly abusive and controlling. Thelma remained with him despite it hindering her career prospects by associating with a known drug dealer. In September 1982, they had a child together, and the following year they married.

In January 1986, after harassment from authorities, Jackie forced Thelma to move to Los Angeles for her safety, but he did not go with her. As his business began to decline and her savings ran low, Thelma decided to enter the drug trade herself. As a woman and mother, she managed to stay under the radar. Jackie hired a woman named Antie to handle his Los Angeles operations, who mentored Thelma in aspects of the drug business that Jackie had never shared. In August 1986, Jackie was murdered in Philadelphia, and Thelma took over his business and Antie became her right-hand woman. While Jackie had only dealt in heroin, Thelma diversified the business and expanded his empire. She later became romantically involved with the leader of the Junior Black Mafia, which drew her back to Philadelphia. However, their relationship ended when he was arrested in 1989. After Antie was killed in August 1991, and as law enforcement began paying closer attention, Thelma made the decision to quietly exit the drug world. Remarkably, she was never arrested or seriously suspected.

Shashikala Ramesh Patankar, better known as "Baby Patankar," was born in 1963 in Worli Koliwada, India into a modest family with five older brothers. When she was young, Patankar was harassed, leading her brothers to retaliate and kill one of her abusers. Her brothers were imprisoned, and one brother, after his release, took his own life. As a result, her parents fell ill and eventually passed away. At 15, Patankar married Ramesh Patankar, an alcoholic taxi driver, and moved to the slum of Siddharth Nagar, where her brothers soon joined her. She faced difficulties in securing stable employment, and became part of the family's milk business, where she soon found out milk adulteration was much more profitable. This introduced her to the world of illicit activities, ultimately leading her into drug dealing. She left her husband soon after, quit the milk business, and expanded her drug dealing network throughout Siddharth Nagar. In the 2000s, she become a police informant as a means to obscure her real involvement in illegal activities. This role provided her with valuable connections, particularly Dharmaraj Kalokhe, a senior police officer who became her romantic partner and helped her expand her criminal network. In 2001, she was briefly arrested but managed to secure bail quickly.

The decline of the Mumbai underworld due to public policies targeting gangs created an opportunity for Patankar to seize control of the market. The police reported that eight out of every ten drug addicts in Mumbai were using drugs that could be traced back to her network. She also expanded her operations to Maharashtra, Goa, Gujarat, and Delhi, among other cities. In Siddharth Nagar she relied on female drug peddlers who would disrobe and accuse police of molestation they we try to stop them, a tactic also used by Patankar. Patankar had a violent reputation, and her downfall came after her lover, Constable Dharmaraj Kalokhe, was arrested with a large quantity of drugs. An extensive search followed, leading to her arrest on April 22, 2015.

8 Conclusion

This article argues that women leaders whose trajectories are shaped by gender dynamics are less likely to use violence and exercise more limited territorial control than their male counterparts. Focusing on the Tijuana Cartel in Mexico and the ascension of Enedina Arellano Félix to leadership following the arrest of her brother in late 2008, we show that Enedina's leadership resulted in less cartel-related violence, violence against women, violence against the state, and limited geographic expansion, but no effect on disappeances. Through 35 case studies of other women leading criminal organizations, we find that those who attain power by succeeding male kin closely resemble Enedina and follow the gendered pathways outlined by existing research, suggesting that our results likely generalize to similar cases.

This article makes important contributions and provides clear avenues for further research. First, it advances academic scholarship by bringing attention to gender and gender dynamics within organized crime. This article provides the first, to the best of our knowledge, quantitative analysis on the effects of leadership and women involvement in organized crime. It is also one of the first studies in political science on gender and organized crime, a topic that has received scant attention despite a burgeoning literature on organized crime, ample anecdotal accounts of women involvement, frequent mentions of the hypermasculinity underpinning organized crime, and the common nexus between organized crime and gender-based violence. Explicitly recognizing the degree to which organized crime is a patriarchal and masculine space unequivocally helps us better understand the phenomenon and offers a much-needed addition to existing research that often leaves gender dynamics implicit or simply excludes them.

Second, our qualitative case studies identify two distinct pathways for women to assume leadership roles: those who succeed male kin and those who establish their own independent criminal organizations. The latter group is largely neglected in existing research. These women have systematically different experiences than those who inherit leadership from male kin and appear to have more violent reputations as a result, marking a clear scope condition to our findings. Understanding the potential consequences of these women's leadership represents an important avenue for further study.

Third, while this article focuses on the violent and territorial consequences of women leadership, their leadership likely matters for other important outcomes, such as internal governance and how they rule over the individuals in their organizations, market governance and how they govern non-members crucial for controlling illicit markets, and civilian governance and how they rule over civilians within their territories. Future research could investigate these dynamics.

Finally, policy implications are equally significant. Our findings challenge the prevailing understanding that leadership decapitation invariably escalates criminal violence. The rise of women to leadership in organized crime represents an unintended consequence of government strategies targeting male leaders. Policymakers should account for these dynamics when designing interventions, recognizing that the consequences of leadership transitions may vary significantly depending on who the successor may be. Our evidence suggests that leadership decapitations that result in a women taking power may exert a stabilizing influence under certain conditions. These insights could inform more nuanced approaches to combating organized crime and mitigating violence.

References

Abadie, Alberto (2021). Using synthetic controls: Feasibility, data requirements, and methodological aspects. *Journal of economic literature 59*(2), 391–425.

Abadie, Alberto, Alexis Diamond, and Jens Hainmueller (2010). Synthetic control methods for comparative case studies: Estimating the effect of california's tobacco control program. *Journal of the American statistical Association 105*(490), 493–505.

Abadie, Alberto, Alexis Diamond, and Jens Hainmueller (2015). Comparative politics and the synthetic control method. *American Journal of Political Science 59*(2), 495–510.

Alberti, Carla, Diego Díaz-Rioseco, and Giancarlo Visconti (2023). Can political alignment reduce crime? evidence from chile. *Political science research and methods 11*(2), 223–236.

Alcocer, Marco (2022). Drug wars, organized crime expansion, and state capture in mexico. Unpublished manuscript.

Alcocer, Marco (2024). Breaking ranks: Profits, survival, and the fragmentation of criminal organizations. Unpublished manuscript.

Alcocer, Marco and Megan Erickson (2024). Criminal dynamics and violence against government officials in mexico. Unpublished manuscript.

Alcocer, Marco, Rachel Skillman, and Torres-Beltran Angie (2025). Women mayors and violence against women in contemporary mexico. *Forthcoming in Political Science Research and Methods*.

Allum, Felia (2007). Doing it for themselves or standing in for their men? women in the neapolitan camorra (1950–2003). In *Women and the Mafia: Female Roles in Organized Crime Structures*, pp. 9–17. Springer.

Allum, Felia and Irene Marchi (2018). Analyzing the Role of Women in Italian Mafias: the Case of the Neapolitan Camorra. *Qualitative Sociology 41*(3), 361–380.

Anderson, Tammy L. (2005). Dimensions of women's power in the illicit drug economy. *Theoretical Criminology 9*(4), 371–400.

Arsovska, Jana and Felia Allum (2014). Introduction: women and transnational organized crime. *Trends in Organized Crime 17*(1-2), 1–15.

Barnes, Nicholas (2022). The logic of criminal territorial control: Military intervention in rio de janeiro. *Comparative Political Studies 55*(5), 789–831.

Blair, Robert A and Michael Weintraub (2023). Little evidence that military policing reduces crime or improves human security. *Nature Human Behaviour 7*, 1–13.

Bochenkova, Alena, Paolo Buonanno, and Sergio Galletta (2023). Fighting violence against women: The role of female political representation. *Journal of Development Economics 164*, 103140.

Brannon, Elizabeth L, Jakana L Thomas, and Lora L DiBlasi (2024). Fighting for peace? the direct and indirect effects of women's participation in rebel groups on peace negotiations. *The Journal of Politics 86*(2), 507–520.

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.

Calderoni, Francesco (2014). Identifying mafia bosses from meeting attendance. In Anthony J. Masys (Ed.), *Networks and Network Analysis for Defence and Security*, pp. 27–48. Cham: Springer International Publishing.

Calderoni, Francesco (2016). *Predicting Organized Crime Leaders*, pp. 89–110. Boulder, USA: Lynne Rienner Publishers.

Calderoni, Francesco and Elisa Superchi (2019). The nature of organized crime leadership: Criminal leaders in meeting and wiretap networks. *Crime, Law and Social Change 72*, 419–444.

Campbell, Howard (2008). Female Drug Smugglers on the U.S.-Mexico Border: Gender, Crime, and Empowerment. *Anthropological Quarterly 81*(1), 233–267.

Chopin, Julien and Benoît Dupont (2024). Leaders and leadership in criminal activities: A scoping review. *Deviant Behavior*, 1–21.

DaMatta, Roberto (2010). Tem pente aí? reflexões sobre a identidade masculina. *Enfoques 9*(1).

De Seranno, Sophia and Charlotte Colman (2023). It's a man's world but it would be nothing without a woman: The involvement of women in Belgian synthetic drugs trafficking. *Trends in Organized Crime*, 1–24.

Di Maria, Franco and Girolamo Lo Verso (2007). Women in mafia organizations. In *Women and the Mafia: Female Roles in Organized Crime Structures*, pp. 87–102. Springer.

Dino, Alessandra, Raffaella Milia, Anna Maria Milito, and Antonino Oliveri (2007). Female visibility in the mafia world: press review 1980 to 2001. In *Women and the Mafia: Female Roles in Organized Crime Structures*, pp. 107–136. Springer.

Dube, Oeindrila and SP Harish (2020). Queens. *Journal of Political Economy 128*(7), 2579–2652.

Durán-Martínez, Angélica (2017). *The politics of drug violence: criminals, cops and politicians in Colombia and Mexico.* New York, NY, United States of America: Oxford University Press.

ECLAC (2021). The pandemic in the shadows: femicides or feminicides in 2020 in latin america and the caribbean. Technical report, Economic Commission for Latin America and the Caribbean.

Farfán-Méndez, Cecilia (2020). Women's Involvement in Organised Crime and Drug Trafficking: A Comparative Analysis of the Sinaloa and Yamaguchi-gumi Organisations. In Julia Buxton, Giavana Margo, and Lona Burger (Eds.), *The Impact of Global Drug Policy on Women: Shifting the Needle*, pp. 159–168. Emerald Publishing Limited.

Ferman, Bruno, Cristine Pinto, and Vitor Possebom (2020). Cherry picking with synthetic controls. *Journal of Policy Analysis and Management 39*(2), 510–532.

Fiandaca, Giovanni (Ed.) (2007). *Women and the mafia: female roles in organized crime structures.* Studies in organized crime. New York: Springer.

Fleetwood, Jennifer (2015). Mafias, Markets, Mules: Gender Stereotypes in Discourses About Drug Trafficking. *Sociology Compass 9*(11), 962–976.

Fleetwood, Jennifer and Lindsay Leban (2023). Women's Involvement in the Drug Trade: Revisiting the Emancipation Thesis in Global Perspective. *Deviant Behavior 44*(2), 238–258.

Folke, Olle, Johanna Rickne, and Daniel M Smith (2021). Gender and dynastic political selection. *Comparative Political Studies 54*(2), 339–371.

Funke, Manuel, Moritz Schularick, and Christoph Trebesch (2023). Populist leaders and the economy. *American Economic Review 113*(12), 3249–3288.

García-Reyes, Karina (2022). The 'real man'in the global war on drugs: Narco versus militarised masculinities. *Journal of Illicit Economies and Development 4*(2), 191–203.

Giacomello, Corina and Coletta A. Youngers (2020). Women Incarcerated for Drug-related Offences: A Latin American Perspective. In Julia Buxton, Giavana Margo, and Lona Burger (Eds.), *The Impact of Global Drug Policy on Women: Shifting the Needle*, pp. 103–111. Emerald Publishing Limited.

Gillespie, Lauren Jane, Sarah Jones, Craig Kelly, and Adam Lynes (2024). Queenpins: an exploratory study of female participation in high-level drug distribution networks. *Trends in Organized Crime*, 1–30.

González, Lucas and María Belén Cáceres (2019). Federal distributive politics and the unequal distribution of violence: Argentine provinces in comparative perspective. *Journal of Politics in Latin America 11*(1), 49–70.

Grier, Kevin and Norman Maynard (2016). The economic consequences of hugo chavez: A synthetic control analysis. *Journal of Economic Behavior & Organization 125*, 1–21.

Guerreiro, Ana, Sílvia Gomes, and Pedro Sousa (2022). Feminist criminology and women in organized crime: a theoretical exercise. *ex æquo 2022*(45), 45–63.

Guerreiro, Ana, Pedro Sousa, and Silvia Gomes (2023). Mujeres en grupos organizados de tráfico de drogas: Un enfoque de red social. *Revista Española de Investigación Criminológica 20*(2), 1–18.

Gutmann, Matthew C (2007). *The meanings of macho: Being a man in Mexico City*, Volume 3. Univ of California Press.

Harrell, Baylee (2023). Can't live with them or can't live without them? how varying roles of women in rebel groups influence one-sided violence. *International Interactions 49*(6), 875–903.

Henshaw, Alexis Leanna (2016). Where women rebel: Patterns of women's participation in armed rebel groups 1990–2008. *International Feminist Journal of Politics 18*(1), 39–60.

Henshaw, Alexis Leanna, June Eric-Udorie, Hannah Godefa, Kathryn Howley, Cat Jeon, Elise Sweezy, and Katheryn Zhao (2019). Understanding women at war: A mixed-methods exploration of leadership in non-state armed groups. *Small Wars & Insurgencies 30*(6-7), 1089–1116.

Herrera, Joel Salvador and Cesar B Martinez-Alvarez (2022). Diversifying violence: Mining, export-agriculture, and criminal governance in mexico. *World Development 151*, 105769.

Imamverdiyeva, Ulkar and Patrick E Shea (2022). Re-examining women leaders and military spending. *Journal of Peace Research 59*(5), 679–693.

Ingrasci, Ombretta (2007). Women in the 'ndrangheta: The serraino–di giovine case. In *Women and the Mafia: Female Roles in Organized Crime Structures*, pp. 47–52. Springer.

Jaraba, Mahmoud (2024). The nexus of women and 'Clan Crime': unravelling the dynamics and constraints. *Trends in Organized Crime*, 1–22.

Jones, Nathan (2013). The unintended consequences of kingpin strategies: kidnap rates and the arellano-felix organization. *Trends in Organized Crime 16*(2), 156–176.

Ju, Changwook (2023). Determinants of conflict-related sexual violence: A meta-reanalysis distinguishing two classes of zero observations. *International Studies Quarterly 67*(3), sqad044.

Kleemans, Edward R., Edwin W. Kruisbergen, and Ruud F. Kouwenberg (2014). Women, brokerage and transnational organized crime. Empirical results from the Dutch Organized Crime Monitor. *Trends in Organized Crime 17*(1-2), 16–30.

Krause, Jana, Werner Krause, and Piia Bränfors (2018). Women's participation in peace negotiations and the durability of peace. *International interactions 44*(6), 985–1016.

Labonne, Julien, Sahar Parsa, and Pablo Querubín (2019, November). Political dynasties, term limits and female political empowerment: Evidence from the philippines. Working Paper 26431, National Bureau of Economic Research.

Leboeuf, Gabrielle Pannetier (2022). Mujeres víctimas y mujeres empoderadas en la narcocultura audiovisual popular. *Cuadernos de Humanidades* (35), 31–48.

Lessing, Benjamin (2017). *Making peace in drug wars : crackdowns and cartels in Latin America.* Cambridge Studies in Comparative Politics. Cambridge, United Kingdom: Cambridge University Press.

Lessing, Benjamin and Graham Denyer Willis (2019). Legitimacy in criminal governance: Managing a drug empire from behind bars. *American Political Science Review 113*(2), 584–606.

Loken, Meredith (2024). Gendering rebel origins: women as first movers during civil wars. *European Journal of Politics and Gender*, 1–21.

Loken, Meredith and Hilary Matfess (2022). Women's participation in violent non-state organizations. In *Oxford research encyclopedia of international studies.* Oxford University Press.

Loken, Meredith and Hilary Matfess (2024). Introducing the women's activities in armed rebellion (waar) project, 1946–2015. *Journal of Peace Research 61*(3), 489–499.

Magaloni, Beatriz, Edgar Franco-Vivanco, and Vanessa Melo (2020). Killing in the slums: Social order, criminal governance, and police violence in rio de janeiro. *American Political Science Review 114*(2), 552–572.

Massari, Monica and Cataldo Motta (2007). Women in the sacra unita. In *Women and the Mafia: Female Roles in Organized Crime Structures*, pp. 53–66. Springer.

McMillan, Anita Schrader and Moli Paul (2011). 'it was good to learn how to show affection': Central american men who reject hypermasculinity. *Community, Work & Family 14*(3), 367–382.

Mehrl, Marius (2022). Female combatants and wartime rape: Reconsidering the role of women in armed conflict. *Armed Forces & Society 48*(2), 464–479.

Mehrl, Marius (2023). Female combatants and rebel group behaviour: Evidence from nepal. *Conflict Management and Peace Science 40*(3), 260–280.

Mejías, Ainhoa Vásquez and Ingrid Urgelles Latorre (2022). Mujeres en el narco: entre el estereotipo y la subversión. *Cuadernos de Humanidades* (35), 13–30.

Noriega, Guillermo Núñez (2017). "el mal ejemplo": masculinidad, homofobia y narcocultura en méxico. *El cotidiano* (202), 45–58.

Núñez Noriega, Guillermo and Claudia Esthela Espinoza Cid (2017). El narcotráfico como dispositivo de poder sexo-genérico: crimen organizado, masculinidad y teoría queer. *Revista interdisciplinaria de estudios de género de El Colegio de México 3*(5), 90–128.

Olvera, Alejandra León (2022). Jefas de perfil bajo en el narcomundo: Las mujeres "invisibles" de las organizaciones. *Cuadernos de Humanidades* (35), 122–134.

Osorio, Javier (2015). The contagion of drug violence: spatiotemporal dynamics of the mexican war on drugs. *Journal of Conflict Resolution 59*(8), 1403–1432.

Otomo, Ryu (2007). Women in organized crime in japan. In *Women and the Mafia: Female Roles in Organized Crime Structures*, pp. 205–2018. Springer.

Penglase, Ben (2010). The owner of the hill: Masculinity and drug-trafficking in rio de janeiro, brazil. *The Journal of Latin American and Caribbean Anthropology 15*(2), 317–337.

Phillips, Brian J. (2015). How does leadership decapitation affect violence? the case of drug trafficking organizations in mexico. *The Journal of Politics 77*(2), 324–336.

Pizzini-Gambetta, Valeria (2009). Women in *Gomorrah*. *Global Crime 10*(3), 267–271.

Plaza, Rosío Córdova and Ernesto Hernández Sánchez (2016). En la línea de fuego: Construcción de masculinidades en jóvenes tamaulipecos ligados al narco. *Disparidades. Revista de Antropología 71*(2), 559–577.

Requena, Laura, Manuel De Juan, Andrea Giménez-Salinas, and Luis De La Corte (2014). A psychosocial study on crime and gender: Position, role and status of women in a sample of Spanish criminal organizations. *International Journal of Social Psychology: Revista de Psicología Social 29*(1), 121–149.

Rios, Viridiana (2015). How government coordination controlled organized crime: The case of mexico's cocaine markets. *Journal of Conflict Resolution 59*(8), 1433–1454.

Rossi, Adriana (2007). Women in organized crime in argentina. In *Women and the Mafia: Female Roles in Organized Crime Structures*, pp. 149–180. Springer.

Sampó, Carolina, Valeska Troncoso, and Antonella Paparini (2023). Evading Law Enforcement in the Americas: Latin American women in organized crime. *Trends in Organized Crime*, 1–29.

Santamaría Gómez, Arturo (Ed.) (2012). *Las jefas del narco: El ascenso de las mujeres en el crimen organizado.* México, D.F.: Grijalbo.

Savona, Ernesto and Gioacchino Natoli (2007). Women and other mafia-type criminal organizations. In *Women and the Mafia: Female Roles in Organized Crime Structures*, pp. 103–106. Springer.

Scott, Joan W (2015). El género: una categoría útil para el análisis histórico. In Marta Lamas (Ed.), *El género: la construcción cultural de la diferencia sexual*, pp. 251–290. Bonilla Artigas Editores.

SEGOB, INMUJERES, and ONU Mujeres (2017). La violencia feminicida en mexico, aproximaciones y tendencias 1985-2016. Technical report, Secretaría de Gobernación.

Selmini, Rossella (2020). Women in Organized Crime. *Crime and Justice 49*, 339–383.

Siebert, Renate (2007). Mafia women: The affirmation of a female pseudo-subject. the case of the 'ndrangheta. In *Women and the Mafia: Female Roles in Organized Crime Structures*, pp. 19–46. Springer.

Siegel, Dina (2014). Women in transnational organized crime. *Trends in Organized Crime 17*(1-2), 52–65.

Siegel, Dina and Sylvia De Blank (2010). Women who traffic women: the role of women in human trafficking networks – Dutch cases. *Global Crime 11*(4), 436–447.

Sobrino, Fernanda (2023). Mexican Cartel Wars: Fighting for the U.S Opioid Market. Unpublished manuscript.

Velasco, Oscar Contreras (2023). Unintended consequences of state action: how the kingpin strategy transformed the structure of violence in mexico's organized crime. *Trends in organized crime*, 1–25.

Wood, Elisabeth Jean (2009). Armed groups and sexual violence: When is wartime rape rare? *Politics & Society 37*(1), 131–161.

Yánez, Massiel Miranda and Shanny Valdes Salas (2019). Narco-culture as a distortion of gender stereotypes: An aggravating factor in the situation of violence and conflict in society. *Ad-Gnosis 8*(8), 4.

Zhang, Sheldon X, Ko-Lin Chin, and Jody Miller (2007). Women's participation in chinese transnational human smuggling: a gendered market perspective. *Criminology 45*(3), 699–733.