

From Violence to Vitality: Gang Reduction and Economic Resurgence in El Salvador

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Abstract

For decades, El Salvador was defined by extreme gang violence, which acted as a primary constraint on its economic and social development. Powerful gangs like MS-13 and Barrio 18 enforced strict territorial control, severely restricting labor mobility, discouraging investment, and creating a state of stagnation in the economy. This study examines the economic repercussions of the unprecedented reduction in gang violence and territorial control achieved since 2019 through the Salvadoran government's security crackdown. Utilizing a mixed-methods approach that incorporates national economic data, security metrics, and an analysis of economic complexity, this paper documents a significant economic resurgence correlated with improved security. Key findings include an increase in Foreign Direct Investment (FDI) up to 40.0%, a 36% increase in formal employment, and accelerated GDP growth. Furthermore, diagnostic analysis reveals a latent potential for economic diversification into more complex industries. The study concludes that the dismantling of gang-imposed mobility restrictions was a critical mechanism for unlocking economic potential, demonstrating that security stabilization is a fundamental prerequisite for structural transformation and sustainable development. The Salvadoran case offers a potent model for other violence-affected regions, while also highlighting the profound impact of government strategies to remove gangs from the streets and the accompanying implications for human rights.

Keywords

El Salvador, gang violence, economic development, labor mobility, territorial control, foreign direct investment, economic complexity, Plan Control Territorial

Introduction

El Salvador's recent history has been profoundly shaped by a persistent and devastating struggle against gang violence, a phenomenon that has deeply scared its social fabric and significantly hampered its economic progress. For decades, the dominance of powerful criminal organizations like MS-13 (Mara Salvatrucha) and Barrio 18 created an environment of pervasive fear and instability. This climate deterred investment, disrupted labor markets, constrained productivity, and locked the economy into low-complexity activities (Melnikov et al., 2020; World Bank, n.d.-a). The economic costs were staggering, with some estimates placing the burden of crime and violence near 8% of regional GDP when accounting for security, law enforcement, and lost productivity (World Bank, n.d.-a).

However, beginning in 2019 and intensifying dramatically after March 2022, the nation witnessed a paradigm shift. A robust government security initiative, known as the Plan Control Territorial, led to a sharp and sustained decline in gang activity and homicide rates (Cruz & Speck, 2022; PNUD, n.d.). This security transformation provides a critical natural experiment to study the economic repercussions of removing violence as a primary constraint on development.

This research paper investigates the hypothesis that the significant reduction in violence has catalyzed an economic resurgence in El Salvador. It examines how improved security has reshaped economic incentives by removing a critical barrier to development: gang-imposed restrictions on labor mobility (Melnikov et al., 2020). The study analyzes how this newfound stability has fostered increased formal workforce participation, enhanced productivity, attracted investment, and created the necessary conditions for economic diversification. Utilizing a mixed-methods approach, including comparative pre- and post-intervention analysis, security metrics, and Economic Complexity Index (ECI) diagnostics, this paper documents the structural transformations occurring within the Salvadoran economy.

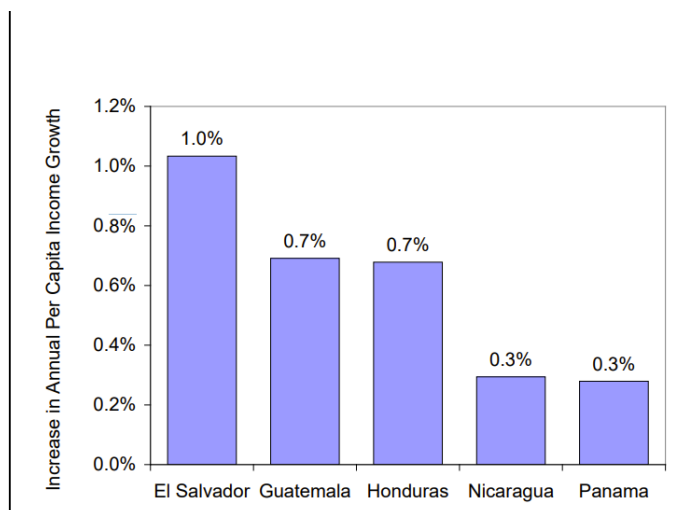
Key findings indicate a dramatic improvement in security metrics strongly correlated with positive economic shifts, including a surge in FDI, growth in formal employment, and the identification of viable pathways for productive diversification. This research suggests that reduced violence not only saves lives but also dismantles the specific mechanisms that directly suppressed economic activity, thereby encouraging formalization, fostering entrepreneurship, and rebuilding institutional trust. The study underscores the critical interplay between security reforms and economic policies, marking El Salvador's potential transition from a gang-constrained economy toward a more diversified, complex, and prosperous future.

Background: Gang Violence, Territorial Control, and Economic Stagnation

The roots of El Salvador's gang problem are complex, stemming from the aftermath of its civil war (1980-1992) and specific U.S. immigration policies. The 1996 Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) led to the mass deportation of Salvadoran gang members from the United States back to El Salvador, a country with low state capacity still recovering from conflict (Melnikov et al., 2020). These deportees re-established their gangs and, crucially, replicated a system of strict, paramilitary-style territorial control based on natural barriers like rivers and major roads. This effectively divided urban landscapes into areas controlled by the state and those controlled by gangs (Melnikov et al., 2020; International Crisis Group, 2018, as cited in Melnikov et al., 2020).

Figure 1

Potential Boost to Annual Economic Growth Rate from Reducing Homicide Rate by 10%



Source: World Bank (2006).

The economic consequences of this territorial control were profound and multifaceted. The pervasive climate of violence acted as a massive drag on development. As illustrated in Figure 1, prior to the recent security improvements, the economic cost of violence in Central America was severe. A World Bank (2006) study estimated that a 10% reduction in the homicide rate could boost annual per capita income growth by nearly

1.0% in a country like El Salvador, highlighting the powerful inverse relationship between violence and economic prosperity.

The economic consequences of this territorial control were profound and multifaceted:

1. **Restricted Labor Mobility:** The most significant economic mechanism was the severe restriction on individuals' mobility. Gangs instituted checkpoints and a system of borders, often violently prohibiting free movement into and out of their territories (Melnikov et al., 2020). Using a spatial regression discontinuity design, Melnikov et al. (2020) found that residents of gang-controlled neighborhoods had significantly less material well-being, income, and education than individuals living just 50 meters away but outside of gang territory. These stark discontinuities were caused primarily because gangs prevented individuals from commuting to other parts of the city where larger, formal, and better-paying firms were located, effectively trapping a segment of the workforce in informal, low-productivity activities.

2. **Extortion and the "Violence Tax":** Extortion, known as "renta," became a primary source of income for gangs, levied on businesses, public transport operators, and households (Cruz & Speck, 2022; World Bank, n.d.-a). This acted as a direct tax on economic activity, raising operational costs, reducing profitability, and discouraging business formation and expansion. The World Bank (n.d.-a) found that businesses in the region faced direct costs averaging 4.5% of sales due to crime.
3. **Deterrence of Investment:** The pervasive violence and instability made El Salvador one of the least attractive destinations for investment in Latin America. Prior to recent changes, its Foreign Direct Investment (FDI) levels, at 1.8% of GDP, were less than half the regional average of 3.6% (Gómez et al., n.d.; World Bank, n.d.-b). The high costs of security and the constant threat of extortion created an unacceptable level of risk for many domestic and foreign investors.
4. **Constrained Economic Complexity:** The economy became increasingly concentrated in non-tradable services and low complexity tradables. The manufacturing sector grew at a slow pace of 1.5% annually from 1992-2022, compared to 2.5% for services (Gómez et al., n.d.). The export basket showed little diversification, remaining dominated by textiles and agricultural products, which represented over half of all exports, with no significant advances in more complex electronics, chemicals, or metals (Gómez et al., n.d.).

Past government attempts to address the violence, oscillating between repressive “mano dura” (iron fist) policies and short-term negotiations, proved largely ineffective. This was especially true in 2015, a year that marked a catastrophic failure of this approach. Following the collapse of a fragile truce

between gangs and failed “mano dura” crackdowns, the major gangs launched a brutal retaliation against the civilian population. This led to a devastating spike in violence, catapulting the homicide rate to one of its highest recorded levels. As depicted in Figure 2, homicides became a leading cause of death in El Salvador that year, claiming 7,830 lives, dwarfing most other causes, including chronic diseases and being the 5th major cause of dead in the country. This surge demonstrated how crackdowns could backfire, leading to increased gang organization within prisons and subsequent spikes in violence and extortion, which perpetuated a cycle of economic stagnation and profound insecurity (Cruz & Speck, 2022).

Causes of death, El Salvador, 1980 to 2021

The estimated annual number of deaths from each cause. Estimates come with wide uncertainties, especially for countries with poor vital registration¹.

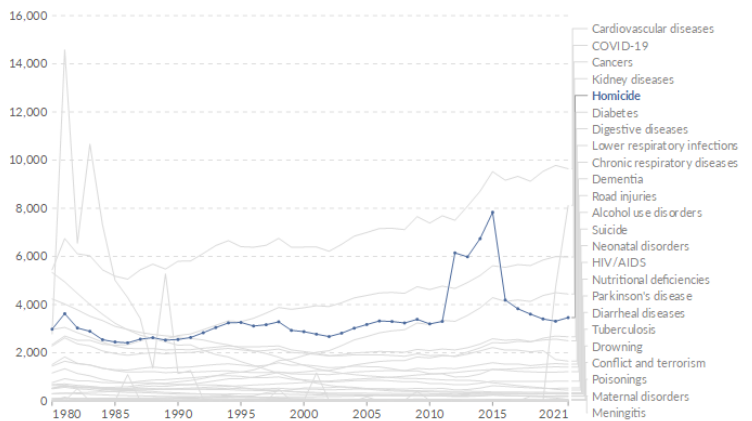


Figure 2

Causes of Death in El Salvador, 1980 to 2021, Highlighting the 2015 Homicide Peak

The Shift: Security Improvements Since 2019

Beginning in 2019 and intensifying significantly after March 2022, the Salvadoran government under President Nayib Bukele implemented a comprehensive and unprecedented security strategy. The Plan Control Territorial was coupled with a state of exception that suspended certain constitutional rights, leading to the arrests of tens of thousands of suspected gang members (Cruz & Speck, 2022).

The impact on security metrics has been dramatic and well-documented:

- **Homicides:** The country experienced a 69.0% decrease in homicides in 2023 compared to 2022, recording 154 cases versus 496 the previous year. The homicide rate plummeted to 2.4 per 100,000 inhabitants in 2023, down from 7.8 in 2022 and a fraction of the rates exceeding 60 per 100,000 seen in the early 2010s (PNUD, n.d.).
- **Homicide-Free Days:** El Salvador registered 247 days without a single homicide in 2023, equivalent to 67.7% of the year (PNUD, n.d.).
- **Public Perception:** This sharp decline fostered a significantly improved perception of security. Surveys indicated that by the end of 2023, 91.5% of Salvadorans felt "secure" or "very secure," a noticeable improvement from 88.2% in 2022. The population reporting victimization from any criminal act fell sharply from 11.3% in 2022 to 5.5% in 2023 (PNUD, n.d.).

Critically, this decline broke the gangs' stranglehold on territory. The checkpoints and borders that once restricted mobility were dismantled, effectively removing the physical barriers that had fragmented the labor market and confined residents to impoverished neighborhoods (Melnikov et al., 2020). This restored state control over national territory provided the foundational stability necessary for economic reactivation.

Concurrently, the government focused on improving the business environment. Efforts by over 17 government institutions and the private sector under the National Trade Facilitation Committee worked to reduce export and import costs. Through the Investment and Export Promotion Agency of El Salvador (InvEST), the government actively worked to attract productive investments and promote new exports (Gómez et al., n.d.).

Methodology

While this analysis identifies significant correlations between the decline in violence and improved economic performance, the findings should be interpreted with caution, as they do not constitute definitive causal proof. Rather, they suggest plausible mechanisms consistent with prior causal research (Melnikov et al., 2020).

Data Sources:

- **Security and Perception Data:** Data on homicide rates, victimization, and public perception of security are sourced from the United Nations Development Programme (PNUD, n.d.) and national surveys.
- **Macroeconomic Data:** Data on GDP growth, FDI, poverty, and formal employment are sourced from the World Bank's Macro Poverty Outlook (World Bank, n.d.-b) and national accounts.
- **Export and Complexity Data:** International trade data and Economic Complexity metrics, including the Economic Complexity Index (ECI), Product Complexity Index (PCI), and Complexity Outlook Index (COI), are sourced from the diagnostic analysis by Gómez et al. (n.d.), which utilizes UN COMTRADE data.
- **Supporting Literature:** The core mechanisms of gang impact on labor mobility are informed by the spatial regression discontinuity analysis in Melnikov et al. (2020), which provides a causal estimate of the effect of gang territorial control.

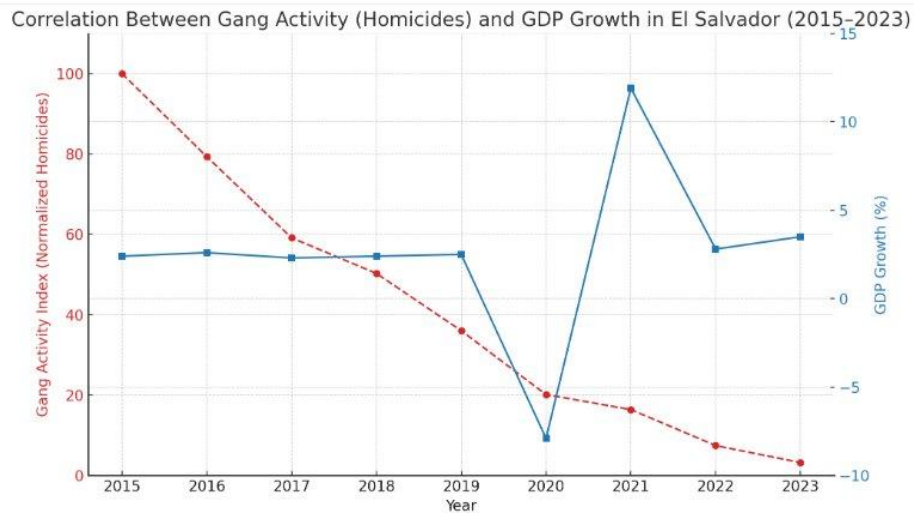
Analytical Approach:

- **Comparative Analysis:** Economic indicators (FDI, GDP growth, formal employment) are compared between the pre-intervention period (pre-2019) and the post-intervention period (post-2020) to identify significant changes following the security improvements.
- **Mechanism Analysis:** Findings are interpreted through the lens of the mechanisms identified by Melnikov et al. (2020), specifically, the removal of mobility restrictions as a key driver of economic improvement. The post-2022 period is treated as a natural experiment that removed the "treatment" of gang territorial control.
- **Sectoral and Complexity Analysis:** Structural transformations and diversification opportunities are examined using export data and complexity metrics from Gómez et al. (n.d.) to identify sectors with high potential for growth and development.

Findings: Economic Resurgence and Diversification Potential

The core relationship underpinning this study is vividly captured in Figure 3, which illustrates the strong inverse correlation between gang activity (as measured by normalized homicide rates) and GDP growth in El Salvador from 2015 to 2023. The chart shows that periods of extreme violence (2015-2018) coincided with depressed economic performance. The pivotal shift begins around 2019, and as homicide

Figure 3
Correlation Between Gang Activity (Homicides) and GDP Growth in El Salvador (2015–2023)



The dismantling of gang territorial control and the associated restoration of security since 2019 correlate with a notable economic resurgence across multiple indicators.

1. **Macroeconomic Growth and Investment:** After a decade of low growth compared to regional peers, El Salvador's economy grew by 3.5% in 2023, surpassing its historical average (World Bank, n.d.-b). A key indicator of renewed confidence is the dramatic surge in Foreign Direct Investment (FDI). FDI rose to 2.1% of GDP in 2023, a significant increase from 0.4% in 2022 and moving closer to the regional average (World Bank, n.d.-b). This surge is a direct signal of improved investor perception of the country's risk following the security crackdown.
2. **Labor Market Formalization:** A fundamental driver of growth is a substantial increase in formal employment, estimated at 36%. This surge is a direct consequence of the restored labor mobility. The removal of gang

checkpoints and borders allows individuals to access formal job opportunities across entire urban areas, no longer confined to the limited economic options within their immediate neighborhood. This finding validates the earlier research by Melnikov et al. (2020), demonstrating that reversing the condition of restricted mobility reverses the economic harm.

3. **Sectoral Output and Performance:** Specific sectors have shown positive responses to the more stable environment. Textile and agro-industrial output, significant components of El Salvador's export base, registered a 12% increase. These sectors are benefiting from a more reliable operating environment and, crucially, a larger and more secure labor pool that can now commute to factories and processing plants without fear of gang violence.
4. **Economic Complexity and Diversification Potential:** Analysis of El Salvador's economic structure reveals an intermediate level of economic complexity compared to other Latin American countries (Gómez et al., n.d.). Its export basket is relatively non-diverse and composed of ubiquitous products, primarily in textiles and agriculture, which tend to be of low complexity. A notable exception is the export of electrical capacitors, which contributes positively to the country's complexity.

Diagnostic research has identified concrete opportunities for productive diversification:

- **Intensive Margin** (existing sectors with growth potential): Electronics (e.g., electrical capacitors), basic metals, and chemicals.
- **Extensive Margin** (new, proximate industries): Manufacture of electrical equipment, beverages, computer and peripheral equipment, and paper

products (Gómez et al., n.d.).

The country's Complexity Outlook Index (COI) suggests it has some complex products within short reach, indicating that diversification into more sophisticated activities is achievable with the right policies and a stable environment.

Discussion: Mechanisms and Implications

It is important to note that the observed associations, while compelling, are primarily correlational. Alternative explanations, such as regional macroeconomic trends or concurrent policy shifts, may also contribute to the observed economic outcomes.

First and foremost, the elimination of mobility restrictions has unlocked the labor market. The empirical work of Melnikov et al. (2020) established a causal link between gang borders and economic deprivation. The reversal of this condition has enabled the reversal of the economic harm, facilitating the recorded rise in formal employment as workers can now seek jobs based on skill and pay, not on gang-imposed geography. This is perhaps the single most significant economic outcome of the security policy.

Secondly, the reduction in violence has slashed the "tax" of crime and extortion on businesses. Lower security expenditures, reduced losses from crime, and the elimination of "renta" payments directly improve profitability and free up capital for investment and expansion, making businesses more competitive.

Thirdly, improved security has rebuilt institutional trust and investor confidence. When citizens feel safer and the state demonstrates its ability to enforce order, engagement with formal institutions, like the formal labor market and the financial system, increases. The surge in FDI is a powerful testament to this renewed confidence, indicating that the perceived risk of operating in El Salvador has fallen dramatically.

The Salvadoran experience provides a potent natural experiment that validates the theoretical and empirical findings on the economic costs of violence. It demonstrates that the economic damage caused by gang territorial control is not permanent; it can be reversed by restoring state authority and freedom of movement. This enhanced security provides a crucial foundation for acting upon the identified diversification opportunities. The potential to move into more complex industries like electronics and advanced manufacturing requires a stable environment to develop the necessary know-how, attract specialized investment, and foster coordination among strategic actors, a role the government must play (Gómez et al., n.d.).

This case underscores that establishing security and the rule of law is not merely a social or humanitarian objective but a fundamental economic prerequisite for unlocking human potential and driving inclusive growth. It offers a powerful, though complex, lesson for other nations grappling with similar challenges of criminal violence and territorial fragmentation.

Conclusion

This study has documented a significant positive correlation between the unprecedented reduction in gang violence and the dismantling of territorial control in El Salvador since 2019 and a subsequent multifaceted economic resurgence. The dramatic decrease in homicides and the eradication of mobility-restricting gang borders have coincided with measurable improvements in key economic indicators: accelerated GDP growth, a substantial rise in formal employment, increased output in established sectors, a remarkable surge in foreign direct investment, and the identification of a viable path toward economic diversification.

The findings strongly suggest that alleviating the specific constraints imposed by decades of gang violence, particularly the fragmentation of labor markets through restricted mobility, can unleash significant latent economic potential. The case of El Salvador powerfully illustrates that establishing security

and restoring freedom of movement are catalytic prerequisites for economic development. The government's ability to impose order created the necessary conditions for the market to function more efficiently and for investors to regain confidence.

However, this transition is not without its profound challenges. The sustainability of the security model, its long-term human rights implications, persistent fiscal pressures, and the need to translate stability into broad-based, inclusive economic opportunities remain critical issues. A central question surrounds the fate of the more than 85,000

incarcerated individuals, a significant portion of whom are in their prime working years. Images from the government's new mega-prisons, such as Figure 4, have drawn international attention and scrutiny. The figure shows long lines of incarcerated individuals, often heavily tattooed with gang insignia, being forced to run under the watch of masked guards in a vast, sterile facility.

While symbolic of the state's regained authority and a powerful deterrent, such imagery also raises serious questions about conditions of detention, the potential for the further radicalization of gang members within the prison system, and the model's adherence to human rights standards.

The massive scale of incarceration presents a monumental societal challenge: what is the plan for this population? Their prolonged removal from society has created immediate economic security but risks storing up a future crisis. Without a clear, comprehensive strategy for rehabilitation, vocational training, and eventual reintegration, the potential for these individuals to return to communities even more marginalized and alienated is high. This could potentially undermine long-term security gains and represents a significant loss of human capital that could otherwise contribute to the nation's economic resurgence. The

Figure 4

Incarcerated individuals in a Salvadoran mega-prison. Source: NBC



long-term viability of a strategy reliant on mass incarceration, its social consequences, and the plan for rehabilitating a lost generation of workers are central subjects of ongoing and urgent debate.

El Salvador's journey offers a powerful lesson on the vital link between security and economic development. By dismantling gang control and restoring mobility, the nation unlocked rapid growth in investment and employment. However, its future prosperity now hinges on addressing the sustainability of its security model. The incarceration of over 85,000 people presents a profound economic and social challenge. Long-term success requires a viable strategy for rehabilitation and reintegration to ensure today's stability translates into inclusive and lasting development.

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