

El Salvador Crime Research

(COMP3125 Individual Project)

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Abstract—This research will try to inquire about the relationship between criminal violence and socioeconomic deprivation in El Salvador, with special attention to the period before and after the mass incarceration policies' implementation

I. INTRODUCTION (HEADING 1)

The purpose of the present study is to establish a relationship between crime indicators and socioeconomic indicators in this country, specifically considering how gang violence impacts the rates of poverty. This paper aims to shed light on the ambiguous impact of crime on El Salvador's economic structure through the analysis of data covering both the period leading up to incarceration and the current context of reduced gang violence.

The main question that will guide this research will be: To what extent has crime, most specifically gang-related violence, impacted poverty rates in El Salvador? Important indicators for analysis include homicide rates, extortion rates, poverty statistics, and economic growth measures. The twofold aims of this project will outline a clear-cut correlation between crime rates and socioeconomic conditions, and then go ahead to assess the recent efforts in gang suppression in relation to their success in poverty reduction. The research will yield important knowledge on the complicated relationships among crime, governance, and economic development in the case of El Salvador.

II. BACKGROUND

El Salvador is a small Central American country that has undergone a great level of political turmoil coupled with violence. It, for example, experienced civil war between 1979 and 1992, resulting in about 75,000 deaths, a situation that greatly affected its economy. Right after that, El Salvador faced another challenge by the deportees coming from the US that included the gang elements of MS-13 and Barrio 18 were among the major contributors to the peak of crime and violence.

By 2015, El Salvador had earned the unsavory distinction of "murder capital of the world," recording an unprecedented 106 homicides per 100,000 residents. This was an unprecedented level of violence, further supplemented by the fragile socio-economic context because of widespread poverty and extremely high rates of immigration. This trend flipped with the rise of President Nayib Bukele to power in 2019. Aggressively, Bukele launched a campaign against gangsterism. He declared a state of emergency in March 2022.

This was what brought about the sudden decline in murder cases to 2.4 out of 100,000 people in the year 2023. The Government has paraded this as success, despite various concerns regarding possible human rights abuses and veracity in crime statistics. Indeed, this dramatic switch in El Salvador's crime landscape brings another unique perspective

through which one could study the interaction of violence, governance, and economic development.

Datasets

The research methodology related to crime and poverty in El Salvador will be wide; several sets of data and methods of analysis will be applied. The key data sources will involve Statista, the database from the World Bank, and Macrotrends.net because they contain a wide array of socioeconomic indicators and crimes.

The dataset includes the following relevant variables:

Homicide rates

Incarceration rates

Most common crime types

Unemployment rate

GDP growth

III. METHODOLOGY

This code demonstrates the process of loading data, cleaning it by removing commas and converting it to integers, and then creating a visually appealing bar plot using seaborn.

It also analyzed the trend and interplay of the criminal statistics, economic factors, and social factors. Time series analysis was done to observe the yearly change of homicide rates and GDP growth, noting the time frames before and after the institution of mass incarceration policies.

It was a comparative analysis aimed at contextualizing the El Salvador situation in the global framework, as it is represented in this visual by incarceration rates. This helps to understand the extent of the challenge that El Salvador faces regarding crime and incarceration.

These methods and tools combined allowed for a rigorous investigation into the interrelationship between criminality and economic marginalization in El Salvador and provided rich information on how recent policy reforms have actually been effective and how they would impinge on socioeconomic conditions.

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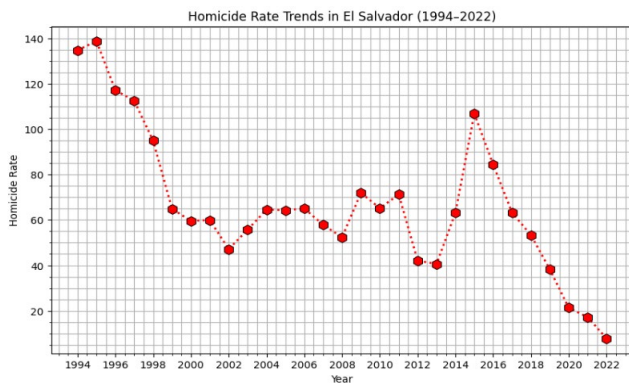
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IV. RESULTS

A. Homicide Rates

Homicide rates in El Salvador have shown very fluctuating trends in violence. Labelled as the "murder capital of the world" in 2015 with more than 100 homicides per 100,000 inhabitants, this is considered to be way off of the pole which it attained to reach its historic killing level. In fact, as derived from Fig. 1, the highest number recorded was 140 homicides per 100,000 in 1995, immediately after the civil war.

Figure 1 Homicide Rate Trends in El Salvador (1994-2022)

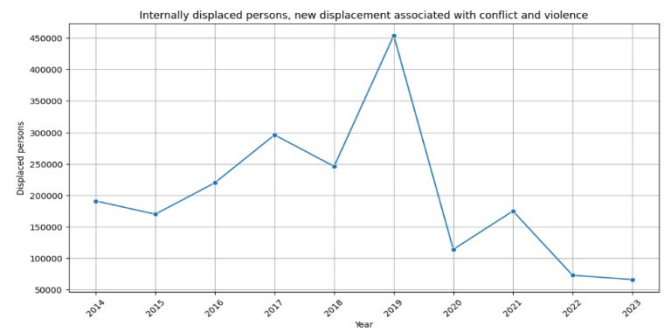


The post-civil war era is very peculiar because the United States initiated the process of deporting gang members to El Salvador, still putting itself together after its civil war. These deportees, MS-13 and Barrio 18 started helping both gangs re-establish themselves and progress further in the region. The conflicts between MS-13 and Barrio 18 began in 1989 in Los Angeles and have been on the rise in El Salvador, with the fight for turf contributing to a wave of violence.

B. Internally displaced people

As shown with the increased violence in El Salvador, the numbers for forced displacements have risen correspondingly, depicted in Fig. 2 below. The internally displaced persons stand at an approximate high of 450,000 in 2015, parallel to the country's peak homicide rate. Indeed, the current displacement crisis has originated from gang violence. The decrease in numbers also went toe to toe with homicides per 100,000 people that greatly decreased. Indeed, this explains the structural linkages of gang violence and homicide incidents to the levels of forced displacement within the context of El Salvador.

Figure 2 Internally displaced people, new displacement associated with conflict and violence

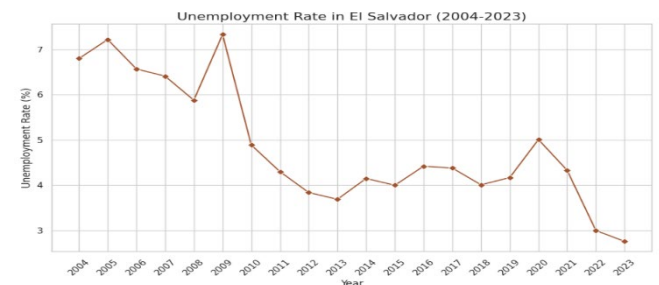


The datasets have shown that the murder rate has gone down to 2.4 per 100,000 inhabitants in 2023. Even though highly credited to the tough security measures of the present administration, proper discussion of detailed policies and sufficient investigation for an elaborate analysis is not given to this context.

C. Unemployment

While gang violence might be deep-rooted in the country, overall, the impact of unemployment in El Salvador was much deeper with the COVID-19 pandemic. Whereas the highest incidence of gang-related homicides in 2015 was associated with slight increases in unemployment, in 2020 it was associated with a comprehensive economic crisis. This becomes the key reason why, though disruptive, gang violence did not create any major economic shutdowns or contractions of world markets and thus hit broader levels of unemployment less than seen in Fig. 3.

Figure 3 Unemployment Rate in El Salvador (2004-2023)

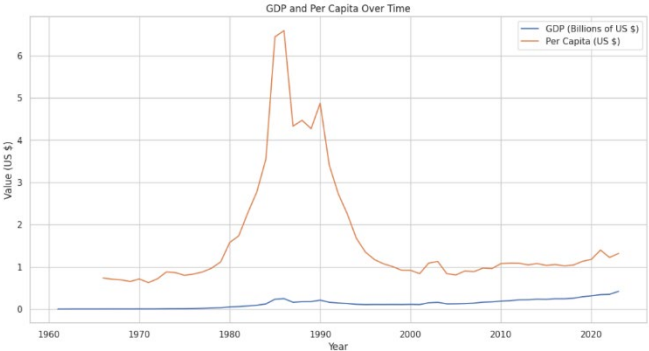


Military and prison spending has also increased sharply in El Salvador, reflecting the administration's emphasis on addressing gang violence and ensuring citizen security. The military budget for 2022 stood at the high, nearly a fourfold increase compared to previous years, in which the government underlined militarized public safety programs. This State Department finding chimes with "state of exception" policies granting President Nayib Bukele powers to perform mass arrests and send military units onto the streets to fight gang activity.

D. Military expenditure & Incarceration rate

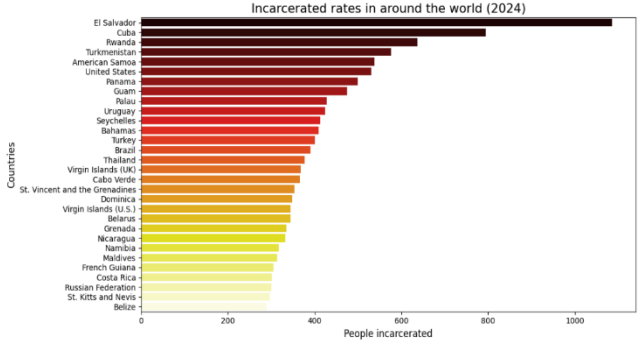
Figure 4 presents different time periods is presented in two variables: GDP, Billions of US \$, and Per Capita, US \$. While the column for GDP represents military expenditure in billions of U.S. dollars, hence reflecting the total spent amount on defense, the column for per capita represents the amount spent on each person, calculated as expenditure divided by the number of individuals. This reflects how much money is spent, not just in absolute terms but in its relative reach for individual citizens.

Figure 4 GDP and Per Capita Over Time Spent for Military Use



The amount of detainees also became so high that the prison expenses have considerably increased, in 2024 reaching nearly 110,000 detainees. Most of these detainees are hosted in “Centro de Confinamiento del Terrorismo (CECOT)” that has a capacity of 40,000 prisoners. In 2024 El Salvador become the country with the highest incarcerated rates in the world seen in Fig. 5. Surprisingly even though it is a small country, they have managed to have higher number than the US and Rusia. All those policies have been quite successful, but at the same time, as a result, the homicide rate has fallen to a record low, though many human rights violations have also been reported, and questions regarding the sustainability of such politics in the long run arise.

Figure 5 Incarcerated rates around the world (2024)



Parallel resorting to military and incarceration-based spending underlines the reliance of El Salvador on retribution-based policies in fighting crime. It can be seen through the presented graphs that these extreme policies have work. Nevertheless, long-term improvement would only be visible in the near future.

V. DISCUSSION

As described in "Poor Economics," El Salvador is a case study of how crime and violence can create self-reinforcing downward spirals of deprivation. Economic Deprivation Theory says that economic inequality and lack of resources fuel criminal behavior, which fuels poverty. This argument fits well with the thinking of Banerjee and Duflo on the need to understand local contexts and the multifaceted nature of poverty.

The investigation into the gang phenomenon in El Salvador provides critical viewpoints for policymakers and development practitioners. Results of the study regarding the socioeconomic impacts of gang control at specific neighborhoods raise an imperative need for targeted

interventions. That could also be used to devise more efficient poverty reduction policies that simultaneously tackle economic and security problems.

Some of the potential uses might be government agencies developing crime prevention and poverty reduction policies, international development organizations working on urban violence, researchers in the areas of crime, poverty, and economic development, and NGOs focusing on youth empowerment and gang prevention programs.

Whereas the study is rich in information, there are certain limitations that must be acknowledged. A focus on urban sites in El Salvador may not capture those dynamics that occur in rural settings or other countries facing similar problems. The fast-changing nature of the operations of gangs and the responses by the government, for instance, the recent law enforcement operations affect the longer-term validity of some findings.

The complex interaction of crime, poverty, and development in El Salvador calls for holistic approaches that tackle these issues in a context-specific manner, much like the leading message of "Poor Economics": that it is essential to have evidence-based intervention fitted to the local context.

VI. CONCLUSION

This paper on criminality and socio-economic deprivation in El Salvador explores complex processes where no stringent simplifying assumptions can be presupposed. No correlation between economic indicators and crime rates could be established, though the research points out considerable social impacts that have possible long-term economic implications. The dramatic fall in the number of homicides following the implementation of mass imprisonment practices shows the immediate effects stringent policing can have on the rate of violent crime. Notwithstanding, the deep-seated fear of incarceration and its wider implications for society become the strong factors that could influence future socio-economic development. The findings suggest that while aggressive crime reduction policies may yield short-term successes in terms of safety, the longer-term implications for poverty reduction and social cohesion must be very carefully considered. Any future policies should aim to balance immediate needs of crime prevention with longer-term initiatives toward social and economic development.

Example: xxx

ACKNOWLEDGMENT (Heading 5)

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