

EXECUTIVE
SUMMARY

The Costs of Crime and Violence

New Evidence and Insights
in Latin America
and the Caribbean



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Summary

This volume is the first to provide a comprehensive, systematic and rigorous analysis of the costs of crime in Latin America and the Caribbean. The main challenges in the region are addressed: the social cost of homicides, private and public spending on security, the penitentiary crisis, violence against women, organized crime and cybercrime. The volume estimates that the direct cost of crime for 17 LAC countries in 2010-2014 is, on average, 3.5 percent of the region's GDP – twice as much as in the developed world. This volume also provides a detailed analysis of the costs of crime in Brazil by state, as well as an examination of the geographical distribution and drivers of crime in the most dangerous sub-regions: the Northern Triangle in Central America and the Caribbean. The situation in terms of violence against women and cybercrime is assessed: the region is lagging behind to confront these new and old crimes. The complete version of this publication is available at <https://publications.iadb.org/handle/11319/8133>.

Contents of the Complete Publication (available at <https://publications.iadb.org/handle/11319/8133>)

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1. Why Is the Estimation of the Costs of Crime Important?

The Latin America and the Caribbean region has made progress in many socioeconomic areas over the past decade. Between 2004 and 2014, the majority of the countries had annual growth rates of nearly 4 percent, poverty rates fell, and citizens in the region became healthier and better-educated. In fact, the Millennium Development Goal of halving, between 1990 and 2015, the proportion of people living on less than US\$1.25 a day was attained in 2008, seven years ahead of time.

In contrast to these positive developments, however, crime in the region has increased. Latin American and Caribbean continues to be the most violent region on Earth, and the World Health Organization has deemed crime and violence in the region to be at epidemic levels. The region contains 9 percent of the world's population but accounts for nearly one-third of its homicide victims, making it the most violent region outside of war zones. Six out of ten robberies in the region involve violence and 90 percent of murders go unresolved. Its prisons are the most overcrowded in the world.

Despite the seriousness of the problem, though, the costs that crime and violence impose on the region have only recently received systematic attention. The contributions to this volume respond to this concern, presenting consistent evidence on the costs of crime and violence across 17 of the region's countries.

In the face of high crime rates, the costs of crime can be sizable: individuals change their behavior to avoid (or engage in) criminal activity, households and businesses spend to protect themselves from crime, firms reduce their levels of investment and incur productivity losses, and governments shift the allocation of resources to tackle the associated problems. The volume therefore asks: How large are the costs of crime and violence in LAC? Estimations of the costs of crime are useful for visualizing the problem, for identifying areas for improvement in the allocation of private and public resources, and for designing better crime prevention and crime control policies.

The Inter-American Development Bank, building on work started in 2012, first published estimates of the costs of crime in the region in 2015, in *The Welfare Costs of Crime in Latin America and the Caribbean* (Jaitman, 2015). This first step constituted a systematic and rigorous analysis of the costs of crime and violence in LAC for five countries.

This volume is a landmark effort to provide comparable crime costs numbers for 17 countries in the region, benchmarking them against 6 developed countries. Furthermore, it advances the discussion in several key ways, responding in many cases to the demands of policymakers throughout the region.

2. A Conceptual Framework for Interpreting the Welfare Costs of Crime

In all domains of public policy, the objective is to improve citizen welfare, and public policy regarding crime is no different. When one speaks of the costs of crime, therefore, the concern is specifically with its welfare costs: how much does crime reduce the welfare of citizens? Unfortunately, it is difficult to measure citizen welfare directly. However, available data help us at least to approximate the welfare costs that crime imposes on the public.

Nevertheless, the translation of cost data on crime into the welfare costs of crime is fraught with challenges. There is no unified methodology capable of incorporating all social losses simultaneously, and different methodologies produce different types of estimates. As a consequence, estimates of the welfare costs of crime vary widely and are rarely consistent from country to country. To ensure consistency, and to make transparent the connection between the crime costs that can be measured and the welfare costs that are of greatest concern, this section explains how the costs of crime measured in this volume contribute to the deterioration of citizen welfare.

Victims and criminals experience the costs of crime differently. Becker (1968), Stigler (1970), and Ehrlich (1973) depict the welfare consequences of crime for potential victims as a function of the probability of victimization, the amount of goods lost, and expenditures on public or private security and the justice system. The welfare losses for criminals, in contrast, are a function of the effort criminals devote to their criminal acts, the likelihood and severity of potential punishment, the loss and opportunity costs incurred (monetary or otherwise) due to capture and expenditures on police and the justice system. These researchers then calculate the aggregate social welfare losses associated with crime as the difference in the total expected welfare of potential victims and criminals in the “no-crime” versus “crime” scenarios. In this context, the typical problem facing a government is how to allocate spending on crime prevention and punishment in a way that will minimize social loss.

There are several approaches to measuring crime costs. The most common is the accounting methodology, which most of the chapters in this volume adopt. Two additional methodologies, contingent valuation and hedonic prices, estimate the costs of crime as a whole (see Soares, 2015 and Jaitman, 2015, for a discussion of these). The accounting methodology is very demanding in terms of its requirements to produce comparable data but captures a portion of the total costs of crime (direct costs and, to an extent, indirect ones), so the results can be interpreted as lower-bound or conservative estimates. It quantifies the costs incurred by and losses experienced in economies that would not be observed in the absence of crime and then uses these to represent the direct welfare losses to citizens.

This volume employs the accounting methodology in a systematic way for 17 countries, applying the methodology in a comparable way for the first time across multiple countries. Owing to significant data limitations, the estimates take only some indirect costs into account (e.g., the labor effort foregone of incarcerated criminals) and none of the intangible ones. The information collected herein on costs of crime is, however, in and of itself, of great interest to policymakers; it has been assembled for the first time for 17 countries, with rigorous controls for comparability. In addition, though, it provides a reasonably robust means for comparing the welfare costs of crime across countries and over time. That is, when the costs of crime are reported here as higher in one country than another, it can be asserted with some confidence that the welfare costs of crime are also higher in that country than in the other. However, there are certain caveats to this conclusion.

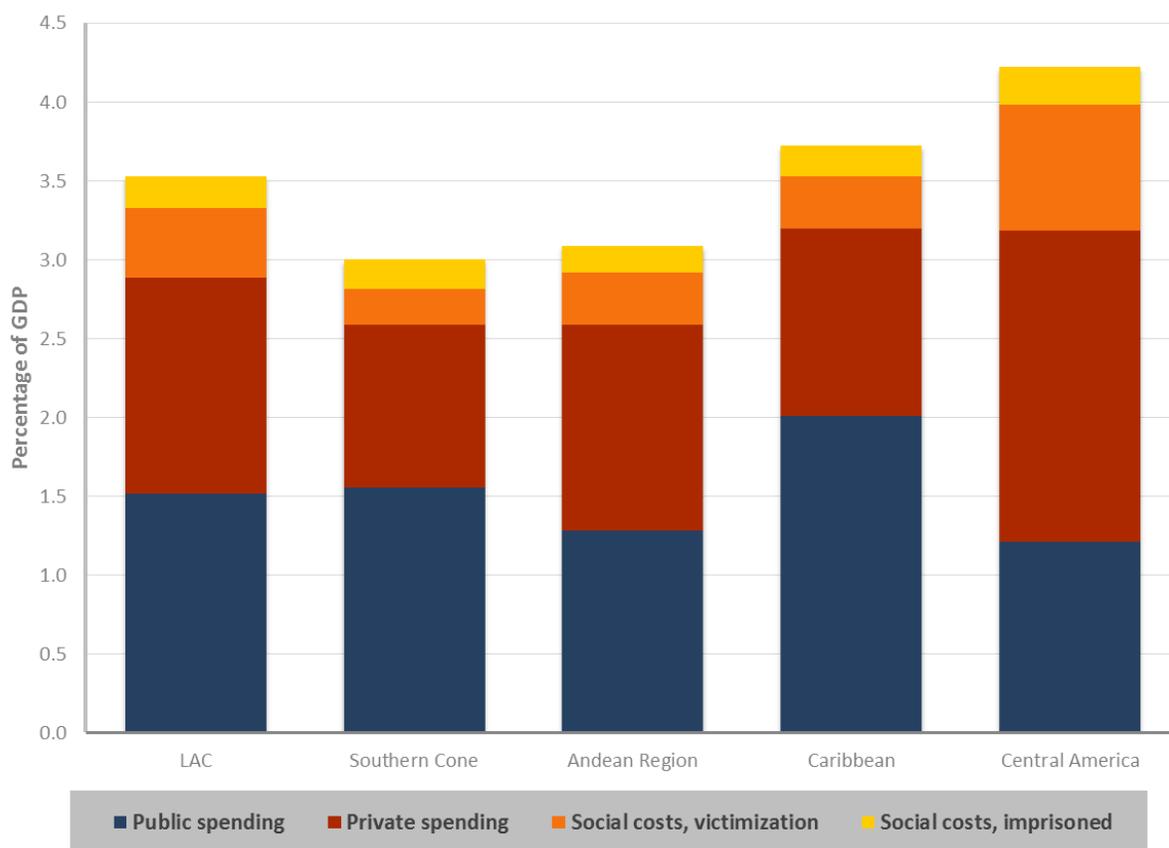
3. Main Findings

This volume addresses the costs of crime from numerous points of view. The accounting methodology described in the preceding section is used to estimate the costs of crime for 17 LAC countries over the period 2010-2014. The focus is on three types of costs: government spending, household and business spending, and costs to victims and criminals.

This publication breaks down the costs of crime into three parts (see Figure 1):

- The social cost of crime, which include the costs of victimization in terms of quality of life loss due to homicides and other violent crimes and the foregone income of the prison population: 0.64 percent of GDP.
- Private spending on security by business and household, which include the expenditure of firms and households on crime prevention, namely spending on security services: 1.37 percent of GDP.
- Government expenditure, which include public spending on the judiciary system, police services, and the administration of prisons: 1.51 percent of GDP.

Figure 1. Overall Crime-related Costs, by Subregion, 2014 (percent of GDP)



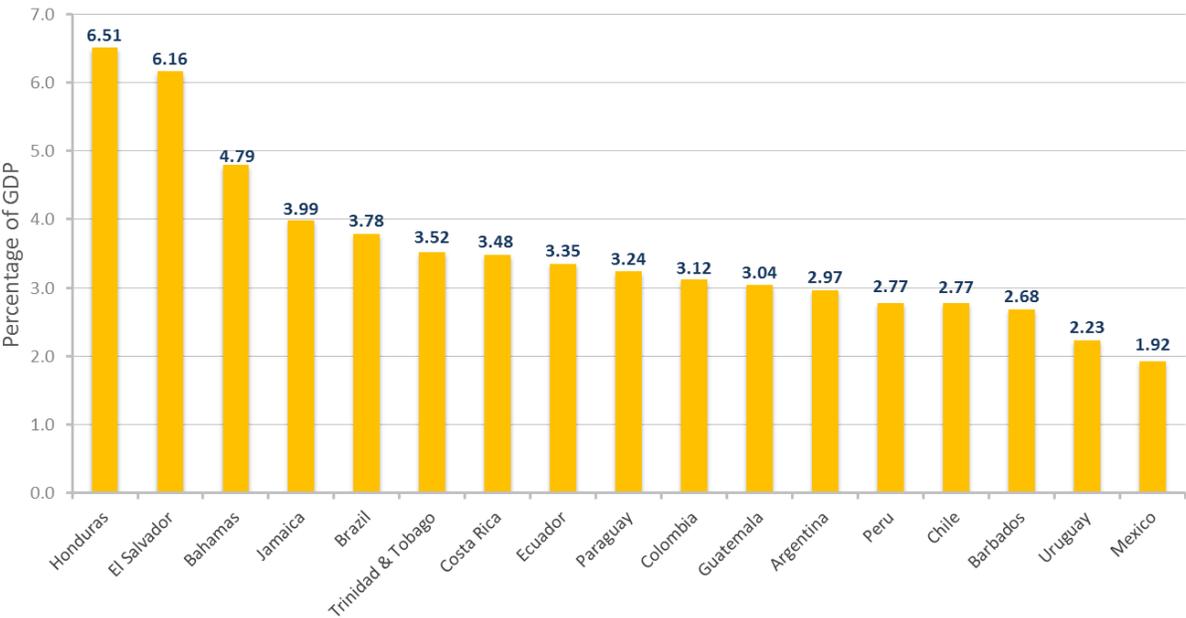
Source: Authors' estimates based on sources listed in Part I Appendix.

Note: LAC = Latin America and the Caribbean.

The overall cost estimates reveal that crime costs LAC countries, on average, between 2.41 percent and 3.55 percent of their GDPs. This is equal to an amount for LAC between US\$115.3 billion and US\$171.8 billion (at 2014 exchange rates) or between US\$175.7 billion and US\$261.2 billion (adjusted for purchasing power parity). The size of crime-related costs in LAC is similar to what those countries spend on infrastructure and is roughly equal to the share of the region's income that goes to the poorest 30 percent of the population. These cost estimations provide a clear picture of the impact of crime and violence in LAC and should foster improvements in public policies that can ultimately reduce them.

Figure 2 presents the results for each country expressed as a share of GDP. It can be seen that the composition of crime-related costs varies across countries. In most countries, victimization costs represent a small amount of total costs, except for Honduras and El Salvador, where their share is large, as mentioned earlier. Substitution between costs incurred by government and those incurred by the private sector does not appear to follow a consistent pattern. Some countries, such as Barbados and Jamaica, have high government costs and low private costs; others, such as Guatemala and Peru, appear to have low government costs and high private ones. Lastly, it is interesting to note that the correlation between victimization costs and private costs is 0.85, while the correlation between victimization costs and government costs is 0.01. In this sense, private sector costs seem to more closely follow patterns of victimization than do government costs.

Figure 2. Crime-related Costs (Upper Bound) in Latin America and the Caribbean, 2014 (percent of GDP)



Source: Authors’ estimates based on sources listed in Part I Appendix.

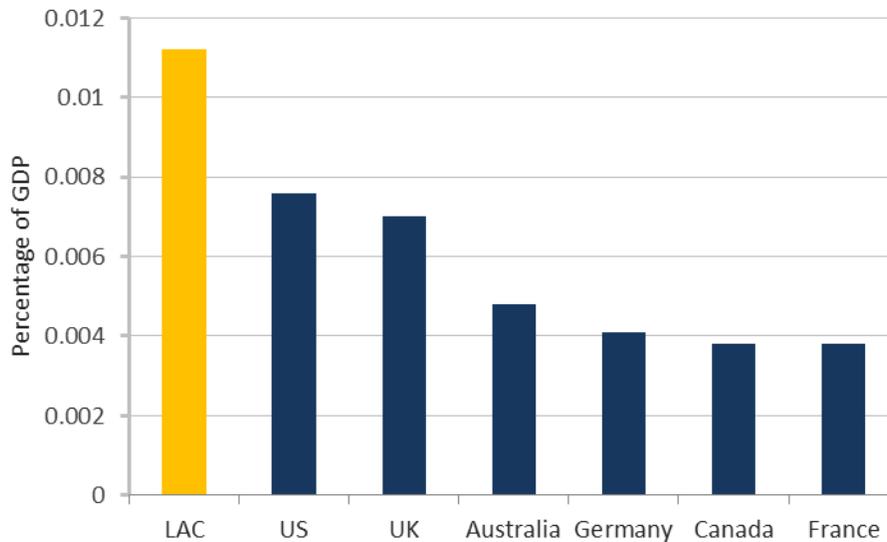
This volume also points out the steep costs of Latin America’s high incarceration rates. For the 2010-2014 period, the region spent \$6.5 billion per year to maintain and build prisons. On top of this, imprisoned individuals forgo an additional \$7.3 billion annually in income. The two numbers together amount to 0.39 percent of GDP, more than the conditional cash transfers for the region’s poor. The study also notes that countries that spend more on prisons do not necessarily reap the benefits of less violence. The Bahamas and El Salvador, for instance, spend large sums (in terms of GDP) on their penitentiary systems but suffer from high crime rates. Argentina and Uruguay, on the other hand, have much lower incarceration costs and lower crime rates.

Finally, this volume sheds light on the costs of violence against women in Latin America and the Caribbean, concluding that in the region, the female homicide rate is double the world average (see Figure 3). The study points to future avenues for more research on gender violence. This volume also takes an in-depth look at specific geographic areas with high welfare costs stemming from crime. Brazil,

with subnational estimates of the costs of crime for every state, exhibits as much internal heterogeneity as Latin America and the Caribbean as a whole.

This volume also focuses on the subregion with the highest costs of crime in the region: the Northern Triangle in Central America (consisting of El Salvador, Honduras, and Guatemala). It then analyzes the subregion with the second-highest costs of crime, the Caribbean, highlighting its similarities and differences with Latin America. Other “old” and “new” security challenges are also discussed, including violence against women and cybersecurity. The region is behind in its readiness to tackle these serious issues. Finally the volume outlines the various forms of what is usually referred to as “organized crime,” a phenomenon that operates in the region and could be exacerbating violence in some countries.

Figure 3. Social Costs of Female Homicides, 2014 (percent of GDP)



Source: Authors’ estimates using the methodology in Chapter 2. See Part I Appendix for sources.

4. Avenues for Future Research

A single volume of this size cannot possibly touch on all of the ways in which the costs of crime undermine economic development and social welfare. Still, it is clear that some emerging areas will demand significant analytical attention in the near future. One is the effect of crime on productivity. Crime can affect firms in numerous ways. The usual focus is on firm investments in security, whether in the form of guards or of capital investments such as cameras and secure buildings. In addition, though, crime can drive down demand, as customers fear that they themselves will be victimized if they patronize a particular business. It can also raise labor costs, if workers demand extra compensation to offset the security risks they assume in trying to get to work. And it can increase innovation and investment costs as well, if firms are concerned that their investments will be expropriated by extortionists. Moreover, as this list makes clear, the costs of crime for firms depend on the type of crime. Research on each of these questions is incipient.

One particular type of crime has received significant attention from development economists, public administration specialists, and political scientists, but little from experts in citizen security: corruption. In particular, corruption has not been assessed using any of the methodologies aimed at quantifying the costs of crime. The rationale for making such assessments is straightforward: law enforcement and crime prevention efforts should be directed where the costs of crime are greatest, unless those efforts are particularly ineffective for some reason. Without a calculation of the costs of corruption that follows the same systematic approach as that for the costs of other types of crime, it is not possible to make these kinds of comparisons. The importance of making them is heightened by the fact that security policies in every country tend to focus security resources on street crimes, generally committed by poorer people, and less on corruption, generally the domain of citizens from the upper strata of society.

Finally, theory regarding costs of crime and more generally regarding crime economics still exhibits important gaps. In general, crime issues are studied in partial-equilibrium settings, but the interconnectedness of agents' decisions requires general-equilibrium approaches. There are many open questions as to how to measure the difference in terms of welfare of a crime versus a no-crime scenario. Along these lines, Galiani, Jaitman, and Weinschelbaum (2016) show that crime produces market and nonmarket externalities that affect the social optimum level of welfare. Furthermore, the degree of informality in a particular economy may play an important role in this regard, even more so in LAC.

These are some important dimensions to develop further in future empirical and theoretical research to promote a better understanding of the welfare costs of crime, in LAC and elsewhere, and the effect of policies aimed at reducing it.

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