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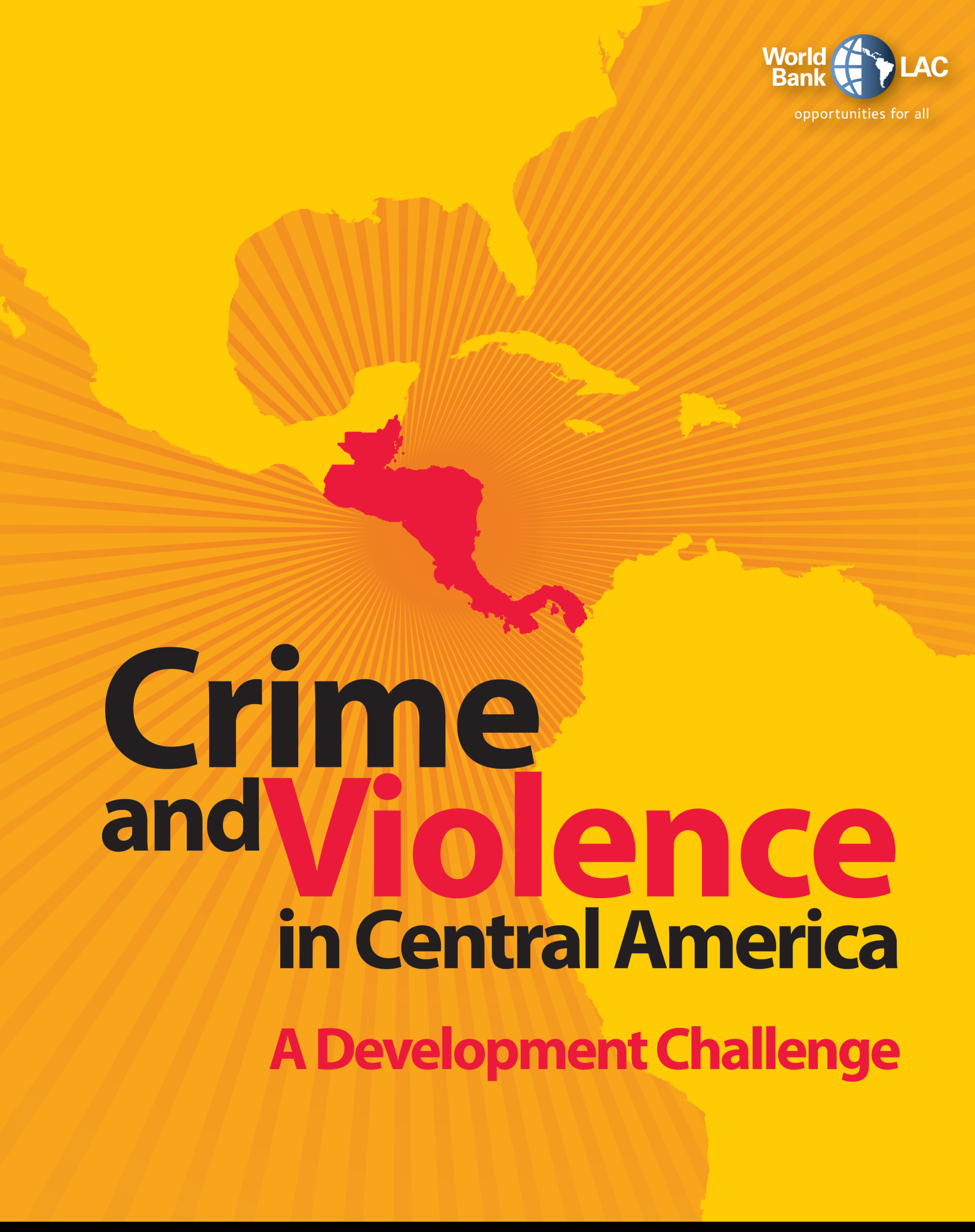

Crime and Violence in Central America

A Development Challenge

Crime and Violence in Central America: A Development Challenge

2011

Sustainable Development Department and
Poverty Reduction and Economic Management Unit
Latin America and the Caribbean Region

Document of the World Bank

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ACKNOWLEDGEMENTS

This report was prepared by Rodrigo Serrano-Berthet and Humberto Lopez. It summarizes the main findings and key policy recommendations of a more detailed World Bank study entitled *Volume II: Crime and Violence in Central America (2010),* which was produced by a team led by Bernice van Bronkhorst and Gabriel Demombynes, and comprised David Varela, Milena Sanchez de Boado, Lorena Cohan, Facundo Cuevas, Diana Hincapie, Lars Christian Moller, Tirza Rivera-Cira (all World Bank), and Abby Cordova Guillen (Vanderbilt University), Jeffrey Miron (Harvard University), Tom Boerman and Lainie Reisman (Washington Office on Latin America), Robert Muggah and Chris Stevenson (Small Arms Survey, Geneva). Full acknowledgments of those who contributed to this research project appear in Volume II.

EXECUTIVE SUMMARY

Crime and violence are now a key development issue for Central American countries. In three nations—El Salvador, Guatemala and Honduras—crime rates are among the top five in Latin America. In the region's other three countries—Costa Rica, Nicaragua and Panama—crime and violence levels are significantly lower, but a steady rise in crime rates in recent years has raised serious concern. There is reason to worry. To put the magnitude of the problem in context, the entire population of Central America is approximately the same as that of Spain, but while Spain registered 336 murders (i.e., fewer than one per day) in 2006, Central America recorded 14,257 murders (i.e., almost 40 per day) in the same year.

Beyond the trauma and suffering of individual victims, crime and violence carry staggering economic costs at the national level. Indeed, some experts estimate these costs at close to eight percent of regional GDP if citizen security, law enforcement and health care are included. Crime and violence also drag down economic growth, not just from the victims' lost wages and labor, but by polluting the investment climate and diverting scarce government resources to strengthen law enforcement rather than promote economic activity. Estimates presented in this report suggest that a ten percent reduction in the violence levels of those Central American countries with the highest murder rates could boost annual economic growth per capita by as much as a full one percent. Crime and violence also weaken key institutions. Existing evidence indicates that drug trafficking increases corruption levels in the criminal justice systems of some Central American countries and tarnishes the legitimacy of state institutions in the public's mind. On average, victims of crime tend to: (i) have less trust in the criminal justice system; (ii) support taking the law into their own hands in larger numbers; and (iii) believe less strongly that the rule of law should always be respected.

What is behind crime and violence in Central America? This report presents a detailed analysis of three main drivers of crime in the region: drug trafficking, youth violence and gangs, and the availability of firearms. It also examines weak justice institutions as a high risk factor for crime and violence. Our research led us to conclude the following:

- Drug trafficking is both an important driver of homicide rates in Central America and the main single factor behind rising violence levels in the region. Just one example: hotspot drug trafficking areas tend to experience crime at rates more than 100 percent higher than non-hotspot areas. Clearly, reducing traffic in illegal drugs, or preventing it altogether, will be key in any regional strategy to fight crime. This element is even more relevant in light of the magnitude of drug flows through the region. An estimated 90 percent of the cocaine arriving into the US comes through the Central America corridor. The associated financial flows are also enormous. The value added of the Central America corridor's cocaine flow could be close to five percent of the regional GDP.

- Youth violence and gangs are a critical concern in Central America today. Men between the ages of 15 and 34 account for the overwhelming majority of homicide victims, and they also comprise the membership of youth gangs. There are more than 900 gangs or *maras* operating in Central America today, with an estimated 70,000 members. While gangs are doubtless a major contributor to crime in El Salvador, Guatemala and Honduras, the very limited evidence indicates that they are responsible for only a minority share of violence; multiple sources suggest that perhaps 15 percent of homicides are gang related. Furthermore, reliable data related to the role of youth gangs in the narcotics trade are scarce. To address issues of youth and gang violence, in the short run policy makers should borrow from the evidence-based toolkit of programs from other regions, such as early childhood development and mentoring programs, interventions to increase

retention of high-risk youth in secondary schools, and opening schools after hours and on weekends to offer activities to occupy youth's free time.

- Availability of firearms. Lengthy civil wars and increases of imported firearms in the years since have left Central America awash in weapons. Separate studies indicate that some 4.5 million small arms were in the region in 2007, the vast majority of them illegal. Because of this, firearms all too often are used in violent crime. A 2008 study conducted in Guatemala by the Geneva-based Small Arms Survey found that firearms were overwhelmingly present in reported incidents of violent crime. Similar results were found in El Salvador.

- Weak criminal justice institutions limit the efficacy of crime and violence punishment and prevention. Institutional weaknesses result in a low percentage of crimes being solved and the perpetrator being punished. For example, in Honduras 63,537 criminal complaints were filed in 2006; of these, 49,198 were referred for investigation and only 1,015 ended in a conviction. Even so, underreporting is thought to be a major issue in Central America, due to citizens' low level of trust in justice sector institutions. Perhaps the most significant obstacle to evidence-based policy making in the region is the lack of reliable statistics.

Clearly there is no quick and easy fix to Central America's crime and violence problem. Rather, the Bank's analysis indicates policymakers will need to persevere because all indications are that the fight against crime is likely to be long lasting. In addition, as the Colombian, and more recently, the Mexican, experiences have shown, policymakers should be aware of the potential high costs of fighting crime when governments target drug trafficking. Still, fighting crime must be very high on the development agendas of all Central American countries.

This report argues that successful strategies require actions along multiple fronts, combining prevention and criminal justice reform, together with regional approaches in the areas of drug trafficking and firearms. It also argues that interventions should be evidence based, starting with a clear understanding of the risk factors involved and ending with a careful evaluation of how any planned action might affect future options. In addition, the design of national crime reduction plans and the establishment of national cross-sectoral crime commissions are important steps to coordinate the actions of different government branches, ease cross-sectoral collaboration and prioritize resource allocation. Of equal importance is the fact that national plans offer a vehicle for the involvement of civil society organizations, in which much of the expertise in violence prevention and rehabilitation resides.

Preventive strategies can work. Existing evidence suggests that the most cost-effective prevention programs focus on children and families; these include early childhood development, effective parenting or school-based violence prevention programs. Since some of these programs may pay dividends only in the medium to long term, they should be complemented by programs that can generate significant short-run reductions in crime and violence. These include integrated citizen security approaches, particularly at the local level, that combine modern methods of policing with preventive programs such as situational crime prevention.

Prevention efforts need to be complemented by effective law enforcement. The required reforms are no longer primarily legislative in nature because all six countries have advanced toward more transparent adversarial criminal procedures. The second-generation reforms should instead help deliver on the promises of previous reforms by: (i) strengthening key institutions and improving the quality and timeliness of the services they provide to citizens; (ii) improving efficiency and effectiveness while respecting due process and human rights; (iii) ensuring accountability and addressing corruption; (iv) increasing inter-agency collaboration; and (v) improving access to justice, especially for poor and disenfranchised groups. Specific interventions reviewed in the report include: information systems and

performance indicators as a prerequisite to improve inter-institutional coordination and information-sharing mechanisms; an internal overhaul of court administration and case management to create rapid-reaction, one-stop shops; the strengthening of entities that provide legal counseling to the poor and to women; and the promotion of alternative dispute-resolution mechanisms and the implementation of community policing programs. The poor reviews of the "*mano dura*" ("iron fist") approach suggest strongly that alternative courses of action should be explored, with due regard for human rights.

All this places the countries of Central America in a difficult situation. The drug war has already brought extreme levels of violence and damaged criminal justice institutions. Options for dealing with the tremendous flow of drugs through the region would appear to be limited. Radical changes in drug policies— including the possible depenalization or decriminalization of some drugs as recommended by the Latin American Commission on Drugs and Democracy (2009)—are simply beyond the capacity of the six nations and can only be contemplated within an international framework that includes the largest producer and consumer countries.

Our analysis leads us to conclude that there are some preferable policy options available to Central American countries with relation to drug trafficking:

- Given the high levels of drug-related corruption in the criminal justice systems and the vast resources of the traffickers, evidence suggests that directing more resources to drug enforcement efforts is not likely to reduce violence in Central America. To the extent this approach is used, we believe a regional, coordinated effort stands a greater chance of some success. To address drug-related corruption and impunity, the Guatemalan experience with the International Commission against Impunity in Guatemala (*Comisión Internacional Contra la Impunidad en Guatemala,* CICIG) is worth considering as it provided a suitable channel to bring international investigative expertise to Guatemala and has been very helpful in resolving high-profile cases.

- Devote resources to address domestic drug use through public health and harm reduction programs, including greater investment in education campaigns, treatment for users, and drug use prevention.

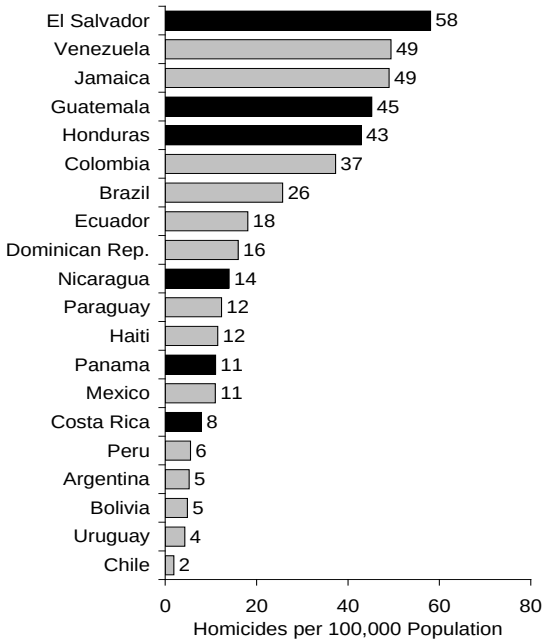
These two broad options are not mutually exclusive. Overall, limited funds are more likely to reduce violence if they are devoted to crime prevention efforts and mitigating the damage from drugs. Within the region, policies should focus on strengthening criminal justice systems, limiting the availability of firearms, and providing meaningful alternatives to at-risk youth.

I. THE EXTENT OF THE PROBLEM

Central America's hopes for a rebirth following the region's civil wars have been dimmed by another plague: a torrent of crime and violence that first engulfed El Salvador, Honduras and Guatemala and now threatens Nicaragua, Costa Rica and Panama. To grasp the magnitude of this new wave of unrest, consider the following: Spain and Central America both have populations of about 40 million people, yet Spain registered 336 murders in 2006 (i.e., fewer than one per day) while Central America registered 14,257 (i.e., almost 40 per day).

El Salvador has the highest homicide rate in Latin America (58 per 100,000 inhabitants), and two other Central American countries, Guatemala, and Honduras with homicide rates of 45 and 43 per 100,000 inhabitants, respectively, are among the top five of the region. The homicide rate for Central America as a whole is 35.4 per 100,000 inhabitants, compared to around 20 per 100,000 for all of Latin America.

Figure 1. Homicide Rates in Latin America and the Caribbean (c. 2006)

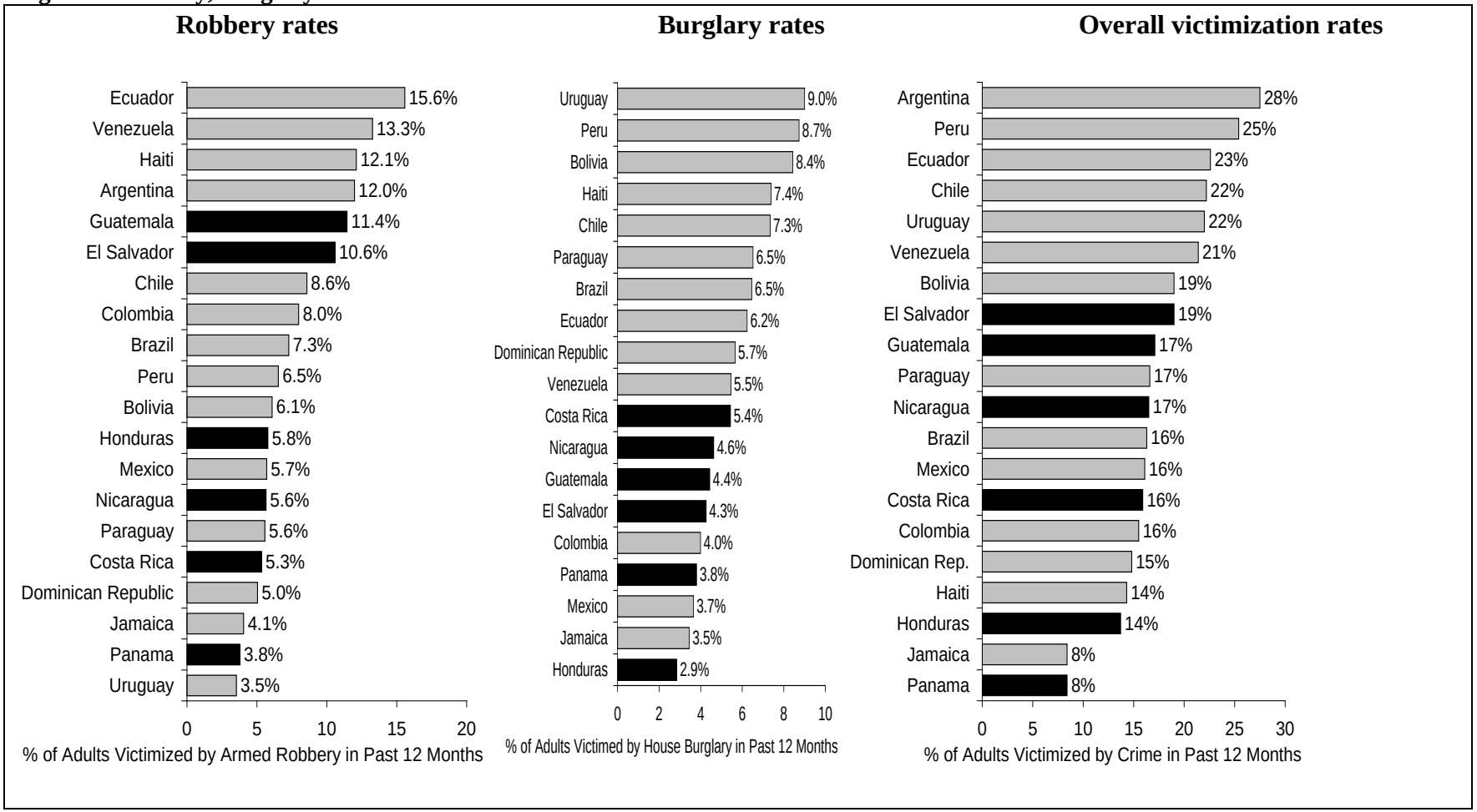


Homicide rates remain low in Panama, Nicaragua, and Costa Rica—about half that of Latin America as a whole—but there is now concern over increasing violence in these countries as well.[1] These worries are compounded by fears of contagion from their three more violence-prone northern Central American neighbors and the prospect that they too could become havens for the drug trafficking that drives the high crime rates in the northern Central triangle.

Admittedly, other measures of violent crime in Central America, such as robbery and burglary rates or overall victimization rates, are far less dramatic than homicide rates. For example, data from a victimization survey conducted by the Latin American Public Opinion Project (LAPOP), reported in Figure 2, indicate that while Guatemala and El Salvador have robbery rates above the Latin American regional average, those of the other four Central American countries are below that average. Similarly, statistics for burglary indicate that all Central American countries come in below the Latin American regional average. Four Central American countries also have overall victimization rates (which measure crime without specifying its type) below the regional average and the Central American countries with the worst statistics—El Salvador and Guatemala—are not very far from the average (8th and 9th in the ranking), according to the LAPOP data.

[1] For example, victimization rates appear to have doubled in Costa Rica between 1997 and 2008.

Figure 2. Robbery, Burglary and Victimization Rates in Latin America



Source: World Bank analysis of LAPOP data (2008).

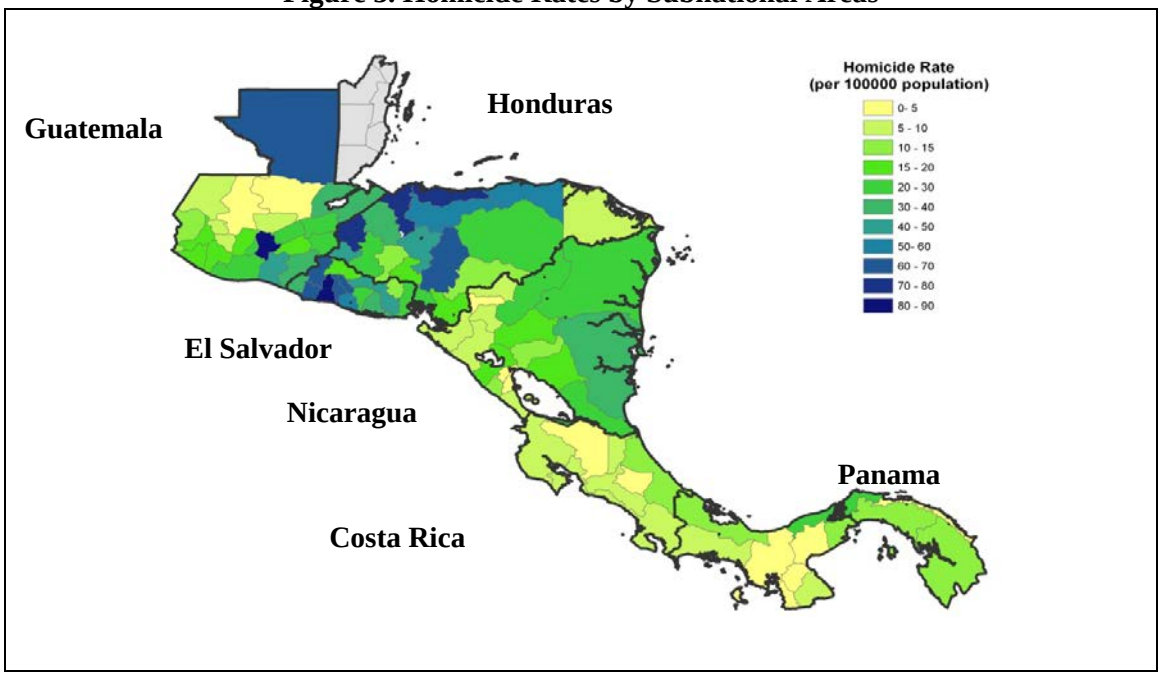
Despite the more positive robbery and victimization statistics, it is the high homicide rates that explain why crime and violence are a key concern of the Central American population. Indeed, across all six Central American countries, 71 percent of the adult population said they view crime as a major threat to future well-being, and more than 50 percent believe high crime rates would justify a military coup.

I.1 Who are the victims of crime in Central America?

The answer to this question depends on how crime statistics are analyzed. For example, age is important. In Central America, young people, particularly young men, comprise the bulk of both perpetrators and victims of violence. A Nicaraguan study of 186 individuals arrested for murder in 2006 found that nearly half were between the ages of 15 and 25. Similarly, for most countries in the region young men between the ages of 15 and 34 comprise about 60 percent of all homicide victims. The exception is Costa Rica, where this figure is above 40 percent.

The fact that the majority of homicides involve men as either victims or perpetrators should not diminish the importance of violence against women. In fact, available information for Honduras and Nicaragua indicates that about 17 to 19 percent of never-married women have experienced violence, 15 to 17 percent have suffered violence at the hands of a family member or spouse/partner, and 12 to 14 percent have been victimized by a spouse or live-in partner. Many incidents of domestic violence go unreported to authorities, and in victimization surveys women are often reluctant to acknowledge abuse by a partner or family member. Therefore, these figures probably understate the true extent of the problem.

Figure 3. Homicide Rates by Subnational Areas



Source: Cuevas and Demombynes (2009).

A second dimension of crime relates to its geographic distribution. Figure 3 shows that homicide numbers in some areas of the northern Central American triangle approach 100 per 100,000 inhabitants, whereas in Costa Rica and Panama to the south, it is hard to find an area that goes above 20 per 100,000 inhabitants. Within countries, El Salvador and Honduras have no area with crime rates below 5 per 100,000 inhabitants. However, Guatemala does: homicides are highest around the capital, with high rates also a

factor in the sparsely populated Petén region in the north. In Honduras, rates are highest along the Atlantic coast, in the area around Tegucigalpa, and on the Guatemalan border. In the remaining countries, homicides tend to be higher on the Atlantic coast.

Income levels are also a factor. An analysis of household data in Guatemala indicates that the probability of being a crime victim increases with socioeconomic status; thus, in relative terms, crime affects the affluent more than the poor. This applies regardless of the type of crime, although in relative terms the affluent tend to be at greater risk of assault and robbery than their poorer counterparts. Well-off people are ten times more likely to be assaulted than extremely poor people and three times more likely to be assaulted as those who are marginally poor. There was a similar finding in Costa Rica, where the probability of a household having at least one member victimized by crime increases with per capita income, to the extent that a person in the highest quintile of the income distribution has a 36 percent chance of falling victim to a violent crime—nearly twice the 20 percent probability rate for those in the lowest quintile. However, the differences have narrowed over time. In 1997, a household in the top quintile of income distribution was twice as likely to fall victim to a crime as a household in the bottom quintile. That ratio for the two households fell to 1.8 in 2008. Although wealthier households have a higher tendency to be targets of crime, Costa Rican data also reveal that poorer households appear to be subject to more severe types of crime. Among affected households in the bottom quintile, three in ten had suffered crimes of aggression, compared to just 20 percent for victimized households in the wealthiest quintile.

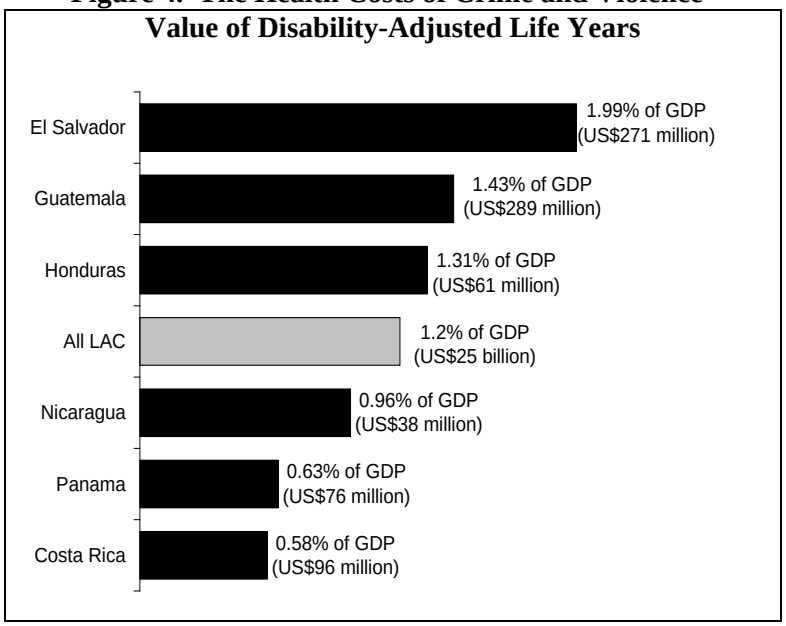
II. THE COSTS OF CRIME AND VIOLENCE

Because crime and violence affect people's lives in many ways, there are several elements to the social costs of criminal activities. The most obvious are the physical and emotional costs to the victims, whether individuals or businesses. Other direct costs to individuals and businesses include private security or the need to alter homes, factories and other workplaces, and the institutional costs incurred by government for additional police and judicial procedures. Beyond these direct costs, the negative impact of crime and violence on the investment climate carries its own costs. The study by Alaimo et al. (2009) concluded that criminal activity lowers productivity and that businesses hit by crime have significantly lower sales per worker than those unaffected by criminal activity. Given the key role of productivity for economic growth, it should be no surprise that crime and violence reduce a nation's GDP growth. Then there are the less visible costs that are nearly impossible to measure, such as the erosion of public trust in the criminal justice system, the increased support for vigilantism, and the conviction that authorities do not need to respect the law when pursuing criminals, all of which accompany higher crime rates according to available evidence. These issues are analyzed below.

II.1 The direct costs of crime and violence

One way to assess the direct costs of violence is the "accounting approach," which identifies broad cost categories related to losses and damages associated with crime and crime prevention activities, and then attaches a dollar value to each of them to obtain a total figure. Although these estimates provide only a rough approximation of the true costs, the exercise can be useful to: (i) summarize the many direct costs of crime; (ii) provide a key input to assess the cost-effectiveness of crime-fighting interventions; and (iii) measure the effectiveness of an intervention.

Figure 4. The Health Costs of Crime and Violence



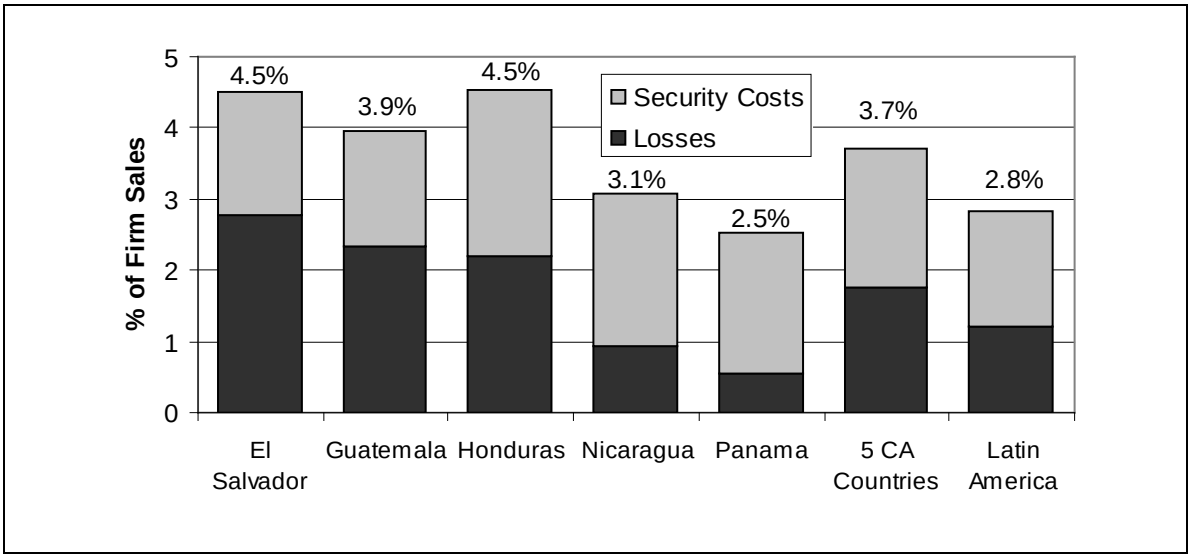
Source: World Bank analysis based on LAPOP surveys (see Volume II).

The World Health Organization (WHO) provides a technique to compute the health costs associated with crime and violence, called "disability-adjusted life years lost" or DALYs. DALYs quantify the effects of threats to health, including disease and violence, associated with any given health condition in a particular country. Thus, DALYs provide an estimate of years of life lost due to premature mortality and disability. Once DALYs are computed, they can be translated into dollar terms by monetizing time in each country, using, for example, annual GDP per capita to value one DALY.

Against this background, Figure 4 shows the estimated value of DALYs for the six Central American countries as well as the average for all of Latin America. The figure indicates that for Central America as a whole, the health costs of crime and violence (as a percentage of annual GDP) are similar to the average costs in Latin America. However, this is a source of little comfort for the people of El Salvador, a country that has the second highest DALY costs in Latin America behind Colombia, and ranks 12th worldwide. Guatemala, Honduras and Nicaragua rank 21st, 36th and 40th, respectively, in the worldwide DALY ranking. At the other extreme, Panama and Costa Rica have the lowest costs.

In the business sector, data collected in the 2006 Enterprise Surveys show that, excluding Costa Rica, the total security-related costs and losses of Central American companies averaged 3.7 percent of sales (Figure 5), a figure significantly higher than the 2.8 percent average for Latin America and the Caribbean as a whole. Moreover, of those five countries, only Panama had criminal activity costs below the regional average. In the other four, these costs range from 3.1 percent in Nicaragua to 4.5 percent in El Salvador and Honduras, with Guatemala somewhat in between (3.9 percent). The high costs of crime in these countries act as a drag on competitiveness, reduce profit margins, and can make the difference in whether a company survives or fails.

Figure 5. Firms' Security Costs and Losses Due to Crime as a Percentage of Firm Sales, 2006



Source: World Bank analysis of 2006 Enterprise Surveys.

In Guatemala, the United Nations Development Programme (UNDP) has conducted detailed studies using the accounting approach (UNDP 2006). Similarly, a report prepared for El Salvador's National Security Council (Acevedo 2008) applies the UNDP estimates along with data from a variety of sources to generate comparable estimates for all Central American countries except Panama. The costs considered in the Acevedo study are grouped in four categories: health costs, institutional costs, private security costs, and material costs. Health costs include medical expenses, lost production due to death and injury, and the costs of victims' emotional suffering. Institutional costs cover added government spending on security and the justice system. Private security costs include households and businesses. Material costs encompass property losses suffered by individuals and businesses.

The main results of the accounting approach are summarized in Table 1. Overall, for the five countries included in the analysis (Panama was not covered in the Acevedo report), the economic cost of crime and violence totals 7.7 percent of GDP. Costs to Guatemala equaled the regional average, while those for Honduras, Nicaragua and El Salvador all exceeded 9 percent of GDP. Costa Rica's costs were barely one-third of that percentage as a share of GDP, yet still significant at 3.6 percent. Health care costs, including those for emotional suffering, were the largest single share of the added financial burden for all countries surveyed, ranging from 1.5 percent of GDP in Costa Rica to 6.1 percent of GDP in El Salvador. Institutional costs were estimated at between 1 percent of GDP for Costa Rica and Guatemala and 2.3 percent of GDP for Honduras. Combined security and material costs totaled between 1.1 percent of GDP in Costa Rica and 3.8 percent of GDP in Nicaragua.

II.2 The growth costs of crime and violence

Beyond these direct costs, crime and violence significantly dampen the business investment climate, skewing the calculations that shape opportunities and incentives for firms to invest productively, create jobs and expand. Three main cost factors are included in the investment decision: (i) the potential losses to criminal activity discussed above; (ii) the cost of diverting resources from productive (and hence growth-enhancing) activities to crime prevention; and (iii) lost productivity resulting from crime-caused fear, increased absenteeism or limitation of working hours to times of the day when workers are not concerned with personal security. In World Bank Enterprise Surveys, crime tends to appear in all Central American countries as one of the main constraints to productivity and growth. Table 2 shows the

constraints mentioned frequently in these surveys as being "major" or "severe." The results indicate that in five of the six Central American countries (the exception is Costa Rica), crime appears among the top five constraints.

Table 1. Total Economic Costs of Crime and Violence as Percentage of GDP

Type of Cost	Guatemala	El Salvador	Honduras	Nicaragua	Costa Rica
	Millions of US$				
Health costs	**1281**	**1144**	**360**	**241**	**325**
Medical attention	69	82	24	44	10
Lost production	521	430	114	35	113
Emotional damage	691	632	222	162	202
Institutional costs	**305**	**285**	**239**	**87**	**221**
Public security	212	160	145	51	85
Administration of justice	93	125	95	36	137
Private security costs	**459**	**329**	**176**	**124**	**150**
Households	135	72	44	31	38
Businesses	324	257	132	93	113
Material costs (transfers)	**245**	**253**	**110**	**78**	**94**
TOTAL	**2291**	**2010**	**885**	**529**	**791**
	As percentage of GDP				
Health costs	**4.3%**	**6.1%**	**3.9%**	**4.5%**	**1.5%**
Medical attention	0.2%	0.4%	0.3%	0.8%	0.0%
Lost production	1.8%	2.3%	1.2%	0.7%	0.5%
Emotional damage	2.3%	3.4%	2.4%	3.1%	0.9%
Institutional costs	**1.0%**	**1.5%**	**2.6%**	**1.6%**	**1.0%**
Public security	0.7%	0.9%	1.6%	1.0%	0.4%
Administration of justice	0.3%	0.7%	1.0%	0.7%	0.6%
Private security costs	**1.5%**	**1.8%**	**1.9%**	**2.3%**	**0.7%**
Households	0.5%	0.4%	0.5%	0.6%	0.2%
Businesses	1.1%	1.4%	1.4%	1.8%	0.5%
Material costs (transfers)	**0.8%**	**1.4%**	**1.2%**	**1.5%**	**0.4%**
TOTAL	**7.7%**	**10.8%**	**9.6%**	**10.0%**	**3.6%**

Source: Acevedo (2008).
Note: Panama was not included in the original analysis.

Table 2. Top Five Constraints to Productivity and Growth in Central America[1/]

Costa Rica	El Salvador	Guatemala
Access to finance	***Crime***	Corruption
Macroeconomic instability	Practices of informal competitors	Electricity
Practices of informal competitors	Access to finance	Macroeconomic instability
Corruption	Corruption	Practices of informal competitors
Tax rates	Macroeconomic instability	***Crime***

Honduras	Nicaragua	Panama
Access to finance	Access to finance	Electricity
Corruption	Corruption	Corruption
Crime	Macroeconomic instability	***Crime***
Macroeconomic instability	Practices of informal competitors	Tax rates
Practices of informal competitors	***Crime***	Macroeconomic instability

[1/] The table reports the top five constraints to productivity and growth as identified by Central American firms in the Bank's Enterprise Surveys.
Source: Alaimo et al. (2009).

Beyond boardroom perceptions, crime also appears in the statistical analysis of Alaimo et al. (2009) as one of the main constraints to productivity and growth. The analysis relies on data from 10,000-plus Latin American businesses to estimate a company's productivity through measures such as sales per worker and value added per worker as well as the investment climate, including the crime rate. Those projections indicate that a 1 percent rise in corporate losses due to crime can trigger a drop in productivity ranging from 5 to 10 percent, depending on a variety of other factors. This impact of crime on productivity makes crime rates one of the most important factors in an econometric model that also explores the role of investment climate attributes such as corruption, regulation, physical infrastructure, human capital or access to finance.

Table 3. Top Three Policy Priorities to Improve Central America's Productivity[1/]

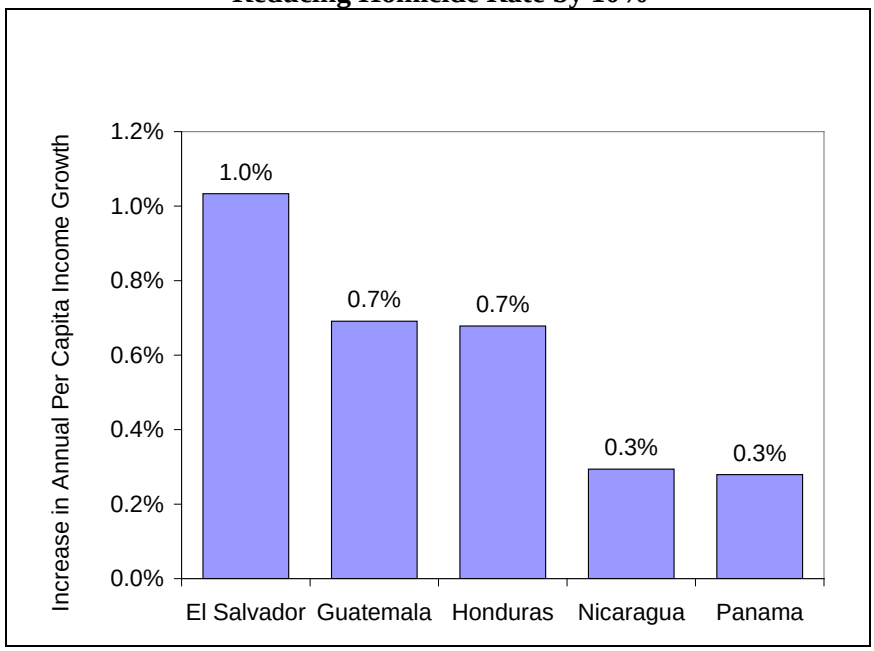
Costa Rica	El Salvador	Guatemala
Regulatory environment	Regulatory environment	Regulatory environment
Crime	Corporate governance	***Crime***
Infrastructure	***Crime***	Corporate governance
Honduras	**Nicaragua**	**Panama**
Corporate governance	Corporate governance	Regulatory environment
Regulatory environment	Regulatory environment	***Crime***
Crime	***Crime***	Technology

[1/] The table reports the areas that would raise productivity the most if all investment climate attributes were to take the value of the firm in the 75th percentile (same industry and firm size).
Source: Alaimo et al. (2009).

Moreover, when Alaimo et al. (2009) explored areas that policy makers need to address to improve the region's productivity, they found that crime concerns should be one of the top three priorities in all six Central American countries (Table 3).

Apart from crime's impact on productivity, a World Bank study (World Bank 2006) projected how much economic growth could increase if crime and violence were to decline. An econometric model was used to simulate how a drop in crime would influence growth.

Figure 6: Potential Boost to Annual Economic Growth Rate from Reducing Homicide Rate by 10%



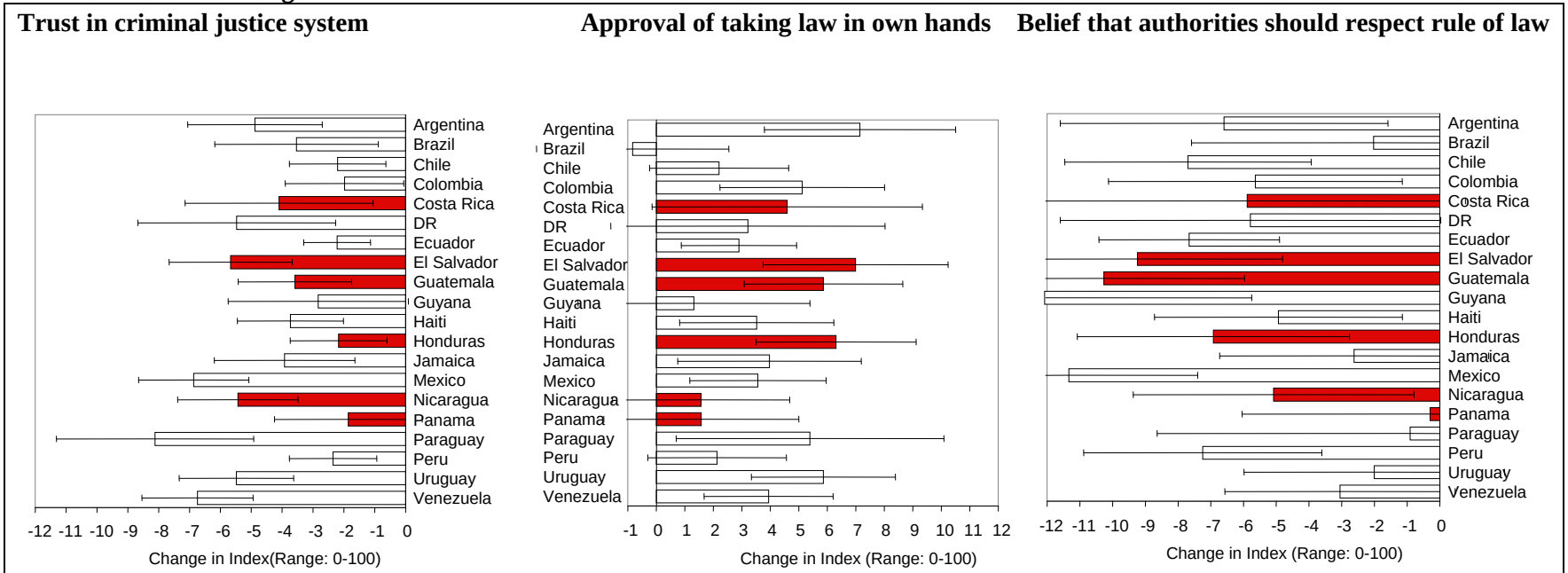
Source: World Bank (2006).

Figure 6 shows the results of these simulations. It indicates that a reduction in violence levels of countries with the highest murder rates could potentially produce very large economic gains. For example, the estimates imply that a 10 percent drop in the homicide rate could boost per capita annual income growth by a full 1.0 percent in El Salvador and by 0.7 percent in Guatemala and Honduras. If Nicaragua and Panama achieved similar cuts, their growth rate would rise by 0.3 percent. Although these estimates may exaggerate the exact potential for growth, they nonetheless indicate that crime and violence do carry significant costs in terms of growth.

II.3 Crime and violence affect the legitimacy of justice sector institutions

A third cost of crime and violence involves changes in way crime victims—and those fearful of becoming victims—view state institutions and how these changes can undermine good governance. The emotional shock of being targeted, combined with first-hand experience of the criminal justice system or greater awareness of negative media coverage about the inability of the institutions to cope with crime and violence, all can erode an individual's confidence in the way authorities and individual citizens confront crime. Research set out in Figure 7 shows that, on average, crime victims: (i) have less trust in the criminal justice system; (ii) are more likely to approve of taking the law into their own hands; and (iii) believe less that the rule of law should always be respected. Most notably, these effects are greater in countries with higher levels of violence. Indeed, in El Salvador, Honduras and Guatemala, crime victims are 6.5 percent more likely to approve of taking the law into their own hands and are 9 percent less likely to believe that the rule of law should always be respected.

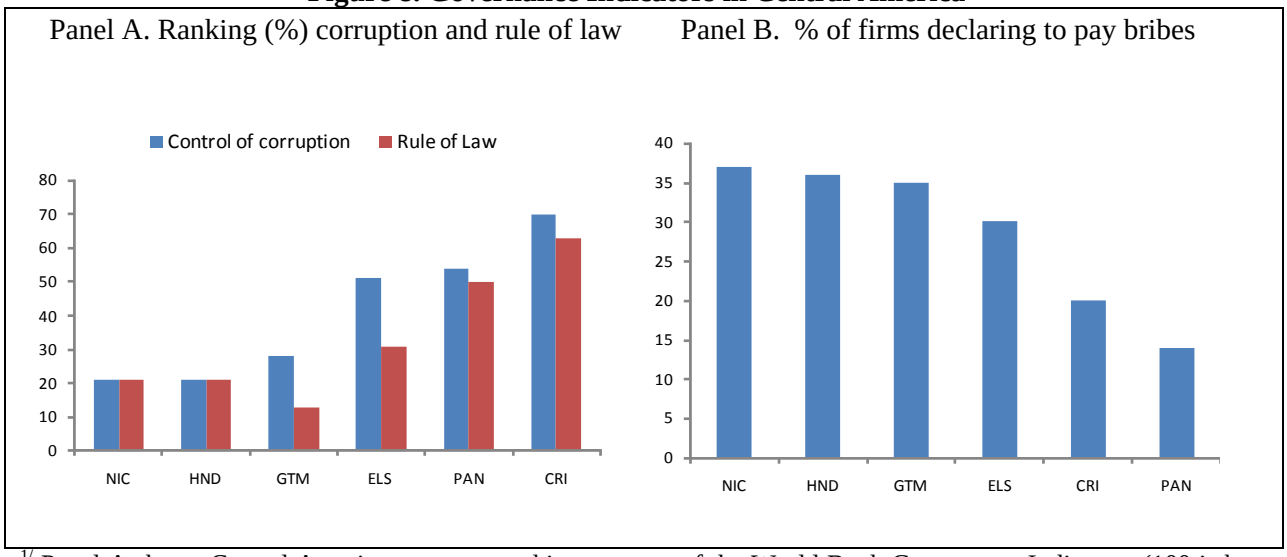
Figure 7. Effect of Crime and Violence on Attitudes toward State Institutions in Latin America



Source: Demombynes (2009). The figures show how attitudes change when a person is victimized, i.e., attitudes with regard to trust in the criminal justice system, approval of taking the law in one's own hands, and belief that authorities should respect the rule of law. Estimates are based on the coefficients on crime victimization from country-specific regressions of the different indexes on crime victimization and a set of control variables. Regressions include fixed effects at the sampling cluster level. Dependent variables are indexes with ranges from 0 to 100.

The impact of crime and violence on the legitimacy of state institutions is particularly relevant in the Central American context where governance (as measured by the World Bank's Governance Indicators) is already an issue of concern. For example, Nicaragua and Honduras fall in the lowest quintile of the Indicator for Control of Corruption (Figure 8, Panel A). In Latin America, only Haiti, Venezuela and Paraguay score lower. Similarly, when the focus is the Rule of Law, Guatemala is near the bottom 10 percent, while Nicaragua, Honduras and El Salvador are in the bottom third of the rankings. Even more worrisome, governance indicators have declined in all four countries in recent years.

Figure 8. Governance Indicators in Central America[1/]



[1/] Panel A shows Central American country rankings on two of the World Bank Governance Indicators (100 is best possible score) and Panel B shows the percentage of firms that declare paying bribes, according to the World Bank Investment Climate Surveys.
Source: Governance indicators (2008) and Fajnzylber, Guasch and Lopez (2009).

Similarly, the World Bank's Investment Climate Surveys found that nearly one third of the companies surveyed in Nicaragua, Honduras, Guatemala and El Salvador said they had paid bribes to do business, a reality that lowers corporate productivity (Figure 8, Panel B). The exceptions to poor governance in Central America are Costa Rica and Panama. They tend to have governance indicators that rank in the upper half of the global sample and have the lowest percentage of companies reporting that they paid bribes. Still, as noted above, their citizens and businesses are also concerned with the upward trends in crime and violence and with how a significant increase could affect their countries' institutions.

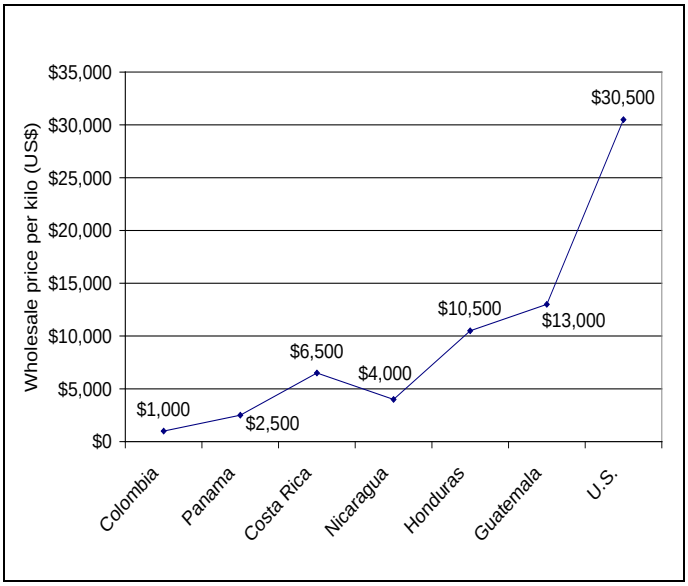
III. THE DRIVERS OF CRIME

This report analyzes the key drivers of crime and violence in Central America: drug trafficking, youth violence and gangs, and the widespread availability of firearms. Drug trafficking stokes violence in several ways, including fighting between and within trafficking organizations, and fighting between traffickers and law enforcement officials, adding to the availability of firearms and weakening the criminal justice system by diverting judicial resources or corrupting the criminal justice system itself. Most perpetrators and victims of crime and violence are young people, mainly young men. The third main contributing factor to criminal violence in the region is the legacy of armed conflict and the widespread availability of firearms.

A detailed analysis of these factors is presented below.

III.1 Drug trafficking

Figure 9. Price of Cocaine along Atlantic Coast



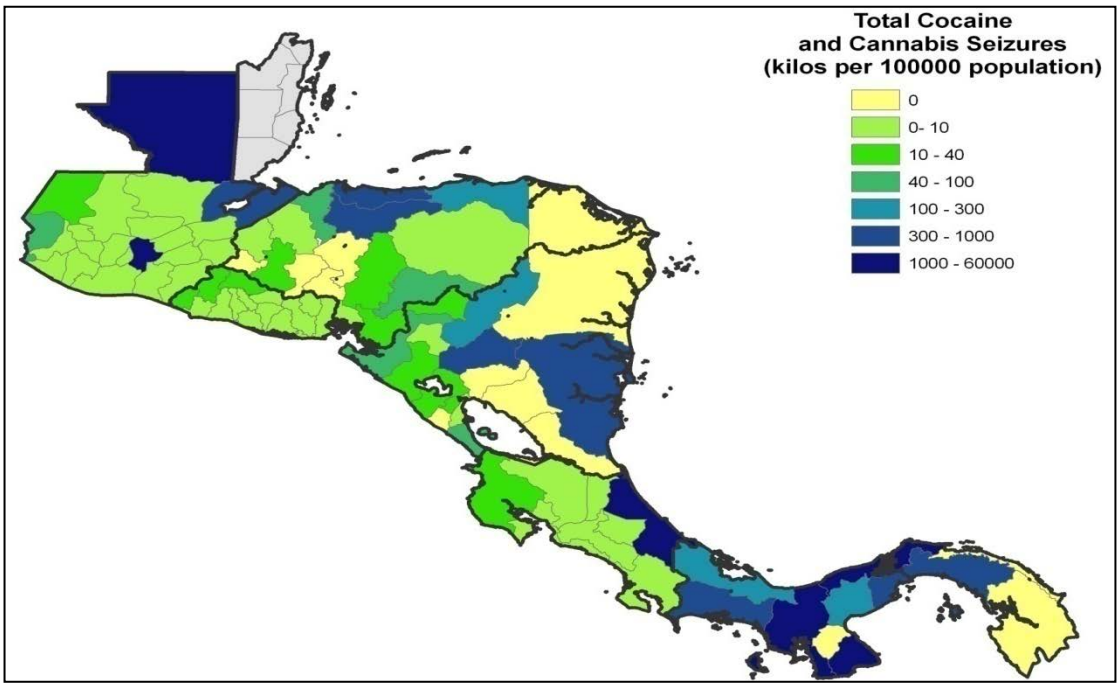
Central America is a pivotal transportation route for drugs bound for the United States. Although this traffic includes some marijuana and heroin produced in the region, cocaine shipped from South America is the dominant commodity. The United States Government estimates that 90 percent of all cocaine entering the US (approximately 560 metric tons in 2007) comes through the Mexico–Central America corridor. Official seizure figures show that 72 metric tons (13 percent) were intercepted in Central America. According to studies by the United Nations Office on Drugs and Crime (UNODC), the dominance of the Central American transit corridor is a phenomenon of the last two decades. Until the early to mid-1990s, most cocaine was shipped through the Caribbean until greater law enforcement interdiction in the Caribbean and the rise of the Mexican drug cartels drove traffickers to the Central America–Mexico route (UNODC 2008).

The wholesale value of cocaine as it moves north along the Atlantic coast route between Colombia and the United States offers a lesson in the economics of the drug trade. Figure 9 shows the wholesale prices of cocaine in the Central America corridor. It shows how the cost of a newly minted kilo of cocaine begins at approximately US$1,000 on the Caribbean coast of Colombia; the cost rises sharply in value as the cocaine passes through Panama, Costa Rica, Nicaragua and Honduras, reaching US$100,000. For Central America, the money at stake in this trade is enormous. The 560 metric tons of cocaine shipped through the region is equivalent to 14 grams for each of the 40 million people in Central America—an amount that carries a street value in the United States of about US$2,300[2] or more than half the US$4,200 estimated 2009 per capita GDP of Honduras. Given such figures, the resources of traffickers are massive. The value added to cocaine as it moves through the region is roughly 20 times Panama's and Guatemala's combined 2007 defense budgets of US$364 million. It also dwarfs (by more than 100 times) the relatively small US$65 million allocated by the United States under the Mérida Initiative to assist interdiction efforts by Central American nations.

Figure 10 shows the regional drug trafficking patterns, measured by the volume of drug seizures (cocaine plus cannabis) measured in kilos per 100,000 people. Seizures are not an ideal measure because the volume of seizures is as much a function of law enforcement efficiency as the volume of drugs trafficked. However, high volumes of seizures in a particular area are at the very least an indicator of high-level trafficking. The map below shows substantial variation both across and within countries in terms of exposure to drug traffic. Panama stands out from the rest due both to its proximity to Colombia and to its role as the point of entry to Central America. Within countries, seizures are generally greater closer to the coasts.

[2] This calculation is based on the US Drug Enforcement Agency's report which indicated that the retail price of cocaine in June 2007 was US$166.90/gram.

Figure 10. Intensity of Drug Trafficking



Source: Cuevas and Demombynes (2009)

Anecdotal evidence indicates that drug use is prevalent among certain populations and in areas where drug traffickers employ locals and pay them with drugs. However, surveys of drug use among secondary school students—clearly a limited group that is not representative of the overall population—find very low levels of drug use in Central America. Still, this does not prevent one of the most pervasive by-products of the drug-trafficking industry: violence.

Although there is little evidence specific to Central America on the links between drugs and violence, there is a substantial body of literature on the issue itself. Goldstein's influential formulation (1985) cites three possible ways in which illicit drugs can generate violence: (i) violence triggered by the effects of a drug on the user; (ii) violence undertaken to generate money to purchase drugs (economic–compulsive); and (iii) violence associated with disputes over drug territory, drug debts and other issues related to the drug trade (systemic).

According to MacCoun, Kilmer, and Reuter's review (2003), the "prevailing view about psychopharmacological...violence is that it is rare and attributable mostly to alcohol rather than illicit drugs." The same review also concludes that, with the exception of heroin addicts, "economic–compulsive criminality is relatively rare." That leaves only the third category—systemic violence associated with the business of drugs—as the main explanation for the drugs–violence connection. Both psychopharmacological and economic–compulsive connections are associated with drug *consumption*, while systemic links are tied chiefly to *trafficking*. Given the lack of any evidence that drug consumption has jumped in Central America as the region has become one of the world's major drug transport corridors, these systemic links are almost certainly behind the drugs–violence connection.

Systemic ties between drugs and violence fall into a number of subcategories.

- **Between trafficking organizations.** Drug traffickers have no access to the courts or other legal mechanisms. They cannot use the legal system to adjudicate commercial disputes such as

nonpayment of debts. They cannot sue for product liability, nor can sellers use the courts to enforce payment. Rival groups cannot use advertising to compete for market share and thus they wage violent turf battles instead. Because of all this, disagreements between drug traffickers are more likely to be resolved with violence. It seems likely that at least a portion of the murders in Central America are linked to such disagreements because so much of the region's trafficking involves the transfer of narcotics between Colombian and Mexican organizations.

- **Within drug trafficking organizations.** Because they are black-market organizations, drug cartels do not establish formal structures within the law. For example, they cannot report employees for misuse of company funds or property without risking prosecution themselves. Consequently, power relationships are by nature informal. Within such a system, violence is often the disciplinary tool of choice for organization leaders and can also be a path to upward mobility within the organization. Although it is extremely difficult to gauge, we suggest that this accounts for at least some of the homicides in the region.

- **Diversion of criminal justice resources or corruption of the criminal justice system itself.** Many researchers have noted that, even in a perfectly functioning criminal justice system, drug trafficking can indirectly increase violence if criminal justice resources are diverted to anti-drug efforts in a way that reduces the system's ability to handle non-drug crime. In countries hard hit by drug trafficking, the damage can be more severe. Where drug trafficking corrupts the criminal justice system by buying off senior government officials, police, judges and prosecutors, the system's ability to effectively handle non-drug crime can be crippled, leading to higher levels of crime and violence not associated with drugs. Furthermore, traffickers who have already corrupted the justice system through payoffs or threats to the authorities so they no longer fear prosecution may be more likely to use violence to settle disputes unrelated to trafficking. Although direct evidence is not available, we believe this channel accounts for a large portion of the drugs–violence connection in the region. There is evidence that corruption is a significant problem in the police and criminal justice systems of El Salvador, Guatemala and Honduras, and has undoubtedly restricted the authorities' ability to confront violence. The establishment of the International Commission against Impunity in Guatemala (*Comisión Internacional Contra la Impunidad en Guatemala*, CICIG) reflects the inability of regular state authorities to handle investigations against powerful interests entrenched in government. In a study conducted on public insecurity in Central America and Mexico, as part of the Americas Barometer Insights Series 2009 (Cruz 2009), the perception that local police are involved in crime (47.7 percent of respondents believed they were) appeared as the third most important contributor to feelings of insecurity, after drug trafficking and the presence of gangs.

- **The spread of guns.** If trafficking brings more firearms or heavier weapons into an area, their availability can facilitate violence, whether or not that violence is related to the drug trade. Research in the United States has suggested that violence was prevalent around the period of the US crack epidemic because the trade fueled demand for firearms (Blumstein 2000; Blumstein and Cork 1996; Cork 1999). The Latin American Commission on Drugs and Democracy highlighted this linkage: "The relationship between homicide, firearms, and drug commerce is central. Drugs finance the purchase of firearms, which sustain gang wars for control of territories and trafficking."

- **Enforcement of prohibition.** Enforcement of anti-drug laws involves arresting people, seizing drugs, and conducting other activities that carry with them the risk of a violent confrontation between law enforcement agents and suspected drug law violators.

III.2 Youth violence and gangs

Youth violence is a critical concern in Central America, especially the problem of youth gangs, which are perceived as a main driver of violent crime in the region. However, youth violence extends beyond youth gangs alone. Although gangs have been blamed for a range of violent crimes, there has been little empirical analysis of gangs, and reliable data on the role of youth gangs in the narcotics trade is scarce. While the number of deportees in Central America has skyrocketed since 2002, evidence to tie criminal deportees with youth gangs is scant, suggesting a weaker link than generally portrayed.

Youth, mainly young men, comprise the bulk of both victims and perpetrators of violence in Central America. Data from Nicaragua (2006) show that nearly half of those arrested in connection with homicide were between the ages of 15 and 25. In El Salvador (2000), positively identified perpetrators of violent crimes were mostly young men with a peak age of 23. Young men are also the principal victims of homicides: in all six Central American countries, about 30 percent of all homicide victims were males between the ages of 15 and 34.

The two major gangs in Central America, the Mara Salvatrucha (MS13) and 18th Street, have their roots in the US. Beginning in the early 1980s, nearly a million Central Americans fled to the US to escape the violence and hardship of civil conflict in the region. Living in poverty and marginalized by other groups, a small percentage became involved with gangs. Some joined 18th Street, a primarily Mexican gang established many years prior to the wave of Central American immigration, while others formed MS13. During the mid-1990s, many Central Americans, including some gang members, were deported to their countries of birth, where some became involved in criminal activity and replicated the 18th Street and MS13 gangs. Over time, high-profile acts of violence brought gangs into the public view. Governments responded by implementing a variety of *mano dura* policies that emphasized repression and law enforcement and minimized prevention, rehabilitation and social reintegration of gang members.

Table 4. Estimates of Gang Membership by Country

Country	Gang Members	Number of Gangs
Honduras	36,000	112
Guatemala	14,000	434
El Salvador	10,500	4
Nicaragua	4,500	268
Costa Rica	2,660	6
Panama	1,385	94
Belize	100	2
Total	69,145	920

Source: Central American and Caribbean Commission of Police Chiefs

However, reliable analysis of the gang phenomenon has been hampered by ever-changing, often arbitrary, definitions of "gang," "gang member," and "gang crime." Given this confusion, it is not surprising that there is little agreement on how many gang members there are in the region. Estimates range from about 10,000 to over 300,000 members, with the most commonly accepted estimates at around 70,000 (Table 4). Of that total, the vast majority are in El Salvador, Guatemala and Honduras.

Data on gangs as instigators of violence in Central America also vary wildly, often depending on the country and the institution collecting the data. This all underlines the need for improved data collection on gangs, not only within but also across countries. However, where reliable information does exist, it casts doubt on the perception that youth gangs are responsible for the majority of crime and violence. There are also are a number of case studies that can be used to gain a better understanding of the role played by gangs.

Table 5, which includes data collected by El Salvador's Institute of Legal Medicine, depicts the established motives for homicides in El Salvador between 2003 and 2006, during which no more than 13.4 percent of total homicides were attributed to gangs. Among homicides for which motives could be

identified, gang crime represented a minority. Many murders were classified simply as "common crime," while nearly 60 percent of homicides recorded in 2005 were listed as having "unknown motives." Collectively, this suggests the need to qualify claims that gang-related crimes were a minority among total crimes, given the possibility that at least some of those crimes with no known motive could be gang-related. About one quarter of those crimes recorded in 2006 with known motives were gang related.

Table 5: Motives for Murder in El Salvador

Motive	2003	2004	2005	2006
Common crime	57.4%	33.7%	23.3%	18.2%
Gang Crime	*8%*	*9.9%*	*13.4%*	*10.7%*
Unknown	28.9%	48.4%	59%	59.1%
Others	5.7%	8%	4.3%	12%

Source: Institute of Legal Medicine, El Salvador

Guatemala is another case in which data paint a mixed picture on the overall contribution of gangs to violent crimes. For example, during a month in which the number of homicides was especially high, police statistics attributed only 14 percent of them to gangs. Moreover, the majority of murders during that period occurred in areas where gang presence was minimal, but where the presence of organized crime and drug trafficking was high (Lara 2006). Additional data from Guatemala on the number of gang members in prison and why they were there, suggest that gang members might not be as violent as the public believes. Data from the Guatemalan penitentiary system indicate that gang members accounted for 5.8 percent of the total number of arrestees in June 2006, a figure suggesting that others are behind the high levels of violence in Guatemala. Furthermore, 2004 data from the Guatemalan National Police showed that drugs were the primary reason for arrests of gang members (23 percent), followed by robbery (20.4 percent). Homicides caused gang member detentions in only 1.8 percent of cases.

However, other data from Guatemala suggest that gangs might play a larger role in violence. A study conducted by the Office of the Attorney General for Human Rights *(Procuradoría de Derechos Humanos)*, which analyzed the causes of death for youth aged 25 and under for the period of July 2002 through August 2003, found that 27.4 percent of these deaths were caused by gang-member attacks on non-gang youths (Ranum IUDOP[3]). The study showed that in total, gangs were responsible for about one third of all deaths covered by the research, including those between gang members and from gang members leaving their gang. Although deaths caused by gangs accounted for 27.4 percent of all deaths of those under age 25, common criminal acts accounted for a marginally higher percentage of deaths of this age group: 28.5 percent (Ranum IUDOP). Again, data are ambiguous about gang involvement in these criminal acts, further reducing clarity on the issue.

Honduras is a third country with information on the role of gangs. Data collected by Casa Alianza (an international NGO dedicated to the rehabilitation of children in Mexico, Nicaragua and Honduras) in order to track youth homicides suggest that gangs were responsible for about 15 percent of Honduran murders in 2006 (Casa Alianza 2006). Honduran police data also showed that less than 5 percent of all crime is committed by people under age 18, a demographic group comprising a significant share of overall gang membership. According to an exhaustive international study, Save the Children UK found that 90 percent of children in legal trouble are involved in property offenses, not person-to-person crimes.

Furthermore, reliable data on youth gangs in the narcotics trade are virtually nonexistent. Still, there is a perception that gangs have become increasingly involved in drug trafficking and dealing over the past

[3] Instituto Universitario de Opinión Pública de la Universidad Centroamericana (University Institute for Public Opinion of the Central American University).

decade. It is believed that gangs provide local security or conduct small-time street selling for Mexican and Colombian cartels. Gangs do not appear to be involved in the large-scale movement of drugs, although some reports suggest that leaders of local drug organizations are often ex-gang members who have "graduated." There are also suggestions that involvement in drug trafficking has made gangs more violent.

Qualitative studies of Central American gangs suggest that they are mainly involved in small-scale, localized crime and delinquency, such as petty theft and muggings, which are typically carried out by individual gang members. However, there is evidence that the *maras* in El Salvador, Guatemala and Honduras are involved in the extortion of protection money from local businesses and from buses and taxis as they go through gang-controlled territories. Such practices create a climate of fear in their communities. Gangs have also been involved in a limited number of cases of extreme violence. While such incidents do not necessarily raise homicide rates in a dramatic manner, they do help strengthen the stereotype and generate fear (Muggah and Stevenson 2008).

Despite the mix of data presented above, the overall perception among Central American citizens remains that youth gang members are primarily responsible for crime. In Central American capitals and their surrounding areas in 2008, between 16 and 36 percent of the population felt that their neighborhoods were greatly affected by gangs (Table 6). Similarly, in the World Bank's 2003 Enterprise Surveys, business managers estimated that gangs were responsible for about a quarter of violent crime affecting their businesses. In El Salvador, the figure was 27 percent, in Honduras 28 percent, and Nicaragua 25 percent. Only in Guatemala was the figure substantially higher at 67 percent. These survey results showed that in El Salvador, small businesses felt especially vulnerable to *maras*, with gangs believed to be responsible for 46 percent of crimes against micro-enterprises, 37 percent of crimes against small firms, 19 percent of crimes against medium-size firms, and 18 percent of crimes against large firms.

Table 6: Percentage of Residents who Say their Neighborhoods are Greatly Affected by Gangs[1/]

	Area Size				
Country	**Capital City**	**Large**	**Medium**	**Small**	**Rural**
Guatemala	0.24	0.22	0.10	--	0.04
El Salvador	0.21	0.08	0.08	0.04	0.05
Honduras	0.21	0.19	0.10	0.03	0.03
Nicaragua	0.36	0.14	0.08	0.03	0.04
Costa Rica	0.16	--	--	0.11	0.06
Panama	0.16	0.23	0.05	0.06	0.04

[1/] The table reports the share of residents who say their neighborhoods are greatly affected by gangs, according to victimization surveys.
Source: Bank staff analysis of data from the 2008 Latin America Public Opinion Project surveys.

To design appropriate policies and interventions to address youth and gang violence, it is necessary to understand why certain youth become involved in criminal and violent behavior—actions that sometimes lead to gang membership—in the first place. In order to do this, we utilized the Ecological Risk Model, which identifies four levels of factors that can influence whether or not a young person becomes engaged in criminal and violent behavior: *societal, community, relationship/interpersonal, and individual.* A summary of these risk factors for Central America is presented in Box 1.

Box 1: Central American Risk Factors for Youth and Gang Violence

Societal

- **Culture of violence:** A system of norms, values, and attitudes that enables, fosters and legitimizes the use of violence in interpersonal relationships (i.e., physical discipline of children, violence against women, etc.).
- **Poverty and income inequality**: Although correlated with risky behaviors such as dropping out of school (a risk factor for youth violence), no causal relationship exists between poverty and violence. However, relative deprivation in LAC is correlated with higher homicide rates.
- **Rapid and uncontrolled urbanization**: Patterns of victimization in LAC have shown that cities whose population had experienced growth spurts also experienced a greater degree of violence as a result of disorganization and poor urban planning. Deteriorated public spaces have also been associated with gang presence and victimization of residents.
- **Youth unemployment and inactivity:** Youth unemployment is associated with a higher probability of youth engaging in risky behavior, including crime and violence. Youth inactivity rates (youth who are not in school or are unemployed) are often much higher than youth unemployment rates.
- **Migration:** Evidence shows that school-going youth who feel close to their parents have lower substance abuse rates and participate less in violence and risky sexual activity. It has also been demonstrated that children who feel close to their families are about 10 percent less likely to engage in risk-taking behavior such as violence, smoking, alcohol and drug abuse, and risky sexual activity. This is particularly relevant given the trend in the last decade of one or both parents migrating to the US.
- **Drug trafficking:** Drugs and violence are linked in three main ways: (i) the altered state generated by drug use can produce violent behavior and a loss of control; (ii) drug abuse generates physical and psychological dependence, which often leads young people to become involved in criminal activities as a means of supporting their drug addictions; and (iii) gang member participation in drug networks and organized crime.

Community

- **Low secondary school enrollment, completion and attainment rates:** Juvenile delinquency is correlated with lower levels of education due to the low cost that engaging in criminal behavior has for these young people, the absence of positive social influences from mentors and peers, and from delinquency being the best income alternative for a young person without any marketable skills.
- **School violence:** While schools have been proven to serve as an important protective factor in the lives of at-risk youth, they can also teach violence through corporal punishment by teachers and through violence between students.
- **Availability of firearms:** The number of firearms in circulation has a direct effect on the ability of those at risk of violence to obtain guns, whether from legitimate sources or illegal firearms sales.

Relationship/Interpersonal

- **Household poverty:** Poverty within a household can cause one or both parents to migrate for better job opportunities or to be absent from the home for many hours, or can drive the younger family members to bring additional income into the home, causing some youth to engage in the illegal drug trade.
- **Dysfunctional families:** Children and youth who experience or observe violent behavior in the home are more likely to engage in violent behavior themselves.
- **Peers who are gang members:** Studies show that relationships established with peers who are gang members or juveniles with criminal records typically have a significant impact on a young person's decision to join a gang. Unlike the families of these young persons, peers can offer solidarity, respect, and sometimes even access to money.

Individual

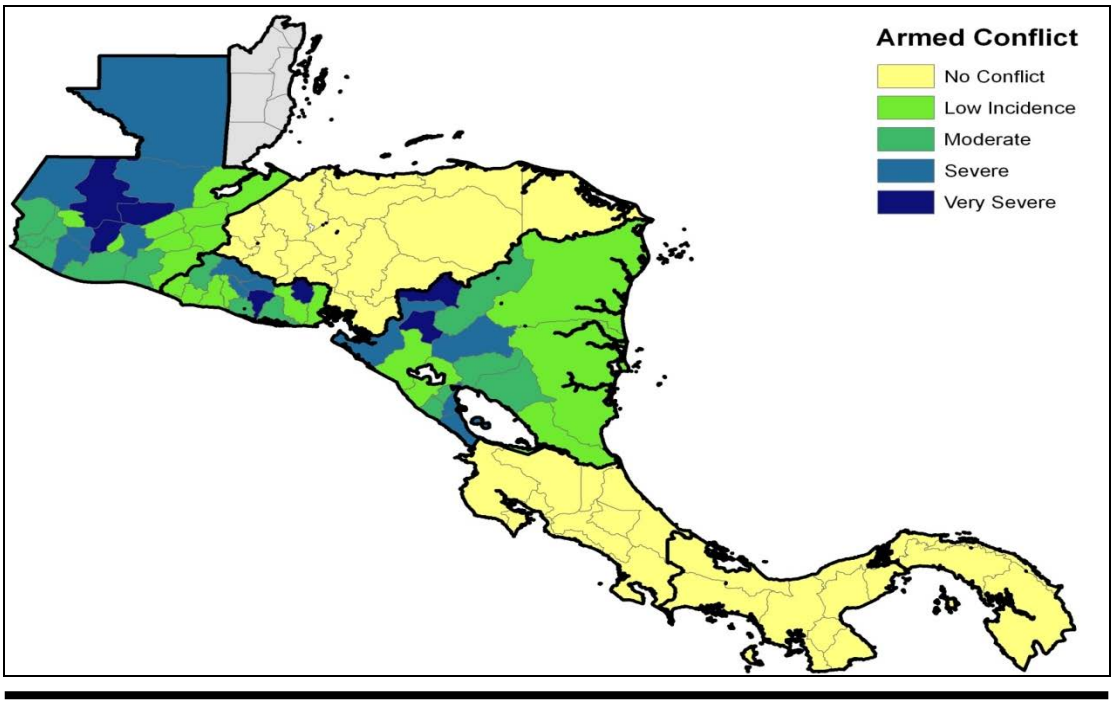
- **Alcohol abuse:** Alcohol can increase the likelihood of youth violence by reducing self-control and the ability to process incoming information and assess risk, by increasing emotional liability and impulsiveness, and by increasing the likelihood that a young person will resort to violence.
- **Lack of identity:** Many young people join gangs due to the absence of positive role models both at home and in their communities, and to being socially excluded (from education and employment opportunities).

III.3 The legacy of the region's wars and the availability of firearms

An explanation sometimes heard for the extraordinary levels of violence in Central America has to do with the legacy of the region's wars. Although the empirical analysis presented in the next section shows no specific evidence for this argument, the wars (along with other factors such as drug trafficking) may have played a role in the widespread availability of firearms, which is a well-known risk factor for crime and violence.

Since the 1960s, large parts of Central America have been periodically engulfed in armed conflict (Figure 11). In Guatemala, communities in the north and northwest parts of the country were more exposed to violence: areas such as Quiche, Chimaltenango and Baja Verapaz. In El Salvador, the central and northern zones, including Chalatenango, Cuscatlán, were the hardest hit. Zones in the northwest of Nicaragua, such as Nueva Segovia, were the most affected by the war with the *contras*. It is estimated that approximately 200,000 people died as a direct consequence of the Guatemalan civil war, which lasted from the early 1960s through 1996, with the most severe period beginning in the early 1980s. In El Salvador, the conflict unfolded from 1980 to 1992, taking the lives of around 75,000 people. The Nicaraguan conflict, which occurred during the 1980s, claimed 38,000 lives and is estimated to have caused about US$17 billion in lost infrastructure and a death toll of 38,000 people.

Figure 11. Intensity of Armed Conflict in Central America



Source: Cuevas and Demombynes (2009)

There are two main hypotheses on how the region's conflicts may be contributing to higher crime levels. According the first hypothesis, war may have created a culture of violence among the population, breeding a tendency to rely on violence to fix problems. Beyond this, it may be that victims tend to retaliate in kind or take justice into their own hands. For example, in Guatemala it is not uncommon to hear of a suspected criminal being caught *in flagrante delicto* (i.e., "in the act") and then being lynched by a mob, sometimes even for petty crime.

The second hypothesis is that recent armed conflict may contribute to higher violence levels through the transfer of firearms and munitions into the region. In 2007, about 4.5 million legal and illegal small firearms were circulating in Central America (Table 7); the great majority of them are illegally owned. For example, Guatemala reported just over 147,000 legally owned civilian firearms but estimated a total number of nearly 2 million in circulation. Similarly, Honduras counted about 133,000 registered firearms, but the number of total firearms actually in the country is estimated at close to 600,000. In Central America as a whole, there is estimated to be about one weapon for every ten people, ranging from a low of 2.8 per 100 people in Costa Rica to nearly 16 per 100 people in Guatemala.

Certainly not all firearms in circulation can be traced back to the armed conflict. Between 2000 and 2006—several years after the last of Central America's civil wars had ended—arms imports increased in all six Central American countries. In Guatemala, for example, the value of imported firearms nearly tripled from about US$3 million to US$8 million during this period. Costa Rica experienced a similar jump from under US$1 million to more than US$3 million. Firearms imported to the region included revolvers, pistols, hunting rifles, shotguns, AK-47 assault rifles, M-16s, rocket launchers, hand grenades and semi-automatic rifles, according to official customs data. A thriving illegal trade in firearms associated with the drug trade is believed to have fueled at least part of this increase. As drugs flow north into Mexico and the United States, firearms flow south.

Table 7: Firearms Owned by Civilians in Central America, 2007

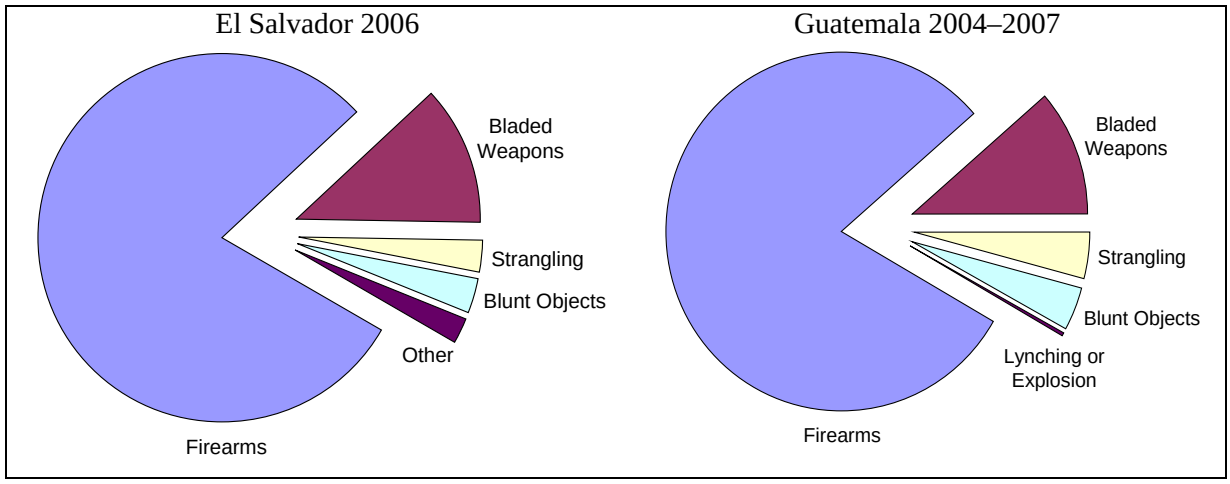
Country	Registered	Estimated	Guns per 100 people
Costa Rica	43,241	115,000	2.8
El Salvador	198,000	450,000	7.0
Guatemala	147,581	1,950,000	15.8
Honduras	133,185	450,000	6.2
Nicaragua	NA	385,000	7.0
Panama	96,600	525,600	5.4

Sources: Karp 2008; Arias Foundation 2005.

Recent spikes of violence in the region have been accompanied by the appearance of more powerful firearms, resulting in higher mortality levels. Indeed, firearms are used in most murders in Central America. Figure 12 shows the breakdown by weapon linked to murders in Guatemala and El Salvador. The patterns are remarkably similar: in both countries, firearms were used for 80 percent of killings.

A 2008 victimization survey in Guatemala conducted by the Geneva-based Small Arms Survey spotlighted a range of similar trends. Firearms were overwhelmingly present in all reported incidents of violent crime. In addition, 31 percent of those participating in the survey said they owned some kind of firearm; a third of them said they had handguns. Of those who did not own a gun, 16 percent said they would like to own one.

Figure 12. Weapons Used for Homicide



Sources: Institute of Legal Medicine for El Salvador; National Police for Guatemala

III.4 Assessing the relative importance of alternative explanations

Up to this point we have identified factors that drive crime in Central America but have made no attempt to assess the relative importance of each. This information is critical to shape effective policy responses or, at the very least, to prioritize interventions on the basis of potential impact.

A recent study by Cuevas and Demombynes (2009) constructed an econometric model of crime levels using data that included: (i) whether the particular region was a drug-trafficking warm- or hotspot[4] on the basis of the volume of drug seizures (cocaine plus cannabis) measured in kilos per 100,000 population; (ii) census information on two demographic variables likely to be risk factors for high levels of youth violence: the share of young men and women in the population and the share of female-headed households; (iii) a qualitative variable on the level of past armed conflict within each country, classifying areas by low, moderate, severe and very severe incidence; and (iv) a set of controls that included years of education, income per capita, inequality indexes, employment statistics, and urban population. Detailed results of the regressions appear in Volume II of this report, but the main findings include the following:

- Drug trafficking is an important driver of homicide rates. Within any one country, controlling for other factors, drug-trafficking hotspots have murder rates more than double those in areas of low trafficking intensity.

- Areas at high risk for youth violence based on demographic characteristics experience higher levels of murder. Specifically, areas with a larger percentage of young men between the ages of 15 and 34 have higher homicide rates. Areas with large numbers of female-headed households, in which young men are less likely to be monitored, also suffer higher murder rates.

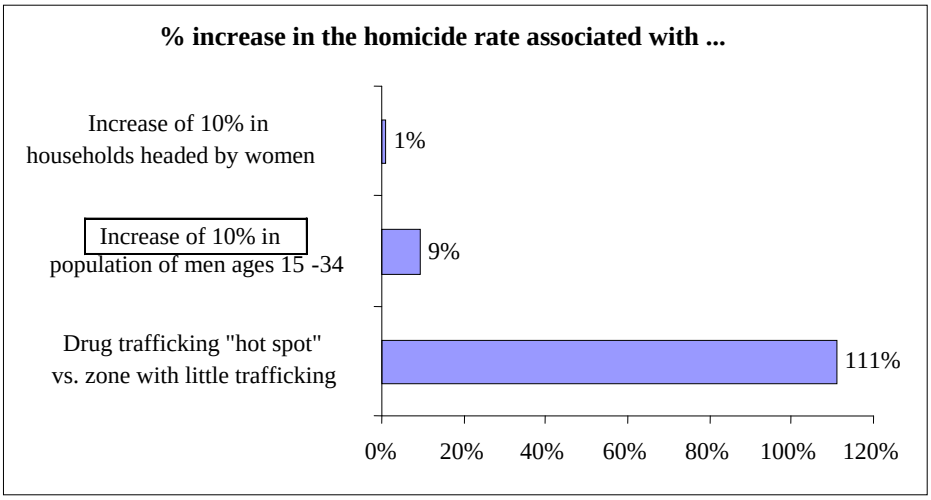
- There is no significant link within countries between the incidence of past armed conflict and current homicide rates. Areas that were hotspots for armed conflict in the past are not

[4] The cutoffs were established by examining the distributions and noting that there is a certain discontinuity around 100. Under this approach, 18 percent of the localities are in the first category of no seizures, 63 percent in the second (between 0 and 100 kilos per 100,000 population), and 19 percent in the third (above 100 kilos).

experiencing higher levels of violence today. Some experts argue that the effects of past armed conflicts are nationwide, not location specific, noting, for example, that civil war damaged the capacity of criminal justice institutions in the country as a whole or generated a large stock of guns that today are bought and sold across the country. However, broader evidence does not suggest that the region's high levels of violence are principally a legacy of armed conflict. Fragmentary data for Guatemala, El Salvador and Nicaragua from the late 1960s—well before armed conflict and political violence had reached intense levels—show that murder rates were already high then, exceeding 20 per 100,000. Cruz (2003) also shows that El Salvador experienced more than 900 killings in 1959, equal to a homicide rate of nearly 30 per 100,000.

All this points toward a simple conclusion: drug trafficking is quantitatively far more important than the other risk factors for violence identified in the study. Figure 13 illustrates this. It simulates the potential impact of an increase in the proxy values of crime determinants labeled significant in Table 8. For example, a 10 percent increase in female-headed households would lead to a 1 percent increase in the homicide rate. Similarly, a 10 percent rise in the population share of 15- to 34-year-olds would lead to an increase in the homicide rate of about 9 percent. At the other extreme, a jump in narcotics trafficking large enough to make an area a drug traffic hotspot would produce a 111 percent increase in the homicide rate.

Figure 13: Key Risk Factors for Homicide in Central America



Source: Cuevas and Demombynes (2009).
Note: Figures shown are selected coefficients from regressions of log homicide rates at the subnational level on explanatory variables. All coefficients shown are significant at the 5% level and are robust to specifications controlling for the other demographic characteristics, the incidence organized armed conflict, employment, education, income and urban/rural divisions.

IV. POLICY OPTIONS

The preceding section reviewed the main factors behind crime and violence in Central America. Due to the complexity of both the problem and its principal causes, it is not surprising that there is no magic bullet to end the crisis. In fact, a main conclusion of this report is that *no quick and easy fix* is ready to be implemented. Rather, our analysis tells us that the fight against violent crime in Central America is nothing less than a generational challenge. It is likely to be long lasting and will require policy makers to be inventive, courageous, diligent and, above all, determined. As the lessons of Colombia and Mexico have taught us, the costs of fighting crime can be huge when governments take on the drug trade. Despite

this risk, fighting crime is—and must remain—a crucial ingredient on the development agendas of Central American countries because the stakes are so high.

Successful crime-fighting strategies elsewhere offer some hints for Central America. One common thread of these earlier successes is action across a broad front. This demands an inclusive coalition of agencies and individuals across governments as well as civil society. Law enforcement and prevention efforts, on their own, simply will not work. Mobilizing support for such an ambitious approach may require a national crime reduction plan, which some Central American countries already have but others do not. It also requires the establishment of a national crime coordinating body, possibly a high-level commission or council, with strong leadership and political backing at the highest levels. Although not easy to create, such a group is essential to coordinate different government branches and supervise ambitious collaboration across traditional bureaucratic fault lines. The criminal justice sector, including the judiciary, prosecutors, public defenders, police and prisons, must all be strengthened by executive branch initiatives on crime prevention, alternative dispute resolution, education, poverty reduction and youth development. National plans must also offer a way to involve civil society organizations, in which much of the expertise in violence prevention resides.

Another common denominator of successful interventions is that they begin with a clear-headed diagnosis of violence types and risk factors, and end with a careful evaluation of an intervention's potential impact that in turn helps shape future policy. In summary, successful strategies are anchored in facts and evidence. Good policy making to reduce crime and violence does not happen by accident. It flows from good analysis, hard work and the capacity to adapt strategies. With these elements in mind, we structure the alternatives available to policy makers along three broad lines of action: (i) prevention programs; (ii) criminal justice sector reform to improve the law enforcement strategy; and (iii) regional and international approaches.

Box 2. Crime and Violence Prevention Components in Bank-Financed Integrated Slum Upgrading Operations: Honduras Barrio–Ciudad Project

The World Bank is supporting local crime and violence prevention in Honduras through a specific project component of the Barrio–Ciudad Project. The component seeks to leverage the ongoing infrastructure and social investments and to mainstream crime prevention at the local level, in order to strengthen the overall project. In short, it combines urban renewal with a citizen security focus at the local level.

The component focuses squarely on the reduction of the high levels of homicide, youth violence and associated risk factors present in the participating *barrios* and municipalities. The synergies created between infrastructure provision, upgrading and situational prevention on the one hand, and community-based "social prevention" activities on the other hand, are especially important. The overall objective is a broad-based intervention at the neighborhood level that is closely coordinated with other donor, governmental and non-governmental programs in these neighborhoods that address crime and violence and their associated risk factors. The component has five parts:

- *Diagnostics*: Crime and violence mapping of micro areas using police statistics and, where possible, Geographic Information Systems (GIS); the victimization section of baseline surveys; and community-based and situational diagnostics.
- *Situational Prevention*: Measures, such as the Crime Prevention through Environmental Design (CPTED) methodology and urban renewal that reduce opportunities for particular crime and violence problems. This method is included in infrastructure work through the training of architects, engineers and other technical staff. It also includes the planning and installation of social infrastructure, such as community centers, playing fields and public lighting. This methodology is quite new in the LAC region but has been successfully piloted in countries such as Chile, Brazil and Colombia.
- *Social Prevention*: Support of immediate mitigation and conflict-resolution activities in addition to other preventive and capacity-enhancement interventions that have a medium- and long-term impact on levels of public safety. In particular, financial support for a menu of initiatives in four broad categories tailored to

the specific needs of each community: (1) mediation and conflict resolution; (2) alternative livelihoods and skills development; (3) family support services; and (4) youth education and recreation.

- *Community and Municipal Liaison Officers:* The role of these technical experts in community organization, crime and violence prevention, and urban development is to strengthen municipal capacity, and at the neighborhood level to carry out community-based diagnostics; formulate participatory community and municipal safety plans and strategies; liaise and coordinate with other relevant agencies and associations, in particular with Community Safety Councils and the police; coordinate closely with those designing infrastructure to ensure the integration of CPTED principles; identify and work with at-risk youth in the community; organize and mobilize the community around the concept of safety though community campaigns (e.g., community clean-up/painting days, community safety festival, etc.); and initiate additional projects such as a summer camp for at-risk youth.
- *Monitoring and Evaluation Component:* Evaluations of the components have been designed and will be carried out. Although evaluation data from these Bank-financed projects are not yet available, similar community-based integrated interventions have yielded dramatic results.

IV.1 Prevention programs

A broad menu of prevention programs is available to Central American policy makers. In practice, governments should seek to design an integrated, comprehensive, holistic and cross-sectoral prevention strategy. Specifically, programs should: (i) combine policies directed toward individual and community risks, but should reinforce them with policies to modify structural conditions that can lead to criminal and violent behavior, such as quality and coverage of education, job and training opportunities, as well as judicial and police reform; (ii) link with the community in which the young person lives; (iii) respond directly to the risk and protective factors present in the young person's life; (iv) be a joint effort between community assistance organizations and police; (v) incorporate the families of young people being targeted, because a strong family is proven to be one of the strongest shields against youth violence; and (vi) improve the socioeconomic situation of high-risk families.

Examples of programs on this front include:

Early childhood development (ECD) programs. Investing in ECD programs, particularly those targeted toward poor families, has been one of the most cost-effective ways to reduce risk behaviors among youth. Evidence from around the world shows that these programs, which traditionally include health care, nutrition supplementation, mental stimulation, educational activities, and parenting training, improve human capital outcomes over the long term, including educational achievement, health and nutrition, and also reduce risky behaviors, such as crime and violence, domestic abuse and substance abuse. The inclusion of effective parenting training (see next paragraph) in ECD programs has been singled out in evaluations as one of the most important factors in reducing youth violence.

Effective parenting programs. Parent training promotes positive, healthy and protective parent–child interactions that can reduce domestic violence, the extent to which young people associate with delinquent peers, alcohol and substance abuse, arrests, and school dropouts. It also reduces tobacco, alcohol and drug use, anger, alienation, aggression, delinquency and misconduct. The most consistent findings in the prevention of youth violence and delinquency stress the value of family interventions from birth through adolescence. For example, nurse home-visitation programs have been shown to improve parenting skills and reduce child aggression. Programs for older children and their families that help parents reduce negative parenting and coercive interactions have also been found to lower child aggression and delinquency. Another approach to family interventions includes teaching parenting skills to young people before they become parents. Creating effective parenting programs is a challenge in any society, but it is especially difficult in much of Central America, where economic stress and migration all

too often result in parental absenteeism. These realities must be acknowledged and programs must be adjusted to take these factors into account. Precisely because the family is under such stress in Central America, parenting programs merit added attention and resources.

Programs to increase secondary school access and completion. Policies and programs to encourage secondary school enrollment and completion are critical. Evidence shows that secondary school completion is one of the most important preventive investments a country can make in at-risk youth, both in terms of improving their education and in reducing nearly all kinds of risky behavior, including crime and violence. School failure and dropout are risk factors for youth violence and delinquency. Young people who stay connected to school are less likely to exhibit disruptive and violent behavior, carry or use a weapon, or experiment with illegal substances. From the perspective of the youth crime and violence problem, it is important to address the considerable gap remaining in secondary education coverage for poor urban communities. It is also critical to ensure high-quality teaching and curricular relevance, including programs to develop generic life skills and strengthen the connection between school and work. Other measures include improving school quality and relevance, increasing parental involvement, and offering incentives to families of at-risk youth to send them to school, possibly through conditional cash transfer programs either to the family or the youths themselves.

School-based violence prevention programs: Evidence shows that violence prevention programs are highly effective ways to reduce risky behavior. Schools are ideal places to socialize young people and develop their resistance to crime and violence. The school curriculum throughout the primary and secondary cycles should promote the development of responsible citizens, offer anti-violence and risk-prevention programs as well as alternative mechanisms for the peaceful resolution of common conflicts. Children should be taught to respect themselves, to understand risks that flow from their own behavior or that of others, to identify and resist gangs and bullying, and to understand the rationale for social norms such as respect for others' lives and property. School-based violence prevention programs are so successful because they can target young people according to their ages, experiences and culture.

Development of specialized agencies for dealing with young offenders, with a focus on rehabilitation and providing second chances to young offenders. Higher recidivism rates are associated with harsh prison conditions as well as with incarcerating young people alongside adults. For this reason, most countries have special courts and probation agencies that provide second-chance opportunities to juvenile delinquents before incarcerating them. A key element of this approach is the introduction of graduated sentences for first-time and minor repeat offenders. These sentences typically include two components: (i) a community accountability board composed of juvenile court personnel, probation officers and/or citizen volunteers, who meet with offenders to assign penalties for their offenses and monitor and enforce a so-called diversion agreement that keeps a young offender out of court and out of jail; and (ii) graduated consequences if a youth fails to comply with the requirements of the community accountability board. These graduated sanctions must be designed to fit a variety of offenses and should include a range of alternatives, including incarceration.

Reduction in the availability and use of firearms. Youth crime and violence are linked with rises in lethal crimes and violence committed with firearms. When more firearms are in circulation, it becomes easier to obtain them illegally, by-passing restrictive legal requirements. Limiting the supply of firearms reduces the number of deaths and injuries caused by them. This can be done through laws against gun trafficking coupled with targeted enforcement to reduce the quantity of firearms. Policies and programs that involve aggressive patrolling in high-crime neighborhoods to arrest youth who carry guns illegally have shown some success in the US.

Safe neighborhood programs or place-specific prevention: Safe neighborhood programs can modify the physical environments in which young people act and interact in ways that are likely to prevent young

people from engaging in risky behavior, particularly in "hotspot" neighborhoods. Studies have shown that safe neighborhood programs increase the public's perception of safety and the image of police, both of which are essential to address the underlying causes of youth violence (see, for example, Buvinic, Morrison and Orlando 2003). These programs can include the installation of street lighting, the removal of high fences that provide cover to criminals, and the rehabilitation and re-appropriation of community public spaces. Ideally, they are combined with targeted social prevention activities as well as community policing programs, such as those listed below. A study of gangs and social capital conducted in El Salvador, for example, showed that gangs thrive in neighborhoods and communities where poverty has eroded social services or eliminated them completely, where the streets are in poor condition, and where public and community infrastructure is run-down, dirty or abandoned.

Municipal ordinances to increase the price and reduce the availability and use of alcohol. Policies that reduce young people's access to alcohol can help keep them from breaking the law. For example, alcohol is a known contributing factor to trouble, including homicide and suicide, for young people in the Latin American region. Policy options include increasing alcohol taxes, tightening sales restrictions, including controls on hours of operation, density, and location of sales outlets, as well as imposing a minimum age for purchasing alcohol. A key factor here, however, is the credibility of the threat of sanctions on merchants who violate regulations. The most effective sanctions include progressive penalties that begin with warnings and escalate to fines, the firing of individuals, the closing of establishments, and the imprisonment of violators. Tax increases and sales restrictions should be implemented at the same time in order to have the maximum possible impact on youth alcohol consumption.

Documentation campaigns in marginal communities. Citizen documentation campaigns are an effective way to reduce social exclusion. Many gang members belong to an "underclass" of undocumented individuals who are effectively excluded from a wide range of social rights. A birth certificate is a recognition by the state of a child's membership in society. When citizens can prove their identity, they become entitled to basic services and rights that underpin their ability to remain healthy, receive an education, stay safe and earn a living.

Box 3. APREDE: Tackling gangs through community interventions

The Association for Crime Prevention *(Asociación para la Prevención del Delito*, APREDE) is an independent NGO working to prevent gang involvement in violent areas of Guatemala City. The group's primary activities include:

a) Popular education. Youth who cannot take classes in a traditional school can study in APREDE and be certified by the NGO CEIBA (validated by the Ministry of Education);
b) Life-skills development through sports and arts;
c) Skills training in information technology, baking, graphic design, machine repair and maintenance, English as a second language, and management.
d) Psycho-social assistance to children and youth, using social workers from the University of San Carlos;
e) Job search support and follow-up through APREDE'S social workers;
f) Development of crime prevention strategies and campaigns through alliances with civil society, public and private sector organizations.

Source: Emilio Goubaud, Director of APREDE, November 2007

Additional policies that have not been as widely evaluated as those discussed above, but for which existing evidence suggests that they have a positive impact, include the following:
Remedial and second-chance education. Special attention needs to be given to children at risk of dropping out of school, either because they are doing poorly in class or are skipping classes, through

remedial classes and after-school homework support groups. For those who do drop out of formal education and face the prospect of a dead-end career and the temptation of crime, "second-chance programs" (often most effectively provided through NGOs) should be developed to offer the opportunity to achieve high-school equivalency, which increases their chances of entering the labor market and earning higher wages. Second-chance education can also provide many intangible benefits to young people, such as improved social and interaction skills, increased confidence, and self-esteem. Although there are few rigorous evaluations of these types of programs, the evidence that does exist suggests that they come with high rates of return and relatively low costs.

Comprehensive job training programs. Studies indicate that comprehensive job training programs help increase youth employment, particularly in developing countries. Research shows that a range of support is needed to teach at-risk youth how to behave in the workplace and help them move from being socially excluded to becoming active members of society. Comprehensive programs go beyond technical training to focus on developing a young person's skills as a worker by providing him or her with a wide range of support, including general skills, life skills, job search and placement assistance, and self-employment services.

Life-skills training. Knowledge of life skills reduces the risk of drug use and risky sexual behavior, improves anger management and academic performance, and enhances social judgment. In the US, young people who are given life-skills training in high school tend to be more productive and make smoother transitions into a job or higher education. In addition, schools can also be used to prevent school-based violence (i.e., between peers, teacher–student), help prevent domestic violence, and provide parenting training.

Youth-friendly spaces, mentoring and youth service programs. Some research has shown that the construction of community centers does not affect youth behavior, but that constructive youth activities which are *supervised* by a caring adult can have a positive impact on young people, helping them perform better in school and in life. On the other hand, young people who are not supervised during after-school hours are more likely to use alcohol, drugs and tobacco, and to engage in criminal and other risky behavior. They also do poorly in school or drop out of school completely. Mentoring programs that include the attention of a caring adult, can serve as strong protective factors for at-risk youth, particularly for those who lack positive adult role models in their homes. Studies have shown that young people who volunteer for youth service are half as less likely to abuse drugs and alcohol, to engage in delinquent behavior, or to drop out of school.

Box 4. Nicaragua's Citizen Security Program

This program focuses on four areas, based on a preventive approach and employing integrated, multisectoral and participatory initiatives that complement one another:

a) Institutional strengthening, especially of the Interior Ministry *(Ministerio de Gobernación,* MIGOB), the authority responsible for policies related to citizen security;
b) Integration and strengthening of juvenile violence prevention services, using a cross-sectoral prevention model at the municipal level;
c) Expansion and consolidation of the community policing program initiative;
d) A public information program to encourage inclusion of the topic within the social agenda and to educate the public on the need for values and standards in order to have social harmony;
e) Government implementing agency: MIGOB.

Source: Belikow, Juan, "Inventory of Crime and Violence Programs in Central America," 2009.

IV.2 Criminal justice reform

Effective criminal law enforcement is a key element in the region's strategy to fight crime. Evidence suggests that recent increases in crime and violence in the region have exacerbated some existing institutional weaknesses, from the lack of inter-institutional coordination to overlapping functions, and have created others (e.g., drug-related corruption). It all signals the need for further reform of the criminal justice sector.

It is important to recognize that the justice sectors of Central America have progressed significantly since the end of the civil conflicts of the 1980s. Nevertheless, problems persist. We believe policy recommendations for the justice sector should focus on improving institutional performance and stressing cooperation, particularly coordination between institutions based on best practices in other Latin American countries and beyond. The criminal justice sector is the set of institutions involved in rule-based conflict resolution and enforcement, such as courts, ministries of justice, police, prosecutors, public defenders, corrections officers and ombudsmen, as well as nonpublic institutions, such as bar associations, legal clinics, traditional and other non-state dispute-resolution mechanisms.

The idea of *mano dura* became a key ingredient of some Central American government strategies against crime and violence over the last five to ten years. It was an approach that called for toughening criminal codes by identifying new offenses, increasing prison terms, or encouraging judges to apply maximum penalties. However, this *mano dura* legislation appears to have a limited impact on reducing crime and violence. It also often contradicted principles of international human rights treaties that the countries had ratified. Although the results varied from country to country, from a regional point of view there is no evidence that these *mano dura* reforms have reduced crime rates, increased the efficiency of justice sector institutions, or improved the public perception of criminal justice institutions. One possible reason for this: excesses in implementing *mano dura* may have resulted in lower public trust in the criminal justice sector.

In contrast, other reforms have shown some results but have fallen short of the very high expectations generated at their inception. The passing of more transparent, accusatorial or "mixed" criminal procedure codes based on oral procedures, which provide an increased role for prosecutors, strengthen public defense and introduce alternative sentencing mechanisms, is considered a significant step forward. Constitutional minimums for the judiciary's budget to ensure judicial independence, the establishment of public defense services for the poor, disenfranchised victim protection, and more transparent mechanisms

for the selection, promotion and discipline of judges, are also positive developments. Collectively, these reforms constitute a major achievement. If effectively implemented and funded, they could result in significant improvement to the rule of law, including the efficiency and effectiveness of criminal justice institutions.

So far, delays in implementation have added to the already significant challenges of reforming justice sector institutions following years of civil conflict. Indeed, only a comprehensive strategy on crime and violence issues can bring together the various institutions active in crime prevention, control, punishment and rehabilitation. Accordingly, recommendations in this area are structured around seven main pillars: (i) performance-based management for criminal justice institutions; (ii) optimization of court administration and case management through the introduction of quality control and robust monitoring systems based on performance indicators; (iii) accountability of individuals working in criminal justice, enhanced with modern human resources tools; (iv) transparency of criminal justice institutions reinforced by citizens' oversight projects; (v) robust legal counseling for the poor and disenfranchised, (vi) effective attention to, and protection of, crime victims; and (vii) communication strategies both to engage internal and external stakeholders and better inform the public.

The introduction of purely normative reforms was not enough and a new generation of more comprehensive changes to these institutions needs to commence. To meet citizens' expectations of efficient, effective and fair criminal justice systems, countries will have to act on several fronts. One is the need to improve coordination and information-sharing mechanisms among institutions to facilitate rapid and effective reaction while protecting due process and human rights guarantees. Another key measure should be the adoption of cost-effective information and communication systems for tasks including the gathering and dissemination of statistics and other information at each step in the process in different agencies. Based on this information, the focus of policing and prosecution should be adjusted toward highest-impact cases. Clearly, a prerequisite for all this is the development of quality-control systems and performance indicators that provide important mechanisms to improve diagnosis, track system outputs, monitor reform programs, and rationalize resources. Countries need to tailor this recommendation to their own financing capabilities and priorities. Although fully integrated information systems may not be feasible in the short term, steps can be taken gradually to enhance inter-institutional coordination and information sharing.

To ensure that due process and human rights guarantees shape the criminal justice processes, institutions should refer to national and international standards to make certain that pre-trial detention and other criminal justice processes meet national and international human rights standards. For example, juveniles should be kept separate from adult offenders, and violent convicted criminals should be separated from nonviolent suspects who are awaiting trial. Support for civil society oversight of the due process/human rights compliance of criminal justice institutions (*observatorios de justicia penal and veedurías de justicia*) is critical while the reforms are still at an initial stage.

A second element is court administration and case management, which can be improved with changes to the case-handling process. The reduction of case disposition times of the Guatemalan and Costa Rican pilots in rapid-reaction one-stop shops (24-hour and "*in flagrante delicto*" courts) is encouraging, especially because it was achieved with full respect for due process guarantees. It shows that coordination among police forces, judges, prosecutors and public defenders operating in the same office (one-stop shops) can be effective. These one-stop shops appear to meet the public demands for quick responses to address the rising wave of crime and violence. In meeting these challenges, it is important to identify "best practices" and to dare to introduce new technologies. These include the use of ISO (International Organization for Standardization) 9001 to certify service standards in the judiciary and ensure minimum standards, the establishment of virtual courtrooms to meet additional demand, and the development of electronic notification systems among judiciaries, the Public Ministry, public defenders' offices and the

national police. The use of a common digital file that circulates through all institutions involved in the process is also important to maintain coordination.

A well-functioning adversarial judicial system requires a balance between those advocating for the state's interests and those of the accused. It implies sufficient resources for defendants. Steps to strengthen publicly funded public defense systems in Central America should include providing access to counsel, ensuring due process, broadening the coverage of current services and enhancing the professional development of public defenders, especially oral trial skills and human rights issues. Efforts should also be made to expand and strengthen publicly funded and alternative defense services, such as the legal clinics (*consultorios jurídicos*) operated by law schools and civil society organizations. Central American countries also need an updated inventory of the numerous legal clinics to ascertain their capabilities and agree on priority assistance areas. A well-structured network of these alternative legal defense providers would facilitate information exchange, referral services and litigation support.

An important area for improvement is the protection of victims. New criminal procedure codes include provisions that establish an important role for victims in the criminal procedures and have increased interest in this issue in Latin America. The creation of victims' assistance centers, administered jointly by the judiciaries and government ministries, is fundamental in violence hotspots. Such centers would provide legal, social and psychological assistance to victims of violent crimes, arrange for their protection if necessary, provide an interpreter when needed, and keep the victims updated on the status of their cases. The new Centers for Assistance to Victims of Violent Crimes in the prosecutors' office of the Judicial Center for Paloquemao and Bucaramanga in Colombia are examples worth studying for possible use in Central America.

It is also important to strengthen the accountability of individuals working in the criminal justice sector by reforming internal disciplinary procedures and using modern human resources tools to select qualified personnel. Criteria for hiring, selection and promotion, improvement of human resource management capabilities, monitoring of ethical behavior, promotion of attitudinal change among personnel of all levels, and in-service learning programs are typical performance-enhancing tools not seen consistently in Central American countries. There should also be increased autonomy for independent agencies such as judicial councils and ombudsmen. The development of specific career paths for professional and administrative personnel is critical to build efficient, modern techniques and measure individual and group performance. There is also a need to institute performance-based management tools in the criminal justice sector for the police, judiciary, attorneys general and public defenders, and to develop results-based budgets, performance contracts and performance ratings for individuals and groups. Selection, promotion and disciplinary processes must be competitive and transparent. Such human resources tools are critical to attract qualified professionals and build solid human capital in key agencies. These professionals will add to the overall quality of governance and make criminal justice a more attractive career path for the most talented university graduates.

Facing the corruption issue is a critical element of accountability within the criminal justice sector. This requires measures to establish or strengthen coordination among internal affairs units, financial intelligence units and other accountability offices such as ombudsmen's offices and judicial councils. This coordination effort should be sufficiently funded and granted ample discretion. It is also necessary for judges and other key justice-sector officials to declare their financial assets. Judicial decisions should be made publicly available promptly after legal processes conclude in order to facilitate public scrutiny. Citizens' oversight groups should be supported as a useful tool to increase the transparency of criminal justice institutions and strengthen respect for human rights and due process. They also generate valuable data to complement the perceptions data provided by national and regional surveys such as Americas Barometer, Latinobarometer, UNDP indicators, etc.

Alternative dispute-resolution mechanisms can play an important complementary role, although they should not be seen as taking the place of formal criminal procedures. Youth mediation and reconciliation

programs, as well as the establishment of peace centers (*Centros de Convivencia*), justice houses, municipal mediation and reconciliation centers, judicial facilitators and mobile justice of the peace courts are all successful initiatives in Latin America. They have created spaces where the community has additional access to conflict resolution, especially for the poor and disadvantaged. These programs also promote good citizenship, peaceful coexistence and amicable conflict resolution. Each has two basic elements: access to justice, and community participation. The municipal mediation centers and the mobile justice of the peace courts in Honduras, the centers for the administration of justice in Guatemala, and the judicial facilitators in Nicaragua are also valuable experiments that deserve to be studied and adapted to the particular circumstances of each country. All contribute to building more peaceful communities.

Box 5. Justice Houses and Peace Centers in Colombia

A Justice House is a community center where neighbors find traditional and nontraditional justice services to resolve conflicts. Formal judicial authorities are present, but alternative dispute-resolution mechanisms are also available, including those based on Afro-Colombian or indigenous traditions. Other social services may be available for children and women. Currently, there are more than 50 Justice Houses in Colombia in urban and rural areas (especially in those areas impacted by conflict).

The Peace Centers *(Centros de Convivencia)* are spaces where the community has access to justice, with programs that promote citizenship values, peaceful coexistence and amicable conflict resolution. In the past six years, they have been very effective in Colombia, a country with high rates of crime and violence. The first Peace Center opened in December 2002 in Barrancabermeja, one of the most violent areas in Bogotá. Now there are 15 throughout Colombia. They have three basic elements: access to justice, education through games, and community participation. They are equipped with a library and an educational play room *(ludoteca)*. They have open spaces for community work focused on issues including youth gangs, youth crime, community and mediation. They mainly play a preventive role against crime, but also house local justice-sector representatives such as police inspectors and family conciliators *(Comisarías de Familia)*.

Community participation in policing activities and public outreach has also proved successful in local settings. Community policing is more responsive and accountable to local communities, creating bonds of trust and reliance, increasing crime reporting, and reducing police abuses. Successful community policing programs can revitalize police forces and increase the public's sense of safety regarding their environment. Several experiments in this type of community participation in Latin America have led to reductions in crime and violence indicators and improvements in citizens' perceptions of security. These initiatives have several common elements, including: (a) surveys, town meetings or other forums to identify problems and priorities; (b) police-sponsored neighborhood or block watches, and business watch programs; (c) crime prevention newsletters and other crime education programs for the public; (d) small local police stations in target neighborhoods; (e) civilian volunteer liaison with community police; (f) police foot patrols; (g) increased attention to minor offenses that are major annoyances to local residents; (h) the creation of educational and recreational spaces for youth, (i) the permanent assignment of police officers to neighborhoods; (j) increased educational requirements for police forces; and (k) the reassignment of certain management tasks from police personnel to civilian personnel.

Community policing is only one tool in a broader toolkit of local citizen security strategies that can include specific actions to address street crime, gangs and petty theft. These include: (a) public information campaigns for awareness-raising about security issues within the community, and community involvement in the design and implementation of the security strategies; and (b) increased focus on preventive measures before at-risk youth are lured into illegal activities. These steps should be taken in partnership with civil society groups that are active in the community and provide suitable training and employment opportunities. Some international actors specializing in the sector can play a major role in these programs (e.g., UNODC, Habitat).

Finally, one-stop shops are a critical tool to increase efficiency and provide access to reformed justice-sector institutions, especially by providing timely dispute resolution. They accomplish two things: (i) they close the gap between institutions and citizens through mechanisms such as family police stations designed to provide immediate services to women and children in cases involving intrafamily violence or child support; and (ii) they provide special services for vulnerable groups through mechanisms such as mobile and 24-hour courts, houses/centers of justice that facilitate coordination among executive/judiciary agencies that provide prevention/rehabilitation services, alternative dispute resolution, public defense, legal aid and victim assistance services.

IV.3 Regional approaches

Many issues facing Central America transcend national boundaries and require a coordinated regional response. But existing levels of collaboration may not be sufficient, particularly considering that drug trafficking and the availability of firearms have a supranational dimension. This adds a level of complexity to the policy debate because actions taken in one country are likely to affect other countries. Therefore, no strategy can hope to succeed without regional coordination. The two areas where regional approaches are particularly critical are firearms and drug trafficking.

Drug trafficking

Central America can be fairly characterized as an innocent bystander in the drug trade. The region is a conduit, a transit corridor that neither produces nor consumes significant amounts of cocaine. In addition, the trade is mostly controlled by Colombian and Mexican cartels. To date, government policies have emphasized interdiction to combat trafficking. But even if increased interdiction succeeds, increased enforcement will merely increase the price and with it the resources available to traffickers. With more cash in hand, traffickers are better equipped to bribe criminal justice officials and purchase weapons. The experiences of Mexico and Colombia, the historical record in the United States, and economic theory all suggest that an escalation of interdiction efforts—on a scale that Central American governments could not mount even with help from abroad—would most likely increase levels of violence without diminishing the capacities of drug traffickers.

All this places the countries of Central America in a difficult situation. The drug war has already brought extreme levels of violence and damaged criminal justice institutions. Options for dealing with the tremendous flow of drugs through the region would appear limited. Radical changes in drug policies – including the possible depenalization or decriminalization of some drugs as recommended by the Latin American Commission on Drugs and Democracy (2009) – are simply beyond the capacity of the six nations and can only be contemplated within an international framework that includes the largest producer and consumer countries.

Our analysis leads us to conclude that there are some preferable options available to Central American countries with relation to drug trafficking:

- Given the high levels of drug-related corruption in the criminal justice systems and the vast resources of the traffickers, evidence suggests that directing more resources to drug enforcement efforts is not likely to reduce violence in Central America. To the extent that this approach is used, we believe a regional, coordinated effort stands a greater chance of some success. To address drug-related corruption and impunity, the Guatemalan experience with CICIG is worth considering as it provided a suitable channel to bring international investigative expertise to Guatemala and has been very helpful in resolving high profile cases.

- Devote resources to address domestic drug use through public health and harm reduction programs, including greater investment in education campaigns, treatment for users, and drug use prevention.

Box 6. Addressing Impunity in Guatemala

Issues of impunity, extrajudicial executions and the deprivation of liberty without due process are major challenges to the rule of law throughout much of the developing world. Central America is no exception. Indeed, a number of ad hoc international commissions and special rapporteurs address these issues throughout the region. One prominent effort is the International Commission against Impunity in Guatemala (*Comisión Internacional Contra la Impunidad en Guatemala*, CICIG). It was created in December 2006 at the request of the Guatemalan Government and began functioning in January 2008 with two objectives: (i) to support, strengthen and assist Guatemala's State institutions in investigating and prosecuting crimes allegedly committed by illegal security forces and clandestine security organizations; and (ii) to establish mechanisms and procedures to protect Guatemalans' fundamental rights, including those rights guaranteed by international conventions to which Guatemala is a party. Passage by the Guatemalan Congress of the agreement establishing the CICIG was the result of the strong political will of the Government, private sector and civil society. Funding is provided by various donors, including private funds for the Commission's two-year mandate, an extension of which was recently endorsed by President Colom.

Illegal security groups and clandestine organizations in Guatemala have direct links to state agencies and are thus able to block judicial action against them, resulting in impunity. CICIG works with the Public Ministry and other justice-sector institutions to "investigate and dismantle violent criminal organizations believed responsible for the widespread crime and the paralysis in the country's justice system." CICIG is headed by a commissioner appointed by the UN Secretary-General. The agreement stipulates that CICIG may join any criminal proceeding as an ad hoc prosecutor *(querellante adhesivo)* but also provides technical assistance to national justice sector agencies to strengthen their capacity.

In less than a year and a half, partly as a result of CICIG's work with state agencies, 1,700 people have been expelled from the police force, including 50 senior officials and the deputy director of national policy; 10 prosecutors had been asked to leave and the Attorney General has been replaced. However, the fight against impunity in Guatemala remains a daunting task, exemplified by the low homicide conviction rate. For example, from 2005 to 2007, 1,960 women were murdered in Guatemala yet there have been only 40 convictions from the 840 cases tried so far. The remaining 1,120 cases have not yet gone to trial.

In addition to the CICIG, President Colom recently announced three initiatives that could help advance the fight against impunity. He announced a presidential anti-impunity committee, a panel to review and declassify Guatemalan army archives from 1960 to 1996, and the creation of an elite US-trained anti-drug force.

Firearms

Due to widespread concern about homicide rates and the role that firearms play in homicides, Central American countries have participated in international and national arms control initiatives. In addition to being full members of the United Nations, all countries in the region have signed the *UN Convention against Transnational Organised Crime (2000)* and its *Protocol against the Manufacturing of and Illicit Trafficking in Firearms, their Parts and Components and Ammunition (2001)*. They have also all participated in the *UN Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects* (PoA) since 2001. Parallel efforts to address the trade, transfer and misuse of small arms are also taking place at the regional level. For example, Costa Rica, El Salvador, Guatemala, Nicaragua and Panama have ratified the Organization of American States (OAS) *Inter-American Convention Against the Illicit Manufacturing and Trafficking in Firearms, Ammunition, Explosives and other Related Material* (CIFTA 1997).

A range of institutions and instruments have also been established in the region to convert declarations into deeds, including the Framework Treaty on Democratic Security in Central America *(Tratado Marco de Seguridad Democrática en Centroamerica)* in 1995. All Central American countries are members the Central American Integration System *(Sistema de Integración Centroamericana,* SICA). Through this mechanism, countries have endorsed the *Guatemala Declaration for a Region Free of Corruption* (2006) and the *Code of Conduct on Arms Transfers* since 2005. The Code of Conduct, in particular, calls on all parties to strengthen licensing controls, end transfers to countries that might use weapons to commit human rights violations, and ensure responsible transfers and respect for international humanitarian and human rights and sustainable development. All six Central American countries also have firearms legislation that provides some aspect of normative and regulatory controls on weapons ownership, firearms registration, use and movement, with various revisions and amendments to improve these laws.

In general, though, national implementation and enforcement of gun laws remain sporadic and need improvement. At the same time, it is important to note that the firearms issue in Central America, from the point of view of Central American countries, transcends regional and national boundaries. No regional strategy in these areas can hope to succeed without significant support from the US. Recently, however, there is increasing recognition in the US that strategies to interdict the flow of drugs from south to north must be supported by greater efforts to restrict the flow of illegal weapons in the reverse direction.

Policies and programs that reduce the availability and use of firearms can also reduce violent crimes. As noted above, the number of firearms in circulation has a direct effect on the ability of those persons at risk of violence to obtain guns, whether from legitimate sources or illegal firearms sales (secondary markets). Below is an overview of the main types of gun control measures:

- **Legislative efforts**: can increase sentences for crimes committed with a firearm or for carrying or selling illegal firearms; regulate the design or category of firearms (e.g., banning assault weapons); and regulate firearms transactions by introducing strict dealer licensing requirements, compulsory licensing for all firearms, mandatory background checks and waiting periods.
- **Supply-side tactics**: can target enforcement operations that disrupt illegal firearms sales. This may include strengthening enforcement patrols in high-crime neighborhoods, using undercover police to pose as potential gun buyers, and implementing gun buy-back programs.
- **Combined approaches**: can employ legislative action together with supply-side tactics. This appears to be the most promising approach.

Although the impact of firearms legislation has been mixed, combining laws with government action and supply-side tactics has shown promise, particularly as part of broader "second-generation" initiatives. Establishing a coordinated national, state and local data collection system is a critical starting point for any firearms strategy. This database can be used to track firearms-related injuries and deaths, to monitor the impact of firearms legislation and supply-side interventions, and to make any necessary policy changes. To be successful, restrictive firearms legislation must also include awareness campaigns to explain, promote and garner public support for the legislation.

Training for the police and other justice sector institutions in implementing the new procedures is also important. Government and legislative-led firearm interventions are only as strong as the police's ability to enforce them. Success depends on the police's ability to develop close partnerships with community leaders as well as to develop solid intelligence-based policing and proactive crime prevention. Effective firearms regulation requires cooperation among all levels of government, law enforcement agencies, business, the media and citizens. It also requires regional information and intelligence cooperation.

Overall, recent experiences with combined and second-generation approaches, such as the introduction of gun amnesties, community-driven weapons controls, awareness-raising and sensitization, and advocacy, suggest that the availability of firearms can be reduced in Central America.

In the end, however, gun ownership is closely linked to the drug trade. Within an environment that drives the demand for weapons, reducing gun ownership is difficult. A long-term, sustained reduction in the demand for guns will hinge on progress in combating drug trafficking, reducing the flow of illegal guns from the US, and changing the cultural factors that increase young men's demand for weapons.

REFERENCES

Acevedo, Carlos (2008). "Los costos económicos de la violencia en Centroamérica." San Salvador: Consejo Nacional de Seguridad.

Arias Foundation. 2005. Legislaciones Centroamericanas: Análisis Comparativo. Costa Rica: Fundación Arias para la Paz y el Progreso Humano. August

Blumstein, A. (2000). Disaggregating the violence trends. In A. Blumstein & J. Wallman (Eds.), *The crime drop in America* (pp. 13-44).

Blumstein, A., & Cork, D. (1996). Linking gun availability to youth gun violence. *Law and Contemporary Problems*, 5-24.

Casa Alianza, 2006. http://www.casa-alianza.org/docs/2006/2006-12-26-hond-ejec.pdf.

Cork, D. (1999). Examining Space–Time Interaction in City-Level Homicide Data: Crack Markets and the Diffusion of Guns Among Youth. *Journal of Quantitative Criminology, 15*(4), 379-406. doi: 10.1023/A:1007540007803.

Cruz 2009. Personal communication, Jose Miguel Cruz, April 15, 2009.

Cuevas, F. and G. Demombynes (2009). "Drug Trafficking, Civil War, and Drivers of Crime in Central America." Unpublished paper.

Demombynes, G. (2009). "The Effect of Crime Victimization on Atttitudes Toward Criminal Justice in Latin America." Unpublished paper.

Karp, An. 2008. *Estimated firearms distribution in 27 Latin America and Caribbean countries, 2007*. Unpublished background data. Geneva: Small Arms Survey.

Lara, J. 2006. *Hipótesis Sobre 427 Muertes, Prensa Libre*, February 2.

Latin American Commission on Drugs and Democracy, 2009. "Drugs and Democracy: Toward a Paradigm Shift."

MacCoun, R., Kilmer, B., & Reuter, P. (n.d.). Research on drug-crime linkages: The next generation. *Drugs and Crime: A Research Agenda for the 21st Century. Washington, DC: US Department of Justice*.

Muggah, R. and Stevenson, C., 2008. "On the Edge: Considering the Causes and Consequences of Armed Violence in Central America." Background paper for World Bank Crime and Violence in Central America ESW.

Ranum, E. C. 2006. "Diagnóstico Nacional Guatemala", *Proyecto pandillas juveniles transnacionales en Centroamérica, México y Estados Unidos*, Centro de Estudios y Programas Interamericanos (CEPI) del Instituto Tecnológico Autónomo de México

United Nations Development Programme (2006). "El costo económico de la violencia en Guatemala", Guatemala: United Nations Development Programme.

UNODC (United Nations Office on Drugs and Crime). 2008. *Annual Report 2008: Covering Activities in 2007*. Vienna: United Nations Office on Drugs and Crime. <http://www.unodc.org/documents/about-unodc/AR08_WEB.pdf>

World Bank (2006). Crime, Violence and Economic Development in Brazil: Elements for Effective Public Policy. Report No. 36525. Washington, D.C.: World Bank.

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