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Occasional Paper No. 5

**Stray Bullets: The Impact
of Small Arms Misuse
in Central America**

William Godnick
with Robert Muggah
and Camilla Waszink

October 2002

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A publication
of the Small Arms Survey

The Small Arms Survey

The Small Arms Survey is an independent research project located at the Graduate Institute of International Studies in Geneva, Switzerland. It is also linked to the Graduate Institute's Programme for Strategic and International Security Studies.

Established in 1999, the project is supported by the Swiss Federal Department of Foreign Affairs, and by contributions from the Governments of Australia, Belgium, Canada, Denmark, Finland, France, the Netherlands, New Zealand, Norway, Sweden, and the United Kingdom. It collaborates with research institutes and non-governmental organizations in many countries including Brazil, Canada, Georgia, Germany, India, Israel, Norway, the Russian Federation, South Africa, Sri Lanka, Sweden, Thailand, the United Kingdom, and the United States.

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Acronyms

ADES	Association of Distributors of El Salvador
ASOCAFEMAT	Association of Coffee Growers of Matagalpa
CIID	Development Research and Information Council (Guatemala)
DALY	disability-adjusted life years
FARC	Revolutionary Armed Forces of Colombia
FARN	Revolutionary Armed Forces of Nicaragua
FMLN	Farabundo Martí Front for National Liberation (El Salvador)
FUAC	Andrés Castro United Front (Nicaragua)
GDP	gross domestic product
IADB	Inter-American Development Bank
IMG	Guatemalan Military Industries
IPM	Military Pension Institute (Honduras)
IUDOP	Instituto Universitario de Opinión Pública
MPCD	Patriotic Movement Against Crime (El Salvador)
MINUGUA	United Nations Observer Mission to Guatemala
NGO	non-governmental organization
NISAT	Norwegian Initiative on Small Arms Transfers
PAHO	Pan-American Health Organization
PN	National Police (Nicaragua)
PNC	Civilian National Police (same name in El Salvador and Guatemala)
RAAN	Northern Atlantic Autonomous Region (Nicaragua)
RAAS	Southern Atlantic Autonomous Region (Nicaragua)
UCA	University of Central America
UNDP	United Nations Development Programme
USD	United States dollar
URNG	National Revolutionary Unit of Guatemala
WHO	World Health Organization

About the author

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Acknowledgements

Significant contributions to this paper were made by José Miguel Cruz (El Salvador), Elvira Cuadra (Nicaragua), Mario Rodríguez (Guatemala), Javier Eduardo Vargas and Julieta Castellanos (Honduras), and the team at the Arias Foundation for Peace and Human Progress (Costa Rica). These contributions are cited throughout the text.

Special thanks are in order to Ed Laurance of the Monterey Institute of International Studies for years of mentorship, support, and encouragement. Additional thanks go to the Small Arms Survey: Peter Batchelor, Estelle Jobson and Anita Bhalerao, as well as to our copyeditor, Alex Potter, for his fine work. Particular thanks go to Robert Muggah and Camilla Waszink for considerable content editing, input, and regional expertise in the development of this paper.

Map 1 Central America



Summary

This paper provides a review of the impact of small arms and light weapons in Central America in the years following the end of the armed hostilities of the 1980s and early 1990s. In this instance, 'Central America' refers to the Spanish-speaking countries of the isthmus—Costa Rica, Honduras, El Salvador, Guatemala, Nicaragua, and Panama.

The definition of small arms and light weapons used here is the one set out by the UN (1997), and covers a wide range of weaponry, including commercial firearms and military weapons that can be used by an individual soldier or small crew.¹ 'Small arms', 'firearms', and 'weapons' are used more or less interchangeably in the paper. Military and civilian firearms are the principal focus, but because of the type of violence affecting present-day Central America, other weapons such as hand grenades and home-made pistols are also discussed.

Homicide rates, and more specifically firearm-related homicide rates, are the primary indicators used to gauge the impact of weapons on Central American societies. Other indicators given more anecdotal consideration here include armed crime and injury rates, the growth in the private security industry, the costs of firearm-related violence to the public health system, the impact of such crimes on the economy and the effects of armed violence on governance in remote rural areas. The key findings of this paper indicate the following:

1. Public sources of data on mortality and morbidity are generally better than earlier believed in Central America, but the persistent under-reporting of crime, particularly with respect to the context of criminal incidents, remains a central challenge. The absence of high-quality data hinders the development and monitoring of preventive violence- and weapons-reduction initiatives.
2. Available data suggests that social violence and armed criminality are on the rise in the aftermath of the conflicts that have plagued most countries of the region. In the early twenty-first century, politicized factions that fought in the 1980s are giving way to criminal gangs and organized civilian militia groups that are taking advantage of left-over military-style weapons, including grenades. Disenfranchised ex-combatants and unemployed or otherwise marginalized male youths are easily recruited into such groups.
3. Military-style weapons and commercial firearms have in large part diffused from the previously conflict-affected countries of El Salvador, Guatemala, and Nicaragua, to the previously peaceful countries of Costa Rica, Honduras, Mexico, and Panama. Recycled Central American weapons are finding new, more profitable markets throughout the region and beyond. The availability of grenades, though probably diminishing over time as Cold War inventories are depleted, continues to be widespread, particularly in Guatemala and El Salvador.
4. Though trends indicate relatively static, if inordinately high, levels of homicides among all the countries of Central America over the last decade, the proportion of these homicides committed with firearms is escalating.

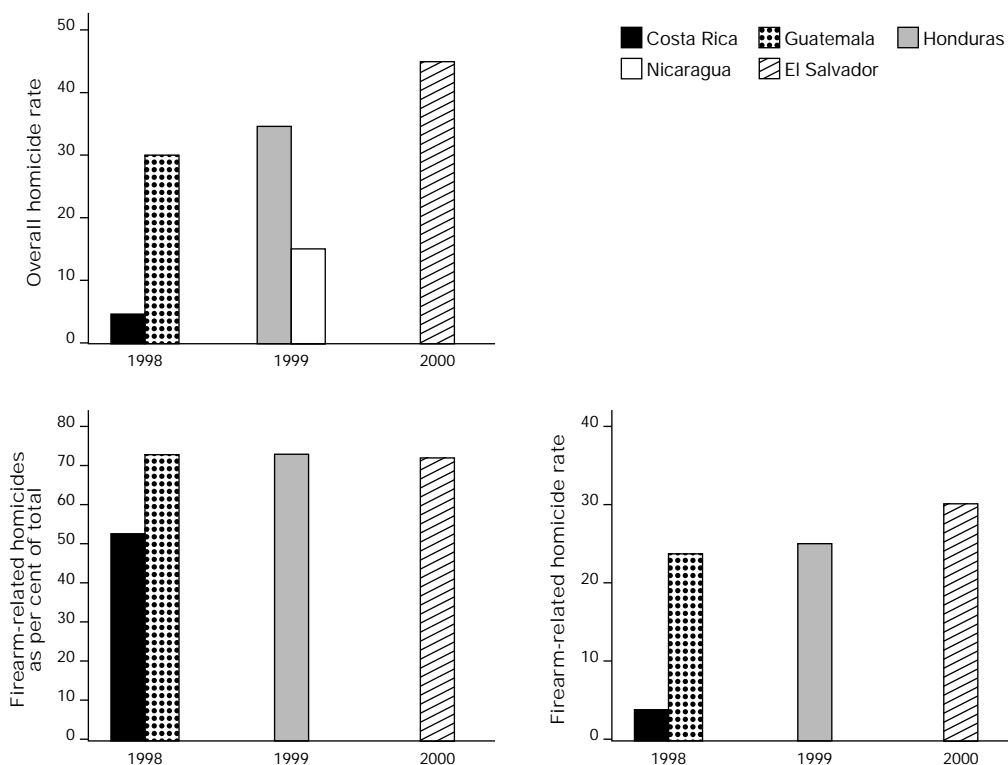
5. A review of available indicators of armed criminality, including armed robbery and kidnapping, indicates that insecurity is pervasive. Though absolute rates of homicide (measured per 100,000) have not risen, communities throughout Central America, particularly urban residents, feel more insecure. Distinct from the rest of Latin America, with the exception of Colombia, both rural and urban armed criminality are acute problems throughout the region.
6. Weak governance in many violence-prone areas has led to a further deterioration in the security environment—because of a lack of state authority, but also as a result of the transfer of erstwhile ‘legitimate’ weapons to criminal factions and a tradition of arming communities to redress their own insecurity. In many parts of Central America, individuals have responded to these perceived threats by acquiring arms or hiring private security companies. Available data indicates a lack of institutional capacity to control the weapons owned by private security companies, both by the companies themselves and the public authorities ultimately responsible for their regulation.
7. Personal insecurity has undermined efforts to promote local and national development—as demonstrated in the cases of coffee production and key resource-extraction industries in Nicaragua, the transportation sector in El Salvador, and tourism in Guatemala. The widespread availability of small arms and their misuse have long-term implications for the overall development of the region.
8. At the international level, Central American countries have to work bilaterally and with the broader international community in order to stem the continued flow of weapons to the region and reduce the recirculation of existing stocks. At the community level, still more research is needed into the impact of weapons on all sectors of society, in order to design and implement interventions that prevent misuse and reduce the risk of citizens becoming either victims or assailants.

I. Introduction

According to the World Health Organization (WHO), there are three factors that influence the use of small arms over other possible choices of weapon: availability, variety, and social norms regarding their use (Villaveces *et al.*, 2001). Central America has excessive availability, a wide variety of military and civilian weapons, and large segments of society willing to use them for a multitude of reasons. Years of civil war and military dictatorship have a great deal to do with this. However, increasingly, other factors that condition armed violence include the narcotics trade, the activities of youth gangs with ties to groups in the US, and the frustration of ex-combatants and others with the seemingly empty promises of peace and prosperity in the aftermath of conflict. The focus of this paper is the impact of small arms-related violence in recent years, rather than the specific impact of the region's conflicts.

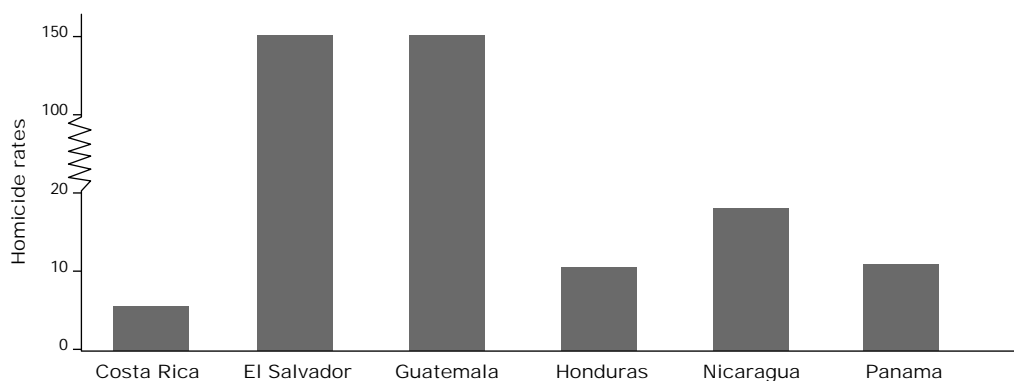
Figure 1 illustrates the most recent homicide and firearm-related homicide rates available for five Central American countries. El Salvador, Guatemala, and Honduras show homicide rates near the low- and middle-income country average of 42.2 per 100,000 (Villaveces *et al.*, 2001). Costa Rica and Nicaragua register rates well below the high-income country average of 17.3 per 100,000, though as we will see later in this paper, the figures relating to Nicaragua reflect severe under-reporting and the lack of integration of firearms data into crime-reporting statistics. In El Salvador, Guatemala, and Honduras, firearm-related homicides represented almost three-quarters of all homicides, and in Costa Rica more than half.

Figure 1 The most recent overall and firearm-related homicide rates in Central America per 100,000



A study carried out in the late 1980s and early 1990s demonstrated alarming homicide rates in Central America, especially in El Salvador and Guatemala (see Figure 2). It is likely that figures for Nicaragua and Honduras were under-reported for a variety of reasons, including, but not limited to, poor institutional capacity and surveying biases.

Figure 2 Homicide rates in Central America per 100,000, late 1980s/early 1990s



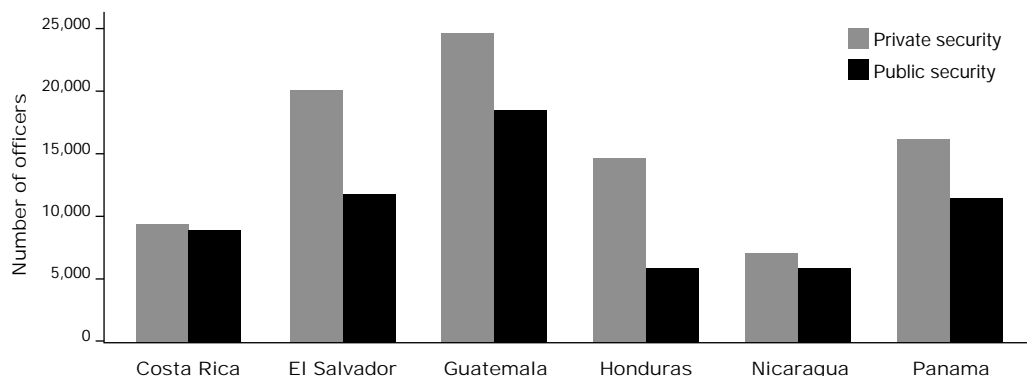
Source: Pan-American Health Organization (1997); data adapted from Buvinic et al. (1999)

If we compare these figures with the most recent rates, overall homicide rates have come down in El Salvador and Guatemala, remained the same in Costa Rica, and risen substantially in Honduras. However, some areas of El Salvador and Guatemala—both in the capital cities and the interior regions—still have homicide rates approaching 100 per 100,000.

There is no uniform regional system in place to measure the impact of small-arms use on the criminal justice and public health systems, although some useful and interesting information does exist. One of the problems is that there is limited capacity, communication, co-ordination, and data sharing among the institutions that deal with people injured or killed by firearm-related violence and accidents, namely the judiciaries, police, fire corps, Red Cross, hospitals, and morgues.

Throughout the region, one of the most common responses to the increase or continuance of what is mostly non-political violence has been to hire private security companies to fill the void left by the public security authorities in transition. Figure 3 shows the number of private security agents compared to public security officers in six Central American countries.

Figure 3 Private and public security officers in Central America, 2002



Source: *Diálogo Centroamericano* (2002)

Many people are sceptical of official Central American government statistics, given the many recent transitions of governments and responsibilities in these countries from military to civilian authorities, in most cases ruling out the possibility of continuity in data-collection activities.² At the same time, it should be acknowledged that many incidents are never reported or are not officially recorded. Regional comparisons are difficult to make because of differing data-collection time periods and categorizations. For these reasons, in Section III of this paper, country data from each Central American country will be presented separately, including a more detailed discussion of criminality and public health in post-conflict El Salvador and issues related to arms, violence, and governance in rural Nicaragua. Unfortunately, there was not a sufficiently rich pool of data for a separate discussion of Panama, beyond the information included on weapons-possession in Section II.

II. Existing knowledge on weapons-possession in Central America

There is widespread recognition that Central American society is inundated with small arms and light weapons, primarily military and civilian firearms.³ Some academics estimate two million small arms and light weapons circulate in Guatemala alone, while others attribute that figure to the region as a whole (Fisas, 2000). In El Salvador there are an estimated 400,000 firearms in civilian hands, of which only 170,000 (see Table 1) or 42.5 per cent were registered in 2000 (Cruz and Beltrán, 2000).⁴ At one point, the Attorney-General of Honduras claimed that there were 67,000 AK-47s in the country, although this figure is probably slightly exaggerated (Castellanos, 2000). In 1989, the Nicaraguan police calculated the Sandinista army's military small-arms arsenal to contain approximately 250,000 weapons (Cuadra, 2000).

Table 1. Legal firearms in Central America, 2000

Country	Legally-registered firearms	Licences to carry a concealed weapon
Costa Rica	43,241	53,857
El Salvador	170,000*	143,126
Guatemala	147,581	125,982
Honduras	n/a	27,500
Nicaragua	52,390	44,089
Panama	96,614	n/a
Total	509,826	394,554

Source: Information presented at the First Central American Forum on the Proliferation of Small Arms and Light Weapons, Antigua, Guatemala, June 2000; table adapted from Arroyo and Espinoza (2000)

*Source: Cruz and Beltrán (2000)

For the purpose of arriving at a conservative working estimate of the number of military and civilian firearms circulating in Central America, one could take the total number of legally-registered firearms in the hands of private citizens and businesses from Table 1—using the number of ‘licences to carry a concealed weapon’ as a substitute for ‘legally-registered firearms’ in the case of Honduras—and come to a total for legally-registered weapons of 537,326. Add to this the 230,000 weapons—57.5 per cent of all firearms—believed to exist outside the law in El Salvador, according to Cruz and Beltrán (2000), and a conservative estimate of 50 per cent for the rest of the Central American countries, and it brings the total to 1,318,315. Using a method similar to that employed in the *Small Arms Survey 2001: Profiling the Problem* (Small Arms Survey, 2001) to calculate the global quantities and distribution of known firearms, the number of weapons held by police, private security agents, and government armed forces is estimated based on the assumption ‘one person, one weapon’. This produces a total estimate of 1,589,478 firearms in the region (see Table 2).⁵ This figure does not take into account other types of small arms and light weapons such as grenades, mortars, and large-calibre machine guns—the figure would be close to two million if other weapons systems were factored into the estimates.

Table 2. Estimated military and civilian firearms in Central America

Legally registered	537,326
Illegal	805,989
Police and military stocks	152,839
Private security stocks	93,324
Total	1,589,478

Sources: For legal and illegal firearms, see calculations above; figures for public and private security forces from *Diálogo Centroamericano* (2002); figures for armed forces from Isacson (1997)

Historical sources of weaponry

No one to date has attempted to systematically calculate how many of the more than one million weapons at present in Central America arrived there before the end of the region's civil wars. What is known is that many of the military firearms distributed to Central America's armed forces and insurgent groups during the Cold War came from the US, the Soviet Union, and their surrogate suppliers (e.g. Argentina, Cuba, and Israel). El Salvador and Honduras were the largest recipients of weaponry from the US government in the 1980s and early 1990s (see Table 3): El Salvador, because of the war it was waging against the communist Farabundo Martí National Liberation Front (FMLN) guerrillas; and Honduras because it was the primary base of operations for the US-backed Nicaraguan Resistance (also known as the Contras) (Klare and Andersen, 1996).

Table 3. Reported deliveries of selected arms to Central America under the US Foreign Military Sales Program in the fiscal years 1980–93

Country	M-1911 pistol	9mm pistol	M-16A rifle	M-203 grenade launcher	M-79 grenade launcher	M-67 grenade	M-14 grenade
Costa Rica	1,000	130	4,750	140	n/a	n/a	n/a
El Salvador	225	1,675	32,474	1,413	1,704	266,410	96
Honduras	1,116	n/a	8,607	651	18	22,668	1,139
Panama	100	n/a	n/a	57	n/a	6,000	n/a
Total	2,441	1,805	45,831	2,261	1,722	295,078	1,235

Source: US Defense Security Assistance Agency, from data supplied to the Federation of American Scientists under the Freedom of Information Act; table adapted from Klare and Andersen (1996)

In the specific case of Guatemala, the Israeli military industry stepped in when the administration of then-US-president Carter cut off all military support in 1977, because of the army's record of human rights abuses. Israel sold 15,000 Galil rifles to the Guatemalan government between 1979 and 1981, in addition to UZI sub-machine guns, M-79 grenade launchers, bazookas, and mortars (Louise, 1996). In reaction to the withdrawal of US military support, the Guatemalan Ministry of Defense via the state enterprise Guatemalan Military Industries (IMG) developed the only substantial domestic arms industry in Central America, with the establishment of a munitions factory in the department of Alta Verapaz, which also assembled Israeli Galil assault rifles under licence (Louise, 1996).⁶

Nicaragua under the Sandinistas received significant military aid and weapons from the Soviet Union and Cuba. This aid was often then re-distributed to other leftist groups in the region. The discovery of several large clandestine arsenals outside Managua, Nicaragua—allegedly belonging to the Salvadoran guerillas—following the UN-sponsored disarmament process in El Salvador appears to confirm this relationship (Laurance and Godnick, 2001, pp. 20–1).

The leftist guerrilla movements also dealt directly with the Cubans for their military supplies. Many of the Belgian-made FN-FAL rifles held in FMLN stocks in El Salvador were traced back to Cuban weapons purchases in the 1960s (Louise, 1996). Ironically, the Cubans provided Guatemala's National Revolutionary Unit (URNG) with M-16s that they had purchased from the Vietnamese government—left-overs from the US involvement in Vietnam prior to 1975. In 1987, the Cuban government acquired 100,000 Kalashnikov-type assault rifles from the North Korean government, many of which were transferred to the Salvadoran guerrilla movement, and these were found amongst other AKM rifles from East Germany and former Yugoslavia. The AK-47s used by the Contras came from weapons confiscated by the Israelis from the Palestine Liberation Organization (Louise, 1996).

The end of the Cold War and the conclusion of the region's internal conflicts shifted strategic attention to other parts of the world. The police and military institutions of Costa Rica, El Salvador, Honduras, Nicaragua, and Panama continue to acquire small arms, parts, and ammunition from the US government through foreign military sales and some direct commercial sales, though these figures are historically low (see below). It is not yet clear to what degree, if at all, small-arms transfers are part of assistance packages associated with the US government's International Narcotics Control Program, more specifically the Western Hemisphere Drug Elimination Act, which set the stage for Plan Colombia and bilateral agreements with individual Central American countries (Isacson and Olson, 1999).⁷

Current sources of weaponry

At least until July 2001, Central American authorities continued to find abandoned or hidden arsenals—remnants of civil wars—especially near San Salvador in El Salvador and Managua in Nicaragua. Military assault rifles and grenades continue to spread throughout society. Grenade attacks and unintentional injuries resulting from the discovery and/or manipulation of these artefacts are relatively common occurrences in El Salvador and Guatemala, and to a lesser degree in Honduras. Efforts such as the Goods for Guns weapons-collection programme initiated by the Salvadoran private sector—implemented between 1996 and 2000—recovered and destroyed more than ten thousand weapons of diverse makes, models, and calibres, but have not made a significant dent in the overall quantity of weapons circulating in the illicit market or the new legal market (Laurance and Godnick, 2001).

At present, public US sources indicate that commercial retail sales of firearms and illegal black-market sales have surpassed government-to-government deals in terms of quantity and value. For example, for the years 1996–99, using data provided by the US government and organized by the Norwegian Initiative on Small Arms Transfers (NISAT), the US government collectively delivered USD 376,000 worth of small arms to the governments of Costa Rica, El Salvador, Honduras, and Panama—including ammunition of multiple calibres, grenades, 73 short arms, and 15 machine guns. After the same period, the US government authorized private industry to sell USD 66,167,402 worth of arms to Central American markets, including 93,855 pistols and revolvers, 28,345 rifles (non-assault), 400 sub-machine guns, and approximately 270 million rounds of ammunition, although there is no publicly available confirmation of actual sales (NISAT, 2001). Data provided by the US Bureau of the Census (see Table 4), which includes both government-to-government and private commercial sales for the same period as well as for 1994–95, indicates that actual Central American small-arms imports did not surpass or

come near to authorized quantities in most categories. However, there is a marked discrepancy between the 40,369 shotguns exported to Central American countries between 1994 and 1998 and the 906 authorized for commercial sale for the years 1996–99 (US Department of Commerce, 2000). Without government data for 1994–95, it is difficult to know for certain if the total number of shotguns sold corresponds to legal authorizations, although at face value the data raises obvious questions. Bureaucratic differences in weapons categorizations could explain this discrepancy.

Manufacturers and brokers from North and South America, Europe, China, and South Korea also export firearms to Central America. Spain appears to be an especially important supplier country for firearms and ammunition (Godnick, 2001). Between 1994 and 1999, El Salvador was the seventh-largest importer of US-made revolvers and pistols behind Mexico and ahead of South Africa (US Department of Commerce, 2000). Equally worrying are the tens of thousands of US exports categorized as sporting weapons destined primarily for El Salvador, Guatemala, and Honduras. Socio-economic conditions in Central America preclude the existence of a sufficiently large leisure class who would purchase this quantity of weaponry solely for hunting and sports shooting (US Department of Commerce, 2000). It is more likely that these weapons are marketed as such, but used for personal protection and/or by private security companies.

Between 1997 and 2000, the Salvadoran finance and treasury ministry reported importing more than eight million rounds of ammunition (Cruz and Beltrán, 2000). In Guatemala alone there are 78 firearms dealers and 14 shooting ranges (M. Rodríguez, 2000). The shooting ranges are used primarily by police, private security guards, and concerned citizens—in other words, not by sports enthusiasts. According to the owner of a Guatemalan retail armoury, it is difficult to keep popular models in stock, because ‘common everyday citizens are purchasing weapons to prevent armed assaults and defend their families’ (Weissert, 2000).

Table 4. Reported US small-arms exports to Central America, 1994–99*

Category	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama	Total
Military rifles	104	199	845	622	0	0	1,770
Machine guns	0	50	2	25	0	53	130
Military shotguns	13	16,009	4,053	901	426	61	21,463
Guns, howitzers, mortars < 30mm	9	100	0	4	160	0	273
Rocket, grenade, and missile launchers	0	52	0	0	0	1,030	1,082
Revolvers and pistols	7,491	44,744	2,934	11,499	71	1,921	68,660
Shotguns, hunting and target rifles**	1,960	9,735	22,492	4,989	2,093	864	42,133
Total	9,577	70,889	30,326	18,040	2,750	3,929	135,511

Source: US Department of Commerce, Economics, and Statistics Administration, Bureau of the Census

* Includes all government and commercial sales, gifts, and transfers

** Does not include figures for 1999

Despite high levels of arms availability in Central America, some individuals and groups have begun to make their own weapons. Youth gangs, or *maras*, as they are generally referred to in Central America, have been assembling makeshift pistols made out of bedsprings and metal tubing. In Honduras, these makeshift weapons are known as *chimbos*, while in El Salvador they are referred to as *armas hechizas* or 'home-made guns'. These types of weapons make popular material for the newspapers, and are often singled out by authorities as a problem associated with youth gangs. *Chimbos* are the *maras*' principal choice of weapon because they are inexpensive, easy to use, and easy to discard.

In Santa Ana, in the northern part of El Salvador, makeshift workshops pump out imitations of .22- and .38-calibre and 9mm pistols known as *tacos*. Between January and August 2000, more than 200 of these weapons were confiscated by the police in Santa Ana (*El Mundo*, 2000). Small-scale clandestine workshops are being uncovered throughout the country. While these weapons—often using parts and material from other weapons as components—are probably more expensive than *chimbos*, they are still cheap, easy to use, easily disposed of, and difficult to trace by authorities. The already excessive circulation of small arms in Central America appears to exacerbate the need to produce even more weaponry for segments of society that want, need, or perceive the need to acquire firepower at a low cost.

III. Country data

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Costa Rica

Map 2 Costa Rica



Population (1999 est.): 3.67 million (US Department of State, 2001)

Homicide rate (1998): 5.94 per 100,000 (Cruz, 2001)

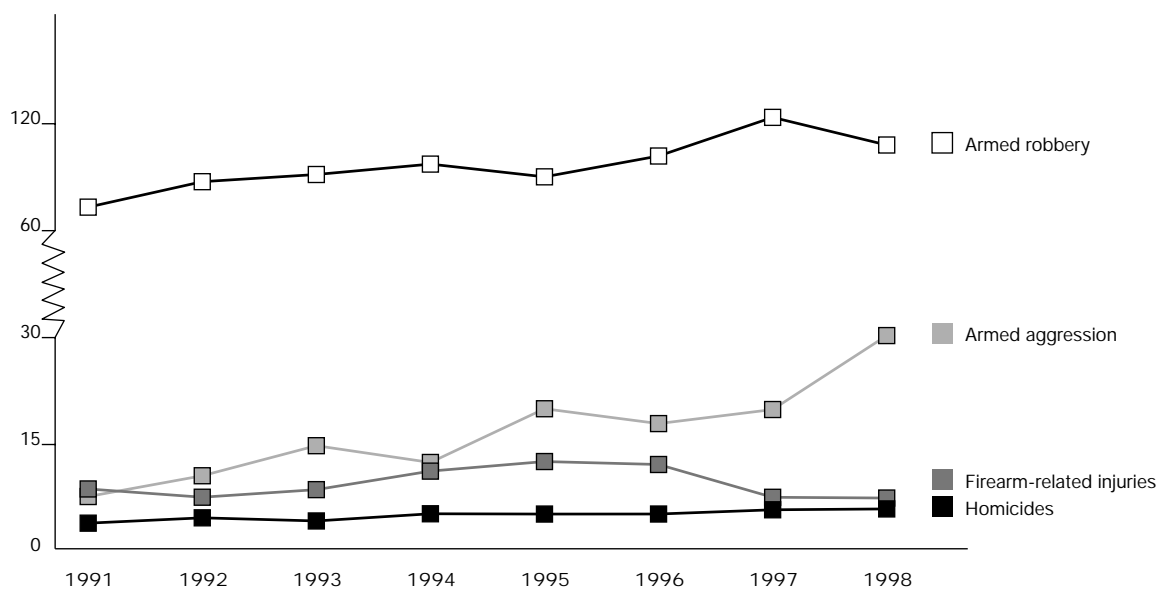
GDP per capita: USD 8,860 (United Nations Development Programme (UNDP), 2001a)

A long-standing democratic tradition, a booming tourist industry, no standing army, and the significant role played by Costa Rica in the Central American peace processes distinguish Costa Rica from its neighbours. However, after the wars in the rest of the region started to wind down, Costa Rica began to experience the general insecurity caused by regional drug and arms trafficking and global economic downturns. Legal and illegal migration of Nicaraguans to Costa Rica came about as a result of years of natural disasters and war in Nicaragua and increasingly attractive labour opportunities for low-skilled workers in Costa Rica. While Nicaraguan ex-combatants have been implicated in drug and arms trafficking, the blame placed on this sector of Costa Rica's population for the rise in violence could be disproportionate.

Most violent crime in Costa Rica is concentrated in the capital, San José, and the Caribbean seaport of Limón. The high-profile murder of two teenage American tourists in March 2000 took place just south of Limón, in the town of Cahuita, which is also known for drug trafficking and violence against tourists and locals alike. However, the most common profile for victims and perpetrators of violence in Costa Rica is male between the ages of 20 and 34 (Loría, 2000).

Figure 4 demonstrates that there are slight or marked changes in virtually all of the violent-crime figures collected nationally. Homicide rates marginally increased during the period 1991–98, and the percentage of homicides committed with firearms increased from 49 per cent in 1993 to 53 per cent in 1998 (Gobierno de Costa Rica, 1999). Firearms were used in approximately 20 per cent of all suicides (Gobierno de Costa Rica, 1999). The drop in firearm-related injuries in 1997–98 is not easily explained, but could be a result of a number of factors, including improved prevention, the increased lethality of firearms resulting in more deaths rather than injuries, and under-reporting. The more marked rise in armed aggression and armed robbery indicates that the use of firearms has become more prevalent in Costa Rican society (Loría, 2000).

Figure 4 Violent crimes in Costa Rica per 100,000, 1991–98



Source: Departamento de Planificación, Organismo de Investigación Judicial, Costa Rica; graph adapted from Loria (2000)

While low relative to the rates of its neighbours, the Costa Rican figures on crime involving firearms and related violence do cause concern. Costa Rica provides a clear example of the contagion effect of the region's civil wars, as described by Carneiro (2000), whereby communities next to others with high levels of violence tend to experience similar problems. The post-war trauma in El Salvador, Guatemala, and Nicaragua, combined with the current levels of violence in Colombia, have not left Costa Rica unscathed.

El Salvador

Map 3 El Salvador



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Population (1999 est.): 6.2 million (US Department of State, 2001)

Homicide rate (2000): 43.4 per 100,000 (Loria, 2000)

GDP per capita: USD 4,344 (UNDP, 2001a)

Insecurity in El Salvador is driving people to arm themselves or employ private security services. And yet, according to a 1999 victimization survey covering the Greater San Salvador Metropolitan Area⁸ (Instituto Universitario de Opinión Pública/Universidad Centroamericana (IUDOP/UCA), 1999), those who owned firearms were more likely to become victims of a firearm-related crime (Cruz *et al.*, 1999). Among firearm owners surveyed, 37.5 per cent were victims of a firearm-related crime, in comparison to 8.8 per cent of non-firearm owners.⁹ Of all the countries of Central America, publicly available data on the impact of firearms for El Salvador is the most comprehensive in terms of both quantity and quality. This is remarkable, considering that as recently as 1997 some of the government institutions responsible for crime-related data collection used manual registries, and not until mid-1999 did the political will materialize to create a multi-agency entity charged with constructing a system of reliable indicators on crime and criminal activity (Cruz *et al.*, 1999). However, a continuing challenge is that different institutions often obtain divergent data.

In 2001, the UNDP, in partnership with the National Public Security Commission, several NGOs, and the Central American University, began exploring options to develop a data-collection mechanism to examine the role and incidence of small-arms misuse in Salvadoran society (UNDP, 2001b). The Salvadoran government has been compelled to improve and further develop mechanisms and institutions to deal with the proliferation and misuse of small arms, because of the magnitude of the problems associated with these weapons.

Firearm-related homicides and injuries

Homicide figures from all causes have been declining in El Salvador since the civil war ended in 1992, although they are still well above the Latin American average of 30 per 100,000 (Buvinic *et al.*, 1999). In the late 1980s/early 1990s, the Pan-American Health Organization (PAHO) calculated El Salvador's homicide rate to be near 150 per 100,000 (Cruz and Beltrán, 2000). At the same time, the proportion of homicides committed with firearms in El Salvador rose to 75 per cent of the total in 1999, from an average of 55 per cent for the years 1990–95 (Cruz, 2001).¹⁰ As Table 5 shows, the proportion of homicides committed with firearms declined slightly between 1999 and 2000.¹¹

Table 5. Registered homicides in El Salvador, 1999–2001¹²

Type	1999		2000		January–April 2001	
	No.	%	No.	%	No.	%
Firearm-related	1,917	75.6	1,931	71.8	505	72.1
Knives	511	20.2	507	18.8	119	17.0
Other	107	4.2	253	9.4	76	10.9
Total	2,535		2,691		700	

Source: Instituto de Medicina Legal 'Roberto Masferrer' and the PNC de El Salvador; table adapted from Cruz (2001)

The data in Table 5 corresponds to a firearm-related homicide rate of 30.9 per 100,000 for 1999 and 31.1 per 100,000 for 2000, but such figures hide important details. Firearm-related homicides are not distributed evenly among the population in terms of sex, age, and geographic region. Ninety-four per cent of all firearm-related homicide victims were males, and 25 per cent were aged 20–24 (Cruz, 2001). According to national forensic records, the circumstances surrounding most firearm-related homicides in El Salvador are unknown. Of those incidents where the context is known, most are attributed to common crime, gang activity, quarrels/fights, and domestic violence. According to data from the police, only 30 per cent of homicides are attributable to assaults and economically-motivated crimes, while 70 per cent are categorized as social violence.

Table 6 disaggregates firearm-related homicide figures in El Salvador by department.

Department	No.	% of national total registered per 1,000	No. of firearms homicides per 100,000	Firearm-related
Ahuachapán	83	4.4	4.0	26.5
Santa Ana	193	10.1	7.7	35.7
Sonsonate	172	9.1	3.0	39.1
Chalatenango	40	2.1	6.0	20.5
La Libertad	243	12.8	5.0	36.7
San Salvador	551	29.0	5.0	28.4
Cuscatlán	99	5.2	5.5	49.3
Cabañas	54	2.8	3.3	35.7
San Vicente	51	2.7	3.3	32.0
La Paz	96	5.0	3.8	33.3
Usulután	102	5.4	6.7	30.3
San Miguel	113	6.0	10.0	24.0
Morazán	25	1.3	8.5	14.5
La Unión	78	4.1	8.6	27.2
Total	1,900	100	6.2*	31.1*

Source: Instituto de Medicina Legal 'Roberto Masferrer'; table adapted from Cruz (2001)

*National rates

As Table 6 shows, the department of San Salvador accounts for almost a third of all homicides nationwide and more than any other department in absolute terms, but is not the region with the highest per capita incidence of firearm-related homicides per 100,000. Cuscatlán, in El Salvador's interior, claims the highest rate at nearly 50 per 100,000, although it accounts for only five per cent of firearm-related homicides nationwide. El Salvador's central interior (Cuscatlán, Cabañas, San Vicente, and La Paz) and the western region (Santa Ana, Sonsonate, and La Libertad) are most affected by crime and common violence, while the eastern regions (Morazán, San Miguel, and La Unión), areas more affected by the civil war, show lower levels of homicide. Interestingly, the most violent departments of El Salvador have some of the lower rates of legal firearm registration per 1,000, lending weight to the possibility that it is illegal firearms that present the greater risk to society.

The Civilian National Police (PNC) reports that 57 per cent of all firearm-related homicides in the first quarter of 2000 were committed in rural zones, against 43 per cent in urban areas, where 58 per cent of the country's population lives. This data suggests that, unlike in many other parts of Latin America, firearm-related violence and crime are not only urban problems in El Salvador, and, in fact, the incidence may be even higher in rural areas (Cruz, 2001).¹⁴ According to Cruz (2001), there is a need for a centralized surveillance system for firearm-related mortality and morbidity. At present there is not sufficient co-ordination between the Ministry of Health, private and public hospitals, and public security authorities to reliably determine the number of deaths and injuries caused by firearms, as well as the circumstances surrounding such incidents.

While the immediate context of most incidents of firearm-related violence in El Salvador is unknown, the costs to society are clear. A study by the Inter-American Development Bank (IADB) determined that in El Salvador in the mid-1990s, a quarter (24.9 per cent) of annual GDP was spent on dealing with violence (Londoño and Guerrero, 1999). In the same period, homicide was the cause in 70 per cent of the external deaths involving youths aged 15–19 (Muggah and Batchelor, 2002). Furthermore, in 1995, more than 178,000 disability-adjusted life years (DALYs)¹⁵ were lost as a result of violent deaths (Londoño, 1998).

The information on firearm-related injuries is less complete than that available for firearm-related homicides, and must be extracted from police records or individual hospital reports. Between June 2000 and April 2001, 864 people were reported injured by firearms in El Salvador, while an additional 2,000 were killed, meaning that only slightly more than 30 per cent of the victims of firearm-related injuries survived. This could be explained by the lethality of injuries involving firearms in comparison to knives, machetes, and other causes (Cruz, 2001). On the other hand, it could be the result of under-reporting. In a victimization poll conducted in the Greater San Salvador Metropolitan Area, 80 per cent of the respondents who said they had been victims of crimes did not report them to the authorities (Cruz *et al.*, 1999).

Another phenomenon that the Salvadoran press has reported on extensively is the number of children injured and killed by stray bullets. These incidents are common because children are frequently caught in the middle of violent assaults or gang fights. Four hundred and nineteen children were admitted to Benjamín Bloom Hospital in San Salvador as a result of wounds caused by stray bullets between 1990 and August 2000 (Tenorio, 2001). Only ten cases occurred in former conflict zones since 1997, while 51 per cent occurred in Greater San Salvador, not one of which has resulted in a criminal prosecution. Forty per cent of the child victims of stray bullets were girls, compared to the six per cent female incidence in all homicides (Tenorio, 2001).

The average daily cost of attending to an injured child in Bloom Hospital's intensive-care unit is USD 685. In extreme cases, a single injury caused by a stray bullet can cost more than USD 45,000 over the course of treatment (Tenorio, 2001). Assuming an average hospital stay of seven days, the cost of attending to the 419 cases described above could have reached USD 2 million. Most of the children involved come from poor families without medical insurance or the means to pay for their treatment. The cost is ultimately absorbed by an over-stretched public health budget and results in fewer resources being available for emergency/disaster response, vaccines, education, and other preventive interventions.

Grenade proliferation and use

While incidents involving the use of hand grenades and grenade launchers are less common in Central America than those involving firearms, the former do regularly occur, especially in El Salvador and Guatemala. These weapons are designed exclusively for military purposes and, unlike firearms, there is no legal justification for their possession and use by civilians. One of the major accomplishments of the Goods for Guns programme in El Salvador was the recovery of more than 3,000 grenades, rocket launchers, mines, missiles, and other military explosives, thereby preventing thousands of potential incidents involving their deliberate and unintentional manipulation (Cruz and Beltrán, 2000; Laurance and Godnick, 2001). The US alone transferred hundreds of thousands of grenades to the Salvadoran military in the 1980s, mostly M-67 hand grenades. Grenades are labelled with lot numbers, as opposed to serial numbers, and a single lot may contain thousands of artefacts. This makes the control of grenade inventories very difficult.

Between 1 September 1998 and 29 July 1999, the Archdiocese of San Salvador's Peace and Justice Commission investigated 40 cases of violent incidents involving hand grenades, resulting in the deaths of 28 individuals and the serious injury of 87 others (Hernández, 1999). The majority of these incidents took place in San Salvador and the neighbouring department of La Libertad. Twenty-four of them were related to gang activity (Hernández, 1999). The availability of grenades, though probably diminishing over time as Cold War inventories are depleted, continues to be widespread ten years after the conclusion of the country's civil war.

Too hot to handle! Grenades in El Salvador

The following incidents involving grenades were reported between January and May 2001:

- Three men were killed and two were critically injured in a rural town in the department of Sonsonate when they were attacked with a hand grenade by gang members after an argument in a bar (Maldonado, 2001; Salguero, 2001).
- One youth was killed and 12 were injured when a skirmish between students from rival high schools at a bus stop resulted in the explosion of a grenade (Ramírez and Grimaldi, 2001).
- Residents of a rural village in the department of Chalatenango found three grenades (M-67, F-1, and FMK-2) near the Azambio River and turned them over to the police for deactivation. Less than a year earlier, in a neighbouring community, one child was killed and his brother seriously injured when they handled a grenade that they stumbled on in the woods (*El Diario de Hoy*, 2001).
- One youth was killed and five others were injured in a grenade explosion during a gang fight in the city of Santa Ana (Escobar, 2001b).
- In Cojutepeque, two alleged gang members threw a hand grenade out of a bus window at two young men walking in the street. The grenade missed the targeted youths and hit a group of people in a settlement for homeless earthquake victims. Twelve people were injured, including women and children (Mejía, 2001).

Firearm-related crime

The most common firearm-related crimes in El Salvador are armed robbery, kidnapping, and the illegal possession of and trade in weapons. Of 3,089 robberies registered by the PNC in El Salvador between January and April 2000, 67 per cent involved the use of firearms, which is up from 53 per cent for all of 1999 (Cruz and Beltrán, 2000; Cruz, 2001). In 2000, more crimes took place in rural zones than in urban centres, according to PNC statistics (*El Diario de Hoy*, 2000). This phenomenon is unique to El Salvador within the Central American context, unless the mechanisms for reporting rural criminal activity are so weak in the other countries that this data is not reflected in their national crime statistics. The number of bank robberies nationwide has decreased from a high of 35 in 1998 to five incidents between January and May 2000 (Zometa and Marroquín, 2000).¹⁶ It is probable that more than 50 per cent of kidnappings involved the use of firearms. Kidnapping figures for the first eight months of 1999 and 2000 showed an eight per cent increase from one year to the next, and the year 2000 ended with a total of 114 kidnappings (Martínez, 2000; Perdomo, 2000).

In 1999, the PNC arrested 655 individuals for illegal possession of firearms, mostly military rifles and grenades. In addition, the Attorney-General prosecuted 119 individuals for firing their weapons in the air, and 79 for illegal firearms transactions (Cruz and Beltrán, 2000). In the 1999 survey of crime victims (IUDOP/UCA, 1999), it was noted that 32 per cent of all ex-combatants interviewed possessed at least one weapon, while only six per cent of the rest of the population reported owning a weapon. Interestingly, in a separate 1999 survey of criminals serving jail time in El Salvador (Cruz and Beltrán, 2000), 23 per cent reported obtaining their firearms by legal means, 48 per cent obtained their ammunition in legitimate armouries, and 43 per cent owned legally-registered weapons. Ten per cent of those interviewed in prison reported acquiring their weapons on the job in the military and police, or as private security agents.

The PNC reports that approximately 25 per cent of the weapons confiscated nationally are taken from private security agents, mostly as a result of their failure to comply with licensing regulations (Cruz *et al.*, 1999). In 1999, only 8,118 of 17,000 private security agents operating in El Salvador had completed the five-day training course required by the National Public Security Academy (Gómez, 1999). This data indicates a lack of institutional capacity to control the weapons owned by private security companies, both by the companies themselves and the public authorities ultimately responsible for their regulation. It also demonstrates that legitimate sources of weaponry can be used for illegitimate activities.

Table 7 shows the number of firearms confiscated by the PNC from 1997 to 2000. Confiscations continue to increase, possibly due to the enforcement of a new law on arms and munitions and improved police efficiency. The majority of weapons confiscated are pistols and revolvers, while rifles and shotguns only constitute a small proportion. There is also a notable increase in confiscations of *armas hechizas* or home-made firearms.

Table 7. Firearms confiscated in El Salvador, 1997–2000

Type	1997	1998	1999	2000*
Pistols and revolvers	**	4,539	5,238	1,733
Rifles and shotguns	**	594	504	210
Military firearms	**	**	110	28
Home-made firearms	**	**	108	434
Total	4,879	5,133	5,960	2,405

Source: PNC de El Salvador; table adapted from Cruz and Beltrán (2000)

* Data only includes confiscations between January and April 2000. Annualized at the same rate, the figure would be 7,215

** Categorical data classification not available

Threats to the transportation system

Commercial and public transportation in El Salvador has been affected by firearm-related violence as well. Increased armed assaults on trucks delivering consumer goods in post-conflict El Salvador were one of the principal factors that drove the Association of Distributors of El Salvador (ADES) to mobilize the private sector and create the Patriotic Movement Against Crime (MPCD), the entity responsible for the development and implementation of the Goods for Guns voluntary weapons turn-in and destruction programme.¹⁷ Evidence of how serious the problem had become was reported in the press when a group of high school students, possibly affiliated with a gang, threw a hand grenade at a rival high school bus (see **Too hot to handle!** above).

In the news: El Salvador's streets and highways

The following incidents involving firearms were reported between June and August 2000:

- The PNC recovered two M-16 and one AK-47 assault rifles on the scene of an accident, after a pick-up truck crashed into another car running a red light near the national university (Marroquín, 2000).
- Criminals shot and killed a police officer and stole his gun when he tried to stop an assault on a bus travelling on the Pan-American Highway (Zamora, 2000).
- Three on-duty taxi-cab drivers were shot and killed in a two-week period in the interior city of Sonsonate (Maldonado, 2000b).
- Also in Sonsonate, a bus passenger pulled out a firearm and began a shootout with two assailants who boarded the bus with the intention of robbing passengers. The shootout resulted in two deaths and three serious injuries, including one of the criminals and the bus driver's assistant (Maldonado, 2000a).

Also in El Salvador's interior, in response to high levels of violence on public roads and buses, the departmental police delegation of Santa Ana has initiated the Disarmament and Safe Transportation Plan that includes searches for illegal firearms and other weapons and the registration and record-keeping of passengers. The plan has created a new unit within the PNC, and has increased patrols of terminals and frequently-used bus stops (Escobar, 2001a).

Insecurity of government arsenals

While the use of weapons left over from the Cold War era continues to threaten public security, another challenge facing the Salvadoran military has been the warehousing of old and deteriorating explosive devices. On 10 May 2000, a military storage facility in San Salvador exploded. It contained more than 9,000 explosive devices, including grenade-launcher projectiles (90mm, 81mm, 60mm, and 40mm), anti-personnel landmines, and LAW 80 rockets (Ramos, 2000b). The explosion, attributed to an electrical short, injured 40 people and caused damage to 725 houses in three neighbourhoods. Residents were not compensated for their losses, but repairs were made by the military. As a result, all of El Salvador's military weapons and explosives-storage facilities in urban areas were moved to unpopulated rural zones (Gutiérrez, 2000).

A week after the explosion in the storage facility, two explosives experts, one from the police and the other from the military, were killed in an accidental explosion that took place during the third round of detonations designed to destroy hundreds of surplus explosive devices, mostly grenades, left over from the defunct National Guard. Two detonations had already taken place when a rock hit a 40mm grenade and it exploded. The military expert was killed instantly, while the police officer died later in hospital. The accident took place during a demonstration staged for members of the press. Four soldiers, a journalist, and a cameraman were also injured in the blast (Ramos, 2000a; Gómez and Ochoa, 2000). It is clear that the Salvadoran government lacks both the capacity and the economic resources to properly warehouse and/or destroy weapons. In this environment, in addition to the risk of theft, accidents are likely to recur.

Public perceptions of firearms

The findings cited below come from a 1998 national survey on crime and violence carried out by the Institute for Public Opinion at the Central American University in San Salvador and published in Cruz and Beltrán (2000). The survey found the following:

- Forty-nine per cent of respondents were in favour of their neighbours possessing firearms to protect themselves from criminals and gangs.
- Nine per cent admitted to owning firearms.
- Fifty per cent admitted to wanting to own a firearm.
- Seventy-three per cent of firearm owners surveyed held weapons for self-protection, while 13.5 per cent held them for work and nine per cent for sport.
- Wealthy individuals were more likely to own firearms than people with low incomes.

The high degree of arms availability in El Salvador would suggest that more than nine per cent of the population owns at least one firearm. The low rate of respondents who reported owning a firearm is probably attributable to the fact that people who have not legally registered their weapons or were suspicious of the purpose of the survey may not have responded truthfully. At least half of the population admits to being positively disposed towards the private possession of firearms, and the likelihood of owning a firearm appears to increase with income level.

National homicide and firearm-related homicide rates in El Salvador have come down over the last few years, yet they are still at above-average levels for countries of similar socio-economic conditions. Despite the apparent downward trend in homicide statistics, firearms are involved in an increasingly higher percentage of violent deaths, and whatever gains have been made in this area have not translated into improved perceptions of public security among the Salvadoran population. While the impact of the country's civil war is largely responsible, recent developments such as the activities of youth gangs and drug trafficking are a growing threat.

Guatemala

Map 4 Guatemala



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Population (1999 est.): 11.1 million (US Department of State, 2001)

Homicide rate (1998): 30.2 per 100,000 (UNDP, 1999)

GDP per capita: USD 3,674 (UNDP, 2001a)

After more than three decades of civil war, Guatemala continues to be one of the most violent countries in the region. During the civil war, most of the violence was restricted to rural areas with high indigenous populations. In the aftermath of war, social violence has increasingly affected the urban middle class and affluent sectors of society, where assaults and kidnappings are commonplace. In 1999, Guatemala City was identified by the IADB as the third most violent urban centre in Latin America behind Cali and Medellín (in Colombia), with a homicide rate of 101.5 per 100,000 (Buvinic and Morrison, 1999). In the same study, several regions of Guatemala show even higher homicide rates, with the departments of Escuintla, Izabal, Jutiapa, and Santa Rosa registering homicide rates of 165, 127, 114, and 111 per 100,000 respectively (Buvinic and Morrison, 1999). Table 8 shows average homicide and firearm-related homicide rates in Guatemala for different departments for the years 1996–98, which immediately followed the conclusion of armed conflict.

Table 8. Homicides and firearm-related homicides in Guatemala per 100,000 averages for 1996–98

Area	Homicide rate	Firearm-related homicide rate
Country total	34.3	24.2
Guatemala (includes the capital)	43.23	32.16
Escuintla	82.06	62.33
Izabal	97.63	69.86
Jutiapa	77.16	63.33
Santa Rosa	77.47	56.16
Departments with less than 25% indigenous population	77.23	58.16
Departments with more than 75% indigenous population	7.96	4.37

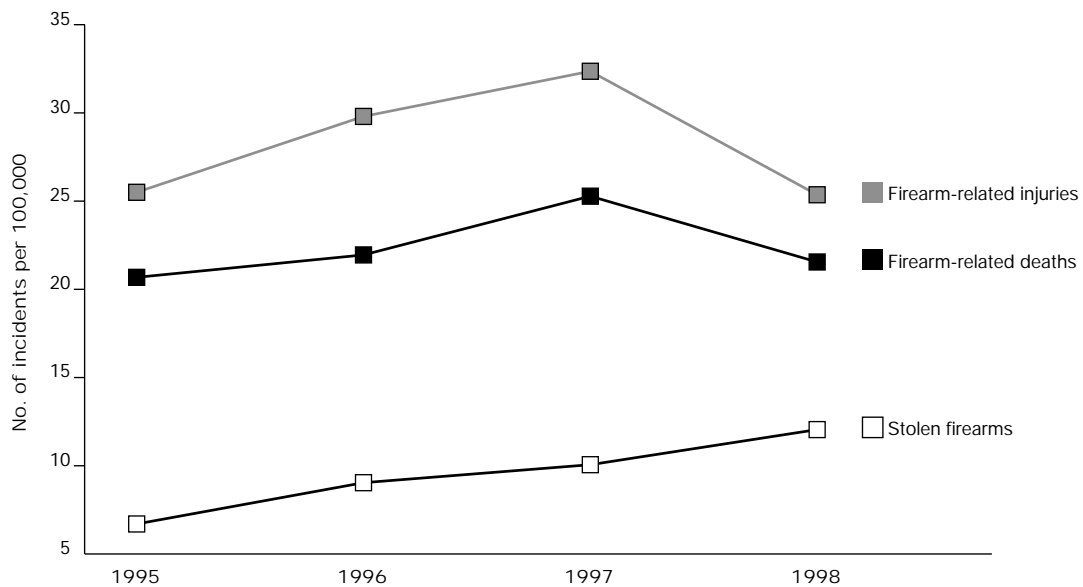
Source: UNDP (1999)

The data in Table 8 indicates that areas populated with more than 75 per cent of indigenous people report markedly lower homicide and firearm-related homicide rates than other departments—such as Escuintla, Izabal, Jutiapa, and Santa Rosa—where less than 25 per cent of the population comes from one of Guatemala’s 22 indigenous communities (UNDP, 1999). There is a range of alternative explanations for this phenomenon. On the one hand, a department like Escuintla, for example, is known to have a high percentage of ex-combatants. On the other hand, violence, including that committed with firearms, might be under-reported in those areas with large concentrations of indigenous peoples, because of a distrust of authorities and the limited presence of government institutions.

While firearm-related violence is less frequent in indigenous communities, violence in these areas commonly manifests itself in the form of public lynchings of individuals accused of criminal activity.¹⁸ The UN Observer Mission in Guatemala (MINUGUA) reports that there were 176 lynchings in Guatemala between 1996 and 2000, resulting in 185 deaths and 448 injuries (MINUGUA, 2000).

Political violence has decreased just as socio-economic violence has surged. However, the 1998 murder of the Catholic Church’s human-rights leader, Bishop Juan Gerardi, and the decision by President Alfonso Portillo to send his family to Canada for their protection, suggests that political conflict still lingers. Criminal activity generally takes the same forms as in other Central American countries, including the increasing activities of youth gangs, as indicated in Figure 5.

Figure 5 Firearm-related incidents in Guatemala per 100,000, 1995–98



Source: 1995 figures, PNC de Guatemala, adapted from De Leon et al., 1999; 1996–98 figures, PNC de Guatemala and Instituto Nacional de Estadística, adapted from UNDP, 1999

Firearm-related homicides and injuries continued to rise after the signing of the Peace Accords in 1996, and then dropped in 1998 (see Figure 5). By contrast, firearm theft increased in the years covered by the table. At the same time, a Guatemalan newspaper conducted a comparison of reported firearm-related deaths occurring in the Guatemala City metropolitan area (estimated population two million) in the first three months of 1999 with those in the first three months of 2000, obtaining results of 91.2 and 95.4 per 100,000 respectively (M. Rodríguez, 2000). An even higher figure was obtained by another newspaper, the *Prensa Libre*, which reported 96.3 firearm-related deaths per 100,000 in the Guatemala City metropolitan area for the year 2000 (López, 2001).¹⁹ The data available therefore suggests differing trends. Nationally, firearm-related deaths and injuries are decreasing slightly and/or levelling off, while firearm-related homicides in the Guatemala City metropolitan area persist at high levels. Concurrently, incidents such as firearm thefts are on the rise. Table 10 presents the number of firearm-related deaths and injuries for the years 1998–2001 compared to the total number of violent deaths and injuries.

Table 9. Firearm-related deaths and injuries in Guatemala, 1998–2001

	1998	1999	2000	2001*
Firearm-related deaths	2,392	1,839	2,109	788
Total violent deaths	4,728	4,704	5,402	2,055
Firearm-related injuries	2,616	2,456	2,907	1,047
Total violent injuries	4,728	4,704	5,402	2,055

Source: Dirección General de Operaciones, PNC de Guatemala
*First six months of 2002 only

As in El Salvador, the growth of the private security industry has been one of the primary responses to generalized insecurity in Guatemala. In 2000, the newspaper *El Periódico* reported that there were about 200 private security companies operating in the country, employing 35,000 agents (M. Rodríguez, 2000).²⁰ The figure represents more than the 31,423 soldiers in the Guatemalan Army and twice the 14,800 police officers recorded (M. Rodríguez, 2000). However, the private security companies affiliated with the Guatemalan Chamber of Industry only record 17,000 agents. According to the same source, 80 unauthorized private security companies exist, employing as many as 6,000 agents.

Threats to the transportation system

Guatemala's urban and inter-city transport systems are stratified according to the social and economic conditions of their passengers. The municipal government of Guatemala City authorizes private companies to operate bus routes throughout the city, creating a wide range of services in terms of quality and price. Poor communities, especially new settlements populated mostly by rural peasants who fled the civil war or sought economic opportunities in the city, are served by old, polluting buses and trucks driven by careless drivers (M. Rodríguez, 2001). These same communities are threatened daily by youth gangs armed with knives, grenades, and firearms. Many gangs use bus stops to charge 'safety' tolls within the community (M. Rodríguez, 2001).

Most urban bus routes end up in terminals located in the centre of Guatemala City. Seven out of ten users of bus transportation in Guatemala City reported having been assaulted or robbed in these terminals (M. Rodríguez, 2001). Violent acts committed inside the buses usually occur after midday, when they are full of passengers. Certain stops are known as *paradas de la muerte* or 'death stops', because they are infamous for being locales where delinquents armed with guns and knives wait to pounce on their victims. According to the National Civilian Police of Guatemala (PNC), there is an average of 35 armed assaults on buses each month (M. Rodríguez, 2001). However, there are no reliable statistics for these incidents over time, nor the specific weapons involved.²¹

Tourism, one of Guatemala's most important earners of foreign currency, has not escaped the consequences of armed violence. In March 1998, a bus carrying American students was held up by armed criminals, who raped five of the students. The news greatly damaged the reputation of Guatemala as a tourist destination (Associated Press, 1998). Increasingly, private schools hire armed guards to protect their pupils against being kidnapped on their buses.

As well as public transportation, armed violence also affects Guatemala's distributors of consumer goods, armoured security vehicles, and transporters of shipping containers. Twelve recent assaults on armoured vehicles carrying large amounts of cash all involved the use of AK-47, M-16, or AR-15 assault rifles. One incident in 2001 left 84 bullet holes in the side of an armoured vehicle. The remains of the ammunition found at the scene provided evidence that the bullets were manufactured at the IMG factory (M. Rodríguez, 2001). In 2000, two Guatemalan army captains, formerly in charge of the military's supply warehouse, were sentenced to jail for theft. However, a military spokesman representing the IMG claimed that the IMG-produced bullets being used in organized crime were probably lost during the civil war (Interiano, 2001).

Public perceptions of firearms and violence

The findings below emerge from a national survey on crime, violence, and firearms (Consejo de Investigaciones e Información en Desarrollo (CIID), 2000). The survey found the following:

- Seventy-five per cent of the respondents felt that there was greater insecurity after the signing of the Peace Accords.
- Eighty-eight per cent perceived a marked increase in the acquisition and proliferation of firearms.
- Only 7.3 per cent claimed to own firearms.
- Wealthy individuals were more likely to own firearms than people from poorer parts of society.
- Four out of ten women interviewed were open to acquiring a firearm.
- Of those interviewed who had experienced a violent attack or robbery, 37.5 per cent stated that the incidents involved firearms.
- Defense of family and property were the two top reasons interviewees gave for justifying the use of firearms against another person.
- While seven out of ten people were opposed to public lynchings (as described above), the same percentage of people supported the use of the death penalty.

The Guatemalan poll demonstrates similar results to those obtained in the Salvadoran survey referred to earlier. Slightly more than seven per cent of Guatemalans surveyed admitted to owning a firearm, and the wealthy were more likely to own guns than the poor. In addition, three-quarters of those polled stated that they felt less secure since the war came to an end.

What makes Guatemala unique is the large, relatively unarmed indigenous Mayan population, where violence commonly manifests itself in the form of public group lynchings instead of armed confrontation. Nowadays, firearm-related violence has hit the capital, which was largely unaffected by large-scale armed violence during the civil war. Again, as in El Salvador, the country's civil war is a major factor contributing to current social and economic violence, but newer phenomena like gangs and the drugs trade are multiplying its already disastrous effects.

Honduras

Map 5 Honduras



Population (1999 est.): 6.4 million (US Department of State, 2001)

Homicide rate (1999): 36.11 per 100,000 (Castellanos, 2000)

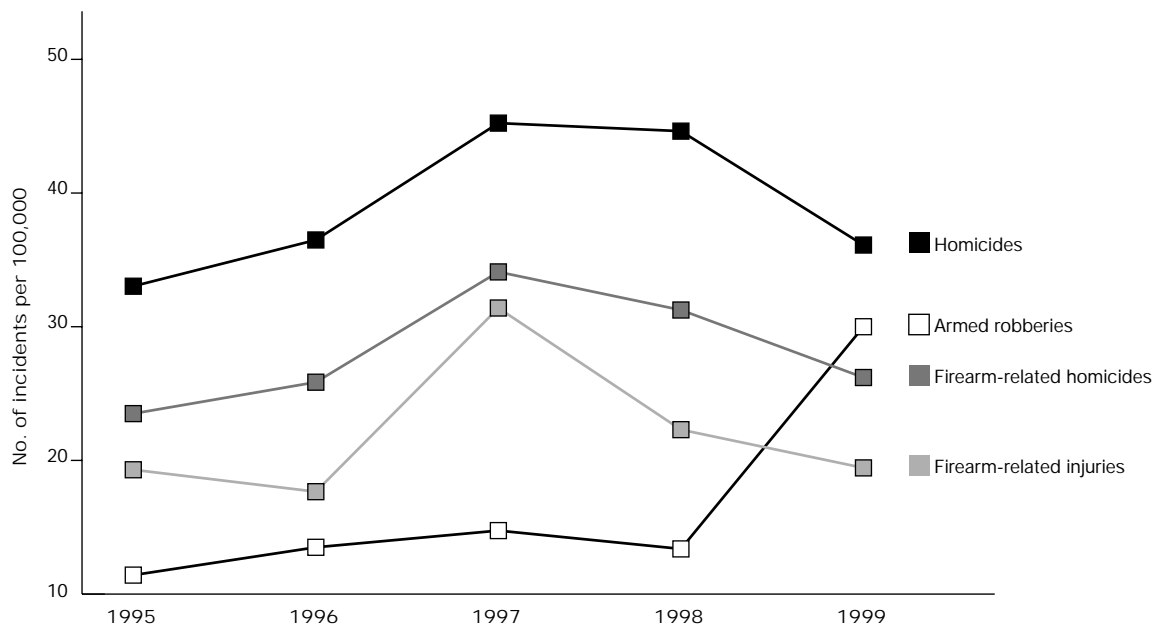
GDP per capita: USD 2,340 (UNDP, 2001a)

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The most recent publicly available data on homicides and firearm-related homicides was made public in a speech to Honduran military and police by the government-appointed human-rights ombudsman, Leo Valladares (*La Prensa*, 2002). In his speech, he noted that during 2001, 1,609 youths and young adults lost their lives to violence. Eighty-two per cent of these deaths, or 1,319 in total, were caused by firearms, of which 36 per cent were identified as involving AK-47 assault rifles, 27 per cent *chimbos* or home-made weapons, and 25 per cent 9mm pistols (*La Prensa*, 2002).²² Members of youth gangs were reported to represent approximately one third of both victims and assailants.

Despite avoiding civil war in the 1980s, Honduras suffers from many of the same problems of violence and instability as its post-conflict neighbours. Honduras' National Office of Forensic Medicine now estimates the homicide rate to be approaching 45 to 50 per 100,000 (Castellanos, 2000; F. Rodríguez, 2000). The rate in the nation's capital, Tegucigalpa, was 51 per 100,000, while in San Pedro Sula, the country's industrial centre, the rate is as high as 95 per 100,000. Figure 6 shows 1995–99 data for homicides, firearm-related homicides, firearm-related injuries, and armed robberies in Honduras.

Figure 6 Homicides and other firearm-related incidents in Honduras per 100,000, 1995–99



The data in Figure 6 highlights trends similar to those observed in Guatemala. While homicide and firearm-related homicide rates increased after 1995, and then began to drop again in 1999, armed robberies continue a marked upward trend. This partially explains why many Central Americans feel less secure than ever, even though violence and homicide levels have come down from several years ago.

In February 2001, the Honduran Secretariat of Security took a random sample of 234 homicides committed in the capital during the three previous years, in order to examine the involvement of firearms, alcohol, and related demographic information. Seventy-five per cent of the cases involved firearms, while 19 per cent involved knives and machetes. Alcohol was implicated as a factor in 50 per cent of the homicides. Close to 60 per cent of all aggressors and victims were between the ages of 16 and 30. Ninety-eight per cent of the perpetrators and 92 per cent of the victims were male. Forty-four per cent of all homicides took place between the hours of 7 p.m. and midnight (Secretaría de Seguridad de Honduras, 2001).

The Honduran case also shows how excessive arms availability can impact on the private security sector. Until recently, at least a dozen private security companies held AK-47s in their arms inventories, even though assault weapons are, by law, reserved for the exclusive use of the military (Castellanos, 2000). The Ministry of Defense and a subsidiary of the Military Pension Institute (IPM) hold monopolies on weapons import permits and commercialization. Neither the Ministry of Defense nor the IPM has ever reported importing or commercializing AK-47s in Honduras. It is therefore likely that these weapons were obtained from illicit markets by legal private security entities. In response, in October 2000, the Ministry of Security ordered all private security companies to turn in machine guns, sub-machine guns, assault rifles, and semi-automatic pistols. The first company to comply turned in 33 illegal weapons, and others followed suit.

Honduras cannot place the blame for current levels of violence on an internal armed conflict, even if it exhibited high levels of militarization and arms proliferation during the 1980s. The fact that levels of homicide, injury, and robbery involving firearms increased in patterns similar to El Salvador and Guatemala, before dropping off slightly, suggests that the ready availability of arms diffused from the neighbouring conflict-affected countries may be partially responsible, in combination with youth-gang activity and drug trafficking.

Nicaragua

Map 6 Nicaragua



Population (1999 est.): 4.7 million (US Department of State, 2001)

Homicide rate (1999): 12.26 per 100,000 (Cuadra, 2000)

GDP per capita: USD 2,279 (UNDP, 2001a)

Like other Central American countries, Nicaragua experiences problems of urban violence in the capital and other large cities. What differentiates Nicaragua from its neighbours is the existence of several organized armed bands—and various semi-organized groups—in the northern and eastern parts of the country, where there is an absence of state authority and the presence of significant populations of ex-combatants from both sides of the conflict. The limited government presence in these two areas known for banditry and assaults on farms implies that there is probably an under-reporting of armed violence. This under-reporting may partially explain the homicide figures, which are low by regional standards, i.e. well below Nicaragua's northern Central American neighbours and only moderately above those of Costa Rica. While the number of armed movements, such as the infamous Andrés Castro United Front (FUAC), has dropped over the last few years (see Figure 7, below), these areas of Nicaragua continue to see the operation of armed groups ranging from disgruntled groups of ex-combatants to common criminals. According to Bendaña (1999), 'in northern Nicaragua armed activity is no longer the monopoly of ex-combatants from one side or another: the newly "demobilized" as early as 1994 and to date are for the most part adolescents too young to have fought in last decade's war' (p. 79).

Similar to El Salvador and Guatemala, Nicaragua saw an increase in homicide rates in the years immediately following the end of armed hostilities, and then a gradual decrease over time.²³ The National Police (PN) does not identify how many homicides were committed with firearms, but does distinguish between homicides and assassinations. For the purposes of this study, the term 'assassinations' is used in place of 'firearm-related homicides', although it is understood that many homicides are also committed with firearms. Regardless, given the anecdotal information on violence as portrayed in the Nicaraguan press and the general perception of violence in Nicaraguan society, these figures are suspiciously low in a regional context and merit further investigation.

As in the other Central American countries, private security companies have proliferated in Nicaragua over the last few years. Between 1990 and 1995, eight private security companies operated in the country. During the following five years, an additional 39 companies entered the market, employing 6,536 agents (Cuadra-Garcia, 2000). In contrast, the PN employs 6,076 individuals, of which only 4,005 are police officers, the rest being administrative staff (Cuadra-Garcia, 2000). According to a PN report in May 2000, 6,753 weapons were registered with the government by private security companies. An additional 12,534 and 10,127 weapons were also reported registered to 'non-private' security businesses and for the purpose of residential protection respectively (Cuadra, 2000). According to a report released in 2002, the number of private security agents today is 7,212, making it likely that the number of weapons held by these companies has increased proportionally (Diálogo Centroamericano, 2002).²⁴

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In an attempt to better understand the involvement of firearms in criminal activities in Nicaragua, Cuadra (2000) examined a representative sample of 284 police reports from the last fifteen days of February, July, and December in 1998 and 1999.²⁵ Analysis of the data sample indicated the following:

- Forty-four per cent of the cases involved one or more military small arms.
- Forty-eight per cent of the cases involved at least one pistol or revolver.
- Eight per cent of crimes were committed by police or military officials.
- The departments where the highest percentage of crimes involving firearms were committed were Managua, Matagalpa, Jinotega, and the Southern and Northern Atlantic Autonomous Regions (RAAS and RAAN).

Public perceptions of firearms and violence

The data below comes from a 2001 survey carried out by the commercial polling firm Borge and Associates in co-operation with the Nicaraguan Centre for Strategic Studies (Borge, 2001). According to this survey:

- Twenty-two per cent of respondents had been assaulted or robbed in incidents involving firearms. These figures reached almost 30 per cent in the capital and northern region of the country.
- Twenty-nine per cent knew how to use firearms, while this figure approached 50 per cent in Matagalpa and the RAAN.
- Forty-two per cent believed possessing a firearm made people safer. In Matagalpa and the RAAN, 53 per cent thought this, while in the southern Pacific department of Rivas, where armed violence is less prevalent, 82 per cent thought firearm possession did *not* make people safer. Thirty-seven per cent believed the government should distribute weapons to civilians in rural zones for their self-protection.
- Only 8.4 per cent admitted that they or someone in their households possessed firearms.
- Only 6.2 per cent of firearm owners interviewed claimed to have legally registered their weapons.
- Forty per cent of respondents believed it was easy to obtain firearms in Nicaragua.
- Eighty-two per cent considered a reduction in the number of firearms in circulation in Nicaragua to be important.
- Sixty-one per cent believed a voluntary weapons-collection programme involving food-stuffs, construction materials, or cash would be a welcome method of recovering weapons.
- Sixty per cent would allow rearmed ex-combatants to participate in a voluntary weapons-collection programme, while 20 per cent rejected the idea.

Similar to respondents in El Salvador and Guatemala, less than ten per cent of the Nicaraguans interviewed admitted to owning a firearm. Another key result of this survey, at least from the government's point of view, is that only slightly more than six per cent of those who admitted to owning a firearm had registered it with the relevant authorities. In some parts of the country, at least half the population interviewed claimed to be well trained in firearm use.

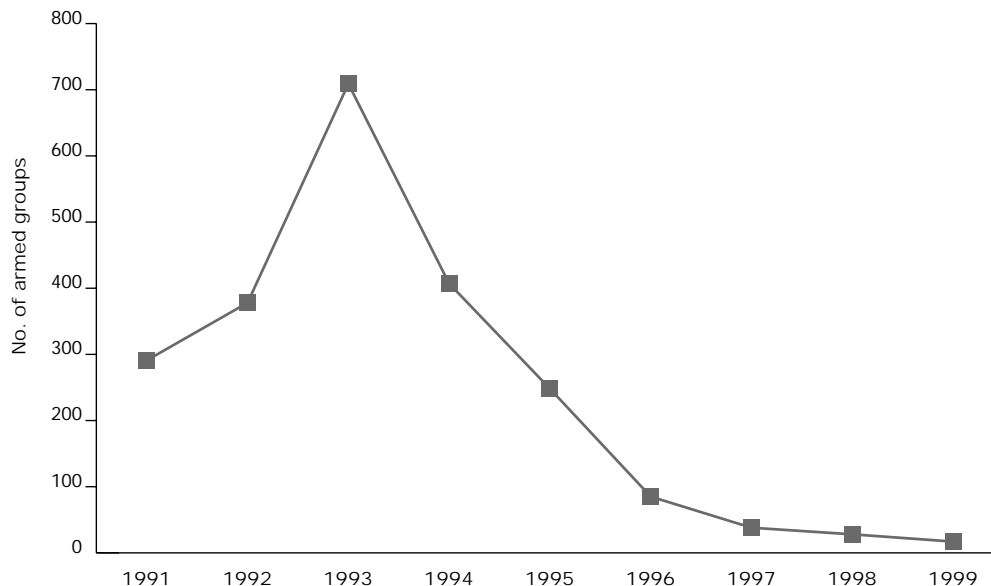
While the quality of official statistics is questionable in any of the Central American countries, Nicaragua is the least reliable among the group. The low homicide rate of 12 per 100,000 in a society where anecdotally violence is so high, combined with the fact that no systematic data is available for the involvement of firearms in homicides, raises red flags. Still, overall firearm-related violence could very well be lower than Nicaragua's neighbours to the north. Drug trafficking is rampant, especially in the Atlantic regions, but youth-gang activity has not reached the same levels as it has in other countries. However, it is very likely that under conditions of improved data collection, Nicaragua would demonstrate trends more in line with El Salvador, Guatemala, and Honduras.

A case study: Armed groups, rural bands, and violence in rural Nicaragua

Compared to the other Central American countries emerging from conflict, Nicaragua has suffered, and continues to suffer to a greater degree, from the activity of organized and semi-organized armed groups and rural bands involved in actions including common crime, robbery, kidnapping, intimidation, and borderline intervention in local politics. The failures and shortcomings of the disarmament, demobilization, reintegration, and pacification processes in Nicaragua led to several cycles of rearmament of ex-combatants both from the Resistance and the Sandinista army. At one point in the mid-1990s, up to 20,000 men had rearmed, mostly in and around northern Nicaragua.²⁶ The groups were named *Recontras*, *Recompas*, or *Revueltos*, depending on their composition, and often incorporated men that joined in order to meet their individual demands and needs rather than collective political objectives. By 1994, a marked reduction in armed movements had taken place (see Figure 7).

Today the majority of these armed groups have disappeared, partly due to constant military and police crack-downs and partly because the Chamorro and Alemán governments' policy not to recognize their legitimacy made rearmament strategically less advantageous as a social or political negotiating tool for ex-combatants (Bendaña, 1999). Despite the significant reduction in their numbers, the few that are still active continue to present serious threats to stability in certain parts of the country. Bendaña (2000) refers to the development of the armed groups and rural bands and the government's response to their activity as the potential 'Colombianization' of Nicaragua. In this scenario, drug traffickers intermingle and co-operate with these armed groups, benefiting from a weak or non-existent state presence.

Figure 7 The development of armed groups in Nicaragua, 1991–99²⁷



Source: PN de Nicaragua; graph adapted from Cuadra (2000; 2001) and Saldomando (1999)

The distinction between rural bands and armed groups is not clearly delineated, and lies often in the eye of the beholder. Cuadra and Saldomando (2000) point to several factors that distinguish rural bands from armed movements and one they hold in common:

- Rural bands usually consist of between four and five men, while rearmed groups consist of between one and two dozen members.
- Participants in rural bands are a mixture of ex-convicts and criminals, poor peasants, and discontented ex-combatants, while the rearmed groups have traditionally consisted mostly of ex-combatants and some peasants.
- Rural bands are motivated exclusively by material gain and are not interested in solving social problems or engaging in dialogue with government authorities.
- Crime is the main activity of rural bands, while rearmed groups might have committed crimes as a means to an end, but not as ends in themselves.
- As a shared characteristic, rural bands and armed groups operate in the same geographic regions.

In addition, Saldomando (1999) points to three key reasons for the emergence of rural bands. Firstly, the culture of violence created by the conflict has taught many people that violence is potentially a valuable tool for survival and material gain. Secondly, the availability of and access to hidden arsenals of small arms and light weapons have made this an easy choice for many. Thirdly, rural criminal banditry is often the most lucrative economic option for the many Nicaraguans who lack formal education, but have military skills.

The armed groups that appeared after the formal demilitarization process ended were considered 'rural criminal bands' and were treated as such by the Nicaraguan government. Since 1996, 309 rural bands have been identified by the PN. Sixty-four per cent of the crimes attributed to the rural bands are robberies and kidnappings (Cuadra, 2001). The northern department of Matagalpa and the Mining Triangle region known as the RAAN, in the country's east, are two parts of Nicaragua presently affected by both rural bands and armed groups. They are also geographically contiguous.

Armed groups and rural bands in northern and eastern Nicaragua

Most armed groups and rural bands operate in and around the city of Matagalpa and in areas bordering the RAAN (in the east, bordering the department of Matagalpa), such as Rancho Grande, La Dalia, Mulukukú, Waslala, Matiguás, Rio Blanco, Wiwilí, Yali, and Cuá-Bocay. In general, these groups do not claim political or social motivations, and most of their members are believed to live in the same towns where they operate. The groups of Matagalpa are generally smaller than those operating in other parts of the country, consisting of anywhere from four to eight men. For the most part, they are made up of ex-combatants and peasants. Some members usually have AK-47 rifles, while the rest use revolvers, pistols, and low-calibre hunting rifles. The most common crimes committed in Matagalpa are armed robberies of coffee trucks carrying products and payrolls, and livestock theft. Intense police enforcement has reduced the activity of the rural bands, although there is usually a resurgence in crimes just before the coffee harvest, when there is an influx of workers and greater circulation of cash (Cuadra, 2001). The government's practice of addressing this problem exclusively through a law enforcement approach has been highly criticized by the regions' coffee producers, and even by the police (Cuadra, 2001).

Table 10 lists armed groups and/or rural bands identified by the PN as operating in the northern and eastern regions of the country in 1999. This paper does not attempt to define one specific faction as an armed group or rural band. As indicated above, the definitions are complex and the distinctions often blurred.

Table 10. Armed groups and/or rural bands in northern and eastern Nicaragua, 1999

Armed group/rural band name	Number of members
Los Cruces	5
San Pedro	4
Los Vegas	4
Los Charles	5
Los Blancos	5
José Luis Marengo (associated with FUAC)	7
Los Hernández	5
Julio Rizo	5
Pilar Lira	6
Los Medranos	5
Los Juárez	4
Talavera	5
Salvador Peralata	2
Santa María de Tazua	3
Los Ortega	3
Santos Manzanares	4
Fuerzas Armadas Revolucionarias de Nicaragua (FARN)	6
Apatío El Sabalar	6
Los Matagalpinos	8
Total	92

Source: PN de Nicaragua; table adapted from Cuadra (2001)

The Revolutionary Armed Forces of Nicaragua (FARN) is one of the most infamous factions in the department of Matagalpa. Despite the connotations of its name, it does not advance clear political or social interests. The FARN's leader was allegedly killed in a shootout with police in March 2000. At that time, his group was involved in blocking the highway near the town of La Dalia, extorting from commercial trucks, and stealing firearms from any travellers who had them in their possession. AK-47 assault rifles were recovered in the operation that killed the FARN leader, along with a list of coffee farmers who could have been potential victims of extortion. The group has been considered out of operation several times, only to resurface again later (Sarmiento, 2000).

Even though the FARN does not have any clear political agenda, it is reported to be in collusion with the FUAC and the rearmed Contra group known as the 3–80 Movement.²⁸ Unofficial sources claim that the FARN had met with representatives of the Revolutionary Armed Forces of Colombia (FARC) in 1999 to discuss the FARN's expansion to Honduras, El Salvador, Guatemala, and Chiapas. This makes it likely that the FARN has more than the six members attributed to it by the PN in 1999 (Pantoja, 2000; see also Table 10).

Armed violence and coffee farming in Nicaragua

For over a century, coffee has been the primary export product of Nicaragua. Between 1994 and 1999, coffee production constituted more than five per cent of the country's GDP (Cuadra, 2001). Germany and the US are the country's two most important export markets. Nicaraguan coffee is cultivated all over the country, but primarily in the northern departments of Matagalpa, Jinotega, Estelí, Madriz, and Nueva Segovia. These were also the regions most affected by the civil war, the rearmament of ex-combatants in the early 1990s, and the emergence of criminal bands in the later 1990s (Cuadra, 2001).

The production of coffee is labour intensive and employs more than 200,000 Nicaraguans, most of whom live in relative poverty. Ironically, considering the importance of coffee production for the Nicaraguan economy, the coffee-growing regions of Nicaragua are also the poorest areas of the country. Matagalpa, for example, one of the most important Nicaraguan departments for coffee production, has both the highest poverty rate and the highest number of poor people in absolute terms after the capital, Managua (Saldomando, 1999).

The greatest challenge facing the Nicaraguan coffee industry has been the drastic fall in international prices over the last few years.²⁹ Combined with the lack of an alternative cashcrop production plan, this has caused a financial crisis that has mobilized coffee producers to protest against the government. A politically unstable environment has resulted from this situation, aggravated by the fact that coffee producers have been the primary targets of rural criminal bands involved in kidnapping and robbery (Cuadra, 2001).

A study carried out by the Nicaraguan Centre for Strategic Studies in 1999 determined that of the hundreds of AK-47 rifles that had been distributed to farmers by the Nicaraguan army for their own defense, many were largely unaccounted for. In 1998, 30 of these weapons were reported stolen from various farmers (Carache and Rodríguez, 1999b). Most of these weapons were reportedly stolen by armed criminal groups and used against the same farmers they were intended to protect, as well as in land disputes (Meza, 1998). For example, coffee farmers in Matagalpa, Jinotega, and Boaco are frequently kidnapped by rural bands armed with AK-47s.³⁰

A decree issued by President Arnoldo Alemán in 1999 called for the return of all military weapons in the hands of coffee growers and cattle ranchers. The Association of Coffee Growers of Matagalpa (ASOCAFEMAT) reported that nearly all coffee growers had two or three military rifles provided by the military and several other weapons acquired on the black market (Carache and Rodríguez, 1999a). The military sought to replace the military weapons with hunting rifles and increase the availability of radio communication between police and farmers, but the farmers were not convinced that this would provide sufficient protection. When news spread of the government's plans to take away high-powered weapons from the coffee growers, black-market weapons dealers approached them offering M-16 rifles with attached grenade launchers and M-79 grenade launchers. The president of ASOCAFEMAT purchased a 50mm machine gun (Carache and Rodríguez, 1999b), declaring that

the government asked the farmers to disarm, but then tried to sell them sawn-off shotguns (Nicolas-Lacayo, 1999). Growers claimed that the hunting rifles and ammunition offered to them were both more expensive and more difficult to obtain. At that time, an AK-47 was selling for USD 70, while a hunting rifle fetched five times that. The government failed to invest adequate resources into seriously implementing the plan to recover the military weapons in the hands of farmers and ranchers, leaving hundreds, or potentially thousands, of military weapons in circulation in the region (Carache and Rodríguez, 1999b).

In 1999, ASOCAFEMAT reported a 10.5 per cent rise in the cost of production as a result of the additional security measures they were forced to take against the violence and crime committed by rural bands in the region. Coffee farmers have invested in private security guards, radio communication, and armed transport to protect their plantations. ASOCAFEMAT estimated that they could increase coffee production by at least 30 per cent if they could work under peaceful conditions. Also, many families in the rural areas have moved away to larger cities to escape the constant threat presented by the rural bands, resulting in a drain of labour for coffee production (Carache and Rodríguez, 1999a).

The role of military and civilian firearms in exacerbating social and political problems in the region led to the organization of the First Regional Forum on the Possession of Arms in Northern Nicaragua held in Matagalpa in August 2000 (Hurtado, 2001).

IV. Conclusions

Despite the shortcomings of reliable data on firearm-related homicides, crime, and other related factors in Central America, it would be difficult to find five contiguous countries anywhere else in the world with as much comparative data produced so recently. However, generating effective policy interventions to deal with the problems associated with weapons proliferation and misuse requires still more precise data over longer periods of time. Police authorities in El Salvador, Guatemala, and Honduras were created nine, five, and four years ago respectively, and have only begun to consolidate their intended roles in society. Nicaragua has not compiled firearm-related homicide and injury data in a systematic fashion, and the lack of state presence in large portions of the country suggests that government data should be treated with caution.

The data presented in this paper raises questions that need to be addressed on a regional, national, and local basis. What types of weapons are causing the greatest damage: grenades, pistols and revolvers, assault rifles, or home-made weapons? Are there any identifiable trends in firearm-related homicides, injuries, and crime rates? Are illegal weapons or legally-registered weapons the primary problem? What are some of the longer-term costs to the public health system and economy in general?

One of the other key issues raised in this paper relates to the growth of the private security industry, which has been identified as both an indicator of and potential contributor to a violent environment. It is likely that a better understanding of how many of these companies exist, who owns them, how many people they employ, and how they control their arms and personnel will produce better-informed policy interventions, regulations, and enforcement, thus reducing their negative effects.

The findings from this paper suggest that the incidence of homicides and firearm-related homicides in Central America has diminished moderately in recent years, although their occurrence is still at alarmingly high levels. 'Post-conflict' does not necessarily mean 'post-violence', and despite the improvement of some indicators of violence, Central America's citizens continue to feel insecure. Crime and violence, especially involving firearms, are some of the key impediments to good governance in Central America, together with persistent poverty, rampant corruption, continued social inequality, and natural disasters. At the same time, the impact of firearms is perpetuated by weak governance, particularly inadequate justice and public security structures.

The small size of the region, the initial data presented in this paper and others, and the close relationship of the individual countries to the UN and other international organizations provides a good foundation for serious comparative research in the future. The model put forth by the UNDP in collaboration with the Salvadoran government's National Public Security Commission, the Central American University, and other NGOs³¹ should be easily replicable in other Central American countries where the UN has active mandates, especially Guatemala. Additionally, on-going projects focusing on the impact on public health of small arms by the WHO and PAHO could strengthen links to the public health community in the region. Such a multilateral collaborative framework would help to improve the capacity of each country to compile good comparative data on firearm-related homicides, injuries, and crimes over a five-year period. Yet, without the active participation of the international community and committed actors from national civil societies, the commitment of national governments to collect and interpret data on the impact of firearms and violence on society is unlikely to persist beyond one political/electoral cycle.

Endnotes

- ¹ According to the UN (1997), small arms include revolvers and pistols, rifles and carbines, assault rifles, sub-machine guns, and light machine guns. Light weapons include heavy machine guns, hand-held and mounted grenade launchers, portable anti-tank and anti-aircraft guns, recoilless rifles, portable anti-tank and anti-aircraft missile systems, and mortars of less than 100mm calibre.
- ² For a detailed discussion of the demilitarization of security forces in Central America up to 1997, see Isacson (1997).
- ³ The widespread availability of small arms in Central America was a primary point of consensus among the governments and NGOs that participated in the First Central American Forum on the Proliferation of Small Arms and Light Weapons held in Antigua, Guatemala in June 2000, and in the Seminar on Small Arms and Light Weapons in Central America: Implementing the UN Programme of Action's Elements for Regulating and Controlling Small Arms held in San José, Costa Rica, 3–5 December 2001.
- ⁴ A more recent figure from 2001 indicates that there are 173,507 legally registered weapons in El Salvador (Cruz, 2002).
- ⁵ Unlike the method used in the *Small Arms Survey 2001*, this estimate includes estimates on illicit stocks that might be in the hands of common citizens, organized criminals, or irregular armed groups, based on available data. The figure of 152,839 attributed to the Central American police and military forces comes from estimates of force sizes as derived by Isacson (1997), and is based on the assumption of 'one person, one weapon'.
- ⁶ It is unlikely that the IMG continues to assemble Galil rifles, though it does continue to produce ammunition.
- ⁷ Between 1998 and 1999, the US State Department increased the Latin American budget of the International Narcotics Program from USD 179.7 million to USD 430.5 million (Isacson and Olson, 1999). It is nearly impossible to isolate budgetary information on small arms, light weapons, and ammunition from broader training and equipment categories.
- ⁸ The Greater San Salvador Metropolitan Area includes 12 municipalities: San Salvador, San Marcos, Soyopango, Ilopango, San Martín, Ciudad Delgado, Apopa, Ayutuxtupeque, Cuscatancingo, Mejicanos, Antigua Cuscatlán, and Nueva San Salvador.
- ⁹ More recent figures from the 2001 victimization survey showed that 14.5 per cent of those not owning firearms had been victims of crimes during the previous 12 months. Among owners of firearms, the proportion was 25.4 per cent, and among those who had acquired firearms in the last 12 months, 36.8 per cent.
- ¹⁰ The figure of 75 per cent includes explosives such as grenades, although they only accounted for 17 of the 1,917 firearm-related homicides in 1999.
- ¹¹ More recent figures indicate that for 1998–2001, firearm-related homicides represented 78.2, 74.7, 71.8, and 74.3 per cent of all homicides respectively (Cruz, 2002).
- ¹² Statistics from the Attorney-General of El Salvador give somewhat higher figures for total homicides, with 3,845 and 3,551 homicides for 1999 and 2000 respectively. However, the proportion of homicides caused by firearms is not specified. This divergence demonstrates that even if El Salvador is the most advanced country regionally in terms of data collection, there is a continued need to improve capacity in this area.
- ¹³ The difference of 17 in total firearm-related homicides in 1999 between Tables 5 and 6 is attributed to grenade violence.
- ¹⁴ With regard to suicides, firearms appear to be involved in a relatively small number of incidents. In 1999, national forensic authorities registered 821 suicides, of which only eight per cent were committed with firearms—a rate of 1.06 per 100,000 (Cruz, 2001).
- ¹⁵ According to Muggah and Batchelor (2002), the DALY has emerged as a measure of the burden of disease. It reflects the total amount of healthy life lost to all causes, whether from premature mortality or from some degree of disability, during a period of time. In other words, it is an indicator of the time lived with a disability and the time lost due to premature mortality.
- ¹⁶ Annualizing this figure to the end of the year would mean an estimated 12 bank robberies in 2000.
- ¹⁷ Author interview with David Gutierrez, President of the Patriotic Movement Against Crime, San Salvador, 8 July 1998. For more on El Salvador's Goods for Guns programme, see Cruz and Beltrán (2000) and Laurance and Godnick (2001).
- ¹⁸ Some victims of lynchings are criminals who have escaped justice, while others are victims of false accusations. The UN attributes this to poorly-deployed police, a corrupt and inefficient judiciary, and the manipulation of citizens by individuals in communities where the social fabric was destroyed by the armed conflict (MINUGUA, 2000).

- ¹⁹ The Guatemala City metropolitan area consists of the capital and the cities of Mixco, Villa Nueva, Chinautla, and San Miguel Petapa.
- ²⁰ A more recent study, surveying the number of private security agents in the Central American countries, estimates a lower figure of 25,000 private security agents in Guatemala (Diálogo Centroamericano, 2002).
- ²¹ De Leon et al. (1999) documented 289 bus assaults between 1995 and 1997 by combining data from the now-defunct National Police with that collected by the new PNC.
- ²² These figures do not represent national figures for all homicides and firearm-related homicides in Honduras in 2001, as they claim only to include youths and young adults, without defining any age limit for young adults.
- ²³ Nicaragua's civil war ended in 1990, El Salvador's in 1992, and Guatemala's officially in 1996.
- ²⁴ However, a publication of the Nicaraguan Centre for Strategic Studies reported the existence of 51 private security companies operating nationally, with 4,555 registered weapons, consisting mainly of revolvers and semi-automatic rifles (Rocha Elasquit and Serrano, 2001).
- ²⁵ The sampling method described by Cuadra is one used by journalists, in which a month is chosen from each quarter in the year and the last two weeks of each of these months are chosen.
- ²⁶ For a more detailed discussion of the different issues involved in demobilization, disarmament, reintegration, and pacification see Saldomando and Cuadra (1994) and Bendaña (1999).
- ²⁷ This includes figures for armed groups of individuals detected by government authorities. The same groups can be included in figures from one year to the next if they continue to operate as such.
- ²⁸ It is believed that these groups sought to sabotage the 2000 municipal elections in the department of Matagalpa and also that some employees of municipal governments in Matagalpa assist the FARN.
- ²⁹ In January 2000, the international price per 60kg bag of coffee was approximately USD 109. By December 2000, the price had dropped to USD 64, and it continued to decline through 2001 (International Coffee Organization (ICO), 2001). Despite offers by the government to provide a USD 25 subsidy per bag, it appears that many coffee growers will continue to go out of business.
- ³⁰ In August 1999, José Cuadra, a congressman and coffee farmer from the Matagalpa region, was shot and killed with an AK-47 and other firearms that had been stolen from a coffee farmer in nearby Rancho Grande. The motive for the killing was to steal the payroll money and firearms Cuadra was carrying (López, 1999).
- ³¹ See <<http://www.violenciaelsalvador.org.sv>>.

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A publication
of the Small Arms Survey