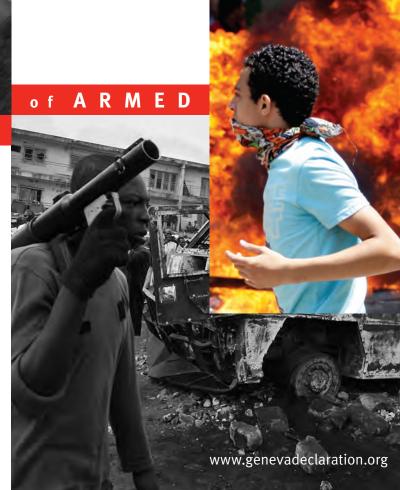




VIOLENCE

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he Global Burden of Armed Violence 2011 takes an integrated approach to the complex and volatile dynamics of armed violence around the world. Drawing on comprehensive country-level data, including both conflict-related and criminal violence, it estimates that at least 526,000 people die violently every year, more than three-quarters of them in non-conflict settings. It highlights that the 58 countries with high rates of lethal violence account for two-thirds of all violent deaths, and shows that one-quarter of all violent deaths occur in just 14 countries, seven of which are in the Americas. New research on femicide also reveals that about 66,000 women and girls are violently killed around the world each year.

This volume also assesses the linkages between violent death rates and socio-economic development, demonstrating that homicide rates are higher wherever income disparity, extreme poverty, and hunger are high. It challenges the use of simple analytical classifications and policy responses, and offers researchers and policy-makers new tools for studying and tackling different forms of violence.

Рнотоѕ

TOP LEFT: Rescuers evacuate a wounded person from Utoeya, Norway, July 2011. © Morten Edvarsen/AFP Photo

CENTRE LEFT: Morgue workers transport a coffin to be buried along with other unidentified bodies found in mass graves, Durango, Mexico, June 2011. © Jorge Valenzuela/Reuters

BOTTOM RIGHT: An armed fighter walks past a burnt-out armed vehicle in the Abobo district of Abidjan, Côte d'Ivoire, March 2010. © Issouf Sanogo/AFP Photo

CENTRE RIGHT: A protester runs from a burning police booth in front of the Interior Ministry in Cairo, Egypt, June 2011. © Mohamed Abd El-Ghany/Reuters



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G L O B A L

U R D E N

Lethal Encounters of ARMED

VIOLENCE

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he Global Burden of Armed Violence 2011 introduces a unified framework for understanding patterns and characteristics of lethal violence across all settings, from armed conflicts to economically motivated crime and interpersonal violence.

The report flies in the face of conventional wisdom and mainstream media coverage by highlighting that conflict deaths account for a relatively small part of the global burden of lethal violence, and that most places featuring high death rates are not to be found in conflict zones. Only about 10 per cent of all violent deaths occur as a result of armed conflicts or terrorism. Roughly 90 per cent of victims die as a result of homicides, or from deaths occurring during legal interventions in non-conflict countries.

The human toll is staggering. Between 2004 and 2009, more than half a million people (526,000) died annually as a direct result of violence. In addition, hundreds of thousands of fatalities probably occur without being recorded, or as an indirect result of armed conflict. Further, for every person killed, many more are injured, or suffer permanent disability and long-lasting pain.

The Global Burden of Armed Violence 2011 also examines the negative links between armed violence and development. It shows how freedom from violence is a fundamental prerequisite of economic progress and human well-being and how armed violence is strongly associated with

slower development. Armed violence undermines governmental institutions, destroys human and physical capital, reduces productivity, and redirects resources away from social and economic investment in fighting crime and violence. Countries that exhibit high levels of income inequality and unemployment as well as poor rule of law are more likely to experience high levels of armed violence.

The picture may be bleak, but a great deal can be done to fight the scourge of armed violence. Together with more than 100 other signatories of the Geneva Declaration, the Swiss Confederation recognizes that effective prevention and reduction of armed violence is a key to sustainable development. Around the globe, in the North as in the South, states are stepping up their efforts to tackle armed violence in urban contexts, along borders, and among high-risk groups. National and local governments successfully join forces with civil society to help reduce violent death rates. A number of good practices derive from these experiences.

The international community—including agencies such as the Organisation for Economic Co-operation and Development, the United Nations, and the World Bank—is increasingly supporting such programming efforts and providing guidelines for good practices in preventing and reducing armed violence. In this context, the *Global Burden of Armed Violence 2011* provides policy-makers

and other stakeholders with a timely tool for responding to evidence in designing policies and programmes at the local, national, and regional levels. We urge the international community, governments, local authorities, and civil society partners to continue to work together to reduce the global burden of armed violence. \$\\$

Peter Maurer

State Secretary of the Swiss Federal Department of Foreign Affairs



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About the Geneva Declaration

HE GENEVA DECLARATION on Armed Violence and Development, endorsed by more than 100 countries, commits signatories to supporting initiatives intended to measure the human, social, and economic costs of armed violence, to assess risks and vulnerabilities, to evaluate the effectiveness of armed violence reduction programmes, and to disseminate knowledge of best practices. The Declaration calls upon states to achieve measurable reductions in the global burden of armed violence and tangible improvements in human security by 2015.

Core group members include Brazil, Colombia, Finland, Guatemala, Indonesia, Kenya, Morocco, the Netherlands, Norway, the Philippines, Spain, Switzerland, Thailand, and the United Kingdom. Affiliated organizations include the United Nations Development Programme (UNDP), the Organisation for Economic Co-operation and Development (OECD), and the Quaker United Nations Office (QUNO).

For more information about the Geneva Declaration, related activities, and publications, please visit www.genevadeclaration.org. \$\\$

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The GBAV 2011 assembles research based on a substantial collection of data on lethal forms of violence around the globe and generated by a wide range of institutional partners. Elisabeth

Gilgen, Matthias Nowak, and Katherine Aguirre Tobón of the Small Arms Survey led the process of building the extensive GBAV 2011 database by collecting information on conflict deaths, terrorism victims, intentional and unintentional homicide. and deaths occurring during legal interventions. The United Nations Office on Drugs and Crime (UNODC) provided comprehensive national homicide statistics; the World Health Organization (WHO) shared preliminary 2008 estimates on interpersonal and collective violence; the Global Burden of Disease Injury Expert Group provided and analysed data stemming from vital registration sources; and the Bogotá-based Conflict Analysis Resource Center (CERAC) was responsible for the dataset on conflict deaths.

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A Unified Approach to Armed Violence

The lines between categories of violence are blurry, allowing various types of violence to reinforce each other in a vicious circle. These traits thwart simple classifications and policy responses. In this chapter, Keith Krause and Matthias Nowak provide an overview of cases and arguments for a unified approach to armed violence. By acknowledging the blurring of boundaries, this approach seeks to facilitate the design of policies and interventions that effectively address the serious challenges posed by armed violence to the safety and well-being of individuals and communities. Jennifer Hazen, Sabine C. Carey, and Neil J. Mitchell provided insight into the evolving nature of armed groups; Germán Lugo of the Sistema Nacional de Seguridad Pública supplied information regarding deaths due to organized crime in Mexico: and the International Maritime Bureau provided assistance in the use and interpretation of yearly piracy reports.

Trends and Patterns of Lethal Violence

Instead of conforming to boundaries between organized, political, and criminally or economically motivated violence, this chapter presents

support with data collection, communications with national governments, and database management.

comprehensive data on violent deaths at the global, regional, and national levels. Authored by Elisabeth Gilgen, it introduces the GBAV 2011 database. Jean-Marc Flückiger (consultant, Switzerland) contributed background research on the complexities of defining terrorism and counting its victims, and Paul Smit (consultant, Netherlands) explored the difficulties of counting victims of violent deaths categorized as 'intentional homicides'. Gavin Hales (consultant, UK) offered valuable input on legal definitions of intentional and unintentional homicides. Andrés Rengifo (Harvard University) provided guidance on deaths due to police killings; and Raza Shah Khan, executive director of the Sustainable Peace and Development Organization, offered insight into counting conflict casualties in Pakistan. Michael Spagat (University of London), John Sloboda (University of London and Iraq Body Count), Madelyn Hsiao-Rei Hicks (King's College), and Hamit Dardagan (Irag Body Count) provided an analysis of violent deaths of Iraqi civilians.

When the Victim is a Woman

One useful way of measuring the extent of lethal violence perpetrated against women is by disaggregating homicide statistics by sex. In this chapter, Anna Alvazzi del Frate presents a global dataset on femicide, which she compiled using mostly publicly available information. Steven Malby (UNODC), Mario Arroyo (Instituto ciudadano de estudios sobre la inseguridad, Mexico), Mumbi Machera (University of Nairobi,), Sami Nevala (European Union Fundamental Rights Agency), Soula McFarlane (Australian Bureau of Statistics), Maria Giuseppina Muratore (Istituto nazionale di statistica, Italy), Henriette Jansen (consultant on violence against women, Switzerland), and Natalie Jaynes (Open Society Foundation, South Africa) provided valuable input.

Characteristics of Armed Violence

Data on intentional homicide has become increasingly detailed in many countries in recent years. Making use of data and analysis provided by the United Nations Office on Drugs and Crime, this chapter moves beyond a description of overall homicide rates to present what is known about the characteristics of homicides and state responses to it. At UNODC, the Statistics and Surveys Section undertook research and analysis. The work was led by Steven Malby under the overall supervision of Angela Me. The chapter benefitted from the data collection system managed by Catherine Pysden and assisted by Ali Saadeddin. International consultants Wilfried De Wever, Lievine Prince, and Elizabeth Gurian provided valuable

More Armed Violence, Less Development

There is a widespread consensus that armed violence and underdevelopment are connected. And yet there is comparatively little empirical evidence demonstrating the precise nature of the relationship. Written by Robert Muggah and Jorge Restrepo, this chapter disaggregates the specific dynamics of that association with an aim to better inform the policy decisions of multilateral and bilateral aid agencies that are investing in armed violence prevention and reduction activities. Mayra Iglesias and Manual Moscoso of CERAC and Katherine Aguirre Tobón of the Small Arms Survey generated additional statistical input. Further contributions

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Executive Summary

HE 2011 EDITION of the Global Burden of Armed Violence adopts an integrated approach to understanding the origins and outcomes of armed violence. Contemporary armed violence can take multiple forms. Whether in the context of conflicts or rebel uprisings, or of gang violence and killings associated with drug trafficking or transnational organized crime, hundreds of thousands of people suffer injuries or lose their lives every year. Countless others are forced to leave their homes and communities. Still more must endure various forms of violence inside the home. Many tragedies—from epidemics to natural disasters—kill people. But violence is unique because it involves the deliberate harming of fellow human beings.

Conventional analyses often compartmentalize armed violence into distinct categories according to a particular context or underlying intentions of the perpetrator. The two most common distinctions are drawn between *organized* (collective) and interpersonal (individual) violence, and between conflict (politically motivated) and criminal (economically motivated) violence. These distinctions are intended to capture the level of organization and the motivations behind violent acts. Governments, multilateral agencies, non-governmental organizations, and research institutes around the world use them to assess overall levels of violence or to plan violence reduction programmes and policies. Yet these distinctions give the misleading impression that

different forms and incidents of violence fit into neat and separate categories.

The 2011 Global Burden of Armed Violence challenges such compartmentalized approaches to armed violence and provides a global overview of violent death across different forms of violence. Rather than confining its analysis exclusively to conflict, criminal, or interpersonal forms of armed violence, it provides a solid foundation for further refining and deepening our understanding of how violence manifests itself in different contexts. and how different forms of violence may interact with each other.

Key findings of the report are:

- More than 526,000 people are killed each year as a result of lethal violence. One in every ten of all reported violent deaths around the world occurs in so-called conflict settings or during terrorist activities, while 396,000 intentional homicides occur every year.
- Fifty-eight countries exhibit violent death rates above 10.0 per 100,000. These countries account for almost two-thirds of all violent deaths. El Salvador was the country most affected by lethal violence in 2004-09, followed by Iraq and Jamaica.
- The proportion of homicides related to *gangs* or organized crime is significantly higher in Central and South America than in Asia or Europe. Homicide rates related to *robbery or*

- *theft* tend to be higher in countries with greater income inequality.
- The proportion of homicides related to intimate partners or the family represents a significant proportion of homicides in some countries in Europe and Asia.
- Roughly 66,000 women are violently killed around the world each year, accounting for approximately 17 per cent of total intentional homicides.
- Lethal violence is strongly associated with negative development outcomes in various ways and is accompanied by low levels of overall achievement of the Millennium Development Goals.

Chapter One (A Unified Approach to Armed Violence) shows high levels of gang violence in Guatemala or Honduras, vigilante justice in postwar and fragile states such as Liberia or Timor-Leste, post-election violence in Côte d'Ivoire or Kenya, and high levels of urban crime in cities such as Kingston or Rio de Janeiro amply demonstrate how the lines between armed conflict and criminal violence are increasingly blurred. In Iraq since 2003, for example, the targeting of non-combatants by insurgents, militias, and sectarian groups may seem chaotic or random at first glance, yet a closer look at underlying patterns of violence suggests that seemingly arbitrary or criminal violence may also serve political purposes in line with the goals of armed groups. In many places, non-conflict violence is linked to highly organized criminal activity, or to different forms of 'political violence', either targeting political opponents or government officials (such as mayors, teachers, police officers, or journalists), or seeking to influence and modify government policies through corruption and use of force. In these contexts, the label 'homicide'—which implies ostensibly







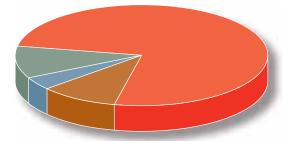
apolitical interpersonal and criminal violence—is slightly misleading.

The violent activities of organized criminal groups frequently have broader political consequences, even if their main motivation remains profitseeking. Criminal activities such as trafficking in drugs or other illegal goods have also been used to finance war efforts in places such as Afghanistan, Bosnia and Herzegovina, Colombia, and Liberia. The operations of organized crime groups, and especially the trafficking of illicit narcotics, are frequently accompanied by high levels of violence. Such groups have shown an extraordinary capacity for blurring the boundaries between criminal and political types of violence, as evidenced by the drug wars in Mexico and the rest of Central America, the Caribbean, and certain Andean countries. Drug cartels are locked in battle for control over the flow of narcotics while governments in countries across these regions have mobilized their armies to boost a faltering war on drugs. Illicit trafficking of drugs is increasingly recognized as a threat to international, regional, and national security, as well as public safety.

FIGURE 2.14 Disaggregating the global burden of lethal violence

LEGEND:

- Direct conflict deaths (55,000; 10.4%)
- Intentional homicide (396,000; 75.3%)
- Unintentional homicide (54,000; 10.2%)
- Legal intervention killings (21,000; 4.1%)



Source: GBAV 2011 database

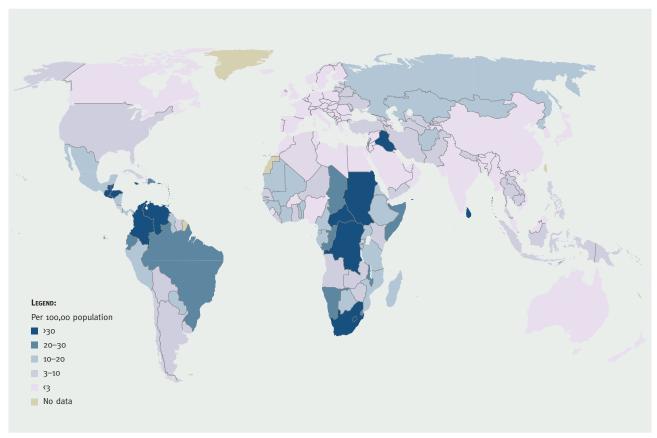
These recurring characteristics—the multiple, simultaneous, and shifting motivations of violent actors, and the links between different forms of violence—demand more than simple analytical classifications and policy responses. They require new ways of understanding the relationships between what were previously held to be distinct forms of armed violence. The *Global Burden of Armed Violence 2011* offers a preliminary roadmap to do precisely this.

Disaggregating lethal violence

The intensity and organization of violent killings provides a critical indicator of a state's—and its population's—relative insecurity. From a statistical perspective, violent deaths tend to be more systematically recorded than other crimes and human rights violations. Based on data on lethal violence from established administrative sources in the criminal justice, health, and conflict studies sectors, Chapter Two (Trends and Patterns of Lethal Violence) finds that an average of 526,000 people died violently per year between 2004 and 2009. The estimate includes civilian conflict deaths, battle deaths, and victims of terrorism (combined as direct conflict deaths), intentional and unintentional homicide, and legal interventions in non-conflict settings (see Figure 2.14).

While war casualties are frequently featured in media headlines, their actual number is far lower than that of victims killed in many ostensibly nonconflict countries. Roughly three-quarters of all violent deaths are the result of intentional homicide, while approximately 10 per cent are direct conflict deaths. This translates into 396,000 intentional homicide victims and 55,000 direct conflict deaths per year. Map 2.1 presents a snapshot of the global distribution of direct conflict and intentional homicide death rates per 100,000 population.

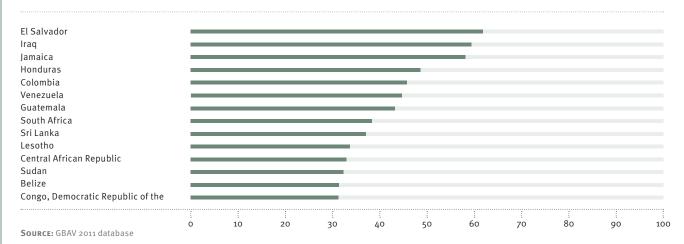
MAP 2.1 Average annual violent death rates per 100,000, 2004–2009



Source: GBAV 2011 database

An estimated 54,000 additional people (more than 10 per cent of all violent deaths) die violently as a result of unintentional homicide. The remaining category—killings during legal interventions—accounts for at least 21,000 victims a year, or 4 per cent of all violent deaths. Most of the data is derived from incident reporting systems and databases, which typically yield conservative estimates since they often undercount the number of victims in any given situation. The reasons for this are obvious: any data harvesting system depends on quality reporting and institutional capacity to monitor incidents.

The 2011 Global Burden of Armed Violence zooms in on the 58 states that are experiencing violent death rates (direct conflict deaths and intentional homicides combined) of more than 10 per 100,000 population. It finds that one-quarter of the world's countries—comprising some 1.2 billion people or roughly 18 per cent of the global population—exhibit high and very high rates of armed violence and account for almost two-thirds (63 per cent) of all violent deaths. An estimated 285,000 people are violently killed each year in these countries. Among them, 14 countries are experiencing extremely high violent death rates—more



than 30 violent deaths per 100,000 people (see Figure 2.3); these comprise 4.6 per cent of the global population and account for an estimated 124,000 violent deaths. In other words, 25 per cent of violent deaths occur in just 14 countries, which are home to less than 5 per cent of the world's population. Of these 14 countries, seven are in the Americas.

As these findings reveal, armed violence is highly concentrated in specific regions and in a comparatively small number of countries. The regions most affected by lethal violence include Latin America and the Caribbean, and Central and Southern Africa. At the country level, El Salvador experienced the highest overall annual average violent death rate between 2004 and 2009, followed by Iraq and Jamaica.

Lethal violence is not only distributed unevenly across states or regions, but also within states. While specific municipalities, cities, or neighbourhoods may be highly affected by criminal violence and armed conflict, other areas may be comparatively peaceful. Whereas Mexico's violent death rate in 2009 stood at 18.4 per 100,000

population, for example, the state of Chihuahua experienced a rate of 108 per 100,000 in the same year. Understanding what is behind such extreme sub-national variations in the incidence of armed violence is a prerequisite for designing and administering effective violence prevention and reduction programmes.

The Global Burden of Armed Violence 2011 also unpacks the diverse contexts and settings in which intentional homicides occur. It examines how intentional homicide may arise in the context of violent operations by gangs or organized criminal groups, premeditated or unplanned crimes of passion committed against intimate partners or family members, or other crimes, such as robbery or theft. **Chapter Three** (Characteristics of Armed Violence) looks at the trends and patterns of these different forms of intentional homicidal violence across different situations and geographic settings.

Such disaggregration of data is important for policy and programmatic reasons. For example, while countries in Asia and Europe show a comparatively high proportion of intimate or family-

related homicides (around 30 per cent of total homicides), their overall homicide rates are significantly lower than those of other regions, such as the Americas. Nonetheless, the high proportion of intimate or family-related homicides in many countries in Asia and Europe underlines the importance of aiming research and local violence reduction and prevention initiatives at these forms of lethal violence. Chapter Three also finds that the proportion of intentional homicides associated with gangs or organized crime is significantly higher in countries in Latin America. At the same time, it notes how homicide rates related to robbery or theft tend to be higher in countries with greater income inequality.

Firearms play an important role in lethal violence, and a close inspection of how and how frequently they are used in homicide can also highlight ways to refine and focus armed violence prevention and reduction efforts. Chapter Three presents a review of 104 countries for which accurate data is available with the aim of untangling the relationships between overall intentional homicide rates and the proportion of homicides committed by firearm. Not all countries with high homicide rates have a high proportion of homicides carried out by firearm; however, four-fifths (78 per cent) of the countries in which more than 70 per cent of homicides are carried out with a firearm show disproportionately high homicide rates of 20 per 100,000 population or above.

These and other findings indicate that societies with high proportions of homicides committed with firearms also experience higher overall violent death rates. In addition, Chapter Three demonstrates that firearms are increasingly supplanting knives and blunt objects as the weapons of choice for youth gangs and organized criminal groups. This shift is related to the general availability of weapons to civilians, as

well as the presence of illegal trafficking and smuggling of firearms.

In **Chapter Four** (When the Victim Is a Woman), the 2011 *Global Burden of Armed Violence* shines a spotlight on 'femicide'—the intentional killing of a woman. Trends in femicide are especially difficult to monitor and interpret because of scarcity of data. Based on the sparse data that is available, the chapter conservatively estimates that 66,000 women and girls are violently killed around the world each year. While men make up the larger proportion of victims of violent deaths, femicide accounts for approximately 17 per cent of the total 396,000 intentional homicides.

Countries that feature comparatively high homicide rates also typically experience higher femicide rates. In countries such as El Salvador and Guatemala, it is not just young men who are dying in high numbers, but also higher numbers of women and girls. At the same time, a deeper comparative inspection of the proportion of male and female victims shows considerable variations. A review of data from 83 countries highlights how in countries where homicides are relatively rare, as in Austria, Japan, Norway, or Switzerland, the percentage of female homicide victims compared to male victims is higher than in more violent contexts. Indeed, in countries where homicides are rare, the female-male victim ratio approaches 1 to 1. At the other end of the spectrum, in countries experiencing high homicide rates, femicide rates represent just a fraction of rates of homicides with male victims. This is the case in Brazil. Colombia, Puerto Rico, and Venezuela, where men are more than ten times more likely to die from homicide than women.

The use of firearms is less common in femicides than in homicides with male victims. But as with homicides in general, there appears to be some





relationship between femicide rates and the percentage of femicides committed with firearms: low femicide rates frequently correspond to a lower percentage of use of firearms.

Reducing armed violence, enabling development

The 2011 Global Burden of Armed Violence also considers the complex relationship between armed violence and development. Aid agencies and governments now widely accept that there is a relationship between higher levels of armed violence and fragile institutional capacities, and that there is a strong association between insecurity and underdevelopment. Without security, human, social, and economic development suffer. Countries with higher respect for the rule of law including effective criminal justice systems—also broadly show lower levels of intentional homicide. At the same time, there is a nexus between high homicide rates, a high proportion of homicides committed with firearms, and a low proportion of cases solved by law enforcement agencies. Countries showing this combination of factors, such as El Salvador and Jamaica, may risk entering a spiral of increasing violence and impunity.

Chapter Five (More Armed Violence, Less Development) presents an analysis of the relationship between lethal violence and development progress as measured by the Human Development Index (HDI) and the Millennium Development Goal (MDG) indicators. Research conducted for the 2011 Global Burden of Armed Violence suggests that lethal violence constrains development progress. Countries that register an improvement in their HDI are also most likely to exhibit lower levels of lethal violence. In other words, homicide rates are negatively and significantly linked to changes in

a country's HDI rating. Yet whether levels of violence *cause* lower scores is difficult to determine. Country data for 2000 to 2009 indicates that the greater the income disparity, the higher the homicide rates. The inverse is also true: societies reporting less severe income inequality report much lower levels of homicidal violence. The findings are aligned with and confirm the body of research that identifies a robust relationship between income inequality and violent criminality.

More positively, the 2011 Global Burden of Armed Violence finds that a reduction in a country's incidence of armed violence corresponds with improved MDG performance. High rates of intentional homicide are accompanied by significantly higher levels of extreme poverty and hunger (MDG 1), lower primary school enrolment (MDG 2), higher infant mortality and adolescent birth rates (MDGs 4 and 5), and higher youth unemployment. The same relationship is found between direct conflict deaths and MDG progress. Higher rates of direct conflict deaths are correlated with higher rates of poverty (measured as the population living below USD 1 per day); a lower share of women in wage employment in the non-agricultural sector; lower enrolment in primary education and a lower ratio of girls to boys in primary education; and last, but not least, lower HDI. These findings reveal a broad set of linkages between armed violence and development outcomes and represent a solid basis for further research at the local and national levels.

Containing and reducing the incidence of armed violence requires a proper diagnosis of its causes and consequences. Many governments affected by high levels of armed violence—as well as many others that are not affected—have initiated comprehensive armed violence monitoring systems. Such 'observatories', especially when administered in partnership with civil society and reliable

research institutions, can provide crucial information on the scale and distribution of lethal violence. This data is indispensable in unpacking the complex relationships between armed violence and factors such as unemployment, inequality, the presence of illicit markets, corruption, weak rule of law, and impunity. The ability of the international community and national as well as local governments to design appropriate policies and programmes for armed violence prevention and reduction depends critically on an integrated and comprehensive understanding of the distribution and dynamics of lethal (and non-lethal) violence worldwide.

Abbreviations

HDI Human Development Index

MDG Millennium Development Goal



A Unified Approach to Armed Violence

RMED VIOLENCE—in both its historical and contemporary manifestations—has directly affected the lives of hundreds of millions of people around the world. In a variety of settings—from the 20th-century world wars to the interventions in Iraq and Afghanistan, from the colonial struggles in Sub-Saharan Africa to contemporary conflicts in Libya or Côte d'Ivoire, and from street violence in Los Angeles and Lagos to the drug war in Mexico—millions have suffered injuries or lost their lives, while countless others have been forced to leave their homes and communities, exposed to sickness, famine, and sexual violence. Many other tragedies including epidemics and diseases, natural disasters, and accidents—claim people's lives, yet violence is distinct in that it involves the deliberate killing or harming of fellow human beings. High levels of armed violence—even when they do not result in death or injury—spread fear and insecurity, and corrode the social, political, and economic fabric of communities and societies in ways that are difficult to measure or compare.

This second edition of the *Global Burden of* Armed Violence report takes a unified view of armed violence, its causes, and its consequences. The first edition, published in 2008, sets out a basic framework for estimating the overall global burden of armed violence, and global and subregional levels of violent death from conflict and interpersonal violence (homicide). This edition takes two further steps, both of which have

important policy and programming implications. First, it 'zooms in' to present comparable nationallevel estimates for violent victimization. Second, it synthesizes and analyses available data from multiple sources to present the first aggregate overview of violent death from all sources, as opposed to distinguishing between conflict, criminal, and interpersonal forms of armed violence. It thus provides the basis for further refining and deepening our understanding of how violence is manifest in different contexts, and how different forms of violence may interact with each other.

One result of these refinements of data, instruments, and the level of analysis is that the Global Burden of Armed Violence 2011 revisits estimates of the global death toll to look at a longer time period (2004-09 rather than 2004-07) and to provide a more nuanced estimate. It also allows more fine-grained comparisons of regional and national variations in the scale and distribution of armed violence.

Armed violence takes many forms and appears in a wide range of contexts. Numerous analysts have noted that the changing nature of contemporary armed violence has blurred the line between armed conflict and crime, and between politically motivated and economically motivated violence. Economic dimensions of wars, the growth of regional networks involving transnational organized crime, gangs, and non-state armed groups, and persistently high levels of

interpersonal violence—whether in conflict and post-conflict situations or in settings that have not experienced war—make clear that armed violence is a complex phenomenon to untangle. Drawing sharp boundaries around the organization, nature, and purpose of different violent acts is unhelpful in developing responses to the diverse manifestations of violence around the world. Following the usage in the first *Global* Burden of Armed Violence report, this volume defines armed violence generally as 'the intentional use of illegitimate force (actual or threatened) with arms or explosives, against a person, group, community, or state, that undermines people-centred security and/or sustainable development' (Geneva Declaration Secretariat, 2008, p. 2).1

This chapter presents an overview of the main themes of the *Global Burden of Armed Violence* 2011, focusing in particular on the reasons for—and challenges to—adopting a unified approach to contemporary armed violence. Its key conclusions are that:

- The intensity and location of conflict and nonconflict armed violence has changed significantly over recent decades.
- Conventional typologies of armed violence based on the context, intention, and type of actor have limitations for both research (data collection) and policy-making (prevention and reduction programmes).
- The boundaries between political, criminal, and intimate or gender-based violence have become increasingly blurred, as revealed in the cases of Iraq, Mexico, and Somalia.
- Effective violence prevention and reduction programmes and policies need to start with a unified assessment of the scope, scale, and

sources of violence and insecurity before focusing on specific drivers or manifestations of violence.

The following chapters explore different elements of these general arguments. Chapter Two unpacks national- and regional-level data on rates and levels of armed violence around the world, focusing on the 58 most violence-affected states, all with an overall violent death rate exceeding 10 per 100,000. It shows that violence in non-conflict settings (intentional homicide) is responsible for the vast majority of killings (slightly more than 75 per cent of all deaths), while conflict-related violence accounts for only 10 per cent of all violent deaths. The remaining deaths are attributed to killings during legal interventions (4 per cent) and unintentional homicide (just over 10 per cent).2 Chapter Three focuses on violent victimization and the instruments of violence involved in so-called non-conflict settings. It finds that gang- and organized crime-related homicides are highly concentrated in Central and South America, and that deaths related to robbery are higher in countries with pronounced inequalities. It also points towards the critical nexus that may exist between high homicide rates, a high proportion of homicides committed with firearms, and a low proportion of cases solved by law enforcement. Chapter Four examines global patterns of violence against women. The final chapter studies the links between armed violence and development by considering the impact of armed violence on progress towards achievement of the Millennium Development Goals and other development indicators. It finds that countries with high and very high levels of violence are concentrated in the low human development and low-income categories, and that there is a persistent link between poverty, armed violence, and development.

Why a unified perspective?

Armed violence is conventionally treated as a series of distinct types that can be categorized according to such factors as the context or the underlying intentions of the perpetrator. The two most common distinctions are drawn between organized (collective) and interpersonal (individual) violence, and between conflict (politically motivated) and criminal (economically motivated) violence. These distinctions capture the level of organization of, and the motivations behind, the violent acts. Conflict violence follows a Clausewitzian logic, according to which 'war' (in its various forms) is the continuation of political struggles by other means, is highly organized, and uses force in a calibrated way to achieve particular ends that are subordinate to political considerations.3 Criminal violence is simply the use of armed violence that is not sanctioned by law (Riedel and Welch, 2008), regardless of whether it is motivated by impersonal economic gain (murders during robberies, for example) or interpersonal disputes.

Beyond these general distinctions lies a wide range of typologies and categorizations that attempt to delineate different forms of conflict and criminal violence according to the level of organization or intentions of the violent actor. These range from the large-scale violence associated with war to inter-communal, state, and terrorist violence, organized criminal and economically motivated violence, and interpersonal and gender-based violence. Each of these categories can be disaggregated into specific violent acts such as terrorism, gang violence, extortion, kidnapping, assault, or rape.

This sort of classification gives rise to the general picture of armed violence presented in Figure 1.1 The 'macro' distinction is between

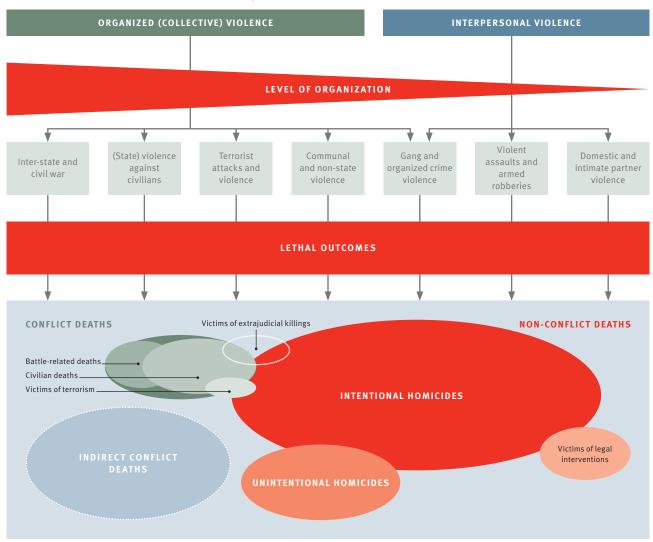
different levels of organization of violence; the second-order distinction captures the different types of actors and motives involved; the last category captures the different ways of counting the lethal consequences.

Conflict violence contributes to the global burden of armed violence through the violent deaths of both combatants and civilians (either trapped in conflict zones, or directly victimized by states and armed groups), as well as the indirect (nonviolent) deaths or excess mortality suffered by civilian populations as a consequence of armed conflict.5 Civilian non-combatants, who form a significant proportion of victims of contemporary organized violence, are more often killed outside of formal 'combat' in massacres by loosely organized groups, as was the case for the more than 1,000 victims⁶ of post-election violence in Kenya in 2008, or in state violence against unarmed demonstrators, as was visible across parts of North Africa and the Middle East in 2011.

Criminal or non-conflict violence is commonly captured in terms of intentional homicide or murder, and unintentional killing (manslaughter), as well as extrajudicial or 'legal' killings by state security forces. While the various ways of counting lethal violence are more or less likely to provide an adequate picture of the actual incidence of armed violence, there is an imperfect 'translation' between different levels. For example, extrajudicial and police killings are not systematically counted in homicide statistics in all countries; in places such as Jamaica or Nigeria, however, they can account for 13–43 per cent of violent deaths (Al, 2009, p. 22; Foglesong and Stone, 2007, p. 18).⁷

Indirect non-violent deaths from conflict—which are dealt with only briefly in this edition of the *Global Burden of Armed Violence*—can account for the majority of victims of conflict and lead to widely different estimates of the burden of conflict

FIGURE 1.1 A framework of armed violence categories



deaths. The Democratic Republic of the Congo is an interesting, yet controversial case. The International Rescue Committee, for example, finds that up to 5.4 million people died between 1998 and 2007, of which only 10 per cent were victims of violence (Coghlan et al., 2006, p. 44; IRC, 2007, p. ii). On the other hand, the *Human Security*

Report 2009/2010 revises these figures and establishes an estimate of up to 2.4 million deaths (HSRP, 2010, part II, p. 38). The first edition of the Global Burden of Armed Violence suggests a global average ratio of four indirect deaths for every direct (violent) death due to armed conflict, although this depends heavily on the nature of the

conflict and the humanitarian response (Geneva Declaration Secretariat, 2008, p. 32).

So what is wrong with this picture? There are four reasons why convenient classifications and sharp distinctions hinder our ability to develop effective practical and programmatic responses to armed violence in different settings. The first is that they give the misleading impression that any particular violent incident fits in one (and only one) of the neat boxes. Yet armed violence can have multiple and overlapping motives; different political, economic, identity-based, ideological, and other motives (such as revenge, resources, and respect) can be present in one violent situation. The practice of denunciation provides striking examples of how motives can overlap. During the Guatemalan civil war, for instance, killings were perpetrated based on name lists provided by local villagers; in Afghanistan, local factions informed US forces about alleged Taliban or Al-Qaeda presence so that these targets would be bombed. In both cases, local actors co-opted external parties with their own motivations to use violence to settle local rivalries, family or clan feuds, or disputes over land and resources (Kalyvas, 2003, pp. 480, 483).

Different forms of armed violence can also be present simultaneously, and be perpetrated by the same actors (Stepanova, 2010). In Iraq, for example, a narrow focus on counting 'conflict deaths'—violent attacks that are claimed by a recognized armed group with a political agenda—leads to low estimates for violent victimization, especially as compared to the 'everyday violence' to which Iraqis have been subjected. The data provided by the Iraq Body Count Project, for example, records 27,000 civilians killed for 2006 alone in Iraq. The combined Uppsala Conflict Data Program (UCDP) datasets—covering statebased conflict, non-state conflict, and one-sided

violence—register only 4,261 deaths in total for the same period.⁹

Armed violence can also change from one form to another over time, often following a shifting tempo with peaks and lulls that reflect the fluidity of motives and capabilities of violent actors. In Angola, for example, UNITA first emerged as a revolutionary movement providing a voice to the Ovimbundu, Angola's largest ethnic group (Malaguias, 2010, p. 296). In the 1970s, the group adopted a clear anti-communist tone, defining itself as struggling 'against the Russo-Cuban expansion' in the region; as such, it benefited from US support in the cold war arena (Koloma Beck, 2009, p. 347). Once the civil war resumed after the failed electoral process in 1992, UNITA faced political and strategic constraints that favoured more predatory activity based on diamond mining. In combination with an unprecedented availability of small arms at the end of the cold war, the diamond trade provided a support to the protracted violence (Malaquias, 2010, p. 294). A second, more recent, example the rise of piracy off the coast of Somalia—is analysed in Box 1.1.

Finally, rigid and exclusive categorizations treat different forms of armed violence as self-contained within a particular system of perpetrators, victims, survivors, and conditions. One result is that it is difficult to see the ways in which different forms of violence may be linked, or may share similar underlying causes. Yet as far back as the US Civil War, analysts note that wartime violence can spill over into non-conflict 'crime waves' (Abbott, 1927); similar findings appear throughout the 20th century (Archer and Gartner, 1976). More recently, researchers have begun to recognize that the patterns and levels of violence against women in such places as Bosnia and Herzegovina, Colombia, the Democratic Republic of the Congo,

Box 1.1 Somali pirates: bandits and soldiers of convenience

Armed violence has been pervasive in Somalia since the 1991 collapse of the state and the ousting of Siad Barre's government. Thousands of people, especially civilians, have suffered directly and indirectly from the armed confrontations among the numerous factions at war in the country. The heavy human toll of the early years of conflict resulted both directly from armed violence and reprisals against civilians, and indirectly from the devastation of farmland, which brought starvation upon thousands of Somalis and displaced tens of thousands of people.

The violent collapse of the Somali state is also linked in complex ways to the increasing acts of piracy in the Gulf of Aden. Initially, with the disappearance of any state surveillance of Somalia's maritime waters, fishermen took up arms to oppose illegal industrial fishing and international waste disposal off the coast. These armed groups rapidly realized that unarmed commercial vessels represented a convenient opportunity for enhanced income generation (Lennox, 2008, p. 9). Initial small-scale attacks quickly grew more sophisticated, peaking with the seizure of the *Sirius Star*, a tanker with an estimated USD 100 million worth of cargo, and the seizure of the *Faina* and its cargo of 33 Russian T-72 tanks, weapons, and ammunition (Balakrishnan, Rice, and Norton-Taylor, 2008; Höges, Klussmann, and Knaup, 2008).

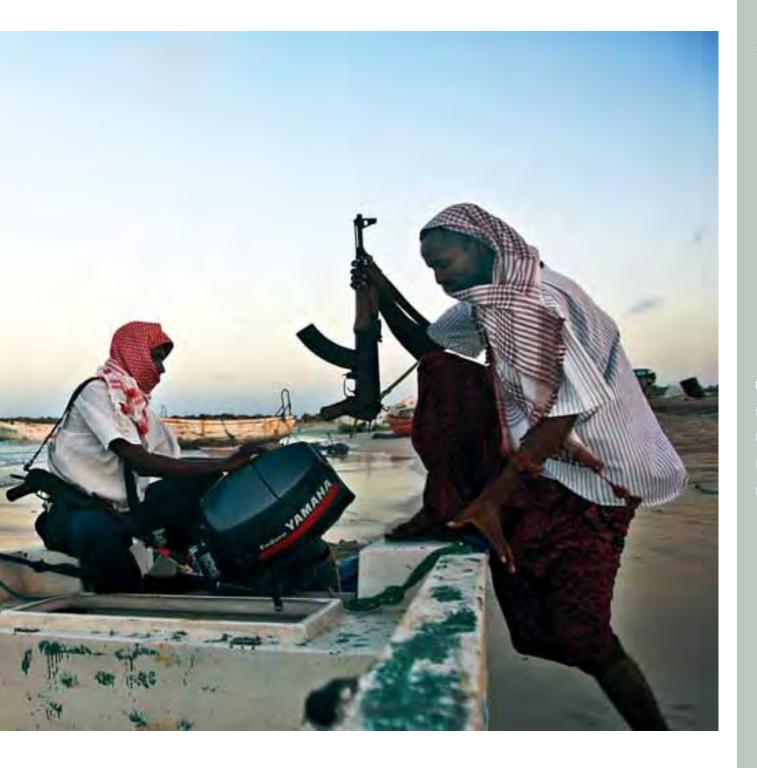
The scope and nature of the attacks are also influenced by the availability of weapons and the environment of pervasive insecurity. The International Maritime Bureau finds that the 213 reported attacks by Somali pirates in 2010 was double the figure for 2008 (and four times higher than the 2007 figure). Furthermore, Somali pirates perpetrated 48 per cent of worldwide reported attacks. Indeed, for the years 2009 and 2010, Somali pirates were responsible for an average of 80 per cent of all attempted attacks, and an average of 25 per cent of successful acts of piracy. Overall, they were responsible for half of the attempted and actual attacks worldwide (IMB, 2010; 2011). The Somali pirates were also more violent than their peers: although they account for only half of the attacks worldwide, Somali pirates accounted for 86 per cent of the hostage-taking, all of the deaths, and 78 per cent of the attacks involving guns in 2010 (IMB, 2010; 2011).

Piracy is by definition a violent act serving private economic interests, but in practice Somali pirates are entangled in local conflict dynamics.¹¹ Though pirates have kept some distance from the ongoing civil conflict, recent reports show that these groups have bolstered their armaments, and that local government officials as well as opposing militias are increasingly relying on the pirates' firepower and strength for carrying out protective and predatory tasks (Gettleman, 2010).

The involvement of piracy—commonly associated with international organized crime—in the Somali conflict illustrates how blurry the distinction between criminally motivated and ideologically motivated violence has become. Though Somali pirates have so far not been directly involved in killings in the ongoing conflict, the fact that they are linked to the warring factions represents a serious threat to safety and security in the region.

PHOTO Armed Somali pirates prepare a skiff in Hobyo for future attacks, Somalia, January 2010. © Mohamed Dahir/AFP Photo





El Salvador, or Iraq may be conditioned by the experiences of war and deeply entrenched conflict dynamics.¹² And the high suicide rates among members of the US armed forces in the past decade are linked to wartime experiences in complex ways (USDoD, 2010).

These four aspects—the multiple, simultaneous, and shifting motivations of violent actors, and the links between different forms of violence—confound simple classifications and policy responses. Rigid distinctions and categorizations lead to policy stovepipes, in which policies and programmes to deal with one sort of armed violence (gang violence, for example, or conflict prevention strategies) are developed in a narrow fashion that disregards the way in which different forms of armed violence can be closely linked. In Liberia, for example, much of the post-war effort focused on more traditional demobilization, disarmament, and reintegration, as well as security sector reform. Post-war Liberia, however, faces other serious challenges; high unemployment, a large youth population, and severe development needs all represent sources of discontent and risk factors for potential armed violence. To date, post-war security promotion efforts have not tackled these issues as a way of reducing the risk of the more criminalized forms of violence (Small Arms Survey, 2011a, p. 2; 2011b).

Policy stovepipes also result in blind spots, in which the most important types of violence may be neglected due to the policy predispositions or orientations of major donors and stakeholders. For example, strategies to deal with homicidal violence in Central America have focused on violent gangs, neglecting the range of other violent acts and actors in the region. The initial response to violence in the region 'can be characterized as enforcement-first' measures, ranging from tougher prison sentences to 'aggressively

arresting youths suspected of gang membership' (Rodgers, Muggah, and Stevenson, 2008, p. 16; Bateson 2009, p. 7). Yet data in El Salvador, for example, shows that only around 13 per cent of homicides in 2008 were attributed to gangs (IML, 2009, p. 70). The focus on gangs, however, means that other violent acts are left aside, such as the 93 extrajudicial killings reported in 2006, and the more recent escalation of drug-related violence linked not to gangs, but to organized crime (Aguilera, 2008, p. 134). Facing criticism and lack of effect, heavy-handed approaches have started to be combined with *mano amiga* (Friendly Hand) and mano extendida (Extended Hand) interventions, which focus more on incentives for demobilizing gangs and the establishment of stricter controls on small arms (Rodgers, Muggah, and Stevenson, 2008, p. 16). Finally, policy stovepipes can also lead to category errors, in which programmers misunderstand or mistake the form of or motivation behind the violence encountered, leading to inappropriate programmes or responses.

Obstacles to a unified perspective

Achieving a unified perspective on armed violence is difficult. Policy-makers require boundaries within which to structure practical programmes. Public health practitioners, for example, rely upon the World Health Organization's epidemiological model, which focuses on risk and resilience factors while seeking to identify factors that can be addressed at the individual, community, and societal level (WHO, 2002). The World Bank's World Development Report 2011: Conflict, Security, and Development relies mainly on data relating to conflict, and only to a much lesser extent on data and analysis relating to homicide and organized crime (World Bank, 2011).

The community working on issues of gender-based violence and violence against women generally works in isolation from other violence prevention and reduction programming. And the conflict prevention and peacebuilding community focuses mainly on those few contexts in which a formal 'armed conflict' has erupted.

Similarly, researchers and analysts specialize in understanding one or another manifestation of armed violence, with little communication between disciplines. Research on conflict, crime, gang violence, and violence against women is abundant in a wide array of disciplines, ranging from criminology to public health, and from international relations to economics to anthropology. Over the years, these communities have produced a solid literature and statistical base, but each of them collects data on the scope and distribution of armed violence according to different understandings and for different purposes. Research on homicide, for example, is the realm of criminologists and organizations such as the United Nations Office on Drugs and Crime; research on conflict is conducted by a series of academic and civil society research centres, such as UCDP, Project Ploughshares, and the International Institute for Strategic Studies (IISS).14

Achieving a unified perspective is thus both a practical and an analytical challenge. It requires different research communities to set aside their predispositions, widen their focus, and gain perspective on where their particular interest fits into larger patterns of violence and insecurity within and between communities. Furthermore, this goal challenges policy-makers to bring together a wide range of actors in 'multi-stakeholder' platforms to learn which promising solutions and best practices can be successfully migrated and adapted to specific contexts and conditions. These challenges can be overcome through

effective armed violence monitoring systems or violence observatories, which link research and analysis directly to policy-making processes. The Jamaican Crime Observatory, for example, links data from hospitals with police crime data and data from local sources. It identifies crime and violence hotspots, brings this information into the community, and catalyses discussions on issues and strategies to prevent and reduce violence (Gilgen and Tracey, 2011, pp. 38–39).

Neither war nor peace: armed violence in contemporary conflicts

Shifts in location, scope, and intensity of the most highly organized forms of armed violence have been well documented over the past two decades. Traditional forms of warfare between states have declined over recent decades, while the number of internal armed conflicts and civil wars steadily increased, peaking in the early 1990s. Since then, the number of armed conflicts that involve states and that are ongoing has stabilized, with 36 state-based armed conflicts active in 2009. All of these were *internal* conflicts, and seven of them involved combatants from outside states (Pettersson and Themnér, 2010, p. 16).¹⁵

The past decades have also witnessed a reported decline in the incidence as well as the intensity of armed conflict around the globe, as measured by the overall lethality of conflicts. This has led some analysts to highlight the shrinking human costs of war and even to herald the end of major war (HSRP, 2010; World Bank, 2011; Lacina and Gleditsch, 2005, pp. 148–51). Some observers argue that these declines are linked to the slow but steady success of the peacekeeping and peacebuilding efforts of multilateral institutions. Others argue that non-violent means of resolving con-





flicts in democratic states are slowly replacing violent interactions. Whatever the explanation, the drop in lethal conflict-related violence worldwide remains tenuous. The violent Arab Spring of 2011 and the armed clashes after Côte d'Ivoire's contested presidential elections of November 2010 are only two recent examples of the divisive nature of political change, and of how countries can slide into outbreaks of collective violence.

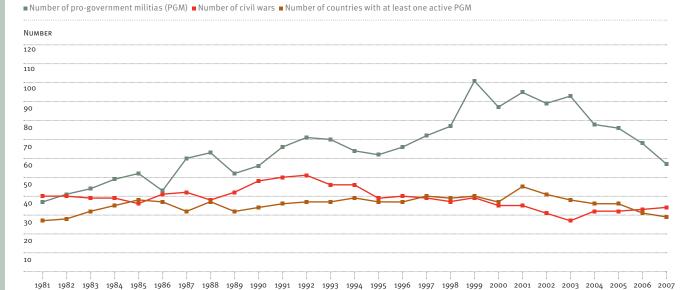
One important feature of contemporary armed conflicts that is not easily captured is the increasing number of more or less formally organized armed groups that confront each other, or that target a specific segment of the population, without the direct involvement of the state. In 2008 in Kenya, for example, the violent clashes that erupted after the disputed elections of 2007 claimed more than 1,000 lives and displaced an estimated 350,000 persons (CIPEV, 2008, p. 272).16 The violence involved at least eight identified non-state groups (such as ethnic groups, gangs, or militias) as well as the Kenyan security forces. 17 Active (and ethnically aligned) gangs—such as the Luo Taliban and the Kikuyu Mungiki—participated in the violence in an environment where party politics have traditionally been organized in a 'winner-takes-all zero-sum ethnic game' (Mueller, 2008, p. 200). Furthermore, the Kenyan army and police reportedly perpetrated rapes and other sexual abuses during the post-electoral violence in 2007-08 (CIPEV, 2008, p. 237). In addition, firearms or gunshots were identified as the cause of death in 405 cases across Kenya (35.7 per cent of all killings); the numbers of gunshot victims were highest in the Rift Valley (194 victims or 47 per cent of all firearms-related deaths), which also suffered the largest numbers of victims overall (744 persons killed) (CIPEV, 2008, pp. 312, 342).

This rise in armed group activity can be illustrated more generally in several ways. One way is to track the number of non-state armed actors around the world, which, according to some estimates, may reach more than 1,000 different groups, large and small, around the globe (Carey and Mitchell, 2011, p. 1; IISS, 2009, pp. 465-74; UCDP, 2011).18 Figure 1.2 illustrates that while the overall number of international and civil wars has been stable or declining since the mid-1990s, the number of active pro-government militias around the globe increased steadily from the early 1980s through 1990s, only to decline since 2003. The increasingly complex power struggles and the atomization of actors and political configurations have been noted in conflict settings such as Darfur, Iraq, and Pakistan (Stepanova, 2010). Predatory groups, counter-insurgency operations undertaken by states, insurgent actions, and criminal activities linked to war

economies are all indicators of the complex web of violent actors involved in different forms of violence at the local, national, and regional levels.

The heightened activity among organized armed groups can also be illustrated by the number of armed conflicts that do not involve governments. Although the figures fluctuate widely from year to year, the number of non-state armed conflicts reached 35 in 2008—more or less the same as the number of armed conflicts involving states (HSRP, 2010, ch. 11, pp. 5-22). 19 Although mostly small-scale, this form of violence poses significant security and development challenges; the 2008–08 post-election violence and political uncertainty in Kenya, for example, had a direct impact on the economy.20 After several years of high annual GDP growth (more than six per cent per year in 2006 and 2007), growth dropped to 1.6 and 2.6 per cent in 2008 and 2009, respectively (World Bank, n.d.).

FIGURE 1.2 Active pro-government militias and the number of civil wars, 1981–2008



Source: Carey and Mitchell (2011)

A violent non-state group is less stable and has less easily defined collective goals and strategies, calling into question the idea of an armed group as a unitary, homogeneous actor with a particular ideology and common goal that uses violence as a means to achieve political change or economic gain. Rather, conflicts involving non-state armed groups can be compared to a brush fire characterized by the eruption of pockets of violence; the groups may have different levels of formal organization, but they are linked in one way or another to the overall context of insecurity and conflict. The violence may be opportunistic and loosely organized (as when neighbouring groups fight over land or resources), highly organized and predatory (formal armed groups), or state-led (to suppress opposition). As the type and number of violent actors in a particular context increases, and as the links between them become more complex, it is more difficult to launch narrowly targeted interventions to negotiate cease-fires or peace agreements (Nitzschke and Studdard,

In addition to the changing nature of contemporary armed conflicts, analysts must recognize the transformation of armed violence that can occur in so-called post-conflict settings. The sharp analytic and programmatic divide between conflict and non-conflict violence is generally based on three beliefs: that when conflicts terminate overall levels of violence decline and security and safety improves, that levels of violence and victimization are higher in conflict settings, and that there are no strong links between forms of conflict and non-conflict violence. But in many contexts one or more of these three beliefs are wrong, as illustrated by the case of Iraq (see Box 1.2). It is not uncommon for peacetime violence to reach mortality rates as high or even higher than during a preceding armed conflict, as in

2005, p. 225; UN, 2010, p. 13).

contemporary Guatemala. During the 36-year civil war, an estimated 119,300–200,000 people were killed, which translates into 3,508–5,800 deaths per year. Yet in 2009 alone, 6,498 homicide victims were reported by the Guatemalan police (Restrepo and Tobón, 2011, pp. 37, 46).

Conflict and post-conflict violence can be linked in many ways. 21 The militarization of the security sector and the formation of paramilitary groups during conflicts in countries such as Colombia, El Salvador, and Mozambique have led to a higher incidence of extrajudicial killings and social cleansing operations in slums or shantytowns. Similarly, the breakdown of state institutions and the lack of effective policing capacities have led to informal policing and rough justice that has included lynching and vigilantism in countries such as Guatemala and Liberia. Most importantly, illegal networks related to war economies contribute not only to the duration of armed conflict itself, but often also to the continuation of criminal violence after the settlement of the conflict.

The return of demobilized former combatants to situations of heightened insecurity and socioeconomic uncertainty can also push people to organize themselves into vigilante-like groups to protect themselves or their communities from violence (Geneva Declaration Secretariat, 2008, p. 130). Criminal activities are known to have become an option for income generation at the individual level as well as to sustain these groups' existence over time (Rodgers and Muggah, 2009, p. 308). Easily accessible weaponry in post-war settings can also contribute to an overall aggravation of the security situation (Small Arms Survey, 2010, p. 141). Over time, political and criminal motives may become blurred, and different manifestations of violence can share root causes and interact in complex (and poorly understood) ways.

Box 1.2 How different forms of violence are linked in Iraq

In post-invasion Iraq, the widely reported targeting of non-combatants by insurgents, militias, and sectarian groups may have appeared chaotic or random at first glance. Yet a closer look at underlying patterns and motives of violence suggests that this seemingly arbitrary or criminal violence may also serve 'clear political purposes' aligned with the political goals of these armed groups (Green and Ward, 2009, p. 612).

Such 'dual-purpose violence' in Iraq is characteristic of both the politically motivated violence of insurgents and organized criminality since 2003. Individuals, often with a criminal background, 'prefinanced' future insurgent activities by participating in the generalized looting shortly after the fall of the Ba'ath regime, and impoverished looters targeted the homes of the political elite 'in acts of political revenge but also to satisfy long accumulated material needs' (Green and Ward, 2009, p. 618). Notorious organized crime figures have reportedly helped insurgent cells to fund their activities through kidnappings, bribery, and highway robberies (p. 619).

Violence against women has also been used to serve sectarian or political ends, demonstrating how common criminality, individual motives, and collective violence interact in Iraq. Under the Ba'ath regime the *hijab* (women's traditional dress code) was forbidden and women's rights were a 'bargaining chip' for the political elite. While advancing a rather progressive position in terms of women's rights and participation in society and the workforce, the Ba'ath regime 'accepted tribal practices' in return for loyalty from local leaders (Green and Ward, 2009, p. 614).

Since 2003, traditional or sectarian practices against women have been used as part of political struggles. When a faction takes control of a territory, the imposition of the veil or a strict dress code for women is usually among the first measures announced as part of a wider 'campaign of





terror' in militia-controlled areas (Green and Ward, 2009, p. 615).

'Honour' killings are also increasingly perpetrated by armed groups that define 'dishonour' in sectarian terms. The United Nations Assistance Mission for Iraq reports that many female students are pressed to adopt conservative dress codes by their families in order to avoid attracting the attention of university guards who are affiliated with different militias (UNAMI, 2008, p. 15).

Family members often denounce women who have brought shame upon their kin, but it has also been reported that members of families in conflict have used malicious denunciation to intimidate and inflict harm upon their opponents (Green and Ward, 2009, p. 615). In 2008, the UK-based Guardian reported that 'honour' killings in the southern city of Basra were on the rise. From January to November 2008, 81 women had been murdered, versus 47 in 2007. In some cases, an Iraqi lawyer reported, family members had hired professional gunmen to carry out killings and make them appear like sectarian murders (Sarhan, 2008). 'Honour' killings have been of particular concern in Basra and the northern region of Iraqi Kurdistan. In 2007, 57 women were killed and their bodies dumped for their allegedly un-Islamic behaviour; meanwhile, the Kurdistan Regional Government reported 56 women killed and 150 women burnt in 'honour'related incidents, including self-immolation (USDoS, 2007; UNAMI, 2008, p. 16).

These various forms of violence against women demonstrate how individual violent acts accommodate political as well as personal and private motives for violence. The conflict in Iraq has increased opportunities for various actors to engage in violence against women under the umbrella of the overall ongoing conflict. In the Iraqi case, women are both victims and instruments of increased polarization among different groups and suffer high levels of violence, especially through 'honour' killings and rape.

Neither peace nor war: violence in post- and non-conflict settings

The incidence and severity of lethal violence in non-conflict settings has also undergone significant changes over the past few decades, yet the picture is more complex than that presented for armed conflict. The limited empirical data on historical homicide rates reveals a regular down-

ward trend in Western Europe since the beginning of the early modern period. Homicide rates across Western Europe—in what are today Belgium, England, Germany, Italy, the Netherlands, Scandinavia, and Switzerland—declined by roughly half from the early 17th to the early 18th century, and by the 19th century, they had dropped three to five times further (Eisner, 2001; Gurr, 1981; Monkkonen, 2001).²² Although the exact timing

FIGURE 1.3 Aggregated homicide rates in 13 selected Western European countries, 1970-2009 (base year=100)



 $\textbf{Note:} \ \text{The rate for the initial year is indexed at 100 to facilitate trend comparison.}$

Source: Small Arms Survey elaboration based on UNODC (n.d.b.)

and scope of the decline varies from place to place, there is little doubt about the long-term decline in lethal violence within European states.

In the medium term, however, homicide rates do fluctuate significantly. Figure 1.3 illustrates the evolution of the aggregated homicide rates in 13 European states, based on data collected by the *United Nations Survey of Crime Trends and the Operations of Criminal Justice Systems* (CTS). The data is divided into two periods, 1970–86 and 1987–2009, due to an apparent change in the statistical recording of homicide in 1987, which is visible in a significant fluctuation of rates throughout the countries observed and renders analysis of trends and rates very difficult. All country rates are set to 100 for the first year to ensure the comparability of trends.

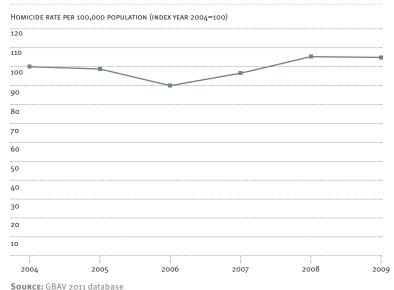
The figures reveal that homicide rates gradually increased by close to 80 per cent between 1970 and 1986, reaching a rate of around three homicides per 100,000. The highest increases are seen in Norway and Switzerland, although these figures have to be considered with some caution since the very low homicide rates in Europe mean that small changes in how data is recorded or homicide defined can have a major impact on trends. Rates continue to increase until the early 1990s, then stabilize, and eventually begin to decline in the early 2000s.²³ Between 2003 and 2009, homicide rates decreased 40 per cent in just six years. At the country level, trends are also noteworthy. Between 1970 and 1986, several countries suffer severe increases in the recorded homicide rates; only Austria, Finland, and Spain have a lower rate in 1986 than in 1970. By 2009, the majority of the 13 countries under review (with the exception of Spain) exhibit rates below the initial homicide rate of 1987. For 2009, the average rate for all 13 countries is a low level of around one homicide per 100,000 persons.

Although European rates remain low over the longer term, these fluctuations raise questions about what factors influence lethal violence in the medium and short term. The upward trend in the 1970s and early 1980s has been attributed variously to rapid modernization and social change in Europe, or considered a 'normal' manifestation of increasing wealth and the resulting opportunities to commit crimes (LaFree and Drass, 2002). The downward trend of homicide rates since the mid-1980s and again in the mid-2000s has also been largely recognized in literature on violent crime (Aeby, 2004; Tseloni et al., 2010; Zimring, 2007); several explanations for the drop have emerged, including such factors as improved emergency medical interventions that reduce mortality from gunshot and other wounds (Spierenburg, 2008, p. 210).

At the global level, there is a lack of reliable historical data that could serve as the basis for trend analysis. The United Nations Office on Drugs and Crime has published data covering 163 countries for the period 1970–2008 from its series of 11 Crime Trends Surveys. Yet this data cannot be used to generate global trends since almost no states report in every survey, and since the entry (and exit) of states and groups of states radically changes the global rates. In the early 1970s, for example, only around 50 states reported; most were from Europe, though samples were provided from all other regions except Sub-Saharan Africa, which was especially under-represented in this period. By the 1990s, about 67 states were reporting consistently; the progressive inclusion of more data from states with relatively high or very high homicide rates (such as Colombia, Estonia, and Ukraine) made it seem as though global rates were increasing, when in fact reporting was simply improving. In the beginning of the 2000s, reporting decreased first but then stabilized at a higher level, with around 95 countries reporting homicide data by 2005–06.

It is thus difficult to derive long-term trends from global averages based on partial and shifting data alone. Coverage has been comprehensive enough to present trend data since 2004, revealing an upward trend in global homicides in the second half of the 2000s (see Figure 1.4). As noted above, Western European countries have a decreasing homicide rate over this period, but in other parts of the world, entire regions were suffering from generally increasing rates in homicidal violence. Despite the rather small magnitude of the increase since 2004 (about 5 per cent), the global impact in terms of human lives lost is significant. The difference between the low point of 2006 and the figure for 2009, drawing on data from the Global Burden of Armed Violence database, represents more than 54,000 additional homicide deaths (and an increase of 24,000 since 2004).

FIGURE 1.4 Global homicide trends, 2004-09



There are several possible explanations for these different—and fluctuating—trends at the European and global level. Most analysts point to the progressive development of modern state institutions, and the expansion of the state's practical monopoly over the legitimate use of force through security institutions such as law enforcement and national defence as one explanation for declining homicide (and overall crime) levels. Not only has the state been able to intensify its presence over its territory, but scientific progress and institutional reorganization of police forces have also improved its capacity to contain crime and apprehend perpetrators (Spierenburg, 2008, pp. 169–70). The low levels of violence in Europe also seem to reflect changing normative understandings of the legitimate use of violence and the importance of personal security.²⁷ Violent practices that were commonplace a century or so ago—such as public executions, torture, and lynchings—have today been stigmatized to the point of near extinction in the West, although there are notable exceptions. Similarly, the everyday use of violence to resolve conflicts has been condemned, even in what was hitherto considered the 'private sphere', where intimate partner violence existed beyond the reach of the state.

Behind these figures lies a more complex reality, one in which lethal non-conflict violence unfolds with different levels of organization. Although non-conflict lethal violence is generally counted as 'homicide', it is often linked to highly organized criminal activity or to different forms of 'political violence' that either target political opponents or civil servants such as mayors, teachers, or police officers, or that seek to modify government policies. In these contexts, the term 'homicide' is a slightly misleading term since it conjures up images of individual inter-personal acts of violence.

One result is that the distinction between the activities of politically motivated armed groups

and criminal organizations has blurred from both ends of the spectrum. Traditionally, politically and economically motivated armed groups have been seen as 'opposing ideal types', the first pursuing 'self-defined higher causes' and the latter pursuing 'monetary profit' (Cornell, 2007, p. 210). Although both require money to operate, the main difference lies in the planned use of the profit arising from these activities. Rebels use criminal activities to mobilize resources (to buy weapons and care for their troops) to achieve political and social change; criminal organizations, on the other hand, focus on the expansion of their business and often use profits for unproductive ends such as luxury goods (Stepanova, 2010, p. 42).

Criminal activities, such as trafficking in goods, have been used to finance the war effort in places such as Afghanistan, Bosnia and Herzegovina, Colombia, and Liberia (UNODC, 2010, p. 234; Wennmann, 2007; see Box 1.3). The production and distribution of narcotics are classic examples of how armed groups generate income to sustain their war efforts. One result is a 'closeknit relationship between criminal and political actors as political protagonists on all sides engage in criminal activity to raise funds' (Steenkamp, 2009, p. 17). Yet when ostensibly politically motivated groups such as the FARC in Colombia turn towards criminal activities because of increased opportunities and the need for selffinancing, or the Ugandan Lord's Resistance Army maintains its predatory violence without apparent political purpose, ideological goals fade and their activities resemble the self-perpetuating business model of organized criminal groups. This shift has important policy implications: in circumstances where armed groups have become criminalized, political compromises such as power-sharing offers may be less effective as

some groups find it more interesting to remain 'violence entrepreneurs' that profit from their established criminal operations (Goodhand, 2008). These developments also imply that the interactions between criminal and political groups are best thought of as a continuum rather than separate phenomena.

Seen from another angle, the violent activities of organized criminal groups can have political implications and consequences, even if the main motive remains profit-seeking. Different forms of trafficking—in drugs, humans, small arms, counterfeit goods, environmental resources—are increasingly recognized as a threat to international, regional, or national security (UNODC, 2010; Kemp, 2003, p. 303). Organized crime, and especially the trafficking of illicit narcotics, is accompanied by high levels of violence and has shown a marked capacity for blurring the boundaries between criminal and political types of violence, as evidenced by the drug war in Mexico (see Box 1.4). Drug cartels are locked in a battle for control over the flow of narcotics to the north, while the Mexican state has mobilized the army to wage a war on drugs in its territory. Killings of politicians and civil servants such as mayors and police officers are frequent, and the cause is both criminal and political, since one goal is to weaken local institutions and to coerce the authorities into abandoning the struggle against the drug traffickers.

Box 1.3 Defining illicit trafficking

The term 'trafficking' covers illicit goods, such as narcotics; goods processed or obtained in illicit ways, such as conflict diamonds or stolen goods; and goods that are legal and obtained legally but destined to illicit activities, such as terrorist financing (Jojarth, 2009, p. 8).

Box 1.4 Mexico's drug war

Violence and insecurity in the wake of President Felipe Calderón's war on drugs have reached extremely high levels in several regions of Mexico. Official estimates set the human cost of Mexico's drug war at around 35,000 dead from 2006 to 2010 (Booth, 2010; Turbiville, 2010, p. 124; Mexico, n.d.a).²⁸

Mexico's overall levels of violence have long been steady—with an average violent death rate of 11.5 per 100,000 persons in 2004–09 (ICESI, n.d.). But this national rate, while demonstrating that most parts of the country are generally safe, masks the bitter reality that some cities and regions suffer from extraordinarily high levels of violence, higher than found in many war zones (see Figure 2.9, TRENDS AND PATTERNS).

At the state level, Chihuahua—home of Ciudad Juarez—had a rate of organized crime-related deaths of 98.6 per 100,000 in 2009 (with an *overall* homicide rate of 108.0); it is followed by Durango, which has a rate of 43.5 per 100,000 (Mexico, n.d.a).²⁹ By contrast, Mexico City had an *overall* murder rate of 8 per 100,000, and a drug-related homicide rate of 1.5 per 100,000. Yucatán and Puebla are among the states witnessing the lowest incidence of drug-related violence and *overall* homicide rates, with rates below 1 per 100,000 for drug-related violence and ranging from 2 to 7 for *overall* homicide rates. See Maps 1.1–1.3 for the distribution of organized crime-related violence in Mexico (ICESI, n.d.; Mexico, n.d.a),³⁰

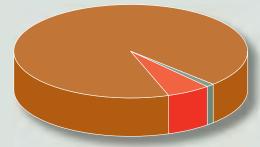
Not surprisingly, the violence is concentrated where the drug cartels are most active. Four groups reportedly control most of the drug trade and other illicit activities in Mexico, with their influence reaching far into the United States. Several splinter groups and factions have also become central players in Mexico's drug war; these are the Sinaloa cartel, the Gulf cartel, the Juárez cartel, and the Tijuana cartel, but also the Zetas, the Beltrán-Leyva organization, and the cartel Pacifico Sur, among others (Bunker, 2010, p. 11; Stratfor Global Intelligence, 2010).³¹ As Maps 1.1–1.3 illustrate, violence in Mexico is highly concentrated, although it also fluctuates and spreads. Thus states not affected by drug-related violence in one year can have very high figures the next. For example, Tamaulipas recorded a total of 90 drug-related deaths in 2009, yet one year later this figure climbed to 1,209.

A war on two fronts is taking place in the regions where the cartels are active. On the one hand, they are in violent confrontation with each other over the control of the lucrative trafficking routes between the Andean regions and the United States, as well as other forms of revenue generation such as extortion, kidnapping, and human trafficking (Bunker, 2010, p. 11). On the other hand, the Mexican government has openly declared war upon drug traffickers, with



LEGEND.

- Aggressions (111; 1%)
- Confrontations (596; 6%)
- Executions (8,906; 93%)



Source: Mexico (n.d.a)

ambiguous results. While the drug cartels have been weakened and divided, the resulting struggles and readjustments of power have given way to even more episodes of overt violence (Stratfor Global Intelligence, 2009, p. 12). Figure 1.5 shows this distribution by disaggregating the drug-related deaths in 2009 by types of violence.

The figure reveals that the vast majority of recorded violence is categorized as 'executions', which captures intentional killings involving high levels of violence, such as multiple gunshots, traces of torture, and mutilation of the body. These events are typically directed at drug cartel members, but they are also coded as drug-related violence when the known or suspected perpetrator is a member of a drug cartel (for example, when a message is left with the body). Confrontations and aggressions, on the other hand, account only for a lesser level of drug-related deaths. Confrontations register both gun battles between criminal groups as well as violent confrontations with law enforcement and security forces. Aggressions, on the other hand, record specifically targeted violence against state

MAP 1.1 Organized crime-related homicide rates, Mexico, 2007



MAP 1.2 Organized crime-related homicide rates, Mexico, 2008



MAP 1.3 Organized crime-related homicide rates, Mexico, 2009



Source for Maps 1.1-1.3: Mexico (n.d.a)

authorities, law enforcement agents, and security forces by drug cartel members, resulting in the death of the targeted person (Mexico, n.d.b).

In response to the war on drug traffickers, cartels have implemented bolder and more professionalized violent tactics. Over the past decade, drug-related violence has 'acquired an increasingly organized and paramilitary character', making a 'transition from the gangsterism of traditional narco hit men to paramilitary terrorism with guerrilla tactics' (Turbiville, 2010, p. 124). Occasional large-scale firefights, targeted assassinations, and military-style raids are common manifestations of the improved tactical competence and effectiveness of the drug cartels. These strategic improvements in the cartels' capacities are reportedly linked to the sweeping Mexican military reforms of the 1990s. In response to low-intensity guerrilla activities and growing drug trafficking violence at that time, the Mexican state trained new elite commando units and assault troops, which were deployed in Chiapas, Guerrero, Puebla, and other regions of the country. A lack of careful recruitment, low salaries, and continuous efforts by criminal organization to recruit security officers led to a substantial number of defections by military personnel, who brought their skills and capacities to their new employers (Turbiville, 2010, pp. 128-32). An example is the

Zetas, a non-family-based group that originated with defectors from the military elite forces. First active as the Gulf cartel's enforcement arm, the unit became increasingly independent, sub-contracting to other groups, until it broke its relations with the Gulf cartel and became an independent and fully established actor among the other cartels in Mexico (Killebrew and Bernal, 2010, p. 21).³²

Reports on several carefully planned and executed raids requiring high levels of intelligence, resources, and weaponry have appeared over the past few years. These attacks are frequently accompanied by unusual and gruesome displays of violence, regularly including decapitations, mutilations, mass executions, and extreme torture (Quinones, 2009; González, 2009).

Politicians, law enforcement agents, civil society members, and their families and friends suffer the consequences of criminal violence. For example, Carlos Reyes López, a policeman of the state of Tabasco, was shot with ten members of his family in February 2009 (Wilkinson, 2009). In another case in Michoacán, the public safety minister, Minerva Bautista, escaped death in an attack that killed four of her colleagues and bodyguards in April 2010 (Wilkinson, 2010). In April 2011, the Mexican poet Javier Sicilia lost his son, who was killed together with six of his friends in what seemed to be 'collateral damage' of the drug war (Miglierini, 2011).

Low incomes and the ready availability of money from drug cartels are important contributing factors to Mexico's spiral of violence. Members of the state or federal police may earn between USD 350 and USD 1,000 per month. Yet when 93 police officers were arrested in June 2009 for charges of corruption in the Mexican state of Hidalgo, some officers had revenues reaching as high as USD 225,000 per month (Nagle, 2010, p. 100).

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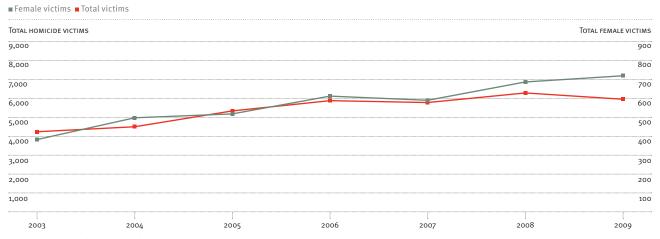
Drugs have a high 'value-to-size ratio' and are commonly linked to recurring conflict in Afghanistan, Colombia, and Myanmar (Cornell, 2007, p. 209; Feldab-Brown, 2010). The violent consequences of drug trafficking are not limited to conflict zones, however, as the case of Mexico reveals. The shift of drug trafficking routes towards Central America and Mexico strengthened the position of Mexican drug cartels during the 1990s, following the dismantling and fragmentation of the Colombian drug cartels (UNODC, 2010, p. 87). Facing the challenges of increased corruption and drug-related violence, President Felipe Calderón chose to crack down on organized crime and declared war on drug traffickers in December 2006. The fight against drug cartels in Mexico involved the deployment of about 40,000 soldiers and an additional 5,000 federal police officers, and resulted in a surge of violence that resembles the scale and intensity of a major armed conflict (Ellingwood, 2008; Stepanova, 2010, p. 56).

In view of the many different violent actors and motives involved, it is nearly impossible to draw clear distinctions between various types of vio-

lence in Mexico. As the Mexican state attempts to counter the expansion of drug cartels and their challenge to its authority and monopoly over coercive means, it is directly involved through the deployment of military personnel and the armed forces. While most of the deaths may be gang-on-gang killings, police officers, soldiers, and government officials are not immune, nor are innocent civilians spared the bloodshed.

The intersections between organized criminal and political violence also highlight the possible interactions and transmission mechanisms between other forms of violence. One such linkage—that between organized (political or criminal) violence and violence against women—is beginning to be explored in such places as the Democratic Republic of the Congo, Guatemala, and Rwanda (World Bank, 2011, pp. 60–61). In Guatemala, for example, an estimated 720 women were killed in 2009, many after having been tortured or sexually assaulted; that figure is almost double the 383 women reportedly killed in 2003 (PDH, 2011, p. 79). The nature and causes of these killings are poorly understood, but as Figure 1.6 shows, the increase

FIGURE 1.6 Overall homicide and femicide levels in Guatemala, 2003–09



Sources: PDH (2011); UNDP (2007)

appears to track the overall rise in criminal and gang-related violence in the country, which implies some connection between these different forms of violence (PDH, 2011).³³

In Rwanda, an estimated 350,000 women were raped during the genocide, translating to about 8,972 rapes per 100,000 women for the whole adult female population; the risk of being raped for a Tutsi woman during this period was around 80 per cent (Bijleveld, Morssinkhof, and Smeulers, 2009, p. 219). No comparable or reliable figures are available for the Democratic Republic of the Congo, but the incidence of rape—as well as other forms of sexual and gender-based violence—is widespread (HHI, 2009, pp. 7–9). The prevalence of rape is also anecdotally linked to the dynamics of the conflict, including the exploitation of mineral resources (Mukengere Mukwege and Nangini, 2009, p. 3). Although poorly understood, the linkages are important in policy terms. As Eriksson Baaz and Stern point out:

the specific, often exclusive, focus on sexual violence [...] hampers our understanding of the relationship between sexual violence and other (supposedly) 'ungendered' violence... These forms of violence are, to a large extent, manifestations of the same systemic failures and mechanisms as those contributing to [sexual and gender-based violence] (Eriksson Baaz and Stern, 2010, p. 12).

These linkages—between organized political and organized criminal violence and between conflict and sexual violence—highlight the ways in which armed violence can assume multiple, simultaneous, and shifting forms that vary from place to place. Understanding how different forms of violence are linked is crucial to assessing the global burden of armed violence, and to developing effective armed violence prevention and reduction strategies and policies.

Conclusion: a unified approach to armed violence

Different forms of armed violence interact in ways that go well beyond the simple dichotomy between political and criminal violence, or between conflict and non-conflict violence. As noted in this chapter, the boundaries between violence categories are blurry and overlap, and they can reinforce each other in a vicious circle in multiple ways. Violence can be 'dual-purpose', as highlighted in the Iraqi and Somali examples; moreover, it can serve both 'individual and organizational goals' (Green and Ward, 2009, p. 611). The concept of dual-purpose violence seems to apply to many settings in which large-scale acts of organized political violence coexist with individual and criminal forms of violence, and where rape, looting, trafficking, personal revenge, and other forms of opportunistic and criminal violence can be observed.

Recognizing the multiple, simultaneous, linked, and changing forms that armed violence takes is one step towards a unified approach to armed violence prevention and reduction. An additional step is captured by the idea of a 'system of violence', in which high levels of violence and crime in post- and non-conflict settings can be attributed to a series of intersecting factors present in any given setting (Richani, 2007, p. 45). These factors include:

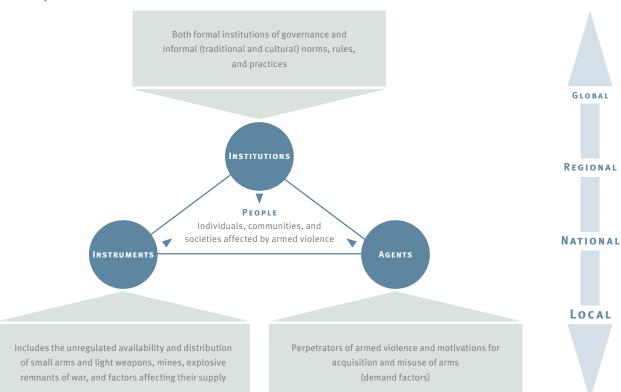
- low coercive and distributive state capacities, measured in terms of law enforcement capacities (impunity and attrition rate) and the government's social expenditures;
- low opportunity costs of crime derived from a lack of law enforcement and a lack of revenuegenerating activities (such as education and job opportunities);

particular contingencies, such as the repatriation of illegal immigrants from the United States to Central America, and the shift of drug trafficking routes from the Caribbean to Central America and Mexico, or international interventions such as in Iraq and Afghanistan (Richani, 2007, pp. 4–5).

A 'system of violence' can emerge when these factors come together. This occurs when the lack of state capacities for law enforcement, weak economic opportunities, and low opportunity costs for committing a crime provide the context in which specific catalysts—such as new opportu-

nities for illicit income generation linked to drug trafficking, or easily exploitable 'conflict goods' such as diamonds—provide the spark (Richani, 2002). In such a situation, a system of violence can emerge in which 'the main interacting units are the specialists of violence', such as the security sector, criminal groups (gangs and organized crime), and political entrepreneurs, which form a dynamic relationship 'that institutionalizes and perpetuates violence' (Richani, 2007, p. 5). These underlying and contingent factors are all highlighted in the World Bank's *World Development Report 2011* as playing an important role in repeated cycles of violence (World Bank, 2011).

FIGURE 1.7 The armed violence 'lens'



SOURCE: OECD (2009, p. 50)

Seeing different forms of armed violence as dualpurpose, or as part of a broader system, opens new opportunities for evidence-based research and policy-making in various settings, ranging from Jamaica to Afghanistan, Kenya to Haiti, and Venezuela to Nepal. Piracy and warlordism amid civil war and state collapse (Somalia and Afghanistan), drug-related violence and its political implications (Central America), shadow networks in war economies (West Africa), as well as sexual and gender-based violence during conflict (Democratic Republic of the Congo) can all be better understood by taking into account the complex interactions between different forms of violence.

One potentially useful framework for designing policies and programmes is the Organisation for Economic Co-operation and Development's armed violence 'lens' (OECD, 2009, p. 50). The lens provides a flexible and unified framework for apprehending the contexts, motives, and risk factors associated with armed violence (see Figure 1.7). Its three legs provide different entry points for armed violence prevention and reduction policies, focusing on the perpetrators of armed violence and their motives, the instruments of armed violence, and the wider institutional environment that enables or protects against armed violence. Although the lens is not in itself a policy or programmatic tool, it does highlight that a variety of factors can or do come together in different situations to create an enabling environment in which violence can occur and escalate, in both conflict and non-conflict contexts. It also avoids debates about the specific categories or types of armed violence; what counts, in the end, is to be able to assemble evidence regarding the various enabling factors of armed violence in order to design policies and interventions that effectively address the serious challenges posed by armed violence to the safety and well-being of individuals and communities.

This chapter has highlighted the way in which the many different contemporary manifestations of armed violence blur the line between conflict and non-conflict contexts. These various manifestations call out for a unified approach to measuring and monitoring armed violence that captures the wide variety of actors, contexts, motivations, and consequences. The next chapter takes up this challenge by taking a broader perspective and presenting comprehensive national-level data that reflects how these different forms of lethal violence are distributed around the world. It highlights not only that conflict deaths are a relatively small part of the global burden of armed violence, but also that the majority of the most violent places on earth are not found in conflict zones. Subsequent chapters focus on how the armed violence lens can be employed to map global and regional differences in patterns of homicidal non-conflict violence (CHARACTERISTICS OF ARMED VIOLENCE), on the state of knowledge about violence against women (WHEN THE VICTIM IS A WOMAN), and on the negative links between armed violence and development outcomes (MORE VIOLENCE, LESS DEVELOPMENT). \$

Abbreviations

IISS International Institute for Strategic Studies FARC Fuerzas Armadas Revolucionarias de Colombia UCDP Uppsala Conflict Data Program

UNITA União Nacional Para a Independência Total de Angola

Endnotes

The definition also focuses on the physical use of force and violence, and deliberately excludes such concepts as structural, cultural, and psychological violence, however important they may be in other contexts.

- These figures do not include the global burden of indirect conflict-related deaths. The estimated burden of indirect conflict deaths stemming from preventable disease, malnourishment, and a general lack of access to health facilities, food, and clean water due to violence probably hovers around roughly four times the number of direct conflict deaths, although this rate varies widely from conflict to conflict, depending on the severity of population displacement, the baseline health and nutrition status of the affected population, and the rapidity of the humanitarian response; see Box 2.6 (TRENDS AND PATTERNS). For a detailed discussion on unintentional homicide counts and deaths due to legal interventions and extrajudicial killings, see Tables 2.3 and 2.4 (TRENDS
- 3 According to von Clausewitz's dictum, 'war is the continuation of politics by other (i.e. violent) means' (von Clausewitz, 1976). On the implications and limitations of the 'conflict' lens as way to assess organized political armed violence, see Brzoska (2007, app. 2C), Kaldor (1999), and Münkler (2003).

AND PATTERNS).

- These types of violence, though by no means exhaustive, draw on the typologies of violence published by several sources, including Hazen and Horner (2007, pp. 56–61), Moser and Rodgers (2005, p. 5), and WHO (2002, pp. 6–7). For the purpose of this research, 'armed violence' does not include self-directed violence (suicide), whose global burden is estimated at 782,000 victims worldwide for 2008 (WHO, 2011).
- 5 See the Global Burden of Armed Violence for definitions of direct and indirect conflict deaths and methodologies for measuring the different impacts of armed conflicts (Geneva Declaration Secretariat, 2008, pp. viii-ix).
- The report of the Commission of Inquiry into the Post Election Violence finds that the violence caused 1,133 victims, of which 11 were children and 78 were women (CIPEV, 2008, pp. 308–09).
- 7 Countries such as Argentina, Colombia, and Costa Rica include extrajudicial and police killings, while others, such as France and Nigeria, do not count civilians killed by police during confrontations or commitment of an offence. Nor does the United States include them, since they are classified as 'justifiable homicide', as is self-defence. See Table 2.4 (TRENDS AND PATTERNS).
- 8 According to the Uppsala Conflict Data Program, in the case of state-based conflicts, battle-related deaths are counted only if they result from use of armed force directly related to the overarching incompatibility (government or territory). In non-state conflict, the deaths are not linked to an incompatibility, but must result from use of armed force between warring factions (such as in Mexico, where

- 751 deaths that were due to inter-cartel warfare were registered between 1993 and 2008). In the category of one-sided violence, killings are recorded in cases of use of armed force by the government of a state or by a formally organized group against civilians (such as the al-Qaeda attack of September 11th or victims of the Sendero Luminoso in Peru). See the codebooks for each dataset at UCDP (n.d.); data examples here stem from Non-state Conflict Database version 2.3 and One-sided Violence version 1.3 (Eck and Hultman, 2007; Eck, Kreutz, and Sundberg, 2010).
- The data was retrieved form the UCDP and the Iraq Body Count Project websites, respectively (UCDP, n.d.; IBC, n.d.). For 2006, UCDP counts 3,656 battle-related deaths and 605 victims of non-state armed violence (best estimates).
- In 2010, Somali pirates perpetrated 148 attempts and 65 successful attacks, while in 2009, these numbers amounted to 169 attempts and 48 actual attacks. Since January 2009, Somali pirates have perpetrated 430 attacks, representing 50 per cent of all piracy attacks in the world (IMB, 2010; 2011).
- Piracy is defined as 'any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft' (Anyu and Moki, 2009, p. 95).
- 12 Eriksson Baaz and Stern (2009); Green and Ward (2009); Hume (2008); Sanchez et al. (2011); Wood (2003; 2006).
- In 2008, 2,831 homicides were registered by the Instituto de Medicina Legal—the Institute for Forensic Medicine in El Salvador. Of these cases, 354 were attributed to maras, or gang-related violence. It should be noted that for 1,910 cases in 2008, the motive was 'unknown'; a significant share of these cases may be gang-related (IML, 2009, p. 70).
- 14 See, for example, UNODC (n.d.a) and the sources for the direct conflict deaths database in the online Methodological Annexe.
- These seven—called 'internationalized intrastate conflicts'
 —were Afghanistan, Algeria, Iraq, Rwanda, Somalia,
 Uganda, and the United States. Names reflect the governments involved, not the location of the fighting.
- The report of the Commission of Inquiry into the Post Election Violence lists 1,133 deaths, while the UCDP database only records 445 deaths (187 from one-sided violence; 258 from non-state violence), illustrating the degree of under-counting to which global incident reporting systems are prone; meanwhile, IISS lists 1,500 deaths. Regarding the figures for displaced persons, the Commission report indicates 350,000 whereas the United Nations reports 600,000 (CIPEV, 2008, p. 293; UNGA, 2010, p. 14).

- 17 For data on identified state and non-state actors involved in Kenya's post-election violence, see the datasets on nonstate conflict and on one-sided violence at UCDP (n.d.).
- These databases count 283 pro-government armed groups (Carey and Mitchell, 2011) and anywhere from 500 to more than 900 non-state armed groups (IISS, 2009; UCDP, n.d.).
- 19 See data at HSRP (n.d.).
- 20 The report of the Commission of Inquiry into the Post Election Violence lists 1,133 deaths, while the UCDP database only records 445 deaths (187 from one-sided violence; 258 from non-state violence), illustrating the degree of undercounting to which global incident reporting systems are prone; meanwhile, IISS lists 1,500 deaths. Regarding the figures for displaced persons, the Commission report indicates 350,000 whereas the United Nations reports 600,000 (CIPEV, 2008, p. 293; UNGA, 2010, p. 14).
- On the complexity and multiplicity of links between conflict and post-conflict violence, see Aguilera (2008), Cornell (2007), Restrepo and Tobón (2011), Jojarth (2009), Killebrew and Bernal (2010), Nitzschke and Studdard (2005), Rodgers and Muggah (2009), Small Arms Survey (2011), and Steenkamp (2009).
- The homicide rate in England dropped from about 23.0 per 100,000 in the 13th and 14th centuries to 4.3 per 100,000 by the end of the 17th, and 0.8 per 100,000 by the first half of the 20th century. In the Netherlands and Belgium, contemporaneous figures are 47.0, 9.2, and 1.7 per 100,000; in Germany and Switzerland, rates fell from 43.0 per 100,000 to below 2.0 for the 20th century (Eisner, 2001, pp. 618–38; Gurr, 1981, pp. 295–353; Monkkonen, 2001, pp. 5–26).
- Trends in homicide rates can be considered in the light of the findings of LaFree and Drass (2002), who identify 'crime booms' between the late 1950s and the late 1990s in more than one-third of their sample, which includes 21 European nations. They define 'crime booms' as taking place in countries with (i) increasing homicide rates, (ii) individual average annual growth in these rates of at least 10 per cent for any three successive years, and (iii) sustained changes in the direction of the homicide trends (LaFree and Drass, 2002, pp. 780–81). By eliminating countries that show some increase at some point, and by including reverse trends to evaluate crime booms, the authors still find that the period in question witnessed significant crime booms, though these were more pronounced in industrializing countries than in industrialized ones.
- 24 Recent improvements in data collection for violent crime have reduced the statistical errors that may be responsible for some previously unclear or fluctuating patterns in homicide trends.
- 25 See UNODC (n.d.b) for criminal justice data from 1970 to 2008.

- 26 On the early efforts to compile global data on crime, see UNCJIN (n.d.).
- 7 This point is explored in Norbert Elias' thesis of 'civilizing processes', which links the general decline of lethal violence to increasing degrees of 'self-control', based on individuals' more detached and rational understanding of the world around them (Elias, 1994).
- Estimates of the numbers have been rising significantly 28 as well. In 2009, Felipe Calderón estimated that around 9.000 narco-linked murders occurred between 2006 and April 2009, while other estimates place the figure at around 11,000 people killed by early 2010 (Turbiville, 2010, p. 124). In April 2010, the Washington Post cited a confidential report that estimates the human cost of drug-related violence at 22.000 victims since 2006 (Booth, 2010). By early 2011, official government data counted 35,000 deaths, of which more than 15,000 occurred in 2010 alone. See Mexico (n.d.a) for the dataset on organized crime-related homicide victims. The Washington Post subsequently indicated that Mexican news media counts had surpassed the 40,000 threshold during the first half of 2011 (Washington Post, 2011).
- 29 Drug-related violence is fluid and spreads easily. In 2010, Chihuahua state exhibited the worst concentration of violence, with a rate of 129 per 100,000, whereas Sinaloa followed in second place with a rate of 68 per 100,000.
- These numbers stem from two different datasets. One covers organized crime-related deaths (Mexico, n.d.a); the second reflects overall homicide deaths in Mexico (ICESI, n.d.).
- 31 The Sinaloa and Gulf cartels alone count an estimated 100,000 foot soldiers throughout the region, including their enforcers or gang contractors (Bunker, 2010, p. 13).
- Increasing violence in Tamaulipas state, for example, is linked to the battles opposing the Zetas to their former ally, the Gulf cartel. The Zetas are also known to have expanded operations into Guatemala, forming alliances with local gangs (Beittel, 2011, p. 10).
- 33 See also Chapter Four on patterns and the extent of female victimization and resulting policy implications (WHEN THE VICTIM IS A WOMAN).

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Trends and Patterns of Lethal Violence

HE CONSEQUENCES OF armed violence range from death to permanent disability or long-lasting pain to minor injury. For the victim, the outcome may be determined by a question of mere centimetres or minutes. Survival and recovery often depend on the availability and quality of medical assistance, a service in short supply in most cities, towns, and rural communities seized by armed violence.¹ And for each person killed, many more are injured or experience prolonged physical and psychological wounds.

The number of deaths is therefore only one indicator of the intensity and consequences of armed violence. But although many factors shape the characteristics and dynamics of armed violence, lethal violence can serve as an approximate measure for the scope and scale of other forms of victimization. Killing is treated seriously in all societies, which renders it more readily amenable to examination and measurement. From an administrative perspective, killing is also an important index of insecurity, since it tends to be recorded more systematically than other crimes. Vital registration systems, legal records, church registries, media dispatches, and oral traditions place more of a premium on documenting intentional death than many forms of assault, abuse, or sexual violence.

When it comes to documenting and recording lethal violence, analysts typically distinguish between 'conflict deaths' that occur during wars and 'intentional homicides' arising in non-conflict

settings (Collier and Hoeffler, 2004, p. 3). As shown in Chapter One, however, it is often difficult in fragile and post-conflict contexts to determine whether a death can be attributed exclusively to organized or interpersonal violence, or to political or economic motivations (A UNIFIED APPROACH). Killings that are believed to be motivated by political or economic objectives may be the result of both or neither. In countries ranging from Afghanistan and Yemen to Mexico and Nigeria, the merging of organized criminal violence with armed conflicts of varying intensity renders a simple binary distinction between 'conflict' and 'non-conflict' meaningless.

Instead of retaining the artificial distinction between the two categories, this chapter collapses available data on lethal violence across all settings. Although it draws on disaggregated data, it combines information on lethal violence to generate a single total. Such an approach allows for an overall portrait of the global burden of armed violence and facilitates a more comprehensive reading of trends at the regional and national levels. Drawing on the comprehensive GBAV 2011 database on lethal violence, which covers the years 2004–09, this chapter finds that:

At least 526,000 people are killed each year as a result of lethal violence. This includes an estimated 55,000 direct conflict deaths, 396,000 intentional homicides, 54,000 so-called 'unintentional' homicides, and 21,000 killings during legal interventions.²

database

- One in every ten of all reported violent deaths around the world occurs in so-called conflict settings or during terrorist activities.
- The average annual global violent death rate between 2004 and 2009 was 7.9 per 100,000.
- At least 58 countries exhibit violent death rates above 10.0 per 100,000. These countries account for almost two-thirds of all violent deaths (63 per cent) or 285,000 deaths.
- El Salvador was the country most affected by lethal violence in 2004–09, followed by Iraq and Jamaica.
- Middle and Southern Africa, Central America and the Caribbean, and South America are the regions that exhibit highest levels of lethal violence.

The rates of both intentional homicide and direct conflict deaths are volatile. In 2006, the number of victims of intentional homicides dropped to around 368,000, while in 2009 this figure increased to around 423,000. After a dramatic increase in direct conflict deaths between 2005 and 2007—roughly 66,000 people died directly in armed conflict in 2007—the figure dropped to roughly 58,000 in 2009.

Explaining the framework

Whether focusing on the global or the national level, a comprehensive estimate of lethal violence necessarily relies on multiple data sources.

FIGURE 2.1 How violence is reported and recorded Victims of extrajudicial killings CONFLICT DEATHS **NON-CONFLICT DEATHS** Battle-related deaths Civilian deaths Victims of terrorism INTENTIONAL HOMICIDES Victims of legal interventions UNINTENTIONAL HOMICIDES Victims of legal Intentional homicides: Direct conflict deaths: interventions: violent deaths as a result of inter-Unintentional homicides: deaths as a result of deaths of civilians by law Note: The circles only deaths as a result of personal violence, gang armed conflicts, political enforcement and state approximately reflect the 'accidental' killingsviolence, economically security forces during violence, and terrorismproportions of violent 54,000 deaths per year motivated crime—396,000 deaths in each category. 55,000 deaths per year legal interventions deaths per year 21,000 deaths per year Source: GBAV 2011

It requires reconciling statistical information on deaths gathered from many disciplines, including criminology, epidemiology, and conflict studies. Because the researchers typically work in isolation from each another, they frequently only gather a partial image of the overall burden of lethal violence. The Global Burden of Armed Violence 2011 thus introduces a unified framework for understanding lethal violence. While Chapter One highlights the challenges of achieving an integrated approach, this chapter works with data sources that distinguish between different forms of lethal violence in order develop a comprehensive and integrated estimate of lethal violence.

Figure 2.1 outlines how lethal violence is recorded and reported within established categories in the criminal justice, health sciences, and conflict studies literatures. While it clarifies some aspects of lethal violence, the framework suffers from a few limitations. The sharp differentiation between conflict and non-conflict deaths betrays the complexity inherent in this dichotomy as well as the fact that distinguishing between the two categories is frequently a matter of interpretation. Nevertheless, the figure shows violent deaths compartmentalized into particular analytical categories, as routinely done by governments and non-governmental organizations, which often assume the categories to be mutually exclusive. While the figure acknowledges the way in which violent acts are reported and recorded, the reality of lethal violence is of course much messier.

Figure 2.1 provides a roadmap for estimating the global burden of armed violence. It demonstrates how direct conflict deaths and intentional homicide are often reported, given adequate data. With some exceptions, international bodies, national authorities, academic institutions, nongovernmental organizations, and the media are

reasonably adept at defining and reporting these two phenomena across time and space. The determinations of what kinds of events are included or excluded in both broad categories are generally shared across different countries, thus facilitating cross-national comparisons.3 The analysis in this chapter does not include indirect (non-violent) deaths or excess mortality inflicted on civilian populations as a consequence of armed conflict, nor does it cover self-directed violence (suicide).

The framework also demonstrates how certain categories of violent death are merged together. For example, terrorism-related deaths are included in the 'direct conflict death' category since most of them occur in countries affected by or emerging from war and because most databases on direct conflict deaths already include victims of terrorism in conflict zones. Challenges in counting terrorism-related deaths and injuries arise partly as a result of the absence of a universally agreed definition of what terrorism actually entails. The concept has been applied to a wide range of countries and groups in different historical, social, and cultural contexts (Friedrichs, 2006, pp. 72-73; see Box 2.1).

On the other hand, unintentional homicides and killings during legal interventions are not generally included in homicide statistics. As a result, they are not analysed in detail in this volume, although they are incorporated into the overall count of lethal violence. Given the absence of comparable definitions, the poor quality of reporting, and the low reliability of data on unintentional homicide and deaths occurring during legal interventions, these figures have to be treated with caution. The final section of this chapter offers a detailed analysis of the challenges involved in gathering data on unintentional homicides and killings during legal interventions.

Box 2.1 Challenges in defining 'terrorism' and recording its victims

Defining what is terrorism and who is a terrorist is a delicate matter. For more than two millennia, the term 'terrorist' has been applied to a disparate assortment of groups—including the Sicarii in first-century Palestine, the Assassins in the 13th-century Middle East, and the so-called 'Thugs', who were active from the 7th to the 19th century in India, and enjoyed a heyday in the 13th century (Rapoport, 1984). More recently the label 'terrorism' was applied to the actions of the French revolutionaries at the end of the 18th century and to Russian and European anarchists during the 19th century. Likewise, a wide range of actors have assigned the label 'terrorist' to the activities of totalitarian states, such as Nazi Germany and the Soviet Union, anti-colonialist and leftist groups of the 1960s and 1970s, and extremist religious and environmental groups since the 1970s (Rapoport, 2002).

There is no international consensus on how 'terrorism' should be defined. In the 1970s the UN General Assembly's Ad Hoc Committee on International Terrorism failed to arrive at a common definition, only to abandon its efforts in 1978 (UNGA, 1972). The goal of arriving at a universal definition was revived in 1996 with a new Ad Hoc Committee established by the General Assembly (UNGA, 1996).4 Despite a major effort to draft a comprehensive convention on international terrorism, the Committee has also failed to issue a definition or set of parameters that satisfy all members, and its draft definition remains provisional (UNGA, 2010a).

Despite the absence of an agreed definition, a number of databases provide annual estimates of terrorist victims, which vary widely in their estimates (see Table 2.1). In this context, the US-based National Counterterrorism Center (NCTC) reports are the most comprehensive as they specifically focus on terrorism rather than other kinds of political violence. Yet the NCTC also counts 'military personnel and assets outside war zones and war-like settings' as terrorism victims (NCTC, 2010, p. 4); this approach is



PHOTO ▲ Forensic experts investigate a bomb-destroyed bus following a coordinated attack on London's public transport system, July 2005. © Kai Pfaffenbach/Reuters

TABLE 2.1 Reported number of victims of terrorism or one-sided violence

	2004	2005	2006	2007	2008	2009
GTD	5,520	6,007	8,988	12,620	8,753	n/a
IISS international terrorism/al-Qaeda	550	620	709	1,760	1,243	n/a
NCTC	7,474	13,889	20,453	22,719	15,709	15,311
UCDP one-sided violence	7,826	3,919	4,096	4,161	3,264	n/a

Sources: GTD (n.d.); IISS (n.d.); NCTC (n.d.); UCDP (n.d.b)

problematic since it risks over-counting victims by including military personnel outside war zones. According to the many analysts who view the targeting of civilians and non-combatants as a defining characteristic of terrorism, combatants and soldiers should be excluded as victims of terrorism, even though organizations designated as terrorist may injure or kill them (Flükiger, 2011). This point has been acknowledged by the authors of the NCTC 2008 and 2009 reports in the case of Iraq. They write:

The distinction between terrorism and insurgency in Iraq was especially challenging in previous years, as Iragis participated in both the Sunni terrorist networks as well as the former-regime-elements insurgency (NCTC, 2009, p. 4; 2010, p. 5).

The Global Terrorism Database (GTD), run out of the University of Maryland, does not always distinguish between terrorism and other forms of violence either, including with respect to insurgencies. As is the case with the NCTC, the risk of over-counting also increases because the GTD counts military and civilian victims of terrorist attacks. Moreover, the GTD also suffers from data inconsistency, since it is made up of three different databases, one of which dates back to the 1970s and all of which apply different criteria for data inclusion and exclusion.

The London-based International Institute for Strategic Studies (IISS) Armed Conflict Database maintains a category on 'international terrorism/al-Qaeda'. This database does not record all victims of terrorism, however; instead, it contains 'battle-deaths' occurring as a result of the armed conflict between the United States and its Coalition forces against the al-Qaeda network. Likewise, the battle-death dataset of the Uppsala Conflict Data

Program (UCDP) records deaths as a result of this armed conflict, although it does not use the term 'international terrorism' (UDCP, n.d.c).6

The IISS dataset records deaths in countries such as Afghanistan, Pakistan, Saudi Arabia, and Yemen. It is important to note that the victims of 'international terrorism' listed by IISS are also counted as 'regular' battle deaths in the countries in which they occur. These victims are counted exclusively in the category of international terrorism only if a terrorist act occurs in a country that is not engaged in active conflict as defined by IISS.

An additional dataset that may capture victims of terrorism is the UCDP 'onesided violence' dataset. It defines one-sided violence as 'the use of armed force by the government of a state or by a formally organized group against civilians which results in at least 25 deaths. Extrajudicial killings in custody are excluded' (Kreutz, 2008, p. 2). The dataset is not entirely consistent, however, since it includes the 2004 Madrid bombings (191 victims) but does not count the victims of the 2005 London bombings (52 victims). Second, it only includes conflicts that claim 'at least 25 deaths in a year'. A multitude of armed violence incidents could count as 'terrorism' and have not been defined as direct conflict deaths, especially if they claim only a few victims. For instance, the UCDP dataset on one-sided violence does not take into account small-scale—but lethal—terrorist incidents such as the attacks of al-Qaeda in the Islamic Maghreb in Mauritania in 2007-09.

A review of the GTD, NCTC, and UCDP one-sided violence datasets finds that the vast majority of casualties of terrorism are killed in conflict settings. For example, 98.2 per cent of all victims of terrorism reported by NCTC for the period 2004-09 were attacked in a 'main armed conflict' such as in the armed conflicts in Afghanistan, Iraq, or Pakistan. To avoid double counting, terrorism victims listed in these three datasets have not been added to the regular 'battle deaths' in the GBAV 2011 dataset. Outside main armed conflicts, victims of terrorism are included on the basis of a review of the information provided by GTD, NCTC, and UCDP. They include, for example, the 191 people killed in the Madrid bombings in 2004; the 88 victims in Sharm el-Sheikh in 2005; and the 60 people killed in Amman in 2005 (Povey et al., 2009, p. 10).

Source: Flükiger (2011)

Explaining the data sources

The Global Burden of Armed Violence 2011 relies on multiple data sources to measure the scale and magnitude of lethal violence. Most of the data is derived from incident reporting systems. Incident reporting encompasses passive surveillance of the number of people reported to have died in violent events through hospital, mortuary, police, or criminal justice data collection. Figure 2.2 provides a graphic illustration of a common incident reporting data collection process, which typically results in three different types of databases: one for criminal justice statistics, one for public health data, and another focusing on direct conflict deaths.

The most reliable incident reporting mechanisms are frequently those connected to a country's public health system. This is because most coun-

tries legally require that every death be certified and registered by the public health authorities. The original data for such death certificates is typically sourced from hospitals, health clinics, emergency rooms, mortuaries, or autopsy reports of forensic institutes. In the best case, data is integrated into a national vital registration system that codes the causes of deaths according to the International Classification of Disease (ICD), currently in its tenth revision (WHO, n.d.a). At the international level, national data is aggregated through systems such as the World Health Organization's Mortality Database (WHOMDB), the single largest dataset on causes of death reported by national vital registration systems.

The criminal justice system is another significant source of data on violent deaths in non-conflict settings, since these typically constitute the

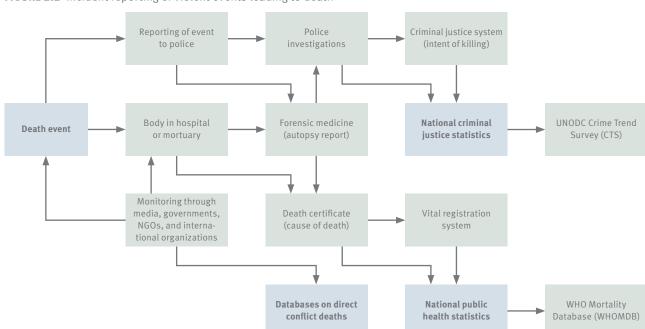


FIGURE 2.2 Incident reporting of violent events leading to death

illegal killings of persons by other persons. For the purposes of this chapter, a homicide can be defined as an 'unlawful death inflicted on a per-

son by another person' (Geneva Declaration

Secretariat, 2008, p. 68). In most settings, homicides are reported by the police. Using forensic information from the autopsy reports, the police

and the criminal justice system investigate the intent of the killing. Statistics on intentional and

unintentional homicides usually emerge out of

this process. And while intentional homicide statistics are routinely approached with scepticism

owing to their partial coverage or politicization,

the last few years have seen significant improve-

ments in their availability and quality.

In conflict-affected settings, public health and criminal justice data is often unreliable, inadequate, or absent altogether. This data lacuna has been recognized since the middle of the 20th century. Indeed, military and defence strategists have long been preoccupied with understanding the lethal effects of armed conflict, especially on their own soldiers (Muggah, 2011). Likewise, a growing cadre of academic and independent research institutions is currently dedicated to the collection of data on conflict deaths, often drawn from health, human rights, NGO, and media reporting. Prominent examples of conflict death databases that make use of incident reporting are the different databases put together by UCDP and Iraq Body Count (UCDP, n.d.a; IBC, n.d.).

The quality and coverage of incident reporting systems vary widely around the world. Sophisticated and comprehensive vital registration data is available in all high-income regions and several low- and middle-income regions, notably in Latin America and the Caribbean. But in several regions, including most of Sub-Saharan Africa, South Asia, East Asia, and South-east Asia, the vital registra-

tion infrastructure is simply too weak to provide reliable, comparable data. To compensate for these chronic data gaps, WHO developed statistical models to estimate broad cause-of-death patterns. It provides country-level estimates on 'violence' (interpersonal) and 'war' (collective violence) for the years 2004 and 2008 (WHO, n.d.b).9

Incident reporting systems that draw on criminal justice data can also facilitate comparisons across countries. Indeed, with the notable exception of a number of countries in Sub-Saharan Africa. comparable intentional homicide data is available for most countries in the world (Harrendorf, Heiskanen, and Malby, 2010, p. 10). While definitions of what constitutes a 'homicide' often differ, it is nevertheless possible to triangulate sources and generate a fine-tuned analysis (CHARACTERISTICS OF ARMED VIOLENCE). This type of data is available as a result of crossnational crime data collection gathering initiatives such as the current United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS), administered by the United Nations Office on Drugs and Crime (UNODC).

It is important to stress that *incident reporting* typically undercounts the number of violent deaths in any given situation (see Box 2.2). The reasons for this may be obvious. Any system depends on quality reporting and a minimum institutional capacity to monitor incidents. In certain cases, these basic requirements may not be met. As a result, especially in settings characterized by high rates of violence, randomized household surveys are often used to provide data on mortality, morbidity, and other indicators. Only in unusual cases is comparable survey data available within or across selected countries. Rather, household survey data often provides a narrow cross-sectional snapshot of a given situation.

Box 2.2 Why incident reporting provides conservative numbers

In theory, hospital records should be among the most reliable sources of information on violent deaths. In practice, however, particularly in countries with limited financial resources and in those affected by acute violence, health facilities rarely systematically capture the causes of injury and deaths. Rather, the priority is placed on the treatment of patients (Holder et al., 2001). Further, in countries with rudimentary public health surveillance systems, many deaths might not be recorded as 'assault'10—which covers intentional homicides and 'injuries inflicted by another person with intent to injure or kill' (WHO, n.d.a)—but rather as 'events of undetermined intent',11 which may or may not include intentional homicides. The latter category covers all deaths for which 'available information is insufficient to enable a medical or legal authority to make a distinction between accident, self-harm and assault' (WHO, n.d.a).

While often more easily available, criminal justice data is significantly more vulnerable to undercounting than public health data. Criminal justice statistics on intentional homicides frequently capture only events that are considered *unlawful*. Yet not all countries share categories of what is lawful. Indeed, legal definitions of homicide vary across countries and may or may not include assault leading to death, euthanasia, infanticide, or assisted suicide. What is more, criminal justice data often records homicide *events*. In other words, it does not account for the number of victims but rather the number of incidents. If several people are killed in one event, the number of victims is frequently undercounted.

Ultimately, the precision and reliability of criminal justice data—including homicide—is hostage to the willingness of people to report their experiences to the police or other authorities. If a person does not trust the government, he or she may be unlikely to report an event. Obviously, only relatives and witnesses—rather than the victims themselves—can report a homicide. If relatives act as perpetrators in a homicide—as may be the case in 'honour' killings, for example—they are not likely to report the incident to the authorities (Geneva Declaration Secretariat, 2008, p. 120).

Since the main characteristic of a homicide is a dead body, homicides are rarely recorded when the body is not found. Yet people who are reported 'missing' may well be victims of a homicide or forced disappearance, though other explanations may apply. Between 1980 and 2010, the UN Working Group on Enforced or Involuntary Disappearances transferred a multitude of cases of forced disappearances for clearance to governments such as Algeria (2,950 cases), Argentina (3,449), Colombia (1,236), El Salvador (2,662), Guatemala (3,155), Iraq (16,545), Peru (3,009), and Sri Lanka (12,230) (UNGA, 2011, pp.135–39).

Between November 2009 and 2010 the Colombian government cleared 211 cases, while non-governmental sources cleared the status of another 68 missing people. Of the 279 cleared cases, 35 per cent were confirmed as deaths (98 persons). In Mexico, an even higher proportion of missing people were confirmed dead. Of the 134 cases cleared by the Mexican government and the 24 cleared by NGOs, 63 were confirmed as deaths. In Guatemala, 25 per cent of the missing persons were confirmed dead (63 out of 256 cleared cases) (UNGA, 2011, pp. 136–37).

The report by the UN Working Group does not indicate whether all of these victims were intentionally murdered. Nor does it specify whether these deaths were later added to homicide statistics. However, the figures in the report highlight that if the tally of 'missing' who have been killed were to be included in homicides statistics, the number of documented homicides would increase significantly. Even in countries such as the Netherlands, 'if all persons who were still missing after a year were victims of a homicide, the total number of homicides would increase by 5–10 per cent' (Smit, 2011, p. 2).

In conflict settings the limitations of incident reporting are even more pronounced. Studies of undercounting in specific conflicts reveal that the number of direct conflict deaths could, in extreme cases, be between two and four times the level actually captured by passive incident reporting systems. ¹² This partly explains the dramatic rise in field-based surveys in a growing number of countries affected by and emerging from war.

Trends in armed violence are thus more difficult to evaluate and data is seldom developed in ways that allow practitioners to design and measure the impact of armed violence prevention and reduction efforts.

For this edition of the Global Burden of Armed Violence, data was tabulated from a range of incident reporting systems. The selection of specific homicide rates was determined on the basis of a decision tree that draws on a combination of public health and criminal justice data from national sources. Likewise, 2004 and 2008 estimates generated by WHO were used selectively to fill key gaps. In a second step, the number of intentional homicides and direct conflict deaths were added. The final violent death rate—per year per 100,000 population—was calculated on the basis of annual population statistics. A number of smaller island states in the Caribbean and the South Pacific—many with populations of less than 100,000—were grouped together into the Lesser Antilles Region and the Micronesia Region so that rates would not skew the data.14

The resulting GBAV 2011 database on lethal violence provides wide coverage with a comparatively high degree of confidence. Time-series information (for 2004-09) was collected for a total of 186 countries, 15 providing a useful starting point for examining changing patterns and trends of armed violence across the globe. Owing to a remarkable improvement in criminal justice data availability, this analysis relies less on public health data and WHO estimates. As a result of the increased use of criminal justice data, which runs a higher risk of undercounting (see Box 2.2), the figures for intentional homicides are somewhat lower than the figures on homicides presented in the first edition of the Global Burden of Armed Violence.

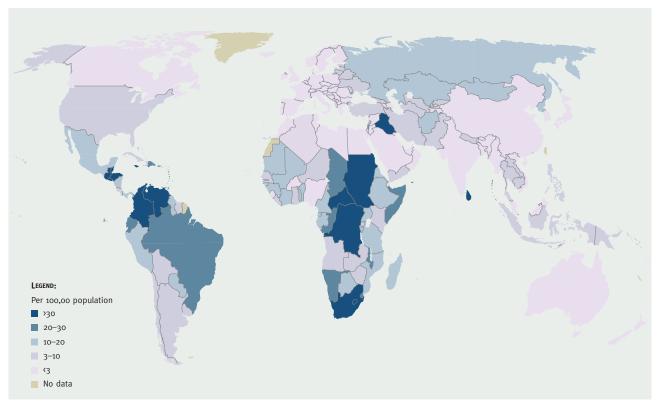
Lethal violence 2004–09: a snapshot

The GBAV 2011 database—a comprehensive database on lethal violence covering the years 2004–09—highlights that, on average, an estimated 526,000 people died violently as a result of conflict, intentional homicide, unintentional homicide, and killings during legal interventions each year between 2004 and 2009. This section presents a snapshot of the regional and national distribution of these deaths, focusing in particular on the total number of direct conflict and intentional homicide deaths (451,000).

Map 2.1 shows the global distribution of these deaths per 100,000 population, and Figure 2.3 ranks the top 58 countries experiencing the highest recorded levels of lethal violence. As a base of comparison, it may be useful to bear in mind that the overall global violent death rate is roughly 7.9 per 100,000 (including all four categories of violent deaths), around 6.8 per 100,000 excluding unintentional homicide and killings during legal interventions, and around 6.0 per 100,000 for intentional homicides only (excluding conflict deaths).

The first thing to note is that while violence experienced in wars from Afghanistan to Sri Lanka has featured in media headlines, the number of people dying violently in so-called non-conflict settings—such as in Central and South America and the Caribbean, and in parts of Sub-Saharan Africa—is far greater than the number killed in conflicts. Of the top 14 states most affected by armed violence (with violent death rates exceeding 30 per 100,000 population), only five have more than 1,000 conflict deaths in an average year (namely Colombia, the Democratic Republic of the Congo, Iraq, Sri Lanka, and Sudan).

MAP 2.1 Average annual violent death rates per 100,000, 2004–2009



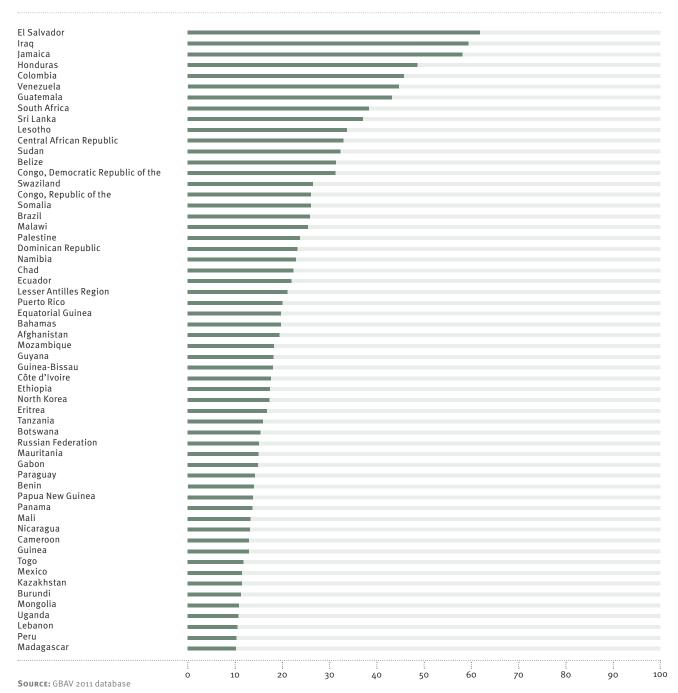
Source: GBAV 2011 database

One-third of all countries with rates of lethal violence above 10 per 100,000 population (16 out of 58) are either experiencing a 'main armed conflict' or emerged from one between 2004 and 2009. 16 Yet in only six of these countries—Afghanistan, Iraq, Lebanon, Palestine, Somalia, and Sri Lanka—do direct conflict deaths constitute the majority of all violent deaths. In the majority of the countries (ten) experiencing or having emerged from armed conflict, the incidence of homicide is actually greater than the number of direct conflict deaths. From among the 16 countries, three countries are considered post-conflict settings: Burundi, Côte d'Ivoire, and Lebanon. 17

In the 186 countries under review, roughly 12.2 per cent of the lethal violence occurred in armed conflict settings and 87.8 per cent in non-conflict settings. This translates to 55,000 direct conflict deaths and 396,000 intentional homicide victims per year. The 55,000 average deaths per year in armed conflicts around the world can be compared to the estimated 48,800 people who die violently on average each year in Brazil.

Three Central American countries—El Salvador, Honduras, and Guatemala—display among the highest rates of lethal violence in the world. With a violent death rate of 61.9 per 100,000 in 2004— 09, the people of El Salvador were more at risk of

FIGURE 2.3 Countries ranked by violent death rate per 100,000 population, 2004–09







dying violently than any population around the world. In comparison, in an average year between 2004 and 2009, Iraq had a violent death rate of 59.4 per 100,000. El Salvador and Iraq are followed by five other countries in Latin America and the Caribbean—in descending order, they are Jamaica, Honduras, Colombia, Venezuela, and Guatemala—all with violent death rates above 43 per 100,000. Overall, 14 countries have lethal violence rates of more than 30 per 100,000.

The country that recorded the highest number of conflict deaths in 2004–09 was Iraq, with an estimated annual average of 15,900 direct conflict deaths. Box 2.3 discusses some of the characteristics associated with lethal violence in Iraq. Conflict deaths for Iraq are estimated by totaling the civilian deaths recorded by Iraq Body Count and the fatalities of the Coalition forces recorded by iCasualties (n.d.). The figures in Box 2.3 (92,614 violent deaths occurring as a result of armed violence between mid-March 2003 and mid-March 2008) only include the Iraqi civilian deaths.

During the same period, eight countries recorded average annual numbers of violent deaths from intentional homicides that were higher than the number of direct conflict deaths in Iraq, although at times with relatively low homicide rates. Brazil recorded 48,800, India 32,700, the Russian Federation 20,700, South Africa 18,700, China 18,200, Colombia 17,500, 19 and the Democratic Republic of the Congo and the United States both reported 16,800 intentional homicide victims. These figures merely demonstrate that countries with a large population but a relatively low rate of lethal violence may still weigh heavily in the overall global totals.

Before turning to broader trends, it is worth underlining the uncertainties associated with the data presented in Figure 2.3, which ranks countries according to violent death rates. The main risk,

Box 2.3 Analysis of violent deaths of Iraqi civilians

Detailed analysis of civilian deaths during armed conflict can improve our understanding of the effects on civilians and specific vulnerable subgroups in the population, including women and children. A 2011 assessment of the 92,614 Iraqi civilian deaths that occurred as a result of armed conflict from mid-March 2003 through mid-March 2008, developed from the Iraq Body Count dataset, represents the most in-depth such study to date (Hicks et al., 2011, p. 1). Iraq Body Count is a non-governmental project that collates media reports of deaths of Iraqi civilians and crosschecks these reports against data from hospitals, morgues, NGOs, and government bodies.

The study finds that most of these violent deaths were inflicted by unknown perpetrators and consisted primarily of extrajudicial executions of captured individuals. Unknown perpetrators also frequently used small arms, suicide bombs, vehicle bombs, and mortars, which had highly lethal and indiscriminate effects on Iraqi civilians. Most of the Iraqi civilians who were killed by Coalition forces died during air attacks without ground fire, while fewer died from small arms gunfire. Of the 58,251 deaths attributed to a

single method and perpetrator in events lasting under two days, 10,599 (18 per cent) were directly attributed to small arms and a further 19,691 (34 per cent) were executions, of which the vast majority were perpetrated using small arms (see Table 2.2).

As shown in Figure 2.4, the researchers also calculated the number of women and children killed; Figure 2.5 shows the proportion of women and children among all civilian deaths identified as men. women, or children. Known as the 'woman and child dirty war index' (DWI), this indicator reflects the degree of indiscriminate lethal effects on a civilian population, from indiscriminate weapons or from the indiscriminate use of weapons in a conflict. The DWI scale ranges from o (no indiscriminate lethal effects) to 100 (extreme indiscriminate lethal effects). The most indiscriminate effect from weapons was from unknown perpetrators firing mortars (DWI = 79). Air attacks by Coalition forces (DWI = 69) and non-suicide vehicle bombs by unknown perpetrators (DWI = 54) also had highly indiscriminate effects on women and children. Indeed, 'Coalition forces had higher Woman and Child DWIs than Anti-Coalition forces, with no evidence of decrease over 2003-2008, for all weapons combined and for small arms gunfire, specifically' (Hicks et al., 2011, p. 1).

TABLE 2.2 Iragi civilian deaths by type of perpetrator and method, mid-March 2003—mid-March 2008

	Unknown perpetrator only		Anti-Coalition perpetrator only		Coalition perpetrator only		
Method	Civilian deaths	Mean death/ event	Civilian deaths	Mean death/ event	Civilian deaths	Mean death/ event	Total
Execution, any	19,321	7 (0.2)	316	7 (1.2)	54	5 (2.2)	19,691
Execution with torture	5,697	8 (0.4)	60	7 (1.6)	0	0	5,757
Small arms gunfire	8,086	2 (0.03	1,526	2 (0.1)	987	2 (0.1)	10,599
Suicide bomb	5,363	19 (2.3)	3,333	8 (0.5)	0	0	8,696
Suicide bomber in vehicle	3,029	19 (3.7)	2,370	7 (0.5)	0	0	5,399
Suicide bomber on foot	2,320	19 (2.4)	963	11 (1.5)	0	0	3,283
Vehicle bomb	3,748	7 (0.5)	1,612	5 (0.5)	0	0	5,360
Roadside bomb	1,561	2 (0.1)	1,293	2 (0.1)	0	0	2,854
Mortar fire	1,763	3 (0.1)	289	3 (0.2)	19	2 (0.6)	2,071
Air attack without ground fire	0	0	0	0	2,384	9 (0.9)	2,384
Bombs only	0	0	0	0	479	17 (3.6)	479
Missiles only	0	0	0	0	353	8 (2.4)	353
Air attack with ground fire	0	0	0	0	213	13 (3.2)	213
Totals for single perpetrators, any method*	44,750	4 (0.1)	9,511	4 (0.1)	3,990	4 (0.3)	58,251

Note: * The total figures include deaths from events involving 'other', 'unknown', and 'combined' methods if attributable to a single perpetrator; these criteria are not shown in the single-method rows.

Source: Hicks et al. (2011, p. 5)

March

2008

2007

FIGURE 2.4 Civilian violent deaths of Iraqi women and children from Coalition and anti-Coalition forces, mid-March 2003—mid-March 2008



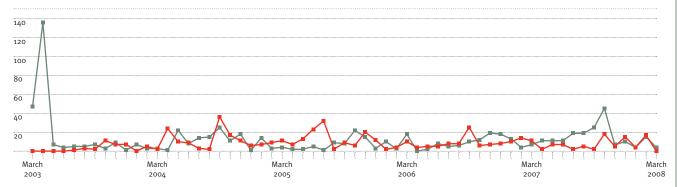
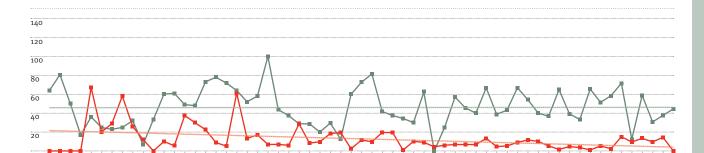


FIGURE 2.5 Woman and child dirty war index, mid-March 2003-mid-March 2008

■ DWI Coalition forces Trend line ■ DWI anti-Coalition forces Trend line

March

2004



2005

as outlined in Box 2.2, is undercounting inherent in incident reporting of conflict deaths or inadequate national and international data collection systems. With better data, several states might move up in the ranking, but very few would be likely to see their rates fall. For example, it is entirely possible that the violent death rate for Somalia is higher than that reported for the Central African Republic, and quite possibly higher than that of Brazil, which follows Somalia in the list. It is also possible that lethal violence is much more prevalent in Afghanistan than in the Bahamas. Some states that are not in the

March

2003

top ranking, such as Haiti, Nigeria, or Yemen, would probably move up if better data were available (see Box 2.5).

March

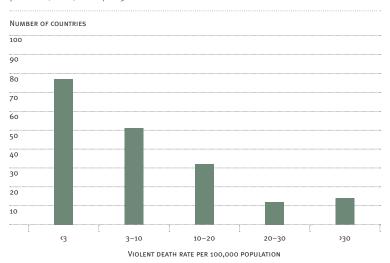
In the absence of administrative surveillance systems and the consequent lack of public health or criminal justice data, homicide rates for both Afghanistan and Somalia are based on WHO figures and are relatively low. While the 2008 WHO estimates were 2.6 per 100,000 for Afghanistan and 1.5 per 100,000 for Somalia, the overall violent death rates in both countries are probably much higher.²⁰ In contrast, the figures for the Bahamas and Brazil—as well as for most

of the states with high levels of violence—are largely reliable. So while the overall rankings might shift with better data, the reported rates for most states would not. The online methodological annex discusses in detail the confidence with which to read particular figures.

Figure 2.6 provides the overall distribution of countries according to their rates of lethal violence.

Not surprisingly, a large number of countries—
77 in all—have low rates of lethal violence (less than 3 per 100,000). Most of these countries are in Europe, Northern Africa, and East Asia. One noteworthy exception in Europe is the Russian Federation, which reported annual average violent death rates of 15.0 for 2004–09. Rates of violent death above 10 per 100,000 characterize 58 states—mostly in Middle and Southern Africa, and in Latin America and the Caribbean—with 14 countries featuring very high levels of armed violence (more than 30 per 100,000). These 58 countries account for around two-thirds of all

FIGURE 2.6 Distribution of violent death rates among 186 countries, per 100,000, 2004–09



Source: GBAV 2011 database





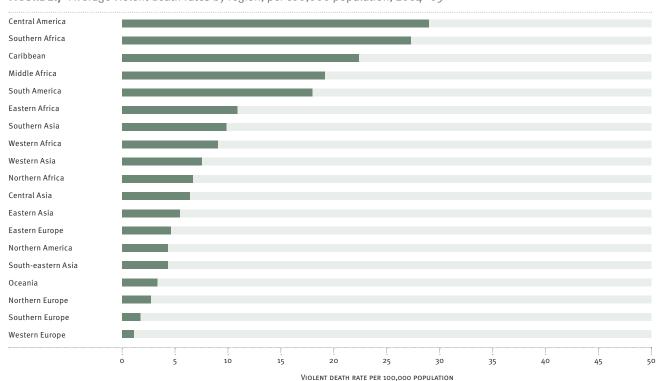
violent deaths (63 per cent); an estimated 285,000 people died violently each year in these countries. The 14 countries with annual violent death rates above 30 per 100,000 population account for an estimated 124,000 deaths. In other words, more than one-quarter of all deaths (27.5 per cent) occurred in 14 countries, where less than 5 per cent of the world's population lives. Targeted efforts to prevent and reduce the lethal impact of armed violence in these countries could significantly reduce the global burden of armed violence.

The uneven distribution of lethal violence is especially apparent at the regional level. Figure 2.7 aggregates the average national violent death

rates for 186 countries into regional groupings.²¹ The regions most affected by lethal violence are Central America, with an average regional rate of 29.0 per 100,000, followed by Southern Africa (27.4) and the Caribbean (22.4).

The variation between regions is also accompanied by considerable intra-regional heterogeneity in lethal violence. This is hardly surprising given countries' different historical, political, economic, and social experiences. Some regions show common patterns of lethal violence across countries while others exhibit a wide disparity in rates of lethal violence among states. Figure 2.8 displays the proportion of countries by region according to the categories of levels of lethal violence.

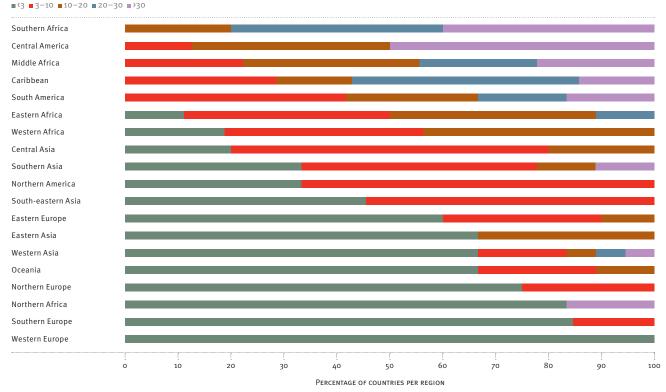
FIGURE 2.7 Average violent death rates by region, per 100,000 population, 2004-09



Source: GBAV 2011 database

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FIGURE 2.8 Percentage of countries per violent death rate per 100,000, 2004-09



Source: GBAV 2011 database

Within certain regions the incidence of lethal violence is comparatively homogenous across countries. For example, the five countries in Southern Africa all feature annual violent death rates above 10 per 100,000 population. With the exception of Costa Rica, all Central American countries exhibit violent death rates of more than 10 per 100,000, and in the Caribbean region, only Cuba and Haiti experience violent death rates below 10 per 100,000. All other countries suffer from high to very high levels of lethal violence, with violent death rates ranging from 19.7 per 100,000 in the Bahamas to 58.1 per 100,000 in Jamaica (see Box 2.4). In Middle Africa and South America most countries display elevated

levels of armed violence (above the global average). At the other end of the spectrum, all Western European countries experience annual violent death rates below 3 per 100,000 population. Similarly, in Southern and Northern Europe, South-east Asia, and Northern America, all countries have violent death rates below 10 per 100,000.

While many regions are relatively homogenous, some regions feature highly unequal distributions of lethal violence among countries. A case in point is Southern Asia, where numerous countries have violent death rates below 10 per 100,000, although Sri Lanka suffers from rates of more than 30 per 100,000; Afghanistan also records high levels of lethal violence with a rate just below 20 per 100,000

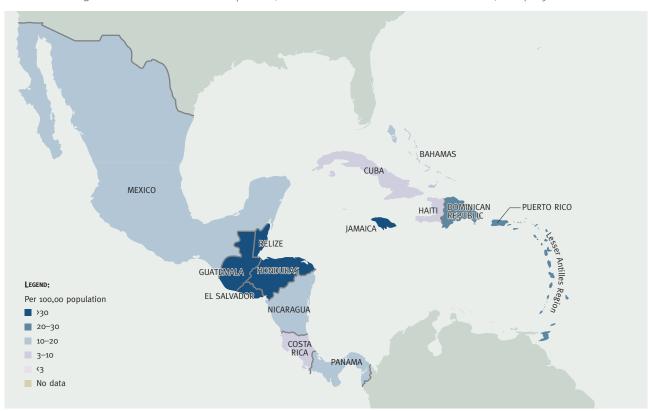
Box 2.4 Violent deaths in Central America and the Caribbean

The intensity of armed violence across Central America and the Caribbean is several times the global average, with a few exceptions. The extent of lethal violence in these states has led to concerns that it is contributing to the erosion of the rule of law and social order. Many analysts underline the fact that homicide casualties as a result of urban violence in El Salvador, Guatemala, Honduras, and Jamaica have surpassed the number of deaths in classic conflicts (Seligson and Booth, 2010; Rodgers, 2010; Zinecker 2008); some have actually likened the characteristics of violence to that of an outright armed conflict (Manwaring, 2007). Indeed, governments in North America and Western Europe have started to initiate military and security support strategies to these countries to prevent the deepening of armed violence and contagion across borders.

(a figure that probably suffers from undercounting of homicides due to limited institutional capacity, as noted above). Likewise, with the exception of Sudan, Northern Africa exhibits low levels of armed violence. The so-called 'Arab Spring' that swept across Bahrain, Egypt, Libya, Syria, Tunisia, and Yemen in 2011 may yet reveal dramatic changes in reported violence and victimization. In any case, the considerable variation between and within regions—and the different factors that may account for it—highlight the importance of not generating overly simplistic conclusions from the data.

Although the data for countries with high levels of violence is relatively robust, a number of

MAP 2.2 Average annual violent death rates per 100,000 in Central America and the Caribbean, 2004–09



Source: GBAV 2011 database

Box 2.5 Violent deaths undercounted in Yemen

After 20 years as a unified state, Yemen is embroiled in social and political turmoil. It is also afflicted by a number of interlocking armed conflicts, ranging from separatist political clashes between state security forces and protesters to all-out civil war and terrorism, which has prompted the United States, the United Kingdom, Saudi Arabia, and other states to become involved.²² Since the 1994 civil war, which claimed an estimated 1,500 lives, different forms of armed violence in Yemen have simmered at low intensity, often without catching the public's attention or even being recorded (UCDP, n.d.c).²³

Publicly available security and justice data records an average of 919 deaths per year due to 'intentional murder' (875 deaths), 'assault leading to death' (30 deaths), and 'the origin kill the branch' (14 deaths) between 2004 and 2009 (CSO, n.d.). Missing in this figure are an additional average 163 'unintentional murders' that are reported for the same period (CSO, n.d.). More importantly, an unpublished report of the Yemeni government acknowledges that an average of 4,000 people are killed each year due to 'land disputes' with underlying political and economic motivations (Small Arms Survey, 2010b); none of these deaths appear in the most common international statistics on armed conflicts and thus they are not integrated into the GBAV 2011 database. Clearly, Yemen is witnessing manifestations of violence that deserve close attention and inclusion in one or another dataset on armed violence, but which are counted in neither armed conflict nor homicide statistics.

The Yemeni example suggests that there is probably significant underreporting of both interpersonal and conflict-related violence in some regions or countries. A Yemeni government official suggested three reasons for undercounting deaths related to land or water disputes. First—and most importantly—many such cases are dealt with by customary rather than formal state mechanisms. ²⁴ Moreover, in many cases the military is used to intervene, raising sensitivities about the impact of state actions. Finally, the tribal nature and dynamics of many such conflicts can make it impossible to identify who killed whom,

reducing the likelihood of prosecutorial involvement (Small Arms Survey, 2010b). If the 4,000 'land conflict' deaths were added to the Yemeni data, the country's overall violent death rate would increase to 26.2 per 100,000, which would be comparable to the rate of 26.0 per 100,000 reported in Somalia.

Sources: Small Arms Survey (2010a; 2010b)

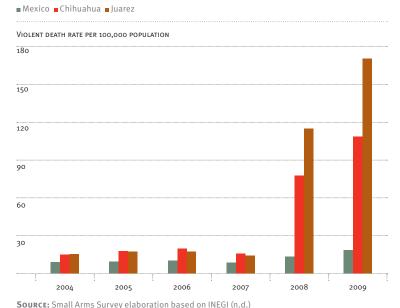


PHOTO ▲ An armed tribesman guards Yemeni opposition tribal chief Sheikh Sadiq al-Ahmar as he inspects his damaged residence in Sana'a, June 2011. © Mohammed Huwais/AFP Photo

countries are not included in Figure 2.3 although they have either recently experienced armed conflicts or are believed to have high levels of violence. Countries such as Burundi, Haiti, Kenya, Liberia, Nepal, Nigeria, Pakistan, and Yemen have each featured chronic and acute outbreaks of violence in their capitals or other prominent cities in the prelude and wake of elections or are affected by armed conflicts. And yet all of these countries actually report lethal violence rates below the global average.

For example, despite recently emerging from a decade-long civil war in 2006, Nepal's average national violent death rate is reported at 6.2 per 100,000; it thus figures in the category of countries with a medium level of armed violence. The country's lethal violence rate is estimated on the basis of data on intentional homicides reported by Nepal's Central Bureau of Statistics and direct

FIGURE 2.9 Violent death rates per 100,000 in Mexico, Chihuahua, and Ciudad Juarez, 2004–09



conflict deaths reported by the news portal INSEC and the IISS Armed Conflict Database (CBS, 2009, s. 17.4; INSEC, n.d.). For 2004–09, Nepal—along with Afghanistan, Iraq, Palestine, Somalia, and Sri Lanka—reported more direct conflict deaths than intentional homicides. In war-affected societies, administrative sources typically lack the capacity to record all intentional violent deaths. As such, there are reasons to suspect that the information reported by Nepal's Central Bureau of Statistics undercounts the number of victims. Another case of potential undercounting—Yemen—

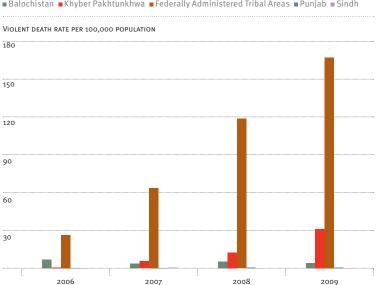
is highlighted in Box 2.5.

Lethal violence is unevenly distributed not only across countries, but also within them. Both Mexico (with an estimated 74,000 violent deaths between 2004 and 2009) and Pakistan (with 90,000 victims of homicide and armed conflict over the same period) have medium lethal violent death rates. Mexico's annual violent death rate averaged 11.5 per 100,000 between 2004 and 2009, although some states have much higher rates; in 2009 the violent death rate in the most affected region, Chihuahua state (with three million inhabitants), was 108.0 per 100,000 (see Box 1.4, A UNIFIED APPROACH). Armed violence is even more concentrated in certain cities. In Ciudad Juarez, a city of just over 1.3 million inhabitants, 2,399 people were killed in 2009, which translates into a murder rate of 170.4 per 100,000 (see Figure 2.9).

As in Mexico, the number of violent deaths in Pakistan appears to have increased significantly since 2004. Owing in part to the escalation of violence mainly on the Afghanistan—Pakistan border, the number of annual violent deaths in Pakistan has increased from around 10,500 in 2004 to 24,500 in 2009. Despite this escalation, the national violent death rate in Pakistan in an

average year between 2004 and 2009 was roughly still only 8.6 per 100,000, though the violence is provinces, 2006–09

unevenly distributed and certain regions in the Balochistan •Khyber Pakhtunkhwa •Federally Administered Tribal Areas •Punjab •Sindh



SOURCE: Small Arms Survey calculation based on conflict deaths figures provided by SATP (2011) and GoP (1998)

still only 8.6 per 100,000, though the violence is unevenly distributed and certain regions in the country are more affected than others. Figure 2.10 highlights the direct conflict death rates between 2006 and 2009 in Pakistan.²⁵ The Federally Administered Tribal Areas in the northwestern region between Pakistan and Afghanistan reportedly had 5,304 direct conflict deaths in 2009 alone. With a population of just over 3.1 million people (1998 census), this figure would represent a direct conflict death rate of approximately 167.0 per 100,000 in 2009 (GoP, 1998; see Figure 2.10).

Trends in lethal violence, 2004–09

Although six years of data is not enough for detailed trend analysis, it is possible to tease out some possible patterns. First, the global violent death rate in 2009 stood at 7.0 per 100,000, as compared to 6.8 per 100,000 in 2004 and 6.4 in 2006. While seemingly rather stable across longer periods of time, rates of lethal violence can fluctuate dramatically on an annual basis and in particular countries. The number of victims of intentional homicides dropped from 397,000 in 2004 to 368,000 in 2006, while in 2009 these figure increased to 423,000.²⁶

Direct conflict deaths are more volatile. After a decrease from 46,000 in 2004 to 40,000 in 2005, direct conflict deaths increased to 66,000 in 2007. In 2009 they dropped again to roughly 58,000. The changes in direct conflict deaths are largely a result of the ebb and flow of armed conflicts in Iraq, Pakistan, Somalia, and Sri Lanka, all described in greater detail below.

Sufficiently comprehensive and coherent time series data exists for only 40 countries with violent death rates higher than 10 per 100,000 in any given year between 2004 and 2009, and they are the focus of attention in this section.27 A number of these countries had significant changes in violent death rates between 2004 and 2009, as shown in Figure 2.11.28 It reveals that in 2009 Sri Lanka experienced the highest violent death rate and the greatest increase since 2004, mainly due to the intense armed conflict that year. Other countries that had significant upward shifts between 2004 and 2009 were Afghanistan, Honduras, Iran, Mexico, Pakistan, Palestine, Panama, Peru, and Uganda. The violent death rates in these countries were at least twice the rates of 2004.

Figure 2.12 tracks ten of the 40 countries under review whose violent death rates for 2009 are

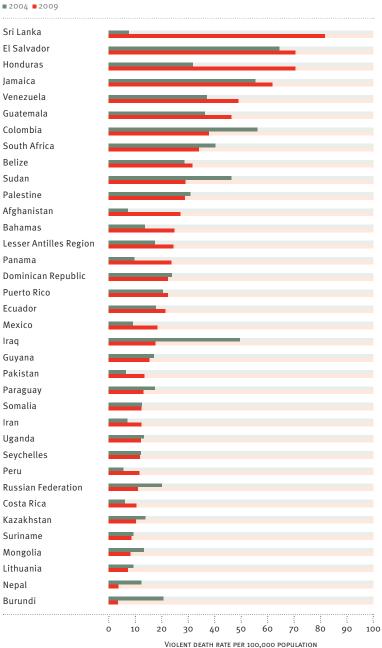


PHOTO ▲ Tamil families use old artillery shell boxes to navigate their way through mine fields as they return to homes they were forced to leave due to fighting, Palampiddi, Sri Lanka, July 2010. © Patrick Brown/Panos Pictures



FIGURE 2.11 Violent death rates per 100,000 population, 2004 and 2009



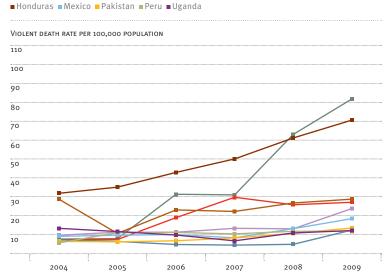


Source: GBAV 2011 database

more than two times higher than the lowest rate in any given year between 2004 and 2009. It shows that the violent death rate in 2009 in Sri Lanka was more than ten times higher than that reported for 2004. The increase in violent deaths is largely a function of extensive military operations in the final phase of the 26-year civil war. In 2009, the armed conflict cost the lives of at least 15,500 people.30 Meanwhile, a number of Central American countries experienced fast and steady increases in homicidal violence. Between 2004 and 2009, violent death rates in Honduras more than doubled, from 31.9 to 70.6 per 100,000. Perhaps somewhat paradoxically, and despite concerns about underreporting with respect to dramatic declines in lethal violence, upward trends are usually based on fairly robust data.

FIGURE 2.12 Countries with significant increases in violent death rates per 100,000, 2004–09

■ Sri Lanka ■ Afghanistan ■ Palestine ■ Iran ■ Panama



NOTE: For 2009, these countries recorded violent death rates that were twice as high as the lowest rate recorded for any given year between 2004 and 2009.

Source: GBAV 2011 database

In contrast, a cluster of countries reported dramatic decreases in lethal violence between 2004 and 2009. Figure 2.13 shows six of the 40 countries under review whose reported violent death rates in 2009 were less than half the highest rate recorded for any given year between 2004 and 2009. The country exhibiting the largest proportional decline was Lebanon. After a sharp increase during the 2006 conflict between Hezbollah and Israel (resulting in a violent death rate of 33.1 per 100,000), the violent death rate dropped to a reported level of just 2.7 per 100,000 in 2009. The country now appears to have low levels of armed violence, although the completeness of national reporting is questionable (Small Arms Survey, 2011).

Between 2007 and 2009, violent death rates in Somalia dropped more than sixfold, from 76.0 per 100,000 in 2007 to 12.5 in 2009. Lethal violence in Iraq also plummeted. In 2006, Iraq experienced an estimated overall violent death rate of 105.6 per 100,000, but by 2009 the annual toll was down to around 5,400 people—or a rate of roughly 17.6 per 100,000—largely attributed to a combination of military 'surge' activities and declining insurgent violence.

All of these six countries were affected by an armed conflict at some point between 2004 and 2009. While post-conflict settings are sometimes associated with rising criminal armed violence, a number of post-conflict countries seem to exhibit reductions in violent death rates.²⁹ Burundi and Nepal, for example, report a considerable decline in lethal violence. These declines over a short period are mainly attributed to peace processes and conflict termination, and the consequent reduction in direct conflict deaths.

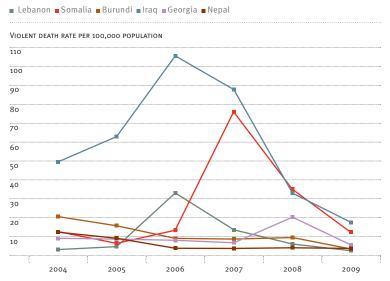
In Burundi, the number of reported direct conflict deaths dropped from 820 in 2004 to 17 in 2009,

translating into a drop in the direct conflict death rate from 11.5 to 0.2 per 100,000. At the same time, the homicide rate in Burundi was also reported to have dropped considerably since the end of the armed conflict. After a sharp increase between 2004 and 2005, homicide rates in Burundi reportedly fell from 12.2 in 2005 to 3.2 per 100,000 in 2009. Owing in part to the destruction of surveillance-related infrastructure during the war, however, official data collection capabilities in post-conflict settings such as Burundi remain poor; official figures must be interpreted cautiously as statistics may undercount the actual number of people murdered. For example, data collected by the Burundian Observatory on Armed Violence places the rate of homicide committed with guns, bladed weapons, and explosives alone at 12.3 per 100,000 for 2008 (Pézard and de Tessières, 2008, p. 26); meanwhile, the Burundi National Police officially reported a rate of 7.6 per 100,000 to UNODC for the same year (UNODC, n.d.).

Likewise, in Nepal the number of direct conflict deaths decreased significantly—from 2,380 in 2004 to fewer than 300 in 2009. This translates into a decline of the direct conflict death rate from 8.9 to 1.0 per 100,000. Unlike in Burundi, however, the reported homicide rates in Nepal remained comparatively stable over the six-year period, varying only between 3.4 per 100,000 in 2004, 2.2 in 2006, and 2.8 in 2009.

In the absence of contextual analysis, these shifts—both upward and downward—do not by themselves reveal anything about the factors driving changing patterns of armed violence in particular countries. They do, however, highlight that while global trends may remain relatively stable, a more fine-grained analysis is needed to assess the shifting dynamics of violence at the regional, national, and local levels.

FIGURE 2.13 Countries with significant decreases in violent death rates per 100,000 population, 2004–09



NOTE: For 2009, these countries recorded violent death rates of less than half the highest rate recorded for any given year between 2004 and 2009.

Source: GBAV 2011 database

Violent deaths: the missing pieces?

The national, regional, and trend analysis above is derived from a systematic review of intentional homicide and direct conflict deaths. While offering important insight, this data provides only a partial picture of the actual magnitude of lethal violence, much less of the total burden of armed violence. Consequently, this chapter presents overall totals that also include aggregate data for unintentional homicides and killings during legal interventions. This data cannot, at this stage, be broken down by country or over time, but it is an important part of the puzzle.

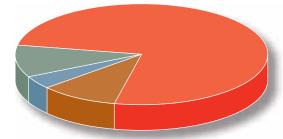
Tabulating homicide and conflict deaths is comparatively straightforward, especially given recent improvements in the availability of criminal justice data. This edition of the *Global Burden of Armed Violence* estimates an average of approximately 396,000 intentional homicide victims per year between 2004 and 2009, a lower figure than the 490,000 homicide victims estimated in the 2008 report. The latter figure draws more extensively on public health data that reports violent deaths independent of the intent behind the killing, or that relies on modeling estimates. In addition, this edition estimates a small increase in annual direct conflict deaths, yielding an annual average of 55,000 deaths between 2004 and 2009 (compared to the 52,000 estimated in 2008 for the period 2004 to 2007).

Adding the figures for the total number of violent deaths from unintentional homicide (54,000) and from killings during legal interventions (21,000) to these two subtotals—the 396,000 intentional homicide victims and 55,000 direct conflict deaths—yields an estimated 526,000 violent deaths each year between 2004 and 2009. As Figure 2.14 shows, slightly more than 75 per cent of these violent deaths are the result of intentional homicide,

FIGURE 2.14 Disaggregating the global burden of lethal violence

LEGEND:

- Direct conflict deaths (55,000; 10.4%)
- Intentional homicide (396,000; 75.3%)
- Unintentional homicide (54,000; 10.2%)
- Legal intervention killings (21,000; 4.1%)



Source: GBAV 2011 database

while just over 10 per cent are direct conflict deaths. Unintentional homicide also accounts for just over 10 per cent of all violent deaths, while killings during legal interventions account for slightly more than 4 per cent of all violent deaths.

The 2011 Global Burden of Armed Violence does not focus on indirect or 'excess' conflict deaths, which is certainly the largest portion of the burden of conflict deaths. Individuals dying in conflict zones due to easily preventable diseases such as dysentery, measles, hunger, and malnutrition are a major contributor to the overall burden. The 2008 Global Burden of Armed Violence report estimates a ratio of 4:1 indirect to direct conflict deaths. This conservative ratio was used to facilitate estimates of the overall excess death rate in conflict-affected countries; it was generated from a review of mortality rates in 13 different conflicts around the world (Geneva Declaration Secretariat, 2008, p. 42). Applying this same ratio to the estimated 55,000 direct conflict deaths in an average year between 2004 and 2009 would imply an excess death toll of 220,000. If indirect conflict deaths are added to the total number of violent deaths, the total global burden of armed violence reaches 746,000 deaths per year for 2004-09.

Nevertheless, fundamental disagreements persist over the methodologies used to measure direct and indirect conflict deaths.³¹ There remains considerable debate over whether conflict deaths have been increasing or decreasing in recent decades, and over whether estimates of indirect deaths and excess mortality are accurate. The controversy over efforts to measure the burden of violence in the Democratic Republic of the Congo highlights the challenges of estimating excess mortality in complex emergencies (see Box 2.6).

Box 2.6 Estimating crude mortality rates in the Democratic Republic of the Congo

In 2000 the International Rescue Committee (IRC) launched a major effort to better understand the human costs of armed conflict in the Democratic Republic of the Congo (DRC). In a widely cited report, the IRC estimates—based on four surveys that were conducted between 2000 and 2004—that 3.9 million people died between 1998 and 2004. In a 2007 report, based on additional surveys conducted between 2006 and 2007, the IRC estimates that between 1998 and 2007 a total of 5.4 million people died as a result of the conflict (Coghlan et al., 2007, p. 2). The primary approach used to estimate the death toll was a 'verbal autopsy'—a randomized household survey.

A number of organizations have challenged this figure and the use of survey-based approaches to calculating mortality rates. The *Human Security Report 2010*, for example, claims that the 'excess deaths' estimate in the first survey is actually almost 60 per cent lower than asserted by the IRC. The report further claims that for the last three surveys, the difference is even more significant and only one-third of the IRC estimate can be attributed to so-called 'excess deaths' or indirect conflict deaths (HSRP, 2010, p. 45).

Researchers associated with the *Human Security Report* contend that the difference between high and low estimates is a result of a disagreement over the DRC's *baseline* crude mortality rate (CMR)—the natural mortality rate in the absence of an armed conflict. Since excess mortality is the difference between the baseline CMR and the CMR in a crisis situation, the choice of a baseline rate has a major impact on the final figures.

On the basis of three nationwide surveys carried out in 2002, 2004, and 2007, the IRC estimated an average mortality rate of 5.2 deaths per 1,000 population per month. The pre-war baseline CMR of 1.5 per 1,000 per month was then subtracted from this figure, yielding the IRC estimate of 3.7 excess deaths per 1,000 per month for the five areas surveyed. The

HSRP report contends that a baseline CMR of 2.0 deaths per 1,000 per month would be more appropriate; the excess mortality toll would thus be reduced 'by some 60 percent' (HSRP, 2010, p. 33).

A new report by the Centre for Research on the Epidemiology of Disasters (CRED) on health in complex emergency situations in eight African countries highlights the complexity of estimating CMRs as they 'can be subject to many sources of bias, which can lead to over- or under-estimation of deaths and therefore to raging debates around estimated death tolls' (CRED, 2011, p. 8).

CRED concludes that most mortality surveys conducted between 2000 and 2010 in the DRC reveal a CMR below the emergency threshold of 1 death per 10,000 people per day, which translates into roughly 3 deaths per 1,000 people per month (CRED, 2011, p. 12). The CRED report shows that the overall CMR in all provinces in the DRC has decreased or remained stable over the past decade. The positive trend is particularly clear in the eastern provinces, including North and South Kivu, Katanga, and Maniema. The CRED report does not provide an estimate of a baseline CMR, but its figures for the post-conflict CMR (between 0.3 and 1.1 per 10,000 per day) are consistent with a baseline rate of 1.5 per 1,000 per month, or 0.5 per 10,000 per day, used by the IRC (p. 70).

At the same time, the CRED study highlights fluctuations in CMRs. Within certain regions, some communities show improving trends over the last five years, while neighbouring communities show deteriorating CMRs. In this context, CRED observes volatility of CMRs in the last five years on a communal level (CRED, 2011, p. 30). Where survey data was available, CRED found that during the period 2006-07 and 2008-10, four districts showed improvements, three remained almost unchanged, and six districts witnessed a deterioration. The latter areas were mainly located in eastern DRC (the region that shows the most positive trend), but no clear geographical pattern could be identified since several sites demonstrating an improvement included neighbouring areas where rates deteriorated.



PHOTO ▲ Displaced people, who fled their homes due to fighting, line up for food at a distribution centre in Kibati, DRC, November 2008. © Les Neuhaus/Reuters



Extending the analysis of non-conflict lethal violence beyond intentional homicide remains a daunting task. As noted above, there is still considerable disagreement over how to classify and record 'homicides'. On the one hand, intentional homicide, commonly referred to as 'murder', typically requires that the perpetrator purposefully intend to cause death.32 'Manslaughter', on the other hand, is 'a categorisation that implies diminished responsibility or intentionality on the part of the perpetrator' (Krause, 2009, p. 349). 'Unintentional homicides' are generally 'accidental' and commonly described as 'manslaughter'. The agency Eurostat defines homicide as the 'intentional killing of a person, including murder, manslaughter, euthanasia and infanticide' (Eurostat, 2010, p. 4). Causing death through dangerous driving is excluded, as are abortion and assisted suicide. Attempted but incomplete homicide is also excluded (p. 4).

The reality is that legal definitions of what constitutes a homicide frequently vary across (and sometimes even within) countries. In Australia, for example, criminal offences are often adjudicated at the state and territory level, which means that each administrative unit features a separate criminal law. As a result, there are eight slightly different justice systems, sets of legislation, and offence definitions for each administrative unit, not to mention a separate federal system. The Australian Bureau of Statistics confirms that 'while murder and manslaughter are fairly generic offences, there are differences across the states and territories in how they are defined in terms of degree, culpability and intent'.33

To account for degrees of intentionality, some countries divide manslaughter into several subcategories. England and Wales, for example,



TABLE 2.3 Intentional versus unintentional homicide: a sample

Country*	Latest available year	Intentional homicide	Unintentional homicide**
Argentina	2008	2,305	613
Burkina Faso	2008	222	98
Costa Rica	2009	525	5
France	2009	682	137
Fiji	2008	20	3
Germany	2009	706	0 (341)
Ghana	2005	383	4
India	2009	32,369	3,930
Italy	2008	611	372
Kenya	2009	1,203	41
Mexico	2009	16,117	2,763
Nepal	2009	806	12
Nicaragua	2008	693	22
Nigeria	2008	1,956	17
UK (England and Wales)	2009	638	0 (194)
Total sample		59,236	8,017
Global total (rounded)		396,000	54,000

include murder, section 2 manslaughter (accepting diminished responsibility), other manslaughter, and cases of infanticide in homicide records (Smith et al., 2011). Complicating matters is the fact that in almost all other languages besides English, there is no exact equivalent of the word 'homicide'. Some languages do not even feature a generic term, while others use a generic term for intentional killings only. In many countries, unintentional homicide also includes deaths resulting from car accidents. In Mexico and numerous other Latin American countries, murder is commonly referred to as homicidio doloso while

involuntary manslaughter is defined as homicidio culposo. In many of these countries, homicidio culposo also includes the killing of one person by another as a result of a road accident. This can lead to serious misunderstandings and errors when working on comparing homicides statistics across countries and language groups (Smit, 2011). At a minimum, it is critical that policy-makers, practitioners, and researchers recognize these disparities and reconcile them where possible.

Table 2.3 presents a sample of countries that differentiate between intentional and unintentional

TABLE 2.3 Notes

* COUNTRY NOTES:

Argentina: Homicidos dolosos (intentional homicides) are included in intentional homicide statistics; homicidios culposos por otros hechos (unintentional homicides using other means) are not. The largest group of homicide refers to deaths as a result of traffic accidents (homicidios culposos en tránsito), which is also excluded from intentional homicide statistics (MJSDH, 2008, p. 1).

Burkina Faso: Homicides volontaires et assassinats (voluntary homicide and assassinations) are both included in intentional homicide statistics; coups mortels (mortal blows) are not included (INSD, 2010, p. 144).

Costa Rica: Homicidio doloso is included in homicide statistics (PJCR, 2009a, p. 5); homicidio culposo (unintentional homicide) is not included. Some of these deaths refer to victims of car accidents. The five victims per year only include the categories lesiones arma de fuego (firearm injuries) (PJCR, 2009b, p. 8).

France: Coups et blessures volontaires, suivis de mort (voluntary blows and injuries, followed by death) are not included in intentional homicide statistics (DCPJ, 2009, p. 11).

Fiji: 'Murder' is included in intentional homicide statistics; 'manslaughter' is not (FIBOS, 2011, p. 125).

Germany: The 365 cases of murder (Mord) and the 341 victims of manslaughter or killing on request (Totschlag und Tötung auf Verlangen) are all included in intentional homicide statistics (BKA, 2010, p. 131).

Ghana: 'Murder' is included in intentional homicide statistics; 'manslaughter' is not (GST, 2005, p. 18).

India: 'Murder' is included in intentional homicide statistics; 'culpable homicide not amounting to murder' is not (NCRB, 2009, p. 220).

Italy: Omicidi volontari consumati (voluntary homicides, completed) are included in intentional homicide statistics; unintentional homicides (omicidi colposi) are not included. The 372 victims refer to unintentional homicides without victims of car accidents (di cui da incidente stradale) (ISTAT, 2008).

Kenya: 'Murder and infanticide' are included in intentional homicide statistics; 'manslaughter' is not included (Kenya Police, 2010, p. 19). Mexico: *Homicidios dolosos* are included in intentional homicide statistics. The 2,763 cases of *homicidios culposos* refer only to the victims who died from the following causes: *por arma de fuego*, *por arma blanca*, and *sin datos* (with a firearm, with a bladed weapon, and no data). The largest group of unintentional homicide victims who died of 'other causes'—12,665 people in 2009—is not listed in the table as it probably includes victims of car accidents (SESNSP, 2009, p. 1).

Nepal: The 806 cases of 'murder' are included in intentional homicide statistics, while the 12 cases of 'dacoity with murder' (banditry with murder) are excluded (CBS, 2009, p. 1).

Nicaragua: The 693 victims that are included in intentional homicide statistics refer to assinatos (assassinations) and homicidio doloso. The categories homicido culposo and homicido preterintencional (felony homicide), accounting for 22 victims in 2008, are not included in intentional homicide statistics (PN, 2008, p. 66).

Nigeria: The intentional homicide statistics include the 1,956 victims of 'murder', but not the 17 victims of 'manslaughter' (CLEEN, n.d., p. 1). UK (England and Wales): Of the 638 homicides, 479 cases reported a conviction. Among these are 284 murders, 28 section 2 manslaughters, and 166 other manslaughters, as well as 1 infanticide. All cases are included in intentional homicide statistics (Smith et al., 2011, p. 36).

** Unintentional homicide notes:

Germany and the UK (England and Wales) include unintentional homicides (shown in brackets) in the statistics on intentional homicides.

homicide, while excluding car accidents. Countries that do not differentiate between unintentional homicides as a result of interpersonal violence and those resulting from road accidents have been excluded from the list. As a result, the table does not include the more than 13,184 'culpable homicides' that occurred in 2008 in South Africa (SAPS, 2010), some of which are certainly due to armed violence. Likewise, it excludes the 163 unintentional homicides that occur in an average year between 2004 and 20009 in Yemen (see Box 2.5).

The table shows the number of homicides that are included in intentional homicides statistics.

It suggests that in some cases overall homicide rates would increase substantially if unintentional homicides were included. Sample countries with unintentional homicide rates that are more than 10 per cent of the total of intentional homicides include Argentina, Burkina Faso, France, Germany, India, Italy, and Mexico. Distinguishing between intentional and unintentional homicide may lead to underestimating of overall rates of lethal violence in many cases; as Table 2.3 shows, only a few countries—such as England and Wales or Germany—include unintentional homicides in statistics on intentional homicides.

A review of the available figures suggests that the rate of homicide would increase by around 13.6 per cent if unintentional homicides were included. Put another way, if this proportion were applied to the estimated 396,000 intentional homicides, the global burden would increase by an additional estimated 54,000 deaths, yielding an estimated 450,000 annual homicide deaths (intentional and unintentional). This is roughly consistent with (although somewhat lower than) the estimate for homicide deaths put forward in the first edition of the Global Burden of Armed Violence, which relied extensively on WHO estimates.

Killings during legal interventions and extrajudicial executions

Another category of lethal violence often not captured by homicide statistics consists of deaths occurring during legal interventions and extrajudicial killings. The UN Special Rapporteur on extrajudicial, summary or arbitrary executions, whose office was established in 1982, defines extrajudicial executions and unlawful killings as 'killings that violate international human rights or humanitarian law' (UNGA, 2010b; UN-ECOSOC, 2005, para. 6). Such a broad interpretation opens the door to a wide range of categories of lethal violence. For example it would include killings by law enforcement officials or other security forces; killings during armed conflict; killings during counterterrorism operations; killings by nonstate actors; and deaths in custody and due to the death penalty (UNGA, 2010b).34

It is currently impossible to verify or validate the annual global distribution and burden of extrajudicial executions. There are no reliable monitoring mechanisms and many governments are not prepared for full disclosure or may lack the





capacities and resources to undertake necessary investigations. The human rights sector often represents the only set of actors seeking to report on extrajudicial executions and unlawful killings. As reported in the 2008 *Global Burden of Armed Violence*:

extrajudicial executions and unlawful killings frequently go unreported, for the simple reason that there is nobody to report them or a lack of awareness about reporting practices and a fear of the legitimacy of relevant institutions (Geneva Declaration Secretariat, 2008, p. 132).

Nevertheless, the Cingranelli–Richards Human Rights Data Project attempts to generate comparative country-level data on extrajudicial killings, defined by the project as:

killings by government officials without due process of law. They include murder by private groups *if* instigated by government. These killings may result from the deliberate, illegal, and excessive use of lethal force by the police, security forces, or other agents of the state whether against criminal suspects, detainees, prisoners, or others (Cingranelli and Richards, 2008, p. 7).

The project divides countries into three categories: 1) countries where no extrajudicial executions or unlawful killings occur; 2) countries where occasional killings take place (1–49 deaths per year); and 3) countries where extrajudicial executions and unlawful killings are frequent (more than 50 deaths per year). Applying conservative multipliers of 5 for category 2 and 51 for category 3 yields an estimate of at least 1,900 annual deaths as a result of extrajudicial executions.

There are many potential overlaps between direct conflict deaths, intentional homicides, and extrajudicial executions. This edition of the *Global Burden of Armed Violence* examines only deaths occurring during legal interventions (killings of

TABLE 2.4 Killings during legal interventions: A sample

Country*	Latest available year	Intentional homicide	Killings during legal interventions
Argentina	2008	2,305	(52)
Colombia	2009	15,817	(363)
Costa Rica	2009	525	(1)
Croatia	2009	58	1
Czech Republic	2009	79	1
Finland	2009	99	1
Honduras	2008	4,473	(54)
India	2009	32,369	644
Netherlands	2009	145	2
Nigeria	2008	1,956	967
Spain	2009	314	1
Sweden	2009	51	1
United States	2009	15,241	454
Uzbekistan	2009	619	2
Venezuela	2009	13,985	2,685
Total sample		88,036	4,759
Global total (rounded)		396,000	21,000

civilians by law enforcement officials, or killings of law enforcement officials on duty). Often, these deaths are referred to as deaths as a result of legal actions. The Special Rapporteur routinely encounters what are effectively 'intentional homicides' in which 'police shoot to kill alleged criminals without resort to other appropriate measures' (UNGA, 2010b, p. 8). The lack of respect for principles on the use of force and firearms while arresting a suspect or the indiscriminate force in a riot-control context are 'often due to poor training, inappropriate "use of force" regulations and resource deficiencies' (p. 8). Owing to significant political sensitivity, reporting on deaths occurring

during legal interventions is predictably scarce and often anecdotal.

While severely underreported, killings during legal actions appear to be surprisingly routine. According to a recent report from Jamaica, one in five killings in the country is committed by security forces, yet these do not appear in the official national homicide record (*Sunday Herald*, 2011). A study on the criminal justice systems in Jamaica and the Dominican Republic estimates that approximately 200 police killings took place in 2007 (Foglesong and Stone, 2007, p. 18); in the Dominican Republic, there have been reports of up to 58 police killings per month (p. 17). Table 2.4

TABLE 2.4 Notes

* COUNTRY NOTES:

Argentina: The 52 cases of intentional homicide (homicidio doloso) include police officers who committed killings while being on duty (policía en servicio). Another 50 homicides were committed by police officers who were not on duty or by other security personnel (MJSDH, 2008, p. 8).

Colombia: The intentional homicide statistics include the 363 'anti-social elements' who were killed by official security forces (antisociales abatidos por fuerza pública y organismos de seguridad) (Espino-Duque, 2010, p. 75).

Costa Rica: The intentional homicides statistics for 2009 include a category of homicides committed by perpetrators while on duty (en cumplimiento del deber) (PICR, 2009a, p. 34).

Croatia: The European Detailed Mortality Database (DMDB) of the WHO lists one person killed during legal interventions (ICD-10: Y35) and 58 people killed as a result of violent assaults (ICD-10: X85-Y05) (WHO, n.d.c).

Czech Republic: The DMDB lists one person killed during legal interventions (ICD-10: Y35) and 79 people killed as a result of violent assaults (ICD-10: X85-Y05) (WHO, n.d.c).

Finland: The DMDB lists one person killed during legal interventions (ICD-10: Y35) and 99 people killed as a result of violent assaults (ICD-10: X85-Yo5) (WHO, n.d.c).

Honduras: The Violence Observatory in Honduras lists 54 homicides as a result of police action, all of which are included in the overall intentional homicide figures (IUDPAS, 2009, p. 3).

India: The crime statistics in India list 184 civilians and 131 policemen killed in police firing (NCRB, 2009, p. 563); they also report 329 police officers otherwise killed on duty—excluding those who died as a result of a car accident (p. 567).

The Netherlands: The DMDB lists two persons killed during legal interventions (ICD-10: Y35) and 164 people killed as a result of violent assaults (ICD-10: X85-Yo5) (WHO, n.d.c).

Nigeria: The CLEEN Foundation reports that police killed 857 robbers in 2009 and that armed robbers killed 110 policemen that same year (CLEEN, n.d., p. 10).

Spain: The DMDB lists one person killed during legal interventions (ICD-10: Y35) and 314 people killed as a result of violent assaults (ICD-10: X85-Yo5) (WHO, n.d.c).

Sweden: The DMDB lists one person killed during legal interventions (ICD-10: Y35) and 51 people killed as a result of violent assaults (ICD-10: X85-Yo5) (WHO, n.d.c).

United States: The Federal Bureau of Investigation reports 406 justifiable homicides by a law enforcement agent (the killing of a felon by a law enforcement officer in the line of duty) (FBI, 2010a). These killings are listed separately from the 15.241 cases of murder and nonnegligent manslaughter (FBI, 2010c) since these killings are determined through law enforcement investigations to be justifiable (FBI, 2010e). An additional 48 law enforcement officers were feloniously killed on duty in 2009 (FBI, 2010d). Not included in the table are the 261 justifiable homicides by private citizens (the killing of a felon, during the commission of a felony, by a private citizen), although they are not counted as murder or non-negligent manslaughter either. Without the involvement of law enforcement officers, they do not qualify as legal interventions, narrowly defined in endnote 2 of this chapter as killings that involve police or other law enforcement officials (FBI, 2010b).

Uzbekistan: The DMDB lists two persons killed during legal interventions (ICD-10: Y35) and 619 people killed as a result of violent assaults (ICD-10: X85-Y05) (WHO, n.d.c).

Venezuela: The Venezuelan non-governmental organization Provea (Programa Venezolano de Educación – Acción en Derechos Humanos) reports that 2,685 civilians were killed during resistance (resistencia) in 2009 (Provea, 2010, p. 418).

provides examples of killings during legal interventions in selected countries. It shows that in several countries, such as Argentina, Colombia, Costa Rica, and Honduras, the national statistics on intentional homicides already include these killings.

The Venezuela example highlights the challenges inherent in identifying and counting extrajudicial killings and deaths occurring during legal interventions. Reports published by the nongovernmental organization Provea indicate that in 2009 an estimated 2,685 people were killed each year while 'resisting authorities' (Provea, 2010, p. 418). According to the Venezuelan Research Institute on Citizen Security, these deaths are not included in government statistics on intentional homicides (INCOSEC, 2010, p. 4). However, Provea also provides data on several hundred annual 'executions' by security providers (on or off duty) who open fire with the intent to kill; a lack of information makes it impossible to determine whether they are included in the intentional homicide statistics (Provea, 2010, p. 417).

A review of this sample of 15 countries indicates that an additional 4,759 deaths would have to be added to the number of intentional homicides for states that do not already include them in the homicide statistics. The number of intentional homicide victims would thus increase by about 5.4 per cent if killings during legal interventions were included. When applied to the estimated 396,000 intentional homicides, this percentage implies that at least 21,000 people are killed during legal interventions every year.

Conclusion

The production and dissemination of reliable, comprehensive, and cumulative data is essential to promoting a better understanding of and more appropriate responses to trends and patterns of lethal violence. This chapter has taken an important step towards providing such a picture, through a careful integration of data from diverse sources and a holistic approach to counting lethal violence. Yet the gaps in the data are many, allowing for only a partial picture. A more accurate description of the overall global burden of lethal violence will require continued commitment to building global and national administrative and analytical capabilities, legal frameworks, and political will to present the facts on the ground (Harrendorf, Heiskanen, and Malby, 2010).

The international development community appears to be recognizing the importance of evidence as a driver of effective policy and programming. A growing number of multilateral and bilateral

agencies are requiring a more determined focus on data and analysis to shape programme design, implementation, and monitoring and evaluation. It is unsurprising that statistics—including data related to lethal violence—are profoundly shaped by political and economic interests. This is especially the case if reputations and the flow of aid dollars are even partly determined by factual evidence. Specialists agree that these challenges are particularly pronounced in relation to trends in homicide, conflict deaths, and other forms of lethal violence (Andreas and Greenhill, 2010).

The chapter has also demonstrated that existing administrative data on lethal violence must be cautiously and critically interpreted. On the one hand, reported increases in particular trends—such as intentional homicide or unlawful killings—may imply a genuine escalation of armed violence. On the other, such increases can also imply increased faith or trust of citizens in government institutions and therefore increased *reporting* rather than changes in the underlying phenomenon itself.³⁵ What is more, decreases in violent mortality could imply improvements in health care provision, policing, or other unrelated phenomena.

This chapter presents estimates that will continue to be refined and enhanced over time. By drawing attention to the most violent contexts worldwide, and to the importance of armed violence in so-called non-conflict settings, it widens the lens for policy-makers, practitioners, and researchers. While the overall number of people dying in armed conflicts is at historic lows, in several regions the burden of armed violence remains frighteningly high, with ripple effects on the prospects for local, regional, and global security and development.

Abbreviations

CMR Crude mortality rate

CRED Centre for Research on the

Epidemiology of Disasters

DMDB European Detailed Mortality

Database

DRC Democratic Republic of the Congo

DWI Dirty war index

GTD Global Terrorism Database

ICD International Classification of

Disease

IISS International Institute for Strategic

Studies

IRC International Rescue Committee

NCTC National Counterterrorism Center

UCDP Uppsala Conflict Data Program

UN-CTS Survey of Crime Trends and

Operations of Criminal Justice

Systems

UNODC United Nations Office on Drugs

and Crime

WHO World Health Organization

WHOMDB World Health Organization's

Mortality Database

Endnotes

- On the relationship between lethality of gunshot wounds and medical technology, see, for example, Harris et al. (2002) and Jarman et al. (1999).
- Killings during legal interventions are defined here as the killings of civilians attributed to police or other law enforcement officials in the course of arresting lawbreakers, quelling disturbances, maintaining order, or other legal actions, or the killings of police or other law enforcement officials by civilians during legal actions.
- 3 See the online methodological annexe at www.genevadeclaration.org.

- For more details, see Ad Hoc Committee (n.d.).
- The 1996 Ad Hoc Committee has produced a draft definition. Presented in 2005, Article 2 of the draft reads: 'Any person commits an offence within the meaning of the present Convention if that person, by any means, unlawfully and intentionally, causes: (a) Death or serious bodily injury to any person; or (b) Serious damage to public or private property, including a place of public use, a State or government facility, a public transportation system, an infrastructure facility or to the environment; or (c) Damage to property, places, facilities or systems referred to in paragraph 1 (b) of the present article resulting or likely to result in major economic loss; when the purpose of the conduct, by its nature or context, is to intimidate a population, or to compel a Government or an international organization to do or to abstain from doing any act' (UNGA, 2005, pp. 9–10). See also CNS (2010).
- 6 Author communication with the International Institute for Strategic Studies, 19 May 2011.
- For a definition of 'main armed conflict', see the online methodological annexe at www.genevadeclaration.org.
- 8 For a detailed analysis of data sources on armed violence, see Gilgen and Tracey (2011, annexe 2).
- 9 See 'Deaths Estimates for 2008 by Cause for WHO Member States' in WHO (n.d.b).
- 10 The ICD classification for 'assault' is X85–Y09; it excludes injuries due to legal intervention and operations of war (WHO, n.d.a).
- The ICD classification for 'event of undetermined intent' is Y10–Y34 (WHO, n.d.a).
- 12 See Obermeyer, Murray, and Gakidou (2008) and Alkhuzai et al. (2008).
- For details, see the online methodological annexe at www.genevadeclaration.org.
- The Lesser Antilles region includes Anguilla, Antigua and Barbuda, Barbados, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago. The Micronesia Region is comprised of the Federated States of Micronesia, Guam, Kiribati, the Marshall Islands, Nauru, and Palau.
- The database includes the 189 UN member states (all but San Marino, Tuvalu, and the UK, which is split into three territories in the GBAV 2011 database), and 10 non-UN members (Anguilla, Bermuda, Guam, Hong Kong, Palestine, Puerto Rico, Reunion, and the UK's England and Wales, Northern Ireland, and Scotland). Of the total of 199 countries, 15 were amalgamated into 2 regions (Lesser Antilles Region and Micronesia Region). The presentation of countries and their names does not imply the expression of any opinion of the editors concerning the legal status of any country, or the delimitation of its boundaries.

- 16 The 16 countries are Afghanistan, Burundi, Chad, Central African Republic, Colombia, Côte d'Ivoire, the Democratic Republic of the Congo, Ethiopia, Iraq, Lebanon, Palestine, the Russian Federation, Somalia, Sri Lanka, Sudan, and Uganda.
- 17 Post-conflict settings are defined according to the UCDP terminology of 'termination of the use of armed force'.

 This occurs when the incompatibility is solved either by an agreement or by a victory; when a party ceases to exist; or when the use of armed force does not meet the 25 battle-related deaths criteria (Kreutz, 2010).
- The 55,000 direct conflict deaths figure also includes the 1,100 direct conflict deaths that occurred in Jammu-Kashmir; Central Asia (Fergana Valley, which is split between Kyrgyzstan, Tajikistan, and Uzbekistan); and the conflict between Armenia and Azerbaijan. In the analysis of the national violent death rates, however, these figures are not included because they cannot be attributed exclusively to one country.
- 19 The statistics on intentional homicides in Colombia include extrajudicial executions and unlawful killings, as well as people killed as a result of the armed conflict.
- 20 WHO estimates of 2008 'war deaths' in Afghanistan (83.6 per 100,000) and Somalia (129.0 per 100,000) are much higher than those used in the GBAV 2011 dataset.
- 21 The regions are labeled according to geographical regions defined by the UN Statistical Division (UNSD, n.d.).
- Saudi Arabian military forces entered the war in Sa'dah in early November 2009, while both the United States and the United Kingdom have supported the development of Yemen's counterterrorism capacity (Aljazeera.net, 2009; The New York Times, 2009; BBC, 2010).
- 23 The UCDP battle-related deaths database lists an estimated 1,491 victims of the 1994 civil war in Yemen (best estimate). See UCDP (n.d.c).
- 24 Crimes in Yemen and elsewhere are generally formally recorded only once they are 'detected', such as once a suspect has been identified and a prosecutor has received the relevant file.
- 25 The figures do not include direct conflict deaths that occurred in the disputed area of Jammu–Kashmir.
- 26 Part of this fluctuation may be due to a greater reliance on WHO estimates in 2004 and again in 2008 and 2009; these years have slightly higher rates than do years for which only reported administrative data was available.
- 27 Criminal justice data on homicides in Latin America and the Caribbean is relatively accessible and comprehensive; an analysis of trends in armed violence in these regions can be conducted across all countries. Most countries in Sub-Saharan Africa were excluded.

- 28 The violent death rates of Georgia and Lebanon were below the threshold of 10 per 100,000, both in 2004 and 2009. Nevertheless, both countries witnessed violent death rates of more than 10 per 100,000 in a given year between 2004 and 2009 (GBAV 2011 dataset). They are discussed in detail below.
- 9 For a more detailed discussion of post-conflict violence, see the first edition of the Global Burden of Armed Violence (Geneva Declaration Secretariat, 2008, ch. 3).
- The UN Panel of Experts on Accountability in Sri Lanka reports an estimated 7,721 civilians killed between August 2008 and May 2009. In the limited surveys that were carried out in the aftermath of the conflict, a high percentage of people reported dead relatives. A number of credible sources have estimated that there could have been as many as 40,000 civilian deaths in a similar time period (UNSG, 2011, pp. 40–41).
- 31 HSRP (2010); Murray et al. (2002); Obermayer, Murray, and Gakidou (2008); Spagat et al. (2009).
- 2 'Situations where the perpetrator is reckless or grossly negligent, or where the perpetrator kills in self-defence, are therefore usually excluded from the category of intentional homicide' (Geneva Declaration Secretariat, 2008, p. 68).
- 33 Author communication with the Australian Bureau of Statistics, 13 May 2011.
- See also PEE (n.d.).
- 35 See Marenin (1997) and Soares (2004a; 2004b).

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Characteristics of Armed Violence

ROUND THE WORLD, politicians, investors, and the general public consider the incidence of homicide a fair index of insecurity. Countries and cities that exhibit high homicide rates often suffer as a result of lost investment, tourism, and, ultimately, revenue collection. Yet while homicide data serves as a proxy for certain forms of armed violence, it routinely leaves knowledge gaps that undermine its use in evidence-based policy-making. While some areas are known to be more dangerous than others, relevant data may not reveal who exactly is being killed, or by whom, where, how, or under what circumstances. Nor does it necessarily point to potential deterrents to homicidal violence. Information on these factors is central to designing and implementing interventions that prevent and effectively reduce intentional death and injury.

One way to facilitate obtaining such information is by disaggregating homicidal violence into separate categories. The Organisation for Economic Co-operation and Development proposes a conceptual framework—the armed violence 'lens'—for this very purpose (OECD, 2009; INTEGRATED APPROACH). The armed violence lens draws attention to the people affected by armed violence (both immediate victims and the wider communities and societies that suffer the consequences), the perpetrators of armed violence and their motives, the instruments of armed violence, and the wider institutional environment that enables.

or protects against, armed violence. In principle, the lens can be applied to both conflict- and non-conflict-related armed violence and to lethal and non-lethal violence.

The armed violence lens draws attention to the limitations of a single aggregate indicator, such as intentional homicide. It suggests that decision-makers and planners who rely exclusively on monitoring homicide rates may fail to capture vital information about the nature and extent of specific and repeated acts of violence. From a statistical point of view, the lens requires disaggregation of 'total offence data' in order to provide additional details concerning the context and characteristics of homicidal violence. This chapter takes a first step towards addressing this information gap by examining available data on the context in which homicides occur. It also explores the state response to non-conflict violence based on law enforcement and criminal justice data.

The main findings of the chapter are:

- The *situational context* of homicide events tends to vary according to geographical context.
- The proportion of homicides related to *gangs or organized crime* is significantly higher in countries in Central and South America than in those of Asia or Europe.
- Homicide rates related to robbery or theft tend to be higher in countries with greater

PHOTO ▼ Members of a

citizen vigilante group patrol the streets of

Barcenas, Guatemala

City, September 2007.

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Laif/Redux

- income inequality, including countries located in the Americas.
- The proportion of homicides related to intimate partners or the family represents a significant proportion of homicides in some countries in Europe and Asia.
- The relative weakness of a country's rule of law is broadly linked with higher overall homicide rates. Yet particular challenges—such as gang activity, a history of conflict, or high income inequality—may lead to high homicide rates even in societies with comparatively strong institutions and rule of law.
- A nexus appears to exist between high homicide rates, a high proportion of homicides committed with firearms, and a low proportion of cases solved by law enforcement. Countries showing this combination of factors risk entering a spiral of increasing violence and impunity.
- Measuring the effectiveness of the criminal justice system response to homicide and crime involving armed violence requires more than a simple calculation of conviction rates or 'case attrition' rates. The deterrent effect of police and justice institutions is also linked to public perception and the quality of justice.



Contextualizing homicide

Governments, non-governmental groups, and the media frequently present homicide as a proportion of the population—usually as a rate per 100,000 people. While a certain degree of confidence may be placed in these figures, the identification, collection, and interpretation of data on national homicide rates is a complex enterprise. These challenges are compounded when it comes to assessing the specific circumstances surrounding violent deaths and the responses of the criminal justice system. This chapter considers the widely varying approaches to collecting data on violent death. It highlights the need for greater investment in the development of effective criminal justice system performance measures in order to increase understanding of the context and drivers of homicide.

Just as there are different legal definitions of what constitutes an 'intentional homicide', there are also many approaches to characterizing homicide events.¹ These include classifying events according to:

- victims and perpetrators based on demographics (sex, age, race, education, income, marital status);
- the victim-offender relationship (intimate partner, family member, friend, acquaintance, perpetrator unknown to the victim);
- the location of the event (home, street, business premises, urban, rural);
- the threatened or actual use of a weapon (sharp object, blunt object, firearm [by type]);
- the time of offence (daytime, evening, night);
- the characteristics of the offence, such as the involvement of drugs, alcohol, or gang membership;

- motivating factors, such as racial, religious, or communal tensions; and
- any other contemporaneous offences, such as robbery or theft.

Although superficial data on the incidence of homicides may be accessible for most countries, more detailed information on the instruments. actors, institutions, and affected people is seldom easy to obtain. At the national just as at the municipal level, comparable statistics on homicide circumstances also require a consistent level of police investigative work, in addition to systematic coding and recording systems for victim, offender, and offence elements and circumstances.2 Such information may be recorded only for investigation or operational purposes and need not necessarily form part of national statistics. Where it is available, methods of categorization of the event context tend to be tailored to specific local needs, rather than designed to facilitate cross-national comparison.

Likewise, medical examination records and coroners' death certificates may provide details on a victim's race, sex, age, location, and probable cause of death, but they do not usually include data on the characteristics of the offender and may reveal only limited information on the victim and situational elements (Riedel, 1999). While police records generally offer more information, the quality and level of detail recorded can vary considerably, both within a country and crossnationally. Suspected homicide cases will have varying degrees of clarity regarding the circumstances surrounding a death, witnesses' willingness to talk, the availability and confidentiality of forensic evidence, and the likelihood of identifying and locating suspected perpetrators.

The sheer diversity of categories used in different countries to classify homicides underlines the

difficulties in developing a standardized approach to data collection and analysis. National homicide categories are often developed according to local needs and rarely with international comparison in mind. While detailed local typologies may be useful for individual study, the identification of generic categories for national and regional comparison represents a significant challenge. Successful translation of national data into cross-national categories requires both a bottom-up approach (working with the data that is available) and a topdown approach that defines common standards. The relatively low response rate to previous data collections on homicide typology³ and the recent attempt to develop a European-level classification system of offences to be used in the context of crime statistics have shown that striking the right balance in this domain is a delicate exercise.4

This chapter draws from three categories of homicide, derived from a review of available national data and the requirements of developing—as far as possible—comparable definitions for crossnational comparison. Such an approach treats the homicide incident holistically, as a complete composite of offender, victim, and offence as well as temporal and spatial elements (Miethe and Regoeczi, 2004). Data in this chapter is therefore disaggregated into *organized crime* and gang-related homicides, robbery- and theftrelated homicides (based on contextual variables), and intimate partner- or family-related homicides (related to the offender-victim relationship). In addition, the chapter considers the category of homicides committed with firearms. The categories are forged on the basis of the following definitions:

 A gang is defined as a structured group of three or more persons existing for a period of time and acting in concert with the aim of committing one or more serious crimes or

- offences, including drug trafficking. The group can be randomly formed for the immediate commission of an offence. It does not need to have formally defined roles for its members, continuity of its membership, or a developed structure.
- The intimate partner or family category includes 'intimate' individuals such as current or former intimate partners; a 'family' is defined as persons living in the same household as the victim, in addition to blood relatives.
- Robbery refers to the theft of property from a person by using force to overcome resistance or by threatening the use of force. Theft involves the removal of property without the property owner's consent. This category includes muggings, domestic burglary, and housebreaking as well as theft of a motor vehicle.

The abovementioned categories do not exhaust the range of possible homicide situations and are not strictly mutually exclusive. Nevertheless, they do reflect commonly used typologies and capture the predominant contexts in which nonconflict lethal violence may occur (Mohanty, 2004). In particular, the term 'gang' incorporates a wide range of contexts and groups, including youth gangs, street gangs, drug gangs, motorcycle gangs, skinheads, and prison gangs (Small Arms Survey, 2010, ch. 5). The term 'organized criminal group' is defined in the United Nations Convention against Transnational Organized Crime; however, the definition is diffuse and does not require a developed group structure (UNODC, 2004).5

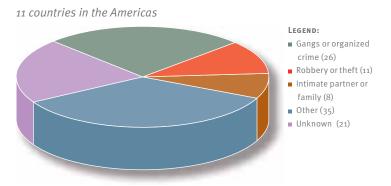
Gangs may include organized criminal groups whose members act in concert to commit serious offences, yet some organized criminal groups—such as drug cartels with high levels of organization—are not necessarily gangs. This chapter presents classifications that are as broad as

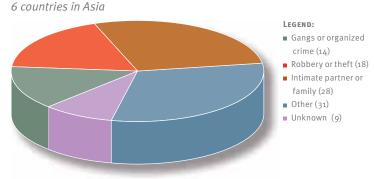
possible in order to take account of a range of national police-recorded data that employs local definitions. Examples from reviewed police records include homicides that are linked to gangs called pandillas (Panama); 'drugs' or 'gangs' (lamaica): modalidad sicariato (paid assassinations) and relacionado con mara (related to gangs, Honduras); 'drug disputes' (Dominican Republic); and 'gang interaction' (Korea). The intimate partner and family category includes homicides recorded in national statistics as 'homicide perpetrated by husband, wife, mother, father, son, daughter, brother, sister, other family, boyfriend or girlfriend' (United States), 'domestic violence' (Uganda), and 'intimate or family' (Japan). The robbery and theft category includes homicides recorded in national statistics as related to robo (Argentina), 'robber' (India), and 'robbery offences' (Germany).6

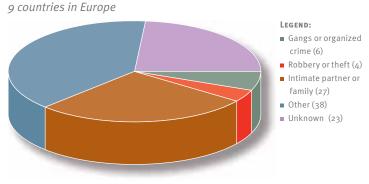
Contextualizing homicide by region

Overall homicide rates vary significantly across geographic regions. The average national homicide rates range from 29.0 per 100,000 population in Central America and 27.4 in Southern Africa, to 3.3 per 100,000 population in Oceania and 1.1 in Western Europe (TRENDS AND PATTERNS). Analysis of the homicide context in countries with available data suggests that—in addition to overall homicide rates—both the use of weapons and the situational context of lethal violence also vary by geographic region.

Figure 3.1 shows four categories of homicide context for 26 countries in the Americas, Asia, and Europe based on an analysis of UNODC homicide statistics (see online methodological annexe; UNODC, n.d.a.). In addition to the categories of organized crime and gang-related homicides,







Source: UNODC elaboration based on UNODC (n.d.a)

robbery- and theft-related homicides, and intimate partner- and family-related homicides, the 'other' category contains all homicides positively identified as not belonging to one of the above three categories. These may include homicides related

to fights, arguments, or sex offences. While results must be interpreted with caution due to the limited number of countries for which data is available, two patterns are particularly prominent: the high proportion of gang- or organized crimerelated homicides in countries of the Americas (more than 25 per cent) and the high proportion

of intimate partner- or family-related homicides in Asia and Europe (around 30 per cent).

It is not currently possible to present an equivalent chart for countries in Africa. Even if better data existed, the exercise would still be particularly challenging. While homicide categories, such as 'gang- and organized crime-related', have relatively

Box 3.1 Mob justice in Africa

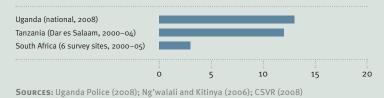
Power and security vacuums are not unusual in post-conflict settings. When they occur, vigilante groups and mob violence can replace formal state-led policing and justice:

Disillusionment with the governing authority's ability to thwart these crimes may result in the population relying on parallel power structures such as militias, which may be seen as able to protect people from the effects of serious crimes (Rausch, 2006, p. 7).

In post-conflict Liberia, for example, violence related to community and informal justice and policing continue to be reported: 'Communal and mob violence continue, often emanating from tensions between ethnic groups and communities over land disputes' (UNSC, 2009). The incidents of vigilante attacks and mob justice—though rare—reveal a lethal potential whose effects can be destabilizing, especially in the absence of strong law enforcement institutions (Small Arms Survey, 2011).

In the aftermath of presidential elections in Kenya in December 2007, for example, violence flared between rival factions of the country's main ethnic groups—the Kikuyu, Luos, and Kalenjin. In addition to large-scale rioting and clashes between protestors and the police, the post-election period saw a significant rise in 'mob' or 'vigilante' killings, as long-held tensions over land, the economy, and political power spilled into lethal violence. An estimated 1,100 people were killed and some 350,000 displaced in violence following the election (CIPEV, 2008, pp. 272, 308).

FIGURE 3.2 Vigilante/mob killings as a percentage of homicides in three African countries





consistent meanings across the Americas, Asia, and Europe, the nexus between gangs, armed groups, insurgents, rebels, bandits, local warlords, and organized criminal groups is especially complex in the African region (Small Arms Survey, 2010, p. 142ff.). In post-conflict environments in Africa, homicides may take place in contexts as

diverse as politicized inter-communal clashes, individual retribution, criminal looting, and mob violence.7 This situational complexity, which is often combined with weak rule of law and limited criminal justice capacity for data recording, makes analysis in this area highly demanding.8 Box 3.1 considers one type of homicide common to a



According to the Commission of Inquiry into the Post Election Violence:

[internally displaces persons] in most camps organised themselves into representative committees to access services, security and other matters. Young men were mobilised in what is commonly referred to as vigilante groups to provide security within the camps (CIPEV, 2008, p. 278).

The issue of vigilante killings and mob justice has received attention at the international level in recent years, not least due to the concern of the United Nations Special Rapporteur on extrajudicial, summary, or arbitrary executions (UN, 2009b). Nonetheless, data on the proportion of homicides that relate to vigilante or mob actions in African countries is limited.

Figure 3.2 shows estimates for three African countries: South Africa, Tanzania, and Uganda. For South Africa, an examination of police records at six survey sites finds that vigilante justice and revenge killings together add up to around 7 per cent of all recorded homicides; vigilante actions alone can be positively attributed to around 3 per cent of the homicide dockets (CSVR, 2008). Research based on hospital records in Dar es Salaam, Tanzania, reveals a higher rate of mob action killings, estimated at around 12 per cent of suspicious deaths during the period 2000 to 2004. Stoning and burning were reported as the most common methods of execution (Ng'walali and Kitinya, 2006). Killings by 'mob action' are reported in the Annual Police Reports of Uganda, one of the few African countries to make such information publicly available. The 2008 report suggests that the number of killings from mob action increased 'from 184 cases in 2007, to 368 cases in 2008' (Uganda Police, 2008, p.12).

PHOTO ◀ A young boy walks past the wreckage of burnt-out shacks, following xenophobic attacks in Reiger Park, Johannesburg, May 2008.

© Rodger Bosch/AFP Photo

number of post-conflict or transitioning African countries, that of vigilante killings or 'mob justice'.

It should be noted that a high *proportion* of a particular type of homicide in Figure 3.1 does not necessarily correspond to a high *rate* of that type of homicide. While countries in Asia and Europe show a comparatively high proportion of intimate partner- and family-related homicides (around 30 per cent), for example, *overall* homicide rates in Asia and Europe are significantly lower than in the Americas. This difference results in correspondingly lower intimate partner and family-related homicide rates for Asia and Europe than for the Americas.

Nonetheless, the significant proportion of intimate partner- and family-related homicides in many countries in Asia and Europe does highlight the importance of this homicide context as a focus for violence reduction initiatives in these regions. These types of killings are more likely to be

unplanned and often represent spontaneous and emotion-laden acts (Gillies, 1976). While men are generally more likely to be victims of homicide than women, women are generally more likely to be killed by someone they know.9

Yet patterns of intimate partner and family-related homicides, particularly in Asian countries, are complex. Underlying reasons for lethal violence are heavily influenced by local traditions, family and social structures, and levels of education. On the one hand, patriarchal societies in Asian countries can present a particular risk factor for lethal violence against women who are considered property and whose subjugation is a symbol of male power and status (UNFPA, 2003). On the other hand, some observers argue that the Asian emphasis on a collectivistic culture, with a high degree of interdependence among partners and within the family, makes lethal violence less likely to involve an offender and victim with close ties (Salfati and Park, 2007; WHEN THE VICTIM IS A WOMAN).



PHOTO ► A man involved in an attempted robbery is transported to hospital following an exchange of gunfire with police, Karachi, June 2010. © Athar Hussain/Reuters

In contrast to countries in Europe and Asia, the proportion of intimate partner and family homicides in countries in the Americas is comparatively low (just under 10 per cent). As with countries with lower levels of human development, this rate is probably not indicative of a low rate of intimate partner or family homicides per se, but rather the result of a high number of homicides falling in other categories—in particular, gangand organized crime-related homicide.

Killings related to gangs and organized crime can take many forms in the Americas. Gangs in the United States, for example, range from loose associations often based along ethnic ties to more clearly structured groups that focus on profitable property crime (Covey, 2010). While drug use and violence are commonplace among many gangs, such phenomena are not necessarily central to all gangs. Although US street gangs have long been involved in the distribution and sale of illegal drugs, for example, evidence on the extent to which gang-motivated homicides are related to drugs can be contradictory (Block and Block, 1993).

From 1998 to 2009, gang-related homicides in the United States stayed reasonably constant and low at the national level (around 5.5 per cent of total homicides). At the level of individual cities and neighbourhoods, however, gang-related homicides represent a far greater proportion of violent deaths (Small Arms Survey, 2010, p. 134). Killings linked to Mexican drug cartels have tended to be similarly localized, with the majority of violent deaths seen in provinces and cities that are strategic for the drug trade (see Box 1.3, A UNIFIED APPROACH).

Other countries in the Americas, particularly Central and South America, are well-known

homes to gangs and gang violence. *Pandillas*, found primarily in Nicaragua and Costa Rica, and *maras*, present mostly in El Salvador, Guatemala, and Honduras, are two distinct types of gangs, originating in Central American neighbourhoods and formed around deportees from the United States, respectively (Jütersonke, Muggah, and Rodgers, 2009). Estimates of the degree to which such groups are responsible for violent deaths in these countries vary considerably, however (UNODC, 2007).

Cross-national comparison is further complicated by different definitions and methods of identifying gang involvement in police statistics. Of the countries in the Americas represented in Figure 3.1, for example, statistics from Panama record 19 per cent of intentional homicides as related to *pandillas*, although it is unclear whether this term refers to a particular gang genus or general gang activity (Panama, 2007). Available statistics from Honduras report homicides separately as *relacionado con mara* (under 1 per cent of total homicides) and *modalidad sicariato* (36 per cent of total homicides), implying the involvement of hired assassins (Honduras, 2008).

The basis on which such distinctions are made is unclear, particularly when gangs resort to such modes of killing in turf conflicts with other groups. Overall, the countries for which data is available and therefore included in Figure 3.1 are drawn largely from North America, Central America, and the Caribbean. Box 3.2 highlights that gangrelated homicides in Jamaica and Trinidad and Tobago have significantly increased in the last ten years. It should be noted that the overall percentage of gang- and organized crime-related homicides may be affected by further inclusion of countries from South America, in particular.

Box 3.2 The homicide context and responses in the Caribbean

Overall, intentional homicide rates in the Caribbean have increased dramatically in recent years. Figure 3.3 shows a significant increase of intentional homicide rates for 12 countries in the Caribbean in the ten-year period from 2000 to 2009. In 2009, the average national rate stood at 24.7, which is more than double the rate of 13.2 in 2000. Evidence from at least two Caribbean countries—Jamaica and Trinidad and Tobago—suggests that this increase is largely due to an increase in gang-related killings. In order to better understand what is driving these trends, it is essential to understand the dynamics of gangs themselves (Townsend, 2009).

In Jamaica a distinction can be made between 'corner crews' (or simply 'crews') that hang out on street corners they consider their turf, area 'dons' who serve as role models for younger gang members, and highly active criminal gangs (Leslie, 2010). These groups have different levels of involvement in crime, ranging from petty offences to car-jacking, marijuana or cocaine trafficking, and, in some cases, white-collar crime. Crews often have violent conflicts with rival crews, leading to revenge murders and fuelling persistent violence (Covey, 2010). Community responses to gangs in Jamaica are comparatively tolerant, due perhaps to the fact that many gangs represent a source of income from drug activities for low-income families.

FIGURE 3.3 Homicide rate in 12 Caribbean states, 2000-09

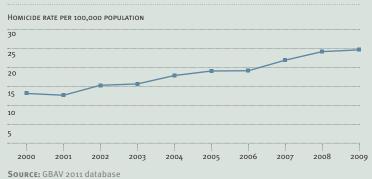
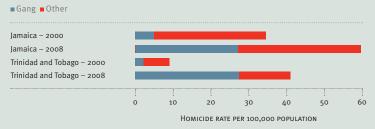


FIGURE 3.4 Homicide context in Jamaica and Trinidad and Tobago, 2000 and 2008



Source: UNODC elaboration based on UNODC (n.d.a)





Figure 3.4 shows an increase in the overall homicide rate in Jamaica from just over 30 in 2000 to almost 60 per 100,000 population in 2008. Similarly, the rate in Trinidad and Tobago increased from less than 10 in 2000 to more than 40 per 100,000 in 2008. Strikingly, the proportion of gang- or organized crime-related killings increased from 14 per cent to 45 per cent in Jamaica and 24 per cent to 69 per cent in Trinidad and Tobago in 2008. In both countries, this rise accounts for almost all of the increase in overall homicide. The pattern of homicides is tightly linked to the use of firearms. Guns were used in approximately 80 per cent of homicides in both Jamaica and Trinidad and Tobago in 2008 (UNODC, n.d.a). This triple combination of high overall levels of homicide, a high proportion of firearm homicides, and a high degree of gang- or organized crime-related homicides presents a significant challenge to an effective state response.

Figure 3.5 shows that, as homicide rates have relentlessly risen in Jamaica since the 1970s, the police 'clearance rate' for reported homicides has gradually fallen, from more than 80 per cent of cases in 1970 to around 40 per cent in 2005. The drop in the clearance rate may be partly due to an increasing proportion of cases that are difficult to solve. Detailed police statistics reveal the challenges in solving drug or gang-related homicides. In 2008:

 No drug-related homicides were reported as cleared up by the Jamaican police.

- Just under 20 per cent of gang-related homicides were reported as cleared up.
- Almost 60 per cent of domestic-related homicides and just over 50 per cent of homicides related to another criminal act were reported as cleared up.
- Clearance rates for firearm homicides were just 30 per cent, compared with more than 40 per cent for homicides committed using any other weapon (JCF, 2010).

Limited police resources may still be a restraining factor in homicide case clearance. Figure 3.5 shows that, in years when homicide rates dropped, clearance rates rose. This suggests either a brief respite for overwhelmed law enforcement officials and/or a drop in harder-to-solve, gang-related homicide cases in those years.

The crime and security situation in Jamaica and, increasingly, in other Caribbean countries threatens to reach endemic proportions. A recent national victimization survey in Jamaica found that more than 7 per cent of all respondents had a relative or close friend who had been murdered in the past year, and almost 33 per cent reported having witnessed the murder of a relative or close friend in their lifetime (Wortley, 2009, p. 24). Analysis of the homicide context and responses indicates that armed violence reduction must begin with addressing the issues of gang membership and impunity from justice for members of criminal groups who engage in violence.

FIGURE 3.5 Homicide rate and case clearance in Jamaica, 1970–2005



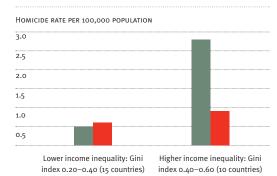
Source: UNODC elaboration based on JCF (n.d.)

In addition to regional variations in homicide context, patterns of difference also emerge when countries are clustered by degree of income inequality. Figure 3.6 shows average rates of intimate partner and family homicide and average rates of robbery- and theft-related homicide for 15 countries with lower income inequality (Gini index 0.20–0.40) and ten countries with higher income inequality (Gini index 0.40–0.60). Increasing income inequality appears to have a greater impact on the use of lethal force in property crime, such as robbery or theft, than in violence against intimate partners or family members.

It has been recognized for some time that countries with higher income inequality tend to have more homicides (Fajnzylber, Lederman, and Loayza, 2002); the finding in Figure 3.6 provides nuance in that it suggests (albeit on the basis of a limited group of countries) that such increases in homicide may not be uniform across homicide context. Rather, differences in income, social inequality, and tension may heighten motivations to use violence, particularly once a criminal

FIGURE 3.6 Homicide context and income inequality, 2010 or latest available year

- Robbery- and theft-related homicide
- Intimate partner- and family-related homicide



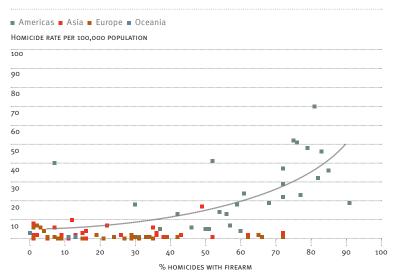
Source: UNODC calculations

endeavour (such as robbery or theft) has already been embarked upon. Chapter Five analyses the findings of a statistical assessment of the relationships between homicidal violence and development indicators (MORE VIOLENCE, LESS DEVELOPMENT).

Homicide context and firearm use

Figure 3.7 shows the impact of the *instruments* of armed violence on homicide rates. Data from 104 countries, organized by region, demonstrates the relationship between the overall homicide rate per 100,000 population and the proportion of those homicides committed by firearm as recorded by national police. Countries with homicide rates that exceed 20 per 100,000 population do not necessarily have a high proportion of firearm homicides. A case in point is South Africa, which had a homicide rate of around 34 per 100,000

FIGURE 3.7 Homicide rate and proportion of homicides committed with firearms, 2009 or latest available year



Source: UNODC elaboration based on UNODC (n.d.a.)

population in 2009, although less than 50 per cent of those homicides were carried out by firearm. ¹⁴ Of the countries where more than 70 per cent of homicides are carried out by firearm, however, some four-fifths have homicide rates of 20 or higher (UNODC, n.d.a).

Regionally, countries in the Americas tend to show both significantly higher homicide rates and higher proportions of homicides committed with firearms than countries in Asia, Europe, or Oceania. For example, the nine Caribbean countries included in their analysis show an average homicide rate of around 25 per 100,000 population, with an average of 60 per cent of homicides committed by firearm. Ten countries in South America show an average homicide rate of around 18 per 100,000 population, with 60 per cent of homicides committed by firearm. These figures stand in stark contrast to the average rates of below 5 per 100,000 population for certain countries in Asia and Europe. where 22 per cent and 24 per cent of homicides are committed by firearm, respectively. As discussed below, this discrepancy may be linked to the higher proportion of gang- or organized crimerelated homicides in a number of countries in the Americas region, particularly in Central America. Figure 3.7 does not include information from African countries, for which there is insufficient data.

Available data on civilian firearm ownership—part of the 'instruments' element of the armed violence lens—shows no obvious relationship with overall homicide rates. It is thus not possible to assess the impact of given numbers of civilian firearms on the pattern shown in Figure 3.7.

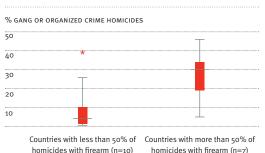
Nonetheless, the presence of guns clearly represents an increased risk of lethality of violent encounters. A number of researchers have demonstrated that weapons in the home constitute more of a health risk than a benefit. ¹⁵ On the one

hand, gun usage in homicide is probably linked to the comprehensiveness and application of regulations (regarding purchase, carrying, licensing, weapon type, and access to ammunition). On the other, it is also potentially connected to the relative presence of gang and organized crime structures that are more likely to misuse weapons than the general population. Indeed, Figure 3.8 demonstrates the close links between the proportion of homicides committed by firearm and the proportion of homicides attributable to gangs or organized crime activity for 2009 or the latest available year for 17 countries in the Americas, Asia, and Europe.

Despite the lack of reliable, comparable, crossnational data on the sub-types of gang or organized crime groups responsible for lethal violence in the Americas, the ubiquitous involvement of firearms in such killings is well established. Figure 3.8 shows medians and quartiles for the proportion of gang or organized crime homicides in ten countries with less than 50 per cent of homicides committed with firearms and seven countries with more than 50 per cent of homicides committed with firearms. It demonstrates that in the former

FIGURE 3.8 Proportion of gang- or organized crime-related homicides and firearm use

 $\textbf{LegenD:} \ the \ outlier \ (star), the \ median \ (horizontal \ bar), and the \ upper \ and \ lower \ quartiles \ (top \ and \ bottom \ of \ each \ bar)$



Source: UNODC calculations

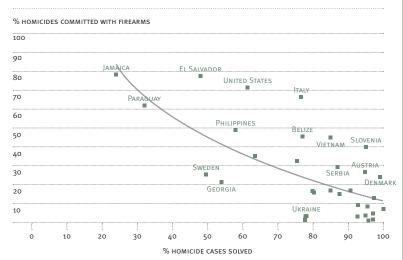
group of countries, the average proportion of gang- or organized crime-related homicides is comparatively low (with a median of 4 per cent and half the group under 10 per cent). In contrast, in the countries where more than half of all homicides are committed by firearm, the average proportion of gang- or organized crime-related homicides tends to be higher (a median of 30 per cent, with half the group at more than 20 per cent).

Guns are increasingly the weapon of choice of gangs and groups engaged in organized crime. The extent to which gangs and criminal groups possess (individually or collectively) firearms, however, appears to vary significantly according to general weapon availability in civilian society and the ease of firearm smuggling. Estimates based primarily on survey data from the United States, England, and Wales suggest that gang gun ownership could be around four times the rate of normal civilian ownership in any given country. Gang members may have a history of owning guns prior to joining a gang, may purchase guns legally or through an intermediary, or may share or steal weapons (Small Arms Survey, 2010, p. 115).

Homicide context and the law enforcement response

Not only does the use of small arms in homicide appear linked with overall levels of homicide and the role of gangs or organized criminal groups, but it is also a major factor in the 'solvability' of homicide cases. Viewed through the armed violence lens, this link highlights the interconnected nature of the institutional context (including the law enforcement and criminal justice system), the instruments of violence, and the agents of violence in combining to restrain or enable violent events. Figure 3.9 shows the percentage of

FIGURE 3.9 Proportion of homicides committed with firearms and cases solved



Source: UNODC elaboration based on CTS-10 data (UNODC, n.d.c)

homicides committed with firearms against the percentage of homicide cases solved for 33 countries for which data is available for 2006 or the closest available year.¹⁶

The set of countries for which data is available is very limited, and data reported by countries concerning 'cases solved' may have different meanings. Caution should thus be exercised in the interpretation of results. Nonetheless, it is possible to assert that as the percentage of homicides committed with firearms increases, the police solve a lower proportion of homicides. Countries with a high proportion of homicides carried out with firearms include those in the Americas in which gang-related homicides are particularly prevalent, such as El Salvador and lamaica.

In addition to the issues surrounding clearance of gang-related homicides (such as the reluctance of some witnesses to come forward due to fear of reprisals), homicide cases involving a firearm are

less likely to be solved than those involving a knife or other forms of physical contact between the victim and the offender. Many countries have limited forensics capacity for detailed ballistics analysis, and the lack of close contact between the victim and the offender means that few types of physical evidence (such as the offender's hair, blood, or fingerprints) are left behind (Addington, 2006; Riedel, 2008).

A study on the decline in the percentage of homicide cases solved in the United States from more than 90 per cent in 1960 to 61 per cent in 2006 finds that homicides involving weapons other than firearms were related to higher clearance rates:

The reason that weapons other than firearms are cleared more quickly is that forensic evidence is [...] not available with firearms, especially handguns that kill at a distance and are widely available (Riedel, 2008, p. 1157).

Furthermore, a number of countries at the top left of Figure 3.8 (high percentage of firearms, low clearance) also have higher overall homicide rates, while countries towards the bottom right (low percentage of firearms, high clearance) tend to be those with lower overall homicide rates. For example, Jamaica had a homicide rate of 58 per 100,000 in an average year between 2004 and 2009, with 75-80 per cent of homicides committed using a firearm and typically less than 40 per cent of homicides 'cleared up' by police.17 This may indicate a connection, in some contexts, between high rates of homicide, use of firearms, low police performance, and, potentially, limited police resources. Countries that report low rates of solved cases also show comparatively low numbers of police per recorded homicide. In particular, Jamaica and El Salvador (two of the countries whose homicide rates are among the highest in the world) have less than ten police

officers per recorded homicide. In contrast, countries with higher rates of solved cases have between 50 and 500 police officers per recorded homicide.¹⁸

There is not enough data to ascertain whether this pattern holds true for other countries with high homicide rates. Nonetheless, at least in some countries, it may be the case that law enforcement officers are unable to devote sufficient resources to individual case investigation and clearance when faced with especially high levels of lethal violence. Looking through the armed violence lens, however, does not help to determine the direction of cause and effect. Law enforcement institutions, for example, may lack the requisite resources to fully investigate a large number of homicides, which leads, in turn, to a culture of impunity, little deterrent effect, and further increases in levels of armed violence. Whether impunity from law enforcement drives high levels of armed violence or vice versa remains an open question. However the problem is viewed, it is clear that strengthening the effectiveness of the criminal justice system represents a key entry point for armed violence reduction and an essential component for violence prevention.

Homicide and criminal justice system performance

A criminal justice system may take many forms, both in terms of both its structural organization and its aims. It may choose a strong deterrent approach through the extensive use of punitive sanctions, such as imprisonment. It may alternatively (and usually for crimes less serious than homicide) seek restorative outcomes through resolution between the victim and perpetrator. The law enforcement component of the system



may be oriented towards the solving of reported crime and the arrest of offenders. On the other hand, it may focus on a strong crime prevention and community policing element. The system itself may even be semi-formal and largely independent of central state control, as in the case of informal justice systems mediated by tribal or village elders whose decisions are recognized and enforceable by state courts.

Whatever the nature of the system, as shown below, respect for the rule of law—including in the operation of the criminal justice system—is broadly linked with lower levels of intentional homicide. The chapter also suggests that, where

impunity for serious crime exists, this may contribute (in some contexts) to a spiral of violence in which homicide rates increase significantly over time. Such analysis highlights an urgent need to increase understanding of the effectiveness of the criminal justice system, at both the national and cross-national levels.

Methods for measuring the criminal justice system's effectiveness in preventing and responding to crimes involving armed violence are highly varied. Common approaches include the examination of:

criminal justice system resources (both human and financial);

PHOTO ▲ A homicide suspect stands trial in Malaga, Spain, October 2005. © Rafael Marchante/ Reuters

- system workload (such as the number of officials per recorded case);
- case progress (such as 'case solved' rates or the likelihood that a suspected offender will be convicted of an offence, known as case 'attrition');
- the impact of justice on the individual offender (such as recidivism rates); and
- the quality of justice (including the extent to which the system is perceived to lead to 'wrongful' convictions).¹⁹

This chapter has already briefly considered possible connections between police resources and case solved rates. It now focuses on measures of the likelihood that an offender will be brought to justice. A common approach to this issue for crime involving armed violence is the use of case 'attrition' rates.

Criminal justice system case attrition rates can be measured in a number of ways. The exact name given to the measure often depends upon the reference points within the system from which it is derived. A 'conviction rate', for example, may use different starting points (such as persons

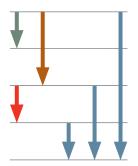
brought before the criminal courts, persons prosecuted, or persons arrested) but always uses the end point of conviction by a competent court or tribunal. In contrast, an 'attrition rate' usually describes the 'exit' of persons from the criminal justice system at various stages, whether at the police, prosecution, or court levels. Attrition rates may be calculated separately for different stages of the system or for the system as a whole, usually with reference to the number of persons brought into initial formal contact with the police.²⁰ Figure 3.10 depicts the different stages of the criminal justice system and possible attrition measures.

Such measures can provide quantitative information about the progress of cases through the criminal justice system and reveal areas where system performance—and the resulting deterrent effect—could be improved. A significant drop in case load from police to prosecution, for example, may indicate difficulties in obtaining sufficient evidence to link suspects to offences in order to proceed to court trial.

At the international level, the collection and interpretation of such data is extremely challenging.

FIGURE 3.10 Possible criminal justice system attrition measures

System stage	Persons
Police	Persons brought into initial formal contact
Police/prosecution	Persons formally charged
Prosecution	Persons prosecuted
Courts	Persons brought before the criminal courts
Courts	Persons convicted at first instance



- Police attrition measure
- Prosecution attrition measure
- Overall police to prosecution attrition measure
- Possible conviction rate measures

One approach is the calculation of an approximate attrition measure from total suspect data at different stages of the criminal justice process. A comparison can be made, for example, between the number of homicide offences recorded by the police in one year against the number of persons arrested for homicide, the number of persons prosecuted, and the number of persons convicted that year.

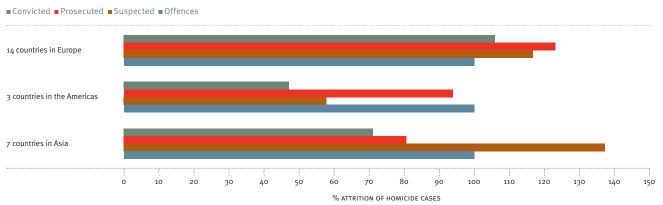
Such measures are likely to be imprecise, since the compared data does not represent the same 'cohort' of cases; instead, it is affected by cases carried over from one year to the next, with potentially significant consequences. Data from India, for example, suggests that, for criminal trials ending in 2007, more than 80 per cent of cases took more than one year, with more than 50 per cent of cases taking more than three years.²¹ This effect can be accounted for, to some extent, by averaging of measurements over time.

Figure 3.11 presents available data reported to the *United Nations Survey of Crime Trends and Operations of Criminal Justice Systems* for the crime of intentional homicide in 24 countries, averaged for a (minimum) two-year period between

2003 and 2009, presented by region. ²² In the figure, the number of annual recorded homicide offences is set to '100 per cent'. The number of *persons suspected* of homicide is presented as a percentage of the number of *offences*. Numbers of persons *prosecuted* and *convicted* are then presented as a percentage of the number of persons initially entering the system as suspects.

Due to high variance in the data, the averaging of case attrition across countries may create results that do not reflect typical case attrition patterns in practice. Recording practices may vary between institutions, including the 'carrying over of cases' from previous years or counting of files that have been open for a number of years. Nonetheless, as a methodological exercise, Figure 3.11 reveals some features that may indeed be indicative of criminal justice system performance in different regions. Countries in Europe and Asia show, on average, more homicide suspects than homicide offences. In the three countries in the Americas for which data is available, however, the average number of homicide suspects is less than two-thirds that of the number of recorded offences. This fits with the pattern of higher fire-

FIGURE 3.11 Attrition of homicide cases in cross-national perspective



arm homicides and resultant lower case clearance rates in some countries in the Americas.

At first glance, countries in Europe and the Americas show—paradoxically—more persons 'prosecuted' for intentional homicide than persons 'suspected'. This may be due to the inclusion of countries, particularly in Eastern Europe and Latin America, with legal and criminal justice systems that allow cases to be initiated at the prosecution level or in which serious charges, such as homicide, are only assigned at the prosecution stage, following investigation by the prosecution service. Finally, data from countries in the Americas shows particularly low numbers of persons convicted for homicide compared to persons suspected and prosecuted. This may be due to the use of different definitions at the prosecution and court levels or different counting rules. Nonetheless, the pattern is striking and may hint at limited criminal justice system capacity and resultant minimal deterrent effect.

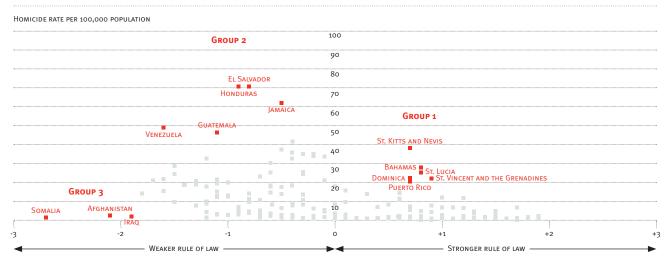
High case attrition in the form of low conviction rates should not automatically be associated with *poor* criminal justice system performance, however. Experts argue that there is a spectrum of criminal justice system approaches. At one end is a large law enforcement–punishment apparatus designed for public order maintenance, with high rates of arrest, prosecution, conviction, and incarceration. At the other end is a system commonly found in liberal democracies, which emphasizes the protection of human and due process rights, invests more heavily in the judiciary, and accepts a higher rate of case acquittals as a price for overall legally defensible convictions (Sung, 2006).

Thus, while a criminal justice system can be efficient at convicting persons for criminal offences, it is not necessarily effective in preventing crime in the first place, nor in correctly identifying perpetrators or in reforming and successfully reintegrating convicted criminals into society. Indeed, the core aim of the criminal justice system should be to uphold the rule of (criminal) law.

This means that acts of armed violence must be carefully defined and prohibited by clear criminal law. Such laws must be publicly promulgated, equally and fairly enforced, and independently adjudicated. The criminal justice system must itself be accountable to procedural law, must demonstrate equality of persons before the law, show fairness in application of the criminal law, ensure procedural transparency, avoid arbitrariness, and—importantly—operate in a manner consistent with international human rights standards and norms (UN, 2010). Indeed, case attrition and conviction rates contain no information about the quality of justice. In that context, the United Nations Human Rights Committee has expressed concern, for example, about 'extremely high conviction rate[s] based primarily on confessions' (UN, 2008, para. 19). In one survey of US law enforcement and criminal justice system professionals, respondents said that wrongful felony convictions occurred in 1-3 per cent of all felony cases (Ramsey and Frank, 2007).

One element that is inherent to the rule of law is the *quality* of justice, including the idea that all persons are 'accountable to laws that are publicly promulgated, equally enforced and independently adjudicated' (UN, 2004). Thus, while the rule of law demands strong state institutions endowed with clear legal powers, it also requires that institutions act *fairly* and in a manner consistent with international standards. The presence of weak state law enforcement and criminal justice institutions may create space for violent crime to prosper (UN, 2009a). Conversely, where institutions are

FIGURE 3.12 Rule of law and overall intentional homicide rates, 2009 or latest available year



Source: UNODC elaboration based on CTS-10 data (UNODC, n.d.c)

basically strong but do not respect principles of the rule of law, they risk generating animosity and loss of public trust. This, in turn, can help fuel violent crime. Persons killed in confrontations with civil and military police in Rio de Janeiro in 2009, for example, accounted for a death rate higher than the overall homicide rate in most Western European countries (FBSP, 2010, p. 32).

The broad links between weak rule of law and intentional homicide are shown in Figure 3.12, which plots rule of law, as measured by the World Bank Rule of Law Index, against overall intentional homicide rates (2009 or latest available year).²³ Stronger rule of law is expressed with positive numbers to the right on the x-axis; weaker rule of law is assigned negative numbers to the left. The figure demonstrates that higher homicide rates are broadly linked with poorer rule of law.

Figure 3.12 identifies three groups of countries that are noticeable outliers. In particular, Caribbean countries—including St. Kitts and Nevis,

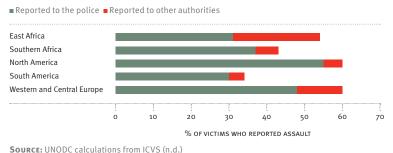
the Bahamas, St. Lucia, St. Vincent and the Grenadines, Dominica, and Puerto Rico (Group 1 in Figure 3.12) —show higher rates of intentional homicide than may be expected from the comparatively solid levels of rule of law. It should be noted that homicide rates in this region can be somewhat unstable due to small country populations and the corresponding small absolute number of deaths involved. Nonetheless, this finding does suggest the presence of additional factors, such as gang conflict or the presence of drug trafficking, that contribute to acts of lethal armed violence, notwithstanding the potential preventive influence of (reasonably strong) government institutions.

Group 2 consists of countries with mid- to low-level rule of law but significantly higher rates of homicide than expected from the general curve (including El Salvador, Guatemala, Honduras, Jamaica, and Venezuela). These countries are not linked geographically but may represent examples of particular contexts in which

comparatively weak rule of law is combined with challenges, such as a past history of conflict, gang or organized crime activity, or high income inequality. The presence of such underlying drivers of violence with the absence of an effective deterrence system appears to be responsible for the especially high homicide levels in these countries.

Finally, countries in Group 3 (Afghanistan, Iraq, and Somalia) show much lower levels of homicide than expected from very weak rule of law institutions. This is probably due to limited institutional recording of violent deaths and particular difficulties in distinguishing between conflict- and non-conflict-related deaths. None of the three countries provide any homicide statistics; the estimates on homicide rates are all based on estimates of deaths caused by interpersonal violence provided by the World Health Organization (TRENDS AND PATTERNS). These estimates of deaths caused by interpersonal violence are far lower than in many other countries (Afghanistan: 2.6, Iraq: 2.2, and Somalia: 1.5 per 100,000). One reason for the low levels is that the programme categorizes many of the deaths that occur in these conflict-affected countries as collective violence.

FIGURE 3.13 Reporting of crime involving armed violence by victims, 1989–2005



The complexities of unpacking the two-way relationship between violence and institutional responses suggests that information, such as statistics on the number of offenders suspected, prosecuted, or convicted, is unlikely to provide a complete picture of the probable impact of the law enforcement or criminal justice system. Rather, information is also required on factors such as the degree of public confidence in the system and the professionalism and integrity of criminal justice system professionals. Crime victimization surveys and specialized access-to-justice surveys are one way of obtaining such information. Figure 3.13 shows, for example, the extent to which victims reported experience of an assault with a weapon to police or to other authorities. The data is derived from the International Crime Victim Surveys conducted in urban areas in 74 countries

between the years 1989 and 2005 (ICVS, n.d.).

In countries in East Africa, victims of assault with a weapon reported the crime to the police in just 31 per cent of cases. In 23 per cent of cases, the crime was reported to a different authority. This compares to only 12 per cent of victims reporting to other authorities and 48 per cent to the police in Western and Central Europe. Low levels of case reporting, particularly of serious crime types such as assault with a weapon, may be symptomatic of distrust or even of fear of law enforcement authorities. Where victims turn to authorities other than the police, the role of these authorities must be considered in the broader armed violence prevention context. In Europe, 'other authorities' could include private security guards, neighbourhood watch coordinators, or community support organizations. In many countries in Africa, traditional dispute resolution structures, such as clan elders or councils of elders, have historically functioned and still function as relevant

authorities capable of imposing penalties, such as payment of compensation. ²⁴ Increasingly, though, private security sector organizations in a number of countries in Africa and the Americas have begun to adopt a law enforcement role, including coercive policing techniques (van der Spuy and Lever, 2010).

Conclusion

Intentional homicide is increasingly recognized as an indicator that is critical to development and the attainment of the Millennium Development Goals. Heightened interest in the links between armed violence and development has resulted in the frequent publication of 'headline' homicide rates at the international level.25 Chapter 2 of this report finds that an estimated 396,000 deaths from intentional homicide occurred in an average year between 2004 and 2009, with homicide rates highest in Middle and Southern Africa, Central and South America, and the Caribbean (TRENDS AND PATTERNS). At the regional and national levels, a proliferation of crime, security, and violence observatories have been effective in promoting homicide rates as a key policy tool for measuring and combating non-conflict armed violence.26

Cross-national comparison of homicide levels has increasingly been applied in development settings in recent years, including in the UN's *Human Development Report 2007/8*, the *Economist's* Global Peace Index, and the Ibrahim Index of African Governance. While such comparisons highlight the negative impact lethal violence can have on states and societies, they represent only a limited step towards an understanding of the underlying causes of homicide and of its situational context.

Available data suggests that—in contrast to the 'single indicator' approach of measuring 'intentional homicide per 100,000 population'—events classified and recorded as intentional homicide actually correspond to a diverse range of actions and contexts. These may range from violent killings carried out by gangs or organized criminal groups, to unplanned crimes of passion committed against intimate partners or family members, to killings in the context of a secondary crime, such as robbery or theft. Each homicide context requires different action to prevent and reduce its occurrence.

Many governments affected by high levels of armed violence have started to establish comprehensive monitoring systems that have since become an important tool to better understand the scale and distribution of homicides and the complexities of armed violence in particular (MORE VIOLENCE, LESS DEVELOPMENT).

The ability of the international community, as well as national and local governments, to develop coherent national and regional policies for the reduction of non-conflict armed violence and to deliver technical support, where needed, is critically dependent upon a clear understanding of the context of lethal (and non-lethal) violence and on the existing capacity of a state to respond. Key steps towards the improvement of data in this area include the strengthening of law enforcement and criminal justice information systems for the purposes of timely and complete monitoring of cases encountered and responses delivered.

Endnotes

- See Bijleveld and Smit (2006); Deker (1993); Killias (1993); Roberts (2009).
- 2 See, for example, FBI (2009).

- 3 See, for example, the annexe of the Tenth United Nations Survey on Crime Trends and Operations of Criminal Justice Systems, or CTS-10 data (UNODC, n.d.c).
- 4 See De Bondt and Vermeulen (2010).
- The United Nations Convention against Transnational Organized Crime defines an 'organized criminal group' as 'a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit' (UNODC, 2004, art. 2(a)). A 'structured group' means 'a group that is not randomly formed for the immediate commission of an offence and that does not need to have formally defined roles for its members, continuity of its membership or a developed structure' (art. 2(c)).
- 6 Data sources used, including the GBAV 2011 dataset, are provided in the online methodological annexe to this chapter; see www.genevadeclaration.org.
- 7 See, for example, Muggah and Krause (2009).
- 8 See Small Arms Survey (2009, ch. 7).
- 9 See, for example, Home Office (2010), FBI (2009), and Salfati and Park (2007).
- This rate is the average percentage of homicides classified as 'gangland killings' or 'juvenile gang killings' (information on 'murder circumstances') among total homicides for the period 1998 to 2008, as reported by the Federal Bureau of Investigation in the *United States Uniform Crime Reports* (FBI, n.d.).
- The countries included are: Antigua and Barbuda, the Bahamas, Bermuda, Cuba, Dominica, Dominican Republic, Grenada, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. (TRENDS AND PATTERNS).
- 12 This chapter treats Trinidad and Tobago separately, whereas Chapter Two lists it as part of the Lesser Antilles Region (TRENDS AND PATTERNS).
- 13 The Gini coefficient of inequality assigns values between o and 1 to each country, with o representing absolute equality and 1 representing absolute inequality.
- 14 See Minnaar (2008).
- 15 See Hemenway (2011).
- The Tenth United Nations Survey on Crime Trends and Operations of Criminal Justice Systems defines a case as 'solved' according to the following criteria: '(i) The police are satisfied of a suspect's guilt because there is a corroborated confession and/or because of the weight of the evidence against him, or (ii) The offender was caught in the act (even if he denies all guilt), or (iii) The person who

- committed the offence has been identified (regardless of whether he is in custody, on provisional release, still at large, or dead), or (iv) Police investigations reveal that no penal offence was in fact committed' (UNODC, n.d.c).
- 17 See the crime review period 1 January 2008–31 December 2008 in JCF (2010).
- 18 UNODC calculations based on CTS data (UNODC, n.d.c).
- 19 Aromaa and Heiskanen (2008); Riedel (2008); Ramsey and Frank (2007); Smit, Meijer, and Groen (2004).
- 20 See, for example, Aromaa and Heiskanen (2008).
- 21 UNODC calculation based on NCRB (n.d.).
- The Eleventh and Twelfth United Nations Surveys of Crime Trends and Operations of Criminal Justice Systems contain time series for the period 2003 to 2009. Recorded intentional homicide offences, persons suspected of intentional homicide, persons prosecuted for intentional homicide, and persons convicted of intentional homicide were averaged, by country and by two-year groups, across the time period. Only countries with a consistent two-year percentage change across the variables were included in the analysis (UNODC, n.d.c).
- The World Bank Rule of Law Index consists of a composite measure of both representative and non-representative survey-based sources that attempt to capture perceptions and experience of concepts related to the rule of law (World Bank, n.d.). The index represents a general rule of law measure and not an assessment of the effectiveness of the criminal justice system alone. Some correlation between the Rule of Law Index and intentional homicide rates is to be expected, insofar as the index includes perceptions of crime and measures of victimization, giving rise to some degree of cross-linking between the two datasets.
- See, for example, Kinyanjui (2009).
- 25 See, for example, Geneva Declaration Secretariat (2010).
- 26 At the regional level, see OIS (n.d.).

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Chapter Four When the V

When the Victim is a Woman

often described in general terms. Men—especially young men—are determined to be most likely to kill and be killed. Women, it is often said, are affected in different ways: as victims, survivors, and often as single heads of households. Yet on closer inspection these crude generalizations are found wanting. This chapter unpacks global patterns of armed violence directed against women. It focuses on 'femicide'—the killing of a woman—as well as sexual violence committed against women during and following armed conflict.

Men generally represent a disproportionately high percentage of the victims of homicide, while women constitute approximately 10 per cent of homicide victims in Mexico, 23 per cent in the United States, and 29 per cent in Australia (INEGI, 2009; FBI, 2010; ABS, 2009). It would be a mistake, however, to underestimate the gravity of homicidal violence committed against women. In the United States, for example, homicide was reportedly the second leading cause of death for women of all races aged 15–24 between 1999 and 2007 (CDC, n.d.a).¹

Men are also more commonly involved in perpetrating homicide and sexual violence; the perpetrators of serious violence against women are frequently current or former partners (Geneva Declaration Secretariat, 2008; BJS, 2005). Yet statistical estimates of femicide and sexual violence conceal complex patterns of victimization

and suffering, especially given that violence against women seldom occurs as an isolated incident. It is often the culmination of escalating aggressions that in some cases lead to fatal outcomes. Moreover, when a woman is killed, there are also frequently indirect casualties; perpetrators sometimes commit suicide while also taking the lives of others, including children, witnesses, and bystanders. Many women who endure abusive and violent relationships also commit suicide in order to end their misery. The sharp increase in reported suicide and self-immolation among Afghan women is attributed to severe forms of psychological, physical, and sexual violence, including forced marriage (MOWA, 2008, pp. 12–13).

The violent killing of any individual is a tragedy with traumatic knock-on effects; it generates farreaching repercussions that reflect the victim's former role in the family and community. Many assessments examining the social and economic costs of armed violence highlight the lost productivity of wage-earning men in the formal economy (Geneva Declaration Secretariat, 2008; Florquin, 2006). In contrast, the implications of femicide and sexual violence on the female workforce and wider labour market are rarely considered. Yet there is growing evidence that a culture of violence can contribute to the 'feminization of poverty', further marginalizing women in society (Pearce, 1978). More broadly, armed violence—and especially violence against women—constitutes a serious challenge for development.

While femicide and sexual violence are prevalent in the domestic sphere, this chapter finds that women are exposed to many other forms of violence—from gang violence to robberies and stray bullets. They are also often singled out for hate crimes, particularly when they are categorized as migrants and refugees (Freedman and Jamal, 2008, pp. 13–19). Guatemala and Mexico's Ciudad Juarez exhibit staggering numbers of women victims and exceptional brutality. In these contexts, intimate partner violence accounts for a relatively small proportion of femicides (Suarez and Jordan, 2007); many women are victims of the increasingly widespread violence related to organized crime and narco-trafficking, which affects the entire population (Molloy, 2010). Furthermore, according to a group of Mexican NGOs:

impunity and government permissiveness, which serves as a crude expression of institutional violence, have led to a multiplication in the number of women murdered throughout the country and this can be attributed to a lack of due diligence (RNOCDH, 2010, p. 4).

In such areas, an exclusive focus on femicide may limit the understanding of a broader picture of extreme violence, which reveals major 'systemic failures' (Eriksson Baaz and Stern, 2010, p. 12; A UNIFIED APPROACH).

The social, cultural, and political risk factors for femicide and sexual violence are widely debated. Analysts frequently point to cultures of 'machismo' that can distort traditional gender roles and encourage constraints on the freedom of girls and women, misogynist behaviour, and recurring violence with impunity. In many war zones, rape has been used as 'a weapon of mass destruction' (UNDP, 2008, p. 2). Assessments of sexual violence in the Democratic Republic of the Congo indicate that mass rapes and atrocities committed against women during periods of fighting occur in a con-

text of widespread tolerance of sexual violence and a high level of impunity (Peterman, Palermo, and Bredenkamp, 2011).² Indeed, a study conducted by the World Health Organization in selected countries reveals that adolescent girls frequently experience the practice of forced sex initiation (WHO, 2002, p. 153); this finding suggests widespread acceptance and impunity of violence against women and girls.

Femicide is an important component of armed violence and includes violence in the domestic sphere, such as that perpetrated by intimate partners and strangers. This chapter seeks to disaggregate the demographics of armed violence and capture the ways in which women of different ages are at risk. Specifically, the chapter finds that:

- In the 111 countries and territories under review, an annual average of 44,000 women became homicide victims in 2004–09.
- Roughly 66,000 women are violently killed around the world each year, accounting for approximately 17 per cent of total intentional homicides.
- On average, men are killed approximately five times more frequently than women.
- Femicides generally occur in the domestic sphere; the perpetrator is the current or former partner in just under half of the cases.
- Countries featuring high homicide rates in the male population also typically experience high femicide rates.
- High levels of femicide are frequently accompanied—and in some cases generated by—a high level of tolerance for violence against women.
- In countries where violence is widespread, the rate of victimization of women reaches levels far above the average risk of domestic violence.

In some countries that exhibit low homicide rates, the percentage of female victims is similar to that of male victims.

This chapter considers the particular settings and risks shaping femicide and sexual violence. The first section provides an overview of femicide on the basis of available statistics, including the incidence, the relationship between victim and offender, and instruments used. The second section considers the characteristics and dynamics of homicide involving female victims. The third section examines other forms of lethal and non-lethal violence against women, including dowry deaths, 'honour' killings, ritual killings, and lethal practices associated with witchcraft, as well as the risk of contracting HIV/AIDS in conflict and post-conflict settings.

Disaggregating homicide by sex

One useful way of measuring the extent of lethal violence perpetrated against women is by disaggregating homicide statistics by sex. Yet since such data is simply not readily available in many settings, analysts may be required to identify and generate additional information to supplement overall homicide data. Even when such analysis is pursued, police reports and files may not satisfactorily record the sex of the victim or critical information on the context in which a given event occurred. Although a growing number of countries are committed to maintaining sex-disaggregated information, internationally comparable data

The 2011 Global Burden of Armed Violence compiles national statistics on femicide covering the largest possible geographical scope. This chapter defines femicide broadly as 'any homicide with a

female victim', thus avoiding an exclusive, narrow interpretation of intent, such as the targeting of females because of their sex. The wider definition allows for a focus on all women, in recognition of their right to live free from violence under international law. This context calls for the provision of objective information on incidents of violence against women, including baseline indicators against which to assess the effectiveness of measures to prevent violence and respond to offenders.

Fortunately, sex-disaggregated statistics are increasingly available in key sectors relating to population, school enrolment, employment, and parliamentary representation (UN, 2010a). Notwithstanding widespread improvements, the production of valid and reliable gender statistics in many areas of public and private life—including in relation to violence—still falls short of international standards. Countries face numerous challenges in generating disaggregated statistics on femicide and sexual violence, including the following:

- the under-development of basic concepts, definitions, and methods limits data collection;
- the absence of agreed international standards and coding systems reduces comparability;
- limited capacity and resources to invest in data collection results in an over-reliance on qualitative outputs;
- the lack of detail in available statistics leads to under-diagnosis;
- the reliance on mixed-quality data from different sources (such as administrative and survey data, police and other criminal justice sources, and health and mortuary data) undermines validity (Alvazzi del Frate, 2010).

Box 4.1 Unpacking femicide: what's in a label?

When it was coined by the feminist movement in the 1970s, the term 'femicide' implied the killing of women specifically because they were women. As such, it was intended to convey 'the misogynous killing of women by men' and to capture 'the proportion of female deaths that occurred due to gender-based causes' (Radford and Russell, 1992, p. 3; Bloom, 2008, p. 178). The overall femicide concept emerged as an expression of the feminist movement to politicize and contest male violence against women.

Diana Russell, an architect of the femicide concept, argues that the notion has been in use for centuries. She traces its origins to early 19th-century Britain, when it was used to describe 'the killing of a woman' (Russell, 2008, p. 3).⁴ She also acknowledges that the term later emerged as a symbol of the battle to emancipate women and free them from violence in the 20th century.

From the beginning, the idea of femicide was designed to account for a range of specific forms of violence. These include dowry and 'honour' killings, intimate partner or spousal violence, murder with rape, the killing of prostitutes, female infanticide or selective abortion, and other deaths that, according to forensic reports, occur as a result of women or girls being targeted on the basis of their sex (for example, victims of a serial killer who specifically targets women) (Bloom, 2008, p. 178).

While the concept has drawn attention to the particular ways in which women are selectively targeted, the definition has become progressively diluted and confused. Indeed, it is now often conflated with a broader understanding of violence against women (such as *any* killing of a woman) and has thus lost much of its original political connotation. The broadening of the definition may be connected to a growing interest in generating quantitative information of violence against women to facilitate comparability across countries and jurisdictions.

Today, most of the related literature applies a broad interpretation of femicide. Yet there are also several qualitative studies and data collection initiatives assessing femicide in the stricter sense, examining the intent of the perpetrator and thus separating femicides from other killings of women. These projects are especially common in Latin America and include, for example, the Registro de Feminicidio del Ministerio Público, hosted by the Crime Observatory of the Ministerio Público in Peru; the Observatorio de Muertes Violentas de Mujeres y Femicidio in Honduras; the Observatorio de Femicidios in Argentina; the Observatorio Ciudadano Nacional del Feminicidio in Juarez, Mexico; and the Banco Datos Feminicidio for Latin America, based in Chile.

Investments in generating accurate sex-disaggregated data in the crime and justice sectors appear to be growing. 5 Several initiatives have already started to generate a wealth of data, albeit not always comparable across time and space.6 Owing to the absence of agreed definitions, many institutions and researchers collect data and develop datasets based on incompatible working definitions. The term 'femicide' is a case in point (see Box 4.1). Some analysts describe femicide as 'the proportion of female deaths occurring due to gender-based causes' (Bloom, 2008, p. 178). Others contend that femicide refers to genderdisaggregated data on homicide or 'murder of women', as indicated by the former Special Rapporteur on Violence against Women, Its Causes and Consequences (UN, 2008, p. 18).

This chapter draws on a combination of data sources to generate a profile of femicide and sexual violence. These sources include reports and surveillance data from national statistical institutions, law enforcement and public health agencies, and research institutions. The resulting GBAV 2011 femicide database entails the following three sets of data, covering 111 countries and territories—56 per cent of the world's female population—for the period 2004–09:7

Femicides in general (homicides with female victims): drawing on the general femicide database alluded to above, information was checked for consistency and categorized according to the classification of countries presented in Chapter Two (TRENDS AND PATTERNS).8 The examination therefore includes a total of 104 countries or territories, providing information on most world regions (with the exception of Middle and Western Africa).

- Intimate partner-related femicides: consisting of information on femicides attributable to intimate-partner violence (IPV), this dataset yielded a smaller sample of 54 countries and territories. In principle, all data included in the IPV dataset refers to homicides committed by current or former intimate partners; however, varying definitions, such as 'spousal' or 'marital' violence, may be used in some settings.
- Femicides committed with firearms: this dataset collates information from a variety of sources for 24 countries and territories.

While not exhaustive and thus under-representing the overall burden of femicide, the GBAV 2011 femicide database is among the largest ever constructed to record femicide. There was insufficient information on direct conflict-related deaths of women, and they have thus been excluded. Due to the absence of relevant international standards, the overall quality of sex-disaggregated information is less reliable and comparable than that of data presented in Chapter Two.

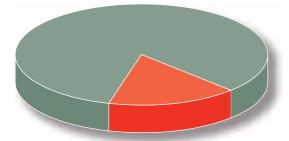
The analysis finds that an average annual total of about 44,000 femicides were reported in the 104 countries and territories under review between 2004 and 2009. What, then, is the global extent of femicide?

The global extent of lethal violence against women was calculated by applying regional rates of femicide to the populations of countries with missing information and using the global rate for the two regions with no data. The estimate yields approximately 66,000 women killed every year at the global level. Female victims thus appear to represent approximately 17 per cent of the total number of violent deaths in a given year (see Figure 4.1). This results in a rate of one woman vs. five men killed per 100,000 total population; this ratio means that, on average, there are five times more male homicide victims than female ones.

FIGURE 4.1 Estimated average proportion of female vs. male homicide victims per year, 2004–09

LEGEND:

- Male victims (330,000; 83%)
- Female victims (66,000; 17%)

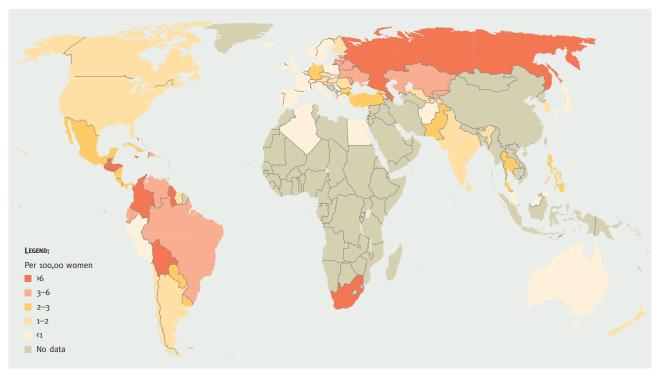


Sources: GBAV 2011 database and femicide database

Map 4.1 reveals specific femicide rates in countries for which reliable information is available. As the map clearly shows, major data gaps are common and sex-disaggregated information is unavailable for most African and Asian countries, including many of those featuring high homicide rates (TRENDS AND PATTERNS). Since the establishment of the Millennium Development Goals, however, a small number of development agencies have invested in statistical systems across Africa based on the conviction that accurate data will allow for more effective policy-making and assessments of interventions. 12 While evidence shows that both public and non-governmental monitoring systems are being developed, major steps must still be taken before a comprehensive surveillance capacity can be established.¹³ To date, the best coverage is available from the Americas and Europe.

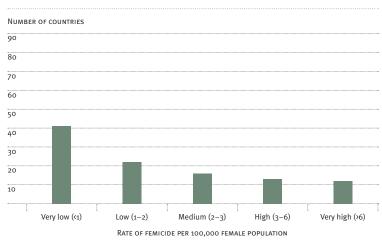
Figure 4.2 considers the distribution of the intensity of femicide per 100,000 female population in 104 countries and territories for which data is available. It finds that 41 countries exhibit 'very low' rates (<1 per 100,000 female population). Twenty-two countries feature 'low' rates (1-2)

MAP 4.1 Rates of female homicide victims per 100,000 female population, 2004–09



Source: GBAV 2011 femicide database

FIGURE 4.2 Countries and territories by rate of femicide per 100,000 female population, 2004–09



Source: GBAV 2011 femicide database

while 16 countries have 'medium' rates (2–3). The figure shows, however, that 13 countries suffer from 'high' rates (3–6) and another 12 countries report a 'very high' intensity of femicide (>6). All in all, 25 countries, or nearly one-quarter of all reviewed countries, exhibit 'high' or 'very high' rates of femicide—that is, rates above the global average. The sum of femicides committed in these 25 countries represents almost half (47 per cent) of the total number of femicides in the database.

At the regional level, the highest rates of femicide are found in regions that also exhibit very high rates of homicide. Figure 4.3 compares the average rates of total homicide and femicide across countries pooled by region.¹⁴ Spreading

the number of femicides across the total population shows discrepancies that appear larger where rates are higher. Four out of five regions with the highest homicide rates in Chapter Two also feature at the top of the femicide ranking, namely in descending order—Southern Africa, 15 South America, the Caribbean, and Central America; meanwhile, femicide rates in Eastern Europe appear disproportionally high with respect to

homicides in general.

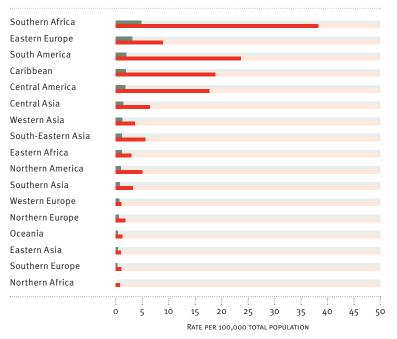
Among regions that exhibit lower rates of femicide, Northern Africa appears at the bottom of the list. In regions with very low rates (<1 per 100,000), the difference between femicide and homicide rates is minor: Western Europe records the smallest difference, with a homicide rate that exceeds the femicide rate by only 0.4 per 100,000 total population. One explanation may be that in countries that exhibit low homicide rates—and that are thus less violent in general—homicides probably include a higher proportion of 'crimes of passion' or domestic violence in which women are frequently the victims. The resulting maleto-female victim ratio therefore approaches 1:1 (CHARACTERISTICS OF ARMED VIOLENCE).

Femicide rates by country

Countries that exhibit high rates of femicide also tend to feature high rates of homicide. At the country level, El Salvador, Guatemala, Jamaica, and South Africa all report rates of 10 femicides per 100,000 female population or above. Indeed, El Salvador ranks first in both femicide and lethal violence in general (TRENDS AND PATTERNS). In addition, Guyana and Honduras register extremely high rates of femicide. In all of these countries, the femicide rates are up to five times higher than overall homicide rates in the majority of Northern, Western, and Southern European countries.

FIGURE 4.3 Average homicide and femicide rates per 100,000 total population, by region, 2004-09

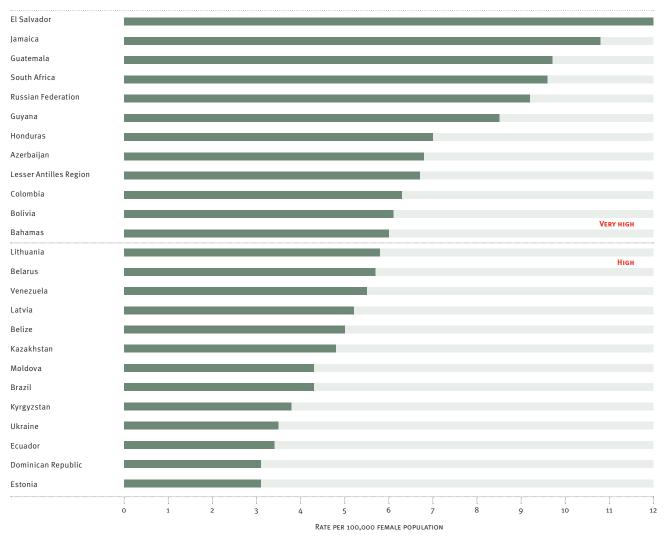
■ Femicide ■ Total homicide



SOURCE: GBAV 2011 database and femicide database (unweighted regional averages)

Of the 25 countries that feature high and very high femicide rates, more than 50 per cent (14) are in the Americas: four in the Caribbean, four in Central America, and six in South America (see Figure 4.4). Seven countries reporting high or very high femicide rates are located in Europe: three in Northern and four in Eastern Europe. Among the remaining countries, three are in Asia and one in Africa. Some countries—such as the Bahamas, Belize, and Guyana—are home to female populations of fewer than 500,000 individuals. In these and other small countries, even a few killings of women generate a relatively high femicide rate. For example, with a total count of seven female victims of homicide and a female population of approximately 141,000, Belize has a high rate of 5.0 per 100,000.16

FIGURE 4.4 Average femicide rates per 100,000 female population in 25 countries and territories with high and very high rates, 2004–09



Source: GBAV 2011 femicide database

Countries in Latin America and the Caribbean appear to share a particularly high incidence of femicide. A comparison reveals that not only young men, but also a disproportionately high number of women and girls, are dying in high numbers. Killings appear to be most frequent in specific states and cities of these countries. Indeed, data

on femicide at the sub-national level reveals even higher rates than those recorded as national averages. In Mexico's Ciudad Juarez, for example, the 2009 femicide rate was 19.1 per 100,000 female population (see Box 4.2). In the state of Espirito Santo in Brazil, the government authorities documented a femicide rate of 10.9 per 100,000 in 2008.¹⁷

Box 4.2 Femicide in Ciudad Juarez: a human rights crisis

The national statistical authority of Mexico—the Instituto Nacional de Estadística y Geografía (INEGI)—reported femicide rates at a historical low of 2.0 per 100,000 female population in 2007, followed by a rapid increase to 3.5 per 100,000 by 2009. Not all areas of Mexico are equally affected by escalating violence; in 2009 three states exhibited rates well above the national average: Chihuahua (13.1 per 100,000 female population), Baja California (10.1), and Guerrero (10.1). Rates in Durango (7.1), Sinaloa (6.0), Sonora (5.1), Tamaulipas (4.5), Oaxaca (3.8), Michoacán (3.8), and Nayarit (3.7) were also above the national average.

Ciudad Juarez in Chihuahua state currently exhibits one of the highest homicide rates in Mexico. It recorded some 170 homicides per 100,000 population in 2009 (INEGI, 2009). The number of women and girls killed in this city is significant—INEGI counts 669 between 1990 and 2009—and constitutes a serious human rights crisis. Figure 4.5 shows trends in femicide at the national and city levels during 1993—2009. Following a radical climb from 2007 to 2008, the peak observed in 2009 is mirrored by a similar trend in the rate of male victimization. Nevertheless, the brutal executions of women, many of whom are tortured before being killed, betrays a particular level of savagery often confined to war zones.

Source: Small Arms Survey elaboration of Arroyo (2011)

Source: Small Arms Survey elaboration of Arroyo (2011)

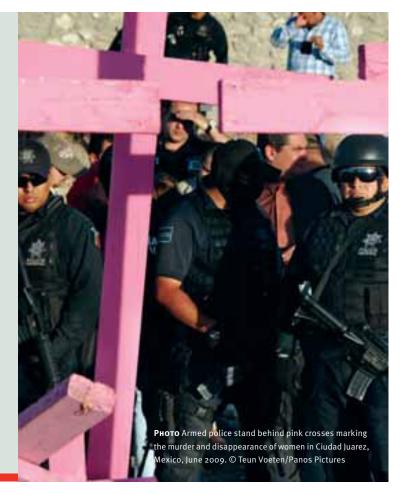
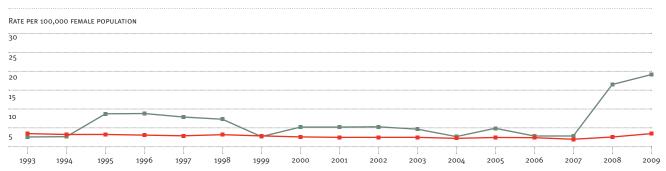


FIGURE 4.5 Trends in femicide per 100,000 female population in Ciudad Juarez and Mexico, 1993–2009

■ Ciudad Juarez ■ Mexico



As noted above, high femicide rates are often accompanied by high levels of tolerance to violence against women among the wider population. Analysts claim that such behaviour is shaped by levels of gender inequality and norms that discriminate against the status of women—norms that are often shared by women themselves. One widely cited study reports that about one in four women surveyed in 33 countries agreed that it was justifiable to be hit or beaten for arguing or refusing to have sex with one's husband (UN, 2010a, p. 137).

Additional research has demonstrated that in settings with high rates of femicide the criminal justice response may be substantially slower and less efficient than for homicide more generally. Cases may not be investigated and consequently not prosecuted, resulting in very low clearance and conviction rates. For example, a recent study finds that between 2008 and 2010 in Honduras, only 211 of 1,010 reported cases of femicide were heard in court and only 56 sentences were passed (Sánchez, 2011, p. 40). Similar patterns have emerged in other regions where femicide is poorly investigated and countered.¹⁹

Armed conflicts in particular can reconfigure gender relations. Research tracking the popular usage of violence in everyday speech in post-conflict El Salvador identifies men as having 'more "right" to use violence than women' (Hume, 2008, p. 66). Indeed, prolonged repression and everyday violence affect the lives of many long after a conflict ends. In particular, Hume finds that:

individuals and communities learned that silence was the only option when no one could be trusted and violence was an ever-present possibility. They testified to feeling afraid of the *orejas* (informers), who were often neighbors or family members (Hume, 2008, p. 71).

Fears of reprisal during the war partly explain the silence regarding contemporary forms of violence and crime, including violence against women.

Certain members of the Salvadoran state had employed local militia to perpetrate violence during the civil war, highlighting how conflict-related violence can affect the domestic and private spheres. Thus:

despite important legislative changes, normative notions of appropriate behavior for men and women still make violence 'acceptable' in certain contexts to the point that it is not always recognized as violence (Hume, 2008, p. 64).

Trends in femicide

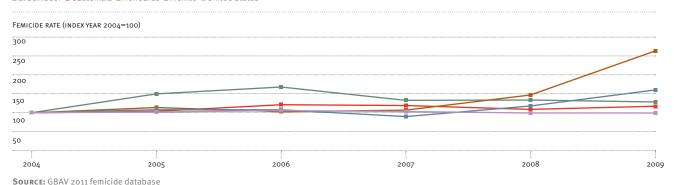
It is possible to examine time-series trends in femicide and violence against women for countries with available data. 21 Attributing the value 100 as a starting point for all countries in 2004 allows several different patterns emerge. These include countries experiencing rapid increases, rapid decreases, fluctuating trends, and more stable rates. Among 22 countries with trend series available, only seven exceeded the starting point rate in 2008 or 2009; the countries are—in descending order of femicide rates—Honduras, Mexico, Finland, El Salvador, Azerbaijan, Guatemala, and the Dominican Republic. In some countries such as Azerbaijan and Finland—rates that had initially climbed may have dropped towards the end of the observed period. The majority of countries under review show stable or decreasing rates. Figure 4.6 displays trends in femicide rates for a sample of five countries with data for the entire 2004-09 period.

Male versus female victims

Available data shows that there is a correlation between the rates of homicides with male victims



FIGURE 4.6 Femicide trends in five selected countries, 2004-09 (basis 2004=100)²⁰



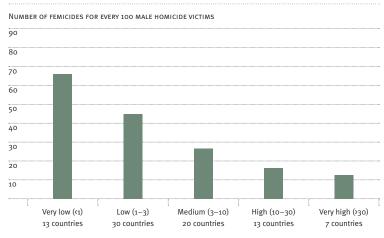
and those with female victims.22 In general, countries featuring high levels of male homicide victims also report high rates of femicide. El Salvador and Guatemala exhibit the highest rates of homicide with respect to both male and female victims. The Russian Federation and Guyana feature relatively high femicide rates, while the opposite can be observed in Colombia, Venezuela, and the US Virgin Islands, which show high homicide rates with respect to male victims.

Nevertheless, a deeper inspection of the maleto-female homicide victim ratio in each country shows considerable variation, partly reflecting the population structure of each country.²³ Indeed, in some countries—especially those presenting low homicide rates—the victimization rate for women appears very close to that observed for men. This is mostly the case in countries with disproportionately large male populations, such as Brunei Darussalam. It is also the case where homicide is relatively rare, such as in Austria, Switzerland, Norway, and Japan.24 This gender gap becomes more significant when the levels of overall violence increase, with the largest differences being observed in Venezuela, Colombia, Guatemala, and El Salvador, in that order.

In countries that feature very low rates of homicide per total population, the difference between rates for men and women appears smallest. In these countries, femicide rates are, on average, just one-third lower than homicide rates for men (see Figure 4.7). Yet Figure 4.7 also shows that in countries experiencing high and very high homicide rates, femicide rates represent just a fraction of homicide rates for men: 16.3 per cent in countries with high rates and 12.5 per cent in those with very high rates. There is a negative correlation between homicide rates and the proportion of women killed. Where homicide rates are higher, the disparity between sexes is higher, and the proportion of male victims is much higher. For example, in Venezuela, Colombia, Puerto Rico, and Brazil, the proportion of male homicide victims is more than ten times greater than the proportion of female ones. This does not mean that women were safer in these countries than elsewhere, given that they were also the countries in which femicide rates were the highest during the period under review.

The countries that exhibit the highest homicide rates also have higher proportions of male and female homicide victims compared to other countries. Even if the proportion of women killed

FIGURE 4.7 Number of femicide victims for every 100 male homicide victims in 83 countries, 2004–09



HOMICIDE RATE PER 100,000 OVERALL POPULATION

Sources: GBAV 2011 database and femicide database

may appear small with respect to that of male homicide victims within a country, the actual femicide rate remains high. A possible explanation for these sustained high rates is the involvement of organized crime and gangs in committing violent acts against women and girls, especially femicide. This is not the case in the majority of countries, where femicides apparently occur predominantly within the family or in the context of an intimate relationship (CHARACTERISTICS OF ARMED VIOLENCE).

Characteristics of femicide

In order to better understand the factors shaping femicide it is important to disaggregate the actors, causes, and circumstances shaping the killing of women. Specifically, the characteristics of the perpetrator are a central component of this classification system. It is widely accepted that male perpetrators comprise the vast majority of offenders

while female perpetrators represent a residual portion. ²⁶ Since femicide often occurs in the family or in restricted circles close to the victim, the perpetrator is likely to be found in most cases. Often there is a previous connection with the victim, most frequently at the family or intimate partner level. The broad category of intimate partners includes all sexual partners—such as current and former spouses or partners—as well as other close family members if involved in an intimate relationship with the victim. Non-intimate partners include friends and acquaintances, as well as known strangers and family members.

The perpetrator remains unknown if the investigation does not succeed in identifying the offender, preventing the case from being 'solved'. This is frequently the case with respect to deaths occurring between armed groups, during armed conflicts, and as a result of robberies, gang activity, shootings in public places, and other incidents of a similar nature. In addition, the capacity and resources necessary for effective investigations may also have an impact on the number of 'unsolved' cases (CHARACTERISTICS OF ARMED VIOLENCE).

Some researchers contend that women who kill themselves in the context of protracted violence or aggression should be counted as victims of femicide. Indeed, the category of forced suicide is the frequent outcome of strong social pressure and honour based violence, such as reported in Iraqi Kurdistan (KWRW, 2008). The consequences of structural repression and social stigmatization in such settings can lead to enduring physical harm and serious psychological hardship.

Another lethal scenario is the killing of a rape victim in order to restore the family 'honour'. For example, in Libya women and girls who become pregnant through rape run the risk of being murdered by a family member in so-called 'honour'

Box 4.3 Insecurity and impunity in Afghanistan

The personal security of Afghan women and girls has been hampered by decades of armed conflict, discrimination, and widespread impunity. The post-Taliban period has witnessed growing international preoccupation regarding women's rights, as evidenced by the creation of the Afghanistan Independent Human Rights Commission and the Ministry of Women's Affairs at the Bonn Conference in 2001. Both agencies have since been struggling to bring about meaningful social change in the absence of a strong civil society (Azarbaijani-Moghaddam, 2007).

Armed groups persistently target women who are seen as breaking away from their traditional roles. Numerous women in public positions have been threatened, harassed, and killed. As reported by the United Nations Assistance Mission in Afghanistan:

Of five high-profile women interviewed in 2005 by a newspaper interested in covering stories of Afghan women who wanted to take a role in reconstructing their country, three have been murdered and one had to flee the country (UNAMA, 2009, p. 10).30

Malalai Kakar, the highest-ranking female police officer in Kandahar, was killed in September 2008, allegedly because she was leading a unit of ten policewomen dealing with domestic violence (UNAMA, 2009, p. 11).

Young girls are also explicitly targeted with violence:

Insurgent groups have repeatedly attacked education infrastructure in general and girls' schools in particular. Security fears have resulted in the closure of over 70% of schools in Helmand province of Afghanistan (UNESCO, 2011, p. 15).

The Ministry of Women's Affairs recorded 192 attacks on schools by insurgent groups between July 2005 and February 2007 alone, including their looting, burning, and total destruction. As a result of such attacks, 'parents fear sending their children to school, especially daughters' (MOWA, 2008, p. 11).

Today, only 66 girls are enrolled for every 100 boys (UNESCO, 2011, p. 8).

Afghanistan suffers from extensive domestic violence directed against women. In 2006, UNIFEM Afghanistan, together with participating agencies,³¹ established a database on violence against women (UNIFEM Afghanistan, n.d.). Between January 2003 and June 2005, the project recorded 1,327 cases from 818 respondents. An analysis of the data highlights that most attacks against women were perpetrated within their homes and by someone close to them, such as a husband, father-in-law, son, or cousin (82 per cent). The most common incidents of violence were physical attack, followed by forced marriage (UNIFEM, 2006, pp. 1–2, 19).

Incidents of rape were less frequently reported, suggesting significant undercounting. In the course of research on violence against women in Afghanistan, the UN Assistance Mission found it 'extremely difficult' to use terms such as 'rape' or 'sexual violence', especially in relation to marriage (UNAMA, 2009, p. 21). Nevertheless, the research suggests that very young girls in forced marriages are especially at risk of being raped by a family member of the husband (p. 21).

The high level of impunity is considered a major contributing factor to widespread incidents of violence against women in general and rape specifically. Any woman who reports a rape risks further victimization, including criminal prosecution because of extra-marital sexual intercourse. As the UN Mission reports:

Coupled with the conservative nature of Afghan society and the social stigma of rape, families often attempt to resolve the case privately or at the community level, through a *jirga* [a gathering of tribal elders] or *shura* [a council of elders] (UNAMA, 2009, p. 25).

These mechanisms provide few rights to the victim, however.





killings (Harter, 2011). Other studies confirm that a rape victim may be killed in defence of the family 'honour' (Ruggi, 1998; Faqir, 2001).

Even where forced suicide and femicide may not take place, repression of women and girls generates lasting consequences. For example, according to the Afghanistan Independent Human Rights Commission, self-immolation is not infrequent among girls and women in Afghanistan (see Box 4.3). The Commission largely attributes these cases to:

forced marriage, premature marriage and multiple marriages as well as other discriminatory practices, the lack of societal awareness of women's rights, the psychological impact of 25 years of war, customary practices such as Tuyana (bride price) and family problems (AIHRC, 2004, p.32).

The correlation between domestic violence and suicide is not limited to countries confronted with chronic homicidal violence or armed conflict. Research undertaken in the United States reveals that between 35 and 40 per cent of victims of domestic violence made at least one suicide attempt at some point during or after the termination of their abusive relationship (Stark and Flitcraft, 1996). A recent European Union study that considers a sample of homicides and femicides in the context of spousal violence identifies suicide as the cause death of 42 per cent of the women in the sample (Psytel, 2010, pp. 9-10).

Indeed, the connections between femicide and suicide are more complex than often assumed. A classification of femicide from a study carried out in five countries in Southern Africa—Botswana, South Africa, Swaziland, Zambia, and Zimbabwe includes suicide as a key category among seven:

PHOTO ▼ A victim of

August 2010.

AP Photo

© Rich Pedroncelli/

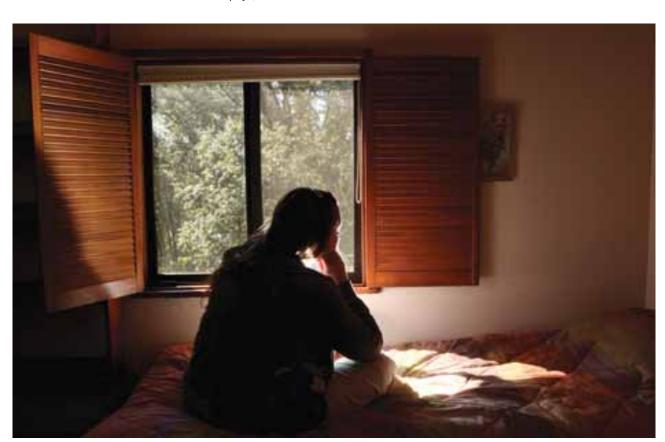
domestic violence takes

shelter at a safe house in Nevada County, California,

- intimate femicide involving women killed by current and former partners;
- femicide by other (male) family members;
- sexual femicide such as rape followed by murder;
- witch femicides;
- ritualistic femicides involving women and girls ritually killed to cut out their genital organs;
- women killed by thieves or robbers; and
- suicides by women experiencing violence, including cases in which there is strong evidence that women kill themselves to escape intolerable levels of violence (Watts, Osam, and Win, 2001, p. 91).

IPV-related femicides

Femicide is often linked to situations involving intimate partner violence, between either spouses or partners. An intimate partner may be defined as a person with whom the victim had a physical intimate relationship, either at the time of the femicide or in the past. In this context, it is irrelevant whether they were ever married or lived together. For this reason, the term 'intimate partner violence' is more apt than 'spousal' or 'marital' violence. All these categories, however, may be captured in the wider definition of 'domestic violence'. As noted in Chapter Three, the proportion of homicides occurring in the domestic sphere is different for males and females and is not the same



Box 4.4 Intimate partner violence

Many studies identify intimate partner violence as a major contributing factor to femicide. Women represent the largest group at risk of IPV. According to the US Bureau of Justice Statistics, women in the United States are more than five times more likely than men to be victims of crime committed by an intimate partner (see Figure 4.8).³²

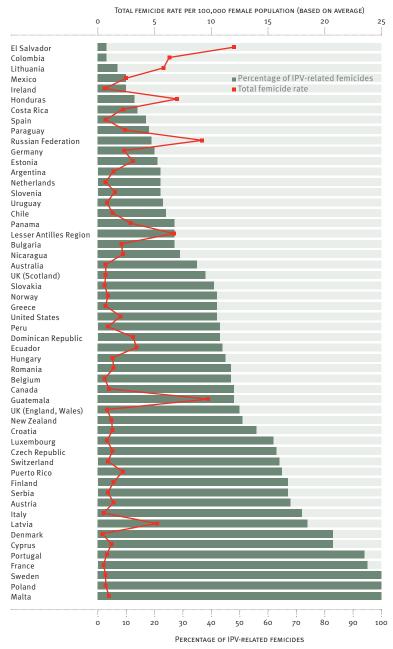
Indeed, as shown in Figure 4.8, women represent a disproportionately large share of the IPV victims with respect to the average; while the total rate is 260 per 100,000 population, the rate for women is 430, while the rate for men is 80. Furthermore, about 30 per cent of femicides are perpetrated by an intimate partner, compared to only five per cent of homicides with male victims (BJS, 2005).

FIGURE 4.8 Victims of violent crime committed by an intimate partner in the United States, by sex and rate per 100,000 population, 2008



'Intimate partner' generally refers to current and former spouses, live-in partners, and dating partners. IPV is not limited to violence committed by men against women; it also refers to cases of violence by women against men and by one partner against the other in same-sex couples (WHO, 2002). IPV is frequently represented as a pattern rather than a single incident, often escalating from less serious to more severe violence. IPV may be considered a part of domestic violence, which is not limited to couples or excouples but extends to include acts committed by parents and other siblings who use violence to coerce, dominate, or exercise power over the victim.

FIGURE 4.9 Total femicide rates per 100,000 female population and estimated percentage of IPV-related femicides per country, 2004–09



Source: GBAV 2011 femicide database

in all countries. Statistically, women run a much higher risk of being killed by their partners than do men (WHO, 2002; UNIFEM, 2006; see Box 4.4).

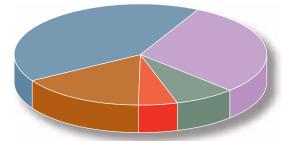
Figure 4.9 shows total rates of femicide and the estimated percentage of IPV-related femicides based on the sample of 54 countries and territories for which data is available. There is a weak negative correlation between the two indicators (-0.431, n=54), reflecting that the higher the rate of femicide, the lower the proportion of IPV-related femicide. This corroborates the conclusion that higher rates of victimization of women may accompany widespread violence rather than domestic or intimate partner violence. In countries where femicide rates are high, women also run a higher risk of becoming targets of violence *outside* the private sphere.

Violence committed by current and former intimate partners represents a risk across all countries and cultures. Strikingly, the vast majority of women killed in the context of IPV had previous experience of domestic violence or stalking, including

FIGURE 4.10 Deaths of men and women as a consequence of domestic violence in the European Union, 2006

LEGEND:

- Male homicide victims (272; 8%)
- Male collateral homicide victims (186; 5%)
- Male suicides after femicide (536; 16%)
- Femicide (1,409; 41%)
- Female suicides after violence (1,010; 30%)



Source: Small Arms Survey elaboration of Psytel (2010)

being physically abused by the same perpetrator (McFarlane et al., 1999; Campbell et al., 2003). Understanding these and other risk factors is critical when considering measures to prevent and reduce femicide.

As noted above, the total number of femicide victims may be higher if suicides and indirect casualties are also included. For example, children, relatives, or other witnesses may be killed as a result of IPV. A study carried out in the 27 countries of the European Union analyses 3,413 deaths resulting from domestic and spousal conflicts in 2006, taking into account both male and female victims (Psytel, 2010, p. 9; see Figure 4.10). The findings are instructive:

- Incidents of femicide were most common, accounting for 41 per cent of all cases.
- Some 8 per cent of the victims were men killed by their female partners.
- Women who committed suicide after enduring long-lasting domestic or spousal violence represent 30 per cent of the sample.
- In 16 per cent of the cases, perpetrators killed themselves in 'homicide-suicide' scenarios.
- Collateral victims who happened to be involved in domestic or spousal incidents represent 5 per cent of the sample.

In some cases—known as 'extended suicide', 'familicide', or 'homicide—suicide'—the perpetrator may kill his or her entire family before committing suicide. The vast majority of these incidents involve a male perpetrator who commits 'femicide—suicide' or, in some cases, 'femicide and attempted suicide'; they tend to take place in the home and guns represent the instrument of choice (Auchter, 2010; Liem and Nieuwbeerta, 2010). Homicide—suicide represents an important component of lethal domestic violence. Research on this issue

5

is most advanced in Europe and the United States, where this type of incident is more frequent among the middle class than in the lower strata of society (Oberwittler, 2008; Kivivuoria and Lehtia, 2003). Not much information is available from low- and middle-income countries. Yet research in South Africa has identified patterns similar to those found in high-income countries, highlighting that approximately 19 per cent of perpetrators of femicide commit suicide within a week of the murder (Roberts et al., 2010; Abrahams, Jewkes, and Mathews, 2010).

The use of firearms in femicides

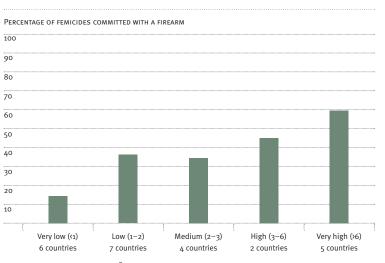
The 2008 *Global Burden of Armed Violence* estimates that approximately 60 per cent of homicides are committed with a firearm (Geneva Declaration Secretariat, 2008, p. 5). While firearms are frequently used in homicides involving men, the use of firearms in femicide is less frequent. Nevertheless, firearms play an important role in violence against women, especially in IPV. Moreover, when a firearm is used, the probability that the perpetrator of femicide will commit suicide is also higher (Mathews et al., 2008).

Firearms are more often used merely to threaten rather than to shoot victims (Hemenway and Azrael, 2000). Firearms may be used to coerce victims to comply with one or more offenders. Weapons are also frequently present in the case of stalking. Specifically, stalkers may own weapons and use them 'to control and intimidate rather than injure victims' (Meloy, 1998, p. 17). Nevertheless, displaying firearms is a predictor of actual use. Many victims of femicide had previously reported being threatened with a firearm (Campbell, Webster, and Glass, 2009). Likewise, the presence of a weapon in the home may also facilitate lethal violence against women and girls; indeed, a firearm is more likely to be used to threaten and injure

family members than to protect the home from intruders (Hemenway, 2011, p. 7). A Canadian study has demonstrated that gun policy limiting access to firearms in households has reduced the risk of domestic disputes ending tragically, based on a study of the number of women killed over a six-year period (RCMP, 2010).

In the 24 countries for which adequate data is available, there is a direct correlation between femicide rates and the percentage of femicides committed with firearms. Low homicide rates frequently correspond with the rare use of firearms (see Figure 3.7, CHARACTERISTICS OF ARMED VIOLENCE). By way of contrast, in countries with high homicide rates—such as Brazil, Colombia, El Salvador, Guatemala, and Honduras—more than 60 per cent of femicides perpetrated in 2004–09 involved the use of a firearm. Figure 4.11 shows the average distribution of femicides committed with firearms by rate of femicide per 100,000 female population.

FIGURE 4.11 Average percentage of femicides committed with firearms in 24 countries, by femicide rate, 2004–09



FEMICIDE RATE PER 100,000 FEMALE POPULATION

Source: GBAV 2011 femicide database

Figure 4.11 also reveals that the use of firearms is much more frequent in countries that exhibit very high femicide rates. Among all countries under review, an average of one-third of all femicides were committed with firearms.

Figure 4.12 highlights the difference between the use of firearms in homicides with male vs. female victims in Mexico on the whole and in Ciudad Juarez from 1993 to 2009. On average, approximately 60 per cent of homicides involving a male victim were committed with a firearm; in contrast, fewer than 40 per cent of femicides involved the use of a gun. Since 2005, there has been a marked increase in the proportion of homicides committed using a firearm, with more than two-thirds of male victims killed by firearms in 2009.

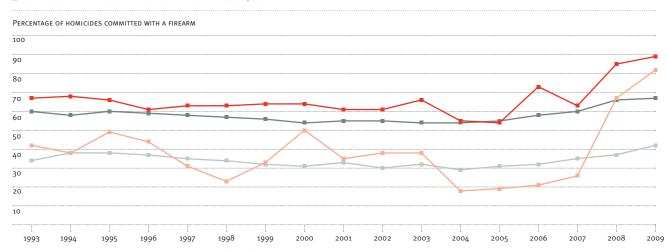
The extremely high levels of violence in Ciudad Juarez, capital of Chihuahua state, are reflected in the very high proportion of homicides committed with firearms, which is generally higher than

the national average for both male and female victims. In 2007–09, the percentage of femicides committed with firearms increased dramatically, reaching 82 per cent in 2009 and thus nearing the percentage observed in homicides with male victims (89 per cent).

In the United States, data from the Centers for Disease Control and Prevention shows that firearms were used in approximately half of all recorded femicides in 1999–2007 (CDC, n.d.a; see Figure 4.13). Most of the femicides by firearm occurred in the age group of 15–24-year-olds, in which they account for 59 per cent of the cases. This suggests that firearm use may be linked to the age of the victim. Firearms were also used to kill more than one-third of the victims aged 5–9 and almost half of those aged 10–14. Indeed, 'children aged 5 to 14 years in the United States have 11 times the likelihood of being killed accidentally with a gun compared with similarly aged children in other

FIGURE 4.12 Percentage of male and female homicide victims killed by firearm, Mexico and Ciudad Juarez, 1993-2009

- % of male homicide victims killed with a firearm in Mexico
- ■% of female homicide victims killed with a firearm in Mexico
- ■% of male homicide victims killed with a firearm in Ciudad Juarez
- % of female homicide victims killed with a firearm in Ciudad Juarez



Source: Small Arms Survey elaboration based on INEGI (2009)

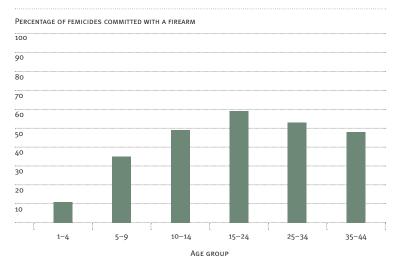
developed countries' (Hemenway, 2011, p. 2). Furthermore, incidents involving girls killed by a firearm most frequently took place inside a residence, often as a result of reckless behaviour with a firearm (Coyne-Beasley, Moracco, and Casteel, 2003, p. 358).

Hidden forms of lethal violence against women

There is little doubt that the data presented above underestimates the extent and breadth of femicide and violence against women. The fact is that such violence frequently goes undocumented as a result of the reluctance of victims to report and due to the poor accessibility of reporting systems. In some contexts, violence against women and girls is tolerated and condoned. Some countries still have legislation in place that foresees the use of violence to sanction a woman's perceived misbehaviour. The development of an international debate to guarantee equal rights for women and to protect them from violence has been quite slow. A steady process only started with the Declaration on the Elimination of Violence against Women (UN, 1993); it continued with the Convention on the Elimination of All Forms of Discrimination against Women and the Beijing Declaration, culminating in UN Security Council Resolution 1325 on 'Women and Peace and Security' in 2000 (UN, 1994; 1995; 2000).

This section considers examples of lethal and non-lethal violence that may be difficult to capture at a global and even national statistical level. Specifically, 'honour' killings and dowry deaths may not be subject to criminal justice procedures or punished with the same seriousness as homicide (HRCP, 2011; see Box 4.5). These and other related practices occur in many different countries across Asia and Africa—and among diasporas—

FIGURE 4.13 Percentage of femicides committed with firearms in the United States, by age group, 1999–2007



Source: Small Arms Survey elaboration of CDC (n.d.a)

as well as in certain countries in Europe and the Americas (Gendercide Watch, 2008). Some jurisdictions may not consider that killing women or forcing them to commit suicide under certain circumstances even constitutes a crime. Acknowledging this gap in his 2010 report, the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions encourages more research on the link between gender-based violence and killings, 'whether concerning honour killings, femicide, domestic violence or witchcraft killings' (UN, 2010b, paras. 62–63).

There are myriad examples of women being subjected to violence or killed by relatives because they allegedly infringed on social customs or damaged the family 'honour'. The UN Population Fund estimates that around 5,000 women and girls are abused, exposed to violence, and in some cases killed each year by male relatives as punishment for a range of behaviour judged to have damaged the reputation of the household,

Box 4.5 Dowry deaths in India

The home of the in-laws in South Asia can be a particularly dangerous environment for women and girls. Survey data suggests that the vast majority of reported murders of women in India are incidents of husbands killing their wives, with 85 per cent of female victims killed in their own home (Mohanty et al., 2004; UNFPA, 2003).

Marriages involving dowry and other demands from the husband are not only a risk factor for domestic violence, but also a direct cause of violent death for women. While dowry payment is illegal in India, it remains common practice, with related disputes or violent demands for more money frequently leading to the death of brides or brides-to-be (Ash, 2003).

Of India's reported 32,369 homicide victims in 2009, around one-quarter were female (NCRB, n.d.b). 'Dowry deaths' under Section 304B of the Indian Penal Code are recorded separately.³³ In 2009, 8,383 cases were filed under that heading, which may include more cases of violent deaths of women and girls than those recorded under the homicide category. Taken together, dowry killings may represent up to 26 per cent of violent deaths and more than 50 per cent all violent deaths of women and girls in India in 2009.³⁴

The number of police-recorded dowry killings in India has risen by 25 per cent since 1999 (NCRB, n.d.b, p. 58). Whether the rise is due to an increase in police and law enforcement attention to the issue or a real underlying increase is unclear. The latter explanation is supported by a retrospective hospital study of female homicide victims, which estimates that 30 per cent of those deaths are dowry-related (Mohanty et al., 2004, p. 153).

Source: Malby (2011)



clan, or tribe (UNFPA, 2003). Women who demonstrate intolerance towards traditional restrictions, especially as regards the choice of friends or partners and sexual behaviour, are especially at risk.

Another scenario in which women and children may be killed is when they are believed to be practising witchcraft. According to a 2002 report by Radhika Coomaraswamy, the then Special Rapporteur on Violence against Women, Its Causes and Consequences, the practice is found 'mainly in Asian and African communities' (UN, 2002, p. 16).

While victims can be male or female, the majority of witch killings across societies appear to target women. Reports of some 50 ritual killings in Papua New Guinea in 2009, for example, provide accounts of young and old victims, mostly women and girls (AI, 2009; Parry, 2009). In Tanzania, up to 1,000 persons are reportedly killed every year based on allegations of witchcraft; the majority of the victims are women above the age of 50 (HAI, 2008, p. 7). According to a study carried out in Ghana, being aware of the status of women and girls in a society is crucial to understanding witch-related femicides (Adinkrah, 2004). The Special Rapporteur also points out that witch killing is often the result of highly unequal gender relations in a society (UN, 2002, p. 17).

Research suggests that witch murders are often linked to poverty and situations of economic despair. One study carried out in Tanzania assesses the number of witch murders in connection with extreme rainfalls that lead to droughts or floods. It finds that the link is significant: 'There are twice

PHOTO ◀ A newlywed stands in a shelter for victims of dowry violence next to a poster highlighting the economic demands some new brides face from their husbands and in-laws, New Delhi, June 2004. © Elizabeth Dalziel/AP Photo

as many witch murders in years of extreme rainfall as in other years' (Miguel, 2005, p. 1153). Similarly, reports of witch killings in India suggest that they may well be the result of economic suffering:

When people suffer from illnesses, or if there is a lack of drinking water, or if there is a death in the family, or cattle die, or if there is a crop failure, or even if there is a natural calamity, the local magic doctor is approached. [. . .] He usually declares a woman or women to be witches or 'dayans' and suggests their elimination through death, to be rid of the evil spirit that is causing the problems (UN, 2002, p. 17).

Alleged witches are killed in a variety of ways. Killings may take ritual forms, including burning, stoning, or beating.³⁵ In the past few years, several reports have called attention to the risk of witchcraft rituals acting as covers for trafficking in organs (Kelly, 2009). In such scenarios, victims are abducted and killed in order to sell their organs.³⁶

Another way that women are intentionally and unintentionally killed is through infection with HIV/AIDS. Unprotected sex is the major mode of HIV transmission and women victims of sexual violence are at high risk of contracting the virus. According to the World Health Organization, forced sex increases the chances of virus transmission. because of the likelihood of tissue laceration (Dunkle and García Moreno, 2010). It is extremely difficult to quantify the extent of the problem. Victims of violence rarely seek help or report incidents. Many live in abusive relationships in which asking for medical care would raise suspicion of the partner, who may use further violence against them. A lack of information and medical assistance contributes to the spread of HIV/AIDS and limits the effectiveness of prevention programmes and interventions.

Box 4.6 HIV and sexual violence in Kenya

Violence against women is not only a public health problem, but also a key vector of the HIV/AIDS pandemic. There is evidence that women and girls in Kenya were at especially high risk of contracting HIV/AIDS during the post-election violence of December 2007 and early 2008. Violence erupted suddenly, ushering in waves of mass rape. Hospitals were soon confronted with a rapid surge in the number of rape victims seeking assistance (Holmes, 2008).

Some groups of women were more vulnerable to sexual violence and HIV/AIDS transmission than others. Specifically, the situation was extremely serious among the approximately 350,000 displaced people due to the elevated incidence of gang rape (COVAW, 2008). Even after the postelection violence subsided, the risk for women remained high.

In Kenya, as elsewhere, women are socialized to accept, tolerate, and even rationalize domestic violence and to remain silent about such experiences. A recent study finds that 44.1 per cent of national HIV incidence can be attributed to heterosexual sex within existing unions and regular partnerships (Kenya NACC, 2009). These findings confirm a long-hidden reality: that spousal sexual violence, usually initiated by the male partner, is a major source of HIV infection.

A recent study carried out in Kenya reveals that HIV-positive women are subjected to many forms of abuse by their partners (Machera, 2009). Violence and the threat of violence can hamper women's ability to adequately protect themselves from HIV infection or assert healthy sexual decision-making. In addition, women living with HIV are more likely to experience violence due to their HIV status (Dunkle and García Moreno, 2010).

The Kenya Demographic and Health Survey 2008–09 documents a sizeable reduction in the proportion of women who say they have experienced physical violence since they turned 15

years old (KNBS, 2010). The survey finds a reduction from 49 per cent in 2003 to 39 per cent in 2008–09. Even so, at least 12 per cent of women aged 15–49 reported that their first sexual intercourse was forced against their will. Moreover, overall, one in five Kenyan women (21 per cent) experienced sexual violence. Analysis across provinces indicates that the two provinces with the highest proportion of women experiencing physical violence (Nyanza and Western provinces) also featured the highest proportion of women experiencing sexual violence.

Among surveyed women who had been married at least once, sexual violence was reportedly perpetrated mainly by current and former husbands and partners. Those who never married said that violence was committed mainly by boyfriends, although almost one in five never-married women (19 per cent) was violated by a friend or acquaintance and almost as many by a stranger (17 per cent). The likelihood of experiencing either physical or sexual violence increases with the age of the women. That said, women with secondary or higher education and those in the top two wealth quintiles are less likely to experience sexual violence than other women.

In the vast majority of cases, sexual violence is perpetrated by persons known to the victims (Machera, 2009). Indeed, strangers commit only 6 per cent of recorded sexual violence. About 37 per cent of women who experienced sexual violence reported current husbands or partners as the perpetrators, followed by current or former boyfriends (16 per cent) and former husbands or partners (13 per cent). Women who have experienced both physical and sexual violence are more likely to seek help than those who experienced only one or the other (KNBS, 2010). Older women are more likely than younger women to seek help to stop the violence.

To reduce sexual violence the Kenyan government has enacted the Sexual Offences Act No. 3 of 2007 (KNBS, 2010). The law has been lauded as a move in the right direction, although its implementation remains slow. For example, the cases brought by women and girls who were raped during the post-election violence in 2007–08 have not yet been addressed by the courts. Mechanisms for retrieving evidence and tracking down perpetrators are generally substandard. Consequently, the law has not yet succeeded in deterring rapists.

Source: Machera (2011)

PHOTO ► A woman stands outside an office dealing with child abuse and violence against women at a police station in Mombasa, Kenya, 2005.

© Sven Torfinn/Panos Pictures





The level of brutality has been heightened through the systematic use of rape as a weapon of war and perpetrated by soldiers who carry the HIV/ AIDS virus. Indeed, the widespread and systematic targeting of civilians and the use of rape is a striking aspect of recent armed conflicts in Sub-Saharan Africa (Elbe, 2002, p. 168; see Box 4.6). In other parts of the world, rape has also been used as a systematic weapon of terror leading to the spread of HIV/AIDS. During the military rule between 1991 and 1994 in Haiti, for example, women were raped because of the alleged political activities of their husbands. The perpetrators were reportedly 'police, soldiers and criminal gangs operating with impunity' (Bastick, Grimm, and Kunz, 2001, p. 79). Twenty per cent of police officers reportedly suffered from HIV/AIDS in Haiti at the time. As a consequence, in 2001 Haiti had the highest prevalence of HIV/AIDS in the Western hemisphere (p. 79).

Conclusion

The critical role of collecting data on lethal violence against women cannot be overstated. And while the evidence base is growing to demonstrate the scale and distribution of femicide and violence against women, this chapter has underlined critical information gaps, especially across Africa and Asia. The fact is that the quantity and quality of data on femicide are very poor and characterized by incomplete geographical coverage. Reliable and valid information on violence according to sex, age, relationship to the perpetrator, and instrument used is crucial to designing effective violence prevention and reduction strategies.

In settings where reported levels of violence are high, femicide levels are also likely to be high. Similarly, these environments are likely to be characterized by the systematic discrimination

of women and pervasive gender inequality. In these places, women and girls cannot enjoy a safe or secure lifestyle. The chapter calls attention to incidents occurring inside as well as outside the domestic sphere. Women are vulnerable to violence committed by strangers, but more frequently they are unsafe in their own homes.

A key conclusion, then, is that there is a need to enhance reporting and analysis of data on lethal and non-lethal violence against women—both crossnationally and sub-nationally. This goal could be achieved by undertaking steps such as those proposed by the Geneva Declaration study on *Tackling Violence against Women: From Knowledge to Practical Initiatives* (Milliken, Gilgen, and Lazarevic, 2011). Practical recommendations include:

- supporting international initiatives to track violence against women globally;
- the promotion of field-based research on mapping violence against women, including surveys to measure violence committed by intimate partners and strangers; and
- the development of costing tools to improve estimates of the effects of violence against women on development, including direct and indirect costs of violence against women.

Abbreviations

INEGI Instituto Nacional de Estadística y Geografía (Mexico)
IPV Intimate partner violence

Endnotes

- 1 Figures based on a report generated at CDC (n.d.b).
- The findings are based on a 2007 survey that estimates that between 1.7 and 1.8 million women were raped in their lifetime in the Democratic Republic of the Congo (Peterman, Palermo, and Bredenkamp, 2011).

- 3 The data presented in this chapter has largely been obtained from the following international sources: a) the database developed by the Homicide Advisory Group at Harvard University, covering 96 countries and providing public health data on violent deaths disaggregated by age and sex (Bhalla et al., 2011); b) a study on femicide carried out by the Queen Sofia Center in Spain, covering 44 countries (Sanmartín et al., 2010); c) the United Nations Economic Commission for Europe database on gender statistics, covering 29 countries, mostly from the European Union (UNECE, n.d.).
- 4 Russell also notes that certain dictionaries define 'femicide' as 'the killing of a woman' (Russell, 2008, p. 3).
- 5 See, for example, UNECE (n.d.).
- 6 See, for example, the compilation of data at UNECE (n.d.) and that presented in Sanmartín et al. (2010).
- 7 For details on population data and regional classifications, see the online methodological annexe at www.geneva declaration.org.
- 8 As in Chapter Two, several smaller Caribbean islands have been grouped together as the 'Lesser Antilles Region'; they are Anguilla, Antigua and Barbuda, Barbados, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. The five countries that reported no female victims are excluded from the analysis; the countries are Andorra, Liechtenstein, the Maldives, Monaco, and Qatar.
- The fact that this dataset contains a smaller number of countries than does the one for general femicide reflects the difficulty inherent in capturing additional information on the circumstances of homicide. Many countries may lack the capacity or resources to compile such information, which is extremely scarce at the international comparative level. Furthermore, due to the use of varying definitions or data collection methods in different countries, the more detailed the information, the higher the risk of incomparability.
- Femicide rates represent an average over the period 2004–09. This 'smoothing' of data reduces extreme high and low points as well as the distortions resulting from gaps in data series.
- 11 For methods of calculation, see the online methodological annexe at www.genevadeclaration.org.
- For example, the World Bank recently provided funding for the restructuring of the Nigeria Bureau of Statistics; see Zavala and Hazen (2009) about the role of injury prevention surveillance systems in Africa.
- See Small Arms Survey (2006) for an assessment of injury surveillance systems from the Injury Prevention Initiative for Africa. The Initiative was founded in 1997 as a network of individuals and institutions involved in violence and injury prevention on the African continent and to highlight the scale and distribution of mortality and morbidity due to 'external' causes, including interpersonal and collective violence.

- Regional homicide rates presented here do not correspond to rates of violent deaths per region in Figure 2.3 in Chapter Two, which also include direct conflict deaths and are calculated based on a larger number of countries (TRENDS AND PATTERNS).
- 15 The analysis includes data from only one country in Southern Africa.
- 6 See the online methodological annexe at www.geneva declaration.org.
- 17 A detailed breakdown of femicide rates at the state and municipal levels in Brazil is presented by the Brazilian Ministry of Justice in Waiselfisz (2011).
- See the 2009 decision of the Inter-American Court of Human Rights holding Mexico responsible for unsolved disappearances and killings of women in Ciudad Juarez (SRE, 2009, p. 1); see also the reiterated requests of the Special Rapporteur on Violence against Women, Its Causes and Consequences, Rashida Manjoo, that Mexico respond to continued violence against women in the country and especially in Ciudad Juarez (UN, 2011, pp. 21–23).
- 19 See, for example, Suarez and Jordan (2007) and RNOCDH (2010).
- In order to compare trends across countries without the interference of the different levels, the chart shows patterns over time starting from a normalized value of 100, corresponding to the number of femicides in the country in the year 2004. Lines show percentages of change for each country over the period 2004–09.
- Another challenge for statistical analysis of femicide is represented by time series. The GBAV 2011 femicide database includes very few countries with complete time series, which limits the potential of trends analysis. Furthermore, trend data is frequently available for countries with low rates, in which there may be large fluctuations due to the small number of cases.
- While there is a dearth of homicide data on women in many countries, relevant information on male victims is also limited.
- The population sex ratio varies significantly across countries. The global ratio is estimated at 101.7 men per 100 women for 2010 (UNdata, n.d.). Some countries have larger differences, showing an excess of either male or female population. For example, Kuwait, Bahrain, Saudi Arabia, and Brunei Darussalam have a strong prevalence of male population, with ratios of 146, 135, 121, and 106 men per 100 women, respectively. In contrast, countries with a larger female population are Latvia and Estonia (86 men per 100 women), Belarus (87), and Cape Verde (92) (UNdata, n.d.)
- These countries exhibit some of the lowest homicide rates in the world: Austria (o.68 per 100,000 population), Switzerland (o.83), Norway (o.69), and Japan (o.45) (TRENDS AND PATTERNS).

- 25 See, for example, Suarez and Jordan (2007) on the involvement of organized crime in femicide in Guatemala.
- 26 Statistically, female authors of femicide, either in samesex couples or in other circumstances, represent a very small portion of the total, for example less than 1 per cent in the United States. See Glass et al. (2004).
- 27 Sexual abuse is a strong predictor of suicide; see, for example, McFarlane and Malecha (2005).
- 28 The definition of 'forced suicide' is commonly used and has been adopted in the context of violence against women by the UN Special Rapporteur on Violence against Women, its Causes and Consequences. See UN (2008).
- 29 Any form of violence against women is likely to be reiterated and to have a long-lasting effect on the victim. This generates psychological effects ranging from low selfesteem to the development of aggressive or criminal behaviour and, very frequently, self-inflicted violence. When the violence comes from the surrounding community and social pressure, especially at a very young age, the psychological impact may be stronger and longer lasting. See, for example, Ho (2008), Dubow, Huesmann, and Boxer (2009), and Leslie (2000) on the long-term psychological effects of violence against women in conflict settings.
- 30 See also Independent (2008).
- The agencies are the Ministries of Women's Affairs, Interior, Health, Education, and Justice, as well as the courts, women's *shuras* (councils of elders), provincial councils, the Afghanistan Independent Human Rights Commission, referral centres, Save the Children, legal aid providers, and the UN Assistance Mission in Afghanistan.
- 32 See Catalano et al. (2009). Victimization rates are per 100,000 persons age 12 or older. The difference between male and female intimate partner victimization rates is significant at the 95 per cent confidence level.
- 33 Section 304B of the Indian Penal Code specifies that 'where the death of a woman is caused by any burns or bodily injury or occurs otherwise than under normal circumstances within seven years of her marriage and it is shown that soon before her death she was subjected to cruelty or harassment by her husband or any relative of her husband for, or in connection with, any demand for dowry, such death shall be called "dowry death" and such husband or relative shall be deemed to have caused her death' (India, 1860).
- 34 NCRB (n.d.a; n.d.b).
- 35 See Watts, Osam, and Win (2001, p. 91) about the stoning of accused witches in Zimbabwe. See Schnoebelen (2009) for details on the beating and burning of so-called witches in Angola.
- 36 In the last few years, the connection between trafficking in women and girls and trafficking in human organs has moved up on the international agenda. See Pearson (2004) and ECOSOC (2004).

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More Armed Violence, Less Development

RE LOWER-INCOME populations more affected by armed violence than wealthier ones? The poor who witness or survive shootings and physical violence are only too aware of the resulting pain, suffering, and trauma. Rich or poor, armed violence shortens planning horizons, erodes social capital, and undermines the skills and assets necessary for a productive life. As a result, it disrupts and distorts the political, economic, and social institutions required to ensure predictable and stable growth and development. In almost all cases, armed violence generates negative consequences for people's quality of life and the achievement of the Millennium Development Goals (MDGs).

Today, most international development agencies and government aid departments recognize and accept the strong association between insecurity and underdevelopment. They understand that without adequate security in areas of need, opportunities and investments in development are squandered. United Nations agencies—including the UN Development Programme (UNDP) and the World Bank—increasingly promote security as a top priority in fragile and violence-affected settings. Moreover, the Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD-DAC) has set out standards to guide investments in armed violence prevention and reduction.1

An increasing array of statements and resolutions reinforces the notion that the rule of law and

freedom from violence are requisites of good governance, economic progress, and human well-being. Many of these same texts also warn of the reverse: that impoverishment, economic stagnation, weak governance, and lawlessness contribute to the onset and persistence of violence. Indeed, such views are now routine within the UN and among its member states (UNGA, 2008; 2009; Geneva Declaration Secretariat, 2008). It is likewise acknowledged that persistent instability and insecurity can undermine governance, destroy human and physical capital, reduce productivity and investment, and contribute to wider human poverty and misery.²

Although widely acknowledged, the two-way relationship between insecurity and underdevelopment is seldom interrogated. Specifically, is it the case that armed violence undermines development in all cases? Does underdevelopment always enable violence? Is the relationship linear and inevitable? What is the direction and strength of the association? In many cases these relationships are presumed without any agreement on what is meant by security, development, or violence. At the micro level, there is mounting evidence that individuals, households, and communities affected by certain forms of armed violenceespecially war—tend to underperform in social and economic terms.3 Similarly, a number of macro-level assessments demonstrate how states plagued with underdevelopment are particularly susceptible to disproportionately high

rates of violence.⁴ And yet these relationships are complex and seldom as straightforward as they are often made out to be.

In order to test these and related claims it is first critical to determine whether and to what extent lower-income countries experience more (or less) violence than middle- and upper-income countries. A comprehensive appraisal using a long time series and a comprehensive definition of development is critical in order to assess whether and how armed violence restricts poorer countries from achieving their full development potential, including attainment of the MDGs. Moreover, such an assessment is crucial if policy recommendations are to correspond to actual needs and target problems effectively.

When examined in the aggregate, it is obvious that the global burden of armed violence is weighted unfavourably against the poor. The large majority of the estimated 526,000 people directly killed each year as a result of armed violence reside in low- and medium-income settings (TRENDS AND PATTERNS). More than two-thirds of them die as a result of homicidal violence—not on the battle-field or in the midst of war. A smaller proportion of those dying directly and indirectly from violence can be attributed to conflict-related incidents and easily preventable illnesses in war zones. While these figures offer a global profile of the distribution of armed violence, they also obscure more complex socio-economic trends and patterns.

This chapter gathers extensive and publicly available statistical data to examine the relationships between development and lethal violence.⁶ It demonstrates how countries that exhibit high intentional homicide rates also commonly register low levels of development. It finds that countries affected with above-average rates of lethal violence also tend to report slower progress

towards achieving specific MDGs. By unpacking the correlates between lethal violence and specific forms of development achievement, the chapter intends to assist policy-makers and practitioners in better understanding the reasons for investing in violence prevention and reduction.

Among the key findings of the chapter are:

- Lethal violence is strongly associated with negative development outcomes in various ways and is accompanied by low levels of overall MDG achievement.
- The higher the level of lethal violence recorded in a country, the larger its gap with respect to other countries in terms of development.
- A reduction in a country's incidence of lethal violence corresponds with improved MDG performance across most indicators.
- High rates of intentional homicide are accompanied by significantly higher levels of extreme poverty and hunger (MDG 1), lower primary education enrolment (MDG 2), and higher infant mortality and adolescent birth rates (MDGs 4 and 5).
- Countries that report proportionately lower levels of income inequality and unemployment exhibit comparatively lower levels of homicide.
- States that feature lower levels of human development and income almost always report high and very high levels of lethal violence.
- Monitoring of armed violence should be integrated into routine MDG progress assessments and more investments are required in national data gathering capacities and observatories.

In order to clarify the basic terms of the debate, the chapter first reviews a number of core concepts that are central to empirically evaluating the relationships between armed violence and development. Section two presents a short overview of the statistical findings from a review of key indicators. Drawing on recent scholarly findings, the third section considers the extent to which the outcomes of the statistical assessment are supported in the social science literature. The chapter concludes with a cursory treatment of how monitoring of armed violence could be integrated into a routine evaluation of country MDG assessments.

Conceptualizing the relationship

Armed violence and its consequences are multidimensional and heterogeneous in their manifestations. On the one hand, armed violence can be traced according to where it occurs geographically and physically—whether along international borders, in inner city neighbourhoods, in peri-urban villages and towns, in pastoral hinterlands, or in the walled compounds of households. Yet pinning down its precise effects is more complicated since they tend to ripple outwards, affecting individuals, households, cities, and states. For these and other reasons, a simple accounting of the statistical relationships between armed violence and development is often hampered by conceptual confusion and evidence gaps.⁷

There are a number of ways to conceptualize and define armed violence. This chapter draws primarily on indicators of lethal violence—including intentional homicide and direct conflict deaths. There are, of course, many manifestations of armed violence, including physical and psychological harm and harassment, material deprivation, and other more subjective factors, such as fear.⁸ The intangible dimensions of armed violence are often more consequential than may be assumed; recent

neurological and behavioural studies highlight the ways in which physical violence generates physiological and psychological consequences for human health and vice versa. Although the boundaries between different types of armed violence are blurry, research nevertheless requires discrimination between categories. 10

There are as many ways to define and classify development. UNDP, for example, defines 'human development' as a process of enlarging people's choices.11 What are the metrics of such a broad definition? Development specialists generally concede that narrow proxies—such as income and economic growth (including gross domestic or national product per capita)—are insufficient expressions of development, even though they may be necessary. For the purposes of this chapter, development is disaggregated according to 21 specific MDG indicators, three World Bank development metrics, and one UNDP indicator. 12 These indicators are selected because they more effectively gauge wider developmental progress than a singular focus on income. Moreover, they are the only indicators for which enough time series data (across various years) is consistently available.

A comprehensive accounting of the violence—development relationship requires valid and longitudinal data across a large cross-section of countries. Such information is often frustratingly difficult to acquire, especially in the case of fragile low- and medium-income settings and societies affected by chronic armed violence. Routine data deficiencies are treated at length in previous chapters and relate to incomplete and missing information and weak vital registration data harvesting infrastructure in many countries. Other challenges concern confusing and potentially competing categories and codes for measuring trends in education, population health, and other indicators of human well-being.¹³

Box 5.1 Building states and societies that are resilient to conflict, crime, and violence: the 2011 *World Development Report*

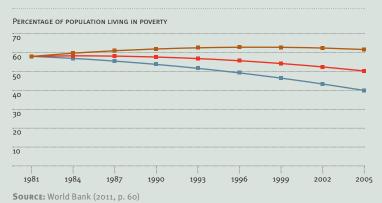
The World Bank's mandate has evolved from a narrow focus on facilitating reconstruction in post-war Europe to a wider agenda of poverty reduction. Recently, the organization returned in some ways to its roots of reconstruction. The 2011 edition of the Bank's flagship publication—the *World Development Report*—is devoted to highlighting the plight of roughly 1.5 billion people affected by conflict, crime, and violence, and those living in 'fragile' situations (World Bank, 2011).

The World Development Report 2011 begins by considering the dire consequences of fragility and violence on human development. It then explores the vicious cycles that result in repeated and evolving manifestations of violence in fragile states and the virtuous cycles of confidence building and institutional transformation necessary to effect long-term change. Finally, the report concludes with practical steps that national and international actors can take to support these initiatives and reduce the stresses that may interrupt the development of resilient states.

The report finds that people living in fragile situations are more likely to experience undernourishment and impoverishment than those living in stable and peaceful developing countries. Child mortality is twice as high in fragile and conflict-affected states than in states not affected by violence. Moreover, affected populations are less likely to have access to basic services—including education and water. Most telling from the report is the finding that no low-income fragile country has made any significant progress towards attaining a single MDG, even if they have made progress in the right direction. Repeated cycles of violence over the past decades are linked to high poverty rates; in countries

FIGURE 5.1 The widening gap between countries affected by major, minor, and negligible violence

- Countries with negligible or no violence
- Countries affected by minor violence
- Countries affected by major violence







experiencing 'major' violence at any point during the period 1981 to 2005, poverty rates are, on average, 20 per cent higher than in countries that were minimally or not affected by violence (see Figure 5.1).

Consistent with the 2008 and 2011 Global Burden of Armed Violence reports, the World Bank finds that conflict, crime, and violence significantly reduce the growth rate of a country's gross domestic product (GDP). Beyond the destruction brought on by conflict and violence, political instability and conflict dissuade economic investment and can lead to unproductive spending on security measures. For example, in Guatemala, violence is estimated to have cost the country at least 7 per cent of GDP in 2005—much more than the damage wrought by Hurricane Stan.

The report also points to the damaging consequences of 'spill-over' effects of armed violence on neighbouring countries, where annual growth can also drop by as much as 0.7 per cent. A particularly vivid manifestation of these contagion effects relates to the costs of anti-piracy measures. At least 27 countries have spent USD 1.3–2 billion each year on interventions in the Gulf of Aden and in the Indian Ocean. The World Bank estimates that these costs may have risen as high as USD 4.5 billion in 2010 if all regions are considered, with the economic burden of paying out ransoms and related deterred investment running at USD 5.7–11.2 billion.

Another manifestation of conflict, crime, and violence is mass displacement, including both refugees and the internally displaced. While generating strains on neighbouring host countries, the exodus of human capital has both short- and long-term implications for domestic development. According to the most recent calculations released by the UN High Commissioner for Refugees, more than 43.3 million people had been forcibly displaced by the end of 2009, including 27 million internally displaced—the highest numbers of people since the mid-1990s. ¹⁴ Many have fled to urban centres, where social tension, crime, and communal violence may escalate.

The repeated and varied forms of violence that fragile states experience are driven by a vicious cycle of 1) elite pacts that do not reform institutions and 2) experience of new stresses and external shocks that can plunge a society into conflict. To break this cycle of fragility and violence, a society needs to build confidence in a national reform project and undertake institutional transformation.

The report argues that success in building resilient states requires confidence in national reform in fragile environments where trust is often lacking. This frequently involves sufficiently inclusive pacts committed to the reform process. These actors can build trust in the reform process through mechanisms that create credible commitments, such as appointing members of the opposition, improving transparency and accountability, revising discriminatory laws, and reforming security. To deliver early results that build confidence, successful reform efforts often involve 'best fit' rather than 'first best' technocratic solutions and aim for a limited number of achievable outcomes.

Investment in renewing social norms, bolstering the rule of law, and rehabilitating basic services is critical. The report emphasizes that weak governance and rule of law and high rates of corruption are correlated with a 30–45 per cent higher risk of experiencing a civil war and a significantly higher risk of extreme criminal violence than that of other developing states. However, institutional development is slow, incremental work. Institutions can be dismantled in days, but it takes generations to build or repair them. The World Development Report 2011 estimates that the 20 fastest reforming countries in the 20th century took between 15 and 30 years to raise their institutional performance from very fragile to more resilient levels. On average, it took roughly 17 years to reduce military interference in politics and 27 years to establish effective controls on corruption.

The report concludes that development of states that are resilient to violence is necessarily a nationally owned enterprise; resilience cannot be imposed from the outside. However, the international community can take steps to assist countries that are trying to escape fragility. The *World Development Report 2011* recommends that international actors:

- commit to better coordinated programmes across the development, security, political, and humanitarian spheres, with fewer priorities and more reasonable expectations;
- reform internal policies to better identify and manage risks, including the risk of inaction in fragile situations;
- reduce external stresses through regional and global action;
 and
- promote South-South learning and experience sharing, collaboratively with emerging powers and regional institutions.

Source: Gary Milante

While acknowledging these limitations, this chapter draws on reliable figures assembled in a host of datasets documenting trends in lethal violence and development. These include the GBAV 2011 database, which is composed of multiple datasets. The chapter also draws on UNDP- and World Bank-managed databases tracking MDG achievements and development progress, and on the World Bank's 2011 World Development Report in order to clarify the linkages between armed violence and development (see Box 5.1).

geographic data coverage for core development variables might generate biases in the sample and in results. As is the case for virtually any statistical assessment of development, ample reliable data is available from the Americas and Europe, whereas Africa, Asia, and Oceania are characterized by a dearth of information. ¹⁸ The resulting biases could eventually be corrected by a gradual improvement of data collection and sharing better information from under-represented states and territories.

Assessing the relationship

This chapter focuses on relationships and specific causal pathways that link lethal violence and underdevelopment. It examines the correlates between intentional homicide rates (per 100,000 population) and the development indicators cited above. Methodologically, this analysis pools homicide rates since the mid-1980s and searches for statistically significant relationships, with a specific focus on the direction and strength of associations. Methods used include an inspection of the inter-relationships between variables and correlation coefficient analysis.¹⁶

It is worth stressing that a correlation analysis cannot be undertaken unless there is information for both lethal violence and development indicators. Taken together, there are a total of 239 countries and territories for which reliable data may be available on homicidal violence or development indicators; however, data on both lethal violence and relevant development variables is available for only 170 countries and territories.

Also worth stressing is the fact that some development indicators feature more data points than others. ¹⁷ The lack of complete temporal and

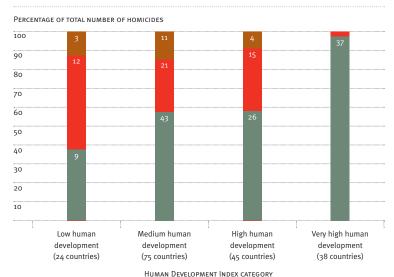
Human development, income, and lethal violence

In order to situate the statistical analysis that follows, it is worth considering the distribution of countries according to their Human Development Index (HDI) scores in relation to lethal violence. Figure 5.2 provides an overview of 182 countries classified according to low (<0.47), medium (0.48–0.65), high (0.66–0.78), and very high (>0.78) development categories. In 2009, there were 24 low HDI countries, 75 medium HDI countries, 45 high HDI countries, and 38 very high HDI countries. The figure also displays thresholds of homicide categorized according to three intervals: low (<7.25 per 100,000 population), high (7.25–18.57), and very high (>18.57) rates.

In proportional terms, countries that register lower levels of human development exhibit more violence. Figure 5.2 reveals that almost two-thirds of low human development countries and almost half of all countries exhibiting medium human development feature homicide rates above the long-term average. In contrast, the figure shows that the vast majority of countries registering both high and very high levels of human development also feature proportionately lower levels of homicidal violence.

FIGURE 5.2 Disaggregated homicidal violence for 182 countries by HDI, 1986–2009²¹





Note: Numbers in the bars indicate how many countries fall into each of the three homicide rate categories (low, high, or very high). The figure for the top segment in the right-hand bar is '1'.

Source: GBAV 2011 database and selected development and violence indicators

As can be seen in Figure 5.2, countries that exhibit high and very high homicide rates are concentrated in the low human development band. Yet a significant number and proportion of countries in the medium and high human development category report severe homicide levels. While lethal violence is concentrated primarily among underdeveloped countries, it is thus not the exclusive preserve of the poor. Indeed, taken together, approximately one-fifth (19 per cent) of the world's population resides in lower- and medium-income countries experiencing high and very high levels of lethal violence.²²

Just as alarming are the ways in which low levels of development are in most cases correlated with higher violence over time. In other words, lethal violence appears to constrain development progress. Classifying countries as either 'improving'

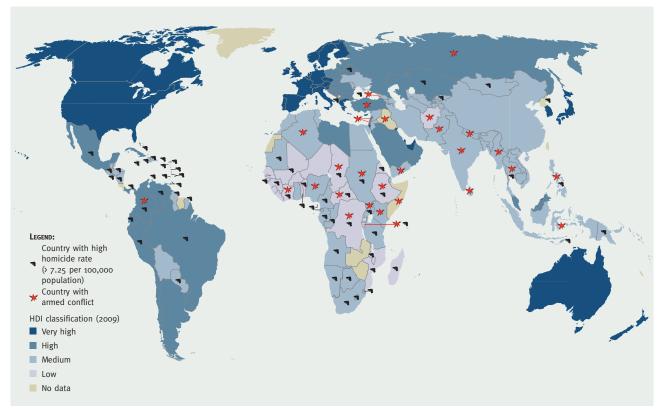
or 'deteriorating' across homicide and development indicators reveals how countries that register a crude improvement in their HDI are also most likely to exhibit lower levels of lethal violence. That is, homicide rates determine negatively and significantly the presence of any improvement of a country's HDI rating, constraining development progress. As such, the statistical assessment confirms that higher homicide rates are associated with lower HDI rankings.²³

Taken together, the findings confirm that less developed countries experience more lethal violence than medium- and upper-income countries. Moreover, they demonstrate that lethal violence hampers development. They also reveal a strong and negative association between the levels of lethal violence in a country and the degree or extent of its development. The higher the level of lethal violence recorded in a country, the larger its gap with respect to other countries in terms of development.²⁴

It is possible to geographically chart the relationships between lethal violence and human development according to thresholds of homicidal and conflict-related violence. As signalled in Chapter Two, countries featuring high homicide rates appear to be located predominantly in regions of Latin America and the Caribbean, Central and Southern Africa, and particular areas of Central and Southern Asia (TRENDS AND PATTERNS). Countries featuring armed conflicts are highly concentrated in lower-income settings throughout Africa and Asia, although some other regions are also represented (see Map 5.1).²⁵

A regional analysis reveals a statistically significant inverse correlation between higher human development and lower homicide rates in North America, most of Asia, and Western, Eastern, and South-eastern Europe. Even across these regions,





Source: GBAV 2011 database and selected development and violence indicators'

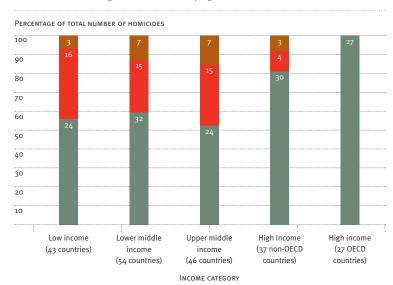
countries that report high homicide rates also correlate with comparatively lower levels of human development, thus reinforcing the conclusion that lower development is not arbitrarily or coincidentally associated with a higher incidence of homicidal violence.

Nearly half the countries that report low human development have experienced or are experiencing an armed conflict. It thus appears that the higher the level of human development, the less likely it is that the country is affected by an ongoing armed conflict. What is more, only three countries that feature relatively high human development are affected by conflicts of various kinds—Colombia, the Russian Federation, and Turkey.

The negative relationship between lethal violence and underdevelopment holds when human development indicators are replaced by income *indicators*. ²⁶ The World Bank reports information on income for 207 countries, all of which are included in this analysis.27 Specifically, the lower the income registered by a given country, the higher the reported level of homicidal violence (see Figure 5.3). Moreover, wealthy member states of the OECD all report low rates of homicidal violence, and only a few non-OECD countries exhibit high or very high homicide rates.28

FIGURE 5.3 Disaggregated homicidal violence by income, 1986–2009





NOTE: Numbers in the bars indicate how many countries fall into each of the three homicide rate categories (low, high, or very high).

Source: GBAV 2011 database and selected development and violence indicators

The MDGs and lethal violence

It also appears that higher levels of lethal violence are statistically correlated with lower levels of *MDG attainment*.²⁹ This statistical analysis considers seven of the eight MDGs and 21 indicators, included according to their availability.³⁰ For MDG 1 (eradicate extreme poverty and hunger) ten variables were considered. In the case of MDG 2 (achieve universal primary education), MDG 3 (promote gender equality and empower women), MDG 4 (reduce child mortality), and MDG 5 (improve maternal health), just two indicators (each) were used. Finally, for MDG 6 (combat HIV/AIDS, malaria, and other diseases) and MDG 7 (ensure environmental sustainability), one and three variables were included, respectively.

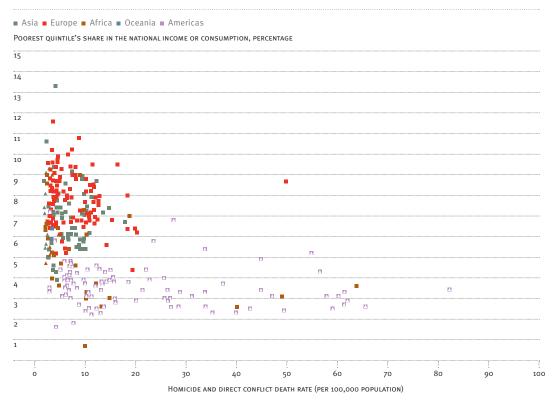
MDG 1 can be parsed into at least four specific targets focused on poverty, income, employment,

and reductions in hunger. When lethal violence is correlated across these variables, it appears that countries registering higher poverty rates also record proportionately higher levels of homicide. It is important to stress that these findings do not necessarily account for a causal relationship: all countries that are poor are not necessarily more *predisposed* to high levels of lethal violence.³¹ Even so, the statistical analysis detects a direct relationship between poverty levels (measured in terms of the percentage of the population living under USD 1 (PPP) per day) and homicidal violence.

Specifically, proportionately higher poverty levels tend to go hand in hand with higher levels of lethal violence. A similar negative relationship holds for the poverty gap ratio, which is a simple measure of inequality. This suggests that lethal violence is not only correlated directly with poverty measured as income, but also with poverty measured as inequality. Indeed, the higher the concentration of income among the rich, the higher the total levels of homicidal violence.³²

The fact that countries registering greater *income* inequality also regularly exhibit a higher incidence of lethal violence is illustrated in Figure 5.4. Specifically, the figure depicts the relationship between homicide rates (squares) and direct conflict deaths (triangles) and the proportion of income earned by the lowest 20 per cent of the population in all countries for which data is available.33 The figure shows that countries with higher levels of lethal violence (approaching the right end of the horizontal axis) coincide with higher inequality, measured as a low proportion of income earned by the poorest 20 per cent of the population (low on the vertical axis). The inverse also applies: countries experiencing low levels of lethal violence feature a higher proportion of participation of this same income group.

FIGURE 5.4 Disaggregating income inequality and lethal violence, 1986-200934



Note: Squares correspond to homicide rates and triangles represent direct conflict deaths.

Source: GBAV 2011 database and selected development and violence indicators

This relationship between income inequality and lethal violence was scrutinized using statistical correlation tests. The relationship was found to be negative as well as significant (not by chance) and very strong (see Table 5.1). Note that a negative relationship between the two variables translates into a positive relationship of income inequality and lethal violence. Indeed, the strength of the correlation can be discerned by the 'cloud' of points that are concentrated from the top left to the bottom right of Figure 5.4. And while this negative correlation is especially strong for certain clusters of countries (such as Latin America), it applies generally to all regions.

In the meantime, countries that register *low unemployment* of young men and women (15–24 years of age) also tend to report lower levels of lethal violence. In particular, the lower a country's male youth unemployment rate, the stronger the probability that the country will also display a lower homicide rate. When this indicator is disaggregated by sex, the correlation between unemployed young women and homicide rates remains strong, indicating the absence of a gender bias. Further, while there is an association between lethal violence and *hunger* (as measured by the prevalence of underweight children under five), it is not statistically robust.

With respect to MDG 2—the achievement of uni*versal primary education*—the statistical analysis considers the net enrolment ratio in primary school and literacy rates of 15-24-year-olds.35 A close inspection finds that higher homicide levels tend to occur in countries that register low primary education enrolment ratios (see Table 5.1). A potential causal link for this relationship can be hypothesized. For example, the inability of a society to keep its youth in the education system during a particularly risk-prone age can make them more predisposed to violence. Specifically, they may be more susceptible to recruitment into armed groups, such as gangs or guerrilla factions. In turn, this trajectory would deny them the productive capacities required to enter the labour market, thus further contributing to a downward spiral.

The assessment also considers MDG 3—the promotion of *gender equality and empowerment of women*—and its statistical relationship with lethal violence. A modest positive association exists between the share of women in wage employment within the nonagricultural sector and the ratio of girls to boys in primary and secondary education, in particular, and lethal violence (see Table 5.1).

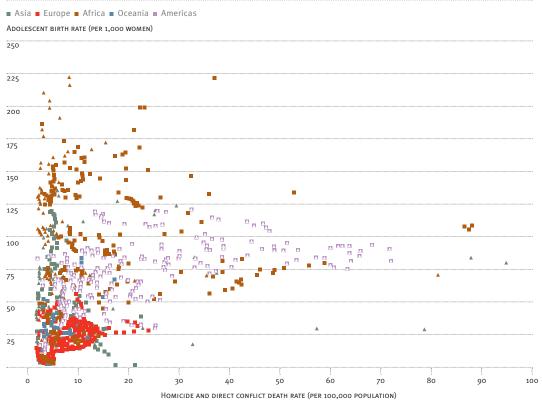
With respect to MDG 4—the reduction in *child mortality*—the mortality rate of children under five is also significantly and positively associated with homicide rates (see Table 5.1). However rather than indicating a direct causal link, it is possible that this finding is simply underlining the fact that less developed countries (most of which feature inadequate water, hygiene, and health systems) may witness an increase in so-called excess deaths among the most vulnerable—as well as rising rates of lethal violence.

MDG 5 considers the progress in relation to maternal health, which is often measured as a function of declines in maternal mortality, a lower adolescent birth rate, and the quality of prenatal and natal care. Key indicators examined as part of this assessment include the adolescent birth rate and the proportion of births attended by skilled health personnel. Figure 5.5 reveals a very strong positive correlation between countries exhibiting a high adolescent birth rate and high rates of lethal violence, a finding also presented in Table 5.1. Specifically, each point shown in Figure 5.5 represents adolescent birth rates per thousand women (on the vertical axis) and lethal violence (on the horizontal axis) in every country for which data is available.

Figure 5.5 shows that countries exhibiting lower rates of lethal violence (on the horizontal axis) also register lower levels of adolescent pregnancy (on the vertical axis) and tend to cluster towards the bottom left of the graph. Countries featuring higher levels of lethal violence exhibit higher levels of adolescent pregnancy and tend to be found away from the origin, or intersection of the x and y axes. A potential causal explanation for this is that lethal violence interrupts access to health care and that large households tend to be less capable of investing in education and preparing children to anticipate risks of violence later in life. The statistical analysis also detects a strong positive correlation between infant mortality rates and homicidal violence as well as a strong negative association between the share of births attended by skilled personnel and homicidal violence.

With respect to MDG 6—combating HIV/AIDS a significant relationship exists between lethal violence and HIV/AIDS (see Table 5.1).³⁶ Specifically, countries featuring a high percentage of people

FIGURE 5.5 Disaggregating adolescent birth rates and lethal violence, 1986–2009



Note: Squares correspond to homicide rates and triangles represent direct conflict deaths.

Source: GBAV 2011 database and selected development and violence indicators

living with HIV/AIDS (ages 15–49) also tend to experience higher homicide rates. This positive correlation is especially significant in Africa, the Americas, and Asia.

The analysis also uncovers a relationship between MDG 7—ensuring *environmental sustainability*—and lethal violence. It suggests that countries with lower levels of lethal violence experience improved access to drinking water and sanitation facilities. Likewise, there is a negative association between the proportion of people living in slums and higher homicide rates, a finding echoed by the World Bank (2011).

Finally, a separate analysis of the relationships between direct conflict death rates and MDG progress reveals similar results to those cited above.³⁷ Indeed, higher reported direct conflict deaths are statistically correlated with:

- higher rates of poverty (measured as the population below USD 1 and poverty gap ratio);
- a lower share of women in wage employment in the non-agricultural sector;
- lower enrolment in primary education and the ratio of girls to boys in primary education; and
- lower HDI.38

Box 5.2 The relationships between lethal violence and development

Table 5.1 reviews correlations of key development indicators and lethal violence. The signs located in the right-hand column—positive and negative—indicate the direction and intensity of each association. The larger the sign, the closer the association between the two variables. The shades reveal the statistical significance of the association, from the 1 percent (dark, most significant) to the 5 percent significance level (light, less significant).

TABLE 5.1 The relationship between development indicators and lethal violence

Development indicator	Relationship to armed violence
Adolescent birth rate (per 1,000 women)	+
Births attended by skilled health personnel (percentage)	-
Children under five severely underweight (percentage)	-
Children under five mortality rate (per 1,000 live births)	+
Employment-to-population ratio, both sexes (percentage)	+
Infant mortality rate (0–1 year, per 1,000 live births)	+
People living with HIV, 15–49 years old (percentage)	+
Poorest quintile's share in national income or consumption (percentage)	-
Population below USD 1 per day (PPP, percentage)	+
Poverty gap ratio at USD 1 per day (PPP, percentage)	+
Proportion of the population using improved drinking water sources (total)	_
Proportion of the population using improved sanitation facilities (total)	-
Share of women in wage employment in the non-agricultural sector	+
Slum population as percentage of urban population (percentage)	-
Total net enrolment ratio in primary education (both sexes)	_
Youth unemployment rate, aged 15–24 (both sexes)	+
Youth unemployment rate, aged 15–24 (men)	+
Youth unemployment rate, aged 15–24 (women)	+
Human Development Index	-

Reviewing the relationship

The above analysis draws attention to a number of unsettling negative relationships between lethal violence and underdevelopment. Some of these associations are more robust than others. In some cases, the availability of additional data would allow for a more exhaustive assessment of patterns and trends. Nevertheless, the basic claim that high rates of lethal violence have negative implications across an array of MDG indicators is confirmed, offering a more nuanced assessment than has been provided elsewhere, including in the 2011 World Development Report. Moreover, this chapter finds that these relationships are not always straightforward: they are frequently complex, heterogeneous, and of varying intensity.

A number of established development agencies are convinced that violence has deleterious effects on MDG progress. For example, the OECD-DAC's International Network on Conflict and Fragility acknowledges how 'external and internal risk factors, alongside the continuum of conflict, armed violence and insecurity makes the MDGs more difficult to achieve' (OECD, 2010a, p. 4). In addition, the Dili Declaration on Peacebuilding and Statebuilding underlines how 'conflict and fragility are major obstacles for achieving the MDGs' and recognizes that 'it will be extremely difficult to achieve the MDGs in most fragile and conflict affected states by 2015' (IDPS, 2010, p. 1).³⁹

Multilateral and bilateral aid agencies are pooling their investments where violence appears to be concentrated, including so-called fragile states (OECD, 2010b). The OECD estimates having channelled in excess of USD 34 billion in aid dollars towards these regions in 2009—more than one-third of total global spending on development.⁴⁰ Home to more than 1.5 billion people, these fragile

and conflict-affected states are generally lagging behind more stable developing countries in terms of MDG progress (Harttgen and Klasen, 2010, p. 29). Indeed, just one in ten fragile states is expected to achieve the goal of halving poverty and hunger—as compared to one in four developing countries.⁴¹

While the short-term costs of direct conflict deaths are considerable, the longer-term implications of conflict-related violence for development prospects are arguably just as extensive. The case of Mozambique is routinely presented to demonstrate how conflict-related violence can compromise educational services (Stewart and FitzGerald, 2001). The civil war during the 1980s demolished an estimated 45 per cent of the primary school network, largely through the killing, trauma, and displacement of teachers, administrative personnel, and students and through the destruction of physical infrastructure (Machel, 1996, p. 43).⁴²

Debates over income inequality and the onset and severity of armed conflict and criminal violence tend to revolve around whether the former is a cause, an outcome, or both (Gates et al., 2010). Some conflict specialists contend that income inequality is a strong causal factor while others claim that the relationship is less significant (Collier and Hoeffler, 2000; Stewart, 2001; Gates and Murshed, 2005). Empirical studies investigating the linkages between income inequality and violent crime also frequently identify robust causal correlations (see Box 5.3). For example, comparative and cross-national research has examined positive associations between income inequality and homicide rates. 43 One recent review of homicidal violence in Brazil provides evidence that high homicide rates are similarly correlated with high levels of inequality (Waiselfisz, 2010, p. 148).



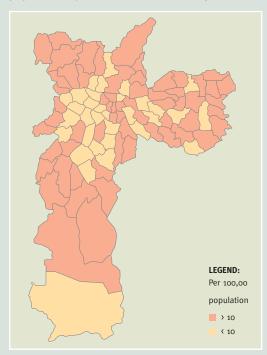
Box 5.3 Lethal violence and MDG attainment in São Paolo

Although it has registered rapid economic growth and has consolidated its democracy, Brazil is confronting one of the highest rates of homicidal violence in the world. While there appear to have been some important reductions in recent years, homicide is especially prevalent in the country's major cities—Rio de Janeiro, São Paolo, and Brasília (see Figure 5.6). In response, and in view of the much-anticipated 2014 World Cup and 2016 Olympics, political and economic investment in integrated violence prevention and reduction activities is increasing.⁴⁴

Made up of some 96 districts, São Paolo is one of the world's largest cities, with an estimated 20 million inhabitants. It is also known for its extreme rates of violence and inequality. Levels of homicidal violence in São Paolo are also higher than the global average: 34 districts feature high homicide rates of 10 per 100,000 and the remaining 62 register high homicide rates of approximately 19 per 100,000 (see Map 5.2).45

A number of clear trends emerge from an examination of the relationship between homicidal violence and MDG achievement in São Paolo for the year 2006 (see Table 5.2). For example, in districts that exhibited higher homicide rates, a higher percentage of the population lived on less than half the minimum wage. Moreover, residents of poorer slum areas or *favelas* were three times more likely to be living in districts experiencing high homicide rates. Likewise, districts reporting higher homicide rates also experienced slightly higher unemployment rates among young men and worse sanitary conditions.⁴⁶

MAP 5.2 Homicide rates per 100,000 population by district, São Paulo, 2009



Source: Muggah and Wennmann (2010, p. 26)

FIGURE 5.6 Homicide rate per 100,000 population in Brasília, Rio de Janeiro, São Paolo, and Brazil, 1992–2007⁴⁷

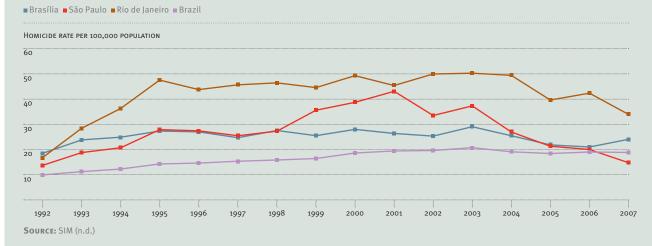


TABLE 5.2 MDG indicators and violence in two district clusters in São Paolo, 2006

MDG indicators	Sex	São Paulo	Districts with lower rates of homicide	Districts with higher rates of homicide
Population with an income of 50 per cent of the minimum wage per capita		20.5	11.4	24.3
Proportion of income held by the poorest 20 per cent		3.3	2.1	4.0
Percentage of	Men	86.8	89.9	85.5
15-year-olds in the economically productive labour force	Women	81.5	81.4	81.5
Unemployment rate of 15–24-year-olds	Men	22.8	19.4	24.0
	Women	32.2	35.7	31.0
Percentage of literate 15–24- year-olds	Men	98.9	100.0	98.5
	Women	99.0	100.0	98.7
Percentage of households in slums		14.9	6.3	18.5
Percentage of the population without access to a water supply		0.8	0.3	1.0
Percentage of the population without access to sanitation		12.4	5.5	15.3

Source: adapted from Muggah and Wennmann (2010, p. 27)

Author: Renato Sérgio de Lima

At the same time, income inequality and lower growth rates also appear to contribute to increases in violent crime across most countries (Lederman, Loayza, and Menéndez, 2002, p. 509). Drawing on panel data for almost 40 states, one assessment observes a link between increases in economic inequality and low economic growth rates on the one hand and homicide and robbery on the other (Demombynes and Özler, 2002, pp. 10−11). Yet some scholars contest these latter findings, contending that inequality is not a statistically significant determinant of violent crime. One researcher argues that inequality is not a statistically significant determinant if 1) country-specific effects are not controlled for and 2) the sample is artificially restricted to a small number of countries (Neumayer, 2005).

There is also considerable research on the association between unemployment and the incidence and intensity of armed violence. On the one hand, rising unemployment—particularly among young men—is perceived to contribute to their growing frustration and idleness, as the case of South Africa shows (see Box 5.4). In other countries, unemployment and other factors reportedly enhance the risk of youth recruitment into gangs and other armed groups (McIlwaine and Moser, 2001; Small Arms Survey, 2010; Jaffe, 2010). In countries affected by a high prevalence of violence, these relationships intensify. 48 The UN Office on Drugs and Crime and the World Bank have stressed how high rates of homicide can in turn hamper GDP growth, creating knock-on effects in relation to unemployment, especially in Latin America and the Caribbean (World Bank and UNODC, 2007; Bourguignon, 1999).49

Box 5.4 South Africa: violence and development

Despite the momentous decline in political violence after South Africa's transition to democracy in 1994, the country continues to experience one of the highest murder rates on the planet. Indeed, a series of factors place South Africa at statistical risk of high levels of homicidal violence. These include a low HDI score (ranked 129 out of 189 countries in 2010), persistent income inequality, high levels of youth unemployment, high rates of HIV/AIDS (one of the highest in the world at more than 18 per cent), and high adolescent birth rates.

During 2008–09 the South African Police Service reported a homicide rate of 37.3 per 100,000 (SAPS, 2009, p. 5). With young men making up the bulk of offenders and victims of criminal violence, firearm homicide has been singled out as the leading cause of death for young men aged 15–21 (Fleshman, 2001). More than half of all homicides in the country are committed with firearms—instruments described routinely by scholars in

the country as symbols of social power and dominance (CSVR, 2008). Violent crime is typically characterized by encounters between people who know each other as friends, relatives, or acquaintances.⁵⁰

A comparison of the relationships between lethal violence and underdevelopment across South African provinces reveals various links. As shown in Table 5.3, the metropolitan areas of Gauteng and Western Cape are plagued by high levels of inequality and high levels of violence. When compared, both provinces exhibit a relatively low level of absolute poverty—measured in terms of people who live below ZAR 283 (about USD 37) per month but experienced a significant increase in inequality over the period 1995–2005. Such a trend is also apparent in Limpopo province, which features one of the highest rates of poverty in the country but one of the lowest rates of murder, while inequality levels declined between 1995 and 2005 (Muggah and Wennmann, 2010, p. 33).

TABLE 5.3 Violence and development indicators in South Africa, various years

Province	Intentional People living homicide rate below ZAR 283 per 100,000 (USD 37) per population month (2008, (2008) ⁵¹ in %, rounded) ⁵²	Gini coefficient ⁵³		Unemployment		
		(USD 37) per month (2008,	1995 ⁵⁴	2005 ⁵⁵	2008, in % ⁵⁶	2009, in %
Eastern Cape	49.5	29.0	0.65	0.64	25.2	27.0
Free State	31.6	16.0	0.66	0.65	22.6	25.3
Gauteng	37.2	6.0	0.54	0.65	20.7	25.7
Kwazulu-Natal	47.0	33.0	0.63	0.67	20.8	19.2
Limpopo	14.2	34.0	0.63	0.58	28.9	26.9
Mpumalanga	25.1	28.0	0.58	0.67	23.1	26.6
Northern Cape	36.5	27.0	0.65	0.62	21.6	24.9
North West	27.4	23.0	0.63	0.64	25.7	27.0
Western Cape	44.6	9.0	0.58	0.69	16.9	21.5
South Africa (national)	37.3	22.0	0.64	0.69	21.9	24.3

Source: Muggah and Wenmann (2010, p. 33)

According to some social scientists, the extent of the relationship between armed violence and underdevelopment is often mediated by a society's stock of 'social capital'. Social capital is variously defined, but it is held to encompass 'features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions' (Putnam, 1993).57 Ultimately, social capital refers to aspects of social relationships that enable collective action. While not all social capital is 'positive'—some can even be perverse in the form of gang membership, cartels, and mafia-like organizations—there is considerable anthropological evidence of the negative effects of armed violence on social networks, community reciprocity, and collective action (Mcllwaine and Moser, 2001).

On the one hand, violence-plagued communities may register a comparatively high level of 'bonding' social capital, referring to strong ties within relatively homogenous groups. But 'bridging' social capital—the kind that links otherwise disparate groups or individual together—can erode rapidly. Moreover, 'linking' social capital—which ties individuals and groups to political and economic elites—can be reconfigured and strengthened in harmful and often destructive ways. Armed violence can play a critical and often detrimental role in transforming the stock of social capital, thwarting the formation of relations essential for building meaningful human development.

Monitoring the relationship

An ongoing and accurate accounting of the effects of armed violence on development progress and outcomes is an essential, yet challenging, agenda. It is also potentially controversial in some coun-

tries, where the topic remains acutely sensitive and subject to intense politicization. The development sector itself has encountered challenges in monitoring the MDGs. For example, repeated meetings of the MDG monitoring group have highlighted the persistent gaps in knowledge and the importance of renewed investment in international, regional, national, and municipal monitoring tools and systems to collect and analyse basic poverty, income, education, and maternal health data on a routine basis.58 There is also a strong case to be made for integrating armed violence into periodic international and national MDG assessments, as such evaluations could constructively highlight key challenges among low- and middle-income countries.

A first priority is the strengthening of national and municipal surveillance and data collection systems in countries affected by and recovering from armed conflict and high rates of criminal violence. While the provision of such support may require considerable investment and be time-consuming, it is nevertheless vital. Fortunately, there are impressive examples of comprehensive and integrated reporting and monitoring mechanisms to appraise trends in armed violence. Regardless of whether they are described as crime observatories, conflict early warning systems, or injury surveillance mechanisms, they offer important examples of systems that can be replicated and scaled up (see Box 5.5).

Public calls for a mechanism to better monitor and track the relationship between violence and MDG achievement are not new. Specifically, the UN Secretary-General's report on *Promoting Development through the Reduction and Prevention of Armed Violence* emphasizes the need to standardize the goals, targets, and indicators to monitor and measure armed violence until 2015 (UNGA, 2009, p. 19). The Secretary-General also

Box 5.5 Global trends in monitoring armed violence

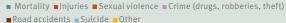
Public health and development agencies are devoting increasing attention to evidence-based approaches to armed violence prevention and reduction. The World Health Organization has released several seminal studies since 2002 through its Violence and Injury Prevention programme (WHO, n.d.b).⁵⁹ Moreover, the WHO-supported Violence Prevention Alliance, a network of more than 50 public health and community development agencies, has also shed light on opportunities and challenges associated with interventions to promote safety.⁶⁰ More recently, in 2009 and 2011, the OECD-DAC drew attention to the wide range of related direct and indirect programmes and projects under way around the world.⁶¹

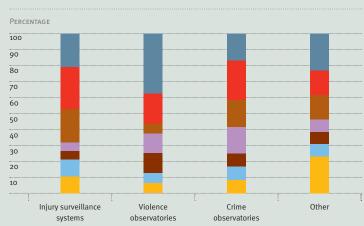
There are many different kinds of armed violence monitoring systems (AVMS) operating across the globe. In many countries, both public entities and non-governmental organizations have established surveillance and survey-based monitoring systems, often in partnership.⁶² Many have a public health or crime

FIGURE 5.7 The core attributes of an armed violence monitoring system



FIGURE 5.8 Violence indicators tracked by AVMS initiatives⁶³





prevention orientation and most are intersectoral or interdisciplinary in approach. All of them tend to feature at least three basic characteristics: 1) they routinely gather timely data on key variables; 2) they systematically analyse data over time; and 3) they disseminate analysis with a view to informing policy and programming (Gilgen and Tracy, 2011, p. 12; see Figure 5.7).

Most AVMS coordinate and harmonize information from disparate public, private and non-governmental entities (Carrière, 2008; CISALVA, 2008). In best-case scenarios they can facilitate coordination and communication between elected officials, police, health, educational and social services, researchers and activists, and civil society organizations. A recent study shows that most AVMS-type efforts collect data on common indicators of armed violence—including lethal violence (Gilgen and Tracey, 2011).

While mortality is the most widely monitored indicator, AVMS systems generally collect and analyse data on non-fatal injuries (including sexual violence) as well as incidents arising from common assault and road traffic accidents (see Figure 5.8). It is important to note that most AVMS collect data from at least one government source, such as criminal justice and vital registration records from hospitals and mortuaries (see Figure 5.9). Thus, the effectiveness of accurate data collection depends in large part on a government's willingness and ability to collect and disclose accurate figures.

FIGURE 5.9 Data sources used by AVMS, as percentage



- Vital registration data Police and forensic sources
- Health and hospital data Morgues Media reports
 Community groups Other



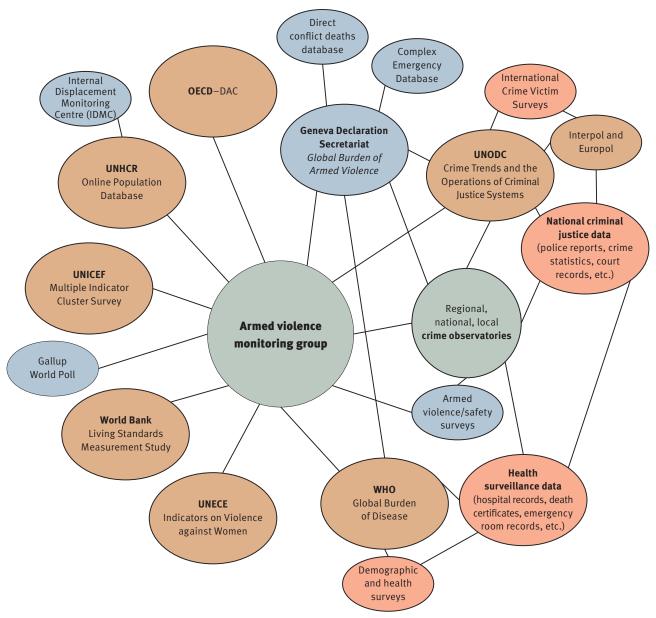
Source: Gilgen and Tracey (2011)



PHOTO A Following a fire, informal settlers of the Laperal compound in Manila throw stones and bottles as they clash with police and members of a demolition team who are taking part in an effort to relocate them, April 2011. © Cheryl Ravelo/Reuters

FIGURE 5.10 An inter-agency armed violence monitoring group

- Data from public and private partners
- Data from national and municipal governments
- Data from international organizations
- Data from research institutes and universities



stresses how the MDG review process offers an opportunity to integrate security-related themes into ongoing efforts to achieve the MDGs (p. 19). He is silent, however, on the most appropriate way to structure a monitoring system so that it can more effectively assist governments and civil society actors on the ground.

The current model of monitoring and measuring trends in violence relies on autonomous public agencies (such as health, police, and social services) working independently and periodically reporting to the United Nations. This model is fast being overtaken by practical needs on the ground. As demonstrated above, a more effective effort to track the specific relationships between armed violence and MDG attainment will call for an ongoing inter-agency and intersectoral approach. It will require data collection activities focused not exclusively on issues of violence and victimization, but, in many cases, on trends in primary and secondary education, health, social welfare, and other issues (Gilgen, Krause, and Muggah, 2010).

A functional international monitoring mechanism would need to build on a wide number of credible data-gathering systems around the world. Many armed violence monitoring systems have already been established at the regional, national, and municipal levels in an effort to better document trends in victimization and inform public policy interventions. Often these actors address overall national safety concerns while others operate through a network of sub-national nodes in order to track trends in intentional violence or other forms of external injury. Taken together, these systems can and do serve as an invaluable service for decision-makers, programme managers, and

PHOTO ► A student writes on the blackboard at the St. Kizito
Institute in Bujumbura, one of the few schools in Burundi where
disabled children can receive an education.
© Dieter Telemans/Panos Pictures



practitioners who work in the field of crime and violence prevention.

One way to strengthen global armed violence monitoring efforts and improve standards in data collection would be through the establishment of a global inter-agency armed violence monitoring group or task force. States already play a central role in global efforts to collect information on core indicators such as homicide through their departments of statistics; they would need to play a primary role in any monitoring group. But to generate more comprehensive and refined information and analysis, the group would also need to forge partnerships with agencies from the health, criminal justice, conflict studies, and development sectors. An example of an ideal type multi-nodal global monitoring group is set out in Figure 5.10.

Such a monitoring group would be responsible for tracking the incidence, causes, and trends in victimization and development. It would also usefully establish and disseminate standards and support networks in collecting data. Likewise, technical experts from international and nongovernmental agencies would need to play a core role in gathering and consolidating data and undertaking analysis. The participation of organizations such as UNDP, the UN Office on Drugs and Crime, the World Health Organization, and the World Bank are critical in this regard. Meanwhile, established research institutions—from think tanks to academic research centres—are also invaluable partners in such an endeavour.

Data collection would be directed on the basis of a consolidated list of targets and indicators. Minimum indicators to measure the dependent variable—armed violence—include the number of direct and indirect conflict deaths, the prevalence of homicide, and the percentage of change in bilateral development assistance to armed

violence prevention and reduction programmes. Building on these and other ongoing data collection frameworks, the working group would issue routine outputs and highlight critical information gaps and needs on the way armed violence is affecting MDG progress (Gilgen, Krause, and Muggah, 2010, p. 25).

Conclusion

The costs and consequences of armed violence on development are considerable and wide-ranging. They include direct visible impacts such as death, injury, and damage to assets and property as well as indirect effects such as the increased, recurrent costs of law enforcement and justice delivery, disruption of social services, lost economic opportunities, and the undermining of governance more generally (Skaperdas et al., 2009, p. 17; Geneva Declaration Secretariat, 2008, pp. 89–108).

The analysis presented in this chapter demonstrates emphatically that the residents of low-and medium-income countries bare a grossly disproportionate share of the global burden of armed violence. More specifically, lethal violence in particular is associated with low achievement of human development and MDGs over time. The chapter thus draws attention to how a large cluster of countries is effectively trapped in cycles of armed violence and underdevelopment.

The chapter makes a strong case to better integrate the issues of armed violence into routine MDG assessments. Indeed, a statistical assessment shows how countries exhibiting high and very high levels of homicide report comparatively low gains in relation to reducing extreme poverty and hunger (MDG 1), achieving universal primary

education (MDG 2), reducing child mortality (MDG 4), and improving maternal health (MDG 5). More optimistically, the chapter also observes that high-income countries experience lower rates of armed violence. Moreover, countries that register low rates of violence also appear to achieve disproportionately higher gains in relation to poverty reduction, nourishment, education, health, and other areas of human welfare.

The mutually reinforcing effects of positive investments in development and low rates of violence are a powerful insight—one that the development sector is increasingly acknowledging. While knowledge gaps remain, in most cases owing to data limitations, an irrefutable picture is nevertheless emerging. There is a compelling and persistent two-way negative relationship between armed violence and development. This straightforward finding amounts to a clarion call to the development sector to take action to promote the prevention and reduction of armed violence as a matter of urgency.

Abbreviations

AVMS Armed violence monitoring system

GDP Gross domestic product

HDI Human Development Index

MDG Millennium Development Goal

OECD-DAC Organisation for Economic Co-operation and

Development–Development Assistance Committee

UNDP United Nations Development Programme

Endnotes

- See OECD (2009).
- 2 See CHS (2003) and Sen (2008).
- 3 See, for example, World Bank (2011), HiCN (n.d.), and MICROCON (n.d.).

- See, for example, Bozzoli, Brück, and Sottsas (2010) and Stewart and FitzGerald (2001).
- The annual estimate is based on global data for the period 2004–09.
- 6 This chapter builds on initial findings presented in Muggah and Wennmann (2010).
- 7 See, for example, OECD (2009).
- 8 See, for example, Ayres (1998, p. 24), who describes violence as 'the undue exercise of physical force'. See also Moser and Holland (1997) and Moser (2004) for participatory assessments of violence.
- 9 There is considerable literature on the cognitive, behavioural, and psychological impacts of witnessing or being subject to violence. The political and psychological impacts of violence, including on children and youths, are reviewed by Dubow, Huesmann, and Boxer (2009). Cairns (1994) and Tremblay, Pedersen, and Errazuriz (2009) focus on the effects of political violence on the development of aggressive behaviour and cognitive impairment. Psychological distress, depression, and anxiety in different populations are also addressed in urban violence cases by Mari et al. (2008) and for homicide survivors specifically by Miller (2009).
- Moser (2004), for example, identifies at least four categories of violence—political, institutional, economic, and social—and a lexicon of attributed characteristics and manifestations. Rather than ascribing a fixed typology, she envisions these violence categories as overlapping and on a continuum.
- See, for example, UNDP (1990, p. 10).
- There are 60 official indicators for monitoring progress of all eight MDGs. The official list of MDG indicators is available at UNSD (n.d.a). These 60 indicators are disaggregated into 171 specific variables, which are available at UNSD (n.d.b). The entire MDG database can be downloaded at UNSD (n.d.c). The 21 specific MDG variables used in this analysis are: 1) population below USD 1 per day (PPP, percentage), 2) poverty gap ratio at USD 1 per day (PPP, percentage), 3) poorest quintile's share in national income or consumption (percentage), 4) employment-topopulation ratio (15+, total, percentage), 5) children under five moderately or severely underweight (percentage), 6) children under five severely underweight (percentage), 7) unemployment, youth total (percentage of total labour force ages 15-24), 8) unemployment, youth male (percentage of male labour force ages 15-24), 9) unemployment, youth female (percentage of female labour force ages

15–24), 10) literacy rate (youth total, percentage of people ages 15–24), 11) total net enrolment in primary education, 12) share of women employed in the non-agricultural sector (percentage of total non-agricultural employment), 13) ratio of girls to boys in primary and secondary education (percentage), 14) mortality rate (under five, per 1,000), 15) mortality rate (infant per 1,000 live births), 16) adolescent fertility rate (births per 1,000 women ages 15–19), 17) births attended by skilled health staff (percentage of total), 18) prevalence of HIV (total, percentage of the population ages 15–49), 19) improved water source (percentage of the population with access), 20) improved sanitation facilities (percentage of the population with access), and 21) slum population (percentage of the urban population).

Three of the World Bank's World Development Indicators are used: 1) gross national income per capita, 2) poverty headcount ratio at the national poverty line, and 3) ratio of girls to boys in primary and secondary education.

The UNDP indicator used is the Human Development Index. For details on indicators and definitions used, see the online methodological annexe at www.genevadeclaration.org.

- 13 See Alda (2010), Altbeker (2005), LaFree (2000), Leggett et al. (2005), and Muggah (2005).
- 14 See UNHCR (n.d.).
- 15 See the online methodological annexe at www.geneva declaration.org.
- 16 The following section applies a range of statistical methods such as correlation analysis and econometric regressions. For details, see the online methodological annexe at www.genevadeclaration.org.
- 17 For example, gross national income per capita is widely available, with 173 countries reporting 1,573 yearly data points. Other development indicators that are readily accessible include adolescent birth rate and employment-to-population ratio. By way of comparison, only 52 countries reported on the ratio of girls to boys in primary education, with only 822 data points. Further, the poverty headcount ratio and the national poverty line data is only available for a limited number of countries.
- 18 See the online methodological annexe at www.geneva declaration.org.
- 19 The classification of countries according to HDI is available at UNDP (n.d.).
- 20 These ranges correspond to the mean and the mean plus one standard deviation of the world distribution of homi-

- cide rates in 1986–2009. For additional information on the descriptive statistics of homicide rates, see the online methodological annexe at www.genevadeclaration.org.
- This graph excludes 12 UN member states (for which HDI classification is lacking): Iraq, Kiribati, Marshall Islands, Micronesia, Monaco, Nauru, North Korea, Palau, San Marino, Somalia, Tuvalu, and Zimbabwe.
- Overall, 18 countries exhibit very high homicide rates and 49 feature high homicide rates. The countries with very high homicide levels are: Belize, Brazil, Central African Republic, Colombia, Democratic Republic of the Congo, Dominican Republic, El Salvador, Equatorial Guinea, Guatemala, Honduras, Jamaica, Lesotho, Malawi, Republic of the Congo, St. Lucia, South Africa, Swaziland, and Venezuela. The countries with high homicide levels are: Albania, Angola, Bahamas, Barbados, Belarus, Benin, Botswana, Burundi, Cameroon, Chad, Côte d'Ivoire, Dominica, Ecuador, Eritrea, Estonia, Ethiopia, Gabon, Georgia, Guinea, Guinea-Bissau, Guyana, Haiti, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Mali, Mauritania, Mexico, Mongolia, Mozambique, Namibia, Nicaragua, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Russian Federation, St. Kitts and Nevis, St. Vincent and the Grenadines, Sudan, Suriname, Tanzania, Thailand, Timor-Leste, Togo, Trinidad and Tobago, and Uganda.
- 23 These findings emerge from a regression logit analysis in which the dependent or left-hand side variable is a dichotomous variable, taking the value of one when a country shows an improvement in the indicator during the 2000–09 period. In this way, it is possible to capture the size and statistical importance of potential factors affecting the likelihood of HDI change. The model parameters were estimated using maximum likelihood procedures. Robust heteroscedasticity-corrected standard errors were also used.
- 24 By using a zero-score regression analysis, it is possible to gauge whether the normalized homicide level has an effect on the normalized HDI level after controlling for other influences. A z-score regression was used on the normalized HDI level on the levels of lethal violence as measured in quintiles.
- The GBAV 2011 database features 29 'main' armed conflicts in countries that were selected on the basis of an average of the levels and rates of direct conflict deaths between 2004 and 2009. Consult the online methodological annexe at www.genevadeclaration.org for more information.
- 26 This study uses the World Bank's classification of countries by income group. See World Bank (n.d.a).

- 27 The World Bank classifies all member countries (187) and all other states and territories (28) with populations of more than 30,000 (215 total); income information is available for 207 of them. Homicide data is not available for American Samoa, Aruba, Cayman Islands, French Polynesia, Greenland, Kosovo, Macao, Mayotte, Netherlands Antilles, New Caledonia, Northern Mariana Islands, Palau, San Marino, or the US Virgin Islands.
- 28 The United States is an interesting case: the country experienced roughly 32,300 firearm-related deaths annually between 1980 and 2006. This figure suggests that firearm-related injuries are the second leading cause of 'external' mortality after motor vehicle accidents. The 2006 age-adjusted death rate from firearm injury was 10.2 per 100,000 population with an estimated non-fatal injury rate of 23.6 per 100,000 (FICAP, 2009, p. 5). On the other hand, the Bahamas, Barbados, Estonia, and Trinidad and Tobago are non-OECD high-income countries with a high homicide rate and Equatorial Guinea, the Netherlands Antilles, and Puerto Rico are the only high-income non-OECD countries displaying very high homicide rates.
- 29 Correlations are calculated using Pearson's correlation, Spearman's rho, and Kendall's tau. Only statistically significant findings are reported.
- 30 The analysis does not consider any indicators or variables for MDG 8 (develop a global partnership for development).
- 31 For example, countries as varied as the Gambia and the Solomon Islands do not exhibit above-average rates of violence.
- The World Bank also confirms the relationship between poverty and homicide levels. Correlating the poverty headcount ratio according to the national poverty line (percentage of population) reveals a positive significant correlation with homicidal violence (World Bank, 2011).
- 33 Field (2010, p. 6) detects a significant negative relationship between an increase in homicide rates and the 'poorest quintile's share in national income or consumption percentage'.
- 34 The negative correlation between the two variables is evident by visual inspection and is confirmed by statistical tests.
- In contrast, with respect to literacy rates, the analysis does not yield any direct robust statistical findings.
- 36 The analysis does not consider the relationships between lethal violence and malaria or other diseases. Since malaria

- indicators (such as malaria per 100,000 and malaria death rates per 100,000) are only collected in malaria-affected countries, cross-country comparisons are not possible outside of those zones.
- 37 The analysis is based on data for 29 'main' armed conflicts in 2004–09 (GBAV 2011 database).
- 38 All of these findings coincide with those related to homicidal violence and probably reinforce these effects in general; as such, they are not presented here as separate effects.
- 39 The Dili Declaration represents a consensus between various government and civil society representatives from both developing and developed countries and is the outcome of a meeting held in Timor–Leste on 9–10 April 2010. To build consensus and put international actors on the right track towards development responses that are both effective and tailored to the context of conflict-affected and fragile states, the Dili Declaration identifies seven goals for peacebuilding and state-building; it also outlines concrete commitments for governments and international assistance to improve support in these processes. See IDPS (2010, p. 1).
- See OECD (2010a; 2010b). It is worth noting, however, that some 51 per cent of this spending was concentrated in 6 of 43 'fragile states', representing less than three-quarters of the total population of these same countries. Afghanistan and Iraq accounted for most increases since 2000.
- 41 See, for example, World Bank (2011).
- 42 Not all children were affected in the same way by the war. Those living in refugee camps administrated by international relief organizations had a better access to educational services than during peacetime. In contrast, internally displaced or handicapped children were completely cut off from any schooling (Hanemann, 2005).
- 43 See Neapolitan (1999). A similarly robust relationship has been found between inequality and health. See also WHO (2008).
- 44 See Muggah and Wennmann (2011).
- With reference to the distribution of homicide committed with firearms, the two groups of districts featured rates of 7.0 and 12.4 per 100,000, respectively.
- There were no reported or significant variations between low and high homicide rate districts when compared with other indicators, including HIV/AIDS-related mortality, infant mortality, percentage of teenage mothers, and births registering low birth weight.

- 47 Consult SIM (n.d.).
- 48 For example, private firms are frequently less inclined to invest and to generate new jobs where crime rates are high (Krkoska and Robeck, 2006; Mihalache, 2008).
- 49 The negative effects of armed conflict on employment through the destruction of industry and infrastructure, as well as through the displacement of people, are uncontested.
- Recent statistics indicate that up to 82 per cent of murders and 59 per cent of attempted murders occur between people who know each other. See SAPS (2007, p. 3).
- 51 Data drawn from SAPS (2009, pp. 24-26).
- 52 Data drawn from South Africa (2009, p. 26).
- 53 The Gini coefficient of inequality assigns values between o and 1 to each country, with o representing absolute equality and 1 representing absolute inequality.
- 54 Data drawn from Bhorat and van der Westhuizen (2009, p. 16).
- 55 Data drawn from Bhorat and van der Westhuizen (2009, p. 16).
- 56 Data drawn from SAPS (2009).
- 57 See also Coleman (1988) and Bourdieu (1986) for a thorough review of social capital.
- In its Millennium Development Goals Report 2010, the United Nations asserts: 'Improved data and monitoring tools are crucial for devising appropriate policies and interventions needed to achieve the MDGs. Although some progress is being made, reliable statistics for monitoring development remain inadequate in many poor countries, and the challenge of building in-country capacity to produce better policy-relevant data is enormous' (UN, 2010, p. 74).
- 59 See WHO (n.d.a) for a review of Violence and Injury Prevention publications.
- 60 See WHO (n.d.b) for a review of Violence Prevention Alliance activities.
- 61 See Muggah and Wennmann (2011).
- 62 Better-known observatories include the Violence Prevention Alliance's crime observatory in Jamaica; the Madrid security observatory; the Bogotá observatory; municipal observatories in El Salvador, Guatemala, and Panama; the regional observatory on security policies in Italy; Central America's violence observatory; and the Observatoire National de la Délinquance in France. See Gilgen and Tracey (2011) for a review of armed violence monitoring systems.
- 63 See Gilgen and Tracey (2011, p. 24).
- 64 On the involvement of the private sector in crime prevention, see Capobianco (2005).

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