Determinants of Common Crimes

Comparative Perspectives

Traditionally, crime experts have based their theories of the macro causes of crime on data from police records or courts. In the late 19th and early 20th centuries, criminologists generally related national or regional levels of crime to climate, extreme poverty, demographic composition, urbanization, secularization, social disorganization, and a wide range of other macro characteristics of societies (Beirne, 1993). Comparative criminology was part of mainstream criminology. In later years, diminished confidence in the reliability of official crime statistics as measures of crime led to a decline in epidemiological studies. Cross-country comparisons, using police figures, continued to be made but did not receive much attention. In many textbooks on criminology, results of such studies were not discussed at all. In the second half of the 20th century, criminological research in many countries focused exclusively on characteristics of individual offenders and methods of treatment or rehabilitation. The epidemiology of crime went into hibernation.

The development of alternative methods of data collection, such as sample surveys among populations of actual and potential victims, has opened new avenues for analyzing levels of crime across countries and over time. Victimization survey research has put epidemiological criminology on a new methodological footing by providing data that are collected independently of the police. These data allow cross-country comparisons that are less influenced by differences in legislation or institutional practices.

This chapter will begin with a discussion of the relationship between common (volume) crimes and a core set of social factors at the macro level (e.g., affluence, urbanization, inequality). Some of these correlates of crime at the macro level will be revisited...
when discussing trends in crime in the next chapter. To optimize the transparency of our analyses, most relationships are presented in the form of scatterplots depicting the position of each country on two dimensions (e.g., GDP and level of crime). The key conclusions about relationships have been retested in multivariate analyses. Although for many countries fresher data are available from the fifth round of the ICVS, cross-sectional analyses are done mainly on data from around 2000. Correlates of crime are unlikely to have changed much in the meantime. The economical, social, and institutional contexts of organized crime, corruption, and terrorism will be discussed separately in Chapter 12.

Urbanization and Crime

A consistent finding in traditional analyses of police-recorded crime rates was that recorded crime is more prevalent in large cities than in rural areas (Beirne, 1993). These studies confirmed the general 19th-century stereotype of cities as hotbeds of vice and crime. More recent statistics on police-recorded crime generally confirm the urban-rural divide. In many European countries, for example, the number of police-recorded crimes is at least twice as high per 1,000 inhabitants in the larger cities as in the countryside (United Nations, 1995). In the Netherlands, urban crime rates are four times higher in the largest cities than in villages (Van der Heide & Eggen, 2003). In central and eastern European countries, crime is traditionally the problem of urban areas. For instance, in Hungary in 2000, 50% of the Hungarian population lived in urban settlements, where 70%–75% of all registered crime was committed.

Higher urban crime rates according to police administrations may also reflect limited opportunities of inhabitants in underpoliced, rural areas to report incidents to the police. Victimization surveys can shed new light on the issue. Data from national crime victimization surveys have confirmed the urban-rural crime divide. The recent national crime victim survey of South Africa, for example, found victimization risks for both theft and violence to be 50% higher in metropolitan areas than in traditional urban and farming areas (Burton et al., 2004). Victimization surveys also confirm the concentration of fear of crime in the big cities of countries. This was, for example, confirmed in a survey carried out among the population of Poland in 2003 (Polish Public Opinion, 2003).

ICVS-based studies found similar results, which are presented below. In developing countries, the ICVS is for cost reasons normally conducted among samples of persons living in the capital city only. This restriction precludes an extensive comparison between urban and nonurban victimization rates at the international level using the ICVS database. At present, sufficient victimization data on urban and rural areas are available for only three world regions: western Europe, North America (United States/Canada), and Oceania (Australia and New Zealand).

Figure 5.1 shows victimization rates of those living in cities of different population sizes (six categories) in these world regions. The rates show how many of the respondents living in each of the six urban categories were victimized by crime per world region. As can be seen in Figure 5.1, the rate of victimization per 100,000 inhabitants increases steadily as city size increases. Limited results concerning respondents from Asia where the survey was carried out at the national or state level in Cambodia, Indonesia, the Philippines, and India (larger Bombay) do not conform to the general
pattern in which levels of crime relate to city size. Since levels of crime in Asia are, as reported in Chapters 3 and 4, comparatively modest, the present findings may indicate that large Asian cities have maintained levels of safety more typically found in rural areas elsewhere in the world. The “Asian exception” relates to the lack of urban crime problems. It may be caused by the preservation in urban settings of mechanisms of social control more typically found in rural communities. The results found in Cambodia may have been affected by large-scale resettlement policies of the previous communist regime whereby large groups of city dwellers were forced to migrate to rural areas. This is likely to have destabilized rural communities.

In Europe, the link between living in large cities and high victimization risks is strong and nearly universal (Van Kesteren, Mayhew, & Nieuwbeerta, 2000). The international crime victimization surveys have found that in Europe, 28% of urban residents felt insecure in their neighborhoods at night, while the comparable percentage in rural areas was 15%. In addition, the use of self-protection measures such as antiburglary devices is most prevalent among those living in the largest cities.
Multivariate analyses of previous ICVS data confirm that countries with higher proportions of people living in big cities show higher national victimization rates regardless of other characteristics (Van Dijk, 1999; Van Wilsen, 2003). The ICVS, as mentioned, has now been conducted among the national populations of more than 30 mostly Western countries. Within this group the degree of urbanization of countries and the national level of crime were found to be weakly but statistically significantly correlated ($r = .34$, $p > 0.05$, $n = 25$). Degree of urbanization and victimization by contact crimes were found to be even more strongly correlated ($r = .59$, $p > 0.05$, $n = 28$) (Van Dijk, Van Kesteren, & Smit, 2007).

The fairly consistent relationship between urbanization and levels of volume crime at both individual and country levels calls for further theoretical reflection. According to routine activity theory, crime rates are determined by the confluence in space and time of pools of motivated offenders and viable opportunities to commit crimes (Cohen & Felson, 1979). This perspective can help to explain the urban–rural crime divide. Although average levels of affluence tend to be higher in cities, rapid urbanization in many developing countries has resulted in a concentration of very poor, unemployed young males in big cities. While poverty by itself may not be a major cause of crime—in Asia, rates of property crimes remain low in even the poorest countries—the propensity to offend is higher among young, disenfranchised males than among other groups. Other factors possibly contributing to higher levels of offending in large cities are weakened family ties and other forms of social cohesiveness and the concentration of people from different cultures. Multivariate analyses of ICVS data at the national regional level have confirmed that the urbanization–crime link is mediated by weaker social cohesiveness (Van Dijk, 1994b).

At the same time, and perhaps more importantly, targets of crime such as cars and other luxury goods are abundantly available in large cities, while the daily routines of urban dwellers may leave these targets of crime less “socially well-guarded.” Typical for large cities, for example, are shopping malls and large-scale school complexes where natural surveillance is weak. City life generally brings people into contact more often with strangers, including potential offenders.

This confluence of criminogenic push-and-pull factors in large cities goes a long way to explain the higher crime rates in big cities (Felson, 1997). As mentioned, violence against women is not more but less prevalent in cities. The anonymity of public space in urban settings seems less relevant for types of crime of violence committed in the domestic sphere. The higher social status that women enjoy in urban environments may act as a shield against this special type of criminal victimization, for example, in the workplace.

**Regional Patterns and Future Trends of Urbanization**

Urbanization has represented one of the most significant worldwide social transformations of the past century. In recent decades, rapid urbanization in many parts of the world has definitely been a major driving force behind the growth in volume crime. The urbanization factor can account partly for the above-average crime rates in South and Central America, currently one of the most highly urbanized regions in the world.
It can also account for rising crime in Africa, a region urbanizing at a higher pace than the global average (UNODC, 2005).

The above-average levels of crime in some Western countries can also be partly explained by the comparatively high percentages of people residing in cities with 100,000 or more inhabitants. This is, for example, the case in Australia, where 69% of the population resides in a large city. Australia is one of the few countries where national rates are as high as urban rates, for example, those of Sydney. It is also worth pointing out in this context that in the ICVS database, the percentage of residents living in a place of more than 100,000 inhabitants is lower in the United States (21%) than in several countries of the European Union, Canada (43%), and Japan (39%). Compared to other industrialized nations, the United States is less highly urbanized. The comparatively low proportion of big-city dwellers in the United States may partly explain its moderately low level of volume crime according to the ICVS.

Presently, about half of the world population resides in urban areas (UN, 2004). Urbanization is forecasted to continue in the coming two decades with the share of population living in urban areas expected to reach two thirds by 2025. The projected pace of urbanization differs across regions, with urbanization in western Europe, North America, Latin America, and Oceania expected to level off. In contrast, rapid further urbanization is forecasted for Asia and Africa. In the latter regions, the share of inhabitants living in cities is forecasted to increase by 40% in the coming two decades (United Nations, 1995).

These regional trends will have important implications for the levels of volume crime and violence in Asia and Africa. The expansion of big cities in developing countries, although conducive to economic growth and modernization, may have a downside in the form of higher levels of volume crime. In Asia, increasing urbanization may eventually generate more serious crime problems in the coming decades and challenge the Asian exception. It is possible that violence against women decreases when women acquire a stronger position in societies with urbanized cultures. In African countries undergoing further rapid urbanization, crime problems may become ever more serious and violent, and governments will be hard-pressed to raise sufficient funds to address these issues successfully and may need foreign aid for institution building.

**Demographics and Crime**

Thefts, burglaries, assaults, and other forms of volume crime are, to a large extent, youth-related phenomena. In all countries, the majority of offenders as well as a disproportionately large proportion of victims are males between 15 to 30 years of age (Adler, Mueller, & Laufer, 1998). The ICVS database allows comparisons of the victimization rates of various age groups for different types of crime. Universally, younger people (24 years of age or less) are markedly more at risk than older ones, defying the stereotypical notion of offenders preying on the elderly. Related to the age factor, those who go out more frequently in the evening are more at risk, particularly for contact crimes (Van Kesteren, Mayhew, & Nieuwbeerta, 2000).

Findings on offending show the same age-related patterns and profiles. Among 12- to 18-year-olds in many countries, engagement in forms of juvenile delinquency is
very common, especially among boys. Across countries and cultures, most people involved in criminal activities significantly reduce their involvement in crime after reaching young adulthood. Many studies report steep declines in criminal involvement after the age of 25 for property crimes and after 30 for violent crime (called the “aging out” phenomenon). Self-reported delinquency surveys from different countries show that the peak of young people’s criminal activities lies between 15 and 18 years (Barberet et al., 2004). Overrepresentation of young males among offenders is attributed by criminologists to weak social integration during the transition from childhood to adulthood (Wilson & Hernnstein, 1995).

The overrepresentation of young males among offenders leads to the epidemiological hypothesis that societies with relatively large proportions of young males will show higher levels of crime. This hypothesis was confirmed by LaFree and Tseloni (2006) in a multivariate analysis of homicide trends. As shown in Figure 5.2, ICVS data on victimization by common crime confirm that overall victimization rates are significantly higher in societies with more young males.

The data in Figure 5.2 reveal a moderately strong relationship between demographic compositions of populations and levels of crime ($r = .46$, $p > 0.05$, $n = 62$). The age structure of the countries or cities included in the analysis explains 25% of the variation in victimization rates. The above-average crime rates in countries such as

Figure 5.2 Scatterplot of Percentages of Young Males in Country or City Populations by Overall Rates of Victimization (Ranked Variable)

Brazil, Colombia, Zimbabwe, Uganda, and Costa Rica are partly explained by the over-representation of young males in their (urban) populations. Outliers include several Asian countries (China and Indonesia) as well as Botswana. Considering the skewed age structure of their populations, higher levels of crime were to be expected in these countries. Among the (mainly Western) countries participating in the fifth wave of the ICVS at the national level, the correlation between age composition and overall victimization was not significant (Van Dijk, Van Kesteren, & Smit, 2007). However, the correlation between age composition and victimization by contact crimes was fairly strong \( (r = .59, p < 0.05, n = 28). \)

Previous analyses of global ICVS victimization data have shown that the macro factors of urbanization and age structure combined explain half of the variation in national victimization rates (Van Dijk, 1999). Put differently, if all world populations were roughly similar in degree of urbanization and age structure, national differences in levels of crime would be reduced by half.²

**Future Demographic Trends**

Countries show great variation in age structure. The proportion that young males make up of the world population is currently 15%. Their share of the population is roughly twice as high in Africa (20%) as in Asia, western Europe, and North America (10% or less). Africa currently hosts the world’s youngest population (43% under the age of 15) (UNDP, 2004). Higher crime rates in African countries can, to a fairly large extent, be attributed to the overrepresentation of young males in their national populations.

Many Western countries have undergone the social and economic impact of a significant “baby boom” since the end of World War II. The overrepresentation of young people in the national populations from 1960 to 1980 was an important factor behind the crime booms in those years in North America and western Europe. The subsequent stabilization of crime rates since 1990 in these countries can be seen as partly an effect of the aging of their populations.

World populations are currently undergoing an unprecedented, rapid demographic transition. Due to lower fertility and mortality, national populations are aging rapidly in many countries across the world. The young–old balance is shifting with the proportion of young people declining. The world’s median age of 26 is forecasted to increase to 36 by 2050 (United Nations, 2004). This aging trend is expected to be enduring and irreversible in the foreseeable future and to pose many economic and social challenges, for example, for the funding of welfare benefits of the elderly. However, one of the rarely mentioned advantages of the aging trend might be a reduction of youth-related forms of volume crime, a trend that is already in evidence in North America, Europe, and Australia.

In the coming decades, the pace of the aging trend is forecasted to increase in many developing countries so that youth-related crime problems, especially in the African region, might at a later point be somewhat alleviated. However, since older people tend to be more concerned about personal security, feelings of insecurity are likely to increase globally, even in countries where levels of actual victimization are stable or declining. The elderly will make up an increasingly important segment of the
electorate in developed countries. From this “gray vote,” more political pressure will be brought to bear on governments to ensure protection against real or perceived security threats. Paradoxically, declining rates of volume crime may be accompanied by increasing fear of crime and demands for “super security.” The first sign of such trends is the growing concern among the public in several European countries, including the United Kingdom and the Netherlands, about minor incivilities and diminished concerns about burglaries or other forms of serious crime.

**Affluence and Crime**

From an economic perspective, it seems self-evident that the opportunity costs of committing offenses for potential offenders are lower if their levels of licit income are low. For those living in extreme poverty, a life of crime presents a tempting escape route. Empirical studies do not confirm, however, any straightforward relationship between poverty and crime at the macro level (Belknap, 1989; Van Wilsem, 2003). The Human Development Index (HDI), published annually by the UN, ranks nations according to their citizens’ quality of life using criteria such as life expectancy, educational attainment, and adjusted real income. An analysis of the relationship between country rates of victimization as reported in the ICVS and the Human Development Index shows inconclusive results. As expected, crime rates tend to be on average somewhat higher in poor, less-developed countries, but the differences in overall crime levels between poor and rich countries are fairly small.

For a proper understanding of crime rates, the prevalence of poor or unemployed young people in a population is not the only relevant factor. The prevalence of potential *victim* populations and of situational factors facilitating crime must also be taken into consideration (Felson and Clarke, 1989; Van Dijk, 1994a, 1994b). Many other factors in society besides the income of potential offenders determine the level of crime. Some of these factors are positively related to affluence. One such factor is, as mentioned above in the discussion of the city–crime link, the availability of suitable targets of property crime. As countries become more affluent, more people own commodities that may become easy targets of crime. This by itself may drive up levels of crime, regardless of the income situation among local pools of potential offenders.

An obvious example of the affluence-driven supply of suitable targets for crime is the automobile. Motor cars are suitable targets for joyriding and car theft and are also important tools for the commission of other crimes such as armed robberies. Figure 5.3 shows the relationship between car ownership rates per country and national victimization rates for three types of car-related crime (car theft, theft from a car, and car vandalism). It shows the strong relationship between the rates of car ownership in a country and the total rates of such car-related crimes per household \( r = .68, p > 0.05, n = 65 \).

If more cars are available in a country, more people are engaged in car-related crimes. The rates of car-related crimes per 100,000 people are higher in countries where more people own cars. As discussed in Chapter 3, the picture changes when rates are calculated for car owners only. However, even car owners’ victimization rates are partly driven by national rates of car ownership. Individual car owners run higher risks of being the victim of car theft in the United Kingdom than in other European
countries where cars are much scarcer (Van Dijk, Mayhew, & Killias, 1990). Japan and Hong Kong/China provide an interesting exception to the rule: Although cars are widely available, rates of car-related thefts have remained low.

**Mass Transportation and Crime**

Countries that rely predominantly on private cars for transportation are at the top of the list for car crimes. In such countries, car-related crimes make up a substantial part of the total costs of volume crime. For example, in Australia, thefts from cars and car thefts are responsible for 8% of the total costs of crime (Mayhew, 2003). High rates of car-related crimes can be seen as a hidden cost of national transportation systems relying mainly on the use of private cars. Countries with better-developed public transport will suffer less from such car-crime losses.
Countries relying more on public transport systems, however, may incur additional crime costs in another domain. As discussed earlier, public transport systems provide ample opportunities for theft from the person through pickpocketing. Countries relying more on trains, buses, and trams for transportation than on cars, such as Spain, France, the Netherlands, Poland, and the Czech Republic, experience markedly higher levels of pickpocketing than the United Kingdom, Australia, or the United States (Mayhew & Van Dijk, 1995).

In several European and Asian cities, bicycles are among the most important modes of transportation. Figure 5.3 provides yet another example of how the levels and nature of volume crime are shaped by the dominant modes of transportation in a country. It shows the strong relationship between bicycle ownership rates as measured by the ICVS and bicycle theft.

Figure 5.4 Percentages of Bicycle Ownership and Bicycle Theft

Figure 5.4 shows a very strong relationship between rates of bicycle ownership and rates of bicycle theft, with rate of ownership explaining 63% of variation in national victimization rates related to bicycle theft \( (r = 75, p < 0.05, n = 65) \). Indonesia is among the outliers, but Japan and China conform to the pattern.

The results on bicycle theft confirm the theory that levels of property crime are determined by criminal opportunity structures (Felson & Clarke, 1989). Bicycle theft, as with car theft, appears to be clearly driven by availability. Even in otherwise low-crime countries such as China and Japan, the general availability of bicycles generates high rates of bicycle theft as “crimes of expediency.” The analysis reveals an exponential relationship between bicycle ownership and theft. If bicycle theft surpasses critical levels, a chain reaction seems to be set motion by victims committing themselves to stealing—or to knowingly buying from “fences”—to replace the stolen bicycle. This phenomenon of “compensatory stealing” of bicycles has been well documented among student populations in the Netherlands (Van Dijk, 1986) and probably also occurs in Denmark, China, and Japan. It is an example of the kind of multiplying mechanisms that cause affluence-driven crime epidemics.

Equally strong relationships have been demonstrated between motorcycle ownership and motorcycle theft. Motorcycle theft also provides an interesting example of how the introduction of new safety regulations and ensuing changes in behavioral patterns yield an unexpected crime prevention bonus. In the 1970s, several countries introduced safety laws requiring motorcyclists to wear helmets. Offenders wanting to steal a motorcycle now had to go equipped with a helmet or they would be spotted quickly. The enactment of the new helmets legislation has led to dramatic declines in motorcycle thefts in several countries, including the United Kingdom, the Netherlands, Germany, and India (Mayhew, Clarke, & Elliot, 1989).

**Patterns of Vehicle Theft at Second Sight**

The impact of vehicle ownership goes further than the fact that more cars drive up car theft and more bicycles drive up bicycle theft. Previous analysis of ICVS results has shown a strong inverse relationship between rates of car theft/joyriding and rates of bicycle theft, controlling for urbanization, affluence, and levels of other crime (Van Dijk & Mayhew, 1992). Thus, in countries where bicycle ownership is high and bicycle theft is therefore relatively common, stealing cars occurs less often. For example, low car theft rates are found in Finland, Germany, and the Netherlands, countries where almost all households own one or more bicycles. Motorcycle ownership seems also to be inversely related to car theft, with Greece and Italy being two cases in point.

A broad explanation of the links between bicycle/motorcycle ownership and car theft is that young people in North America, Australia, the United Kingdom, and Ireland are more accustomed to driving cars. In Sweden, the Netherlands, and Germany, young people tend to be more attuned to the use of bicycles, and in Italy and Greece, to motorcycles, although car ownership rates are comparatively high as well. These general patterns of preferred vehicle use among young people are reflected in national patterns of vehicle theft. Patterns of vehicle theft in Europe provide a neat example of how crime patterns are shaped by routine activities of the population.
The strong inverse relationship between bicycle ownership and car theft/joyriding also suggests that those looking for illegal, short-distance transportation will make do with a bicycle or motorcycle if there are plenty available and young people are used to riding such vehicles. Consistent with this interpretation is that in typical low-bicycle-ownership countries, such as the United Kingdom and France, a larger proportion of all car thefts qualify as cases of joyriding (because the car is eventually recovered) than elsewhere, for example, in Germany and the Netherlands. This finding led Van Dijk, Mayhew, and Killias (1990) to hypothesize that “On the market of illegal transportation, bicycles could be a substitute for cars, if bicycles are in sufficient supply.”

Over the past 10 years, improved anti-theft security has reduced opportunities for car theft and joyriding, especially in countries where such crimes were relatively common (e.g., the United Kingdom). In the next chapter, results will be presented showing pronounced decreases in many developed countries in rates of joyriding. According to the hypothesis of bicycles acting as “substitute goods,” this reduction in opportunities for joyriding should have increased the vulnerability of available bicycles and motorcycles as targets of theft. The ICVS 2005 shows indeed a sharp increase in motorcycle thefts in the United Kingdom in recent years (2000–2005), and stable rates of bicycle theft decreasing elsewhere. This result suggests that two-wheelers have acted as substitute goods for (better-protected) cars as targets of theft for illegal transportation. Improved security of motor cars has arrived at a moment when the use of bicycles has become more popular and is actively promoted for environmental reasons. The unintended side effect of these two trends might well be a displacement from joyriding of cars to thefts of two-wheelers.

More Affluence, Less Crime?

It is widely believed that economic and social development will automatically result in decreasing rates of crime by eliminating its social root causes. According to conventional criminological “strain” theories, for example, fewer people will be motivationally inclined to engage in offending if societies become more prosperous. Unfortunately, crime trends in developed countries over the past 50 years have failed to conform to this optimistic model of crime prevention through economic development. Trends in crime over time are strongly and positively related to levels of affluence. Almost everywhere, crime rates start rising as soon as the economy starts to grow. All developed countries experiencing “economic miracles” in the 1960s after recovering from World War II saw their crime rates surging, with crime rates multiplying fivefold or more in some countries (Laycock, 2001; Van Dijk, 2000). Several central European countries have likewise experienced crime booms in tandem with healthy economic growth over the past two decades. More recently, Ireland, where economic growth was delayed, stands out with a boom in crime, whereas levels of volume crime have reached a plateau in most other developed countries.

The trend data on crime and affluence seem to point to a dynamic interplay of push-and-pull factors at the macro level that is not easy to understand. While high levels of crime in poor countries seem to require no explanation—opportunity costs of offending are, as said, comparatively low due to poverty and massive unemployment—the
curvilinear relationship between affluence and crime in most Western countries over the past 50 years poses a theoretical puzzle. According to routine activity/criminal opportunity theory, mentioned earlier, the impact of affluence on crime in societies is not limited to a reduction of the pool of potential offenders. Affluence brings into mass circulation goods that fit the acronym CRAVED: Concealable, Removable, Available, Valuable, Enjoyable, and Disposable (Clarke, 1999). Affluence is also often accompanied by urbanization and related weakening of social cohesiveness. As affluence levels rise, fewer people may be driven toward crime by economic deprivation, but more are driven toward it by the presence of abundant suitable targets. Car theft has been mentioned as a prime example of a type of crime driven by opportunity. A neat, topical example of supply-driven crime effects is the recent upsurge in robberies and thefts caused by the massive distribution of mobile phones (Mayhew, 2003). In conclusion, the crime-reducing effects of fewer people with a poverty-driven propensity to offend are more than offset by the increased availability of opportunities to commit profitable crimes with near impunity. The dual impact of affluence on levels of crime is described in Figure 5.5.

Figure 5.5  Graphic Description of the Dual Impact of (Growing) Affluence on Crime

If losses from crime increase, investments in crime prevention and criminal justice become more and more economically rewarding. Sooner or later, inhabitants of affluent societies respond to higher crime rates with increased expenditures on countercrime measures. As a general rule, more effective crime prevention measures are put in place if losses from crime outweigh the costs of effective prevention. High crime rates automatically generate market demand for crime prevention. Examples are security measures against household burglary, robberies of post offices and banks, and check fraud (Laycock, 2001). As crime prevention and criminal justice reach sufficient levels, the costs of offending will increase and crime rates are likely to start falling. Increased affluence leads to a “crime harvest” in the medium term. Eventually, sufficient
measures are put in place by potential victims to counter increased losses from crime, and crime rates will stabilize at a lower level. We will return to this hypothesis of equilibrating forces on the market of crime in our discussion of the trends in crime over time in the next chapter.

**Development and Crime Revisited**

There are clear indications that among the most developed countries, rates of volume crime such as burglaries and car thefts have started to fall, after four decades of increases. In this context, evidence will be presented of the significantly increased investments in crime prevention and criminal justice in countries enjoying drops in crime. With a time lag of several decades, the most developed countries have finally counterbalanced increased opportunities of crime with better protection and more effective deterrence. Western societies are finally reaping the delayed benefits of the crime prevention measures that their higher affluence has allowed them to put into place.

From an economic perspective, the criminological outlook for developing countries is less positive. Rapid urbanization, demographics producing a “youth bulge,” and high unemployment have already driven up crime rates. For the reasons explained above, economic growth, however welcome for other reasons, is unlikely to produce crime reductions as an automatic side effect. In developing countries, poverty alleviation by itself is no remedy for crime, at least not in the short or even medium term. The experiences of developed countries, including most recently those in central and eastern Europe and Ireland with affluence-driven crime booms, leaves little room for optimism about the immediate future of urban security in developing countries, even if they experience robust economic growth. Within sub-Saharan Africa, levels of crime are the highest in the more affluent countries (e.g., South Africa). As other African countries approach similar levels of affluence, their crime rates may soon surge to South African levels. According to high-ranking Chinese police authorities, levels of common crime are stable but are rising in the economically most advanced areas (personal communication to the author).

Decreases in crime in developing countries with expanding economies can be expected only if both private and public investments in crime prevention and criminal justice are brought up to the standards of developed countries or to levels even higher. Such catching up will require much larger investments in countercrime policies than currently available or planned for. As with other public goods, many developing countries, especially in sub-Saharan Africa, lack the resources to bring crime prevention and criminal justice up to par. Failure to address crime problems may in turn negatively affect development. This issue will be further discussed in Chapters 12 and 13, which deal with the impact of the justice and security sector on sustainable development and the need of global reforms.

**Correlates of Violence**

Many comparative studies of crime levels have shown levels of violent crime to be related to sets of social factors other than those of property crimes (Howard & Smith, 2003). Bennett (1991) has specifically maintained that development serves to decrease crimes of violence but simultaneously acts to increase crimes of theft. Similarly,
analysis of older ICVS data showed that violent crime is related to indicators of poverty and inequality, while property crime is associated with opportunities of offending created by affluence (Van Dijk, 1999; Van Dijk & Kangaspunta, 2000).

**Poverty and Inequality**

Analyses of older ICVS data on 50 countries have shown that a measure of poverty-related “strain”—percentage of young males dissatisfied with their income—was strongly related to levels of contact crimes (robery and threats/assaults, sexual offenses). In multivariate analyses, the strain factor emerged as the strongest predictor of levels of violence (Van Dijk, 1999). In other secondary analyses of ICVS data on fewer countries, income inequality emerged as the most important correlate of common violent crime (Van Wilsem, 2003). This finding has been contested by Pare (2006), who argues that not income inequality but infant mortality, which is a measure of poverty, is the best predictor of common violence. Since income inequalities tend to be larger in poorer countries, where more people suffer from extreme poverty, the impact of poverty and inequality on violence is difficult to disentangle. Arguably, income inequality and various measures of perceived or objective poverty are two sides of the same coin. In many countries, both are measures of the forms of severe deprivation conducive to violence.

The statistical linkage between income inequality and violence is confirmed in the results of the ICVS 2000 for both threats/assaults and robbery. Figure 5.6 shows the relationship between income inequality, as measured by the Gini coefficient (a measure of inequality in a population) and the levels of robbery as measured in the ICVS. The relationship between income inequality and rates of victimization for street robbery appears to be moderately strong ($r = .62, p < 0.05, n = 50$). In the upper right quarter, which indicates where these problems are most severe, are mainly Latin American and African countries as well as Russia and Estonia.

In several epidemiological studies of levels of police-recorded criminal violence, including domestic violence, statistical relations have been found with income inequalities (Fajnzylber, 1997; Fajnzylber, Ledermann, & Loayza, 2000; LaFree, 1999; LaFree & Tseloni, 2006). According to Neumayer (2003) and Pare (2006), other measures of deprivation are more important. As said, the distinction may not matter much in developing countries. Many countries in Africa (Swaziland, South Africa, Zimbabwe) and Latin America (Brazil, Colombia, Bolivia) where homicide rates are high show high scores on both income inequality and on many measures of poverty/deprivation. As South African president Thabo Mbeki argued in response to the UNDP 2000 Human Development Report: “Poverty is not only expressed in shortage of food, shelter and clothing. It is also expressed in high levels of crime, including violence among the poor themselves, especially against women and children, in many instances accompanied by substance abuse.”

**Criminal Victimization and Gender Inequality**

Analyses of the ICVS data at the level of individuals reveal a fairly even gender distribution of risks of victimization for property crimes. Burglary victimization rates are just about the same for males and females. For other property crimes in general, male–female differences are slight, with males experiencing somewhat higher robbery
victimization rates. As discussed before, violent crime is more clearly gendered. Violence of males against females, including sexual violence, is prevalent in many societies (United Nations, 2006; WHO, 2002; WHO, 2005). Since the measurement of these forms of violence has many methodological problems, all available results should be regarded as tentative. Analysis of ICVS data has shown that violence against women, measured independently of the police, is linked to gender inequalities. Rates of victimization by violence among females are higher in countries where women are less educated (Alvazzi del Frate & Patrignani 1995; Van Dijk, 1999). Results of dedicated surveys on violence against women showed developing countries experiencing a higher prevalence of partner violence than developed countries. Such violence is also more common in provincial areas than in urban ones (United Nations, 2006). These results indicate the existence of a link between gender equality and violence against
women. Violence against women is also, like all forms of criminal violence, linked to deprivation among males, as correctly assumed by President Mbeki (Van Dijk, 1999).

If ICVS-based data on victimization by sexually motivated violence (sexual harassment and rapes) are combined with data on other violence (assaults), a comprehensive index of violent crime shows females to be somewhat more at risk of violence than males. The gender ratio for violence shows a highly differentiated pattern across regions. In Europe and North America, males show higher rates of victimization by violence than do females. But in the other regions, the difference goes in the other direction. In Africa, South and Central America, and Asia, the percentage of women victimized by any kind of violence is 50% or more above that for males. In Asia, female victimization by violence is even twice as high as male victimization (Van Dijk, 1999). The generalized notion that Asian countries are low on violence must be qualified with respect to gender. For Asian women, the risks of being violently victimized are not much lower than for women in Western countries.

The distribution of the risk of being lethally wounded differs from the risks of being victimized by nonlethal violence. As just mentioned, women are more at risk of being victimized by violence if sexually motivated violence is included in the measures used, especially in many developing countries. Homicide, however, appears universally to victimize predominantly (young) males. WHO homicide data show the risk for homicide to be the highest for young males (19.4 per 100,000) and young adult males (18.7 per 100,000) (WHO, 2002). Risks for females are significantly lower in all age groups (4.5 per 100,000).

Although high levels of violence, including violence against women, are clearly linked to poverty and inequality, other factors such as alcohol consumption and gun ownership play an important role, independent of affluence. These special determinants of levels of crime and violence are discussed below.

### Drugs and Alcohol Abuse

Many drug addicts finance their addiction at least partly through predatory crime. A significant percentage of arrested offenders in many countries test positive for illicit drug use. In Australia, for example, $3.7 billion of the cost of property and violent crime stems from drug-attributable crimes, according to the findings of the Drug Use Monitoring in Australia program (Makkai & McGregor, 2003). This amounts to almost 20% of the total crime bill of the country (Mayhew, 2003). Nonetheless, research has not provided much support for the theory that young drug users turn to crime solely to pay for drugs. Those who commit crimes frequently and over a longer period of time are often those who began offending at a young age, then moved to illicit drug use, and then increased the scope of their criminal activities. As it is often expressed, illicit drug use is just one element of a delinquent lifestyle (UNDCP, 1997).

Though not necessarily causally linked, the two phenomena—drug use and crime—often occur in tandem. In the United States, for instance, the current use of cocaine among the general population decreased by 35% between 1988 and 2002. Over the same period, total recorded crime fell by 15%, the number of murder victims declined by 22% (those related to the drug law offenses declined by more than 50%),
and property crime fell by 28% (National Drug Control Strategy Reports, 2004; UNODC, 1996). Similarly, the “heroin drought” in Australia (2002), following an initial hike, resulted in crime rates falling overall as large numbers of heroin addicts left the market. Although the continuous drop in property crime in Australia can only partly be attributed to the heroin drought, it seems to have assisted the downward trend (Moffatt, Weatherburn, & Donnelly, 2005).

A component of the I-ADAM study dealt with self-reported sources of illegal income of arrested drug users over the past 12 months in a selection of countries (Bennett, Holloway, & Williams, 2001). The majority admitted income-generating property crime (theft, burglary, robbery, handling, and fraud/deception). Furthermore, drug-using arrestees reported higher levels of illegal income than non-drug-using arrestees.

Drug scenes can by themselves, regardless of their association with property crime, be perceived as constituting a public nuisance or incivility problem by the public at large. A question in this respect has been addressed to EU citizens in the framework of the Eurobarometer (Van Dijk & Toornvliet, 1996). The results for 2002 are presented in Figure 5.7.

**Figure 5.7** Contact With Drug-Related Problems in the Area of Residence (in %) in 15 European Union Countries (2002)

Source: Eurobarometer, 2003, adapted.
On average, 19% of the respondents said that they had been in contact with drug-related problems either often or from time to time during the past 12 months. Five countries, namely, the United Kingdom, the Netherlands, Portugal, Italy, and Greece, were above the average while the others showed lower percentages. The high percentages of exposure in the United Kingdom and the Netherlands tie in with the current political debates in these countries about “incivilities.” Feelings of unsafety in the street were found to be strongly correlated with perceived exposure to drug problems ($r = .79$). The same question has been introduced in the ICVS 2005 for European countries. The results indicate that concerns about drug-related incivilities have continued to go up in most EU member states (Van Dijk, Manchin, Van Kesteren, & Hideg, 2007).

**Alcohol Abuse and Violence**

Alcohol abuse is a major cause of fatal traffic accidents across the world. Most countries have therefore introduced laws prohibiting driving under the influence of alcohol. In the United States, 4 out of 10 fatal motor vehicle accidents involve alcohol (Bureau of Justice Statistics, 1998). The dramatic consequences of drunk driving have led to campaigns for more stringent action against drunk drivers (Mothers Against Drunk Driving, MADD). For individuals, the link between alcohol abuse and violent behavior is equally well established. Alcohol consumption often precedes violent events, and the amount of drinking is related to the severity of the subsequent violence (WHO, 2002). Alcohol use is known to reduce restraints and relax antiviolence norms. In some situations, alcohol-related violence is facilitated by norms condoning or prescribing such behavior (WHO, 2002).

Studies across the world have consistently shown the close association of alcohol and violent crime. In the United States, almost half of all offenders convicted for violent crimes were under the influence of alcohol during the crime (Adler, Mueller, & Laufer, 1998). Among attacks committed by current or former intimate partners, two out of three perpetrators had been drinking prior to the attack. In homicide cases, alcohol involvement of both offenders and victims is even higher than in less serious crimes (Adler, Mueller, & Laufer, 1998). Very similar statistics have been reported from South Africa. According to recent victim surveys, in just over 70% of all assault cases, either the victim or the offender, or both, were under the influence of alcohol. The contributing role of excessive alcohol consumption goes some way to explain the seasonal patterns of violence in South Africa, showing clear peaks during holidays (Shaw, 2002).

At the macro level, time series analysis has consistently shown clear relationships between alcohol consumption and homicide rates in northern European and central European countries, while such relationships in southern European countries tend to be weak (Lenke, 1990; Rossow, 2001).

In analyses of ICVS rates of victimization, rates of beer and liquor consumption have been found to be related to rates of victimization by assaults and threats among Western countries. Figure 5.8 shows the results of the analysis of the relationship between beer consumption according to World Drink Trends (2004 and 2005) and victimization by threats and assaults, using data of the ICVS 2005 for developed countries and Mexico.
As is shown in Figure 5.8, levels of assaults or threats are moderately correlated to levels of beer consumption per 100,000 population ($r = .44$, $p > 0.05$, $n = 27$). Countries combining comparatively high rates of beer consumption and levels of violence include Ireland, Australia, New Zealand, the United Kingdom, and the Netherlands. In a multivariate analysis of correlates of violence, using the ICVS 2005 data, levels of beer consumption emerged as the strongest independent predictor of levels of assault or threats. Degree of urbanization and beer consumption together explained 47% of the variance in the 30 countries included in the analysis (multiple $r = .69$). Beer consumption was found to be strongly correlated with wealth ($r = .44$). The latter finding suggests that among developed countries, alcohol-induced violence can be seen as an affluence-driven social problem.

Within northern Europe and Australia, excessive beer drinking is commonly associated with rowdy behavior by young adolescents (so-called “lager louts”). Manifestations of this phenomenon consist of different forms of street violence including vandalism. Analyses of older data from ICVS 2000 confirm the linkage between beer consumption and rates of vandalized cars, which can be seen as a proxy for hooliganism. Countries scoring high on both beer consumption and vandalism included Austria, Australia, the United States, Belgium, and the Netherlands.
We finally looked at the relationship between hard liquor consumption and homicide in Europe. Again, a clear correlation between alcohol and violence was found after the deletion of two outliers (Estonia, Ukraine) of which the data on liquor may be deflated ($r = .68, p < 0.05, n = 26$) (see Figure 5.9).

**Trends in Alcohol Consumption**

Total alcohol consumption is higher in the more affluent world regions, with Europe and Australia clearly on top. Trends in alcohol consumption are different for the three main types of alcohol (hard liquor, wine, and beer) and are divergent across regions and countries. Over the past 10 years, total alcohol consumption has declined in many of the more affluent regions and increased elsewhere. Several middle-income countries such as Mexico, Brazil, Russia, and South Africa have experienced significant

---

**Figure 5.9** National Rates of Consumption of Hard Liquor (Liters per Head) and Rates of Homicide in Europe (Ranked Variables)

increases in beer consumption over the past 20 years (World Drink Trends, 2004). Total alcohol consumption has also increased by 12% in the United Kingdom since 1997. This increase, in conjunction with more liberal licensing rules, is blamed by experts for the increase of attacks on strangers in British cities as measured by the British Crime Surveys (The Economist, August 1, 2004). Especially worrying from a criminological perspective are reports of increasing consumption of alcohol by very young people in the United Kingdom, the Netherlands, and elsewhere in Europe. By contrast, underage drinking is more successfully addressed in the United States mostly as a result of pressure from groups such as MADD. In his detailed analysis of the famous crime drop of New York in the 1990s, Karmen (2000) identifies decreases in the use of hard liquor as one of the key factors. Publication of the ICVS 2005 results in Europe in February 2007 has fueled a political debate about alcohol abuse among youngsters in the United Kingdom, Ireland, and the Netherlands (e.g., Daily Telegraph, February 6, 2007).

### Availability of Guns

In many regions of the world, the easy availability of firearms is seen as another important contributing factor of violent crime, and the ongoing proliferation of small firearms worldwide is a cause for grave concern for many governments. The danger of readily available weapons, especially in combination with alcohol abuse, has been recognized since time immemorial. In the epic poem, “The Odyssey,” written about ancient Greece over three millennia ago, the hero, Odysseus, explains his removal of weapons from a hall where young noblemen are bound to feast as a measure of crime prevention. He observes that they may otherwise, “drunken from wine,” start wounding each other: “because iron has that attraction to men”.

In the current era, guns are the “tools of choice” for serious crimes of violence committed across the world. At least 200,000 non-conflict-related firearm deaths occur each year worldwide, most of them classifiable as firearm homicides (Small Arms Survey, 2004). Firearm homicides appear to be concentrated in South America and the Caribbean (40% of global cases). This region loses between 73,000 and 90,000 victims by firearms annually, overwhelmingly through homicides. Another 20% of the world’s firearm homicides take place in Africa. Guns are also widely used in the commission of nonlethal crimes such as threats, aggravated assaults, robberies, and, to a lesser extent, sexual crimes.

The ICVS questionnaire includes an item on ownership of firearms that allows an estimate of national or city ownership rates, independent of official registration. Since ownership of firearms is illegal in some countries, the responses may be somewhat deflated. Reported ownership may also be deflated in countries where governments and NGOs are actively campaigning against ownership. Figure 5.10 shows the ownership rates for firearms and handguns specifically in urban areas. Ownership rates of firearms and of handguns are strongly correlated at the country level.

Globally, one in 10 households owns one or more firearm. Firearm ownership rates are highest in North America (United States and Canada, weighted for population), Latin America, and eastern Europe. The proportions of firearms that are handguns are largest in Latin America and Africa. The ownership rate in Africa for handguns is slightly above the global mean.
Reasons for firearm ownership were asked about in the ICVS, starting from the third sweep of the survey (1992). The most common primary reason in that survey given was hunting or sport. The percentages of owners who mentioned protection are highest in Africa (79%) and Latin America (65%). In the United States, 39% mentioned protection as reason. The percentage is much lower in western Europe (9%).

Table 5.1 shows the national firearms ownership rates in urban areas, also indicating the proportion of hand guns.

The ICVS survey confirms that firearm ownership in the United States is very common: Firearms are present in over 30% of households and are mainly handguns. Other countries with high firearm ownership rates among city dwellers are some of the Latin American countries, such as Paraguay and Costa Rica. High rates are also found in some countries in eastern Europe (Serbia, Albania) and some countries in Africa (South Africa, Namibia). Switzerland's high rate is largely explained by mandatory ownership of a military weapon by all male adults. Low ownership rates are found in Asian countries such as China, India, and Japan and western Europe (the Netherlands and the United Kingdom).

Firearms and Violent Crime

International cross-sectional studies find that gun ownership levels are associated with overall homicide rates (Hepburn & Hemenway, 2004; Killias, 1993; Killias, Van Kesteren & Rindlisbacher, 2001). In South Africa, the increased availability of firearms in recent years has not only increased the percentages of homicides committed with
### Table 5.1 World Rankings According to Firearm Ownership and Proportion of Handguns in Urban Areas

#### Fifteen Countries With Highest Rates of Gun Ownership

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>% Firearms Being Handguns</th>
<th>% Firearms Being Handguns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>United States</td>
<td>34.4</td>
<td>67.6</td>
</tr>
<tr>
<td>2</td>
<td>Paraguay</td>
<td>31.9</td>
<td>93.7</td>
</tr>
<tr>
<td>3</td>
<td>Serbia</td>
<td>28.4</td>
<td>86.4</td>
</tr>
<tr>
<td></td>
<td>&amp; Montenegro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Switzerland</td>
<td>27.4</td>
<td>37.2</td>
</tr>
<tr>
<td>5</td>
<td>Namibia</td>
<td>22.1</td>
<td>100.0</td>
</tr>
<tr>
<td>6</td>
<td>Costa Rica</td>
<td>19.2</td>
<td>64.0</td>
</tr>
<tr>
<td>7</td>
<td>South Africa</td>
<td>18.3</td>
<td>85.7</td>
</tr>
<tr>
<td>8</td>
<td>Malta</td>
<td>17.4</td>
<td>8.9</td>
</tr>
<tr>
<td>9</td>
<td>Lesotho</td>
<td>15.0</td>
<td>100.0</td>
</tr>
<tr>
<td>10</td>
<td>Albania</td>
<td>14.3</td>
<td>39.3</td>
</tr>
<tr>
<td>11</td>
<td>Belgium</td>
<td>14.1</td>
<td>30.6</td>
</tr>
<tr>
<td>12</td>
<td>Finland</td>
<td>13.1</td>
<td>37.6</td>
</tr>
<tr>
<td>13</td>
<td>Macedonia</td>
<td>12.8</td>
<td>65.4</td>
</tr>
<tr>
<td>14</td>
<td>Croatia</td>
<td>11.8</td>
<td>88.2</td>
</tr>
<tr>
<td>15</td>
<td>Panama</td>
<td>11.8</td>
<td>86.8</td>
</tr>
</tbody>
</table>

#### Fifteen Countries With Moderately High Rates of Gun Ownership

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>% Firearms Being Handguns</th>
<th>% Firearms Being Handguns</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Canada</td>
<td>11.5</td>
<td>17.8</td>
</tr>
<tr>
<td>18</td>
<td>France</td>
<td>11.0</td>
<td>32.1</td>
</tr>
<tr>
<td>20</td>
<td>Colombia</td>
<td>10.8</td>
<td>81.8</td>
</tr>
<tr>
<td>21</td>
<td>Argentina</td>
<td>10.2</td>
<td>84.4</td>
</tr>
<tr>
<td>22</td>
<td>Brazil</td>
<td>9.0</td>
<td>97.4</td>
</tr>
<tr>
<td>25</td>
<td>Czech Republic</td>
<td>8.7</td>
<td>74.5</td>
</tr>
<tr>
<td>26</td>
<td>Russian Federation</td>
<td>8.5</td>
<td>49.3</td>
</tr>
<tr>
<td>28</td>
<td>Sweden</td>
<td>7.5</td>
<td>15.8</td>
</tr>
<tr>
<td>29</td>
<td>Bulgaria</td>
<td>7.3</td>
<td>77.3</td>
</tr>
<tr>
<td>31</td>
<td>Austria</td>
<td>7.1</td>
<td>60.8</td>
</tr>
<tr>
<td>33</td>
<td>Indonesia</td>
<td>6.5</td>
<td>12.6</td>
</tr>
<tr>
<td>36</td>
<td>Hungary</td>
<td>5.6</td>
<td>74.3</td>
</tr>
<tr>
<td>38</td>
<td>Denmark</td>
<td>4.7</td>
<td>25.5</td>
</tr>
<tr>
<td>39</td>
<td>Poland</td>
<td>4.6</td>
<td>37.6</td>
</tr>
<tr>
<td>40</td>
<td>Australia</td>
<td>4.1</td>
<td>24.6</td>
</tr>
</tbody>
</table>

#### Fifteen Countries With Low Rates of Gun Ownership

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>% Firearms Being Handguns</th>
<th>% Firearms Being Handguns</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Botswana</td>
<td>4.0</td>
<td>20.8</td>
</tr>
<tr>
<td>42</td>
<td>Latvia</td>
<td>3.9</td>
<td>54.4</td>
</tr>
<tr>
<td>43</td>
<td>Slovak Republic</td>
<td>3.9</td>
<td>43.8</td>
</tr>
<tr>
<td>44</td>
<td>Mozambique</td>
<td>3.0</td>
<td>93.3</td>
</tr>
<tr>
<td>45</td>
<td>Philippines</td>
<td>2.9</td>
<td>90.9</td>
</tr>
<tr>
<td>46</td>
<td>Zimbabwe</td>
<td>2.8</td>
<td>19.8</td>
</tr>
<tr>
<td>47</td>
<td>Romania</td>
<td>2.0</td>
<td>88.8</td>
</tr>
<tr>
<td>48</td>
<td>Uganda</td>
<td>1.9</td>
<td>57.9</td>
</tr>
<tr>
<td>49</td>
<td>Nigeria</td>
<td>1.6</td>
<td>43.8</td>
</tr>
<tr>
<td>50</td>
<td>Korea, Rep.</td>
<td>1.6</td>
<td>84.4</td>
</tr>
<tr>
<td>51</td>
<td>United Kingdom</td>
<td>1.3</td>
<td>24.0</td>
</tr>
<tr>
<td>52</td>
<td>Netherlands</td>
<td>0.9</td>
<td>36.3</td>
</tr>
<tr>
<td>53</td>
<td>India</td>
<td>0.8</td>
<td>14.2</td>
</tr>
<tr>
<td>54</td>
<td>Azerbaijan</td>
<td>0.7</td>
<td>11.1</td>
</tr>
<tr>
<td>55</td>
<td>Japan</td>
<td>0.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>

firearms but has also, even more dramatically, increased firearm use in serious robberies, including car hijackings (Shaw, 2002).

The comparison of the United States to other industrialized nations underscores the role of guns as facilitators of homicide, aggravated assault, and gun robberies. Homicide and other serious violence rates in the United States are many times higher than comparable rates in western Europe. This is not because the United States is a more criminal or violent society generally. In fact, as discussed, rates of overall volume crime, including common assaults, are at the same level or lower than in many other Western countries, including Canada and the United Kingdom. Rather, the much higher homicide rates of the United States may result from the widespread availability of handguns, which means that the opportunity to carry out a quick but dangerous attack is much greater, even when the victim is stronger than the attacker (Felson & Clarke, 1998).

Sloan et al. (1988) compared homicide rates of Seattle, Washington, in the United States, and Vancouver, British Columbia, in Canada. Although these two cities are comparable in terms of age, race, and income, homicide rates were 50% higher in Seattle probably because of greater availability of handguns. Across U.S. regions and states, where there are more guns, there are more firearm homicides. The association continues to hold after accounting for poverty, unemployment, urbanization, and alcohol consumption (Miller et al., 2002). Several studies have also found that the more guns there are, the more that women become victims of homicide, usually committed by intimates (Small Arms Survey, 2004). Higher levels of gun ownership are also related to higher levels of gun robberies, the most dangerous category of robberies (Cook, 1987). The link between gun availability and serious violence has been confirmed in field experiments. Interventions to reduce gun availability in Kansas City, New York, and Boston have proven to result in lower violence (Wintemute, 2005).

Previous analyses of global ICVS victimization rates have found positive relationships between gun ownership and rates of assaults or threats with guns as well as gun robberies, which held after controlling for other determining factors (Van Dijk, 1999). Analyses using data from later sweeps of the ICVS confirm the existence of these statistically significant, though not always very strong, associations. Gun ownership was found to be statistically unrelated to rates of threats or assaults.

Figure 5.11 presents results of the analysis of ICVS 1996–2000 data on the relationship between firearm ownership rates and assaults with firearms. Countries where firearm ownership—and especially handgun ownership—is more common tend to show, on average, higher rates of firearm-related assaults ($r = .41, \ p < 0.05, n = 56$). This relationship was once again confirmed in an analysis of ICVS 2005 data ($r = .62, \ p < 0.05, n = 30$). Obvious examples of countries where high ownership of guns goes together with high rates of gun-related violent crime are the United States, South Africa, Albania, Colombia, and Costa Rica. The case of Switzerland is sometimes mentioned as evidence that high levels of gun ownership are not linked to high levels of serious violence. It should be recalled, though, that most of the Swiss firearms are military weapons owned by reservists and do not easily lend themselves for concealed possession in public and are usually locked away at home.

Supporters of defensive gun use have pointed out that gun availability might actually save lives and prevent crime by deterring would-be offenders from attacking or
from entering premises for burglary. The economist John R. Lott argued in his book *More Guns, Less Crime* that violent crime has decreased in areas where law-abiding citizens are allowed to carry concealed guns (Lott, 1997). There seems, however, to be little supporting empirical evidence for this hypothesis (Wellford, Pepper, & Petrie, 2004).

In a paper presented at the American Society of Criminology, Felson, Pare, and Haber (2006) show that across American states, gun possession is related to rates of homicide but is unrelated to rates of common assault. In southern states, homicide rates are comparatively high and assault rates comparatively low. In their view, the presence of firearms discourages violence because fear of armed adversaries may lead offenders to avoid fistfights. This mechanism may also explain the consistent finding of ICVS surveys that rates of common assaults are comparatively low in gun-ridden societies with high homicide rates such as the United States and Brazil and are comparatively high in gun-free societies such as England/Wales, Australia, Canada, and the Netherlands, where homicide rates are low. It seems worth noting that in typical high-gun-ownership countries such as the United States and South Africa, rates of pickpocketing are also comparatively low.
At the national level, more guns are related to higher levels of serious violence, including homicide. On the positive side, however, more guns are not related to higher levels of common assault. A high prevalence of guns might even discourage potential attackers from initiating violent interactions or pickpocketing. It seems possible, as argued by Lott, that gun possession in some respects results in less crime. The preventative effect on common assaults, however, comes at the price of higher levels of serious and lethal violence including gun robberies. On balance, the crime-related impact of guns on societies looks to be a distinctly negative one.

Guns and Violence in Developing Countries

The recent boom in lethal violence in Costa Rica illustrates the importance of both inequalities and gun ownership as determinants of serious violence. Homicide rates per 100,000 inhabitants in Costa Rica remained stable in the 1990s, fluctuating around 4 per 100,000. From 1992 onward, homicide rates suddenly started to rise, and were at 7 per 100,000 of the population in 2003. The rise in homicides coincided with a general rise in recorded crime rates, including robberies and kidnappings. According to staff of the United Nations Research Institute in Costa Rica (ILANUD), two social factors seem to be related to the upward surge of homicides: increased income inequalities and greater availability of firearms.

Inequality in income distribution as expressed in the Gini coefficient has risen in Costa Rica from 0.374 in 1990 to 0.425 in 2003. The variations in the Gini coefficient scores show a strong positive correlation with the increase in the homicide rate \( r = 0.62 \) (see Figure 5.12).

Figure 5.12 shows that homicide rates in Costa Rica have risen in tandem with income inequality in recent years. The percentage of homicides committed with a firearm has risen 17 points since 1989: from 35.6% that year to 52% in 2003. The percentages of firearm killings and the increase in homicide rates were found to be closely related. The results show that the rise in the overall homicide rate in Costa Rica over the past 10 years was caused by an increase in male-to-male violence, which is typically committed with the use of firearms and often in the context of other criminal activities against the background of gross socioeconomic inequalities.

The results confirm the conclusion reached in the latest Small Arms Survey (2004) that availability of firearms in households is more likely to increase the risks of being victimized by serious crime than of being protected against strangers. Although it is obvious that firearm availability by itself cannot explain rates of serious violent crime—social causes are at least equally and probably even more important—the results are consistent with a policy position against widespread availability of firearms.

Several countries, including Australia, Brazil, and South Africa, have recently introduced tighter gun legislation or regulations seeking to reduce the availability of firearms. In several postconflict countries, for example, in western Africa and Central America, special programs have been carried out to control the availability of weapons. The program developed by the city government and the church in Bogota, Colombia, to buy back weapons in exchange for cash represents a promising effort in this regard. It also illustrates the added value of collaboration between the administration
and the private sector. Between 1993 and 2001, the number of murders in Bogota decreased from 4,452 to 1,993, whereas national rates of homicide in Colombia declined only marginally (Waller, 2006). Another interesting experience in handgun control in Colombia comes from Cali, where the carrying of handguns was prohibited on high-risk weekends and is held partially responsible for lowering Cali’s homicide rates (Buvinic, Morrison, & Shifter, 1999).

In 2004, Brazil’s President Lula undertook systematic attempts to come to grips with one of the worst social problems and deterrents for investors in Brazil, violent crime. The government adopted a two-pronged strategy. First, a gun amnesty, launched in July 2004, has had more success in taking arms off the streets than had been expected. In the first month alone, 57,000 weapons had been turned in. Second, the president pushed legislation through Congress to limit the issuing of permits on weapons to anyone except those in dangerous professions.

In a report on “reducing gun violence through the UN process on small arms control,” Justice and Security Sector Reform (JSSR) is recommended as part of the solution, especially in postconflict situations (Missing Pieces, 2005). In postconflict situations, disarmament requires a functioning, nonmilitary, restrained police who instill trust in law-abiding citizens.
The observation on the conditionality of gun control on “generalized trust” brings us back to the conventional wisdom expressed in Homeros’ verse about the need to remove weapons from places where young men are going to party and drink. However sensible and wise such preventive measures may be, in the case of Odysseus it was a devious ruse to make his rivals defenseless against his planned retaliatory attack on his wife’s suitors. Possession of firearms increases the risks for serious violence within communities and should therefore be reduced. But in the debate on gun control, the primary function of firearms, to offer a defense against enemies, must not be overlooked. The reduction or elimination of guns requires a social context of general lawfulness and trust. In postconflict societies, gun control measures have a better chance for lasting results when introduced as part of comprehensive reforms of the justice and security sector.

SUMMARY POINTS/IN CONCLUSION

- The most important general risk factors in the epidemiology of common crimes are age composition (proportion of young males in the population), degree of urbanization, and affluence. The combined factors of age composition and urbanization can explain a large part of the variation in crime rates across countries. The impact of affluence on levels of crime is more complex. On the one hand, more affluence reduces extreme poverty and inequalities, factors linked to the level of some property crimes and, more strongly, contact crimes including homicides and violence against women. On the other hand, more affluence creates opportunities for property crimes such as vehicle-related crime. From a criminological perspective, economic growth is a mixed blessing. Economic growth can not be seen as a fix for crime problems of developing countries. As the experience of Western countries over the past three decades has proven, economic growth in the short and even medium term spurs rather than reduces overall levels of common crime.

- Governments have limited capacity to influence factors such as urbanization and age composition, and no government will be ready to slow down development in order to prevent some types of property crime. To control crime at the global level and prevent a widening of the gap in security between the affluent North and the poor South, developing countries will need to invest more of their scarce resources in types of crime prevention and control that have proven their cost-effectiveness in the developed countries. The range of policies and interventions available will be discussed in Chapter 9 in Part IV.

- Risk factors for violence include economic deprivation of young males, gender inequality, alcohol abuse, and availability of guns. Governments of developed and developing countries have the option to introduce policies that can help to reduce these three risk factors and thereby contribute to making their societies safer. Politically, such policies are often controversial or opposed by special interest groups. In western Europe, powerful lobbying from beer companies and their associates in the leisure industry prevents governments from tackling binge drinking by not being able to raise age levels for alcohol consumption to above 16. In the United States, legislation to reduce availability of guns consistently meets with fierce opposition of the National Rifle Association.

- Comparative information on the links between risk factors and crime across countries
can inform ongoing policy debates. Reviews of best practices in crime prevention provide several examples of successful actions to reduce violence by measures against gender inequality, alcohol abuse, and the possession of firearms (see Chapter 9 for details).

**Notes**

1. Self-report studies among samples of juveniles are another method for collecting information on crime rates independently of the police. Through standardization of instruments, comparative results can be obtained. The first International Self-Report Delinquency Study (ISRD) was launched in 1992 by the Dutch Research and Documentation Center (WODC). The study was based on data collected in 11 mostly EU countries, Nebraska (United States), and New Zealand (Josine Junger-Tas, Gert-Jan Telouw, & Malcolm W. Klein [1994]: *Delinquent Behavior among Young People in the Western World – First Results of the International Self-report Delinquency Study*, Kugler Publications; Josine Junger-Tas, Ineke Haen Marshall, & Denis Ribeaud [2003]: *Delinquency in an International Perspective – The International Self-Report Delinquency Study*, Criminal Justice Press and Kugler Publications). A small steering committee coordinates the ongoing project. Contact person is Josine Junger-Tas (Jungertas@xs4all.nl).

2. Urbanization and age composition together explain 27% of the variance in overall victimization rates of the 30 mainly Western countries participating in the ICVS 2004/2005.

3. Similar “crime chains” may also apply to the theft of other personal items associated with affluence such as Walkmans, laptops, mobile phones, and other electronic gadgets among student populations (Felson & Clarke, 1998).

4. In 1988, the United Kingdom showed one of the lowest rates of victimization for motorcycle theft of all Western countries. In the 2005 sweep of the ICVS, the UK’s owners’ motorcycle theft victimization rate was second only to that of Italy (Van Dijk, Manchin, Van Kesteren, & Hideg, 2007).

5. In her inaugural lecture as director of the Jill Dando Institute of Crime Science in London, Laycock commented on the rise of recorded crime in the United Kingdom since World War I: “The rise was not caused by an increase of poverty—we are, by any measure, better off now than we have ever been. Nor was it caused by a lack of education, even the worst educated members of our population spend more time in formal education than did the average child of the early 20th century. Nor is there any evidence that “parenting” has been in catastrophic decline throughout the period ( . . . ) All these factors may, in combination have played their subtle part, but there is one factor, which we do not hear about, and that is opportunity” (Laycock, 2001).

6. The item on contact with drugs-related problems follows the methodological strategy of the ICVS to interview people about real-life experiences rather than about beliefs and perceptions: “Over the last 12 months, how often were you personally in contact with drug-related problems in the area where you live? For example, seeing people dealing in drugs, taking or using drugs in public spaces, or by finding syringes left by drug addicts? Was this often, from time to time, rarely, or never?”