

ONE

through the looking glass: the complex relationship between crime and the economy

Willie Sutton was a notorious bank robber. During his 40-year criminal career he allegedly stole over \$2 million. He spent about half of his adult life behind bars, although he managed to escape from prison twice. He is best known for his answer when asked why he robbed banks: … because that's where the money is. In his partly ghost-written autobiography, Where the Money Was: The Memoirs of a Bank Robber, Sutton denied having uttered the phrase. He credited some enterprising reporter. Nevertheless, the words attributed to him seem to contain a pearl of wisdom: when trying to understand some phenomenon, begin with the obvious. This sage advice is sometimes referred to as 'Sutton's Law'.

At first glance, the basic focus of this book – the relationship between the economy and crime – might seem particularly well suited for the application of Sutton's Law. There appears to be nothing particularly profound or surprising in the proposition that the ups and downs of the economy and criminal activity go hand in hand. It turns out, however, that Sutton's Law serves only as a useful starting point in inquiring about the economy and crime. The picture becomes murkier as we peer through the looking glass. As self-evident and straightforward as the



¹ http://en.wikipedia.org/wiki/Willie_Sutton. Accessed 14 February 2011.

connection between crime and the economy might seem, the relationship is actually quite complex. A half century ago, a thorough review of the academic literature concluded that 'the general relations of economic conditions and criminality are so indefinite that no clear or definite conclusions can be drawn' (Vold, 1958: 181). Our reading of the research literature is not quite as pessimistic, but we agree that the accumulated evidence defies simple conclusions.

In this book we review the research on the relationship between crime and the economy and consider the theoretical perspectives that have been advanced to explain the complexities in that relationship. We then offer our own take on the relationship, especially as it is manifested in contemporary advanced industrial societies. Our review covers all kinds of criminal acts, violent as well as property offences and so-called white-collar as well as street crimes. Our perspective on the crime–economy relationship considers the modern market economy as a *social institution* that has powerful, if not always obvious or direct, consequences for criminal activity. The key concept in our institutional analysis is the *market*: the exchange of goods and services for money.

To set the stage for the analyses to follow, it is useful to begin by considering one particularly salient outcome of the market economy, specifically, economic deprivation or poverty. Here is where Sutton's Law is most likely be invoked. To the extent that the economy has any connection with crime, it seems almost commonsensical to surmise that poor economic circumstances will promote high levels of criminal activity. Yet, as we shall see, the relationship between economic deprivation and crime proves to be more complex than it initially appears.

Socioeconomic status and street crime

The phrase 'It's the economy, stupid' was popularized during Bill Clinton's 1992 US Presidential campaign. Advisor James Carville used the phrase to focus the campaign on the recession that occurred during the Presidential term of Clinton's opponent, George H. W. Bush. 'So goes the economy, so goes the election' has become a staple of political



science research on the impact of the economy on electoral politics (Dolan et al., 2008; Fair, 2009). When we look at statistics on the socio-

economic status of persons caught up in the criminal justice system,

economics also predict the outcome: the poor get prison.²

The poor are over-represented among those who are arrested for crimes, sentenced to prison, and even those who are victimized by crime. Surveys of the inmates in local jails, including persons awaiting trial and those convicted of crimes, consistently find that jail inmates have less education, higher unemployment rates, and lower incomes than the general population of adults. For example, in 2002, 44% of jail inmates did not have a high school diploma or GED, compared with 20% of the US adult population.3 Fully 29% of the jail inmates were unemployed during the month before they were arrested, compared with an unemployment rate of 5.8% in the general population. During the month before their arrest, 59% of jail inmates had incomes less than the federal poverty threshold for a family of two; most of those did not have enough money to support themselves above the poverty line. The poverty rate for the general population was just over 12%. The socioeconomic portrait of persons convicted for serious crimes and sentenced to state and federal prisons, if anything, is even bleaker than that of inmates in local jails (Petersilia, 2003; Western, 2006).

The picture of the socioeconomic characteristics of offenders drawn from official statistics on arrest and incarceration is of course imperfect. Criminologists have long recognized that the processing of cases by criminal justice officials – from police to prosecutors to juries and judges - can introduce systematic biases, often based on socio-economic status (Cooney, 2009; Reiman and Leighton, 2009). But even 'self-report' surveys which ask persons if they have committed crimes find that those of lower socioeconomic status report greater involvement in serious violent and property crime (e.g., Loeber and Farrington, 1998).





² The Rich Get Richer and the Poor Get Prison is the title of Jeffrey Reiman and Paul Leighton's (2009) provocative treatment of class bias in the US criminal justice system.

³ The figures for jail inmates are from James (2004). The general population figures are from the 2000 Census (http://factfinder.census.gov/home/saff/main.html?_lang=en). Accessed 21 February 2011.

Another vantage point from which to observe the relationship between socioeconomic status and crime is through an examination of criminal victimization. Residential patterns in the US tend to be segregated by class (and race). In addition, criminological researchers have documented that offenders tend not to travel far from home when selecting their targets for victimization (Brantingham and Brantingham, 1993; Chainey and Ratcliffe, 2005). It is therefore not surprising that persons who live in close proximity to criminal offenders tend to have higher rates of victimization, regardless of their lifestyle and other characteristics (Sampson and Lauritsen, 1990). If socioeconomic status is in fact associated with criminal offending, we would expect that low-income residents will be at comparatively high risk of victimization.

Some evidence supports this hypothesis. Each year, the US Bureau of Justice Statistics, in conjunction with the Census Bureau, conducts an ambitious data collection effort, the National Crime Victimization Survey (NCVS). The NCVS asks representative samples of the population, age 12 and older, whether they have been the victim of a crime during the past six months and, if so, what type of crime. The NCVS also collects information on the characteristics of the households in the sample, including household income. Table 1.1 reports the burglary victimization rates per 1,000 households in 2009 according to household income. The data reveal a clear negative relationship between household income and burglary. The lowest two income categories exhibit the highest burglary rates, and the rates decline steadily as incomes rise.

Whether we look at official statistics on arrest and incarceration, self-report studies of criminal offending, or surveys of crime victims, the same pattern emerges: lower socioeconomic status is associated with greater involvement with the criminal justice system, higher rates of criminal offending, and higher rates of various forms of victimization. The relationship between socioeconomic deprivation and involvement in crime and the justice system holds not only for individuals, as we have seen, but also for neighbourhoods. Extensive research confirms the perception of nearly all urban residents: there are readily identifiable 'bad' neighbourhoods where the risk of becoming a victim of crime is high. These neighbourhoods are typically characterized by a host of disadvantages, including pervasive poverty.

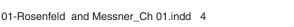






Table 1.1 NCVS Burglary Rates per 1,000 Households, 2009

Under \$7,500	44.4
\$7,500 to \$14,999	46.3
\$15,000 to \$24,999	35.3
\$25,000 to \$34,999	32.3
\$35,000 to \$49,999	26.7
\$50,000 to \$74,999	19.3
\$75,000 and over	15.1

Source: Truman and Rand, 2010

An example comes from research on the city of St. Louis (Rosenfeld et al., 1999). The map displayed in Figure 1.1 divides the city into 588 census 'block groups', small geographic areas with an average population of 675 residents per block group. The block groups are shaded according to their score on an index of disadvantage, consisting of the rate of poverty, public assistance income, and female-headed households in each block group in 1990. The dark-shaded areas have very high levels of disadvantage, the lighter-shaded areas exhibit moderate levels of disadvantage, and the areas with no shading are the least disadvantaged. Superimposed on the block groups are crosses and circles representing homicides committed between 1985 and 1995, coded as 'gang-motivated' and 'gang-affiliated', respectively. The researchers defined a homicide as gang-motivated if it resulted from gang behaviour or relationships, such as an initiation ritual, the 'throwing' of gang signs, or a gang fight. A homicide was defined as gang-affiliated if it involved a suspect or victim who was a gang member but did not arise from gang activity.

Regardless of the type of homicide, the map reveals a striking association between an area's level of disadvantage and the frequency of killings. Homicides are heavily concentrated in the northern section of the city, where socioeconomic disadvantage is most pronounced, and are virtually absent in the least disadvantaged southwestern neighbourhoods.







Figure 1.1 The Relationship Between Gang Homicides and Neighbourhood Socioeconomic Disadvantage in St. Louis, 1985–95.

Source: Rosenfeld et al., 1999

St. Louis is not alone in exhibiting this strong spatial association between gang homicides and socioeconomic disadvantage. Nor is the relationship between disadvantage and crime confined to homicides or gang crimes. A century of research on neighbourhoods and crime





consistently reveals the same pattern: crime tends to be concentrated in disadvantaged places (Bursik and Grasmick, 1993; Pratt and Cullen, 2005; Sampson et al., 2002).

The evidence presented thus far would seem to confirm the obvious: there is a straightforward relationship between crime and economic outcomes. Low socioeconomic status is associated with increased risk of criminal offending and victimization, and thus by extension, the level of criminal activity should reflect the extent to which the economy effectively 'delivers the goods' in society. It turns out, however, that the relationship between economic conditions and crime – even crimes committed for economic gain – is more complex than it appears at first glance. To understand these complexities, it is necessary to introduce some important conceptual and analytic distinctions.

Complicating the picture

Up to this point, we have framed the basic topic of inquiry for this book in rather loose language, by referring to the 'relationship' between the economy and crime. Our illustrations of a definite connection between socioeconomic deprivation and crime have in fact been based on empirical relationships and the statistical associations that represent them. However, such associations are typically of interest insofar as they allow us to make inferences about the presence and nature of *causal* processes. Do features of the economy actually produce or inhibit criminal activity in meaningful ways, and if so, how? It turns out that drawing causal inferences on the basis of empirical associations is a highly challenging task that ultimately requires theoretical guidance.

A full exposition of the intricacies of causal inference goes well beyond the scope of our discussion, but we can indicate here some of the complexities of interpreting statistical associations with illustrations from criminological research. This will serve as a useful starting point for our investigation into the complex relationship between crime and the economy. Figure 1.2 displays different processes that might conceivably link outcomes of the economy with some indicator of criminal activity. Panel A depicts a direct effect of an economic outcome on crime. In the language of causal modelling, such an effect is







referred to as 'unmediated'. It does not operate in conjunction with any other identified variable. If the economic factor were the only one to influence crime (which is implausible), and if we were to measure the variables well, the simple statistical association between these variables would serve as an impeccable guide to any underlying causal effect.

Panel B elaborates the causal model by introducing an additional factor, indicated by variable 'Z'. This model depicts a causal process wherein the effect of an economic outcome comes about by virtue of its effect on Z, which in turn affects crime. Panel C is also a model that entails mediating causal processes, but with two mediating factors at work. Both of these models depict scenarios in which underlying causal processes might not be readily apparent in the simple, overall statistical association between an economic outcome and an indicator of criminal activity.

Panel D illustrates a fourth scenario: a conditional relationship between an outcome of the economy and crime. The arrow to the arrow in the diagram implies that the effect of the economic factor differs depending on the third variable. This third variable is usually referred to as a 'moderating' variable. It moderates the relationship between the other two variables.

Finally, Panel E introduces another complicating factor: the level of aggregation of the units of analysis ('level of analysis', for short). In much research, individuals serve as the units of interest, but as we have seen in the example of homicide and neighbourhood disadvantage, it is also possible to theorize about individuals aggregated into meaningful social groupings. This aggregation can range from small groups (e.g., families) to larger communities (e.g., neighbourhoods) to whole societies. As such, an important issue to consider is the extent to which any statistical relationship found at a given level of analysis, such as that of individuals, can be directly translated to another level.

Even as we begin to complicate the relationship between crime and the economy, the scenarios presented in Figure 1.2 represent only a few of the possible complexities. We have depicted the relationship between crime and the economy with single-headed arrows, as if the economy influences crime, but not the reverse. But research has shown that the criminal propensities of individuals and the crime rates of communities can affect their economic status – usually for the worse. The causal





relationship between crime and the economy, in other words, is likely to be a two-way street. In addition, Figure 1.2 does not indicate whether the variables are observed at a single point in time or over multiple time points. The former type of analysis is referred to as *cross-sectional* and the latter type as *longitudinal* analysis. We shall see that the results of cross-sectional and longitudinal research often differ; sometimes they produce contradictory conclusions regarding the strength or direction of the crime–economy relationship.

The scenarios shown in Figure 1.2, however, offer a useful starting point for our investigation into the complex relationship between crime and the economy. We take up the additional complexities in the following chapters. Here we illustrate scenarios of mediating and moderating effects, and the issue of levels of analysis, with data and research that describe the association between crime and economic conditions across nations and over time within the United States. We begin by presenting data and research relevant to mediating processes.

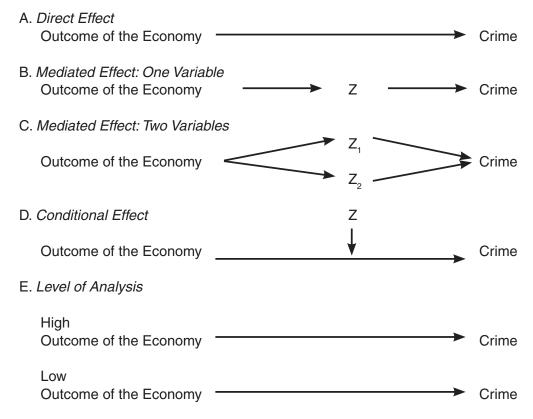
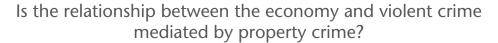


Figure 1.2 Five Causal Scenarios of the Crime–Economy Relationship.







If economic conditions influence crime rates, it is reasonable to expect that they should have stronger or more immediate effects on property crimes, which are committed for economic gain, than on violent crimes, which often seem to have little to do with economic considerations. Throughout history, people have been assaulted and killed for all kinds of reasons and not simply for their money or property. When violence is used for economic gain, the crime is termed a 'robbery' – theft accompanied by force or the threat of force. In essence, robbers apply the means of violent crime (force) to the ends of property crime (material acquisition). Recent research supports the expectation that economic conditions have a robust statistical association with temporal change in property crimes and little or no association with trends in violent crimes, other than robbery (e.g., Arvanites and Defina, 2006).

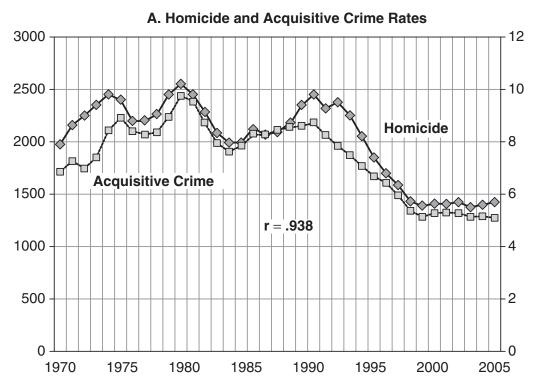
Should we then conclude that violent crime has no meaningful causal connection with changing economic conditions? Prior research would support that conclusion, but only if the impact of the economy on violent crime is assumed to be unmediated, that is, takes the form of the simple relationship depicted by the diagram in Panel A of Figure 1.2. Yet there are good reasons to suppose that the economy influences violent crimes indirectly, that is, through its effect on other conditions that, in turn, affect the rate of violent crime, as depicted in Panel B of Figure 1.2. A recent study proposed that an important mediator of the relationship between violent crime and the economy is property crime (Rosenfeld, 2009).

If this hypothesis is correct, we should observe a positive relationship between rates of violent crime and crimes committed for economic gain. Figure 1.3 displays the trends between 1970 and 2006 in homicide, the most serious violent crime, and an index of 'acquisitive crime' in the United States. Acquisitive crime is defined as criminal offences intended to acquire money or valuables from the victim and in this example consists of the combined rates of robbery, burglary, and motor vehicle theft (Rosenfeld, 2009). The annual rates of homicide and acquisitive crime are shown in Panel A of the figure. Panel B displays the year-over-year changes in the rates (i.e., each year's rate minus the previous year's rate). In both cases, we see a strong correspondence between the two series, as









B. Year-over-Year Change in Homicide and Acquisitive Crime Rates

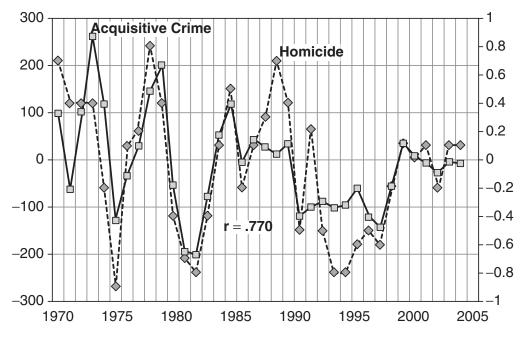


Figure 1.3 Rates of Homicide and Acquisitive Crime per 100,000 Population, 1970–2006.

Source: Rosenfeld, 2009





revealed by the sizable correlations (r) shown in the figure. ⁴ Whether expressed as annual rates or changes, when acquisitive crime rises, homicide tends to increase as well. When acquisitive crime declines, so does homicide. There are exceptions, especially in the late 1980s and early 1990s, when homicide increases outpaced those in acquisitive crime but, in general, the 27-year trends in homicide and acquisitive crime shown in Figure 1.3 track one another rather closely.

Correlation, of course, does not necessarily mean causation. In Chapter 4, we present arguments and evidence to support the hypothesis that violent and property crimes are in fact causally related to one another. For now, we suggest only that the case for assuming that economic conditions are unrelated to violent crime may have been closed prematurely if the relationship between the economy and violent crime is mediated by property crime or some other condition.

Might causal processes linking the economy and crime work in opposing directions?

When making our initial case for a relationship between socioeconomic status and crime, we cited evidence of a distinct inverse relationship between household income and the risk of victimization for burglary. We were actually being selective in our use of the evidence for didactic purposes. It turns out that we could have drawn a different portrait if we had chosen to consider a different form of property crime, referred to as 'theft' – the illegal taking of property from the custody or care of another person without force or breaking and entering. Table 1.2 presents victimization rates for theft by household income based on the data from the NCVS. Similar to the case for burglary, the lowest income category exhibits a relatively high victimization rate (150.7), which decreases along with increasing income up to a point. But then victimization rates increase with higher incomes, and the highest income category (\$75,000 and over) has a victimization rate greater







⁴ The correlation coefficient (r) measures the strength of the linear statistical association between two variables and takes on values between minus one and one. A value of zero indicates no relationship between the variables. Values close to one indicate a strong positive relationship; those close to minus one indicate a strong negative relationship.



Table 1.2 NCVS Theft Rates per 1,000 Households, 2009

Under \$7,500	150.7
\$7,500 to \$14,999	102.4
\$15,000 to \$24,999	99.8
\$25,000 to \$34,999	95.3
\$35,000 to \$49,999	102.8
\$50,000 to \$74,999	96.2
\$75,000 and over	105.6

Source: Truman and Rand, 2010

than those for the other categories, except for the very lowest. Overall, there is no simple linear relationship between the two variables.

Why might those in the highest income group have a risk of being victimized by theft? Applying Sutton's Law, the answer might seem obvious: they have the money. Yet this does not explain why the relationship between household income and the victimization risk for theft is not consistently positive: the higher the income, the higher the risk. As an initial step in interpreting the lack of any distinct relationship between household income and theft, it is useful to consider Panel C in Figure 1.2. Perhaps household income, as an outcome of the economy, is causally related to this form of property crime through two different processes, which operate in opposing directions. Members of lowincome households are likely to have greater exposure to potential criminals, but they also tend to have less valuable property to steal. The reverse is true for members of high-income households. Such countervailing mediating effects might explain why neither a positive nor negative statistical association emerges for measures of economic outcomes and theft, even though there are important causal processes at work.⁵



⁵ In Chapter 2, we review 'routine activities' theory, which introduces another factor that is related to both household income and victimization risk for property crimes: 'guardianship'. Routine activities theory offers an account for why economic factors such as household income might be related to different types of property crime in different ways.

Is the relationship between unemployment and homicide moderated by the welfare state?

As we have seen, prior research reveals a weak or null relationship between economic conditions and violent crimes, with the exception of robbery. We have proposed that the relationship may be mediated by crimes committed for economic gain, which are influenced by the economy and, in turn, have an effect on violent crime. We now propose an additional scenario for understanding the link between economic conditions and violent crime: the relationship is moderated by the size and scope of social welfare provisions which nations provide for their citizens. This is the scenario depicted in Panel D of Figure 1.2. We investigate this hypothesis in some detail in Chapter 4. Here, we illustrate the moderating hypothesis with the results of a study we conducted that show how unemployment can have differing effects on the homicide rates of nations depending on the generosity of their welfare states (Rosenfeld and Messner, 2007).

We surmised that the strength of the relationship between national economic conditions and violent crime depends on the degree to which nations protect their citizens from the full brunt of market forces. In countries that provide their citizens with extensive unemployment insurance, health insurance and pensions, the impact of market forces on crime should be weaker than in those with less generous social welfare provisions. We evaluated this hypothesis with data on the unemployment rates, homicide rates, social welfare benefits, and other conditions for 13 advanced industrial nations over the period 1971 to 2001. An initial task was to document that these nations did in fact differ in the size and scope of their social welfare provisions. We took our measure of welfare generosity from the Comparative Welfare Entitlements Dataset, which scores nations according to the universality and extensiveness of their unemployment, sickness, and pension benefits (Scruggs, 2004). Figure 1.4 rank orders the 13 nations in our study by this measure.

Figure 1.4 reveals substantial variation across the 13 nations in the generosity of their social welfare provisions. The welfare systems in Sweden and Norway, for example, are more than twice as generous as those in the United Kingdom, the United States and Japan. The next





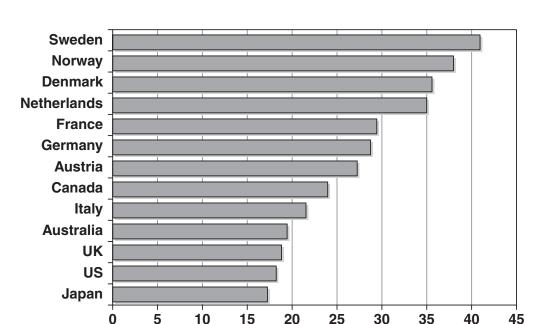


Figure 1.4 Average Welfare Generosity in 13 Nations, 1971–2001.

Source: Rosenfeld and Messner, 2007; Scruggs, 2004

question is whether these differences moderate the effect of unemployment on the homicide rates of the 13 nations between 1971 and 2001.

One simple test of the moderating hypothesis is to divide the nations into two groups according to whether they score above or below the average value on the welfare generosity index and conduct a separate analysis of the relationship between unemployment and homicide rates over the 32-year period within each group. When we did this, we found no statistically significant effect of unemployment on homicide for the nations scoring above average on the welfare generosity index. By contrast, we found a statistically significant and positive effect of unemployment on homicide for the lower scoring nations. In these nations, higher rates of unemployment were associated with higher homicide rates. These results were confirmed when we applied a more sophisticated statistical model to the data. In short, consistent with the type of causal process depicted in Panel D of Figure 1.2, the relationship between unemployment and homicide evidently depends, at least in part, on the size and scope of a nation's social welfare system.





Are relationships between economic outcomes and crime always translatable across different levels of analysis?

We saw earlier that the risk of burglary (but not theft) varies inversely with household income. As household income rises, burglary victimization rates decline steadily. When extrapolated to the national level, we might expect that burglary rates would be lowest in those nations that have achieved the highest level of affluence. Figure 1.5 plots the residential burglary rate against the per capita gross domestic product for nine European nations and the United States in the year 2000. The gross domestic product (GDP) measures the total value of goods and

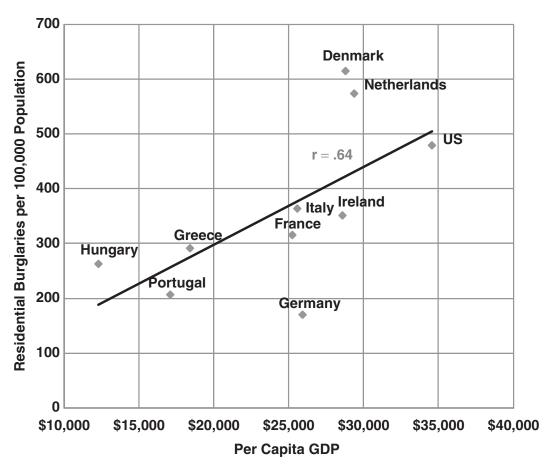


Figure 1.5 The Relationship Between Residential Burglary and Per Capita GDP in 10 Nations, 2000.

Source: Eurostat, Uniform Crime Reports¹







¹ Eurostat: http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home. Uniform Crime Reports: http://www.fbi.gov/about-us/cjis/ucr/ucr. Accessed 3 February 2011.

services produced by a nation and is a good indicator of general affluence. The figure reveals a definite statistical association, but the sign of the relationship is positive rather than negative. Although the relationship is far from perfect (r = .64), nations with higher per capita GDP generally tend to have *higher* residential burglary rates.

How can we reconcile these seemingly contradictory findings regarding the relationship between burglary and income among households and burglary and affluence across nations? Why should high burglary rates coincide with low household income but also with high national affluence? There are many possible reasons for this apparent discrepancy, in part because many possible mechanisms may account for the effect of economic conditions on burglary rates. As alluded to above and developed more fully in the next chapter, criminological theory suggests that some of these mechanisms will produce a negative relationship and some will produce a positive relationship between economic outcomes and crime. The direction of the relationship, then, may depend on which of the hypothesized mechanisms is most important. It follows that the mechanisms producing the negative relationship between burglary and household income are likely to differ from those producing the positive relationship between burglary and national affluence.

Summary and the chapters ahead

Despite ample indications that economic considerations may be a source of personal distress and criminal behaviour, research on the relationship between crime and the economy tells a more complex story. We saw that socioeconomic status tends to be negatively associated with criminal behaviour, victimization, and involvement with the criminal justice system – at least for serious street crimes such as burglary and homicide. Later, when we consider the so-called white-collar crimes committed by persons who occupy corporate suites or government bureaus, the relationship between socioeconomic position and criminal behaviour looks very different.

But even the association between economic conditions and street crime turns out to be more complex than it first appears. To unravel these







complexities, we called attention to the important conceptual distinction between statistical associations and causal relationships, and we illustrated some of the difficulties associated with drawing causal inferences with reference to five causal scenarios. The common feature of all but the first of these scenarios is that they depict mechanisms that describe *how* crime and economic conditions might be related to one another. We have invoked two scenarios that depict mediating mechanisms. We illustrated one mediating scenario with evidence showing the close association between homicide and 'acquisitive' crimes and suggested that such crimes committed for economic gain may mediate the association between violent crime and the economy. The second mediating scenario entails mediating causal processes that work in opposite directions. Such opposing or countervailing processes provide a plausible account for the lack of any clear statistical relationship between socioeconomic status and the risk of personal theft, even though meaningful causal processes are at work.

A close cousin to the mediating scenarios is the moderating scenario. This scenario depicts the relationship between crime and economic conditions as dependent on the presence or strength of some third condition. In an example from our own research, we presented evidence that the relationship between unemployment and burglary is moderated by the strength of the welfare state. Finally, we introduced the issue of extrapolating observed relationships from one level of analysis, such as individual persons or households, to relationships that might pertain to social aggregates. We reported evidence revealing a positive association between a measure of affluence and levels of burglary based on data for a sample of nation states that is the opposite of the negative relationship typically observed in research on individual economic status and burglary victimization.

These are just a few of the complexities uncovered by research on crime and the economy.⁶ Making sense of the complex association between individual economic status and criminal behaviour, and aggregate economic conditions and the crime rates of communities or whole societies, is the job of criminological theory. In the following chapter, we discuss the major criminological perspectives that have been used to explain the manifold connections between crime and the economy.





⁶ See Crutchfield (forthcoming) for an extensive discussion of the link between the nature and quality of employment and crime.