Piecing Together the Cross-National Crime Puzzle

by Jan van Dijk and Kristiina Kangaspunta nderstanding national crime levels has proven to be a difficult task. In the United States, for example, cities that have experienced dramatic declines in their crime rates in recent years may link those declines to increased enforcement, a decrease in crack markets, and better job opportunities. On the other hand, cities with similar social and economic developments experience no commensurate decline in their crime rates.

Uncovering the mystery of why and how crime varies cross-nationally is even more difficult: Why, for example, is serious violent crime more prevalent in certain Central and Eastern European countries and the United States than in the European Union countries and Canada? Understanding the variation in crime rates across countries can help policymakers put crime in their own countries into perspective.

To develop a deeper understanding of how crime varies across countries, a team of researchers at HEUNI, the European Institute for Crime Prevention and Control affiliated with the United Nations,¹ regularly analyzes criminal justice data collected by the UN from its member states.²

HEUNI's latest analysis focuses on the differences among European and North American countries and is based on the Fifth United Nations Survey on Crime Trends and Operations of Criminal Justice Systems 1990–1994, as well as on data from the International Crime Victim Survey (ICVS).

The HEUNI study is the first ever attempt to construct multisource measures of crime that do not suffer from the well known difficulties of measures based on the number of crimes reported to the police in various countries. (See "The Difficulties of Analyzing Crime Data Across Countries.") The study may signify a

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The Difficulties of Analyzing Crime Data Across Countries

Researchers face some well known and frequently rehearsed difficulties when analyzing the data on reported crime for different countries, cultures, or jurisdictions. Cross-national comparisons present their own problems.

- One such problem is varying definitions. Different legal codes define crimes in different ways, so that the set of acts that constitute a given crime type in one country may not be identical to the set of acts to which the same label is applied in another.
- Recording practices are another problem. Different police forces, in particular, have different rules for when an event should be recorded as a crime and when it should not. For example, in some countries the police are said to be very careful about recording every theft of a bicycle, whereas in other countries, the police may not record every bicycle theft because the department has a higher workload of more serious crimes, has fewer resources, and may be less organized.
- A third difficulty is that of operating practices. In some countries, the main decisions regarding a case are made at the prosecution stage, so that many cases, especially trivial ones, do not appear in the records of those countries until that stage. Countries also vary with respect to common law and codified, civil law; therefore, comparisons between the raw numbers of different systems can be risky unless the person making the comparison is familiar with the details of the operations of the system and their implications for statistical recording.
- There also are large factual inequalities among countries as to their population size, population makeup (for example, percent urban and rural, and percent older than 60 and younger than 25), and the size of the crime problem. Even in comparisons that take these differences into account, hidden factors will affect the outcome.
- Finally, there are a set of **problems specifically associated with recorded crime**. The numbers provided by governments are regarded as indicators of the input into, and therefore the workload of, the criminal justice system. They are not regarded as accurate statements as to the actual prevalence and incidence of a given crime type in a given jurisdiction, although they may be that. Further information would be needed to validate the figures. It is general criminological wisdom that the less serious the crime type, the more questionable the officially recorded figures. It also is widely accepted that victim surveys provide more valid data in regard to the incidence of most types of crime.

All of these issues are good reasons to construct measures of crime that are based on multiple sources of data.

Source: Burnham, R.W., "A First Analysis of the United Nations Data Set on Crime Trends and the Operations of Criminal Justice Systems," unpublished final report for NIJ grant 97–MU–CX–0002.

HEUNI's full report also contains an in-depth discussion of these topics. See Kangaspunta K., Joutsen M., and Ollus N. (ed.), *Crime and Criminal Justice in Europe and North America*, 1990–1994, HEUNI Publication No. 32, (Helsinki, 1998).

breakthrough in comparative crime statistics.

This article focuses on three of the eight crimes HEUNI researchers studied: Property crime, violence, and corruption in Central and Eastern Europe, Western Europe, and North America.³ Before considering these findings, however, it is important to be aware of the pitfalls related to statistical comparisons of crime in different countries.

The Pitfalls of Using International Statistics

The dangers of using official reported statistics as a reflection of crime within one's own country are well documented. Reported crime is not the same as actual crime, and statistics are collected for administrative purposes, not to satisfy research interests. The vagaries of changing laws and statistical practice and the idiosyncrasies of defining criminal incidents make it difficult to draw conclusions when comparing statistics from different areas or different times. In addition, the "traditional" offenses (those usually noted in the statistics) may not necessarily have the greatest economic and social consequences for society.

International comparisons are even more rife with misunderstandings, as has been repeated throughout discussions about the UN surveys. The major problems with comparing international crime data are differences in laws and in definitions of legal terms, improper statistical classifications, procedural differences among countries, ambiguous coding structures, and differences in the units of count used.

HEUNI researchers have attempted to lessen any misinterpretation by using data from different sources to see if they point in the same direction and by measuring different dimensions of the same phenomenon. HEUNI's cross-national analysis is based on more than the official reported crime statistics of countries responding to the Fifth UN Survey. It also is based on results of the ICVS—fully standardized victimization surveys on the general public's experiences with crime, which were carried out in more than 60 countries. Added to these data are data from organizations such as the World Health Organization, the Centers for Disease Control and Prevention, and Transparency International, an organization that collects data on corruption.⁴

The use of different data sources yielded a measure of crime that is more scientifically robust than those previously available. This measure can be used reliably for comparative purposes across countries in Europe and North America.

Sociological and Behavioral Factors Related to Crime

Crime levels can be interpreted as the convergence of sufficient numbers of motivated offenders. relatively weak mechanisms of social control, and the presence of suitable targets of crime.⁵ For this study, the researchers analyzed data related to: (1) motivational factors, including level of affluence, alcohol consumption (both beer and strong alcohol), and a concept referred to as strain, or a person's reaction to a shortfall in the achievement of goals (usually socioeconomic goals); and (2) opportunity factors, including vehicle ownership, handgun ownership, patterns of outdoor recreation, proportion of single-person households, and strength of informal social control.

Motivational Factors. According to conventional criminological theories, crime is related to economic and/or social deprivation or inequalities. A key concept is strain, which the HEUNI team defined as the number of people in a country for whom criminal activities might be economically rewarding and for whom the involvement in criminal activities is a viable option. As a measure of strain, the team used the rate of young people (16 to 29 years) who are dissatisfied with their income and/or who are unemployed (per 100,000 inhabitants).

Opportunity Factors. According to opportunity theory, the level of crime also is determined by the presence of suitable targets of crime and the extent of informal social control. A well documented example is the relationship between vehicle ownership and vehicle-related crime. Included in HEUNI's recent analyses were known risk factors, such as the frequency of outdoor visits for recreational purposes. number of one-person households, composition of housing (apartment buildings or detached houses), and ownership rates of motor vehicles, motorcycles, and bicycles. In addition to these factors, the researchers studied the prevalence of the possession of handguns as a possible facilitator of violent crime and the prevalence of antiburglary device use.

Urbanization and modernization have been linked to high crime rates due to lower levels of social control in urban areas.⁶ In previous analyses of ICVS data, the level of victimization by crime was strongly related to the proportion of the population living in a large city. For its study, HEUNI used data on urbanization taken from the UN Compendium on Human Settlement, which reflect the proportion of the national population living in settlements of 20,000 inhabitants or more.

The Interplay of Motivational and Opportunity Factors.

Crime in societies is determined by the interplay between motivational and opportunity factors. Motivational factors can be seen as determinants of the "demand side" of national crime markets. To the extent that motivational factors are more prevalent in a country, there will be more potential offenders looking for opportunities to offend. Structural characteristics that provide viable opportunities for crime can be seen as the "supply side" of the crime market. Owners of expensive cars and consumer goods are the reluctant "suppliers" of opportunities for crime. In countries where suitable targets of crime are plenty and the level of social control is reduced, there are more potential victims of crime.

Affluence can be considered both a motivational and an opportunity factor. It acts as both an important inhibiting factor of certain forms of crime as well as a catalyst of others. In more affluent countries, there is less "demand" for crime—there are proportionately fewer individuals who are motivated to commit crimes or who are looking for criminal opportunities. Important motivational factors, such as income inequalities, dissatisfaction with income, and unemployment, tend to be lower in more affluent countries. If levels of affluence rise—and if the newly acquired wealth is evenly spread—the pool of motivated offenders in a given society decreases. This trend will contribute to a reduction in the level of crime. At the same time, affluence goes together with the ownership of commodities that can be stolen with relative ease, and also with a more outgoing lifestyle, which increases exposure to criminal victimization by strangers. Higher prosperity will invite higher levels of opportunistic forms of crime.

However, there are no straightforward, linear relationships between affluence and crime. The dynamics of crime in the big picture are further complicated by the increased use of sophisticated security measures by potential victims in more affluent, high-crime nations. These measures reduce opportunities for crime and, therefore, inhibit the occurrence of certain types of property crime.

Comparing Crime in Three Regions

To understand how and why crime varies across countries, researchers examined data from 49 countries in three regions—Central and Eastern Europe, Western Europe, and North America. The researchers found that the most important predictor of high crime rates was the percentage of the population who were young males, ages 16 to 29, who were dissatisfied with their income or were unemployed. The results of the HEUNI team's analysis concerning the three regions can be summed up as follows.

Crime in Central and Eastern

Europe. The motivation to offend appears greater in the countries of Central and Eastern Europe, which are in transition to a market-based economy, than in Western Europe. In Central and Eastern Europe, there are more male adolescents experiencing strain, and socioeconomic deprivation and alcohol abuse appear to help in the formation of a breeding ground for different forms of violent crime. Assaults, homicides, and robberies appear to be more prevalent in countries where many young males experience the strain of unfulfilled aspirations.

Also, alcohol use is endemic in these countries.

Corruption also appears to be much more common in Central and Eastern European countries than in North America and Northern Europe. Corruption is related to a lack of transparency and accountability in the public domain, characteristics that are common among the developing countries of Central and Eastern Europe. Corruption in government circles appears to be lower in the countries where economic and political restructuring is relatively advanced—for example, in Estonia, Hungary, Poland, and Slovenia. In fact, the level of corruption in some of these countries is lower than in some Western countries. These findings are encouraging. If the restructuring in other countries in the region continues, the long-term prospects for decreasing levels of corruption seem fairly good.

In the short term, the economic crisis in the Russian Federation and in some other countries in the region may exacerbate existing economic and social problems. In the long term, the overall economic prospects might be better, but this probably will not reduce the prevalence of strain among the lower social strata. Socioeconomic inequality is growing, and the rates of unemployment will probably remain high for many years to come.

In most of the countries in transition, people in urban areas typically live in apartments and car ownership is still relatively rare. These factors may have so far inhibited further increases of property crimes. During the past 10 years, affluence has increased in most Central and



Eastern European countries, particularly in Hungary, Poland, Slovenia, and the Baltic states. If the gross national product of these countries, which are among the first candidates for entry into the European Union, continues to increase, vehicle-related crimes and some forms of petty crimes are likely to increase. Household burglary rates also are likely to increase if households start to possess more expensive commodities but do not invest in antiburglary devices.

Eventually, investments in selfprotection against car theft and burglary will increase and the rates of property crimes will stabilize. However, if strain among adolescents remains prevalent due to high unemployment, some of the offenders prevented by improved security from committing less serious property crime may be desperate enough to switch to more risky, violent forms of property crime (street robbery, car jacking, and household robbery). The easy availability of firearms in many countries in the region will facilitate this. The crime profile of the countries in transition may start to resemble that of South Africa or the more affluent Latin American countries, where property is relatively well protected but robbery rates are high.

To sum up, the level of crime in the countries in transition is relatively high, and the overall criminological outlook is fairly bleak. Even if they overcome their current economic problems, the rates of violent crimes probably will remain high due to high levels of unemployment among young males and the high consumption of strong alcohol.

Crime in Western Europe. The crime situation in the more industrialized and affluent nations of Western Europe must be understood in terms of special opportunity structures. Countries such as England and Wales that rely largely on cars for transportation experience high rates of vehicle-related crimes. Countries such as The Netherlands and Sweden, where bicycles are common, experience high rates of bicycle theft. Countries where more people live in homes rather than apartments experience high burglary rates. As protection against car theft, theft from cars, bicycle theft, and household burglaries has increased, the overall level of property crimes has declined. Since the level of self-protection continues to increase, crime rates are likely to continue to fall.

Paradoxically, crimes of violence particularly violent juvenile crimeshow an upward trend in several member states of the European Union. Street robberies might be increasing as a result of displacement due to improved protection of property. The emergence of an ethnic underclass in the larger cities of Western Europe also might be contributing to violence because strain among some ethnic parts of the urban population might be rising. The main challenge for Western European countries seems to be the social and economic integration of young immigrants in the urban areas.

The outgoing lifestyle of young people and their use of alcohol and drugs might also be a causal factor behind juvenile violent crime. One of Western Europe's main assets is the relatively low level of handgun ownership, which probably is an important factor inhibiting homicides.

Relatively low levels of manifest corruption by public officials appear to be typical of affluent nations with stable democratic traditions. This relationship also can be understood in terms of criminal opportunities and motivations. In open democracies with relatively unregulated markets, there are fewer opportunities for public officials to require bribes for their services. In such societies, public officials receive better salaries than those in countries in transition, and the norms against corruption are stronger and more generally shared.

Crime in North America. Since 1988, the level of crime in the United States and Canada has declined, according to both ICVS and police data. The level of selfprotection against crime is high, and the level of strain appears to be relatively low.

Crime in the United States differs less from Canada, the United Kingdom, and The Netherlands than is commonly assumed.⁷ Both the United States and Canada have relatively high levels of burglaries and car-related crimes in urban settings, but conventional crime and corruption in the United States are not exceptionally high. The most important difference appears to be the high level of homicides and robberies. which in the United States often involve guns. The most probable cause of this deviation from the European pattern is the exceptionally high rate of gun ownership in the United States.

Selected Country-Specific Findings

Property Crimes. The United States, Canada, and the Czech Republic rank among the highest in burglary, motor vehicle theft, and petty crimes.* Other countries with relatively high levels of these types of crimes are Bulgaria, Estonia, and Slovakia.

Countries with relatively low levels of property crimes are Belarus, Norway, Switzerland, and the former Yugoslav Republic of Macedonia.

Violence. Serious violent crimes tend to be relatively more prevalent in the countries of the former Soviet Union, such as Estonia, Kazakhstan, Kyrgyzstan, and the Russian Federation.

The United States stands out with a high score on serious violence, which contrasts with much lower levels in Canada and the Western European countries.

Countries with low levels of violence tend to be found in Western Europe. Hungary and the former Yugoslav Republic of Macedonia also have relatively low levels.

Corruption. High levels of corruption tend to be concentrated in Central, Eastern, and Southern Europe.

* *Editor's Note:* Another study based on victim surveys and police statistics has concluded that crime rates are much higher in England than in the United States. The authors of the study report that in 1995, the results of a victim survey indicated that England's burglary rate was almost double America's and its motor vehicle theft rate was more than double America's. See Langan, Patrick A., and Farrington, David P, *Crime and Justice in the United States and in England and Wales*, 1981–96, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1998, NCJ 169284.

Framing the International Debate on Crime Reduction

Despite the cautions needed when working with the available international data, the HEUNI team's analyses indicate that we are beginning to piece together some important parts of the intricate international puzzle of crime.

Crime indicators based on a combination of police statistics and survey findings proved to be useful for analyzing the determinants of crime. National crime profiles can be understood as the outcome of the dynamic interplay between motivational and opportunity factors. High levels of crime are found in both poor and rich countries. However, the factors responsible for high crime rates differ across regions.

In Central and Eastern Europe, much crime is demand-driven crimes are committed by young males as a means to survive in dire economic situations.

In Western Europe and North America, much crime is supplydriven—the prevalence and shape of crime are related to special opportunity-structures (the availability of targets and levels of social control and self-protection). This conclusion has important implications for criminal justice policy.

For More Information

This article is based on *Crime and Criminal Justice in Europe and North America*, *1990–1994*, edited by Kristiina Kangaspunta, Matti Joutsen, and Natalia Ollus (Helsinki, 1998). The report provides a full discussion of the HEUNI team's research and methodology, including background on the Fifth UN Survey and analyses of different countries' types of crime; a description of criminal justice system resources, case flow, and performance; and a review of sanctions.

HEUNI also has published a volume of criminal justice profiles of all European and North American countries with an independent criminal justice system. HEUNI research reports are available on its Web site at http://www.vn.fi/om/suomi/heuni/.

For more information on the UN Survey and the International Crime Victim Survey see also: Graeme Newman (ed.), *Global Report on Crime and Justice*, United Nations Centre for International Crime Prevention, Oxford University Press, New York, Oxford, 1999.

Policies that have worked in one country or region may be less useful or even counterproductive in countries where crime is determined by another set of factors. In the international debate on best practices in crime reduction, whether in the framework of the United Nations crime program or elsewhere, differentiations in policies ought to be made on the basis of criminologically informed crime profiles.

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Notes

- 1. HEUNI is the European link in the network of institutes operating within the framework of the United Nations Crime Preven-tion and Criminal Justice Programme. HEUNI, which is based in Helsinki, Finland, was established through an agreement between the United Nations and the government of Finland, signed December 23, 1981.
- 2. The UN has gathered information on crime and criminal justice from its member states since 1975. The first survey covered the period 1970 through 1975. In these surveys the information on crime is based on national police statistics and reflects the numbers of offenses recorded by the police. HEUNI has carried out the European and North American analysis of the second, third, fourth, and fifth United Nations Survey on Crime Trends and the Operation of Criminal Justice Systems.
- 3. For its most recent analysis, HEUNI used crime data on 40 Western, Central, and Eastern European countries as well as on Canada and the United States. Researchers studied eight different types of crime: nonfatal violence (assaults and robberies), homicides, serious violence (a combination of nonfatal violence and homicides), burglary, violence against women

(sexual violence and assaults), vehicle crimes (theft of and from cars), corruption, and petty crimes (bicycle theft, motorcycle theft, noncontact personal theft, car vandalism, nonviolent sexual incidents, and threats).

4. Previous UN surveys relied almost exclusively on UN survey data. The analyses of the Fifth Survey differ considerably from previous ones because additional sources of comparative data were used. The HEUNI research team relied on a database called the Crime Guide, which consists of data from various sources, including the Fifth UN Survey, the International Crime Victim Survey, health and mortality statistics collected by the World Health Organization and the Centers for Disease Control and Prevention. and data on corruption from Transparency International and the International Institute for Management Development, which collects information on improper practices in the public sector and in the workplace.

The Crime Guide database draws data from studies of firearm ownership, alcohol consumption, substance abuse, gender equality, urbanization, and employment and compensation.

 Cohen and Felson, "Social Change and Crime Rate Trends: A Routine Activity Approach," *American Sociological Review*, 44(1979): 588–608; van Dijk, J.J.M., "Opportunities for Crime: A Test of the RationalInteractionist Model," report at the Eleventh Criminological Colloquium of the Council of Europe, Strasbourg, November 28–30, 1994.

- 6. Shelley, Louise, *Crime and Modernisation: The Impact of Industrialisation and Urbanisation on Crime*, Carbondale, IL: Southern Illinois University Press, 1981.
- 7. Editor's Note: Other research based on victim surveys and police statistics has concluded that crime rates are much higher in England than in the United States. (See Langan, Patrick A.,

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and Farrington, David P., *Crime* and Justice in the United States and in England and Wales, 1981–96, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1998, NCJ 169284.) These seemingly contradictory findings provide at least suggestive reinforcement for the authors' argument for the use of multiple sources of data when making cross-country comparisons.