European Institute for Crime Prevention and Control, affiliated with the United Nations (HEUNI) P.O.Box 161, FIN-00131 Helsinki Finland

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### CRIME AND CRIMINAL JUSTICE IN EUROPE AND NORTH AMERICA 1990–1994

Kristiina Kangaspunta, Matti Joutsen and Natalia Ollus editors

Helsinki 1998

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### Foreword

This report and the companion volume ("Profiles of Criminal Justice Systems in Europe and North America", HEUNI publication no. 33, Helsinki 1998) is the result of an innovative analysis of national responses to the Fifth United Nations Survey of Crime Trends and Operation of Criminal Justice Systems (1990-1994). Responses to the Fifth United Nations Survey were received from nearly all European countries, and from the United States and Canada. The working group has supplemented this with a large amount of other data, in particular the data emerging from the mammoth International Crime Victim Survey.

As noted in the introduction, this report adds a new dimension to international comparisons. Never before have so much different data been available from so many European and North American countries. Never before has it been possible to attempt to go beyond relatively simple statements of how much crime has been recorded in each country or how many persons have entered prison, to seek not only to actually compare countries in this respect, but even to see whether various demographic, economic and social factors could help to explain some of the differences and patterns detected.

Our findings must be regarded as tentative. Nonetheless, since many of the findings are confirmed by a variety of indicators, we believe that they will contribute to national and international discussions on how crime prevention and criminal policy should be developed. At the same time, we look forward to a methodological discussion in which the soundness of our approach is reviewed. Any such discussion, and replication of our approach with other data, can only promote international comparative research in this critical area.

The analysis has been carried out by an international expert working group consisting of Dr Carolyn Block (United States), Prof. Jan J.M. van Dijk (The Netherlands), Dr Matti Joutsen (HEUNI), Ms Kristiina Kangaspunta (HE-UNI), Prof. André Kuhn (Switzerland) and Professor Ineke Haen Marshall (The Netherlands/the United States). Mr Adam Bouloukos (the Centre for International Crime Prevention, United Nations) and Dr Ugljesa Zvekic (the United Nations Interregional Crime and Justice Research Institute) have actively assisted the group in their work. Ms Natalia Ollus (Finland) has overseen the compilation of the data and the editing. Mr John van Kesteren (the Netherlands) and Ms Lieke Bootsma (the Netherlands) have assisted with the statistical analysis. HEUNI wishes to express its profound appreciation to the members of the working group for their time, expertise and dedication to the cause of international comparisons. All HEUNI staff members can also add, with particular appreciation, that it was a pleasure to work together with them on this project.

Many of the national criminal justice profiles published in the companion volume have been prepared or supplemented by individual experts. In addition, all of these profiles have been reviewed by national experts and authorities, to whom we owe a sincere debt of gratitude for their kind assistance.

Helsinki, 2 October 1998

Matti Joutsen Director, HEUNI

### To the reader

The data used in this report and in the companion volume containing national criminal justice profiles are taken primarily from the responses submitted by the countries in question. In many cases, supplemental data have been used, and the sources are cited.

In the process of the validation of the data, a number of presumable errors were noted. These often appeared to be errors in understanding the questions or in transcription. In such cases, the respondents have been asked to comment on the matter. Replies were received from most, but not all, of such respondents.

Sections 1.3 and 1.4 of the report noted many of the difficulties in analysing official or research data on crime and criminal justice from different countries. The importance of bearing these cautions in mind when reading the present report cannot be stressed too highly.

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## Summary

### The Fifth United Nations Survey

This report is based on an analysis of national responses to the Fifth United Nations Survey. The report covers the years 1990 through 1994. The Fifth United Nations Survey data have been supplemented by other information, including in particular the results of the International Crime (Victim) Survey.

The report differs considerably from its predecessors. The data has been subjected to quantitative analysis in order to test whether a set of indicators can be developed that may help us to better understand differences between countries in the level and structure of crime, and in the operation of the criminal justice system (a brief summary of the procedure is presented in sections 1.5.-1.6.; more detailed descriptions are provided in the annexes). Different sources of data have been used in order to develop "indices" of, respectively, burglaries, motor vehicle crimes, petty crimes, serious violence, violence against women, and corruption (chapter 2). These indices have been studied in the light of indicators that seek to measure the opportunity and motivation to commit crimes (chapter 3).

Indices have also been developed to assess the resources available to the criminal justice system; the gender balance in criminal justice professions; and citizen evaluation of the performance of the police (chapter 4).

Often, the tentative conclusions that have been reached may appear self-evident (as is the case with the finding that many countries with a high consumption of alcohol have a high rate of violence). Some other tentative conclusions presented here, however, have scarcely even entered the debate on criminal policy in many of the countries covered.

In reading the following summary, the reader is strongly cautioned to recall the possible pitfalls of international comparisons of statistics (section 1.3.). In this connection, we note only that the use of official statistics and the existing survey data tends to focus our attention on "traditional crime". Because of the absence of data, this report cannot shed much light on the extent of, for example, economic crime, environmental crime, organized crime and drug trafficking.

A separate volume contains the analysis on a country-by-country level.

### The amount of crime and the determinants of crime

We conclude that crime indicators which are based on a combination of survey findings on the public's experiences of crime and on police crime statistics are related to criminologically relevant economic and social indicators. These relationships can usefully be interpreted with the help of an interactionist model which sees crime rates as the result of a dynamic interplay between motivational and opportunity factors at the macro level.

In two cases in particular - violence against women and corruption - we have been faced with special methodological difficulties. The analysis of the macro-correlates of violence against women is complicated by measurement errors. Both official data (which are based on offences recorded by the police) as well as victimisation rates (which are based on survey research among the public) show cultural biases related to the social status of women. We conclude that research is needed on the cross-cultural measurement of violence against women. It is only when better comparative data become available that the correlates at the macro level of this type of criminality can adequately be determined (sections 3.1.4. and 3.2.3.).

The prevalence of corruption appears to be strongly related to the state of the economy. Economies in transition and, more generally, weaker economies tend to experience higher levels of manifest corruption of public officials. The various source variables used showed strong correlations. This results suggests that the measurement of corruption might be less complicated than often assumed (sections 2.7. and 3.2.3.)

### Selected country-specific findings

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 crime are Bulgaria, Slovakia and Estonia.

Countries with relatively low levels of property crimes are Belarus, Switzerland, Norway and "The Former Yugoslav Republic of Macedonia".

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

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.

The levels of violence against women tend to be highest in the countries of the former Soviet Union. The study showed, interestingly enough, that the United States, Canada and several Northern European countries also had high scores on the index for violence against women. However, these scores might well be an artefact of higher awareness of this type of crime in the more gender-balanced societies. (See the discussion in section 3.1.4.).

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

## Crime and the determinants of crime in Central and Eastern Europe

In the light of the indicators developed for the study, the motivation to offend would appear to be greater in the countries with economies in transition (the countries in Central and Eastern Europe) than in Western Europe. (As noted, the data used for this study deal primarily with "traditional" offences.) In Central and Eastern Europe, the indicators suggest that there is clearly more demand among male adolescents for opportunities to acquire income through criminal activities. In these countries socio-economic deprivation and alcohol abuse appear to help in forming a breeding ground for different forms of crimes of violence. Assaults, homicides and robberies appear to be more prevalent in countries where many young males experience strain. Furthermore, in most Central and Eastern European countries violence against women is relatively high. In addition to strain and alcohol abuse, this specific crime problem is probably related to the low social status of women. For example, the percentage of women with higher education is much lower in most countries in transition than in the European Union member states (chapter 3).

Corruption also appears to be much more common in many Central and Eastern European countries than in North America and Northern Europe.

In the short term, the economic crisis in the Russian Federation in particular might exacerbate existing economic and social problems in the region. In the longer term the economic prospects might be better but this will not necessarily reduce the demand for crime. Increased affluence in these countries will probably not reduce the prevalence of strain because in the context of a free market economy the lower social strata will profit less from it than will the higher strata. 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 flats, and car ownership is still relatively rare. These factors may have so far inhibited further increases of property crimes. Over the past ten years, in most Central and Eastern European countries the level of affluence has increased. This has been the case in particular in Hungary, Poland, Slovenia and the Baltic states. If the GNP 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 as well. Probably household burglary rates will also increase if households start to possess more expensive commodities, and investments in anti-burglary devices remain low.

Eventually, however, investments in self-protection against car theft and burglary will increase and the rates of property crimes will stabilise. If at that time strain among adolescents remains prevalent, there might well be a shift towards more violent forms of property crimes (street robberies, car-jacking and household robberies). Some of the less serious property crimes prevented by improved protection may be displaced in the form of more serious forms. The crime profile of the countries in transition may start to resemble that of South Africa which suffers from exceptionally high rates of robberies.

The level of corruption in government circles appears to be lower in the countries where economic restructuring is relatively advanced, e.g. in Estonia and Hungary. In fact the level of corruption in these countries is lower than in some Western countries. These are encouraging findings. If the restructuring in other countries in the region continues, the long-term prospects for decreasing levels of corruption seem fairly good.

To sum up, the over-all criminological outlook for the countries in transition in our view is relatively bleak. Even if the current economic problems are overcome, the rates of crimes of violence will probably remain high, due to high levels of unemployment among young males and the high consumption of strong alcohol. Also, the traditional attitudes towards females are unlikely to change in the short term, and violence against women is likely to remain a serious problem.

In the years to come, the increased affluence of the emerging middle classes, although currently suffering a set-back in the Russian Federation, will increase opportunities for crime. More people will be able to afford to live in detached housing and to own cars. With a time lag of a few years, the levels of self-protection will go up and the rate of opportunistic crimes might stop increasing. Some of the crimes prevented, however, are likely to be displaced to become robberies.

### Crime and determinants of crime in Western Europe

The crime situation in the more industrialised and affluent nations of Western Europe must primarily be understood in terms of special opportunity structures. Countries which rely on motor cars for their transportation experience high rates of vehicle-related crimes. Countries where people traditionally live in detached housing experience high rates of burglaries. In recent years protection against car theft, theft from cars and household burglaries has increased. Probably in relation to this – and perhaps also to intensified policing and more severe punishment of offenders – the over-all level of property crimes has been declining in both North America and Western Europe since 1995 (chapter 3).

Paradoxically, crimes of violence – in particular violent juvenile crime – show an upward trend in several member states of the European Union. The increase in street robberies in some countries might be the result of displacement of crimes prevented by improved protection. Another explanation is the emergence of an ethnic underclass in the larger cities of Western Europe. Although this cannot yet be determined with certainty, the level of strain among some ethnic parts of the urban population might well be on the increase. In the area of crime prevention, the main challenge for Western

European countries seems to be the social and economic integration of young immigrants in the urban areas.

At the same time, the outgoing lifestyle of young people and the combined use of alcohol and drugs might also be a causal factor behind juvenile violent crime. One of the main assets of Western Europe in this context is the relatively low levels of handgun ownership. There are strong indications that this is an important factor inhibiting homicides. The high rates of violence against women in some Western countries, as shown by both police statistics and ICVS data, might be the result of heightened sensitivity to and awareness of the maltreatment of women by their spouses or other partners in a domestic setting. If other countries become more gender-balanced, they may also show higher rates of violence against women for the same reason. This explanation for the high rates in some of the most affluent and gender-balanced countries should be no reason to belittle the seriousness of these incidents. The recent phenomenon of increased visibility of these crimes in the most gender-balanced nations underlines the existence of very substantial dark numbers elsewhere.

Relatively low levels of manifest corruption by public officials appear to be typical of affluent nations with stable democratic traditions. This relationship can also be understood in terms of criminal opportunities. In open democracies with relatively unregulated markets there are fewer opportunities for public officials to require bribes for their services.

### Crime and the determinants of crime in North America

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

Both the United States and Canada have relatively high levels of car-related crimes in urban settings, as well as burglaries.

The level and profile of crime in the United States differs less from that of countries such as Canada, the United Kingdom and The Netherlands than is commonly assumed. The level of conventional crimes in the United States is not exceptionally high, nor is the level of corruption. The most important difference appears to be the high level of homicides and robberies, and the fact that in the United States these often involve the use of guns. The most probable cause of this deviation from the "European" pattern is the exceptionally high rates of gun ownership.

# Resources and the operation of the criminal justice system

Despite the cautions needed when working with the available international data, the consistency in the findings in the present study regarding the criminal justice systems of Europe and North America does provide confi-

dence that we are beginning to piece together some important parts of the intricate international puzzle of criminal justice. The main findings from chapter 4 are summarized in the following seven points.

- (1) There are large international variations in the rate of police, prosecutors, judges, and prison staff (per 100,000 population), but there is a striking international similarity in the distribution of criminal justice personnel among the police, prosecution, the judiciary, and corrections. Although Central and Eastern European countries have a significantly higher rate of population employed in criminal justice than do the EU countries, about 82% of criminal justice personnel in both groups of countries are employed by the police, approximately 2% in prosecution, 3% in the judiciary, and 13% in corrections.
- (2) There appears to be a correlation between crime and the levels of criminal justice personnel: countries that have a higher level of petty theft, serious violence and homicide tend to have rather high levels of criminal justice personnel than do countries with lower levels of these crimes.
- (3) Criminal justice in Europe and North America remains a male-dominated profession. There is not a single country where half or more of the prison staff and police are female, and there are very few countries where females make up more than half of the prosecutors or judges. Central and Eastern European countries have a somewhat higher proportion of female judges and prison employees than do the EU countries. Yet, it is an oversimplification to conclude that Central and Eastern European countries in transition rank rather low on the gender balance Index, whereas some EU countries, Canada and the US rank in the top quartile of the gender balance index.
- (4) The Fifth United Nations Survey and the International Crime Victimization Survey provide partially inconsistent portrayals of international variations in criminality. However, once national differences in the level of victim-reporting are taken into consideration, some of these inconsistencies disappear (when the focus is on "total crime").
- (5) There are large international variations in the likelihood that the police will record crimes that come to their attention. In the Central and Eastern European countries crime victims are less likely to report the crime to the police and the police appear less likely to record a reported offence than is the case in the EU countries.
- (6) International data on case flow are problematic and difficult to interpret, particularly when the focus is on "total crime". It is clear that EU countries have a significantly larger number of recorded offences, suspects, prosecutions, convictions, and prison sentences than do the countries in transition. Beyond that statement, it is difficult to draw any firm conclusions. Differences in case attrition (the rate at which cases and suspects appear to "drop out" of the criminal justice system at different stages of the process) likely reflect differences in national criminal

justice procedures, recording practices and sentencing philosophy, rather than differences in the quality of work performed by criminal justice employees. Data on the later stages of processing are likely to be more reliable than those on the early stages; the ration between prosecutions and convictions (i.e. how many prosecutions lead to a conviction) shows relatively limited international variation and may, therefore, be a promising candidate for future international analysis.

(7) Assessment of international variations in the performance of a large number of criminal justice systems remains a difficult, if not impossible task. The data are simply not adequate. Subjective measures are more easily available than objective, "hard" measures. Crime rates — although obviously closely interlinked with the operations of criminal justice systems — are not useful performance indicators. Countries do appear to show (to a certain extent) a clustering on similar ranks in respect of the measures of police recording performance, productivity (of police and prosecutors, measured by number of suspects and prosecutions), and several subjective measures (the citizen evaluation of police performance index, evaluations of the fairness of the system and of the sense of security, and ICVS responses on corruption). Some countries are high on all (or most) performance indicators; other countries tend to be low on all (or most) performance indicators. This suggests that the performance indicators that have been developed for this study may have a reasonable degree of usefulness. Also, crime rates are apparently not completely randomly distributed among countries differing on the performance indicators. Any conclusions at this early stage about cause-and-effect should be avoided.

### Sanctions

*Life imprisonment:* With a very few exceptions (such as Norway, where life imprisonment was abolished in 1981), life imprisonment is possible throughout Europe and North America for certain serious offences. Nevertheless, the available data show that life imprisonment represents only a very small part (less than 1 per cent in all the countries) of the total number of sentences imposed.

**Deprivation of liberty:** Imprisonment is the backbone of the system of sanctions of all countries in Europe and North America. It represents about one-third of all imposed sanctions. The Fifth United Nations Survey data show large variations when calculated per 100,000 inhabitants. The range goes from less than 50 sentences of deprivation of liberty per 100,000 inhabitants each year in Azerbaijan, Cyprus, and Germany, to over 200 in Greece, the Netherlands, Scotland, and Turkey.

The overall use of imprisonment has increased between 1990 and 1994. In several countries the number of prison sentences imposed and the number of prison admissions has in fact decreased during this period. Nevertheless, it seems that an increase in the length of the prison terms actually served compensates for such a decrease in admissions and even results in an increase in prison populations. Some interesting exceptions (Austria, Cyprus, Finland and Slovenia) show that prison populations can be controlled and that prisoner rates are not fated to increase (section 5.3.).

There appear to be substantial differences in the way imprisonment is used. Some countries seem to have made a deliberate policy decision to decrease the use of imprisonment (as in the case of Finland), while others seem to have made a deliberate policy decision to increase its use (as in the case of the United States). Some countries sentence only a few offenders to long terms of imprisonment, others sentence many offenders to short terms, and still others sentence many offenders to long terms. The Nordic countries appear to represent one end of the spectrum, with the Central and Eastern European countries (with a few exceptions) as well as the United States at the other end (section 5.6.).

A correlation was found between the prisoner rate per 100,000 inhabitants and the national percentage of ICVS respondents who favoured imprisonment (section 5.7.). However, the correlation can be due to the fact that the courts are simply reflecting the "will of the people", or to the fact that the public comes to accept the sentencing practice of the courts — or it is even possible that both the prisoner population and public opinion are determined by some third factor(s).

The length of sentences of imprisonment seems to be the main factor in explaining the prisoner rate. The length of sentences depends primarily on the fundamental premise of criminal policy in a given country, which in fact determines whether it is more or less punitive. Thus, to reduce the prison population a criminal justice system has to find means to reduce the average length of prison terms rather than to try to reduce the number of admissions – although a reduction in the number of admissions can contribute to a decrease in the prison population.

"Control in freedom": Many sanctions involve considerable supervision and control of the offender. These include suspended or conditional imprisonment with supervision, probation, community service, reformative and educative labour, special forms of treatment, and local banishment. Because of this variety, it is not possible to find a common trend in the data on this sanction. The different countries report that between zero and about 70 per cent (for the Czech Republic and Slovakia) of their total number of sanctions consist of "control in freedom". A question in the Fifth United Nations Survey refers to the number of persons placed on probation (a procedure whereby an individual found guilty of an offence is released by the court without imprisonment, and placed under the supervision of an official or officially sanctioned body), and another question asks for the number of persons on probation on a given day. In 1994, between about 10 (in Lithuania) and 536 (in the United States) persons per 100,000 inhabitants were placed on probation, and on a selected day in the year the rates oscillated between 12 (in Slovenia) and 1137 (in the United States) per 100,000 population.

*Warnings and admonitions:* Here again, the countries report that between zero and more than 50 per cent (in Bulgaria, Kazakhstan, Slovenia and Switzerland) of their sanctions were warnings or admonitions, including all suspended sanctions without a supervision requirement. (The cautions noted in sections 1.3 and 5.1.1 on the comparability of statistics on sanctions should be noted; it can be assumed that in many countries, warnings and admonitions may be imposed by the police and the prosecutor, and may not be entered into the judicial statistics.)

*Fines:* The financial sanction is clearly one of the most popular among European countries, especially in Western Europe. In Austria, England & Wales, Finland, and Germany more than 70 per cent of all sanctions are fines. At the other end of the scale, in Kyrgyzstan, Lithuania and Slovakia less than 10 per cent of sanctions were fines. (The same cautions noted above regarding the statistics on warnings and admonitions apply to fines.)

*Community service:* Many countries do not recognize community service as a sanction in their criminal justice system. According to the responses to the Fifth United Nations Survey, the countries which make the greatest use of community service are the Russian Federation (about 15 per cent of all sentences), Azerbaijan (13 per cent), Georgia (12 per cent), the Netherlands (8 per cent), Scotland (7 per cent), and Northern Ireland (6 per cent). However, in this connection it should be recalled that the concept of community service can be substantively different from one country to the other and therefore caution is needed in making international comparisons on the topic. For example in several countries in transition, including the Russian Federation, Azerbaijan and Georgia, community service is actually "educative labour". This sanction requires the offender to continue working at his or her regular employment, but a part of the wages are deducted as a sanction.

Among the persons convicted in 1994, between 3.5 per cent (in Kazakhstan) and 18.2 per cent (in Austria) are women. In each country, the differences between 1990 and 1994 in the proportion of women among the convicted offenders are slight and go both ways; there are increases in some countries and decreases in others.

# Résumé

### La Cinquième enquête des Nations Unies

Le présent rapport se base sur une analyse des réponses nationales à la cinquième enquête des Nations Unies. Le rapport couvre les années 1990 à 1994. Les données qu'il contient ont été complétées par une autre information, laquelle inclut notamment les résultats de l'Enquête internationale sur l'exposition (de la victime ) au crime.

Ce rapport diffère sensiblement de ses prédécesseurs. Les données ont été soumises à une analyse quantitative afin de tester s'il est possible d'élaborer un ensemble d'indicateurs susceptible de nous aider à mieux comprendre les différences entre les pays en ce qui concerne le niveau et la structure du crime, et le fonctionnement du système de justice pénal (un bref sommaire de la procédure est présenté aux chapitres 1.5-1.6; des descriptions plus détaillées sont fournies aux annexes). Différentes sources de données ont été utilisées pour élaborer des "indices" respectivement de cambriolage, de délits sur les véhicules à moteur, de délits mineurs, de violence aggravée, de violences/sévices contre les femmes, et de corruption (chapitre 2). Ces indices ont été étudiés à la lumière des indicateurs qui visent à mesurer l'opportunité et la motivation au crime (chapitre 3).

Des indices ont également été élaborés pour évaluer les ressources à la disposition du système de justice pénale; l'équilibre ente les sexes dans les professions de la justice pénale; et l'évaluation par le citoyen de performance de la police dans son travail (chapitre 4).

Souvent, les tentatives de conclusions qui ont été atteintes peuvent sembler évidentes (c'est notamment le cas du constat que dans de nombreux pays où la consommation d'alcool est élevée le taux de violence est élevé). Certaines autres tentatives de conclusion présentées ici, cependant, ont à peine suscité le débat sur la politique pénale dans de nombreux pays couvert par l'enquête.

A la lecture du sommaire qui suit, le lecteur est vivement mis en garde contre les éventuels pièges des comparaisons statistiques internationales (chapitre 1.3). Dans ce contexte, nous notons simplement que le recours aux statistiques officielles et de données existantes produites par des enquêtes tendent à attirer notre attention sur "le délit traditionnel". Faute de données, le présent rapport ne peut guère faire la lumière sur, par exemple, l'étendue du délit économique, le délit environnemental, le crime organisé et le trafic de drogues.

L'analyse pays par pays est l'objet d'un volume séparé.

### Quantité et déterminants des crimes/délits

Nous concluons que les indicateurs de crimes/délits, qui se basent sur une combinaison d'observations faites lors des enquêtes, sur l'idée que l'opinion se fait du crime/délit et sur les statistiques criminelles établies par la police, sont liés à des indicateurs socio-économiques pertinents sur le plan criminologique. Ces relations peuvent utilement être interprétées à l'aide d'un modèle interactif, lequel voit dans les taux de criminalité le résultat d'une interactivité entre des facteurs de motivation et d'opportunités au macroniveau.

Dans deux cas, en particulier – la violence contre les femmes et la corruption –, nous avons été confrontés à des difficultés méthodologiques particulières. L'analyse des macro-corrélations de la violence contre les femmes est compliquée par des erreurs de mesure. Les données officielles (qui sont basées sur les délits enregistrés par la police) et la fréquence de l'exposition au délit (qui sont basés sur les sondages d'opinion) indiquent des différences culturelles liées au statut social des femmes. Nous concluons qu'il est nécessaire de mener des recherches sur la mesure transculturelle de la violence contre les femmes. Ce n'est que lorsque l'on dispose de meilleures données comparatives que les corrélations au macro-niveau de ce type de criminalité peuvent être définies de manière appropriées (chapitres 3.1.4. et 3.2.3.).

La prédominance de la corruption semble vigoureusement liée à la situation économique. Les économies en transition et, plus généralement, les économie plus faibles tendent à présenter des taux plus élevés de corruption manifeste de fonctionnaires. Les diverses variables à la source utilisées présentaient de fortes corrélations. Ces résultats permettent de supposer que la mesure de la corruption est peut-être moins compliquée qu'on le pense souvent (chapitres 2.7 et 3.2.3.).

#### Choix d'observations spécifiques par pays

Les Etats-Unis, le Canada et la République Tchèque sont les pays où les cambriolages, le vol de voitures et les délits mineurs sont les plus nombreux. Les autres pays où ces délits sont relativement fréquents sont la Bulgarie, la Slovaquie et l'Estonie.

Les pays où les taux de délits contre la propriété sont relativement faibles sont la Bélarus, la Suisse, la Norvège et "l'ex-République Yougoslave de Macédoine".

Les délits de violence aggravés tendent à être relativement plus fréquents dans les pays de l'ex-URSS (comme la Fédération de Russie, l'Estonie, le Kirghizistan, le Kazakhstan).

Les Etats-Unis se distinguent par la fréquence élevée de violences aggravées, laquelle contraste avec des taux beaucoup plus faibles au Canada et dans les pays d'Europe occidentale. Les pays où les taux de violence sont faibles sont situés en Europe occidentale. La Hongrie et "l'ex-République Yougoslave de Macédoine présentent aussi des taux relativement faibles.

Les taux de violences contre les femmes tendent à être les plus élevés dans les pays de l'ex-URSS. L'étude montre, de manière suffisamment intéressante, que les Etats-Unis, le Canada et plusieurs pays de l'Europe du nord présentent aussi des valeurs élevées de l'indice de violence contre les femmes. Ces chiffres, toutefois, pourraient bien être le produit artificiel d'une plus grande prise de conscience de ce type de délits dans les sociétés où l'égalité entre les sexes est la plus équilibrée. (Voir la discussion au chapitre 3.1.4.).

Les hauts niveaux de corruption tendent à être concentrés en Europe centrale et dans le sud de Europe.

#### Facteurs déterminants du délit/crime en Europe centrale et orientale

Au vue des indicateurs élaborés pour les besoins de l'étude, la motivation à commettre un acte délictueux semble plus élevée dans les pays d'économie en transition (les Pays d'Europe centrale et orientale) qu'en Europe occidentale. (Comme on l'a indiqué, les données utilisées dans la présente étude traitent essentiellement des délits "traditionnels"). En Europe centrale et orientale, les indicateurs laissent à penser qu'il existe chez les jeunes adolescents de sexe masculin une exigence nettement supérieure de trouver des occasions de tirer revenu d'activités délictueuses/criminelles. Dans ces pays, la carence socio-économique et l'abus d'alcool semblent favoriser la formation d'un support de croissance de diverses formes de délits de violence. Agressions, homicides et vols qualifiés semblent prévaloir davantage dans les pays où de nombreux jeunes gens vivent dans le besoin. De plus, dans la plupart des Pays d'Europe centrale et orientale, la violence contre les femmes est relativement fréquente. En plus du besoin et de l'abus d'alcool, ce problème spécifique du crime est probablement lié au statut social - jugé inférieur - de la femme. Par exemple, la proportion de femmes possédant une formation supérieure est beaucoup plus faible dans la plupart des pays en transition que dans les Etats membres de l'Union européenne (chapitre 3).

La corruption semble également être beaucoup plus courante dans de nombreux Pays d'Europe centrale et orientale qu'en Amérique du Nord et en Europe du Nord.

A court terme, la crise économique qui secoue la Fédération de Russie, en particulier, risque d'exacerber les problèmes économiques et sociaux qui se posent dans la région. A plus long terme, les perspectives économiques pourraient s'améliorer sans pour autant entraîner une diminution de l'aspiration au crime. L'amélioration du niveau de vie dans ces pays ne réduira probablement pas le caractère général de la tension, car dans le contexte d'une libre économie de marché, les couches sociales défavorisées en profiteront moins que les couches sociales favorisées. Les taux de chômage resteront probablement élevés pendant de nombreuses années.

Dans la plupart des pays en transition, les citadins vivent, en règle générale, dans des appartements et posséder sa voiture reste relativement rare. Ces facteurs peuvent avoir inhibé, jusqu'à présent, de nouvelles recrudescences des délits contre la propriété. Durant les dix dernières années, dans la plupart des Pays d'Europe centrale et orientale, le niveau de vie s'est élevé. C'est le cas notamment en Hongrie, en Pologne, en Slovénie et dans les Etats Baltes. Si le P.i.b. de ces pays (qui comptent parmi les premiers candidats à l'adhésion à l'Union européenne) continue d'augmenter, les délits liés aux véhicules et certaines formes de délits mineurs, risquent d'augmenter eux aussi. La fréquence des cambriolages augmentera aussi si les ménages commencent à posséder des mobiliers de plus en plus coûteux et si les investissements dans les installations contre le cambriolage restent faibles.

Le cas échéant, toutefois, des investissements dans l'auto-protection contre le vol de voitures et le cambriolage augmenteront et la fréquence des délits contre la propriété se stabilisera. Si, à ce moment-là, le besoin dont souffrent les adolescents continue de prévaloir, on pourrait bien assister à un recentrage vers des formes plus violentes de délits contre la propriété (vols qualifiés dans la rue, vols de voitures et cambriolages qualifiés). A certains des délits les plus graves contre la propriété, empêchés grâce à une meilleure protection, peuvent se substituer d'autres formes, plus graves. Le profil des délits, dans les pays en transition, peut commencer à ressembler à ceux de l'Afrique du Sud où les taux de vols qualifiés sont exceptionnellement élevés.

Le niveau de corruption, dans les milieux gouvernementaux, semble moindre dans les pays où la restructuration de l'économie est relativement avancée, par exemple en Estonie et en Hongrie. En fait, le niveau de la corruption dans ces pays est inférieur à ce qu'il est dans certains pays occidentaux. Ces constatations sont encourageantes. Si la restructuration dans d'autres pays de la région se poursuit, les perspectives à long terme de voir baisser les niveaux de corruption semblent relativement bonnes.

En résumé, sur le plan de la criminologie en général, la perspective des pays en transition est, selon nous, relativement sombre. Même si les problèmes économiques actuels sont surmontés, les taux de délits de violence resteront probablement élevés en raison des taux de chômage élevés parmi les jeunes gens et de la forte consommation de boissons alcoolisées fortes. De plus, les attitudes traditionnelles vis-à-vis des femmes ne changeront probablement pas à court terme, et la violence contre celles-ci restera, vraisemblablement, un sérieux problème.

Dans les années à venir, l'amélioration du niveau de vie des classes moyennes qui émergent - même si présentement elles souffrent d'un certain recul dans la Fédération de Russie - augmenteront les opportunités de délits. Un nombre croissant de personnes auront les moyens de vivre dans un logement pavillonnaire et de posséder leurs voitures. Avec un décalage de quelques années, les taux d'auto-protection augmenteront et le taux de délits d'opportunité pourraient bien cesser d'augmenter. Mais, à certains délits empêchés se substitueront, probablement, des vols qualifiés.

### Délit et facteurs déterminants du délit/crime en Europe

La criminalité, dans les nations les plus industrialisées et où le niveau de vie est le plus élevé en Europe occidentale, doit être perçue, avant tout, en terme de structures d'opportunité particulières. Les pays où l'on compte sur les voitures individuelles pour effectuer ses déplacements se caractérisent par des taux élevés de délits contre les véhicules. Les pays où les gens vivent, traditionnellement, dans une maison individuelle, connaissent des taux de cambriolage élevés. Ces dernières années, la protection contre le vol de voiture, le vol dans les voitures et les cambriolages de domiciles ont augmenté. Probablement pour cette raison, et peut-être aussi pour une pratique policière intensifiée et la punition plus sévère des délinquants - le niveau global de criminalité contre la propriété a décliné, depuis 1995, tant aux Etats-Unis qu'en Europe occidentale (chapitre 3).

Paradoxalement, les délits de violence – en particulier le délit violent commis par des jeunes – montrent une tendance à la recrudescence dans plusieurs Etats membres de l'Union européenne. La recrudescence des vols à main armée dans la rue, dans certains pays, pourrait bien être le résultat d'un recentrage des délits lorsque ceux-ci sont empêchés par une protection améliorée. Autre explication: l'émergence d'une sous-classe ethnique dans les plus grandes villes d'Europe occidentale. Bien que ce fait ne puisse encore être établi avec certitude, le niveau de besoin, dans certaines parties ethniques de la population urbaine, pourrait bien être en augmentation. Dans le domaine de la prévention du crime, le principal défi, pour les pays d'Europe occidentale, semble être l'intégration économique et sociale des jeunes immigrants dans les régions urbaines.

Dans le même temps, le mode de vie convivial des jeunes et l'usage combiné de l'alcool et de la drogue pourraient bien être aussi un facteur causal de la délinquance juvénile violente.

L'un des avantages majeurs de l'Europe occidentale, dans ce contexte, réside dans les taux relativement faibles de détention d'armes. Il existe de sérieuses indications que ce fait constitue une important facteur de prévention des homicides. Les taux de violences élevés contre les femmes, dans certains pays occidentaux, comme l'indiquent tant les statistiques de la police que les données de l'ICVS, pourraient résulter d'une sensibilité et d'une prise de conscience accrues du mauvais traitement infligé aux femmes par leurs conjoints ou par d'autres partenaires dans l'environnement domestique. Si d'autres pays présentent une égalité entre les sexes améliorée, ils peuvent aussi présenter des taux plus élevés de violences contre les femmes, pour la même raison. Cette explication des taux plus élevés, dans certains des pays les plus prospères et où l'égalité entre les sexes est la plus avancée, ne devrait pas pour autant entraîner la diminution de la gravité de ces incidents. Le récent phénomène de la visibilité accrue de ces délits, dans les pays où l'égalité entre les sexes est la plus avancée, souligne l'existence de chiffres très sombres ailleurs.

Les taux plus faibles de corruption manifeste de fonctionnaires semblent être typiquement le cas de nations prospères, dotées de traditions démocratiques stables. Cette relation peut également être perçue en terme d'opportunités de commettre des délits. Dans les démocraties transparentes, caractérisées par des marchés relativement non réglementés, des possibilités moindres s'offrent aux fonctionnaires d'exiger des pots-de-vin en échange de leurs services.

### Délit et facteurs déterminants du délit/crime en Amérique du Nord

Depuis 1988, le taux de criminalité aux Etats-Unis et au Canada a décliné, tant d'après les données de l'ICVS que d'après celles de la police. Le niveau d'auto-protection contre les délits est élevé. Le niveau de tension semble aussi y être relativement faible.

Les Etats-Unis comme le Canada présentent des taux relativement élevés de délits liés aux voitures, en milieu urbain; il en est de même des cambriolages.

Le niveau et le profil de la criminalité aux Etats-Unis diffèrent moins de ceux observés dans des pays comme le Canada, le Royaume-Uni et les Pays-Bas qu'on le pense généralement. Le taux de délits conventionnels, aux Etats-Unis, n'est pas exceptionnellement élevé, pas plus que celui de corruption. La plus importante différence semble résider dans le taux élevé d'homicides et de vols qualifiés, et dans le fait qu'aux Etats-Unis ils impliquent souvent l'usage d'armes. La cause la plus probable de cette différence, par rapport au modèle européen, réside dans les taux exceptionnellement élevés de détentions d'armes.

# Ressources et fonctionnement du système de la justice pénale

En dépit des précautions qui s'imposent lorsque l'on travaille sur les données internationales disponibles, la constance de ces observations dans la présente étude, en ce qui concerne les systèmes de justice pénale en Europe et en Amérique du Nord, permettent d'envisager avec confiance que nous commençons à rassembler certaines des pièces les plus importantes du puzzle international de la justice pénale. Les principales observations faites au chapitre 4 sont résumées dans les sept points suivants.

(1) La proportion de policiers, de procureurs, de juges et de personnels carcéraux (pour 100.000 habitants) présentent de fortes variations internationales; mais il existe une remarquable similarité internationale dans la répartition du personnel de la justice pénale, entre la police, le ministère public, le judiciaire et les peines infligées. Bien que les Pays d'Europe centrale et orientale présentent des taux sensiblement plus élevés de population employée dans la justice pénale que dans les Pays de l'Union européenne, environ 82% des effectifs de la justice pénale, dans les deux catégories de pays, sont employés dans la police, environ 2% dans les ministères publics, 3% dans le judiciaire et 13% dans les établissements de détention correctionnels.

- (2) Il semble exister une corrélation entre la délinquance et les taux de personnels de la justice pénale: les pays qui présentent un taux plus élevé de vols mineurs, de violences graves et d'homicides tendent a avoir des niveaux moins élevés de personnels de justice pénale que dans les pays où la fréquence de ces délits est moindre.
- (3) La justice pénale, en Europe et en Amérique du Nord, reste dominée par des professions essentiellement masculines. Il n'y a pas un seul pays où la moitié ou plus du personnel carcéral est féminin, et il y a très peut de pays où plus de la moitié des procureurs ou des juges sont des femmes. Les Pays d'Europe centrale et orientale ont une proportion un peu plus élevée de femmes exerçant la fonction de juge et d'employées dans les prisons que les pays de l'Union européenne. En conclure que les Pays d'Europe centrale et orientale réalisent, au niveau des personnels employés dans la justice pénale, une plus grande égalité entre les sexes serait toutefois simplifier exagérément: plusieurs des pays en transition comptent parmi ceux où l'indice d'égalité entre les sexes est plutôt faible, tandis que certains pays de l'Union européenne, le Canada et les Etats-Unis se classent dans le premier quartile pour cet indice.
- (4) La Cinquième Enquête des Nations Unies et l'Enquête internationale sur l'exposition aux crimes/délits (ICVS) donnent des descriptions en partie incohérentes des variations internationales de la criminalité. Toutefois, une fois prises en considération les différences nationales dans le taux d'enregistrement des plaintes des victimes, certaines de ces incohérences disparaissent (lorsque l'accent est mis sur la "criminalité/délinquance totale").
- (5) Il existe de fortes variations internationales dans la probabilité que la police enregistrera les délits qui viennent à sa connaissance. Dans les Pays d'Europe centrale et orientale, les victimes des délits s'adressent moins vraisemblablement vers la police et l'enregistrement des délits par celle-ci est moins vraisemblable que dans les pays de l'Union européenne.
- (6) Les données internationales relatives flots d'affaires sont problématiques et difficiles à interpréter, en particulier lorsque l'accent est mis sur la "criminalité totale". Il est clair que dans les pays de l'Union européenne le nombre des délits enregistrés est sensiblement plus élevé, de suspects, de poursuites, de condamnations, et de peines de prison que dans les pays en transition. Ce constat fait, il est difficile de tirer des conclusions définitives. Les différences dans l'épuisement des cas (le taux de cas et de suspects qui semblent abandonnés par la justice pénale à différents

stades de la procédure) reflètent vraisemblablement des différences au niveau des procédures nationales de justice pénale, des pratiques d'enregistrement et de la philosophie de jugement, plutôt que des différences dans la qualité du travail accompli par les personnels au service de la justice pénale. Les données relatives aux stades ultérieurs de la procédure sont vraisemblablement plus fiables que celles relatives aux stades préliminaires; le rapport entre poursuites et condamnations (par ex. le nombre de poursuites conduisant à une condamnation) indique une variation internationale relativement limitée et peut, par conséquent, être promis à candidature pour une prochaine analyse internationale.

L'évaluation des variations internationales de la performance d'un grand nombre de systèmes de justice pénale reste une tâche difficile, voire impossible. Les données, tout simplement, ne sont pas adéquates. Il est plus facile d'obtenir des mesures subjectives que des mesures objectives, dites mesures "dures". Les taux de criminalité - bien que manifestement liés au fonctionnement des systèmes de justice pénale – ne sont pas des indicateurs utiles de performance. Les pays semblent présenter (jusqu'à une certaine mesure) un regroupement au niveau du classement: pour la mesure de la performance de l'enregistrement par la police, de la productivité (de la police et des procureurs, performance mesurée par le nombre de suspects et de poursuites), et de plusieurs mesures subjectives (évaluation par le citoyen de l'indice de performance de la police, évaluations de l'impartialité du système et au sens de sécurité, et les réponses à l'ICVS sur la corruption). Certains pays sont haut placés pour tous (ou presque tous) les indicateurs de performance; d'autres pays tendent à être au bas de l'échelle pour tous (ou presque tous) les indicateurs de performance. Ceci permet de penser que les indicateurs de performance qui ont été élaborés pour les besoins de cette étude sont susceptibles de présenter un degré raisonnable d'inutilité. De plus, les taux de criminalité n'obéissent apparemment pas à une distribution entièrement aléatoire selon les pays qui présentent des différences au niveau des indicateurs de performance. Toute conclusion, à ce stade précoce, sur la relation de cause à effet devrait être évitée.

### Sanctions/peines

**Prison à vie:** A quelques rares exceptions près (comme la Norvège, où l'emprisonnement à vie a été aboli en 1981), l'emprisonnement à vie sanctionnant certains délits graves, est possible dans toute l'Europe et l'Amérique du Nord. Néanmoins, les données disponibles montrent que l'emprisonnement à vie ne représente qu'une très faible proportion (moins de 1% dans tous les pays) du nombre total de condamnations prononcées.

*Privation de liberté:* L'emprisonnement constitue la charpente du système de sanctions/peines dans tous les pays d'Europe et d'Amérique du Nord. Il représente environ un tiers du total des peines prononcées. La Cinquième

Enquête des Nations Unies montre d'importantes variations lorsque l'on rapporte le nombre d'emprisonnements pour 100.000 habitants. L'éventail est compris entre moins de 50 condamnations à des peines privatives de liberté pour 100.000 habitants par an en Azerbaïdjan, à Chypre et en Allemagne, à plus de 200 en Grèce, aux Pays-Bas, en Ecosse et en Turquie.

Le recours général à l'emprisonnement a augmenté entre 1990 et 1994. Dans plusieurs pays, le nombre de peines de prison prononcées et le nombre d'entrées en prison a, en fait, diminué durant cette période. Il semble toutefois qu'une augmentation de la durée des emprisonnements actuellement purgés compense un tel recul du nombre d'entrées et même se traduise par une augmentation des populations carcérales. Quelques exceptions intéressantes (Autriche, Chypre, Finlande et Slovénie) montrent que les populations carcérales peuvent être contrôlées et que les taux d'emprisonnement ne sont pas voués à augmenter (chapitre 5.3.).

Des différences substantielles dans le recours à l'emprisonnement semblent exister. Certains pays semblent avoir pris une décision politique délibérée de réduire le recours à l'emprisonnement (cas de la Finlande), tandis que d'autres semblent avoir pris une décision politique délibérée d'y recourir davantage (cas des Etats-Unis). Certains pays ne condamnent que de rares délinquants à de longues peines d'emprisonnement, d'autres condamnent de nombreux délinquants à des peines courtes, d'autres encore condamnent de nombreux délinquants à des peines de longue durée. Les Pays Nordiques semblent représenter une extrémité du spectre, tandis que l'on trouve les Pays d'Europe centrale et orientale (à quelques exceptions près) à l'autre extrémité de celui-ci (chapitre 5.6).

Une corrélation peut être établie entre le taux d'emprisonnement pour 100.000 habitants et le pourcentage national des réponses à l'enquête sur l'exposition des victimes aux délits (ICVS) qui se déclaraient favorables à l'emprisonnement (chapitre 5.7). Toutefois, la corrélation peut être due au fait que les tribunaux reflètent simplement la "volonté du peuple", ou le fait que l'opinion en vient à accepter la pratique exercée par les tribunaux en matière de condamnation – ou il est même possible que la population carcérale comme l'opinion sont déterminés par quelque(s) facteur(s) tiers.

La durée des peines d'emprisonnement semble être le principal facteur qui permette d'expliquer le taux d'emprisonnement. La durée des peines dépend principalement des principes fondamentaux de la politique pénale dans un pays donné, laquelle détermine, en fait, si elle est plus ou moins punitive. Ainsi, pour réduire la population carcérale, un système de justice pénale doit trouver des moyens de réduire la durée moyenne des peines de prison plutôt que chercher à réduire le nombre des admissions - bien qu'une réduction du nombre d'admissions puisse contribuer à une diminution de la population carcérale.

*"Liberté sous contrôle":* De nombreuses sanctions/peines entraînent une surveillance et un contrôle considérables du délinquant. Il s'agit de peine d'emprisonnement suspensive ou conditionnelle, assortie de surveillance, de

probation, de service communautaire, de travail correctionnel ou éducatif, de formes particulières de traitement et d'interdiction de séjour. En raison de cette diversité, il n'est pas possible d'identifier une tendance commune dans les données couvertes par ce chapitre. Les différents pays déclarent que dans 0 à 70% (pour la République Tchèque et la Slovaquie) du nombre total de sanctions qui y sont prononcées consistent en "liberté sous contrôle". Une question de la Cinquième Enquête des Nattions Unies renvoie au nombre de personnes placées en probation (procédure dans laquelle une personne convaincue de culpabilité pour un délit commis est remise en liberté par le tribunal, sans emprisonnement, pour être placée sous surveillance d'un fonctionnaire ou d'un organe officiellement reconnu); le nombre de personnes en situation de probation à une date donnée est l'objet d'une autre question. En 1994, entre 10 (en Lituanie) et 536 personnes (aux Etats-Unis) personnes pour 100.000 habitants étaient placées en probation, et à une certaine date de l'année, les taux variaient entre 12 (en Slovénie) et 1137 (aux Etats-Unis) pour 100.000 habitants.

*Avertissements et admonestations:* Là encore, les pays déclarent qu'entre 0 et 50% (Bulgarie, Kazakhstan, Slovénie et Suisse) des sanctions qui y sont prononcées étaient des avertissements ou des admonestations, y compris toutes les peines avec sursis, sans que soit exigée une surveillance. (Les prudences évoquées aux chapitres 1.3. et 5.1.1., relatives à la comparabilité des statistiques sur les sanction doivent être notées; on peut présumer que dans de nombreux pays, avertissements et admonestations peuvent être imposés par la police et le procureur, et peuvent ne pas figurer dans les statistiques judiciaires.

*Amendes:* La sanction financière est manifestement une des plus répandues dans les pays d'Europe, en particulier en Europe occidentale. En Autriche, en Angleterre et au Pays de Galles, en Finlande et en Allemagne, plus de 70% de sanctions prononcées sont des amendes. A l'autre extrémité de l'échelle, au Kirghizistan, en Lituanie et en Slovaquie, moins de 10% des sanctions étaient des amendes. (Les mêmes prudences que celles indiquées ci-dessus à propos des statistiques relatives aux avertissements et admonestations s'appliquent aux amendes).

*Service communautaire:* De nombreux pays ne reconnaissent pas le service communautaire comme une sanction prévue par leur système de justice pénale. Selon les réponses à la Cinquième Enquête des Nations Unies, les pays qui ont le plus fréquemment recours au service communautaire sont la Fédération de Russie (environ 15% des peines prononcées), l'Azerbaïdjan (13%), la Géorgie (12%), les Pays-Bas (8%), l'Ecosse (7%) et l'Irlande du Nord (6%). A cet égard, il convient toutefois de rappeler que le concept de service communautaire peut varier sensiblement d'un pays à un autre et, par conséquent, la prudence est de mise lorsque l'on fait des comparaisons internationales sur ce sujet. Par exemple, dans plusieurs pays en transition, au nombre desquels la Fédération de Russie, l'Azerbaïdjan et la Géorgie, le service communautaire est en fait un "travail éducatif". Cette sanction

signifie pour le délinquant qu'il doit continue à travailler en exerçant son emploi régulier, mais une partie de ses revenus sont déduits au titre de la sanction.

Parmi les personnes condamnées en 1994, entre 3,5% (au Kazakhstan) et 18,2% (en Autriche) sont des femmes. Dans chaque pays, les différences - entre 1994 et 1990 - dans la proportion de femmes parmi les délinquants condamnés sont minces et varient dans les deux sens; on constate des augmentations dans certains pays et des diminutions dans d'autres.

# Содержание

### Пятый обзор ООН

Настоящий доклад основывается на анализе национальных ответов в рамках Пятого обзора ООН. В докладе охватывается период с 1990 по 1994 г. Данные Пятого обзора ООН подкрепляются другой информацией, включая, в частности, результаты Международного виктимологического исследования.

Настоящий доклад значительно отличается от предшествующих. Д анные были подвергнуты количественному анализу, в целях определения возможности установления набора параметров для лучшего понимания различий между странами в уровне и структуре преступности, а также в функционировании системы уголовного правосудия (краткое обобщение процедуры представлено в разделе 1.5.-1.6; более детально информация дана в приложении). Были использованы различные источники данных для выработки "параметров" соответственно ограблений, краж автомототранспорта, незначительных преступлений, тяжких преступлений, насилия в отношении женщин и коррупции (разделы 2). Эти параметры рассматривались в контексте показателей, используемых для определения вероятности имотивации совершения преступлений (разделы 3).

Были также разработаны индикаторы для оценки ресурсов, имеющихся в распоряжении системы уголовного правосудия; соотношения полов в профессиях системы уголовного правосудия, а также для оценки деятельности полиции со стороны граждан (разделы 4.).

Предварительные выводы, которые были сделаны, могли зачастую говорить сами за себя (как это было в случае с выводом, что в странах с высоким уровнем потребления алкоголя высок и уровень насилия). Некоторые другие представленные здесь предварительные выводы, однако, едва ли учитывались вообще при выработке уголовной политики в большинстве стран, охваченных обзором.

При чтении следующего краткого содержания настоятельно рекомендуем читателям помнить о недостатках прямого сравнения в международном масштабе статистических данных (раздел 1.3). В этой связи мы отмечаем только, что использование официальных статистических показателей и данных обзоров обращают наше внимание в основном на "традиционную преступность". Из-за отсутствия данных, отчет не может пролить много света на масштабы, например, экономической преступности, экологических преступлений, организованной преступности и незаконного оборота наркотиков.

В отдельном томе представлен анализ по странам.

### Объем преступности и детерминанты преступности

Мы делаем вывод, что параметры преступности, которые основываются на сочетании результатов обзора относительно виктимизации населения и полицейской статистики преступности, связаны с крминологически значимыми социально-экономическими показателями. Такое взаимоотношение может быть успешно интерпретировано с помощью модели взаимодействия, которая отображает уровни преступности как результат динамической зависимости между факторами мотивации и вероятности на макроуровне.

В двух случаях, в частности, насилие в отношении женщин и коррупция, мы столкнулись с особыми методологическими трудностями. Анализ макро-коррелятов насилия в отношении женщин осложняется ошибками в измерении. Как официальные данные (которые основываются на зарегистрированных полицией преступлениях), так и уровни виктимизации (которые основываются на результатах опроса населения) показывают культурные различия, касающиеся социального статуса женщины. Мы делаем вывод, что необходимо провести исследование в отношении насилия против женщин, но уже на срезе культур. Корреляты этого вида преступности могут быть адекватно определены на макро уровне, только если будут получены более качественные сравнительные данные (разделы 3.1.4. и 3.2.3).

Похоже, что уровень коррупции очень сильно связан с состоянием экономики. Экономические структуры, находящиеся в переходном периоде, и, в общем смысле, более слабые экономические структуры отличаются более высоким уровнем проявления коррупции среди государственных должностных лиц. Использованные из различных источников переменные показывают строгую зависимость в этом отношении. Эти результаты позволяют сделать вывод, что измерение уровня коррупции может быть менее сложным, чем это часто предполагают (раздел 2.7 и 3.2.3).

#### Отдельные выводы по странам

Соединенные Штаты, Канада и Чешская Республика занимают первые места по уровням краж со взломом, кражам автомототранспорта и мелким преступлениям. К другим странам с относительно высокими уровнями этих видов преступности относятся Болгария, Словакия и Эстония.

Странами с относительно низким уровнем имущественных преступлений являются Б еларусь, Швейцария, Норвегия и Бывшая Югославская Республика Македония.

Тяжкие насильственные преступления относительно чаще совершаются в республиках бывшего Советского Союза (таких как, Российская Федерация, Эстония, Киргизия, Казахстан).

В Соединенных Штатах высок уровень тяжких преступлений, что контрастирует с гораздо более низкими уровнями в Канаде и странах Западной Европы.

Страны с более низкими уровнями насилия отмечаются в Западной Европе. Относительно низкие уровни насилия в Венгрии и Бывшей Югославской Республике Македония. Уровни насилия в отношении женщин наиболее высокие в республиках бывшего Советского Союза. Достаточно интересно, что исследование показало также наличие высокого уровня насилия в отношении женщин в Соединенных Штатах, Канаде и некоторых североевропейских странах. Однако эти данные могут быть следствием более высокого уровня осознания этого вида преступления в странах с большей сбалансированностью в отношениях полов. (См. материалы раздела 3.1.4.).

Высокие уровни коррупции отмечаются в Центральной и Восточной Европе и в южно-европейских странах.

## Преступления и детерминанты преступности в Центральной и Восточной Европе

В свете параметров, избранных в целях настоящего исследования, мотивация к совершению преступления имеет более высокий уровень в странах, экономика которых переживает переходный период (страны Центральной и Восточной Европы), чем в Западной Европе. (Как уже отмечалось, использованные в настоящем исследовании данные относятся в первую очередь к "традиционным" преступлениям). Для стран Центральной и Восточной Европы индикаторы показывают явно более высокое стремление дееспособных лиц мужского пола использовать возможности для извлечения доходов посредством противоправной деятельности. В этих странах недостаточность социально-экономических условий и злоупотребление алкоголем способствуют созданию почвы для различных видов насильственных преступлений. Нападения, убийства и ограбления преобладают в странах, где многие молодые люди мужского пола испытывают лишения. Более того, в большинстве стран Центральной и Восточной Европы уровень насилия в отношении женщин относительно высок. Помимо лишений и злоупотребления алкоголем эта конкретная проблема преступности, вероятно, связана с более низким социальным статусом женщины. Например, доля женщин с высшим образованием гораздо меньше в большинстве стран переходного периода, чем в государствах-членах Европейского союза (глава 3).

Коррупция также отмечается чаще в большинстве стран Центральной и Восточной Европы по сравнению со странами Северной Америки и Северной Европы.

В краткосрочной перспективе экономический кризис в Российской Федерации, в частности, может обострить социально-экономические проблемы в данном регионе. В долгосрочной перспективе экономическая ситуация может улучшиться, но это вовсе не обязательно приведет к снижению потребности в совершении преступлений. Повышение уровня состоятельности людей в этих странах, вероятно, не приведет к сокращеиню уровня бедности, так в контексте свободной рыночной экономики низшие социальные слои общества будут получать от этого меньше, чем более высокие социальные слои. Уровень безработицы, по всей вероятности, будет оставаться высоким на долгие годы.

В большинстве стран переходного периода люди в городских районах обычно живут в квартирах, а уровень владения автотранспортом попрежнему относительно низок. Эти факторы, возможно, до сих пор предопределяли рост имущественных преступлений. В последние 10 лет в большинстве стран Центральной и Восточной Европы уровень благосостояния возрос. Это, в частности, отмечается в Венгрии, Польше, Словении и Балтийских странах. Если ВНП в этих странах (которые находятся среди первых кандидатов на вступление в Европейский союз) будет продолжать расти, то вероятен также рост преступлений, связанных с автомототранспортом, а также некоторые виды мелких преступлений. Возможно также возрастет уровень квартирных краж, если в домах начнут появляться все более дорогие вещи, а капиталовложения в обеспечение защиты от краж будут оставаться незначительными.

Со временем, однако, вложения средств в предупреждение угонов автотранспорта и квартирных краж возрастут, и уровень имущественных преступлений стабилизируется. Если к тому времени лишения в среде взрослого населения останутся превалирующими, может отмечаться смещение к более насильственным формам имущественных преступлений (ограбления на улицах, хищения автотранспорта и кражи со взломом). Некоторые из менее тяжких имущественных преступлений, предотвращенные обеспечением улучшением системы защиты, могут быть вытеснены имущественными преступлениями в более тяжкой форме. Уровень преступности в странах переходного периода может тогда быть схожим с уровнем преступности в Южной Африке, которая характеризуется исключительно высоким уровнем ограблений и квартирных краж.

Уровень коррупции в государственной сфере представляется ниже в тех странах, где экономическая реструктуризация находится на относительно продвинутом этапе, например, в Эстонии и Венгрии. По сути уровень коррупции в этих странах ниже, чем в некоторых западных странах. Это очень обнадеживающие выводы. Если реструктуризация продолжится и в других странах региона, то долгосрочные перспективы снижения уровня коррупции будут достаточно хорошими.

В целом, общая криминологическая ситуация для стран переходного периода, на наш взгляд, выглядит достаточно мрачной. Даже если имеющиеся экономические проблемы будут преодолены, уровни насильственных преступлений, по всей вероятности, останутся высокими в связи с высокими уровнями безработицы среди молодежи и высоким уровнем потребления крепких спиртных напитков. Кроме этого, традиционное отношение к женщинам вряд ли изменится за короткий период, и насилие против женщин, видимо, останется серьезной проблемой.

В предстоящие годы повышение уровня благосостояния нарождающегося среднего класса, хотя и страдающего в связи с откатом назад, наблюдаемом в Российской Федерации, даст новый рост возможностей для совершения преступлений. Большее количество людей сможет позволить себе жить в отдельных домах и владеть автомашинами. С временным отставанием в несколько лет уровень самозащиты и предупреждения преступности начнет расти, и доля казуальных преступлений может остановиться в росте. На замену некоторым предотвращенным преступлениям, однако, могут придти грабежи.
#### Преступность и ее детерминанты в Западной Европе

Положение с преступностью в более индустриально развитых и процветающих странах Западной Европы должно рассматриваться, в первую очередь, в смысле конкретных вероятностных структур. В странах, где люди в большинстве своем для осуществления поездок полагаются на автомобили, отмечается более высокий уровень преступлений, связанных с автомототранспортом. В странах, где население традиционно проживает в отдельных домах, отмечается более высокий уровень краж со взломом. В последние годы усилились меры по защите автомобилей от угонов и предотвращению краж из автомобилей, а также по защите жилищ от взломов. Возможно, в связи с этим - и вероятно также из-за усиления предпринимаемых полицией мер и более суровых мер наказания правонарушителей – общий уровень имущественных преступлений начиная с 1995 года снижается как в Северной Америке, так и в Западной Европе (глава 3).

Парадокс, но насильственные преступления – в особенности насильственные преступления среди несовершеннолетних – имеют тенденцию к росту в некоторых странах-членах Европейского союза. В некоторых странах рост числа ограблений на улицах может быть результатом вытеснения преступлений, которые были предупреждены посредствомусиленных мерзащиты. Другим объяснением является нарождение этнического низшего класса в крупных городах Западной Европы. Хотя это и нельзя пока констатировать с уверенностью, но уровень напряженности в некоторых этнических сегментах городского населения может весьма быть на подъеме. В сфере предупреждения преступности основной проблемой для стран Западной Европы, похоже, являетсясоциальнаяиэкономическаяинтеграциямолодыхиммигрантовв районах урбанизации.

В то же время свободный образ жизни молодых людей и одновременное увлечение алкоголем и наркотиками может также быть казуальным фактором, предопределяющим уровень насильственной преступностью среди молодежи. Одним из наиболее значимых "активов" в Западной Европе в этом контексте является относительно низкое количество находящегося в собственности огнестрельного оружия. Имеются убедительные показатели, что это является важным фактором, способстующим совершению убийств. Высокие уровни насилия в отношении женщин в некоторых западных странах, как показывают и полицейская статистика, и исследования по вопросам виктимизации, могут быть результатом повышенной чувствительности этого вопроса и осознания проблемы неправомерного обращения с женщинами со стороны супругов или иных партнеров в домашней среде. Если другие страны станут более сбалансированными в отношениях полов, в них именно по этой причине также могут возрасти уровни насилия против женщин. Это объяснение в отношении высоких уровней в некоторых из наиболее процветающих и сбалансированных в отношении полов странах не должно стать причиной принижения серьезности этого вида преступлений. Недавнее явление возросшего проявления этих

преступлений в большинстве сбалансированных в отношении полов стран подчеркивает наличие весьма значительных скрытых данных в других местах.

Относительно низкие уровни проявления коррупции со стороны государственных служащих выглядят типичными для стран с высоким уровнем доходов и со стабильными демократическими традициями. Это отношение может также пониматься в смысле возможностей для совершения преступления. В открытых демократических сообществах с относительно свободными рыночными отношениями у официальных лиц существует меньше возможностей вымогать взятки за свои услуги.

#### Преступления и детерминанты преступности в Северной Америке

По сравнению с 1988 годом уровень преступности в Соединенных Штатах и Канаде снизился. Это показывают как данные виктимологического исследования, так и полицейская статистика. Высок уровеньобеспечениясамозащиты.Уровеньнапряженностипредставляется относительно низким.

И в Соединенных Штатах, и в Канаде в городских районах отмечаются относительно высокие уровни преступлений, связанных с автомобилями,

а также квартирных краж.

Уровень и профиль преступности в Соединенных Штатах отличается от уровня и профиля преступности таких стран, как Канада, Великобритания и Нидерланды, меньше, чем принято считать. Уровень традиционных преступлений в Соединенных Штатах не является исключительно высоким, такое же положение и в отношении уровня коррумпированности. Наиболее важные отличия проявляются в более высоком уровне убийств и ограблений, а также в том, что в США эти преступления часто совершаются с применением огнестрельного оружия. Наиболее вероятной причиной этого отклонения от "европейской" схемы является исключительно высокий уровень владения огнестрельным оружием.

#### Ресурсы и деятельность системы уголовного правосудия

Несмотря на осторожность, которую следует иметь в виду, работая с имеющимися международными данными, последовательность выводов в настоящем исследовании в отношении систем уголовного правосудия как в Европе, так и в Северной Америке в действительности представляет возможность уверенно заявить, что мы начинаем складывать по в единую картину важные составляющие части запутанной международной головоломки под названием "уголовное правосудие". Основные выводы по материалам глав суммируются в следующих семи пунктах:

(1) В международном измерении существуют значительные вариации в уровне полицейских, прокурорских работников, судей и персонала пенитенциарной системы (на 100 000 населения), но поразительна интернациональная схожесть в распределении сотрудников системы уголовного правосудия в органах полиции, прокуратуры, судов и уголовноисполнительных учреждений. Хотя в странах Центральной и Восточной Европы отмечается значительно более высокий уровень сотрудников, работающих в системе уголовного правосудия, чем в странах Европейского союза, около 82% персонала системы уголовного правосудия в обеих группах стран заняты в полиции, примерно 2% – в прокурорской практике, 3% – судьи и 13% - в исправительной системе.

(2) Отмечается прямая зависимость между преступностью и уровнями персонала системы уголовного правосудия: страны с высоким уровнем мелких краж, тяжких насильственных преступлений и убийств имеют достаточно высокий уровень сотрудников системы, нежели страны с более низкими уровнями этих преступлений.

(3) Уголовное правосудие в Европе и Северной Америке остается профессией, где доминируют мужчины. Нет ни одной страны, где женщины составляют половину или более персонала пенитенциарной системы и полиции, и есть всего несколько стран, где половина или более прокурорских работников или судей являются женщинами. В странах Центральной и Восточной Европы несколько выше доля женщинсудей и персонала пенитенциарной системы, чем в странах Европейского союза. И все же будет слишком упрощенным делать вывод, что в странах Центральной и Восточной Европы соответственно имеется более сбалансированная по половому признаку численность работников системы уголовного правосудия: в некоторых странах переходного периода индекс баланса по половому признаку достаточно низок, в то время как некоторые страны Европейского союза, Канада и США занимают места в верхней четверти рейтинга по индексу полового баланса.

(4) Пятый обзор ООН и Международное виктимологическое исследование дали частично непоследовательные портретные отпечатки вариаций преступности на международном уровне. Однако, как только в отношении степени заявляемости о жертвах преступлений принимаются во внимание национальные различия, некоторые из этих несоответствий исчезают (когда внимание обращено на преступность в целом).

(5) Существуют значительные различия на международном уровне в степени вероятности, что полиция будет регистрировать преступления, попавшие в сферу ее внимания. В странах Центральной и Восточной Европы по сравнению со странами Европейского союза ниже степень вероятности того, что жертвы преступлений будут сообщать об этом полиции, и полиция с меньшей готовностью регистрирует преступления, о которых ей сообщают.

(6) На международном уровне весьма проблематичны и тяжелы для интерпретации данные о движении дела по этапам системы уголовного правосудия, особенно когда акцент делается на преступность в целом. Очевидно, что в странах Европейского союза отмечается более высокое по сравнению со странами переходного периода количество зарегистрированных преступлений, подозреваемых, возбужденных уголовных дел, судимостей и вынесенных приговоров о лишении свободы. Помимо этого утверждения трудно сделать какие-либо твердые заключения. Различия в уровне "выпадения дел" (уровень, при котором дела и подозреваемые оказываются "выскользнувшими" из системы уголовного правосудия на различных стадиях процесса), по всей вероятности, отражают различия в процессуальных особенностях национальных систем уголовного правосудия, практике регистрации и методологии вынесения приговора, а не различия в качестве работы, проведенной сотрудниками органов системы уголовного правосудия. Данные о завершающих стадиях процесса, видимо, более надежны, чем данные о начальных этапах процесса; соотношение между уголовным преследованием и вынесением приговора (т.е. сколько преследований привело к осуждению) показывает относительно ограниченную вариантность на международном уровне и поэтому может быть обещающим объектом для будущего анализа на международном уровне.

(7) Оценка международных вариаций в функционировании большого количества систем уголовного правосудия остается трудной, если вообще являетсяразрешимойзадачей. Имеющиеся данные простоне представляются адекватными. Субъективные показатели получить легче, чем объективные "жесткие" показатели. Уровни преступности - хотя и очевидно тесно связанные с результатами деятельности систем уголовного правосудия - полезными параметрами с точки зрения показателей функционирования не являются. Страны показывают в определенной степени опору на сходные категории в отношении параметров регистрации полицией преступлений, продуктивности работы (полиции и прокурорских работников, измеряемой количеством подозреваемых и подвергнутых наказанию) и некоторые субъективные показатели (оценка гражданами функционирования полиции, оценка достаточности системы и ощущения степени безопасности, а также ответы на вопросы относительно коррупции в рамкахьеждународного виктимологического исследования). Некоторые страны имеют высокие показатели по всем (или по большинству параметров функционирования: у других стран низкие показатели по всем (или по большинству) параметрам. Это предполагает, что параметры функционирования, которые были разработаны для настоящего исследования, могут иметь обоснованную степень полезности. Кроме того, уровни преступности, очевидно, не совсем беспорядочно распределяются среди стран, различающихся по параметрам функционирования систем уголовного правосудия. На настоящем начальном этапе следует избегать любых выводов относительно причинноследственной зависимости.

#### Санкции

Пожизненное заключение. За очень редким исключением (например, Норвегия, где пожизненное заключение было отменено в 1981 году) пожизненное заключение может последовать в Европе и Северной Америке за определенные тяжкие преступления. Тем не менее, имеющиеся данные показывают, что пожизненное заключение составляет лишь очень малую часть (менее одного процента во всех странах) от общего числа вынесенных приговоров. Лишение свободы. Тюремное заключение является "становым хребтом" системы санкций во все странах Европы и Северной Америки. Оно составляет около трети от всех вынесенных приговоров. Данные Пятого обзора ООН показывают значительные вариации в данном показателе на 100 тыс. населения. Диапазон различий – от менее 50 приговоров ежегодно о лишении свободы на 100 тыс. населения в Азербайджане, на Кипре и в Германии до 200 в Греции, Шотландии и Турции.

В целом, применение меры пресечения в виде лишения свободы за период с 1990 по 1994 г. возросло. В ряде стран число вынесенных приговоров с наложением наказания в виде тюремного заключения и число заключений под стражу за этот период уменьшилось. Тем не менее, похоже, что увеличение сроков лишения свободы, реально проведенных в рамках тюремного заключения, реально компенсирует такое сокращение численности заключенных под стражу и даже находит отражение в увеличении числа находящихся в заключении. Некоторые интересные исключения (Австрия, Кипр, Финляндия и Словения) показывают, что количество заключенных может контролироваться и в этом показателе нет обязательной предопределенности к росту (раздел 5.3.)

Существуют значительные различия в методе применения тюремногозаключения.. В некоторых странах намеренно принято политическое решение о сокращении наказания в виде тюремного заключения (как это имеет место в Финляндии), в то время как другие страны имеют определенное политическое решение об усилении использования тюремного заключения как меры лишения свободы (как это имеет место в Соединенных Штатах). В некоторых странах только для малого числа преступников выносятся приговоры, предусматривающие значительный срок тюремного заключения, в других к незначительным срокам тюремного заключения приговаривается большое количество правонарушителей, а в третьих к значительным срокам тюремного заключения приговаривается большое количество правонарушителей. Северные страны Европы стоят на одном конце спектра, а страны Центральной и Восточной Европы (за редким исключением), а также Соединенные Штаты находятся на другом (раздел 5.6).

Была отмечена связь между уровнем заключенных на 100 тыс. населения и количеством респондентов по странам в рамках Международного виктимологического исследования, которые высказались в пользу тюремногозаключения(раздел 5.7.). Однакокорреляцияможетявляться следствием того, что суды просто отражают "глас народа", или того, что население начинает воспринимать существующую практику вынесения приговоров судами, или даже возможно, что и количество находящихся в заключении, и общественное мнение определяются некоторым третьим(и) фактором (факторами).

Похоже, что продолжительность срока тюремного заключения являетсяосновнымфактором,объясняющимчисленностьнаходящихсяв заключении. Срок лишения свободы зависит, в первую очередь, от фундаментальной предпосылки уголовной политики в определенной стране, что по сути определяет, ориентируется ли она на наказание или нет. Таким образом, для того, чтобы уменьшить количество лиц, лишенных свободы, система уголовного правосудия должна найти способы сокращения в среднем сроков заключения, а не пытаться сократить число лишаемых свободы лиц - хотя сокращение количества заключаемых под стражу может привести к сокращению численности отбывающих срок наказания в тюрьме.

"Контроль на свободе". Многие санкции подразумевают значительную степень наблюдения и контроля за правонарушителем. Сюда относятся и отсроченное или условное наказание с установлением наблюдения, испытательного срока, привлечения к общественно-полезному труду, исправительно-трудовые работы, специальные формы обращения и лечения и местное ограничение в правах. В связи с таким разнообразием нет возможности выявить общую тенденцию в данных в отношении этой санкции. Различные страны информируют, что в общем массиве санкций "контроль на свободе" составляет от 0 до 70% (для Чехии и Словакии). Одним из вопросов Пятого обзора ООН являлся вопрос о количестве лиц. находящихся в условном осуждении (процедура, когда признанное виновным лицо освобождается судом без наложения наказания в виде лишения свободы и помещается под наблюдение официального лица или официально назначенного органа), и другой вопрос касался количества лиц, находящихся в условном осуждении на определенный день. В 1994 году от 10 (в Литве) до 536 (в Соединенных Штатах) человек на 100 тыс. населения находилось в условном осуждении; а на отдельно взятый день года цифры варьировались от 12 (Словения) до 1137 (в Соединенных Штатах) на 100 тыс. населения.

Предупреждения и меры дисциплинароного воздействия. И вновь в ответах стран сообщалось, что от 0 до более 50% (в Болгарии, Казахстане, Словении и Швейцарии) санкций относятся к предупреждениям или мерам дисциплинарного воздействия, включая все отсроченные меры наказания без обязательного наблюдения. (Следует иметь в виду специальную оговорку в разделах 1.3 и 5.1.1 относительно сравнимости данных по статистике мер наказаний; можно сделать предположение, что во многих странах предупреждения и меры административного воздействия могут налагаться полицией и прокуратурой, и это не обязательно включается в судебную статистику).

Штрафы. Материальные меры наказание являются одним из самых широко используемых в европейских странах, особенно в Западной Е вропе. В Австрии, Англии и Уэлсе, Финляндии и Германии более 70% мер наказания составляют штрафы. С другой стороны шкалы – в Киргизии, Литве и Словении – штрафы составляют менее 10% санкций. (Та же оговорка, что и в отношении статистики по предупреждениям и мерам дисциплинарного воздействия, справедлива и в отношении штрафов).

Общественно-полезный труд. Во многих странах общественнополезный труд в качестве меры наказания в рамках системы уголовного правосудия не признается. Судя по ответам на Пятый обзор ООН, к странам, где наиболее активно используется общественно-полезный труд, относятся Российская Федерация (около 15% всех наказаний), Азербайджан (13%), Грузия (12%), Нидерланды (8%), Шотландия (7%) и Северная Ирландия (6%). Однако в этой связи следует напомнить, что концепция общественнополезного труда в странах может значительно отличаться, и поэтому следует быть осторожным при проведении международного сравненительного анализа в данной области. Например, в некоторых странах переходного периода, включая Российскую Федерацию, Азербайджан и Грузию, общественно-полезный труд по сути является "воспитательным трудом". Эта мера наказания предусматривает, чтобы правонарушитель продолжал работать на своем рабочем месте, а часть заработной платы вычитается в виде наказания.

Среди лиц, осужденных в 1994 году, доля женщин составляет от 3,5% (в Казахстане) до 18,2% (в Австрии). Для каждой страны различия в данных 1990 года и 1994 года в отношении доли осужденных женщин в общем числе осужденных правонарушителей являются незначительными и показывают изменения двоякого характера: в одних странах отмечается уменьшение количества осужденных женщин, в других – увеличение.

# 1 Introduction

Matti Joutsen

## 1.1 The Fifth United Nations Survey

The United Nations has gathered criminal justice information from Member States since 1975. The first survey covered the period 1970 through 1975; the second, 1975 through 1980; the third, 1980 through 1986; the fourth, 1986 through 1990; and the fifth, 1990 through 1994.<sup>1</sup>

Each of the surveys was designed to obtain quantitative and qualitative information on crime trends and the operation of national criminal justice systems. These data include statistics such as the number of crimes reported to the police, the clearance rate, the number of suspects and offenders dealt with at the different stages of criminal procedure, sentences and the enforcement of sentences, and the resources available to the criminal justice system.

This report is based on an analysis of national responses to the Fifth United Nations Survey. It is supplemented by other information available to the members of the expert group that performed the analysis. This international group consisted of Dr Carolyn Block (United States), Prof. Jan J.M. van Dijk (The Netherlands), Dr Matti Joutsen (HEUNI), Ms Kristiina Kangaspunta (HEUNI), Prof. André Kuhn (Switzerland) and Professor Ineke Haen Marshall (The Netherlands/the United States). Mr Adam Bouloukos (Centre for International Crime Prevention, United Nations) and Dr Ugljesa Zvekic (United Nations Interregional Crime and Justice Research Institute) have actively assisted the group in their work. Ms Natalia Ollus (Finland) has overseen the compilation of the data and the editing. Mr John van Kesteren (the Netherlands) and Ms Lieke Bootsma (the Netherlands) have assisted with the statistical analysis.

The report differs considerably from its predecessors (HEUNI 1985, HEUNI 1990 and HEUNI 1995). As noted below (sections 1.2 and 1.5), the data has been subjected to quantitative analysis in order to test whether a set

<sup>1</sup> The results of the previous surveys were published in United Nations documents A/32/199 (1977), A/CONF.121/18 and Corr.1 (1985), the third A/CONF.144/6 (1990) and the fourth A/CONF.169/15 (1995). The European results to the Second Survey were published in "Criminal Justice Systems in Europe" (HEUNI publication no. 5, Helsinki 1985). The European and North American results to the Third Survey were published in "Criminal Justice Systems in Europe and North America" (HEUNI publication no. 17, Helsinki 1990), and to the Fourth Survey in two publications, "Crime and Criminal Justice in Europe and North America, 1986-1990" and "Profiles of Criminal Justice Systems in Europe and North America" (HEUNI publications no. 25 and 26, Helsinki 1995).

of crime and social indicators can be developed that could explain the differences between the countries. Such an analysis might help in identifying differences that would otherwise have gone unnoticed in an analysis that proceeds on a country-by-country basis.

In the Fifth Survey, responses were received from all European and North American countries except Albania, Bosnia-Herzegovina, the Holy See, Iceland, the Republic of Ireland, Monaco, Poland, San Marino, Tajikistan, Turkmenistan and Uzbekistan.

The report consists of six chapters.

Chapter one provides a background to the Fifth Survey itself as well as a discussion of the problems of international comparison.

Chapters two and three contain an analysis of various factors which appear to correlate with the amount of crime in the different countries. Chapter two seeks to identify which countries have a low or, respectively, a high rate of homicide, other violent crime, crime against women, motor vehicle related crime, corruption, burglary or petty crime. Chapter three is an analysis of various factors which appear to correlate with the motivation and opportunity to commit the types of crime covered by the Fifth United Nations Survey.

Chapter four is an analysis of the data on the resources available to the criminal justice system. Chapter four also looks at the flow of cases through the criminal justice system, and at the performance of the criminal justice system. Chapter five deals with sanctions and their severity.

Chapter six, which is published as a separate volume, contains brief "criminal justice profiles" of all the European and North American countries with an independent criminal justice system, even if they did not respond to the Fifth United Nations Survey. Each profile seeks to provide background information on the criminal justice system, the trend in crime, resources, and special issues of concern. Where possible, additional sources of information have been utilized. The profiles have been prepared by individual members of the expert group, and sent to the authorities and experts in the respective countries for review.

## 1.2 The purpose of the report

The purpose of the report is to describe public safety in the region as a whole and in the individual countries. "Public safety" is understood as the general risk of victimization to crime, as shown by the data. The report also seeks to formulate tentative criminologically-based conclusions and provide an assessment of the situation as a basis for reviewing the application of United Nations standards and as a basis for technical assistance. These conclusions, which have been submitted in the hope that they will stimulate constructive debate both regionally and within the individual countries, have been based largely on an analysis of the differences between the European and North American countries. In the course of this analysis, the members of the expert group have identified a number of factors that may help to understand the prevalence of certain forms of crime in some countries, and the low level of certain forms of crime in other countries. Often, these conclusions may be self-evident (as is the case with the finding that many countries with a high consumption of alcohol have a high rate of violence). Some other tentative findings presented here have scarcely even entered the debate on criminal policy in many of the countries covered.

The focus of the report is on the period covered by the Fifth Survey (1990-1994). For this reason, earlier data have not been used in the cross-national analysis. However, in chapter six (the national criminal justice profiles), data covering also earlier years have been used for selected countries where issues of particular interest arise.

# 1.3 The pitfalls of using statistics: definitions, classifications and counting rules

A number of problems have been noted with the United Nations Surveys. These are problems that, to a large extent, are common to all efforts in gathering international criminal justice statistics. The major problems in regards to data analysis are the imprecise definition of the terms, improper classifications, ambiguous coding structures, and differences in the units of count used.

The Fifth Survey instrument includes a brief section setting out the key definitions, for example the definition of "assault", the definition of "persons prosecuted" and the definition of "admissions to prison". This section is a necessity, since even the basic terms are defined differently in the different countries. Utilizing lessons learned from earlier Surveys, each successive Survey instrument has tried to improve on this section.

Despite this section, the problem of imprecise definitions remains.

First, the *legal definitions* of offences vary considerably from one country to the next. For example, "assault" may be an independent category in some jurisdictions, while others may not consider an incident to be an assault unless it results in bodily injury. Another illustration is the extent to which negligence affects the determination of criminal responsibility. A third example is the extent of criminalization. Matters that in one country are dealt with by regulatory authorities (such as labour safety authorities) may be matters for the police in another country. Acts that are criminalized in some countries (such as the possession of drugs, certain sexual behaviour, and gambling) may be tolerated elsewhere.

Second, there are considerable *procedural differences* between countries. It is not always the police and the lower courts that deal with crime. Certain cases may be handled with a simplified procedure or by special investigatory and adjudicatory bodies. A category such as "persons prosecuted" may be understood by some respondents to refer only to persons against whom the public prosecutor brings charges in court, while other respondents may include cases where the prosecutor takes other action, such as closing the case with a warning or the arrangement of victim/offender mediation.

Another example of the importance of procedural differences is provided by traffic offences. In many countries they are not considered "offences," and are dealt with by a special branch of the police or through a special procedure (and, often, are not recorded in the statistics). Without a full appraisal of these procedural differences, countries that include such petty offences in their statistics will have considerably higher figures than do countries that do not include them.

Yet another procedural difference relates to the extent to which discretion is permitted, either formally or informally. Some countries require criminal justice agencies to proceed with any prima facie case (the "principle of legality"). Other countries may allow more discretion (the "principle of opportunity", also known as the "principle of expediency"), which in practice may mean that further measures are waived in a large portion of the cases. In still other countries, the police and prosecutor will not proceed with certain types of cases unless the victim requests that measures be instituted. If no such request is made, the case will generally not be recorded as an offence.

A third difference between countries in respect of definitions is in the *statistical classification* of crime. The classification of theft is a good example. Depending on the country, it may or may not include burglary or theft of a motor vehicle. It may or may not include simple or aggravated theft as defined by the law of the jurisdiction in question, and it may or may not include shoplifting.

Fourth, the rules for *counting* offences or offenders vary. Some authorities in some countries count offenders, others count offences; some count each separate incident in a series of offences, while others record a series as one unit. One particular difference which has led to considerable confusion is the unit used for the successful outcome of police investigations. Some countries count "arrests", others use "reported offences", and still other countries use "cleared offences". Any comparison of statistics based on such different units would be quite misleading.

Another example of differences in counting rules is provided by admissions to prison. Some countries count only those cases where an individual is admitted to prison the first time, often as a suspect remanded to pre-trial custody. Other countries may be of the view that for example a change in the status of an individual from pre-trial detainee to convicted prisoner counts as a new "admission". Yet other countries may take the word "admission" literally, and count every time a prisoner enters the prison doors, for example on returning from an appearance in court or from a prison furlough.

Fifth, the *comprehensiveness of the statistics* varies. Some countries include only the major criminal offences. Others include petty offences,

violations of tax laws, alcohol laws, administrative regulations and similar subsidiary legislation. Consequently, any comparisons should be made between specific categories of offences, and not between aggregate amounts.

In addition to the differences in laws, procedures and statistical routines, there are also differences in *legal terminology*. These differences not only confound comparisons which require translation into a foreign language (where concepts such as "plea-bargaining" may not exist) but also comparisons between jurisdictions which nominally speak the same language. Examples from English-speaking countries range from differences in spelling (jail / gaol) to differences in definition (compensation / restitution).

Attempts to reach an international agreement, either formal or informal, on uniform definitions, classifications, coding structures and units of counts have consistently been unsuccessful. No country is likely to change its administrative and statistical practice in order to promote the international exchange of information. Quite simply, the current statistics have been prepared by administrators for administrative purposes and, for them, this purpose will remain the most important.

A more realistic option has been pursued in connection with the United Nations Surveys. Respondents were asked to compare their usage with a basic, relatively precise definition of terms, as provided by the United Nations Secretariat, and note how their definition was different (if there were differences). Regrettably, few respondents provided this information. Some experts to whom the draft report was sent for comment specifically noted that the data the authorities in their country had provided in response to the Fifth United Nations Survey were misleading, since the definition used differed. Wherever possible, these comments have been noted in the present publication.

One final point regarding pitfalls in the use of statistics: official statistics on reported crime and the operation of the criminal justice system tend to focus our attention on traditional crime and administrative procedures. No matter what work is done on the Surveys, some questions shall remain unanswered. The detection rate for example for drug crimes, economic crimes and environmental crimes is very low, and so there are few reported cases. Another example is that, despite the strong interest in Europe and North America in organized crime, the present report can say little about this subject. Most of what would be termed organised crime is classified as homicide, aggravated assault, extortion, aggravated theft and so on, and for this reason reported organized crime tends to lose its distinctive profile in the statistics. A third example is that it is difficult to gather data on the "invisible" facets of criminal justice, such as the use of discretion, or on the possible differential treatment of ethnic and other minorities. Crossnational studies based solely on statistics can scarcely come to grips with the operation of "alternatives" to criminal justice, such as mediation and conciliation proceedings, informal social control or the operation of private security companies.

# 1.4 Errors and non-response

No country provided data on all of the issues covered by the Survey. There are several possible reasons for a lack of response. The more important ones are as follows.

First, it is possible that the data requested simply do not exist. The country in question does not keep the statistics or conduct the research in question. Some respondents noted that their statistical system was being developed, and as a result data from certain years could not be provided.

Second, the information may exist, but not in a coordinated format. It may be dispersed horizontally (between different departments or agencies) or geographically (at a regional level with no centralized repository for statistics). (This latter possibility is particularly a problem for federal states such as Australia, Canada, Germany, and the United States.)

Third, the information may exist, but it is several years out of date. Some experts commenting on the draft report have expressed surprise that more recent data available from their countries (covering the years 1995 through 1997) have not been utilized. However, in most countries there tends to be a long lag in the production of statistics.

It is also possible that the survey instrument simply never got to a person willing and able to respond. Although the Surveys are available in all six official United Nations languages, the person(s) who could best respond may not have been fluent in any of them. Language problems may thus have led to difficulties in understanding the questions or, in the case of open-ended questions, difficulties in describing the experience and/or policy of the country.

Finally, there is the ever present possibility of clerical error when data are transcribed many times over. This may happen in the country in question when the data are first entered into the statistics, or later on when the data are entered into the survey instrument. It may also happen when the data are analysed for the present report. The United Nations Secretariat had attempted to reduce the possibility of error by asking the country in question to verify unusual entries (for example, when there is a jump or drop of over 30% from one year to the next, or when the number of persons entering prison for a certain type of offence exceeds the number of persons convicted of that offence.)

1.5

# Comparing the incomparable: developing indicators of crime and of performance

The dangers of using statistics as a reflection of crime and crime control in one's own country are well documented. We all know that reported crime is not the same as actual crime and that statistics have been developed for administrative purposes, not to satisfy research interests. The vagaries of changing laws, statistical practice and the idiosyncrasies of those involved in defining criminal incidents make it difficult to draw any conclusions when comparing statistics from different areas or different times. We also know that the crimes punished under the penal codes of different countries (the crimes that are usually noted in the statistics) are generally the "traditional" offences, which do not necessarily have the greatest economic and social consequences for society.

International comparisons are even more rife with misunderstandings, as has been repeated throughout the discussions over the years on the United Nations Surveys.

At least in the short run, no uniform basis will be developed for international statistics. As one reads the comments on the results of the Fifth Survey for Europe and North America the following caveat must be kept in mind: comparisons will continue to be fraught with the risk of misinterpretation and overgeneralization.

Although statistical data may be misleading, an attempt can be made to lessen this risk by using data from *different* sources to see if they point in the same direction. In preparing the present report, data has been taken not only from the Fifth Survey (which is based largely on the official statistics of the respondent countries), but also for example from the health and mortality statistics collected by the World Health Organization (WHO) and the Centre for Disease Control (CDC). The International Crime Victim Survey (ICVS) has now been carried out in almost every European and North American country. The ICVS can thus provide a welcome supplement to statistical data on reported crime. Selected other studies have also been used in this report.

The key findings of the ICVS are the percentages of the public victimised by crime over the past five years, respectively, during the last year. Data from countries where the survey was carried out more than once were averaged. Thus, if for example the survey was carried out in 1989, 1992 and 1996, the three victimisation rates were averaged. This was done so that the victimisation rates would give comparable information on the level of crime in the period 1989 to 1996.<sup>2</sup>

<sup>2</sup> In some cases this approach results in a loss of information, in particular if there has been a major change in victimization rates from 1989 to 1996. Nonetheless, since the survey has been carried out at different times in the different countries, the approach adopted here was the most appropriate way to maximize comparability. Readers interested in the results for the different years are invited to refer to the source materials on the ICVS.

Both the (averaged) annual rates and the five-year rates were used in the preparation of this report. The rank numbers for both rates are very similar. The five-year rates are of course higher than the one-year rates, and therefore statistically more robust. This can be important for the comparison of rates of victimisation for those types of crime which occur relatively seldom.

In the preparation of this report, a further distinction has been made between national rates for urban areas (cities with 100,00 inhabitants or more), national rates for rural areas and total national rates. For most countries in transition, only the urban rates are available.

A second way to augment the explanatory power of statistical data is to seek to measure different *dimensions* of the same phenomenon. For example, the number of reported assaults and the number of reported robberies together measure different dimensions of non-fatal physical violence in a society. Somewhat similarly, an index of the way in which the public evaluates the performance of the police can be developed by combining measures of how often victims of certain types of crime report these to the police, the degree to which victims who reported an offence to the police are satisfied with how this was dealt with, and the degree to which members of the public believe that the police in their society are doing a good job in controlling crime – all questions that have been asked in the International Crime Victim Surveys.

The analysis carried out by the HEUNI expert group of the responses to the Fifth United Nations Survey has sought to break new ground by combining both of these approaches. An attempt has been made to combine as many different sources of data as possible that deal with the same phenomenon. This was done in order to maximize the number of countries from which at least some data were available, and in order to ascertain that the data from different sources pointed in the same direction. Theoretically, a combination of data from several sources that deal with the same phenomenon can produce a more reliable and robust index than what is possible on the basis of individual sources.

Accordingly, three sets of indicators have been developed. The first set contains indicators of the amount of crime (on, respectively, homicide, non-fatal violence, serious violence, burglary, violence against women, vehicle-related crime, corruption and petty crime). The second set contains indicators of motivation and opportunity. The third set contains indicators of the operation of the criminal justice system (the resources available to law enforcement, gender balance among criminal justice practitioners, and citizen evaluation of police performance). The structure of these sets and how they have been used are explained in greater detail in the respective sections of this report. An overview is provided below.

In most cases, the year selected for analysis is 1994, the last year included in the Fifth UN Survey. In some cases, an earlier year was used. This was done, for example, if no data are available for 1994, but several data sets are available for an earlier year.

# 1.6 Those mysterious indices

As has already been noted, one of the difficulties in making international comparisons is that corresponding data may be lacking from the different countries, or the data cover different years. On the other hand, the wealth of data available from a variety of sources that could shed a light on crime and criminal justice is so large, that at times it is too great to process.

No country has filled out every box in the response to the Fifth Survey. Often, the country does not have data on the question, or data are available for only some years. Furthermore, making comparisons on the basis of just one indicator (such as the number of reported homicides) may well be misleading for a number of reasons – the definition of homicide varies, the figures are calculated differently, and so on.

If several indicators can be taken together to form an index, then the problem with missing data is somewhat eased. These indices are also more reliable than the raw data, since any flaws in the data are compensated. One source can give an overly high estimate of the actual situation, another an underestimate. In this way the indices can also, at least partially, overcome the problem of "out-liers" (i.e. of country data from a single source that have values that deviate significantly from those of other sources or other countries, and thus "skew" the results).

Another advantage of "bundling" together different data sets describing the same phenomenon is that this reduces the vast amount of data to a more manageable size and therefore eases the processing of data and the drawing of conclusions.

The following procedure was used in combining the different sources into indices:<sup>3</sup>

- 1. First, the different data sources describing the same phenomenon are identified.
- 2. The rank order is determined for each of the data sources. The country with the lowest value gets rank 1, the second lowest rank 2 and so on.
- 3. The rank orders are standardised<sup>4</sup> by dividing by the highest rank and subsequently multiplying by 100.<sup>5</sup>

<sup>3</sup> There are many different ways to combine several sets of data into a single index, including complicated multivariate techniques. Experience shows that the results of these exercises are often very similar. We have chosen the one used here for its simplicity.

More detailed explanations on how the indices have been developed can be found in the relevant sections of this report: 2.1, 3.1, 4.2.6, 4.2.7 and 4.4.4, and in Appendix B.

<sup>4</sup> As already noted, not all data are available for every country. As a result, the highest rank depends on the number of countries for which that particular data source is available. If we want to use the same scale to assess each source, we need to standardise these rankings.

<sup>5</sup> Example: if data are available for 20 countries, the initial rankings are 1 through 20. After standardisation, the lowest ranking is 5 (100\*1/20), and the second lowest is 10 (100\*2/20). If data are available for 50 countries, the lowest ranking is 2 (100\*1/50) followed by 4 and 6. In all instances, the highest standardised ranking is 100.

4. The index is the average of these standardised rankings.

The results are indices on a scale from 1 to 100. The scores are interpreted as follows:

0-25very low25-40below average40-60average60-75above average75-100very high

Differences of less than 10 are deemed not to be significant.

We are aware that the procedure can well be criticized on at least the following grounds.

- 1) By computing indices we lose the possibility of an absolute interpretation. The original data may show us, for example, the percentage of the population that has been victimised or the number of crimes per 100,000 inhabitants. However, the indices are on the 'ordinal' level, which means that they can only be interpreted relative to the scores of other countries or to other crimes within a country. For instance, if one country has an index of 60 on, say burglary, and a second country has an index of 40, it is not justified to say that burglary is 50% higher. On the other hand, it is justified to say that burglary is higher in the first country (where it is a bit above average), and lower in the second (where it is a bit below average). In the same way, if a country has an index of 10 on homicide and 90 on petty crimes, we cannot conclude that there are nine times more petty crimes than murders. We can conclude that the rate of petty crimes in that country is, internationally speaking, among the highest, whilst the rate of murder is comparatively among the lowest.
- 2) The procedure assumes that the data are valid and reliable; i.e. that they describe the phenomenon in question, and that the data have been correctly compiled and reported. We have assumed with some reservations that the data supplied to us by the Governments, and provided by various surveys, is proper and correct.
- 3) The procedure assumes that data from one country (for example, statistics on reported crime) can readily be compared with data from another country. In the case of surveys carried out with much the same methodology in different countries, this assumption can justifiably be made (although again, generally with some reservations). In the case of statistics, which the Fifth Survey in fact is designed to collect, this assumption is far shakier so shaky, indeed, that in earlier HEUNI reports on the United Nations Surveys, we have deliberately down-played the making of such comparisons. We now believe that sufficient research data and supplemental statistical data have become available to merit an exploration of the utility of indicators in making cross-national comparisons of trends in crime and criminal justice. In order to respond to the criticism

that comparisons should not be made internationally, we note that the purpose of bundling different sets of data together as an index is indeed to make a more robust measure – if for example different indicators suggest that a country has an unusually large amount of violent crime, then there are reasonable grounds to assume that the indicators are correct, and that this country does indeed have an unusually large amount of violent crime.

- 4) The procedure assumes that the data on which each index is based are at least to some degree commensurate. It assumes, for example, that data on ownership of autos, motorcycles, mopeds and bicycles, data on the average number of evenings spent away from home for recreational purposes, data on the number of single-person households and data on the percentage of females with paid employment all measure dimensions of the opportunity for property crime, and for this reason they can be bundled to form an index. This assumption is more difficult to make, but we have chosen to examine the data in this way, at least so that we can see where the analysis will lead.<sup>6</sup>
- 5) The procedure assumes that the selection of the data used is criminologically justified. This is a particularly sensitive issue in respect of the indicators of motivation and opportunity. There is a burgeoning criminological literature on the possible link for example between unemployment and violence, between the prevalence of handguns and violence, and between the prevailing type of housing and burglaries. Although we are aware that the selection of factors is a value choice, we believe that the factors we have included are justified. We are not claiming that these are the *only* factors that contribute to crime or that affect the operation of the criminal justice system. According to criminological theory, motivation, for example, can be influenced not only by unemployment but also by (among many other factors) family and peers, the media, and previous contacts with the criminal justice system. We simply note in this connection that international data sets that shed a light on such factors are so far not available. When they do become available, they can be used in corresponding analyses.
- 6) Finally, the procedure assumes that aggregate national data (or, in some cases, aggregate rural/urban data) can help to shed a light on the prevalence of crime or on the structure of criminal justice, when in fact there are often large regional (and temporal) differences in both. A country may have a low amount of violence on the national level, but this may

<sup>6</sup> In respect of the crime indices, the strength of the assumption was tested by computing Cronbach's alpha (the average correlation between the constituting variables within a scale). This alpha is based on those countries that have no missing values on any of the constituting variables. The consistency for the burglary index was 0,55, which is acceptable. The consistency for the homicide index was 0,71, and the consistency for all other crime indexes was over 0,80; all these can be regarded as good. Please see Appendix B for details.

mask the fact that it may have some regions with an extraordinarily large amount of crime. Similarly, a country may have a low rate of unemployment, but unemployment may be particularly high among young urban males.

The data sets used in computing the different indices were as follows:

#### A. Crime indices

#### **Burglary index:**

- averaged annual ICVS national burglary rate from 1988 to 1995;
- averaged annual ICVS urban burglary rate from 1988 to 1995;
- averaged annual ICVS rural burglary rate from 1988 to 1995; and
- Fifth UN Survey data on burglaries (based on police statistics) for the end years of the survey, 1990 and 1994.

This is theoretically the most stable index, since there are in general only minor differences among countries in how the law defines burglary and how the public understands burglary. Comparing victimization risks for burglary with rates for other crimes shows that burglary is the best single indicator for household crimes. The index only includes completed burglaries, not attempts. (However, in some countries "burglary" does not exist as a separate legal or statistical category, and is subsumed under theft or aggravated theft.)

#### Homicide index:

- World Health Organization data on deaths (based on medical records) from 1992;
- Centers for Disease Control data on deaths (again based on medical records) for one year between 1990 and 1994;
- Interpol data on fatal violence (based on police statistics) for 1994; and
- Fifth UN Survey data on homicide (based on police statistics) for the end years of the survey, 1990 and 1994.

#### Non-fatal violence index:

- averaged annual ICVS national assault and threat rate from 1988 to 1995;
- averaged annual ICVS urban assault and threat rate from 1988 to 1995;
- averaged annual ICVS rural assault and threat rate from 1988 to 1995;
- averaged annual ICVS national robbery rate from 1988 to 1995;
- averaged annual ICVS urban robbery rate from 1988 to 1995; and
- averaged annual ICVS rural robbery rate from 1988 to 1995.

The homicide index and the non-fatal violence index together constitute the serious violence index.

#### Violence against women index:

- averaged ICVS national violence against women five-year rate, 1984-1995;
- averaged ICVS urban violence against women five-year rate, 1984-1995;
- averaged ICVS rural violence against women five-year rate, 1984-1995; and
- Fifth UN Survey data on rapes (based on police statistics) for the end years of the survey, 1990 and 1994.

#### Motor vehicle crime index:

- averaged annual ICVS national theft from/of car rate from 1988 to 1995;
- averaged annual ICVS urban theft from/of car rate from 1988 to 1995;
- averaged annual ICVS rural theft from/of car rate from 1988 to 1995;
- HEUNI data set on stolen and misappropriated vehicles per 100,000 in population; and
- HEUNI data set on stolen and misappropriated vehicles that have not been traced, per 100,000 in population.

#### Petty crime index:

 averaged ICVS prevalence rate (proportion victimised over the preceding year) for the following six offences: vandalism of car, theft of motorcycle or moped, theft of bicycle, theft of personal belongings, indecent or offensive behaviour, and threat.

The common denominator for the offences included in the petty crime index is that the offences in general are regarded by the law – although not necessarily by the victim – as petty. Reporting rates tend to be low, and so the offences generally do not appear in the statistics. The source used here in all cases is the International Crime Victim Survey.

#### **Corruption index:**

- averaged annual ICVS national corruption rate from 1988 to 1995;
- averaged annual ICVS urban corruption rate from 1988 to 1995;
- averaged annual ICVS rural corruption rate from 1988 to 1995;
- Transparency International index; and
- the World Competitiveness Yearbook index based on the statement, "Improper practices (such as bribing or corruption) do not prevail in the public sphere."

#### B. Opportunity and motivation indices

#### **Opportunity for crime index:**

- ICVS data on ownership of autos, ownership of motorcycles or mopeds and ownership of bicycles;
- ICVS data on average number of evenings spent away from home for recreation;
- ICVS data on the number of single-person households; and
- ICVS data on the percentage of females with paid employment.

#### Motivation for crime index:

- ICVS data on the percentage of the population that is male, young and either unemployed or dissatisfied with their income

#### C. Operation of the criminal justice indices

#### Law enforcement resources index:

- Fifth UN Survey data on the number of police (both sworn and civilian) per 100,000 for 1994;
- Dutch Ministry of Justice data on the number of private police per 100,000;
- Fifth UN Survey data on the number of prosecutors per 100,000 for 1994;
- Fifth UN Survey data on the number of judges per 100,000 for 1994; and
- Fifth UN Survey data on the number of correctional personnel (in adult and juvenile institutions) per 100,000 for 1994.

If 1994 data on law enforcement resources were not available, 1990 data were used. This was the case with Switzerland for police data, with the United States for prosecutorial data, with the Netherlands and Switzerland for judicial data, and with Switzerland and the United States for correctional personnel data. Where no data were provided in the Fifth UN Survey, data on police were taken from the survey carried out by the Dutch Ministry of Justice on private security. This was the case with Germany, Ireland, Italy, the Netherlands and Portugal.

Data on financial resources was found to be too unreliable to be used.

#### Criminal justice practitioner gender balance index:

- Fifth UN Survey data on the female share of police personnel (in percentages)
- Fifth UN Survey data on the female share of prosecutors (in percentages)
- Fifth UN Survey data on the female share of judges (in percentages)
- Fifth UN Survey data on the female share of prison personnel (in percentages)

If 1994 data on the female share of criminal justice personnel were not available, 1990 data were used. This was the case with Switzerland and the Netherlands.

#### Citizen evaluation of police performance index:

- ICVS data on the percentage of victims of contact crimes who reported their victimization to the police
- ICVS data in the percentage of victims who were satisfied with their report to the police
- ICVS data on the percentage of all respondents who are satisfied with police crime control

### 1.7

# Background to European and North American criminal justice systems

Any report with so ambitious a scope raises the serious possibility of misunderstandings due to a variety of reasons. The difficulties of comparing statistics received from different countries have already been noted. Another source of concern lies in the differences between systems of criminal justice. Readers with a background in comparative criminal justice are well aware of the differences between the Germanic-based, the French-based, the socialist and the common law criminal justice systems. They may be reluctant to give any credibility to attempts at comparison, and understandably so. Others, in turn, may assume that criminal justice processes are essentially the same anywhere in Europe and North America. They may overlook the nuances of the different systems. There is also a third ethnocentric group of readers who believe that their criminal justice system is the best in the world, and are disposed to seeing any differences between their system and a foreign system as proof that the foreign system has fundamental flaws, or at least serious shortcomings.

Through the mass media, we have also grown accustomed to seeing the more colourful side of crime control in other countries. Such drama ranges from images of Cossacks on horseback patrolling areas in the Russian Federation, to solemn British judges presiding over trials in Old Bailey, to the *carabinieri* in Italy making arrests, to the proliferation of victim support services in the United States. Even the terminology used in other countries may seem mysterious: actions such as the *partie civile* and the *Adhesions-verfahren*, and agencies such as social courts and investigating magistrates may well be unfamiliar to readers from other countries.

The diversity of terminology reflects the fact that each country defines and deals with crime in a unique manner. After all, criminal law is perhaps the area of law that is most closely bound to national values and interests. It is certainly the area of law where the naked power of the State is used most clearly. No two countries define crimes the same way or have quite the same criminal justice system.

And yet, all countries must deal with basically the same problems of crime and criminal justice. Most of the cases processed in every country and considered in this report are thefts, burglaries, assaults and other "traditional crimes". The broad outlines of the process are also much the same: the police investigate in response to a report of a crime, the prosecutor prosecutes, the court hears the case and, on conviction, imposes a sentence, which is then enforced.

Historical, political and economic factors explain to a large extent the structure of the criminal justice system in a given country: the balance of power between the central government and the local levels, the powers of the

police, the training of judges and the basic principles of justice. They also serve to explain changes in the day-to-day operation of the criminal justice.

Since the Second World War, Europe and North America have been undergoing considerable demographic and social changes. The demographic changes include the baby-boom generation, an increase in life expectancy, a lowering of the birth-rate, an increase in single-parent families, and migration towards the cities domestically and internationally. The social changes include industrialization, a changed use of time by the population (including more leisure time), an improved standard of living, and changes in technology and communications.

Such changes have had a considerable impact on crime and on crime control.

The number of offences has increased, due to the changes in the opportunity for crime (in the number and motivation of potential offenders, in the number and type of potential targets, and in the absence of capable guardians). The increase has been most noticeable in respect of property offences, although also other types of offences have been affected.

There has also been a change in the structure of crime. New criminalizations have been adopted, for example in the area of environmental crime, economic crime, computer crime, traffic crime and narcotics crime. Moreover, crime has ceased to be a purely national phenomenon and has become international.

This combination of the increase in the number of offences and the increase in the complexity of many offences is overburdening the criminal justice systems of many European and North American countries. The responses have been more or less the same from one country to the next: some decriminalization *de facto* or *de jure*, attempts to speed up the process for petty offences (for example by granting the police and/or prosecutors powers to settle the matter, or by adopting simplified court procedures), and attempts to deal with certain serious offences (in particular, narcotics offences) more punitively. There has also been a growing interest in crime prevention programmes and in revitalizing community-based informal social control. Finally, attempts are being made across the board to improve the position of the victim.

Two examples of increasing convergences in criminal justice systems can be noted. First, the literature commonly refers to two basic principles of prosecution, the *legality principle* and the *opportunity principle* (or expediency principle). In its extreme form, the legality principle requires that the prosecutor bring charges whenever there is sufficient evidence of the guilt of an identifiable suspect. This has traditionally been the established principle in for example Albania, Austria, Bulgaria, the Czech Republic, Finland, Germany, Greece, Hungary, Ireland, Italy, Liechtenstein, Poland, Portugal, Romania, Spain, Sweden, most cantons in Switzerland, Turkey, and the former republics of the USSR and of Yugoslavia. The opportunity principle, in turn, gives the prosecutor discretion to decide, in any individual case, whether there is a public interest (or other overriding interest) in prosecution. This has traditionally been the established principle in for example Belgium, Canada, Cyprus, Denmark, England and Wales, France, Iceland, Luxembourg, the Netherlands, Northern Ireland, Norway, Scotland, some cantons in Switzerland, and the United States.

In practice, however, the legality principle has been eroded by granting the prosecutor discretion in certain (often broadly defined) cases, and the opportunity principle, in turn, has been made more strict by requiring the prosecutor to bring charges in certain types of cases. These changes are often expressed in prosecutorial guidelines. More and more, prosecutorial principles in the European and North American countries are sharing common features (see Tak 1986).

The second example is provided by the classic distinction between *accusatorial* and *inquisitorial* proceedings. In the former, the judge has traditionally been more passive, and it is up to the prosecutor (and the defendant) to present the case. In the latter, the judge is supposedly more active in marshalling the evidence for and against the guilt of the defendant. Again, in practice, the differences between the theoretical extremes have often been eroded.

Furthermore, all European and North American criminal justice systems share fundamental principles, which have most notably been enshrined in the first articles of the European Convention on Human Rights and Fundamental Freedoms: the right to life (article 2), the prohibition of torture and of inhuman or degrading treatment or punishment (article 3), the right to liberty and security (article 5, with its attendant requirements for lawful arrest and detention, the right of the arrested person to be informed of the reasons for his or her arrest and of any charges against him or her, and the principle of *habeas corpus*), the right to due process (article 6, with its attendant right to a fair and public hearing within a reasonable time by an independent and impartial tribunal, the presumption of innocence, and the right to a proper defence), the prohibition of criminalization *ex post facto* (article 7) and the prohibition of discrimination in the enjoyment of the rights and freedoms set forth in the Convention (article 14).

Because the European Convention on Human Rights and Fundamental Freedoms has been signed by the 40 member States of the Council of Europe, the work of the Council of Europe is significant in the present connection. The Council formulates conventions and recommendations that enshrine principles that can be regarded as universally respected in Europe. (These same principles are also widely enshrined in basic legislation in both Canada and the United States.) There is a strong tendency to review national legislation to ensure that it accords with the requirements of, for example, the European Convention.

This impact of the Council of Europe, however, has varied from country to country, and issue to issue. With perhaps the exception of the criminalization of money laundering, which follows upon ratification of the 1990 Convention, the Conventions and numerous resolutions adopted by the Council of Europe allow member States considerable leeway in deciding how to adapt their criminal justice system to the requirements of these Conventions. They do not provide a detailed road map of what steps must be taken.

More recently, the European Union has also been contributing to closer alignment of criminal justice systems, in order to promote international cooperation. The European Union was established by the 1992 Maastricht Treaty, on the basis of the European Economic Communities. It includes almost all of the Western European countries (with the exception of Iceland, Norway and Switzerland, and the "mini-States"). Since the European Union countries work on the basis of the free movement of person, capital, services and goods, and since the European Union itself has become a source of subsidies, there is considerable potential for the growth of criminal activity. As a result, the European Union has paid considerable attention to aligning the criminal justice systems of its fifteen member states. The EU also works closely with the eleven candidate countries<sup>7</sup> in an effort to ensure that their legislation, practice and infrastructure meets the demands of membership.<sup>8</sup>

In this alignment of criminal justice systems, the European Union has developed a special tool, the so-called "pre-accession pact" which the European Union has signed with the candidate countries (European Union document CRIMORG 72, 19 May 1998). This "pact" outlines 15 principles regarding the strengthening of international cooperation in the prevention and control of organized crime. Although the pact is not legally binding, it carries considerable political weight.

The Council of Europe and the European Union are not the only intergovernmental organizations seeking to influence criminal justice reform in Europe. The United Nations has worked in particular through the United Nations Centre for International Crime Prevention, the United Nations Centre for Human Rights, the United Nations International Drug Control Programme, the United Nations Development Programme, the United Nations Interregional Crime and Justice Research Institute and HEUNI. Other examples include the European Bank for Reconstruction and Development, the World Bank, the International Monetary Fund, the Organisation for Economic Co-operation and Development, and the G-7/P-8. The Financial Action Task Force (which was set up by the G-7) has worked to improve the

<sup>7</sup> The candidate countries are Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia.

<sup>8</sup> The European Union has refined the terminology in this respect, largely due to considerable discussion over how far legal systems can be aligned with one another. *Unification* - the replacement of national legal systems by one "European Union system" - has largely (but not entirely) been abandoned. *Harmonization* - adoption of similar provisions by the different countries - is being promoted by some countries and resisted by others. (The disagreement appears to relate largely to the scope and timetable of such harmonization.) *Approximation* - co-ordination of different legal provisions or systems by eliminating major differences and creating minimum requirements or standards - appears to be the favoured way to go at the moment.

regulation of banking, the adoption of customer identification requirements, the retention of transaction records for at least five years, the reporting of unusual and suspicious transactions and the need for the criminalization of money laundering.

In addition, there has been considerable bilateral activity in the development of criminal justice systems, activity that has involved almost all European and North American countries (see Joutsen 1996a).

In a world of increasing diversity, Europe and North America are seeking greater uniformity in fundamental principles of criminal justice.

# 2 The Crime Situation in Europe and North America

Jan J.M. van Dijk, Carolyn Block and Natalia Ollus<sup>1</sup>

# 2.1 Constructing indices of eight different types of crime

In the previous chapter the construction of the eight crime indices was briefly described (section 1.6). Here we will elaborate on this description and present the national scores on these indices.

In the initial stages of our work, the decision was made to focus exclusively on the countries which, on the basis of available data, could with a high degree of certainty be qualified as either low crime or high crime countries. Dr Block selected variables which seemed relevant indicators of the types of crime at issue (e.g. for burglary both police data on recorded burglaries and ICVS data on urban and rural areas seemed relevant). She subsequently selected the countries which showed high scores on most of these variables (which were called the source variables). If a country had high scores on most source variables and no low scores on any others, it was classified as a high burglary country. In other words, countries were classified as high if their source variables consistently indicated high or at least moderately high levels of that type of crime. Countries that scored highly on some source variables and low on others were classified in an intermediate group (a group about which inconsistent information is available). Countries about which no information was available on most source variables were classified in a second intermediate group (a group about which insufficient data are available). The low crime category was ascertained in a way comparable to the high crime category: countries consistently showing low or moderately low scores on all source variable were classified as low crime countries. This procedure resulted in dichotomies between low crime and high crime countries for all eight types of crime.

This procedure has the advantage that certain countries can be classified with a high degree of certainty as experiencing low or, alternatively, high

<sup>&</sup>lt;sup>1</sup> We would like to thank Mr John van Kesteren and Ms Lieke Bootsma for their invaluable assistance with the statistical analysis.

levels of particular types of crime. An important drawback appeared to be that almost half of the countries could not be categorized as either low or high. They ended up in one of the two intermediate categories. As a consequence no information was available about the level of crime in half of the countries. A second drawback is that a dichotomous qualification overlooks the differences within the high crime or low crime group (for example, no differentiation is made between countries with very high and those with moderately high levels). In this way much information about differences in the crime situation is lost. The possibilities of multivariate analyses of the correlates of crime indices are severely restricted if the indices only differentiate between low and high crime countries.

After careful consideration, it was decided to explore whether other, more refined differentiation procedures could be applied. As described in section 1.6 indices were calculated by averaging rank numbers on the source variables. This procedure results in rank numbers for all countries instead of the former dichotomy between high and low crime countries with many countries in intermediate categories. We subsequently checked how the new ranking compared with the previous dichotomy of high crime and low crime countries. It was found that the new rankings correlated highly with the old dichotomous rankings.<sup>2</sup> Countries with higher rank numbers were almost without exception also classified as high crime countries according to the careful procedure followed by Dr. Block to determine high crime and low crime countries. This result indicates that although the new ranking procedure may result in erroneous rank numbers for some individual countries, the over-all ranking seems as valid as the previous high-low dichotomies. Since the new ranking has, as explained, many advantages over the high-low dichotomies, the decision was made to use it in the subsequent analyses.

# 2.2 The crime indices per country: Introductory remarks

In this chapter we will briefly comment on the ranking of the countries in terms of the eight indices of crime. The commentary will be largely descriptive. In the next chapter the national crime indices scores will be analysed against the background of relevant economic and social factors (the oppor-

<sup>&</sup>lt;sup>2</sup> The correlation coefficients between the dichotomy (with the first intermediate group as an "in between" category) and the new ranking were as follows: for burglary .68 (n=35; p=0.000), for motor vehicle crime .81 (n=44; p=.01), for petty crime (n.a.), for non-fatal violence (n.a.), for homicide .87 (n=46; p=0.000), for serious violence .82 (n=48; p=0.000), for violence against women .83 (n=43; p=0.000), and for corruption .76 (n=41; p=01). Since the 'dichotomous' variable has three categories, the maximum correlation can never reach 1.00. The highest possible correlation is about 0.92.

tunity and motivation factors). The focus is on those countries whose scores belong to the ten countries with the highest, and respectively with the lowest scores.

The reader is reminded that the national scores are not always based on information on all relevant source variables. In some cases, for example, no information from the International Crime Victim Survey is available. In such cases the index may be exclusively based on information on officially recorded crimes and should be treated with extra caution. The national scores should be checked against more reliable data, preferably based on future ICVS results.

The commentary on the scores of individual countries will occasionally refer to the lack of information on source variables. Information on the index scores and the source variables available per country is given in appendeces B and C. Readers who are interested in the crime situation in particular countries are advised to consult the details given in this appendix.

To facilitate the comparison of national scores on the crime indices, the HEUNI "Crime Guide" contains information on the quartile to which national scores belong.<sup>3</sup> For instance for burglary, Switzerland belongs to the lowest quartile (which means that it is among the 25% countries with the lowest scores) and Estonia belongs to the highest quartile (which means that it is among the 25% countries with the highest scores). In this chapter average scores for the countries of the Central and Eastern European countries, for all Western European countries, for the member states of the European Union and for the United States and Canada (North America) are presented. These group averages allow the reader to compare national scores with the scores of countries belonging to the same geopolitical group.

### 2.3 Burglaries

#### Household burglaries

Household burglaries are, even more than other types of crime, a cross-cultural phenomenon. In all Western countries most citizens live alone or with family members or friends in private homes where many of their private possessions are stored. These private possessions stored in the house are suitable targets for burglars. The prevalence of burglary is apparently not to any considerable extent influenced by country-specific opportunity structures. The availability of targets is roughly the same everywhere.

<sup>&</sup>lt;sup>3</sup> This Crime Guide summarizes the data from different sources used in the preparation of the report. The Crime Guide was used in order to ensure that all members of the group of experts used the same data. See appendix A.

Burglary low		Burglary high	
Central and Eastern Europe		Central and Eastern Europe	
Azerbaijan Belarus Kazakhstan Moldova Romania	4 17 25 27 29	Kyrgyzstan Czech Republic Slovakia Albania Georgia Bulgaria Estonia	68 75 76 79 82 94 98
West		West	
Malta Switzerland Cyprus Germany Norway	18 18 23 25 25	Canada United States England/Wales	79 80 81
Central and Eastern Europe mean Western Europe mean North American mean EU mean		53 45 80 52	

Table 1. Ten countries with the highest and lowest scores on the index for burglary.\*

\* Computing the indices see section 1.6 and appendix B

Previous analyses of the ICVS data have shown that burglary rates are the best predictors of over-all crime victimisation rates. If burglary rates in a country are high, the over-all victimisation rate of the public is usually relatively high as well (Van Dijk, 1998a). It was also found that national household burglary rates correlate highly with national burglary rates of business premises (Van Dijk, Terlouw, 1996).

The average score in North America (80) is much higher than those of Western Europe (45) and Central and Eastern Europe (53).

If we look at the ten highest scores on our index for household burglary, we see that the highest scores are in Estonia, Bulgaria and Georgia. At the fourth and fifth place stand England and Wales and the United States. Canada and Albania are at the sixth/seventh place ex aequo. The other countries belonging to the "top ten" are Slovakia, the Czech Republic and Kyrgyzstan.

From a geopolitical perspective, the countries with the highest level of household burglaries constitute a fairly heterogeneous group. The levels of burglary are the highest in some Central and Eastern European countries as well as in England and Wales, the United States and Canada. One explanation for the relatively high rates of England and Wales and North America is the high proportion of households in these countries living in detached or semi-detached houses rather than in apartment buildings (Mayhew, Van Dijk, 1997). Detached and semi-detached houses have been found to be more vulnerable for burglary. Another country (not included in this analysis) with a high proportion of detached houses is Australia. In Australia the rate of burglaries is even higher than in England and Wales.

Among the countries with the lowest scores we find several Western European countries (Malta, Switzerland and Norway) but also Belarus and Romania. Other countries with low scores are some other Central and Eastern European countries, and Cyprus and Germany. In the latter cases, however, the index score is based on just one or two source variables and the scores should be validated before any conclusions are drawn (see appendix C).

# 2.4 Motor vehicle crimes

Motor vehicle crimes low		Motor vehicle crimes high	
Central and Eastern Europe		Central and Eastern Europe	
Tajikistan Kyrgyzstan Kazakhstan Belarus Romania Ukraine FYR Macedonia	4 10 12 16 18 23 23	Czech Republic Bulgaria	79 92
West		West	
Turkey Switzerland Cyprus	6 11 22	France Malta Luxembourg Italy England/ Wales United States Denmark Spain	80 83 89 90 93 97 99
Central and Eastern Europe mean Western Europe mean North American mean EU mean		42 55 82 64	

Table 2. Countries with the highest and lowest scores on the index for motor vehicle theft.

The average scores for motor vehicle crimes - theft of or from a car- are higher for North America (82) and Western Europe (55) than for Central and Eastern Europe (42). The highest scores were calculated for Spain, Denmark, the United States, England and Wales and Italy. The countries with the lowest scores are mainly situated in Central and Eastern Europe. It seems highly plausible that the prevalence of car thefts is related to the prevalence of car ownership. There are few exceptions to this pattern. In Switzerland the level of motor vehicle theft is low, although the rate of car ownership is among the highest in the world. Of the Central and Eastern European countries the Czech Republic and Bulgaria are exceptional in having high scores. In these countries the car ownership rate in urban areas is somewhat higher than in most other countries in transition (66 and 64% respectively).

### 2.5 Petty crimes

In the ICVS all respondents who report victimisations were asked to assess the seriousness of their own victimisation on a three-point scale (very serious, somewhat serious, not very serious). The ranking of types of crime in terms of seriousness showed marked similarity across countries (Van Dijk, 1998a). The most serious crimes were robberies with a weapon, car theft, sexual assault, joyriding and burglary with entry (completed burglary). Car vandalism, theft from garages, theft from a car, bicycle theft, indecent behaviour, attempted burglary, personal theft and threats were considered least serious. Thefts from cars were included in the index for motor vehicle crimes. Our index for petty theft consists of the percentage of respondents victimised by at least one of the six other less serious types of crime or of theft of a motorcycle (a type of crime rated as moderately serious by the victims). Since police figures of less serious crime are notoriously unreliable due to widely varying legal definitions and reporting patterns, no attempt was made to include official statistics in the index of petty crime.

The average scores are again the highest for North America (77). The averages of Western Europe (44) and Central and Eastern Europe (52) do not differ much.

The Netherlands ranks first on the index of petty crime. This position is largely accounted for by its exceptionally high rates of bicycle theft and car vandalism (9% and 10% per year respectively). Among the countries with high scores are some countries from Central and Eastern Europe (the Ukraine, Czech Republic, Estonia and the Russian Federation) as well as Canada, the United States and Sweden.

Belarus, the former Yugoslav Republic of Macedonia, Georgia, Croatia and Hungary appear to experience relatively few victimisations by petty crimes. This is also true for Northern Ireland and Norway. In all these countries bicycle thefts are relatively rare.

Petty crimes		Petty crimes	
low		high	
Central and Eastern Europe		Central and Eastern Europe	
Belarus	8	Slovakia	73
FYR Macedonia	11	Latvia	74
Georgia	13	Russian Federation	75
Croatia	14	Estonia	80
Hungary	17	Czech Republic	90
Albania	30	Ukraine	97
West		West	
Northern Ireland	4	Sweden	72
Norway	15	United States	76
Belgium	18	Canada	78
Spain	27	Netherlands	99
Central and Eastern Europe mean Western Europe mean North American mean EU mean		52 44 77 45	

Table 3. Countries with the lowest and highest scores on the index for petty crime (ICVS data).

# 2.6 Violent crimes

Four different indices were constructed for types of violent crime: non-fatal violent crime, homicides, serious crime (a combination of the latter) and violence against women (including serious sexual violence). Since the first three indices are strongly correlated (see chapter 3), we will only present the national scores for serious violence and the violence against women index. The data on non-fatal violence and homicide are summarized below.

#### Non-fatal violence

This variable is based on the ICVS victimisation rates for assaults and threats and for robbery. North America has an average score of 80 and Central and Eastern Europe of 58. The average score of Western Europe is markedly lower (40).

Estonia shows the highest rate, followed by the United States and the Russian Federation, Bulgaria and Poland. No Western European country is among the ten countries with the highest rates.

Austria and Hungary are lowest on this index.

#### Homicide

Central and Eastern Europe shows the highest group score (68), closely followed by North America (64). The Western European group shows a much lower score (35).

The homicide rates are highest for the Russian Federation, Estonia, Latvia, Northern Ireland, Kazakhstan, Kyrgyzstan and the United States. The mean scores of Central and Eastern Europe (68) and North America (64) are almost twice as high as that of Western Europe (35). All ten countries with the lowest scores are situated in Western Europe.

#### Serious violence

The comprehensive index of homicide and non-fatal violence shows the same ranking as homicides, with Estonia, the Russian Federation, Kazakhstan and the United States on top and Western European countries at the low end (see table 4).

Ireland stands out as the country with the lowest level of violence. Of the Central and Eastern European countries, the former Yugoslav Republic of Macedonia shows a remarkably low score on this index.

#### Violence against women

The violence against women index is based on ICVS data on assaults and sexual assaults (rapes, attempted rapes and serious sexual harassment) and official rape statistics. Table 5 shows the countries with high and low scores.

The countries with high scores on the violence against women index can be divided in three main groups: Central and Eastern European (Kyrgyzstan, Kazakhstan and the Russian Federation), North American (the United States and Canada) and North Western European (Denmark, Finland, Germany and Sweden). The first two groups show similarly high scores on other indices of violent crime. This is not true for the third group, however. The Czech Republic does not fit in any of these groups.

The scores of the four Central and Eastern European countries with the lowest scores are based on official rape statistics only and need further scrutiny. Other countries with low scores are situated in Southern Europe (Malta, Italy, the former Yugoslav Republic of Macedonia, Greece and Spain).

Serious violence low		Serious violence high	
Central and Eastern Europe		Central and Eastern Europe	
FYR Macedonia	30	Azerbaijan Georgia Poland Bulgaria Kyrgyzstan Armenia Kazakhstan Russian Federation Estonia	68 70 71 73 80 88 93 96
West		West	
Ireland Cyprus Turkey Andorra Austria Greece France Switzerland Norway	8 14 17 18 22 28 31 31 31 32	United States	86
Central and Eastern Europe mean Western Europe mean North American mean EU mean		64 36 73 40	

# Table 4. Ten countries with the highest and lowest scores on the index for serious violence.
Violence against women low		Violence against women high	
Central and Eastern Europe		Central and Eastern Europe	
Armenia Azerbaijan FYR Macedonia Poland	7 10 21 25	Kyrgyzstan Russian Federation Kazakhstan Czech Republic	80 83 84 90
West		West	
Turkey Cyprus Malta Italy Greece Spain	5 6 15 16 22 22	Denmark Finland Germany Sweden United States Canada	74 76 81 82 84 90
Central and Eastern Europe n Western Europe mean North American mean EU mean	nean	51 45 87 52	

## Table 5. Ten countries with the highest and lowest scores on the index for violence against women.

## 2.7

## Corruption (taking of bribes by government officials)

The corruption index is based on information from three independent sources. As mentioned earlier, the source variables of this index were highly intercorrelated. Somewhat surprisingly it was found that even the ICVS ranking of street level corruption of public officials was strongly correlated with the Transparency International ranking of corrupt practices as perceived by the business sector (r=.86; n=11; p=0.001). This finding suggests that corruption on different levels of society is somehow interrelated. Corruption at the highest levels seems to go hand in hand with street-level corruption.

The mean scores of Central and Eastern Europe, North America and Western Europe are 78, 32 and 45. Most countries with the highest scores are situated in Central and Eastern Europe, with the exception of Italy and Greece (see table 6).

All countries with low levels of corruption are situated in either North-Western Europe or North America.

Corruption low		Corruption high	
Central and Eastern Europe		Central and Eastern Europe	
		Lithuania Latvia Yugoslavia Bulgaria Russian Federation Georgia Kyrgyzstan	86 86 87 94 95 98 98
West		West	
Denmark Netherlands Finland Iceland Sweden United Kingdom Switzerland Norway Canada United States	4 6 10 12 19 24 24 25 31 33	Greece Italy Turkey	88 93 94
Central and Eastern Europe r Western Europe mean North American mean EU mean	nean	78 45 32 45	·

#### Table 6. Ten countries with the highest and lowest scores on the index for corruption.

## 2.8 General conclusions

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

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

Serious violent crimes apparently tend to be most prevalent in the countries of the former Soviet Union (e.g. the Russian Federation, Estonia, Kyrgyzstan, Kazakhstan).

The United States stands out with a high level 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 appear to have relatively low levels of violence.

The levels of violence against women tend to be highest in the countries of the former Soviet Union. The United States, Canada and several Northern European countries also show high scores on the index for violence against women. However, the latter scores might well be an artefact of higher awareness of this type of crime in the most gender-balanced societies. This issue will be taken up in section 3.1.4.

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

In the next chapter national scores on the crime indices will be related to economic, social and cultural factors.

## 3 Determinants of Crime

Jan J.M. van Dijk

## 3.1 Introduction

#### 3.1.1 The use of comparative studies

Ever since the pioneering studies of the Belgian statistician Quetelet (1796-1874), criminological researchers have noted that rates of recorded crimes vary across countries in a consistent way. Year after year certain countries experience higher levels of crime than others. Generations of criminologists have searched for the characteristics of societies which are associated with high (or low) levels of crime. According to the followers of the so-called French school of environmentalists in the nineteenth century, important correlates of crime are urbanisation, poverty and high average temperatures. At the turn of the century, the Dutch criminologist Bonger, building upon empirical studies carried out by von Mayr and others, argued that in free market economies socio-economic deprivation was the single most important determinant of crime.

In the post war area, statistics on officially recorded crimes were no longer viewed as credible measures of crime. Court and police statistics were shown to be greatly affected by the reporting patterns of the public and by decisionmaking by the police and the courts. Since crime statistics did not reflect the actual volumes or trends of crime, most criminologists lost their interest in comparing statistics on recorded crimes across countries. Comparative criminology in the tradition of Quetelet and Bonger went through a period of stagnation and decline.

An illustration of this is that police statistics on recorded crime were treated in previous HEUNI publications on the UN surveys as indicators of the police work load or of the input to the criminal justice system, rather than as measures of the level of crime (Kangaspunta, 1995a). Such a situation might have diminished the relevance of criminology for policy-makers.

In chapter 2 the crime situation in the countries of Europe and North America was described on the basis of indices for different types of crime. In constructing these crime indices, the findings of the International Crime Victim Survey were supplemented by a selection of official statistics on recorded crime. Although these crime indices cannot be seen as precise measures of crimes committed per country, they can, in our judgement, be confidently used for a rough comparison of national crime levels. The presentation of these descriptive statistics on crime at the macro level gives rise to the question of how differences in the level of crime across countries can be explained. Why, for example is serious violent crime more prevalent in several Central and Eastern European countries and the United States than in the EU countries and Canada? Answers to such basic questions about the ranking of countries in terms of crime may help policy-makers to put their national crime problems into perspective. Exceptional crime problems may at least partly be determined by autonomous structural characteristics of societies which lie outside the immediate sphere of influence of policy-makers responsible for the criminal justice system. In such a case national crime problems may primarily call for a wide range of preventive policies. In other countries it may be that no obvious criminological explanation for the existing crime problems is at hand, and a critical reassessment of crime control policies might be recommended.

Although our analyses of the determinants of crime are largely explorative, they are guided by a theoretical perspective which brings together insights from current criminological theories on the causes of crime. National crime levels will be interpreted as the social result of the convergence within countries of sufficient numbers of motivated offenders, relatively weak mechanisms of social control and the presence of suitable targets of crime (Cohen and Felson, 1979; Van Dijk, 1994a, 1994b). According to this perspective the level of crime in societies is determined by the interplay between motivational factors on the one hand and opportunity factors on the other.

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 out for opportunities to offend. Structural characteristics which provide viable opportunities of crime can be seen as *the supply side of the crime market*. Owners of expensive cars and other expensive consumer goods are the reluctant suppliers of opportunities of 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.

In the present theoretical view, affluence has a dual impact upon the level of crime. There is less demand for crime in more affluent countries. Important motivational factors such as income inequalities, dissatisfaction with income and unemployment, for example, tend to be lower in more affluent countries. If levels of affluence rise – and if the newly acquired wealth is not too unevenly spread – the pool of motivated offenders in a given society decreases. This trend will contribute to a reduction of the level of crime. At the same time affluence goes together with the ownership of commodities which can be stolen with relative ease, and also with a more outgoing lifestyle which increases exposure to criminal victimisation by strangers. Higher prosperity will invite higher levels of opportunistic forms of crime as well as a catalyst of other forms.

It follows from the present interactionist perspective that there are no straightforward, linear relationships between affluence and crime. The dynamics of crime at the macro level are further complicated by the increased employment of (sophisticated) security measures by potential victims in more affluent, high-crime nations. The use of these measures reduces opportunities of crime and therefore acts as a negative feed back loop for certain types of property crime.

The interactionist model described above proved useful in previous analyses of ICVS data (Van Dijk, 1994a; Mayhew, Van Dijk, 1997). Violent crimes were found to be most strongly associated with indicators of poverty, social inequality and dissatisfaction with income. Property crimes were found to be related to several crime-specific opportunity factors which are more prevalent in affluent nations. In sum, violent crime was found to be povertydriven while forms of property crimes were found to be largely opportunitydriven. Many forms of crime are more common in countries in which large parts of the population live in large cities. (This is probably because many forms of informal social control tend to be weaker in an urban setting.)

We will test whether this model can also be used to analyse the correlates of indices of crime, indices which are based on a combination of police statistics, ICVS data and other data. Previous studies looked at the macro correlates of crime across the world (Van Dijk, 1994a; Van Dijk, 1998a) or among a small group of industrialised nations (Mayhew, Van Dijk, 1997). The results of the present analysis of industrialised countries and countries in transition will not necessarily produce identical results. However, if the perspective is valid, the main results should at least resemble those found in earlier analyses.

#### 3.1.2 Description of the data set

As explained in the previous chapter, the present study brings together and uses crime data on forty Western, Central and Eastern European countries as well as on Canada and the United States. These crime statistics have been taken from different sources. A spreadsheet (know to the expert group as the HEUNI "Crime Guide") was made which includes the national, urban and rural victimisation rates of the ICVS and the rates of recorded crimes as collected in the course of the Fifth United Nations Survey, covering 1994 as well as other sources of data<sup>1</sup>. Using a combination of data from these various sources, several indices of types of crime were constructed, as explained in sections 1.5 and 1.6: non-fatal violence (assaults and robberies), homicides, serious violence (a combination of the first two), burglary, violence against women (sexual violence, assaults), vehicle crimes (theft of and from cars),

<sup>&</sup>lt;sup>1</sup> See appendix A.

corruption and petty crimes (e.g. bicycle theft, motorcycle theft, non-contact personal theft, car vandalism, non-violent sexual incidents and threats). An overview of the national scores on these indices was given in chapter 2.

The indicator of violence against women is based on both police statistics of recorded rapes and ICVS data on sexual and non-sexual assaults on women. Added to the crime indices is an index of bribery/corruption. The constituting variables for this are the rate of street level corruption of public officials according to the ICVS and the ranking of corruption of public officials with regard to business transactions, according to the rankings of Transparency International and the World Competitiveness study 1997 (based on survey research among business people).

The newly constructed indices cover a wider range of crimes than what is reflected in the ICVS. Serious crimes of violence in particular are better represented because police data on recorded homicides and rapes are included. The same is true of the more serious forms of corruption. The indicators of petty crimes and non-fatal violence are exclusively based on ICVS data since no credible police statistics on these types of crime are available.

The HEUNI "Crime Guide" includes a selection of criminologically relevant social indicators. Some of these social indicators are also based on ICVS items (e.g. handgun ownership, recreational patterns, unemployment, age structure, types of housing, use of anti-burglary measures, car ownership and bicycle ownership). Other items, such as the GNP per capita, the educational attainment of females and urbanisation were taken from data sets of the UN, the World Bank, UNESCO and the World Drink Trends<sup>2</sup>.

#### 3.1.3 Motivational factors

According to conventional criminological theories, serious crime is related to economic and/or social deprivation or inequalities (so-called strain theories). In previous analyses of ICVS data the relationships were analysed on the basis of a large set of socio-economic indicators and levels of victimisation. Levels of serious crime were found to be strongly related to several indicators of inequality, poverty and/or socio-economic deprivation. Levels of crime tend to be higher in countries where GNP per capita is lower and where more young people are dissatisfied with their income and/or where more people are unemployed. Multivariate analyses of global data showed that the most important predictor of high crime rates was the percentage of the population consisting of young males between 16 and 29 who are dissatisfied with their income and/or unemployed. Analyses of the present data set confirmed that this variable is most clearly related to some of the

<sup>&</sup>lt;sup>2</sup> See appendix A.

crime indices. Income inequality seems less relevant for cross-national studies of crime.<sup>34</sup> The percentage of young males dissatisfied and/or out of work is determined by the proportion of young males in the national population as well as by the subjective and objective socio-economic situation of this group. This measure will be used as an indicator of criminologically relevant "strain".

Our measure of strain reflects the size of the pool of people in a country for whom criminal activities might be economically or psychologically rewarding and for whom the involvement in criminal activities is a viable option.<sup>5</sup> The national values on this factor will be used as the primary indicator of criminal motivation (demand). Nations with the highest scores on this factor are Georgia, Kyrgyzstan, Romania, the Russian Federation and Lithuania. Our hypothesis is that in these nations, a relatively large part of the population experiences criminogenic "strain".

Included in the analyses are also two indicators of alcohol consumption (beer consumption and strong alcohol consumption). Their inclusion was based on the assumption that alcohol consumption might be a determinant of crimes of violence.

#### 3.1.4 Gender balance and violence against women

Little comparative empirical research has been done on the macro determinants of violence against women (sexual violence and non-sexual violence). In previous ICVS studies using global data it was found that violence against women is associated at the macro level with a high prevalence of strain among young males and with a low average social status of women (Van Dijk, 1998a). The latter finding confirms conventional feminist theory that women with low social status are more vulnerable for violent attacks by males. The ICVS rates of violence against women were for example exceptionally high in several developing nations (for example Brazil and South Africa). A subanalysis, however, showed that among industrialised countries violence against women is positively related to the divorce rate. Divorce rates, in turn, are positively related to the social status of women. The rates of violence against women, then, are relatively high in both some of the least gender-bal-

<sup>&</sup>lt;sup>3</sup> The "Crime Guide" includes an indicator of income inequality, based on the ratio between the income of the top twenty percent and the bottom twenty percent. Income inequality is inversely related to affluence: in more affluent nations the ratio is smaller (r=-.50; n=28; p.05). It is not significantly related to our indicator of strain.

<sup>&</sup>lt;sup>4</sup> The rate of unemployed young males correlates highly with the rate of either dissatisfied or unemployed young males (r=.93; n=36; p=0.000).

<sup>&</sup>lt;sup>5</sup> As noted in section 1.3, the data collected through the Fifth United Nations Survey focuses on so-called "traditional" crime, and not for example on economic crime. The expert group is, of course, aware that the pool of people who have the opportunity and motivation to engage in economic crime and other "modern" crime may well differ from the pool of people with the opportunity and motivation to commit property crimes and violent crimes.

anced and some of the most gender-balanced countries. One interpretation of this paradoxical finding is that in some of these latter countries tensions around the newly acquired social status of women manifest themselves in higher rates of male violence against women. An alternative interpretation is that the positive relationship between high social status of women and high rates of violence against women is caused by a heightened sensitivity for violence by males amongst women in more gender-balanced nations (Kangaspunta, 1997). Examples of countries which show this cluster of characteristics (high affluence, high social status of women and high rates of violence against women) are the United States, Canada, Finland and New Zealand (not included in this analysis).

If the latter interpretation is correct, it would mean that the cross-cultural measurement of violence against women is complicated by differential responses to standardised survey questions on domestic violence against women. Precisely in countries where women have high social status and where domestic violence is supposed to be less prevalent, female respondents are more likely to define violent act by spouses and other partners as criminal. In that case, the positive relationship between female social status and violence against women might be an artefact of the method of measurement.

In order to explore further the relationships between gender-balance and violence against women among the set of industrialised nations covered by the present report, indicators of female educational attainment and the prevalence of divorce were included in the analysis.

#### 3.1.5 Opportunity factors

According to opportunity theory, the level of crime is also determined by the presence of suitable targets of crime and the extent of informal social control. Well-documented examples are the relationships between vehicle-ownership and vehicle-related crime. In some studies types of crimes were also found to be related to routine activity patterns such as patterns of outdoors recreation and female labour participation. Included in the analyses were known risk factors such as the frequency of outdoor visits for recreational purposes, single occupancy of dwellings (one-person households), composition of housing stock (apartment buildings or detached houses) and ownership rates of motor vehicles, motorcycles and bicycles.

In order to reduce the number of relevant variables, one over-all scale was constructed for criminal opportunities. This overall opportunity scale was based on three types of vehicle ownership, the frequency of outdoor visits, proportion of single person households and the percentage of females with paid employment. These six source variables are strongly intercorrelated. Factor analysis yields a first factor explaining 50% of the variance. The country scores on this opportunity factor were entered into the HEUNI "Crime Guide" as a comprehensive indicator of criminal opportunities. The five nations with the highest scores were Norway, Germany, Sweden, the United States and the Netherlands. In this cluster of nations the "supply" of criminal opportunities is clearly the highest. Our hypothesis is that in these nations opportunistic forms of crime will be more prevalent due to the existing opportunity structures.

Included in the analyses were also the prevalence of the possession of hand guns – a possible facilitator of crimes of violence – and the prevalence of the use of anti-burglary devices (e.g. burglary alarms).

#### 3.1.6 Urbanisation

Urbanisation and modernisation are supposedly linked to high crime rates due to lower levels of social control (Shelley, 1981). In previous analyses of ICVS data, the level of victimisation by crime was strongly related to the proportion of the population living in a large city. Information on this characteristic was based on a survey question about the size of the respondent's home city. In some cases the official boundaries of one's city are not clear. The ICVS data on urbanisation are a measure of urbanisation as perceived by the respondents. Since ICVS data on the national degree of urbanisation are available for only twenty nations, other sources were used to collect data on this variable. Data on urbanisation taken from the UN Compendium on Human Settlement were entered into the "Crime Guide". These data reflect the proportion of the national population living in settlements of 20,000 inhabitants or more. This measure did not clearly correlate with the ICVS data on the proportion living in cities with 100,000 inhabitants or more. In the analyses we used the UN measure of urbanisation.

## 3.2 Results of the analyses<sup>6</sup>

#### 3.2.1 Affluence and criminogenic factors

As a first step in the analysis, we looked at the relationship between AFFLU-ENCE (GNP per capita) and the various motivational and opportunity factors. The results show a clear picture. AFFLUENCE is strongly inversely related to our indicator of STRAIN among young males (r=-.84; n=33; p=000). In the more affluent countries many fewer young males express dissatisfaction with their income and/or are unemployed. In accordance with our hypothesis, there is less "demand of crime" in more affluent nations.

The consumption of strong ALCOHOL is also inversely related to affluence (r=-42; n=28; p=05). Consumption levels are the highest in the least

<sup>&</sup>lt;sup>6</sup> Due to missing values for certain variables, the number of cases varies for each analysis.

affluent countries, in particular some Eastern European countries. High consumption of strong alcohol is traditionally linked to socio-economic deprivation. The indicator of "strain" is strongly related to the consumption rate of strong alcohol (r=.61; n=22; P=.002).

In our set of nations this cluster of motivational factors is the most prevalent in Central and Eastern European countries with economies in transition.

Affluence is, conversely, positively related to an outgoing LIFESTYLE (r=+68; n=32; p=.000), ownership rates of motor CARS (r=.69; n=28; p=.000), ownership of BICYCLES (r=.41; n=28; p=.002), educational attainment of females (r=.63; n=35; p=.000), proportion of divorcees (r=.52; n=30; p=.005), proportion of detached HOUSES (r=.63; n=32; p=.000) and proportion of burglar ALARMS (r=.58; n=32; p=.001). These results confirm the hypothesis that affluence goes together with the presence of several known risk factors of property crimes (high frequency of outdoor visits, high prevalence of vehicle ownership and high proportion of people living in stand free, easily accessible houses). To counterbalance their increased exposure as house dwellers, potential victims in these nations are more likely to employ sophisticated technical self-protection measures.

The rate of educational attainment of women can be seen as a measure of the social status of women (GENDER BALANCE). This measure correlates highly with affluence. In the more affluent nations the social position of women is stronger. Educational attainment of women also correlates strongly with divorce rates.

As said, a scale was constructed which combines six different elements of high exposure to crime. This comprehensive indicator of criminal opportunity is strongly positively related to affluence (r=.80; n=29; p=.000). The hypothesis that affluence increases the "supply of criminal opportunities" is also confirmed.

Urbanisation, as measured by the UN, is related to affluence in the present set of nations (r=+.57; n=49; p=.000). It is inversely related to strain (r=-.46). Urbanisation is weakly related to a more outgoing lifestyle (r=.36) and more strongly to car ownership (r=.54). Gun ownership is unrelated to our measure of urbanisation.

In Europe and North America, people living in more highly urbanised countries tend to be more affluent, pursue an outgoing lifestyle and use cars as their main means of transportation.

Affluence appears to be a factor which is related to many important criminogenic factors. Table 7 shows the correlations between AFFLUENCE (GNP per capita) and the indicators of the most relevant motivational and opportunity factors.

By and large the results confirm that affluence has a dual impact on the (criminological) vulnerability of nations. On the one hand the pool of potential offenders – consisting of socially marginalized and/or dissatisfied young males – is much smaller in the more affluent countries of Western

	AFFLUENCE
STRAIN	87 (29)
ALCOHOL	41 (27)
LIFESTYLE	P = 0.032 +.69 (29)
CARS	P=0.000 +.67 (29)
BICYCLES	P=0.000 +.39 (29)
GENDER BALANCE	P = 0.038 + .50 (36) P = 0.002
HOUSES	P = 0.002 +.64 (28) P = 0.000
ALARMS	+.61 (29)
URBANISATION	+.58 (49) P=0.000

Table 7. Correlations between affluence and a selection of motivational factors and opportunity factors; Pearson's correlation coefficients (r).

Europe and North America. In the countries in transition there are, relatively speaking, more potential offenders. In these countries the rate of consumption of strong alcohol is also higher. The abuse of strong alcohol might contribute to higher levels of violent crime.

On the other hand, more affluent countries show several characteristics which make them more vulnerable for certain types of crime, notably crimes of theft and burglary. In these nations there may be fewer people motivated to commit crimes but this advantage is offset by the ample prevalence of opportunities to acquire easy money through the commission of criminal acts in a anonymous urban setting. In terms of opportunities for crime the more affluent nations of North America and Western Europe are clearly more at risk than are the countries with economies in transition.

#### 3.2.2 Crime patterns

The ultimate goal of the analysis is to explore the statistical relationships between the motivational and opportunity factors described above and the national crime levels. In order to explore the relationships between the various types of crime we have firstly looked at the correlations between the eight crime indices. Table 8 provides an overview.

The results show that the three indicators of violent crime are strongly intercorrelated. The correlation between the homicide indicator and the indicator of serious violence is near perfect. The serious violence indicator is, as explained, based on a combination of homicide indicators and ICVS indicators of assaults and robberies. The (non-fatal) violence indicator is based on ICVS data on assault and robberies. The correlation with the homicide indicator is moderately strong. The correlation with the serious violence indicator is very strong. Since the serious violence index is so

	homicide	nonfatal violence	serious violence	petty crime	burglary	violence against women	vehicle crime	corruption
homicide		.3380 (34) p=.051	.8554 (47) p=.000	0731 (34) p=.681	.2011 (39) P=.220	.2119 (42) p=.178	1038 (43) p=.508	.3569 (41) p=.022
nonfatal violence			.8298 (36) p=.000	.5855 (36) p=.000	.5003 (36) p=.002	.3618 (36) p=.030	.2963 (36) p=.079	.1708 (36) p=.319
serious violence				.3965 (36) p=.017	.3161 (41) p=.044	.3419 (44) p=.023	.0782 (45) p=.610	.2956 (43) p=.054
petty crime					.3997 (36) p=.016	.4992 (36) p=.002	.2419 (36) p=.155	1059 (36) p=.539
burglary						.3086 (41) p=,050	.5459 (40) p=.000	.1712 (37) p=.311
violence against women							.1054 (42) p=.507	3654 (39) p=.022
vehicle crime								0766 (43) p=.625

Table 8. Correlation matrix of national scores for eight different indicators of crime.

strongly related to both other indices of violence, further analyses were limited to this index.

The index of violence against women is unrelated to the index of homicide. It is weakly related to the two other indices of violent crime. These results confirm that the prevalence of violence against women does not necessarily reflect the level of serious violence in general. A separate analysis of the social correlates of violence against women is called for.

The homicide index is unrelated to petty crimes, burglaries or vehicle crimes. The other indices of violence are (weakly) related to petty theft and burglary.

The indicator of petty crime is fairly strongly related to burglary and, somewhat surprisingly, to the index of violence against women.

Burglary is most strongly related to vehicle crimes. It is also weakly related to most other types of crime. This finding is consistent with previous results which showed that from a global perspective rates of burglary are the best predictors of over-all levels of crime (Van Dijk, Van Kesteren, 1996).

Corruption is weakly related to serious violence.

In conclusion, the indicators of violence are strongly interrelated. Violence against women, however, is not clearly related to these other forms of violence. The rates of petty crimes and of vehicle crimes are weakly and inconsistently related to the indices of crimes of violence. These results indicate that nations which suffer from high levels of violence are not necessarily always also experiencing high rates of property crimes and vice versa. High rates of burglary seem to go hand in hand with high rates of vehicle crime. Violence against women and corruption show few clear relationships with other types of crime and seem to be independent phenomena.

#### 3.2.3 Correlates of crime

In order to explore the determinants of crime, simple correlations were calculated between the key motivational and opportunity factors and the indicators of crime.

#### Violent crime

To reduce the number of analyses, the analysis of violent crime was, as noted, limited to the index of serious violent crime. Serious violent crime is strongly related to the prevalence of strain (r=. 57; n=36; p=.000). Since strain was found to be inversely related to affluence, it follows that serious violence is inversely related to affluence (r=-.45; n=45; p=.002).

The national rates of serious violence were also positively related to the consumption rate of strong alcohol (r=.49; n=28; p=.01).

Previous analyses of global ICVS data have shown that levels of violent crime are, independently of other factors, related to handgun ownership (Van Dijk, 1998a). In the present dataset no significant correlation between gun ownership and the serious violence index was found (r=+.21; n=36; p=.20).

In order to determine the relative strength of the various relationships, multiple regression analyses were carried out. Regression analyses showed that strain is the most important predictor of serious violence (multiple regression coefficient of .57). The second variable chosen in the equation is income inequality. The multiple regression coefficient is slightly increased by the inclusion of the second variable (r=.67). This means that 45% of the variance in the level of serious violence is explained by these two variables. If the strain variable is excluded from the analysis, the next most important predictor is the consumption of strong alcohol. The results for homicide are similar.

The results confirm that violent crime is more prevalent in less affluent nations where there are more young males who experience "strain" and where the consumption rates of strong alcohol are high. In the case of serious violence, income inequality may also play a role. The role of gun ownership does not seem to explain differences in the level of violence in this particular set of countries. The correlation is positive but does not reach statistical significance.

#### Burglaries, petty crimes and vehicle crime

Burglaries are not significantly related to any of the indicators included. The correlation with the proportion of inhabitants living in detached housing is not significant (r = +.25; n = 35; p = .14). If the analysis is limited to the countries of Western Europe and North America, the proportion living in detached housing is strongly correlated with the burglary index (r = .70; n = 17; p = .002). In Western Europe and North America, countries where a large proportion live in apartment buildings rather than in semidetached or detached housing experience fewer burglaries.

The relationship in North America and Western Europe between types of housing and burglary rates is probably weakened by the strong positive relationship between the proportion of people living in detached housing and the use of burglar alarms et al (r=.81; n=35; p-.000). If burglar alarms were not so prevalent in countries with many detached houses, the relationship between the factor "proportion living in apartment buildings" and burglaries would probably be stronger. In the Central and Eastern European countries the level of burglaries is unrelated to the type of housing. In most of these countries, living in apartment buildings is the norm in urban areas.

The rate of petty crimes is not significantly related to bicycle ownership (r=.25; n=36; p=.15). As is to be expected, the rate of vehicle crime is related to car ownership (r=.49; n=36; p=.003). This type of crime is positively related to affluence and inversely related to the proportion of people living in apartment buildings. The rate of vehicle crimes is also related to the degree of urbanisation (r=.55; n=43; p=0.000).

Regression analyses confirm that the independent variables mentioned (living in apartment buildings, car ownership and bicycle ownership) are the most important predictors of the three types of property crime.

#### Violence against women

The rates of violence against women show a pattern of correlations which is difficult to interpret. The national scores on the index for this type of crime shows positive relationships with a UNESCO measure of female educational attainment (r=.39; n=33; p=0.8) and with the proportion of divorced persons (r=.43; n=33; p=.01). The national scores are also clearly related to bicycle ownership. High rates of bicycles are mostly found in the more affluent Western European countries, which tend to be more gender-balanced. In conclusion, the index of violence against women is positively related to indicators of gender-balance.

As said, in analyses of global ICVS data the social status of women was inversely related to violence against women. The present data seem to contradict this result. However, in the previous ICVS study it was also found that among industrialised nations rates of violence against women are higher in nations where females have a higher status. The results of the present analysis of the correlates of a more comprehensive index of violence against women confirm the previous finding. One interpretation of this finding is, as said, that in the latter nations women are more aware of forms of violence against women than elsewhere and therefore more likely to report it to interviewers as well as to the police. Since the index of violence against women is in part based on police rape data this interpretation is plausible. Rates of recorded rapes for 1994, taken from the Fifth United Nations Survey, are even more strongly related to female educational attainment (r=.75; n=29; p=0.000). It seems implausible that the actual prevalence of rapes strongly increases with the improvement of the social position of women. The interpretation that more emancipated women are more inclined to condemn and report sexual violence and non-sexual violence is more credible. This interpretation is supported by the knowledge that precisely in the Western countries with the highest scores (Canada, the United States, Norway and Finland), public awareness about violence against women has been systematically raised through information campaigns in the mass media.

To explore this issue further, a split analysis was made of the correlates of the index of violence against women in Western European and North American countries and in the countries with economies in transition. The two analyses showed different results. Among the Western nations the educational attainment of women is strongly related to the index of violence against women (r=.70; n=15; p=.005). To the extent that countries are more genderbalanced, the rates of victimisation are higher. Among the nations in Central and Eastern Europe this relationship is non-existent (r=.04). This finding suggests that the most gender-balanced nations show relatively high scores

on the index for sexual and/or non-sexual violence against women because women are more sensitive to these types of crime and more ready to report these to interviewers and/or the police. In Southern European countries such behaviour might still be a taboo subject which is not easily discussed with interviewers or the police.

Among the Central and Eastern European countries, high rates of victimisation are not related to the status of women. In this group of countries the social status of women is generally lower than in the Western countries, according to UNESCO indicators of educational attainment. The public debate about violence against women has only recently started. The relatively high rates in countries like Kyrgyzstan and the Russian Federation probably reflect a high actual prevalence of such crimes. If levels of education and/or awareness of the seriousness of these type of offences rise, many Central and Eastern European countries will show even higher scores on indices of violence against women.

These considerations shed doubts on the validity of the present indicator. The rates of violence against women in countries where women have low social status might systematically underestimate the true prevalence of such acts. This conclusion does not imply that the rates of violence against women in the more gender-balanced nations do not reflect serious acts of violence. The ICVS data on seriousness assessments of reported incidents by the victims show that violence against women is seen as one of the most serious types of crime across the world (Van Dijk, 1998a). However, since the indicator is probably biased, it cannot be reliably used for comparative purposes. We therefore will not include this indicator in our multivariate analyses.<sup>7</sup>

#### **Corruption/bribery**

The index of corruption is strongly inversely related to affluence (r=-.72; n=43; p=.000). These types of criminal behaviour are obviously more prevalent in the less affluent nations. The prevalence is the highest in the Central and Eastern European nations with economies in transition. Among these nations, corruption is the least prevalent in the more prosperous nations, such as Slovenia, Estonia, Hungary and Poland.

<sup>&</sup>lt;sup>7</sup> The correlation between the index of violence against women and female education is fairly strong. Regression analysis showed that female education explains 14% of the variance in the indicator (B=.46; p=.000). The residual variance per country was expressed in z-scores. These scores can be seen as an indicator of violence against women, corrected for female educational attainment. Some Western nations which showed high scores on the index, such as Canada, Finland, Norway and the United States showed only moderately high scores on the new indicator.

High levels of corruption are partly determined by the existing political structures. Corruption problems are exacerbated by undemocratic practices, lack of transparency and insufficient salaries for officials.

A high level of corruption is itself a factor inhibiting sustainable economic growth.

#### 3.2.4 Results of a factor analysis

Finally, we conducted a factor analysis in order to characterise the crime situation in the European and North American countries in terms of both their victimisation rates and their scores for motivational and opportunity factors. Building on the results presented above, we singled out the following as the measures of crime: serious violence, burglary, petty crime and vehicle-related crimes. We entered into the analysis the most important independent variables that explained the variance in the victimisation rates. The chosen variables are: affluence, strain, urbanisation, car ownership and bicycle ownership.

Factor analysis is a multivariate statistical technique which reduces data by looking for underlying patterns of factors which represent commonality in the original variables. In our case it allows us to see how victimisation rates and their correlates cluster together into "factors". To understand what the factors describe or represent, one looks for the variables with the highest scores (or "loadings," as they are known). The analysis is limited to the 33 nations for which full information on all relevant variables is available. The number of cases entered into the analysis is rather low and the results must be interpreted with due caution.

Three factors emerged which together explain 74.5 percent of the variance in the nine variables included in the analysis. The results are shown in table 9.

	FACTOR 1 strain-related violent crimes	FACTOR 2 serious property crimes in urban settings	FACTOR 3 opportunistic petty crime
petty crimes	.13	.29	.81
burglary	.29	.73	.35
serious violence	.70	.14	.02
motor vehicle crimes	25	.87	.05
urbanisation	49	.65	15
affluence	83	.25	.03
strain	.92	07	12
car ownership	82	.23	01
bicycle ownership	.49	23	.69

## Table 9. Results of factor analysis on victimisation rates and the most important correlates in 33 countries (after varimax rotation).

The first factor seems to represent strain-related violent crime (contact crimes). It is characterised by high loadings on violent crime, strain, affluence (negatively), car ownership (negatively) and bicycle ownership. A secondary characteristic, not included in the analysis, is high consumption of strong alcohol.

The second factor has its highest scores on burglary, vehicle crimes, car ownership and urbanisation. It has moderately high loadings on affluence. This factor seems to represent relatively affluent, urbanised nations where high car ownership rates – and an outgoing lifestyle – invite high levels of car crimes and burglaries. As we have discussed earlier, burglaries are also related in the subset of Western nations to the proportion of households living in detached housing.

The third factor has its highest scores on petty crimes and bicycle ownership rates. This factor seems to represent opportunistic petty crime, notably bicycle theft.

The results of this factor analysis are very similar to the results of a previous factor analysis conducted on ICVS data (Mayhew, Van Dijk, 1997). In the latter study three factors emerged which were described as strain-related contact crimes (violence and robbery), property crimes in an urban setting and opportunistic petty crimes. The substitution of data from various sources on serious violence for ICVS data on contact crimes has not changed the results. Nations which suffer from high levels of violence show the same profile, regardless of the measure of violence used.

Figure 1 gives an overview of the main findings of our inquiry of the determinants of crime at the macro level of nations.



Figure 1. Schematic representation of the main correlates of national crime rates in Europe and North America.

Factor analyses of data on comparative crime rates and criminologically relevant other social indicators seem to produce fairly consistent results. There seems firstly to be a distinct cluster of nations where socio-economic deprivation among groups of the population breeds high levels of various forms of violent crime. In an analysis of global ICVS data, the same factor emerged (Van Dijk, 1998a). This global factor showed high loadings on both assaults/threats and robberies. It was labelled as deprivation-induced violent crimes. In the present analysis of crime data of European and North American nations the most serious types of violence were included. Again, a clear-cut factor emerged which shows high loadings on strain and the indicator of violence.

National crime rates cannot be understood in terms of strain only. The analyses consistently show that there are several other criminologically relevant clusters of nations. One characteristic that these countries have in common is that, in spite of low levels of strain, their national rates of certain property crimes are high, due to special criminal opportunity structures.

When criminal opportunities are presented, opportunistic, potential offenders take them up. In recent years the use of self-protection measures has gone up markedly in all Western nations (Mayhew, Van Dijk, 1997). The increased use of self-protection measures in more affluent countries can be seen as an adaptive countermeasure of potential victims which increases the costs of crime or lowers the benefits of crime by restricting opportunities. This negative feed-back loop may help to better control the level of opportunistic crime.

The results confirm the usefulness of the interactionist perspective which assumes that crime is driven by the dynamic interplay between demand and supply factors.

#### 3.2.5 Country scores

The results of the factor analysis allow us to assess for each country the dominant features of their crime profile, by looking at their scores on the three factors found (in z-scores<sup>8</sup>). High scores on a factor mean that the country scores highly (or lowly) on the variables represented by that factor (e.g. high scores on factor 1 signify high scores on strain and homicide and low scores on affluence and car ownership). Table 10 gives the results for the thirty-three nations which could be included in the analysis.

Countries with the highest scores on the factor representing strain-related violence are Kyrgyzstan, Georgia, Estonia, Ukraine, the Russian Federation, Romania and Latvia. Hungary, Poland and Albania show moderately high

<sup>&</sup>lt;sup>8</sup> Deviations from the mean, expressed in standard deviations

	Strain-related violence	Serious property crime in urban settings	Opportunistic petty crime
Austria	99	-1.05	.75
Belarus	.76	-1.01	-1.66
Belgium	86	.81	-1.24
Bulgaria	1.05	1.79	.02
Canada	67	.92	1.18
Croatia	.11	72	62
Czech Republic	.29	.75	1.53
England /Wales	75	1.61	19
Estonia	1.42	1.45	1.06
Finland	65	88	.84
France	77	.89	59
Georgia	1.50	.76	-1.09
Hungary	.48	03	88
Italy	63	.87	34
Kyrgyzstan	1.80	43	.25
Latvia	1.22	.61	.10
Lithuania	1.04	.66	13
FYR Macedonia	11	-1.14	53
Malta	92	.50	-1.30
Netherlands	-1.07	.24	1.98
Northern Ireland	.08	.50	-1.21
Norway	-1.43	82	94
Poland	.36	24	.68
Romania	1.19	64	-1.40
Russian Fed.	1.33	.23	.15
Scotland	62	.95	-1.29
Slovakia	.34	.14	1.23
Slovenia	44	71	1.15
Spain	91	.91	-1.49
Sweden	82	.36	1.39
Switzerland	-1.21	-1.14	02
Ukraine	1.38	.19	.68
United States	61	1.58	.97

Table 10. National scores on three factors describing the crime situation.

scores on this factor. Countries which stand out with the lowest scores on strain-related violence are Norway, Switzerland and the Netherlands.

High scores on the factor representing serious property crime in an urban setting are found in Bulgaria, England and Wales, the United States, Estonia, Scotland, Canada, Spain, France and Italy. With the exception of Bulgaria, these are all affluent countries where relatively many people live in metropolitan areas and where motor vehicles are the most common means of transportation. Most countries in transition have low scores. For the third factor, representing opportunistic petty crime, the scores were highest in the Netherlands, the Czech Republic, Sweden, Slovakia, and Slovenia.

Each of the three criminologically relevant factors can be characterised in terms of groups of countries. In the present data set, strain-related violence is represented by the countries in transition. (In a global perspective African and Latin American nations show even higher scores.)

The second factor represents vehicle-related crimes and burglaries. Vehicle-related crimes in urban settings are typical of several Anglo-Saxon countries. (In a global perspective Australia and New Zealand also feature highly on this list.) As said, these nations are vulnerable to vehicle-related crime because they rely on motor vehicles for transportation.

Burglaries are typical of a group of Anglo-Saxon and some Central European countries where people predominantly live in detached housing. In the first group of countries sophisticated anti-burglary devices are much more widely used than in the latter. The use of such devices has gone up significantly since the late 1980s, according to trend data of the ICVS (Mayhew, Van Dijk, 1997).

Petty crime is most prevalent in some of the Northern and Central European countries.

Each of the nations for which scores could be calculated can be characterised criminologically in terms of their scores on the three factors. Most nations score exceptionally high on at least one factor. Detailed information about national crime profiles and their social backgrounds can be found in the tables, with national scores given in the appendices.

## 3.3 Discussion

#### **General conclusions**

The analyses have shown that crime indicators which are based on a combination of survey findings on the public's experiences of crime, and on police statistics on recorded crimes are related with criminologically relevant economic and social indicators. These relationships can usefully be interpreted with the help of an interactionist model which sees crime rates as the result of the dynamic interplay between motivational and opportunity factors at the macro level.

The analysis of the macro correlates of violence against women is complicated by measurement errors. Both official data (which are based on police recorded crime) as well as victimisation rates (which are based on survey research among the public) show cultural biases related to the social status of women. More research should be done on the cross-cultural measurement of violence against women. It is only when better comparative data become available that the correlates at the macro level of this type of criminality can adequately be determined.

The prevalence of corruption appears to be strongly related to the state of the economy. Economies in transition and, more generally, weaker economies appear to experience higher levels of manifest corruption by public officials. The various source variables used showed strong correlations. This results suggests that the measurement of corruption might be less complicated than often assumed.

#### **Central and Eastern Europe**

In the light of the indicators developed for the study, the motivation to offend would appear to be greater in the countries with economies in transition (the countries in Central and Eastern Europe) than in Western Europe. (As noted, the data used for this study deal primarily with "traditional" offences.) In Central and Eastern Europe, the indicators suggest that there is clearly more demand among male adolescents for opportunities to acquire income through criminal activities. In these countries socio-economic deprivation and alcohol abuse appear to help in forming a breeding ground for different forms of crimes of violence. Assaults, homicides and robberies appear to be more prevalent in countries where many young males experience strain. Furthermore, in most Central and Eastern European countries violence against women is relatively high. In addition to strain and alcohol abuse, this specific crime problem is probably related to the low social status of women. For example, the percentage of women with higher education is much lower in most countries in transition than in the European Union member states.

Corruption also appears to be much more common in many Central and Eastern European countries than in North America and Northern Europe.

In the short term, the economic crisis in the Russian Federation in particular might exacerbate existing economic and social problems in the region. In the longer term the economic prospects might be better but this will not necessarily reduce the demand for crime. Increased affluence in these countries will probably not reduce the prevalence of strain because in the context of a free market economy the lower social strata will profit less from it than will the higher strata. 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 flats, and car ownership is still relatively rare. These factors may have so far inhibited further increases of property crimes. Over the past ten years, in most Central and Eastern European countries the level of affluence has increased. This has been the case in particular in Hungary, Poland, Slovenia and the Baltic states. If the GNP 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 as well. Probably household burglary rates will also increase if households start to possess more expensive commodities, and investments in anti-burglary devices remain low.

Eventually, however, investments in self-protection against car theft and burglary will increase and the rates of property crimes will stabilise. If at that time strain among adolescents remains prevalent, there might well be a shift towards more violent forms of property crimes (street robberies, car-jacking and household robberies). Some of the less serious property crimes prevented by improved protection may be displaced in the form of more serious forms. The crime profile of the countries in transition may start to resemble that of South Africa which suffers from exceptionally high rates of robberies.

The level of corruption in government circles appears to be lower in the countries where economic restructuring is relatively advanced, e.g. in Estonia and Hungary. In fact the level of corruption in these countries is lower than in some Western countries. These are encouraging findings. If the restructuring in other countries in the region continues, the long-term prospects for decreasing levels of corruption seem fairly good.

To sum up, the over-all criminological outlook for the countries in transition in our view is relatively bleak. Even if the current economic problems are overcome, the rates of crimes of violence will probably remain high, due to high levels of unemployment among young males and the high consumption of strong alcohol. Also, the traditional attitudes towards females are unlikely to change in the short term, and violence against women is likely to remain a serious problem.

In the years to come, the increased affluence of the emerging middle classes, although currently suffering a set-back in the Russian Federation, will increase opportunities for crime. More people will be able to afford to live in detached housing and to own cars. With a time lag of a few years, the levels of self-protection will go up and the rate of opportunistic crimes might stop increasing. Some of the crimes prevented, however, are likely to be displaced to become robberies.

#### Western Europe

The crime situation in the more industrialised and affluent nations of Western Europe must primarily be understood in terms of special opportunity structures. Countries which rely on motor cars for their transportation experience high rates of vehicle-related crimes. Countries where people traditionally live in detached housing experience high rates of burglaries. In recent years protection against car theft, theft from cars and household burglaries has increased. Probably in relation to this – and perhaps also to intensified policing and more severe punishment of offenders – the over-all level of property crimes has been declining in both North America and Western Europe since 1995 (Mayhew, Van Dijk, 1997).

Paradoxically, crimes of violence - in particular violent juvenile crime - show an upward trend in several member states of the European Union

(Joutsen 1996b; Pfeiffer 1997). The increase in street robberies in some countries might be the result of displacement of crimes prevented by improved protection. Another explanation could lie in the emergence of an ethnic underclass in the larger cities of Western Europe. Although this cannot yet be determined with certainty, the level of strain among some ethnic parts of the urban population might well be on the increase. In the area of crime prevention, the main challenge for Western European countries seems to be the social and economic integration of young immigrants in the urban areas.

At the same time, the outgoing lifestyle of young people and the combined use of alcohol and drugs might also be a causal factor behind juvenile violent crime. One of the main assets of Western Europe in this context is the relatively low levels of handgun ownership. There are strong indications that this is an important factor inhibiting homicides. The high rates of violence against women in some Western countries, as shown by both police statistics and ICVS data, might be the result of heightened sensitivity to and awareness of the maltreatment of women by their spouses or other partners in a domestic setting. If other countries become more gender-balanced, they may also show higher rates of violence against women for the same reason. This explanation for the high rates in some of the most affluent and gender-balanced countries should be no reason to belittle the seriousness of these incidents. The recent phenomenon of increased visibility of these crimes in the most gender-balanced nations underlines the existence of very substantial dark numbers elsewhere.

Relatively low levels of manifest corruption by public officials appear to be typical of affluent nations with stable democratic traditions. This relationship can also be understood in terms of criminal opportunities. In open democracies with relatively unregulated markets there are fewer opportunities for public officials to require bribes for their services.

#### North America

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

Both the United States and Canada have relatively high levels of car-related crimes in urban settings, as well as burglaries.

The level and profile of crime in the United States differs less from that of countries such as Canada, the United Kingdom and the Netherlands than is commonly assumed. The level of conventional crimes in the United States is not exceptionally high, nor is the level of corruption. The most important difference appears to be the high level of homicides and robberies, and the fact that in the United States these often involve the use of guns (see also Marshall, 1996). The most probable cause of this deviation from the "European" pattern is the exceptionally high rates of gun ownership.

# 4 Operation of the Criminal Justice System<sup>1</sup>

Ineke Haen Marshall

## 4.1 Describing the operation of the criminal justice system

Chapters 4 through 6 discuss a variety of indicators related to the operation of criminal justice systems in a number of European countries and North America (the United States and Canada). The two main data sources are the Fifth United Nations Survey and the International Crime Victim Survey (ICVS). Occasionally, additional data sources have been used. Lack of comparability of indicators and missing data are two of the main challenges facing the international data analysis. The current effort is no exception to this rule. However, this chapter documents, whenever possible, the peculiarities and problems associated with particular data. Furthermore, three indices (a "Law Enforcement Resources" index, a "Criminal Justice Practitioner Gender Balance" index, and a "Citizen Evaluation of Police Performance" index) have been created in an attempt to overcome some of the problems associated with missing and conflicting data.

The purpose of chapter 4 is to provide a general overview of the operation of criminal justice systems in Europe and North America. In addition to presenting country-based descriptive data, this chapter also provide simple summary measures (means and standard deviations, quartiles, ranks) for the entire region, as well as separately for the fifteen European Union (EU) countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the UK) and the Central and Eastern European countries (Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Moldova, Poland, Romania, Russian Federation, Slovakia, Slovenia, Tajikistan, Ukraine, Uzbekistan, and Yugoslavia). This allows the making of comparisons between groups of nations which are

<sup>&</sup>lt;sup>1</sup> We wish to express our appreciation to Chris E. Marshall at the University of Nebraska at Omaha for his help in data management and statistical analysis.

likely to differ in significant respects (the countries in transition vs. traditionally capitalist countries). Lumping a large number of countries together in broad categories such as the EU or Central and Eastern European countries risks ignoring important differences that exist between individual countries that are grouped together.<sup>2</sup> Yet, it appears that the benefits of this approach outweigh its drawbacks for two reasons. First, because of the often questionable validity of individual country-level data for specific indicators, the use of comparisons between aggregated means (for groups of countries) provides a more robust measure, because it minimizes the importance of single data points. Second, the purpose of the present chapter is to describe international patterns, similarities and differences in the operation of criminal justice systems in Europe and North America. The use of aggregate comparisons facilitate such an attempt.

Section 4.2 provides a description of criminal justice resources, in particular criminal justice personnel. Section 4.3 provides an overview of the flow of cases through the different criminal justice systems. Section 4.4 discusses performance indicators for the criminal justice systems in Europe and North America.

## 4.2 Criminal justice resources

Crime control is no longer monopolized by government, nor is it limited to law enforcement. "The various means for the production of security implicate at least the private sector, other departments of public government than the police, pressure groups and citizens" (Brodeur 1995, p. 9). An increasing amount of (public and private) resources is devoted to crime control and prevention (crime prevention councils, community crime prevention groups, education programmes) and target hardening (locks, burglary alarms). Policing is now widely offered by institutions other than the state, most importantly by private companies on a commercial basis and by communities on a volunteer basis (Bayley and Shearing 1996, p. 585). Dealing with the after-effects of crime (i.e., the crime victim) is becoming more and more an integrated part of criminal justice systems. Law enforcement agencies provide victim support services, and women's shelters are available to offer protection to the victims of domestic abuse. Unfortunately, lack of systematic international data (with the exception of some data on private security) prevent the description of these types of criminal justice resources in this chapter.

Traditionally, criminal justice resources have been conceived of in terms of personnel, budget, expenditure and capital resources (United Nations

<sup>&</sup>lt;sup>2</sup> In addition, such a grouping omits the non-EU Western European countries of Andorra, Cyprus, Iceland, Liechtenstein, Malta, Norway and Switzerland.

Interim Report A/Conf.169/1, 1994, p. 18). There are also less tangible resources, such as the educational quality and the moral integrity of its personnel and the sophistication of its organizational structure (cf. Kangaspunta 1995a, p. 53), and its degree of professionalism (i.e., merit hiring, training, advanced technology, incorruptability, and equal treatment of citizens and strict adherence to law) (cf. Fairchild 1993).

Commonly, the focus is on the two most tangible resources, personnel and financial resources. Data on personnel and budget – which are routinely used for administrative and government purposes – should be among the more easily obtainable pieces of information, even internationally. The United Nations surveys prove otherwise. The earlier Surveys obtained resource data on only a handful of countries. The results of the Fifth Survey are more encouraging: over 30 of the countries from the region supplied data on these variables. However, whereas missing data are becoming a less pressing problem, serious questions remain about the quality and the international comparability of the resources data. The organizational complexity of law enforcement in most countries makes answering questions about resources a true challenge. For example, as the United Nations Interim Report (p. 18) points out, because the criminal justice systems in most countries are not centralized units, it is difficult to collect data on the distribution of personnel to police, prosecution, courts, and prisons.

The financial resources devoted to criminal justice activities and personnel are not described in the present chapter because of major problems associated with financial data provided through the Fifth United Nations Survey. First, the data are only available for a small number of countries. Although 18 countries report on police expenditures, 13 countries report on prosecutorial expenditures, 13 countries report on court expenditures, and 24 countries report on prison staff expenditures, only 6 countries report on all four categories of expenditures. Second, there is the additional problem that the original data are provided in terms of the local currency. In order to make international comparisons, UN currency conversion tables need to be used. Particularly in the countries in transition (Central and Eastern Europe) that have had a highly fluctuating currency during the period under review, the resulting figures are questionable and should be approached with great caution. Bayley (1985, p. 75) argues that expenditures (on policing) are not a useful vardstick for comparative purposes because of variations in purchasing power over time as well as from place to place.

Criminal justice is a human-resource-intensive industry (cf. United Nations Interim Report, p. 18); a large portion of the budget is spent on personnel. Thus, there is a high correlation between personnel and budget because most of the criminal justice resources throughout the world are expended on personnel (cf. Bayley 1985, p. 75). The number of criminal justice personnel, therefore, is the focus of the following discussion of criminal justice resources.

The rest of this section is divided into six subsections. Comparative data on the police (section 4.2.1), prosecutors (section 4.2.2), judges (section 4.2.3), and

correctional personnel (section 4.2.4) lay the groundwork for a section (4.2.5) that provides a descriptive account of the size and composition of the total criminal justice work force in Europe and North America. The last section (4.2.6) zeroes in on the gender balance among criminal justice personnel in the region.

#### 4.2.1 The police

The capacity or strength of the police force may be measured in terms of the number of officers, budget, equipment, training, recruitment standards, strategic choices, honesty, and accountability (Bayley 1985, p. 74). The number of police is the most expedient, relatively straightforward measure, even though problems arise in classifying functionaries as police (Bayley 1985). The Fifth United Nations survey instrument defines the police or law enforcement sector as any "[P]ublic agencies whose principal functions are the prevention, detection and investigation of crime and the apprehension of alleged offenders" (page 10). In some countries, these functions are performed by para-military or military forces or national security forces. For this reason, the administrator responsible for completing the UN questionnaire is asked to "...try to limit as far as possible replies to the civil police proper as distinct from national guards or local militia" (p. 10). The UN survey instrument then asks for the "[N]umber of personnel at the national level. If there are many local forces, please provide data on them if possible" (p. 10). Specifically, the question asks for data on "police personnel (sworn/uniform and civilian) by number and sex" (p. 11). Close examination of the national responses to this question, as well as comparisons of some of the data with other published sources (e.g. Hebenton and Thomas 1995, Table 1.1) suggests that the international police personnel data need to be used with caution.

What are some of the reasons for this "health warning"? First, the distinction between sworn/uniform and civilian police is problematic. Civilian police personnel is increasingly important as police officers now are aided by a far larger number of civilian employees in the police service than in the past (Reiner 1995). However, what exactly is civilian / police personnel? Does it include support staff, such as secretaries, computer specialists and crime lab technicians? Some countries (such as Moldova) indicate that they have no civilian police personnel (leaving it open to speculation whether this means in contrast to military, or in contrast to uniformed personnel), while others (such as Liechtenstein and Northern Ireland) simply leave this part of the question blank. Second, even when focusing on "total police", some of the national figures provided in the responses may be questionable, reflecting the impossibility of summarizing often very complex systems of policing (centralized or decentralized, with different structures and organizations, under different jurisdictions) into one single summary measure. Also, many agencies that are not thought of as police nonetheless possess police powers (e.g. the Coast Guard in the U.S.) (Bayley 1985, p. 7). Furthermore, national

Countries	Public police per 100,000 <sup>1</sup>	Total public police	Public police (rank)	Private Police per 100,000	Private Police (rank)	Total Police (public and private) (per 100,000) <sup>7</sup>	Ratio Private/ Public Police <sup>8</sup>
Armenia Austria Belgium Canada Croatia Cvorus	405 367 <sup>2</sup> 344 <sup>3</sup> 249 670 523	15,191 29,474 34,712 72,828 30,159 3,838	25 23 18 8 37 35	75 109	6 9	442 453	0.20 0.32
Czech Rep. Denmark England/W Estonia	238 347 436	12,372 178,336 6,539	6 19 28	24 193 155	3 19 16	431 502	0.81 0.45
Finland France Germany Greece	232 349 <sup>4</sup> 320 383 202	11,816 201,696 260,132 39,934 20.041	5 20 17 24 12	69 121 217 19	5 12 21 2	301 470 537 402	0.30 0.35 0.68 0.05
Ireland Italy Kazakhstan Latvia	293 304 488 779 463	10,829 278,640 132,582 11,809	15 32 38 30	143 76	15 7	402 447 564	0.47 0.16
Liechtenstein Lithuania Luxembourg FYR Macedonia Malta Moldova	190 545 276 318 507 241 <sup>5</sup>	59 20,279 1,100 6,807 1,846 10 492	2 36 11 16 33 7	121 201	12 20	666 477	0.22 0.73
Netherlands N. Ireland Norway	255 520 231	39,216 8,493 10,042	9 34 4	132 112	13 10	387	0.52
Poland Portugal Romania	440 214	43,459 48,692	29 3	26 156	4 17	343	0.48 0.35
Russian Fed. Scotland Slovakia	1,225 360 352 412	1,812,344 18,458 18,834	39 22 21 26			596	
Soverna Spain Sweden Switzerland Turkey	412 475 <sup>6</sup> 282 265 190	6,002 185,983 24,759 14,210 116,180	20 31 12 10 1	135 184 108 10	14 18 8 1	610 466 373 200	0.28 0.65 0.41 0.05
Ukraine USA	419 300	217,298 782,110	27 14	582	22	882	1.94

#### Table 11. Public and Private Police, 1994.

Table 11 continues...

#### Table 11. ... continues

Countries	Public police per 100,000 <sup>1</sup>	Total public police	Public police (rank)	Private Police per 100,000	Private Police (rank)	Total Police (public and private) (per 100,000) <sup>7</sup>	Ratio Private/ Public Police <sup>8</sup>
Standard Dev. 25% Quartile Median 75% Quartile	189 265 349 464			116 74 121 163		145 391 460 557	0.41 0.24 0.38 0.62
Mean EU mean Central and Eastern Europe mean	390 341 484			135 132 57		477 472 666 (1 case)	0.47 0.42 .22 (1 case)

<sup>1</sup> Data are Fifth UN Survey data for 1994 (question 1.1), except for Switzerland, in which case the data for 1990 were used. For Germany, Ireland, Italy, the Netherlands and Portugal no Fifth UN Survey data were available, and data were taken from the Dutch Ministry of Justice study on private security.

<sup>2</sup> This figure for Austria includes security guards, criminal and administrative posts, and the uniformed Bundesgendarmerie.

<sup>3</sup> Total police figures for Belgium include municipal police, the gendarmerie and the judicial police.

<sup>4</sup> The figures for France only include active personnel, i.e. the administrative staff is excluded, as is the staff of schools and youth performing their national service in the police force of the gendarmerie.

<sup>5</sup> The figure for Moldova does not include data about the number of employees at the Security Administration and the Investigatory Administration since employees of these subdivisions are not related to the police service.

<sup>6</sup> This figure includes the gendarme (guardia civil), the three corps of the autonomic regions and the 1,702 municipal corps. All police personnel are uniformed ("uniformado") in Spain. Although the state corps (the national police and the gendarme) serve as the judicial police, they are part of the same corporate structure as the police with security functions. Thus, these figures should not be evaluated separately.

<sup>7</sup> The total figures deviate occasionally from those in the HEUNI "Crime Guide" 2.0 because of adjustments in the figures for the public police.

<sup>8</sup> The private/public police ratio is based on only 20 countries (for which data were available both for the public and the private police). That is why the summary statistics can not be calculated by using the statistics provided in the first column - police per 100,000 - and the fourth column - private police per 100,000 - which are based on a larger number of cases.

figures conceal enormous variations in the concentration of police officers within countries (Bayley 1985). Finally, international data on police strength do not reflect differences in level of pay and training, and level of available technological support.

Policing also includes private security or private policing. The private security industry has grown tremendously over the past thirty years (Bayley 1994, p. 10). In the U.S., the United Kingdom and Canada, there are more private security agents than public police, and the rate of growth for the private sector is faster than for the public (Bayley 1994, p. 10). International

data on private security are limited. Table 11 presents data on private police collected by the Dutch Ministry of Justice. In addition, Table 11 presents data on public police personnel for Europe, the U.S. and Canada for 1994.

Table 11 shows that data on the number of police are available for 37 European countries, as well as for the United States and Canada. There are, of course, huge international variations in the size of police force (for example 1,812,344 in the Russian Federation, vs. 59 in Liechtenstein). Standardized rates are more meaningful. These are expressed as the number of police officers per 100,000 population. For example, in the Russian Federation there were 1,224 police officers per 100,000 people (or one police officer for every 82 people). The rate per 100,000 varies from this high of 1,224 for the Russian Federation to a low of 190 for Turkey. Countries in the 75% quartile tend to be countries in transition: Croatia, Kazakhstan, Latvia, Lithuania, and the Russian Federation. The high rates in these countries are not surprising in view of the fact that the governments of these nations historically have relied heavily on state security forces to maintain order. Northern Ireland, Cyprus, Italy, Malta, Spain and Portugal are the other countries with high rates. Three Nordic countries Denmark, Finland and Norway have relatively low rates of police per capita, but so do a few Central and Eastern European countries, such as Moldova and Romania. Canada, the Netherlands, Liechtenstein and Turkey also have a relative low per capita police presence.

The present analysis does not include trend data. However, it is a well-established fact that the number of police officers has increased in most countries over the last thirty years (see e.g. Reiner 1995). For the 39 countries which provided data, on the average, in 1994 there are 390 police officers per 100,000 people (or one police employee for every 256 people). The mean number of police officers for the Central and Eastern European countries is 484, compared to 341 for the EU countries. This observation is consistent with Bayley's analysis of 1965 police data which showed that the then-USSR and East Europe were the most heavily policed region (380 people per officer in 1965).

Data on private police are available for 22 countries. Table 11 shows that the countries with a higher GNP (such as England and Wales, Germany, Luxembourg, Sweden and the USA) tend to have a relatively high level of private police forces. On the other hand, the Czech Republic, Greece, Poland, and Turkey, less prosperous countries, appear to have a low level of private security. It should be noted that an exception to this correlation between prosperity and the number of private police is Finland, a prosperous country with a relatively low level of private security forces. The mean number of private police is 135 per 100,000. Since most of the private security data are collected in countries other than Central and Eastern Europe (the Czech Republic and Lithuania are exceptions), it is not useful to make comparisons between EU countries and countries in transition. It should be noted nonetheless that there is ample anecdotal evidence to suggest that in some Central and Eastern European countries (for which we lack systematic data) security is increasingly becoming a private (i.e., commercial) matter rather than a government responsibility.

For the 20 nations with data on both private and public police, it is possible to calculate the combined number of (public and private) police. The mean number of (public and private) police is 477 per 100,000. Countries with the highest combined security forces are the United States, Portugal, Spain, Lithuania, and Italy which all rank in the top or 75% quartile. Countries in the bottom or 25% quartile (i.e., below 391) are Finland, the Netherlands, Norway, Switzerland, and Turkey. It should be recalled that these rankings are influenced by the limited (and biased) availability of data (particularly on private policing). Typically, the number of private police is much smaller than the number of public police. For example, in Austria, the number of private police is one-fifth that of the public police. In the U.S., on the other hand, the number of private security workers is almost double that of the police. The data in Table 11 show no statistically significant relationship between the level of public police and the level of private police.

International differences in police strength (as measured by the number of public police personnel per 100,000) may be related to a variety of factors, such as the level of criminality. The motor vehicle theft index, the burglary index, and the petty crime index (see section 1.6) are not related to the number of police officers per capita in Europe and North America in a statistically significant manner, whereas the corruption index (r = .47, p = .005), the homicide index (r = .46, p = .004), and the serious violence index (r = .45, p = .004) are all related to the level of police presence. Thus, countries with a higher level of corruption, homicide, and serious violence tend to have a greater number of police officers per capita than countries with a lower level of corruption, homicide and serious violence.

The level of economic development is another commonly used correlate of police strength. There is a negative correlation between number of police and 1994 GNP (r = -.39, p = .02): countries with a higher GNP tend to have fewer police per capita. A related measure, the Human Development Index (1994) also shows a weak negative relationship with the number of police (r = -.28, p = .10): countries which score high on the HDI tend to have fewer police officers per capita than countries that are less developed. It should be noted, however, that these are simple bivariate correlations; more sophisticated multivariate analysis is needed in order to address the complex issue of the determinants of police capacity.

#### 4.2.2 Prosecutors

Prosecution of criminal cases may be initiated by the police (as in Denmark), by the Office of Public Prosecution (as in the United States and in England and Wales), or by the Procurator (as in France) (Reichel 1994, p. 223). In countries with a common law tradition, discussing public prosecution is fairly straightforward: one describes the office of public prosecutor (Reichel 1994, p. 224). Matters become more complicated in countries with a civil law tradition, where there is more emphasis on the investigative stage and the office of the Procurator. Typically, prosecution in these countries involves three agents: the judicial police, procurators (prosecutors), and examining magistrates (judges) (Reichel 1994, p. 225). It is against this background that information provided on prosecution through the Fifth United Nations Survey must be interpreted.

According to the UN survey instrument, "'Prosecutor' refers to a government official whose duty is to initiate and maintain criminal proceedings on behalf of the state against persons accused of committing a criminal offence. Countries differ in whether a prosecutor is a member of a separate agency, or a member of the police or judiciary. Please indicate the title of the agency in your country under which the prosecutor functions. If more than one criminal justice system operates in your country, for example federal/provincial systems or civilian/martial systems, please provide separate information about prosecutorial functions in each system" (p. 18). The total number of prosecutors, by gender, as well as whether the prosecutors are full-time or part-time (and again by gender) was also asked.

Not surprisingly, the mean number of prosecutors per 100,000 (9) is much smaller than the mean number of police (390). Also, the standard deviation (4) is fairly small; the difference between the minimum (2 for Austria) and the maximum (19 for the Russian Federation) is fairly modest, much more so than the huge variations for police per 100,000 (for example, 1,225 for the Russian Federation vs. 190 for Turkey). Countries in the top or 75% quartile are Belarus, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, and the Russian Federation. Countries in the bottom or 25% quartile are Austria, Andorra, England and Wales, Greece, the former Yugoslav Republic of Macedonia, the Netherlands, Scotland, Spain, and Turkey. In Central and Eastern Europe there are, on the average, almost twice as many prosecutors per 100,000 in population (11) as there are in the EU countries (6).

Notes of Table 12.

<sup>&</sup>lt;sup>1</sup> Data are Fifth UN Survey data for 1994 (question 6.1), except for the United States, for which the data for 1990 were used.

<sup>&</sup>lt;sup>2</sup> The data on total prosecutors do not include the district prosecutors (the "Bezirkanwalte").

<sup>&</sup>lt;sup>3</sup> The national judiciary system in the former Yugoslav Republic of Macedonia comprises only professional (full-time) prosecutors.

#### Table 12. Prosecutors, 1994.

Countries	Prosecutors per 100,000 <sup>1</sup>	Total Prosecutors	Prosecutors (rank)	Prosecutors (Quartile)
Andorra Armenia Austria Azerbaijan Belarus Belgium Bulgaria Croatia Cyprus Czech Rep. Denmark England/W Estonia Finland Georgia Germany Greece Hungary Kazakhstan Kyrgyzstan Latvia Liechtenstein Lithuania Luxemburg FYR Macedonia Moldova Netherlands Portugal Russian Fed. Scotland Slovakia Slovenia Spain Sweden Turkey USA	5 9 2 16 14 8 7 7 10 8 7 4 8 7 4 8 7 7 4 11 19 12 16 10 16 10 16 7 6 11 3 10 19 5 10 7 3 8 4 9	$\begin{array}{c} 3\\ 327\\ 200^2\\ 1,232\\ 1,495\\ 774\\ 589\\ 314\\ 71\\ 843\\ 386\\ 2,090\\ 123\\ 334\\ 384\\ 5,375\\ 392\\ 1,153\\ 3,167\\ 539\\ 398\\ 3\\ 388\\ 27\\ 1,153\\ 3,167\\ 539\\ 398\\ 3\\ 588\\ 27\\ 119^3\\ 467\\ 417\\ 1,015\\ 28,514\\ 249\\ 560\\ 142\\ 1,284\\ 717\\ 2,356\\ 22\\ 300\end{array}$	$\begin{array}{c} 7\\ 22\\ 1\\ 34\\ 31\\ 18\\ 14\\ 13\\ 24\\ 19\\ 17\\ 6\\ 21\\ 10\\ 15\\ 11\\ 4\\ 29\\ 35\\ 30\\ 32\\ 25\\ 33\\ 12\\ 9\\ 28\\ 2\\ 25\\ 33\\ 12\\ 9\\ 28\\ 2\\ 25\\ 33\\ 12\\ 9\\ 28\\ 2\\ 25\\ 33\\ 12\\ 9\\ 28\\ 2\\ 25\\ 33\\ 12\\ 9\\ 28\\ 2\\ 26\\ 36\\ 8\\ 27\\ 16\\ 3\\ 20\\ 5\\ 23\\ \end{array}$	1 3 1 4 4 2 2 2 2 3 3 2 2 2 1 3 2 2 2 2 1 3 2 2 2 2 2 1 3 2 2 2 2 2 2 2 2 2 2 2 2 2
Standard Dev. 25% Quartile Median 75% Quartile	4 6 8 11			
Mean EU mean Central and Eastern Europe mean	9 6 11			

#### 4.2.3 Judges

In the section on courts, the UN survey instrument defines judges and magistrates as follows: "Judges and magistrates refers to both full and part-time officials authorized to hear civil, criminal and other cases, including appeal courts, and make dispositions in a court of law. Please include also associate judges and magistrates, who may be authorized as above, within this category. Lay judges and magistrates refer to persons performing the same functions as the professional officials but who do not consider themselves, and are not normally considered by others, as career members of the judiciary" (p. 24). The number of professional judges (male/female), full-time and part-time, lay judges (male/ female), and full-time and part-time was also asked. In the responses, information on lay judges is frequently missing (with no indication of whether this means that the country does not use lay judges, or whether data are unavailable). For this reason, Table 13 presents information on professional judges only.

There are large variations in the number of professional judges per capita, from a low of 2 (England and Wales), to a high of 70 (Switzerland), with a mean of 14 and a standard deviation of 12. The mean number of professional judges in EU countries (13) is very close to the mean number of professional judges in Central and Eastern Europe (12). Countries with a relatively large number of judges per capita are Croatia, the Czech Republic, Germany, Hungary, Liechtenstein, Luxembourg, Slovakia, Slovenia), and Switzerland. Countries with relatively few judges per capita are Armenia, England and Wales, Georgia, Kyrgyzstan, Moldova, Northern Ireland, Scotland, and Sweden.

Notes of Table 13.

<sup>&</sup>lt;sup>1</sup> Data are Fifth UN Survey data for 1994 (question 13.1), except for the Netherlands and Switzerland, for which 1990 data are used.

<sup>&</sup>lt;sup>2</sup> For England and Wales, figures do not include masters or members of Tribunals (neither category deals with crime), nor do the figures include acting stipendiary magistrates.

<sup>&</sup>lt;sup>3</sup> For Finland, data includes only the professional judges. The number of lay judges has doubled from 1990 to 1994 because of the reform of first instance courts implemented in 1993. As a result of the reform, two different types of court were unified and a new system of lay judges (encompassing an additional 1.8 million citizens in jurisdictions with lay judges) was established. The number of part-time lay judges is 2100 in 1990 and 4075 in 1994.

<sup>&</sup>lt;sup>4</sup> These data are for 1995.

<sup>&</sup>lt;sup>5</sup> The judiciary system in the former Yugoslav Republic of Macedonia comprises only professional (full-time) judges and magistrates. The latter form (magistrates) are municipal. There are three levels: municipal, regional and supreme.

<sup>&</sup>lt;sup>6</sup> Scotland: The number of professional judges or magistrates includes judges, magistrates, sheriffs and stipendiary magistrates.

<sup>&</sup>lt;sup>7</sup> United States: includes judges from federal and state courts, but not from lower courts, e.g. municipal and police courts.
Countries	Judges per 100,000 <sup>1</sup>	Total Judges	Judges (rank)	Judges (Quartile)
Armenia Austria Belarus Belgium Bulgaria Croatia Croatia Cyprus Czech Rep. England/W Estonia Finland Georgia Germany Greece Hungary Kazakhstan Kyrgyzstan Latvia Liechtenstein Lithuania Luxemburg FYR Macedonia Malta Moldova Netherlands N. Ireland Norway Portugal Russian Fed. Scotland Slovakia Slovenia Spain Sweden Switzerland Turkey USA	$\begin{array}{c} 3\\ 20\\ 7\\ 12\\ 12\\ 23\\ 9\\ 20\\ 2\\ 12\\ 18\\ 5\\ 27\\ 13\\ 21\\ 7\\ 5\\ 7\\ 26\\ 7\\ 27\\ 19\\ 8\\ 6\\ 8\\ 3\\ 10\\ 13\\ 9\\ 3\\ 21\\ 26\\ 8\\ 4\\ 70\\ 9\\ 4\end{array}$	$\begin{array}{c} 95\\ 1,589\\ 679\\ 1,197\\ 989\\ 1,034\\ 67\\ 2,059\\ 985^2\\ 185\\ 929^3\\ 249\\ 22,134^4\\ 1,366\\ 2,198\\ 1,142\\ 240\\ 186\\ 8\\ 256\\ 107\\ 399^5\\ 29\\ 242\\ 1,204\\ 44\\ 422\\ 1,248\\ 12,577\\ 137^6\\ 1,118\\ 510\\ 3,063\\ 390\\ 4,296\\ 5,359\\ 11,235^7\end{array}$	$\begin{array}{c} 2\\ 28\\ 10\\ 22\\ 21\\ 32\\ 19\\ 29\\ 1\\ 23\\ 26\\ 7\\ 36\\ 25\\ 31\\ 11\\ 8\\ 13\\ 33\\ 12\\ 35\\ 27\\ 15\\ 9\\ 16\\ 4\\ 20\\ 24\\ 17\\ 3\\ 30\\ 34\\ 14\\ 6\\ 37\\ 18\\ 5\end{array}$	$     \begin{array}{c}       1 \\       3 \\       2 \\       3 \\       3 \\       4 \\       3 \\       4 \\       1 \\       3 \\       4 \\       2 \\       1 \\       2 \\       4 \\       2 \\       1 \\       2 \\       1 \\       3 \\       2 \\       1 \\       2 \\       1 \\       3 \\       2 \\       1 \\       3 \\       2 \\       1 \\       3 \\       2 \\       1 \\       4 \\       2 \\       1 \\       1 \\       3 \\       3 \\       3 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       4 \\       2 \\       1 \\       1 \\       3 \\       3 \\       3 \\       2 \\       1 \\       3 \\       3 \\       1 \\       3 \\       3 \\       2 \\       1 \\       3 \\       3 \\       3 \\       2 \\       1 \\       3 \\       3 \\       3 \\       2 \\       1 \\       3 \\     $
Standard Dev. 25% Quartile Median 75% Quartile	12 6 9			
Mean EU Mean Central and Eastern	14 13 12			

## 4.2.4 Correctional staff

The UN survey instrument asks for data on the number of persons (at the national level) defined as "staff of adult prisons (penal and correctional institutions), by sex and function" and the same for juvenile prisons. The total number of staff is broken down into management staff, treatment staff, custodial staff and "other". In Table 14, data on the total (combined) number of staff are presented. Several countries either did not provide data on their juvenile correctional staff, or indicated that there was no separate juvenile correctional system. In those cases, total prison staff was assumed to be equal to adult prison staff; in the other cases, the total prison staff was a simple summation of the adult and juvenile staff.

An additional measure of the investment into the prison system is the inmate/staff ratio: countries where the inmate/staff ratio is low (close to 1/1) invest more resources in the prison system than do countries where the inmate/staff ratio is high. The data for the inmate/staff ratio were taken from a report prepared for HEUNI (Walmsley 1997), with additional calculations based on the Fifth United Nations Survey.

Table 14 shows that the countries in the top or 75% quartile of prison staff per 100,000 are Canada and the United States - the two North American countries - and the Czech Republic, Estonia, Latvia, Lithuania, the Russian Federation - all Central and Eastern European countries - and Scotland and Northern Ireland. In the bottom or 25% quartile of prison staff per capita are Armenia, Belarus, Bulgaria, Cyprus, Georgia, Germany, Greece, the former Yugoslav Republic of Macedonia and Malta. In view of the rather large international variations, it is not surprising that the EU mean (53) is only slightly below the Central and Eastern Europe mean (67).

With regard to the inmate/staff ratio, Belarus, Bulgaria, Georgia, Kyrgyzstan, Latvia, Lithuania, Moldova, Romania, the Russian Federation, Ukraine and the U.S. have a relatively high inmate/staff ratio (i.e., in the top quartile). With the exception of the U.S., these are all Eastern and Central European countries. In the EU countries, there is an average of 1.7 inmates per correctional employee; in Central and Eastern European countries, the average number of inmates per prison employee is double that in the EU countries (3.6). Cyprus, Denmark, Finland, Italy, Liechtenstein, the Netherlands, Northern Ireland, Norway, Slovenia and Sweden rank in the bottom or 25% quartile of the inmate/staff ratio (1.25). In these countries, there is roughly one (or more) prison employee for each inmate.

It should be noted that the data do not show any correlation between number of prison staff per capita and the inmate/staff ratio. However, there is a statistically significant relation between prison staff per capita and two property crime indices: the burglary index (r = .42, p = .02), the petty theft index (r = .58, p = .001) and the motor vehicle theft index (r = .33, p = .05). Also, the size of the prison staff is positively correlated to the homicide index (r = .38, p = .02), the serious violence index (r = .38, p = .02) and the violence

Abania         -         -         1.4         17         2           Armenia         28         1,064         3         1         -         -           Austria         44         3,514         14         2         2.1         26         3           Belarus         35         3,611         7         13,7         45         4           Belgiam         52         5,243         19         3         1.4         17         2           Bosnia         -         -         1.3         14         2         2         15         19         2           Croatia         49         2,185         17         2         1.4         17         2           Coprus         29         216         4         1         10         8         1           Czech Rep.         79         8,110         29         4         2.5         30         3           Denmark         74.8         3,891         28         1.0         8         1         2           Finland         53         2,681         21         3         1.1         10         1           Freigland/W         75<	Countries	Staff per 100,000 <sup>1</sup>	Total Staff	Staff (rank)	Staff (Quartile)	lhmate/ Staff Ratio <sup>2</sup>	lhmate/ Staff Rank	lhmate/ Staff (Quartile)
Normania281,0643112Austria443,5141422.12.63Austria443,5141422.12.63Belarus353,6117113,7454Belgium525,2431931.4172Bosnia1.3142Croatia492,1851721.4172Croatia492,1851721.4172Croatia492,1851721.4172Cyprus29216411.081Czech Rep.798,1102942.5303Denmark74.83,84352731.3142England/W7538,4352731.3142Estonia1762,6423641.7212Finland532,6812131.1101France2.4293Geerogia372,009813.8374Lealand-1.21112.9323Hungary646,5682632.12.63Lealand-1.21112.7313Kyrgyztan	Albania					14	17	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Armenia	28	1 064	3	1			-
Lockin171314172544Belarus52 $5,243$ 1931.4172Bulgaria34 $2,840$ 613.1354Canada92.7.327,1033241.5192Croatia49 $2,185$ 1721.4172Cyprus29216411.081Czech Rep.798,1102942.5303Demark74.8.43,8912831.081England/W7538,4352731.3142Estonia1762,6423641.7212Finland532,26812131.1101France2.42933343.6Georgia372,009813.8374Germany3730,078912.3273Greece181,889112.93231Italy121111111Kyrgyzstan53.9.52,4772235.6444Liechtenstein55172331.191Liedard0.83119112Malta331205	Austria	44	3 514	14	2	21	26	3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Relarus	35	3 611	7	1	13.7	45	4
BosniaImage: Construction of the sector of the	Belgium	52	5 243	19	3	14	17	2
Bulgaria         34         2,840         6         1         3.1         35         4           Canada         92.7 <sup>3</sup> 27,103         32         4         1.5         19         2           Croatia         49         2,185         17         2         1.4         17         2           Cyprus         29         216         4         1         1.0         8         1           Czech Rep.         79         8,110         29         4         2.5         30         3           Denmark         74.8 <sup>4</sup> 3,891         28         3         1.0         8         1           England/W         75         38,435         27         3         1.3         14         2           Estonia         176         2,642         36         4         1.7         21         2           Finland         53         2,681         21         3         1.3         14         2           Geroria         37         2,009         8         1         3.8         37         4           Geroria         1.89         1         1.2.9         32         3         1         12 <td>Bosnia</td> <td>02</td> <td>0,210</td> <td>10</td> <td>Ŭ</td> <td>1.3</td> <td>14</td> <td>2</td>	Bosnia	02	0,210	10	Ŭ	1.3	14	2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Bulgaria	34	2.840	6	1	3.1	35	4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Canada	92.7 <sup>3</sup>	27,103	32	4	1.5	19	2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Croatia	49	2,185	17	2	1.4	17	2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Cvprus	29	216	4	1	1.0	8	1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Czech Rep.	79	8.110	29	4	2.5	30	3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Denmark	74.8 <sup>4</sup>	3.891	28	3	1.0	8	1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	England/W	75	38,435	27	3	1.3	14	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Estonia	176	2,642	36	4	1.7	21	2
France         2.009         8         1         3.8         3.7         4           Gerongia         37         2.009         8         1         3.8         3.7         4           Germany         37         30,078         9         1         2.3         27         3           Greece         18         1,889         1         1         2.9         32         3           Iungary         64         6,568         26         3         2.1         26         3           Iceland          1.3         14         2         11         1           Kyrgyzstan         53.9 <sup>5</sup> 2,477         22         3         5.6         44         4           Latvia         80         2,030         30         4         5.1         42         4           Lichtenstein         55         17         23         3         1.1         9         1           Lithuania         107         3,991         33         4         3.5         36         4           Luxemburg         46         185         16         2         2.4         29         3           FYR	Finland	53	2,681	21	3	1.1	10	1
Georgia         37         2,009         8         1         3.8         37         4           Germany         37         30,078         9         1         2.3         27         3           Greece         18         1,889         1         1         2.9         32         3           Hungary         64         6,568         26         3         2.1         26         3           Iceland          1.3         14         2         13         14         2           Ireland          0.8         3         1         1         12         11         1           Kyryzstan         53.9 <sup>5</sup> 2,477         22         3         5.6         44         4           Latvia         80         2,030         30         4         5.1         42         4           Liechtenstein         55         17         23         3         1.1         9         1           Likthuania         107         3,991         33         4         3.5         36         4           Luxemburg         46         185         16         2         2.4         29 <t< td=""><td>France</td><td></td><td></td><td></td><td></td><td>2.4</td><td>29</td><td>3</td></t<>	France					2.4	29	3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Georgia	37	2,009	8	1	3.8	37	4
Greece         18         1,889         1         1         2.9         32         3           Hungary         64         6,568         26         3         2.1         26         3         1.3         14         2           Ireland         0.8         3         1         1.2         11         1         12         11         1           Kyrgyzstan         53.9 <sup>5</sup> 2,477         22         3         5.6         44         4           Latvia         80         2,030         30         4         5.1         42         4           Lichtenstein         55         17         23         3         1.1         9         1           Lithuania         107         3,991         33         4         3.5         36         4           Luxemburg         46         185         16         2         2.4         29         3           FYR         23         500         2         1         2.7         31         3           Malta         33         120         5         1         1.7         21         2           Moldova         58         2,523         24	Germany	37	30,078	9	1	2.3	27	3
Hungary leeland         64         6,568         26         3         2.1         26         3           Ireland         0.8         3         1         1.3         14         2           Italy         0.8         3         1         1.2         11         1           Kyrgyzstan         53.9         2,477         22         3         5.6         44         4           Latvia         80         2,030         30         4         5.1         42         4           Lichuania         107         3,991         33         4         3.5         36         4           Luxemburg         46         185         16         2         2.4         29         3           FYR         23         500         2         1         2.7         31         3           Malta         33         120         5         1         1.7         21         2           Moldova         58         2,523         24         3         4.2         40         4           Netherlands         61         9,446         25         3         0.9         5         1           Norway	Greece	18	1,889	1	1	2.9	32	3
Iceland         1.3         14         2           Italy         0.8         3         1           Kyrgyzstan         53.9 <sup>5</sup> 2,477         22         3         5.6         44         4           Latvia         80         2,030         30         4         5.1         42         4           Liechtenstein         55         17         23         3         1.1         9         1           Lithuania         107         3,991         33         4         3.5         36         4           Luxemburg         46         185         16         2         2.4         29         3           FYR         23         500         2         1         2.7         31         3           Malta         33         120         5         1         1.7         21         2           Moldova         58         2,523         24         3         4.2         40         4           Netherlands         61         9,446         25         3         0.9         5         1           Norway         53         2,281         20         3         0.9         5	Hungary	64	6,568	26	3	2.1	26	3
Ireland       0.8       3       1         Italy       1.2       11       1         Kyrgyzstan       53.9 <sup>5</sup> 2,477       22       3       5.6       44       4         Latvia       80       2,030       30       4       5.1       42       4         Liechtenstein       55       17       23       3       1.1       9       1         Lithuania       107       3,991       33       4       3.5       36       4         Luxemburg       46       185       16       2       2.4       29       3         FYR       23       500       2       1       2.7       31       3         Matta       33       120       5       1       1.7       21       2         Moldova       58       2,523       24       3       4.2       40       4         Netherlands       61       9,446       25       3       0.9       5       1         Norway       53       2,281       20       3       0.9       5       1         Poland       2       3.0       34       3       3       4 <t< td=""><td>Iceland</td><td></td><td></td><td></td><td></td><td>1.3</td><td>14</td><td>2</td></t<>	Iceland					1.3	14	2
Italy1.2111Kyrgyzstan $53.9^5$ $2,477$ $22$ $3$ $5.6$ $44$ $4$ Latvia $80$ $2,030$ $30$ $4$ $5.1$ $42$ $4$ Liethenstein $55$ $17$ $23$ $3$ $1.1$ $9$ $1$ Lithuania $107$ $3,991$ $33$ $4$ $3.5$ $36$ $4$ Luxemburg $46$ $185$ $16$ $2$ $2.4$ $29$ $3$ FYR $23$ $500$ $2$ $1$ $2.7$ $31$ $3$ Malta $33$ $120$ $5$ $1$ $1.7$ $21$ $2$ Moldova $58$ $2,523$ $24$ $3$ $4.2$ $40$ $4$ Netherlands $61$ $9,446$ $25$ $3$ $0.9$ $5$ $1$ N. Ireland $193$ $3,153$ $37$ $4$ $0.5$ $1$ $1$ Norway $53$ $2,281$ $20$ $3$ $0.9$ $5$ $1$ Poland $ 3.0$ $34$ $3$ $3$ $3$ $3$ Romania $ 5.5$ $43$ $4$ $4$ $4.3$ $41$ $4$ Scotland $86$ $4,426$ $31$ $4$ $1.3$ $14$ $2$ Slovekia $ 1.8$ $22$ $2$ $2$ $2$ $2$ $2$ $3$ Witzerland $39$ $2,734$ $10$ $2$ $2.0$ $24$ $3$ $3$ Ukraine $46$ $23,720$	Ireland					0.8	3	1
Kyrgyzstan $53.9^3$ $2,477$ $22$ $3$ $5.6$ $44$ $4$ Latvia $80$ $2,030$ $30$ $4$ $5.1$ $42$ $4$ Liehtenstein $55$ $17$ $23$ $3$ $1.1$ $9$ $1$ Lithuania $107$ $3,991$ $33$ $4$ $3.5$ $36$ $4$ Luxemburg $46$ $185$ $16$ $2$ $2.4$ $29$ $3$ FYR $23$ $500$ $2$ $1$ $2.7$ $31$ $3$ Malta $33$ $120$ $5$ $1$ $1.7$ $21$ $2$ Moldova $58$ $2,523$ $24$ $3$ $4.2$ $40$ $4$ Netherlands $61$ $9,446$ $25$ $3$ $0.9$ $5$ $1$ Norway $53$ $2,281$ $20$ $3$ $0.9$ $5$ $1$ Poland $ 3.0$ $34$ $3$ $3$ Portugal $42$ $4,126$ $12$ $2$ $3.0$ $34$ $3$ Romania $ 1.8$ $22$ $2$ $2$ $2$ $2$ $2$ Slovakia $ 1.8$ $22$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ Slovakia $ 1.8$ $2$ $0.9$ $5$ $1$ $3$ $4$ $4$ $4$ $4$ $4$ Luxenburg $40$ $24,378$ $11$ $2$ $1.9$ $23$ $3$ $3$ $4$ Luched $46$ $23,720$ <td>Italy</td> <td>F</td> <td></td> <td></td> <td></td> <td>1.2</td> <td>11</td> <td>  1  </td>	Italy	F				1.2	11	1
Latvia         80         2,030         30         4         5.1         42         4           Liechtenstein         55         17         23         3         1.1         9         1           Lithuania         107         3,991         33         4         3.5         36         4           Luxemburg         46         185         16         2         2.4         29         3           FYR         23         500         2         1         2.7         31         3           Malta         33         120         5         1         1.7         21         2           Moldova         58         2,523         24         3         4.2         40         4           Netherlands         61         9,446         25         3         0.9         5         1           N. Ireland         193         3,153         37         4         0.5         1         1           Norway         53         2,281         20         3         0.9         5         1           Poland	Kyrgyzstan	53.9 <sup>5</sup>	2,477	22	3	5.6	44	4
Liechtenstein         55         17         23         3         1.1         9         1           Lithuania         107         3,991         33         4         3.5         36         4           Luxemburg         46         185         16         2         2.4         29         3           FYR         23         500         2         1         2.7         31         3           Mata         33         120         5         1         1.7         21         2           Moldova         58         2,523         24         3         4.2         40         4           Netherlands         61         9,446         25         3         0.9         5         1           N. Ireland         193         3,153         37         4         0.5         1         1           Norway         53         2,281         20         3         0.9         5         1           Poland	Latvia	80	2,030	30	4	5.1	42	4
Lithuania107 $3,991$ $33$ 4 $3.5$ $36$ 4Luxemburg46185162 $2.4$ $29$ 3FYR23 $500$ 21 $2.7$ $31$ 3Mata3312051 $1.7$ $21$ 2Moldova $58$ $2,523$ $24$ 3 $4.2$ $40$ $4$ Netherlands61 $9,446$ $25$ 3 $0.9$ $5$ $1$ N. Ireland193 $3,153$ $37$ $4$ $0.5$ $1$ $1$ Norway $53$ $2,281$ $20$ $3$ $0.9$ $5$ $1$ Poland $3.0$ $34$ $3$ $3$ $3$ $3$ $3$ $3$ Portugal $42$ $4,126$ $12$ $2$ $3.0$ $34$ $3$ Romania $5.5$ $43$ $4$ $4.3$ $41$ $4$ Scotland $86$ $4,426$ $31$ $4$ $1.3$ $14$ $2$ Slovakia $1.8$ $22$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $3$ Sweden $52$ $4,521$ $18$ $2$ $0.9$ $5$ $1$ $3$ $3$ $1$ Switzerland $39$ $2,734$ $10$ $2$ $2.0$ $24$ $3$ $3$ $4$ Ukraine $46$ $23,720$ $15$ $2$ $3.9$ $38$ $4$	Liechtenstein	55	17	23	3	1.1	9	1
Luxemburg46185162 $2.4$ $29$ 3FYR2350021 $2.7$ $31$ 3Malta3312051 $1.7$ $21$ 2Moldova58 $2,523$ $24$ 3 $4.2$ $40$ $4$ Netherlands61 $9,446$ $25$ 3 $0.9$ $5$ $1$ N. Ireland193 $3,153$ $37$ $4$ $0.5$ $1$ $1$ Norway $53$ $2,281$ $20$ $3$ $0.9$ $5$ $1$ Poland $3.0$ $34$ $3$ $3$ $3.0$ $34$ $3$ Portugal $42$ $4,126$ $12$ $2$ $3.0$ $34$ $3$ Romania $5.5$ $43$ $4$ $4$ $4.3$ $41$ $4$ Scotland $86$ $4,426$ $31$ $4$ $1.3$ $14$ $2$ Slovakia $1.8$ $22$ $2$ $2$ $2.0$ $24$ $3$ Sweden $52$ $4,521$ $18$ $2$ $0.9$ $5$ $1$ Switzerland $39$ $2,734$ $10$ $2$ $2.0$ $24$ $3$ Ukraine $46$ $23,720$ $15$ $2$ $3.9$ $38$ $4$	Lithuania	107	3,991	33	4	3.5	36	4
FYR23 $500$ 21 $2.7$ $31$ $3$ Malta33 $120$ $5$ $1$ $1.7$ $21$ $2$ Moldova $58$ $2,523$ $24$ $3$ $4.2$ $40$ $4$ Netherlands $61$ $9,446$ $25$ $3$ $0.9$ $5$ $1$ N. Ireland $193$ $3,153$ $37$ $4$ $0.5$ $1$ $1$ Norway $53$ $2,281$ $20$ $3$ $0.9$ $5$ $1$ Poland $3.0$ $34$ $3$ $3$ Portugal $42$ $4,126$ $12$ $2$ $3.0$ $34$ $3$ Romania $5.5$ $43$ $4$ $4$ $4$ $4$ $4$ Scotland $86$ $4,426$ $31$ $4$ $1.3$ $14$ $2$ Slovakia $1.8$ $22$ $2$ $2$ $2.0$ $24$ $3$ Switzerland $39$ $2,734$ $10$ $2$ $2.0$ $24$ $3$ Ukraine $46$ $23,720$ $15$ $2$ $3.9$ $38$ $4$	Luxemburg	46	185	16	2	2.4	29	3
Maita3312051 $1.7$ $21$ 2Moldova58 $2,523$ $24$ 3 $4.2$ $40$ $4$ Netherlands61 $9,446$ $25$ 3 $0.9$ $5$ $1$ N. Ireland193 $3,153$ $37$ $4$ $0.5$ $1$ $1$ Norway $53$ $2,281$ $20$ $3$ $0.9$ $5$ $1$ Poland $3.0$ $34$ $3$ Portugal $42$ $4,126$ $12$ $2$ $3.0$ $34$ $3$ Romania $5.5$ $43$ $4$ $4$ $4.3$ $41$ $4$ Scotland $86$ $4,426$ $31$ $4$ $1.3$ $14$ $2$ Slovakia $1.8$ $22$ $2$ $2$ $2.0$ $24$ $3$ Sweden $52$ $4,521$ $18$ $2$ $0.9$ $5$ $1$ Switzerland $39$ $2,734$ $10$ $2$ $2.0$ $24$ $3$ Ukraine $46$ $23,720$ $15$ $2$ $3.9$ $38$ $4$	FYR	23	500	2		2.7	31	3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Malta	33	120	5	1	1./	21	2
Netherlands619,446253 $0.9$ 51N. Ireland1933,153374 $0.5$ 11Norway532,281203 $0.9$ 51Poland3.0343Portugal424,1261223.0343Romania5.5434Russian Fed.154228,4953544.3414Scotland864,4263141.3142Slovakia1.8222221320.831Sweden524,5211820.951313Switzerland392,7341022.024331Ukraine4623,7201523.9384440394	Noldova	58	2,523	24	3	4.2	40	4
N. Ireland1933,153374 $0.5$ 11Norway532,281203 $0.9$ 51Poland3.0343Portugal424,126122 $3.0$ 343Romania5.5434Russian Fed.154228,4953544.3414Scotland864,4263141.3142Slovakia1.82222Slovenia42822132 $0.8$ 31Sweden524,521182 $0.9$ 51Switzerland392,7341022.0243Ukraine4623,720152 $3.9$ $38$ 4United States140 $365.755$ $34$ 440 $39$ 4	Netherlands	10	9,446	25	3	0.9	5	
Norway532,201203 $0.9$ 51Poland3.0343Portugal424,1261223.0343Romania5.5434Russian Fed.154228,4953544.3414Scotland864,4263141.3142Slovakia1.82222Slovenia428221320.831Sweden524,5211820.951Switzerland392,7341022.0243Turkey4024,3781121.92334Ukraine4623,7201523.9384	N. Ireland	193	3,153	3/	4	0.5		
Portugal       42       4,126       12       2       3.0       34       3         Romania       5.5       43       4         Russian Fed.       154       228,495       35       4       4.3       41       4         Scotland       86       4,426       31       4       1.3       14       2         Slovakia       1.8       22       2       2       3       1.8       22       2         Slovenia       42       822       13       2       0.8       3       1         Sweden       52       4,521       18       2       0.9       5       1         Switzerland       39       2,734       10       2       2.0       24       3         Ukraine       46       23,720       15       2       3.9       38       4	Norway	53	2,281	20	3	0.9	24	
Portugal $42$ $4,120$ $12$ $2$ $3.0$ $34$ $3$ Romania5.5 $43$ $4$ Russian Fed. $154$ $228,495$ $35$ $4$ $4.3$ $41$ $4$ Scotland $86$ $4,426$ $31$ $4$ $1.3$ $14$ $2$ Slovakia1.8 $22$ $2$ Slovenia $42$ $822$ $13$ $2$ $0.8$ $3$ $1$ Sweden $52$ $4,521$ $18$ $2$ $0.9$ $5$ $1$ Switzerland $39$ $2,734$ $10$ $2$ $2.0$ $24$ $3$ Turkey $40$ $24,378$ $11$ $2$ $1.9$ $23$ $3$ Ukraine $46$ $23,720$ $15$ $2$ $3.9$ $38$ $4$	Polaliu	40	4 106	10	0	3.0	34	3
Russian Fed.       154       228,495       35       4       4.3       41       4         Scotland       86       4,426       31       4       1.3       14       2         Slovakia       1.8       22       2       2       2       2       2       2         Slovakia       1.8       22       2       2       2       2       3       1         Sweden       52       4,521       18       2       0.9       5       1         Switzerland       39       2,734       10       2       2.0       24       3         Turkey       40       24,378       11       2       1.9       23       3         Ukraine       46       23,720       15       2       3.9       38       4	Portugal	42	4,120	12	2	3.U 5.5	04 12	3
Russian red.134228,4553544.3414Scotland $86$ $4,426$ $31$ $4$ $1.3$ $14$ $2$ Slovakia $1.8$ $22$ $2$ Slovenia $42$ $822$ $13$ $2$ $0.8$ $3$ $1$ Sweden $52$ $4,521$ $18$ $2$ $0.9$ $5$ $1$ Switzerland $39$ $2,734$ $10$ $2$ $2.0$ $24$ $3$ Turkey $40$ $24,378$ $11$ $2$ $1.9$ $23$ $3$ Ukraine $46$ $23,720$ $15$ $2$ $3.9$ $38$ $4$	Duccian Fod	154	228 105	25	1	0.0 1 0	43	4
Slovakia       1.8       22       2         Slovakia       1.8       22       2         Slovakia       4       1.8       22       2         Slovakia       4       1.8       22       2         Slovakia       4       4.521       13       2       0.8       3       1         Sweden       52       4,521       18       2       0.9       5       1         Switzerland       39       2,734       10       2       2.0       24       3         Turkey       40       24,378       11       2       1.9       23       3         Ukraine       46       23,720       15       2       3.9       38       4         United States       140       365,755       34       4       4.0       39       4	Scotland	86	220,495	21	4	4.0	41 1/	4
Slovenia       42       822       13       2       0.8       3       1         Sweden       52       4,521       18       2       0.9       5       1         Switzerland       39       2,734       10       2       2.0       24       3         Turkey       40       24,378       11       2       1.9       23       3         Ukraine       46       23,720       15       2       3.9       38       4	Slovakia	00	4,420	51	4	1.0	14 00	2
Sweden     52     4,521     18     2     0.9     5     1       Switzerland     39     2,734     10     2     2.0     24     3       Turkey     40     24,378     11     2     1.9     23     3       Ukraine     46     23,720     15     2     3.9     38     4       United States     140     365,755     34     4     4.0     39     4	Slovenia	42	822	13	2	0.8	22	
Switzerland         39         2,734         10         2         2.0         24         3           Turkey         40         24,378         11         2         1.9         23         3           Ukraine         46         23,720         15         2         3.9         38         4           United States         140         365.755         34         4         4.0         39         4	Sweden	42 50	A 591	18	2	0.0 N Q	5	
Turkey         40         24,378         11         2         1.9         23         3           Ukraine         46         23,720         15         2         3.9         38         4           United States         140         365.755         34         4         4.0         39         4	Switzerland	30	2 734	10	2	20	24	3
Ukraine         46         23,720         15         2         3.9         38         4           United States         140         365,755         34         4         40         39         4	Turkey	40	24,378	11	2	1 9	23	3
United States 140 365,755 34 4 40 39 4	Ukraine	46	23,720	15	2	39	38	4
	United States	140	365.755	34	4	4.0	39	4

# Table 14. Correctional Staff, 1994.

Table 14 continues...

Table 14. ... continues

Countries	Staff per 100,000 <sup>1</sup>	Total Staff	Staff (rank)	Staff (Quartile)	Ihmate/ Staff Ratio <sup>2</sup>	lhmate/ Staff Rank	lhmate/ Staff (Quartile)
Standard Dev. 25% Quartile Median 75% Quartile	41 38 52 77				2.2 1.3 1.9 3.1		
Mean EU mean Central and Eastern Europe mean	64 53 67				2.5 1.7 3.6		

<sup>1</sup> Data are Fifth UN Survey data for 1994 (question 22.1 and 23.1). For Switzerland, 1990 was used. For the United States, no 1994 UN data were available, and the data were taken from the 1995 Sourcebook of Criminal Justice Statistics (p. 85).

<sup>2</sup> Most of the data are taken from Walmsley 1997. If the report did not include this type of data for a country, the inmate/staff ratio was calculated by dividing the total number of persons held in incarceration on a given day (question 16.1) by the total number of correctional personnel (questions 22.1 and 23.1, Fifth UN Survey, 1994).

<sup>3</sup> For Canada, the 1994 data is for 1994-1995 and includes a community corrections staff of 3610 and 1445 full time equivalent positions in one province (British Columbia).

<sup>4</sup> For Denmark, this figure includes staff of all prisons, including the Department of Prisons and Probation and local probation.

<sup>5</sup> For Kyrgyzstan, these data do not include the staff of the internal protection section.

against women index (r = .59, p = .000). There is also a positive relationship between the inmate/staff ratio and the corruption index (r = .59, p = .000), the homicide index (r = .45, p = .003), and the serious violence index (r = .49, p = .001).

### 4.2.5 Total criminal justice personnel

Countries differ with regard to the total number of people employed as criminal justice personnel (police, prosecutors, judges, and prison staff). Table 15 presents the rate of criminal justice personnel per 100,000 for the 25 countries for which data are available on police, prosecution, courts, and prisons. Of these countries, the Russian Federation has the highest rate of criminal justice personnel per capita (1,407), and Turkey the lowest with 242 criminal justice staff per 100,000 people. Countries in the bottom or 25% quartile with respect to the total number of criminal justice personnel per 100,000 are Finland, Liechtenstein, Moldova, the Netherlands, Sweden, and Turkey. The Russian Federation, Croatia, Cyprus, Estonia, Latvia, and Lithuania rank in the top quartile. On the average, these 25 countries have 478 criminal justice personnel per 100,000 population (standard deviation 229).

Central and Eastern European countries have a larger average number of criminal justice personnel per capita (603) than do those EU countries for which data are available (398)

Table 15 shows significant international differences in the total number of people working in criminal justice (per 100,000 population). The size of the (combined) criminal justice work force, however, only tells part of the story. That is, a country which scores low on per capita criminal justice personnel may rank high with respect to the proportion of personnel resources spent on prison; another country which ranks high on per capita criminal justice personnel may rank near the bottom with regard to prison staff. How, then do countries differ with regard to the proportion of their criminal justice personnel resources spent on either police, prosecution, courts, or prison?

Table 15 shows that all countries devote the bulk of their criminal justice resources - as measured by criminal justice personnel per capita - to the police. The mean is 81.1%, with a small standard deviation (7.1). The United States ranks lowest with 66.2%, followed by Liechtenstein and Estonia. At the other end, Armenia, Greece and Cyprus rank highest. After police spending, prison personnel - without exception - represents the second largest personnel assignment. The mean is 13.9%, with a standard deviation of 6.7. The United States and Estonia appear to employ almost one-third of all criminal justice personnel in correctional services, compared to countries which employ less than 10% of their criminal justice staff in corrections: Croatia, Cyprus, Germany, Greece, the former Yugoslav Republic of Macedonia, Portugal, and Slovenia. The numerical importance of judges and prosecutors is fairly low among the total number of criminal justice personnel: judges - on the average - account for 3.29% of all criminal justice staff (with a standard deviation of 2.4), and prosecutors - on the average - account for 1.8% of all criminal justice personnel (with a standard deviation of .8). Liechtenstein reports that 9.2% of the criminal justice work force consists of judges – an outlier, probably reflecting the very low base numbers for this small country. The amount of variation between countries is even smaller for prosecutors, with a high of 3.4% for Moldova, and a low of 0.6% for Austria.

There is a striking similarity in distribution of criminal justice personnel (among police, prosecutors, judges, and prisons) between the EU countries (n = 11), and the Central and Eastern European countries (n = 10) (see Figure 2). In the EU countries, 81.9% of all criminal justice personnel is employed by the police; the comparable figure for the Central and Eastern European countries is 82.2%. About 2% of the criminal justice work force in both the EU and the Central and Eastern European countries are working as prosecutors, and a little over 13% of the criminal justice work force in both EU and Central and Eastern European countries are employed in corrections. There is a difference of less than 1% between the proportion of the criminal justice work force employed as judges in EU countries (3.48%) and Central and Eastern European countries (2.62%). This similarity is even more striking in

Table 15. 1994 Total (per 100,000) and Percentage Distribution of Criminal Justice Personnel: Police, Prosecutors, Judges, and Prison Staff.

Countries	Total CJ Personnel (per 100,000)	Police (%)	Prosecutors (%)	Judges (%)	Prison Staff (%)
Armenia Austria Belgium Croatia Cyprus England/W Estonia Finland Germany Greece Hungary Latvia Liechtenstein Lithuania Luxembourg FYR Macedonia Moldova Netherlands Portugal Russian Fed. Scotland Slovenia Sweden Turkey USA	$\begin{array}{c} 445\\ 433\\ 416\\ 748\\ 571\\ 427\\ 633\\ 309\\ 391\\ 418\\ 389\\ 566\\ 281\\ 675\\ 356\\ 365\\ 315\\ 327\\ 505\\ 1,407\\ 453\\ 488\\ 346\\ 242\\ 454\\ \end{array}$	91.1 84.8 82.8 89.5 91.6 81.1 68.9 75.0 81.9 91.6 75.2 81.9 67.8 80.8 77.6 87.0 76.5 77.9 87.1 87.1 87.1 79.3 84.4 81.5 78.4 66.2	$\begin{array}{c} 2.0\\ 0.6\\ 1.9\\ 0.9\\ 1.7\\ 1.0\\ 1.3\\ 2.1\\ 1.7\\ 0.9\\ 2.9\\ 2.8\\ 3.5\\ 2.3\\ 1.9\\ 1.5\\ 3.4\\ 0.8\\ 2.0\\ 1.4\\ 1.1\\ 1.5\\ 2.4\\ 1.6\\ 2.0\\ \end{array}$	$\begin{array}{c} 0.6\\ 4.6\\ 2.9\\ 3.1\\ 1.6\\ 0.5\\ 2.0\\ 5.9\\ 7.0\\ 3.1\\ 5.5\\ 1.3\\ 9.2\\ 1.0\\ 7.5\\ 5.1\\ 1.8\\ 2.5\\ 2.5\\ 0.6\\ 0.6\\ 5.4\\ 1.3\\ 3.6\\ 1.0\\ \end{array}$	$\begin{array}{c} 6.4\\ 10.1\\ 12.5\\ 6.5\\ 5.2\\ 17.5\\ 27.8\\ 17.0\\ 9.5\\ 4.3\\ 16.4\\ 14.1\\ 19.5\\ 15.9\\ 13.0\\ 6.4\\ 18.4\\ 18.8\\ 8.3\\ 11.0\\ 19.0\\ 8.7\\ 14.9\\ 16.4\\ 30.9\end{array}$
Mean (sd) EU Mean Central and Eastern Europe Mean	478 398 603	81.1 81.9 82.2	1.8 2.0 2.0	3.2 3.5 2.6	13.9 13.2 13.2

view of the fact that about 1.5 times more people are employed as criminal justice personnel in the Central and Eastern European countries than in the EU countries (603.17 vs. 398.3).

The number of criminal justice personnel per capita is not related to the police/total personnel, prison/total personnel, or prosecutors/total personnel ratios. Only the judges/total personnel ratio appears to have an association with the total strength of the criminal justice work force (r = -.41, p = .05). Countries with a larger number of criminal justice personnel per capita tend to have a lower proportion of judges, than do countries with a smaller number of criminal justice personnel. Overall, the size of the criminal justice work



Figure 2. 1994 Percentage distribution of criminal justice personnel: Police, prosecutors, judges, and prison staff.

force in a country is not related to variations within a country in the relative importance of either police, prison, or prosecutors staff.

The picture appears to be clear: in all countries for which we have data in the region the bulk of criminal justice personnel works as police, followed by prison staff, with only a rather small proportion of all criminal justice personnel consisting of judges and prosecutors. The remarkable international consistency supports the functional view of criminal justice systems which assumes that there is "more similarity of jobs across systems than there is among persons performing these duties" (Reichel 1994, p. 11). This is not surprising considering the very labour-intensive type of work and functions that the police and prison staff perform. Unlike police and correctional workers, prosecutors and judges deal with large numbers of cases which may be processed relatively quickly.

Since the bulk of the criminal justice work force consists of police (see Table 15), a strong association between the rate of police and total number of criminal justice personnel is expected. The data in Table 15 support this (r = .99, p = .00). The number of prosecutors per capita (r = .66, p = .000), and the number of prison staff per capita (r = .57, p = .01) are also positively related to the overall level of criminal justice personnel. There is no relationship between the number of judges and total criminal justice personnel levels. Table 16 provides more information on the interrelationships between levels of policing, prosecutors, judges, and prison staff.

Police per 100,000	Private Police	Prosecutors	Judges	Prison Staff
(Quartiles)	per 100,00	per 100,000	per 100,000	per 100,000
Bottom (Q1)	103	7	13	61
Medium (Q2)	212	7	21	59
Medium (Q3)	93	7	14	60
Low (Q4)	111	13	9	92
Prison Staff per	Private Police	Police	Prosecutors	Judges
100,000 (Quartiles)	per 100,00	per 100,000	per 100,000	per 100,000
Bottom (Q1)	118	409	8	11
Medium (Q2)	122	369	7	24
Medium (Q3)	128	263	8	12

Table 16. Relationship between Levels of Police, Prosecutors, Judges, and Prison Staff (mean rate per 100,000).

The relative size of private security forces has no consistent relationship with either the police per 100,000 or the prison staff per 100,000. Countries in the top quartile of police per 100,000 tend to have a higher amount of prosecutors per 100,000 and prison staff per 100,000. However, the pattern with regard to judges per 100,000 is different: countries in the top quartile with respect to police per 100,000 appear to have a lower rate of judges per 100,000 than do countries with a lower rate of policing. Examining the distribution of countries on the basis of the prison staff per 100,000 also shows that the mean rate of judges varies in an inconsistent manner. Countries in the top quartile of prison staff per capita tend to have higher mean rates of police per capita (512) and prosecutors per capita (12) than do countries with lower levels of prison staff. As expected, there is a relationship between the size of the prison staff and the size of the police force (r = .39, p = .05), the size of the police force and the prosecutors staff (r = .63, p = .000), and the size of the prison staff and the prosecutors staff (r = .40, p = .05). The number of judges per capita is not related to the number of prosecutors, police or prison staff.

#### The Law Enforcement Resources Index (LERI)

Only about half of the nations (n = 25) in the region provided data on police, prosecutors, judges and prison staff. Any comments about the variations within a country with regard to the relative importance of the police, prosecution, courts, and prison, as well as about the total number of criminal justice personnel must, therefore, be limited to those countries for which complete

data are available. It is important, however, to attempt to include as many countries as possible in the overall assessment of the international variability in the size of the criminal justice work force. In order to accomplish this, the "law enforcement resources index" (LERI) was created<sup>3</sup>.

The LERI uses all of the data available, while keeping the number of countries with missing data as small as possible. The LERI is a composite indicator consisting of the (adjusted) average of the rankings on several source variables (private police, public police, prosecutors, judges, and prison staff). Two major advantages of the LERI are that it does not give undue weight to one of the components (i.e., the police) over other components, and that it minimizes missing cases. Thus, the resulting law enforcement resources index ranking includes all countries (n = 47) for which information was available on at least one of the source variables (public police, private police, prosecutors, judges, prison staff). A LERI value could not be calculated for only 6 countries (Albania, Bosnia, Iceland, Tajikistan, Uzbekistan, and Yugoslavia [Serbia-Montenegro]). This is a considerable improvement over the 25 countries (with complete information) which were the focus of the previous section.

Countries ranking in the top quartile on the LERI are Azerbaijan, Croatia, Estonia, Hungary, Kazakhstan, Latvia, Lithuania, the Russian Federation, and Slovakia - all Central and Eastern European countries (see Table 17). Northern Ireland, Portugal and the United States also rank in the top LERI quartile. On the other hand, the bottom quartile also has a heavy concentration of Central and Eastern European countries (Armenia, Bulgaria, Georgia, the former Yugoslav Republic of Macedonia, Poland and Romania), together with Andorra, Greece, Turkey, Finland and the Netherlands. The mean Central and Eastern European value on the LERI (29) obscures the clustering of these countries in the top and bottom quartiles; as a matter of fact, the Central and Eastern European mean is fairly close to the EU mean (26). The EU countries, on the other hand, tend to be clustered in the middle LERI ranges, with few cases with very low or very high LERI rankings.

The LERI is based on the (average of the) rankings on the level of police and/or prosecutors and/or judges and/or prison staff. It is only to be expected that countries that are high on the LERI, also tend to have a relatively high number of police (r = .59), prosecutors (r = .73) and prison staff (r = .62). However, the number of judges is not associated with the LERI. The LERI also fails to show any significant relationship with the ratio measures (i.e., % police, % prosecutors, % judges, % prison staff).

<sup>&</sup>lt;sup>3</sup> See appendix D for a more detailed discussion. The LERI is simply a first attempt to maximize the use of available data. The LERI cannot make up for the absence of data or for the poor quality of data, of course. Other limitations of the LERI are discussed in appendix D.

ıtries	LERI	LERI (Rank)	LERI (Quartile)
orra	10	3	1
enia	18	7	1
ria	21	12	2
paiian	50	47	4
TUS	23	16	2
um	26	22	2
aria	20	9	1
ida	28	25	3
tia	35	38	4
us	29	26	3
h Rep.	30	29	3
nark	30	30	3
and/W	23	15	2
nia	38	44	4
nd	20	10	1
се.	27	23	2
nia	15	5	1
nanv	31	34	3
Ce	16	6	1
larv	36	40	4
nd	28	24	3
	30	32	3
khstan	40	45	4
vzstan	29	27	3
2	37	42	4
ntenstein	30	31	3
ania	38	43	4
mbura	31	33	3
Macedonia	19	8	1
3	25	17.5	2
ova	25	17.5	2
erlands	21	11	1
eland	35	39	4
vav	22	13	2
nd	10	2	1
idal	34	37	4
ania	4	1	1
sian Fed.	45	46	4
and	23	14	2
akia	37	41	4
enia	32	35	3
n	25	21	2
den	25	19	2
zerland	25	20	2
5V	11	4	1
ine	29	28	3
			-
and/W hia nd ce gia hany ce gary hary khstan yzstan a khstan yzstan a khstan yzstan a hard khstan yzstan a hard khstan yzstan a hard khstan yzstan a hard hard	$\begin{array}{c} 23\\ 38\\ 20\\ 27\\ 15\\ 31\\ 16\\ 36\\ 28\\ 30\\ 40\\ 29\\ 37\\ 30\\ 38\\ 31\\ 19\\ 25\\ 25\\ 21\\ 35\\ 22\\ 10\\ 34\\ 4\\ 45\\ 23\\ 37\\ 32\\ 25\\ 25\\ 25\\ 25\\ 25\\ 25\\ 11\\ 29\end{array}$	$     \begin{array}{r}       15 \\       44 \\       10 \\       23 \\       5 \\       34 \\       6 \\       40 \\       24 \\       32 \\       45 \\       27 \\       42 \\       31 \\       43 \\       33 \\       8 \\       17.5 \\       17.5 \\       17.5 \\       11 \\       39 \\       13 \\       2 \\       37 \\       1 \\       46 \\       14 \\       41 \\       35 \\       21 \\       19 \\       20 \\       4 \\       28 \\     \end{array} $	2 4 1 2 1 3 1 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4

# Table 17. Law Enforcement Resources Index (LERI).

Table 17 continues...

Table 17. ... continues

Countries	LERI	LERI (Rank)	LERI (Quartile)
Standard Dev. 25% Quartile Median 75% Quartile	9 21 28 32		
Mean EU mean Central and Eastern Europe mean	27 26 29		

One would expect the LERI to be related to the level of criminality in the 47 countries in the region. Indeed, countries with a higher rank on the homicide index (r = .43, p = .002), a higher value on the serious violence index (r = .36, p = .05), and a higher value on the petty crime index (r = .49, p = .01) tend to have a higher ranking on the LERI. Thus, countries with a relatively greater level of investment in criminal justice resources (measured by personnel) tend to have a higher level of homicides, serious violent crime, and petty crime than do those of their counterparts which have a lower level of criminal justice personnel. There is no relationship with the burglary index, corruption index, violence against women index, or motor vehicle theft index. Unlike the findings reported in section 4.2.1 (suggesting a negative relationship between the level of economic development and the level of policing) there is no statistically significant association between the LERI and GNP (1994) or the Human Development Index among the 47 countries. This latter finding may be related to the clustering of the Central and Eastern European countries (with a lower level of GNP or HDI) in the top and bottom quartiles of the LERI.

### 4.2.6 Gender balance in criminal justice personnel

Table 18 presents the rates of female criminal justice personnel per 100,000 population (the four left-hand columns). Just as there are significant international differences in the rates of (total) police, prosecutors, judges, and correctional personnel per 100,000, there are also large variations in female police (prosecutors, judges, prison personnel) rates. The Russian Federation has the highest number of female police per capita (261.2); Turkey (5.1) the lowest. The mean rate of female police is 51.6 (compared to 390 for all police - see Table 11); the EU mean is 40.3, compared to 66.5 for Central and Eastern

Countries	Fem	ale CJ Personn Populati	el per 100 ion	Female Share of CJ Staff (%)					
	Police	Prosecutors	Judges	Prison	Police	Prosecutors	Judges	Prison	
Andorra		3.1				66.7			
Armenia	67.0	0.5	0.6		16.6	5.2	23.2		
Austria	49.8	0.4	3.7	5.5	13.6	16.0	18.6	12.5	
Azerbaijan		0.5				3.1			
Belarus		2.7	2.7	11.3		18.8	41.1	32.4	
Belgium	18.8	2.5	3.5		5.5	32.7	29.1		
Bulgaria		2.9	8.0	4.9		41.4	67.9	14.7	
Canada	58.5				23.5				
Croatia	138.2	2.2		12.1	20.6	31.2		25.0	
Cyprus	26.2	3.3	0.8	1.2	5.0	33.8	9.0	4.2	
Czech Rep.		4.5	12.3	15.4		55.4	61.6	19.6	
Denmark	46.0	3.1			19.3	41.7			
England/W		1.9	0.1			47.2	6.5		
Estonia	<b>545</b>	5.4	7.5	58.0	00 F	65.9	60.5	32.9	
Finland	54.5	0.5			23.5	7.5			
France	9.2	0.4	0.0	6.4	2.6		10.0	04.0	
Georgia		0.4	0.6	9.1		5.5	12.9	24.6	
Germany	0.1.0	1.9	1.2	1.0	F 0	28.9	26.3	10.0	
Greece	21.0	0.6	4.9	1.0	5.0	17.1	37.0	10.2	
Hullyaly	20.9	2.0	0.0	14.9	9.9	20.2	22.6	23.3	
Kazakiistaii	55.0	3.0 1 0	2.3 1 E	1/0	1.1	20.3	33.0	07 F	
Kyryyzsian Lotvio	01/	1.0	1.0	14.0	176	10.4	21.9	27.0	
Laivia	65	9.0	0.2	29.0	2.4	22.2	11.0	50.0	
Liebniensiem	60.3	5.2	20	25.6	11 1	34.4	12.6	22.0	
EVR Macadonia	16.0	17	2.5	20.0	53	21.1	42.0	13.0	
Malta	63.7	1.7	03	3.8	12.6	01.1	35	11 7	
Moldova	8.8	15	1.5	16.5	3.6	14 1	27.3	28.4	
Netherlands	22.4	0.9	2.5	10.0	8.8	31.2	31.4	20.4	
N Ireland	52.3	0.0	0.0	14 0	10.0	01.2	0.0	73	
Norway	71.0		1.6	1 1.0	30.7		16.1	1.0	
Portugal	11.0	3.9	2.8		00.1	37.3	22.0		
Romania	20.8				9.7				
Russian Fed.	261.2	6.4	4.8	45.6	21.3	33.3	56.6	29.5	
Scotland	84.2	2.2	0.2	7.6	23.4	45.8	6.6	8.8	
Slovakia	27.5	4.6	11.1		7.8	43.8	53.1		
Slovenia	83.5	3.3	14.8	8.6	20.3	45.1	56.5	20.3	
Spain	3.0	1.3			2.3	39.8			
Śweden	94.0	2.6	1.4	17.5	33.3	31.9	30.8	34.0	
Switzerland	27.3		26.9	3.2	10.3		38.6	8.2	
Tajikistan									
Turkey	5.1	0.4	0.5	2.1	2.7	10.0	5.2	5.2	
Ukraine	15.6			3.3	3.7			7.3	
United States	73.2			43.0	24.4			30.7	

### Table 18. Female Criminal Justice Personnel, 1994.

Table 18 continues...

Countries	Fem	ale CJ Personn Populat	el per 100 ion	,000	Female Share of CJ Staff (%)			
	Police	Prosecutors	Judges	Prison	Police	Prosecutors	Judges	Prison
Standard Dev. 25% Quartile Median 75% Quartile	49.6 19.3 47.9 70.0	2.0 1.1 2.5 3.5	5.7 0.6 2.7 7.2	14.8 3.3 10.2 16.7	8.8 5.4 10.2 20.5	17.0 16.6 32.7 42.7	20.8 12.9 29.1 42.6	10.5 8.7 19.9 28.7
Mean EU mean Central and Eastern Europe mean	51.6 40.3 66.5	2.7 1.8 3.3	4.5 2.9 5.6	14.4 8.1 18.2	13.0 13.8 11.9	31.6 31.4 30.7	30.9 23.1 45.1	19.1 16.4 24.0

Table 18. ...continues

Europe. Latvia has the highest rate of female prosecutors per 100,000 (9); and Georgia and Turkey share the lowest rank (0.4). On the average, the region has 2.7 female prosecutors per 100,000 (compared to 8.7 for all prosecutors - see Table 12). The EU mean (1.8) is lower than the mean for Central and Eastern Europe (3.3). Switzerland has the highest rate of female judges (26.9), followed by Slovenia (14.8). Liechtenstein and Northern Ireland appear to have no female judges at all. On the average, the region has 4.5 female judges per 100,000 population (compared to 14 for all judges see Table 13). The EU average number of female judges per 100,000 (2.9) is lower than the Central and Eastern European mean (5.6). Estonia has the highest rate of female prison personnel per 100,000 (58.0); Cyprus ranks at the bottom (1.2). The average number of female prison staff (per 100,000) for Europe and North America (the United States only; no data are available for Canada) is 14.4 (compared to 64.3 for all prison staff - see Table 14). For the EU countries, there is an average of 8.1 female prison workers (per 100,000 people), which is less than half of the average for the Central and Eastern European countries (18.2).

Criminal justice is still a male-dominated occupation. The four right-hand columns of Table 18 (Female Share of Criminal Justice Staff) clearly document this. On the average, about 13% of the police are female (data for 32 countries), and 19% of prison staff are female (data for 26 countries). The maximum proportion of females for both police and prison staff in any of the countries in the region is about one-third of all personnel. The situation for prosecutors and judges is rather different: on the average, since almost one-third of the prosecutors and judges are female. The maximum proportion

of female prosecutors and judges is about twice as high as that for police and prison staff, about two-thirds (66,7% in Andorra and 71% in Latvia). The jobs of judges and prosecutors involve relatively little direct physical human contact, as contrasted with police and prison work, which are typically viewed as more masculine jobs.

There is considerable international variation in the female proportion of the police. In Sweden about one-third of the police force is female, while in Spain, only one out of four police officers is female. With regard to prosecutors, the international variation is even larger: Andorra reports that two-third of their prosecutors are female, while in Azerbaijan only about 3% of the prosecutors are female. In Latvia, 71% of the judges are female, whereas Liechtenstein and Northern Ireland do not have any female judges. Latvia also has the highest proportion of female correctional staff (36.8%); Turkey and Liechtenstein rank lowest with about one female prison worker for every 20 male prison workers.

Female judges appear to be more common in Central and Eastern Europe than in the EU countries: an average of 45% of the judges in the Central and Eastern European countries are female, almost double the corresponding proportion in the EU countries (23.1%). With regard to the prison staff, the Central and Eastern European countries also appear to have a slightly more equal gender balance (24%) than do the EU countries (16.4%). The gender differences are much smaller among the police (in EU countries, the mean is 13.8%, in Central and Eastern European countries, it is 11.9%), and among prosecutors (EU countries: 31.4%, Central and Eastern Europe: 30.7%).

#### **Gender Balance index**

In order to describe international variations in the gender balance of the total criminal justice work force, complete data are needed on the police, prosecutors, judges, and prison personnel. However, data on the female share of the work force for police, prosecutors, judges and prison staff are available for only 13 countries (Austria, Cyprus, Greece, Latvia, Liechtenstein, Lithuania, Moldova, the Russian Federation, Scotland, Slovenia, Sweden, the former Yugoslav Republic of Macedonia, and Turkey). Thus, a criminal justice practitioner gender balance index (GBI) was constructed in order to have a measure which makes use of all available information, minimizes the missing cases, and reflects the level of gender balance in the different components of the criminal justice work force<sup>4</sup>. Forty-three countries were ranked on the GBI; data on female employment were not available for Albania, Bosnia, Iceland, Ireland, Italy, Luxemburg, Poland, Tajikistan, Uzbekistan, and Yugoslavia (Serbia-Montenegro).

<sup>&</sup>lt;sup>4</sup> See appendix D for an explanation of the construction of the GBI.

Countries	GBI	GBI (rank)	GBI (Quartile)
Armenia	20	10	1
Austria	21	14	2
Azerbaijan	2	1	1
Belarus	34	29	3
Belaium	23	18	2
Bulgaria	39	33	4
Canada	48	40	4
Croatia	34	30	3
Cyprus	15	7	1
Czech Ben	42	38	4
Denmark	40	35	4
England/W/	28	25	3
Eligiana, W	50	42	4
Finland	00 07	22	т 2
France	21	20	1
Georgia	18	8	1
Germany	21	15	2
Grand	21	10	2
	20	12	2
Hullyal y Kazakhatan	28	20	0
KdZdKIISIdII Kurguzotop	20	10	2
Kylyyzsiali Letuie	20	Z I	2
Lalvia	48	41	4
Liechlenstein	12	5	
Lillinuania	30	31	3
FYR Macedonia	24	19	2
Maita	18	9	1
Moldova	21	13	2
Netherlands	25	20	2
N. Ireland	12	6	1
Norway	33	28	3
Portugal	28	24	3
Romania	23	17	2
Russian Fed.	40	37	4
Scotland	29	27	3
Slovakia	35	32	3
Slovenia	39	34	4
Spain	20	11	2
Sweden	40	36	4
Switzerland	25	22	3
Turkey	6	3	1
Ukraine	10	4	1
United States	47	39	4
Standard Dev.	13		
25% Quartile	20		
Median	25		
75% Quartile	39		
Mean	28		
EU mean	25		
Central and Eastern Europe mean	30		

# Table 19. Criminal Justice Practitioner Gender Balance Index (GBI).

Azerbaijan, France, Turkey, Ukraine, Liechtenstein, Northern Ireland, Cyprus, Georgia, Malta and Armenia rank in the bottom (25%) quartile of the GBI. Four of these countries are countries in transition; there is only one EU country (France) in this group of nations with the lowest ratio of females/males in the criminal justice work force. Six Central and Eastern European countries (Bulgaria, Slovenia, the Russian Federation, the Czech Republic, Latvia and Estonia) rank in the top (75%) quartile of the gender balance index, together with two EU countries (Denmark and Sweden), Canada and the United States. The mean for Central and Eastern European countries (30) is higher than the EU mean (25). Half of the Central and Eastern European countries rank in the intermediate range of the GBI, however. The mean for North America (Canada and the United States) is almost double that of the EU countries (48).

It is commonly assumed that female victims of violence will be more likely to report their victimization to the authorities if there are more female criminal justice employees. Interestingly, the expectation that a higher proportion of females in the criminal justice work force will be related to a greater likelihood of reporting violence against women to the police is not supported by the data. On the other hand, there is a relationship between the gender balance in the criminal justice work force (GBI) and the degree of female empowerment in society. The data do support a weak positive association between the criminal justice practitioner gender balance index and the Gender-related Development Index (1994) (r = .30, p =.07), the female share of earned income (1994) (r =.46, p =.01), and the female economic activity rate (% male, 1994) (r =.44, p =.01)<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup> Gender-related Development Index (1994), the female share of earned income (1994) and the female economic activity rate (% male, 1994) are based on the Human Development Report 1997.

# 4.3 The flow of cases

### 4.3.1 Trying to describe the flow of cases

There are many national variations in specific criminal justice procedures, rules, regulations, and practices. However, it is reasonable to argue that in both Europe and North America the processing of (criminal) cases through the criminal justice system proceeds according to the following figure (cf. Maguire et al. 1998):



Data collected at the different stages of the criminal justice funnel - be it victimization data, self-report offending data, police data, or data provided by prosecutors, courts, correctional agencies – are all wrought with problems. This has been documented over and over again.

To a large extent, the concern has been focused on the validity of official police data as an indicator of the extent and nature of *criminality* – and rightfully so. It is important, however, to keep in mind that data produced within the framework of an organization (such as the data elicited by the United Nations Surveys) are less questionable and problematic when used as indicators of *organizational processing and decision-making*, rather than as measures of the amount of crime in a particular society. Of course, missing data and data that appear internally inconsistent remain a serious problem.

There are many different ways in which the flow of cases through the criminal justice system may be portrayed. In this section, three different ways of describing case flow are presented:

- (1) the degree to which police-recorded crime is consistent with the amount of crime found through victim surveys (section 4.3.2.);
- (2) the volume of cases (per 100,000 population) processed at five different stages of processing (crime recorded, arrest, charge/prosecution, conviction, and prison sentence) (section 4.3.3.); and
- (3) the extent of case attrition at the different stages of the criminal justice process (arrest/offences, prosecutions/arrests, convictions/prosecutions, and prison/convictions) (section 4.3.4.).

# 4.3.2 The mismatch between ICVS and Fifth United Nations Survey data

Crime committed, crime reported to police, and crime recorded by police - these three sequential events represent the first phases of the flow of cases. In this section, the degree of mismatch between ICVS data and Fifth United Nations Survey police data is interpreted as an indicator of police recording practices.

One of the pre-occupations of crime researchers is to make reliable estimates of the "true" amount of crime in a society (regardless of whether this is on the neighbourhood, city, region or national level). This is illustrated by chapter 2, on crime indicators, which makes use of both ICVS data and Fifth United Nations Survey data to categorize countries based on the amount of burglary, serious violence, car theft, and so on. The two main sources of international comparative data (ICVS and the Fifth United Nations Survey) provide inconsistent portrayals of criminality. This is not surprising in view of the fact that – at the national level – similar discrepancies (between victim surveys and police data) have been observed also in other connections (O'Brien 1985, Junger-Tas 1996). Different interpretations of these inconsistent findings exist, the most popular of which is that these two indicators are actually measuring different dimensions of crime.

Farrington and his colleagues (1992, 1994) have tried to provide national estimates of the flow of offenders through different criminal justice systems, from the commission of crimes through police recording and conviction, and on to imprisonment. They have provided national estimates for six offences (burglary, assault, vehicle theft, robbery, rape, and homicide) in three countries (the United States, Sweden and the United Kingdom) between the 1970s and the 1990s. They make use in a rather ingenious way of both victimization and police-based data, though they do point out that their figures are only estimates, limited by numerous assumptions (1994, p. 128). Unfortunately, we do not have available for the 54 European and North American countries the detailed information on the many decision points which Farrington and

Country	Three measures of "crime"						Three probabilities related to police crime recording						
	Column	А	Column	В	Column	С	Column D		Column E		Column F		
	% Victims Victim (ICVS) adji victim rate (IC		Victim-rep adjuste victimisat rates (% (ICVS)	Victim-report adjusted victimisation rates (%) (ICVS)		e n oort ey)	P [Reporting/ Offences]		P P [Reporting/ [Recording/ Offences] Reporting]		ng/ g]	P [Recordii Offence	ng/ s]
	%	Q	%	Q	%	Q	Proba- bility	Q	Proba- bility	Q	Proba- bility	Q	
Austria Belarus Belgium Bulgaria Canada Croatia England & Wales Estonia Finland France Georgia Hungary Italy Kyrgyzstan Latvia Lithuania FYR Macedonia Malta Netherlands N. Ireland Norway Romania Russian Fed. Scotland Slovakia Slovenia Spain Sweden Switzerland Ukraine United States EU mean <sup>1</sup> Central and Eastern Europe mean <sup>2</sup>	27.00 21.10 22.50 38.40 33.00 20.30 31.10 39.70 25.10 28.10 33.40 24.70 31.40 27.40 33.40 21.60 23.30 38.40 24.40 26.10 29.40 35.00 28.30 35.90 30.30 31.90 30.60 23.60 38.20 35.00	$\begin{array}{c} 2\\ 1\\ 1\\ 4\\ 3\\ 1\\ 3\\ 4\\ 2\\ 2\\ 3\\ 2\\ 3\\ 2\\ 4\\ 3\\ 1\\ 1\\ 4\\ 1\\ 2\\ 2\\ 4\\ 2\\ 4\\ 3\\ 3\\ 3\\ 1\\ 4\\ 4\end{array}$	$\begin{array}{c} 14.03\\ 6.01\\ 14.33\\ 12.80\\ 18.23\\ 7.81\\ 18.90\\ 13.52\\ 11.16\\ 16.61\\ 7.13\\ 11.81\\ 12.78\\ 5.79\\ 11.40\\ 12.39\\ 8.55\\ 11.83\\ 21.62\\ 15.29\\ 12.33\\ 10.45\\ 9.66\\ 17.45\\ 20.90\\ 12.13\\ 11.90\\ 18.34\\ 13.35\\ 10.45\\ 19.96\\ 15.52\\ 10.72\\ \end{array}$	$\begin{array}{c} 3 \\ 1 \\ 3 \\ 3 \\ 4 \\ 1 \\ 4 \\ 3 \\ 2 \\ 4 \\ 1 \\ 2 \\ 3 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 1 \\ 4 \\ 4 \\ 2 \\ 2 \\ 4 \\ 3 \\ 1 \\ 4 \\ 2 \\ 4 \\ 3 \\ 1 \\ 4 \\ 3 \\ 2 \\ 4 \\ 3 \\ 1 \\ 4 \\ 3 \\ 2 \\ 4 \\ 3 \\ 1 \\ 4 \\ 3 \\ 2 \\ 4 \\ 3 \\ 1 \\ 4 \\ 3 \\ 2 \\ 4 \\ 3 \\ 1 \\ 4 \\ 3 \\ 2 \\ 4 \\ 3 \\ 1 \\ 4 \\ 3 \\ 2 \\ 4 \\ 3 \\ 1 \\ 4 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 1 \\ 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 3 \\ 1 \\ 4 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$	$\begin{array}{c} 6.28\\ 1.16\\ 5.73\\ 2.36\\ 9.98\\ 1.42\\ 10.21\\ 2.38\\ 7.64\\ 6.79\\ 0.32\\ 3.80\\ 3.80\\ 0.90\\ 1.61\\ 1.58\\ 1.09\\ 2.11\\ 8.48\\ 4.16\\ 5.93\\ 1.04\\ 1.78\\ 10.27\\ 2.58\\ 2.25\\ 1.77\\ 12.67\\ 5.11\\ 1.10\\ 5.37\\ 7.04\\ 1.69\\ \end{array}$	4 1 3 2 4 1 4 2 4 4 1 3 3 1 2 2 1 2 4 3 3 1 2 4 3 2 2 4 3 1 3	0.52 0.29 0.64 0.33 0.55 0.39 0.61 0.34 0.44 0.59 0.21 0.48 0.41 0.21 0.34 0.37 0.40 0.51 0.56 0.63 0.47 0.36 0.28 0.62 0.58 0.40 0.37 0.60 0.57 0.57 0.57	$\begin{array}{c} 3\\1\\4\\1\\3\\2\\4\\1\\3\\2\\1\\2\\2\\3\\3\\4\\3\\2\\1\\4\\4\\2\\2\\4\\3\\1\\4\end{array}$	0.45 0.19 0.40 0.18 0.55 0.18 0.54 0.18 0.68 0.41 0.05 0.32 0.30 0.15 0.14 0.13 0.13 0.13 0.13 0.13 0.13 0.14 0.39 0.27 0.48 0.10 0.12 0.19 0.15 0.69 0.38 0.11 0.27 0.45 0.16	4 3 3 2 4 2 4 2 4 2 4 4 1 3 3 2 1 1 1 2 3 3 4 1 2 4 3 1 3 1 3	0.23 0.06 0.26 0.06 0.30 0.07 0.33 0.06 0.30 0.24 0.01 0.15 0.04 0.07 0.06 0.41 0.22 0.03 0.15 0.24 0.06	4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 4 1 3 3 1 1 1 1 3 3 3 3 3 1 2 4 2 2 2 4 3 1 3 1 3	

#### Table 20. Mismatch between ICVS and Fifth United Nations Survey police crime data as an indicator of police recording practices (all crimes).

<sup>1</sup> This is the mean only for those EU countries that are listed in this table. <sup>2</sup> This is the mean only for those Central and Eastern European countries listed in this table.

colleagues collected for the United States, Sweden and the United Kingdom. However, since we do have some victimization and police-based data for several countries, it is possible to adopt some of Farrington's measures. The results are presented in Table 20, which presents data for 31 countries. The table consists of 6 main columns (A through F).

*Table 20, Column A: % Victims.* The first possible estimate of the amount of crime committed is on the basis of victimization surveys. The ICVS provides both estimates of the number of offences committed, as well as estimates of the proportion of households and/or individuals touched by crime. Table 20 shows that, for example, in Austria, 27.0 % of the households surveyed by the ICVS (in the city sample) indicated that they had been victimized by crime (all crimes, averaged 1988-95). ICVS city samples of 31 nations are available.

Table 20, Column B: % Victim-Reported Victimizations. Only a proportion of all crimes will be reported to the police. This is perhaps one of the best-known facts about criminal justice. The willingness of citizens to report the crime to the police depends on a variety of factors, one of which may be the (lack of) trust that citizens have in the police - an issue to which we will return later. Typically, the proportion of victimizations reported to the police (see Column D) is used as a "soft" indicator of police performance. However, there is a different way in which information about the reporting behaviour of the public may be used: it allows estimates of the (minimum) number of victimizations which should (or could) have been recorded by the police. We arrive at this estimate by multiplying the reporting rate P [Reporting/Of*fences* (in Column D) by the estimates of the proportion of the population who were victimized (Column A). We label this "victim-report -adjusted victimization rate" (Column B). For example, in Austria, 52% of the ICVS victims reported the crime to the police (Column D), which adds up to (.52 \* 27.0) = 14.03 % victim-report adjusted victimization rate.

*Table 20, Column C: % Crime* – Based on Police Records. This column reports "crimes reported by the police"<sup>6</sup>. The police does not make a formal record of all crime incidents that come to its attention, for a variety of reasons. Therefore, the volume of formally recorded crime is invariably less than the amount reported to the police. This may be because of perfectly legitimate reasons (i.e., an incident reported as a crime was in fact not a crime), but there may also be more questionable reasons for this lack of police responsiveness to victims' complaints. If the police make a formal record of all the crimes reported to them by the victims, then the number of crimes reported by the police should - at the very least - be equal to the number of reported

<sup>6</sup> Question 2.1 in the Fifth United Nations Survey: Number of Crimes Recorded.

victimizations.<sup>7</sup> A complicating factor is that there is a mixture of units of analysis between, respectively, the ICVS (households and individuals who are victimized) and the Fifth United Nations Survey (recorded crime incidents, and - later on in the criminal justice processing chain – suspects). This makes any attempt to make direct links between the different data sources questionable. It is only through the use of assumptions – for example assumptions about the average number of offenders per victimization or per recorded offence (cf. Farrington et al 1994) – that it is possible to make more realistic estimates. Unfortunately, we lack the data needed for such an endeavour at the present time.

Table 20, Column D: Proportion of Crimes Reported by Victims. This column presents the percentage of the crime victims who indicated to ICVS surveyers that they actually reported their victimization to the police. For example, in Austria, 52% of the ICVS victims reported their victimization to the police.

Table 20, Column E: Proportion of Reported Crimes Recorded by Police. It may be argued that the smaller the proportion of (victim) reported crimes recorded by the police, the less responsive the police is to the needs of citizens. The probability that a reported crime will be recorded (P[recorded/reported]) may be computed by dividing the number of police recorded offences (Column C) by the number of victim-reported offences (Column B). For example, in Austria 6.28/14.03 = 0.45 (45%) of the victim-reported offences were recorded by the police. Most likely this is an inflated estimate, since this would assume that *all* police recorded crimes consist of victim-reported incidents.

Table 20, Column F: Proportion of Committed Crimes Recorded by Police. The total number of crimes committed may be divided into those that are reported to the police and those that are not reported to the police. We may calculate a rough estimate of the probability that *any* crime ends up in the formal police records by dividing the total estimate of the proportion of the population victimized by crime (Column A) by the number of police recorded crimes (expressed as number of crimes per 100 population). For example, for Austria this means that 6.28/27.0 = 0.23 (23%) of the victimizations end up in the police files.

Table 20 suggests the following:

(1) Once we take into account the level of victim reporting – which varies by country – the rank order of the countries with regard to ICVS victimization changes (compare columns A and B). Twelve countries (Belarus, Croatia, Finland, Hungary, Italy, Lithuania, the former Yugo-

<sup>7</sup> Of course, there are crimes recorded by the police through channels other than victim complaints, but there is no way we can weigh the importance of this factor at the present time. It may be possible to make some estimates, based on existing research on police work.

slav Republic of Macedonia, the Netherlands, Norway, Romania, Slovakia and the United States) maintain the same rank. The other 19 countries change rank order, sometimes by one quartile (Austria, Bulgaria, Canada, England and Wales, Estonia, Kyrgyzstan, Malta, Slovenia, Spain and Sweden), sometimes by more than one quartile (Belgium, France, Georgia, Latvia, Northern Ireland, the Russian Federation, Scotland, Switzerland and Ukraine).

- (2) When we compare victimization rates (unadjusted for reporting rates see column A) to the Fifth United Nations Survey police recorded rates (column C), there are only five countries which are in the same quartile (Belarus, Croatia, Italy, the former Yugoslav Republic of Macedonia and the Netherlands). However, a comparison of the victim-report adjusted victimization rates (column B) with the Fifth UN Survey police rates (column C), shows that there are twenty countries within the same quartile (Belarus, Belgium, Canada, Croatia, England and Wales, France, Georgia, Italy, Kyrgyzstan, Latvia, the former Yugoslav Republic of Macedonia, Malta, the Netherlands, Northern Ireland, Scotland, Slovenia, Spain, Sweden, Switzerland and Ukraine), ten countries differ by one quartile, and only one country (Finland) differs by two quartiles. This suggests that – perhaps – police recording practices are not as unresponsive to victimization as appears at first glance. Indeed, the police-based rank order is closer to the victimization-based rank order, once we take into account victim reporting rates.
- (3) There is great variability in the probability that a reported crime will be recorded (column E). It varies from an extreme low of .05 for Georgia to a high of .69 for Sweden. As suggested earlier, we could interpret the values in column E as a measure of police recording performance: a low value reflects a low level of police recording of victim-reported crime, a high value reflects a high recording level of victim-reported crime. Austria, Canada, England and Wales, Finland, France, Norway, Scotland and Sweden are in the top quartile. Countries in the bottom quartile are Georgia, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Romania, Slovakia and Ukraine.
- (4) Comparing column D (reporting rate) and column E (proportion of reported crime recorded by police) shows that – to some extent – citizens may be realistic in their assessment of the police. Two of the seven countries that are in the bottom quartile for the reporting rate (Georgia and Ukraine) are also in the bottom quartile for the probability that the police records a reported crime. Four countries in the bottom quartile for the reporting rate are in the second quartile with respect to the probability that reported crime will be recorded (Bulgaria, Estonia, Kyrgyzstan and the Russian Federation). With regard to the top quartile, four of the eight countries in the top quartile for the reporting rates (England and Wales, France, Scotland and Sweden) are also in the top quartile for the likelihood that the police makes a record of reported crimes. Three of these

countries (Belgium, Northern Ireland and the United States) are in the third quartile for the likelihood that the police makes a record of a reported crime.

- (5) There is great variability with regard to the likelihood that a crime is recorded by the police (discounting the factor of differential reporting rates). The information presented in column F shows a low of .01 for Georgia (but there may be a problem with the accuracy of Georgia's crime figures they are inconsistent with later arrest figures), and a high of .41 for Sweden.
- (6) Finally, comparing column C (police recorded crimes) and column F (the ratio between police recorded crime and victimizations) shows a fair degree of consistency in rankings: twenty-three of the countries have similar rankings on both variables. This is not surprising in view of the fact that the nominator in this division is the number of crimes; however, the denominator is the number of victimizations a figure which fluctuates significantly.

Table 20 also presents the means for overall victimization for the EU countries (29.6) and the Central and Eastern European countries (30.7); these two means are quite close to one another. The likelihood that a crime will be reported to the police (column D) is lower (.35) in the Central and Eastern European countries than in the EU countries (.53). Thus, the victim reportadjusted victimization rate for the Central and Eastern European countries (10.72) is lower than that for the EU countries (15.52). The volume of crimes reported by the police (column C) in the EU countries is much higher (7.04) than in the Central and Eastern European countries. Thus, based on the victim-report adjusted victimization rate, we may conclude that the likelihood that a crime actually will be recorded by the police (column E) is much lower in the Central and Eastern European countries (.16) than in the EU countries (.45). Add to that the lower reporting rate (column D) and it should not surprise us that the ratio between offences and recorded offences (column A/column C) in the Central and Eastern European countries (.06) is only one fourth of that in the EU countries (.24). Thus, in the Central and Eastern European countries, victims are less likely to report, and police are less likely to record a reported offence, while it appears that the victimization rates do not differ that much between the two groups of countries.

Table 21 presents comparable data, this time for burglary, for 22 countries. With regard to burglary, the observations are less clear cut than those with regard to "total crime":

(1) Of the 22 countries with complete ICVS and Fifth United Nations Survey data, 10 countries share the same quartile for self-reported victimization and police recorded burglaries (column A and column C); three countries (Lithuania, Norway and Finland) are in the top quartile for one and in

Country	Three measures of "crime"						Three probabilities related to police crime recording					
	Column A Column E		ı B	Column C		Column D		Column E		Column F		
	% Victims (ICVS)		Victim-report adjusted victimisation rates (%) (ICVS)		% Crime based on police report (UN Survey)		P [Reporting/ Offences]		P [Recording/ Reporting]		P [Recording/ Offences]	
	%	Q	%	Q	%	Q	Proba- bility	Q	Proba- bility	Q	Proba- bility	Q
Austria Belarus Belgium Canada Croatia England/W Finland France Hungary Kyrgyzstan Lithuania FYR Macedonia Netherlands N. Ireland Norway Romania Scotland Slovakia Slovenia Spain Sweden United States EU mean <sup>1</sup> Central and Eastern Europe mean <sup>2</sup>	$\begin{array}{c} 0.20\\ 1.50\\ 2.70\\ 4.00\\ 1.00\\ 4.50\\ 0.40\\ 4.20\\ 2.50\\ 4.00\\ 5.50\\ 2.30\\ 3.50\\ 3.50\\ 3.30\\ 4.20\\ 1.10\\ 2.00\\ 6.50\\ 2.80\\ 2.40\\ 2.60\\ 3.90\\ 2.57\\ 3.02 \end{array}$	$ \begin{array}{c} 1 \\ 1 \\ 2 \\ 3 \\ 1 \\ 4 \\ 1 \\ 4 \\ 2 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 3 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 3 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 3 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 3 \\ 3 \\ 3 \\ 4 \\ 1 \\ 2 \\ 3 \\ 3 \\ 4 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$	0.24 0.76 2.26 3.48 0.67 4.27 0.28 3.69 2.04 2.38 3.47 1.50 3.15 2.41 3.18 0.93 1.87 4.82 1.88 1.55 1.85 3.11 2.16 2.05	$\begin{array}{c}1\\1\\3\\4\\1\\4\\2\\3\\4\\2\\3\\3\\1\\2\\4\\2\\2\\2\\3\\3\end{array}$	$\begin{array}{c} 1.12\\ 0.20\\ 1.53\\ 1.33\\ 0.40\\ 2.45\\ 1.94\\ 0.84\\ 0.77\\ 0.20\\ 0.20\\ 0.20\\ 0.44\\ 0.81\\ 1.04\\ 0.09\\ 0.13\\ 1.72\\ 0.81\\ 0.54\\ 0.36\\ 1.61\\ 1.04\\ 1.33\\ 0.41\\ \end{array}$	$\begin{array}{c} 3 \\ 1 \\ 4 \\ 3 \\ 2 \\ 4 \\ 4 \\ 3 \\ 2 \\ 1 \\ 1 \\ 2 \\ 3 \\ 3 \\ 1 \\ 1 \\ 4 \\ 2 \\ 2 \\ 4 \\ 3 \end{array}$	$\begin{array}{c} 1.00\\ 0.50\\ 0.84\\ 0.87\\ 0.65\\ 0.94\\ 0.73\\ 0.88\\ 0.82\\ 0.60\\ 0.63\\ 0.65\\ 0.90\\ 0.73\\ 0.75\\ 0.86\\ 0.94\\ 0.74\\ 0.68\\ 0.65\\ 0.71\\ 0.79\\ 0.83\\ 0.68\end{array}$	4 1 3 3 2 4 2 4 3 1 1 1 4 2 3 3 4 2 2 1 2 3	$\begin{array}{c} 4.59\\ 0.26\\ 0.68\\ 0.38\\ 0.61\\ 0.57\\ 7.02\\ 0.23\\ 0.38\\ 0.09\\ 0.06\\ 0.30\\ 0.26\\ 0.43\\ 0.03\\ 0.26\\ 0.43\\ 0.03\\ 0.14\\ 0.92\\ 0.17\\ 0.29\\ 0.23\\ 0.87\\ 0.34\\ 1.81\\ 0.25\end{array}$	4 2 4 3 3 3 4 2 3 1 1 2 2 3 1 1 4 1 2 2 4 3	$\begin{array}{c} 4.59\\ 0.13\\ 0.57\\ 0.33\\ 0.40\\ 0.54\\ 5.12\\ 0.20\\ 0.31\\ 0.05\\ 0.04\\ 0.19\\ 0.23\\ 0.31\\ 0.02\\ 0.12\\ 0.31\\ 0.02\\ 0.12\\ 0.87\\ 0.12\\ 0.19\\ 0.15\\ 0.62\\ 0.27\\ 1.50\\ 0.17\\ \end{array}$	4 2 4 3 3 3 4 2 3 1 1 2 2 3 1 1 4 1 2 2 4 3

#### Table 21. Mismatch between ICVS and Fifth United Nations Survey police crime data as an indicator of police recording practices (burglary).

<sup>1</sup> This is the mean only for those EU countries that are listed in this table.
 <sup>2</sup> This is the mean only for those Central and Eastern European countries listed in this table.

the bottom quartile for the other, and the remaining nine countries find themselves in different quartiles (although not in the extreme opposites).

- (2) Comparing column B (reporting-adjusted victimization level) and column C (police recorded burglaries), the situation has not changed much. There are also ten countries in the same quartile; two countries are in the bottom quartile for column B and in the top quartile for column C (Finland, and Lithuania with low victimization and high police recorded burglary), and the remaining ten countries find themselves in different quartiles (although not in the extreme opposites). The relative lack of improvement is probably explained by the overall fairly high level of reporting of burglaries, as well as the relatively low degree of variation in burglary reporting rates between countries.
- (3) The reporting rates although all fairly high vary between .50 (Belarus) and 1.00 (Austria). There appears to be a fairly close match between column C (police recorded burglaries) and reporting rate (column D). Ten countries fall within the same quartile for both measures; two of the five countries in the top quartile for the reporting rate (Scotland, and England and Wales) are also in the top quartile for police recorded burglaries; three of the countries in the bottom quartile for reporting (Belarus, Kyrgyzstan and Lithuania) are also in the bottom quartile for police-recorded burglaries.
- (4) Finally, column E (the ratio between recorded and reported burglaries) a possible measure of the willingness of the police to record victim complaints – shows several anomalies. There are two countries where there are more police-recorded burglaries than there are victim-reported burglaries (Austria and Finland). This may be explained in part by burglaries of businesses - which are not part of victimization surveys.

Table 21 also provides the means for the EU countries and for the Central and Eastern European countries. Interestingly, the percentage of households victimized by burglary appears to be quite similar in the two groups of countries (2.57 and 3.02). On the other hand, the official police-reported burglaries are about three times higher in EU countries than in Central and Eastern Europe (1.33 vs. .41). Although the willingness to report burglaries to the police is somewhat lower in Central and Eastern Europe (.68) than in the EU countries (.83), this factor does not account for the major differences in reported burglaries. As column E indicates, the likelihood that a burglary will be recorded by the police is much higher in the EU countries (1.81) than in Central and Eastern European countries (.25). (It should be noted that these figures may be inflated because of the extremely high numbers for Austria and Finland; excluding these, the means are .83 for column D, .54 for column E, .45 for column F - still considerably higher than in the Central and Eastern European countries, but not by quite as much.)

The *level of economic development* may be a proxy measure for police recording capacity. If this is true, then we would expect that indicators of economic development are associated with the proportion of reported crimes that are recorded by the police (column E in tables 20 and 21), and the proportion of committed crimes that are recorded by the police (column F in tables 20 and 21). Two good indicators of the level of economic development are the gross national product (World Bank data for 1994), and the ranking on the 1994 Human Development Index (HDI). The correlation between 1994 GNP and column E (Table 20, for all crimes) is .80 (p = .000), and between 1994 GNP and column F (Table 20, for all crimes) is .75 (p = .000). Correspondingly, the correlation between the 1994 HDI (where low values reflect a high level of development) and column E is -.76 (p = .000), and between the 1994 HDI and column F is -.80 (p = .000) (Table 20, for all crimes). Thus, the higher the GNP and the higher the score on the Human Development Index, the more likely that the police will record a reported crime, and the more likely that any crime (reported or otherwise) will be recorded by the police. These findings increase our confidence in the reasoning underlying the calculations in Table 20. However, it should be noted that the correlations between the two indicators of level of economic development and burglary (Table 21) are not statistically significant.

### 4.3.3 The volume of cases (per 100,000 population)

Criminal justice systems process "cases" - individuals and/ or criminal incidents. The larger the volume of cases a system has to process, the greater the pressures and demands on the system. Criminal justice systems in large countries will naturally have to process a larger volume of cases than smaller countries – as a simple function of population size. In order to allow better direct comparison between the criminal justice case loads of different nations, we employ the standardized indicator: the number of cases per 100,000 population. To depict the "flow of cases" in any one country is difficult enough. To try to do this in a cross-national context is even more difficult, because of the lack of comparability in the legal definitions, differences in recording practices, and differences in processing procedures (see section 1.3.). Countries vary in where charging decisions are made, what is considered an official contact, even what a "conviction" is. It is with great caution that we present some commonly used statistics in this section, emphasizing that - rather than taking the values as absolute or making comparisons between individual countries - we will try to describe the overall patterns in Europe and North America. Extreme caution needs to be exercised in interpreting the figures presented in Table 22. There is a likely confusion about whether the numbers reflect the number of *individuals* involved, or the number of processing decisions involved (i.e., the number of sentences imposed or the number of criminal incidents).

Five processing points are described:

- 1. The number of crimes recorded in the criminal (police) statistics<sup>8</sup>. This overall measure of recorded crimes is a very rough indicator of criminality. It may reflect more the technical ability of a police force to record crimes than the true amount of crime. There are large variations between countries with respect to what is included under "all crimes". However, it is the first official measure of the input into a system.
- 2. The number of persons brought into formal contact with the criminal justice system<sup>9</sup>. Countries vary in what they define as "formal contact with the criminal justice system". Not all countries make a record of these contacts.
- 3. *The number of persons prosecuted*<sup>10</sup>. Some countries responded with the same figures for questions on the number of persons brought into formal contact with the criminal justice system and on the number of persons prosecuted.
- 4. The number of adults convicted by number and type of sentence (all crimes)<sup>11</sup>.
- 5. The number of adults sentenced to life imprisonment or "deprivation of liberty"<sup>12</sup>.

One way of assessing the likely validity of the official processing data is by examining if the numbers at each processing point decrease - which they logically should. We assume that countries where the figures do not fit this pattern have suspect data, and we have eliminated these figures from the body of Table 22. (These suspect figures are included in a footnote to Table 22.)

<sup>8</sup> Question 2.1 on the Fifth United Nations Survey: Total - all recorded crimes. "Crimes recorded by the police" refer to the number of penal code offences or their equivalent, i.e. various special law offences, but excluding minor road traffic and other petty offences, brought to the attention of the police or other law enforcement agencies and recorded by one of those agencies.

<sup>9</sup> Question 5.1 on the Fifth United Nations Survey. "Number of persons brought into formal contact with the criminal justice system by sex and age. Please specify whether suspected, arrested, or otherwise." Sometimes, question 4.13 was used instead: "Total of all persons brought into formal contact with the criminal justice system first recorded as... (please specify whether suspected, arrested or otherwise). Grand total of persons covered ( including those not covered by the specific categories given)."

<sup>10</sup>Question 8.1 on the Fifth United Nations Survey. "Persons prosecuted refers to alleged offenders prosecuted against by means of an official charge, initiated by the public prosecutor or the law enforcement agency responsible for prosecution." If question 8.1 was not completed, or appeared suspect, question 7.13 was used instead ("Grand total of persons prosecuted - including those not covered by the specific categories given").

<sup>11</sup> Question 11.1 on the Fifth United Nations Survey. "Persons convicted refers to persons found guilty by any legal body duly authorized to do so under national law, whether the convictions were later upheld or not."

<sup>12</sup> Question 11.2 on the Fifth United Nations Survey. "Deprivation of liberty includes various forms of detention, including security measures, combined or split sentence (where at least part of the sentence involves deprivation of liberty) and all other sanctions involving deprivation of liberty (i.e., where a person is forced to stay at least one night in an institution of any kind)."

Countries	Offences Recorded	Suspects	People Prosecuted	People Convicted	Adults Sentenced to Prison
Countries	Offences Recorded	Suspects 217 2,512 196 638 991 2,402 1,249 375 3 6,214 4,157 1,343 2,627 1,165 1,302 639 4,547 524 572 1,124 410 1,578 769 974 885	People Prosecuted           3,057 171           167 2           286           896           610           146           832           3,166           3,750           6,214           1,744           1,545           1,150           1,003           1,051           4,547           457           692           383           1,520           654           565           968           625           1,216           794	People Convicted           1,014           160           824           155           457           397           112           365           86           490           1,611           2,302           407           1,501           152           547           758           763           355           477           312           397           368           314           311           643           470           298           549           996           443	Adults Sentenced to Prison 146 109 81 62 151 103 92 109 31 108 102 111 143 81 38 727 99 213 191 115 164 96 259 286 98 116 134 205 220 92
Siovenia Spain Sweden Switzerland Turkey Ukraine United States Yugoslavia	2,2/4 1,770 12,671 5,115 10 1,102 5,367	1,637 587 1,161 10 519 4,557 923	480 2,700	324 1,055 1,228	47 194 394

# Table 22. Criminal Justice Processing Data (Volume of Cases per 100,000 population), 1994<sup>1</sup>.

Table 22 continues...

#### Table 22. ...continues

Countries	Offences Recorded	Suspects	People Prosecuted	People Convicted	Adults Sentenced to Prison
Standard dev. 25% Quartile Median 75% Quartile	3,517 1,179 2,483 6,019	1,059 560 948 1,402	958 455 692 1,183	482 313 450 778	128 94 111 193
Mean EU Mean Central and Eastern Europe mean	4,047 7,206 1,491	1,237 1,908 764	1,045 1,821 515	607 930 364	155 205 124

<sup>1</sup> "No statistics on the number of juvelines sentenced to prison are available; therefore adult figures for convictions and prison sentences were used for all countries. On the other hand, the presented rates for suspects per 100,000 and prosecutions per 100,000 are for all persons. Since comparable figures (i.e., adults only for convictions and prison sentences, and all persons for suspects and prosecutions) are used for all countries, international comparisons should not be misleading since all comparisons use the same baseline indicators. It needs to be emphasized, however, that any attempt at direct international comparison of processing data needs to be done with extreme caution."

<sup>2</sup> Belarus provided the figure of 56 for total number of prosecutions. Since this figure appears to be unrealistically low, and not in line with the number of persons convicted, it was decided not to use the data.

<sup>3</sup> Denmark provided two sets of data. The data in the body of the table are those provided by Official Statistics Denmark. The National Commissioner provided the following data: 134,524 (suspects), 10,507 (offences), 59,596 (prosecutions), and 5,278 (convictions).

<sup>4</sup> For England and Wales, it was decided to use the figure from question 7.13 - grand total of persons prosecuted, including those not covered by the specific categories given (37,497), rather than question 8.1. (99,363).

<sup>5</sup> Estonia does not distinguish between suspected, charged and prosecuted individuals. For this reason, the figures for suspects and prosecutions are the same.

<sup>6</sup> Georgia provided the following figures: 14,463 (suspects, defined as "accused"), 4,051 (prosecuted), and 1,537 (brought before the court). It was decided not to use the figures for suspects (14,463); prosecutions (4,051) was replaced by 1,537 (brought before the court).

<sup>7</sup> Kazakhstan provided two sets of statistics, one from the Ministry of the Interior and one from Goskomstat. It was decided to use the Goskomstat figures; however, the prosecution statistics are suspect (8,331) and were not used.

<sup>8</sup> For Kyrgyzstan, the statistics provided for arrests and prosecutions are the same.

<sup>9</sup> For the former Yugoslav Republic of Macedonia, the statistics provided for crimes recorded (question 2.1) and number of suspects (question 5.1) are very close. Since the former Yugoslav Republic of Macedonia does provide information on the age distribution of the suspects, it is assumed that this figure is probably correct, and that the number of recorded crimes is not correct. The former Yugoslav Republic of Macedonia reported 2,114 recorded offences per 100,000.

<sup>10</sup> The statistics on crimes recorded (question 2.10) and suspects (question 5.1) for Turkey are so low that it was decided not to use them.

Table 22 shows that:

- (1) On the average, countries in the region have over 4,000 police recorded crimes per 100,000 population; 1,236 suspects per 100,000; 1,045 prosecutions per 100,000; 607 convictions per 100,000, and 155 prison sentences per 100,000 people. There are, of course, very large variations between countries for each of these five variables: the standard deviations are very large.
- (2) With regard to police recorded offences, the median (2,483) is much lower than the mean, suggesting that there are some extreme high outliers which influence the mean. The countries in the top quartile (Q3 = 6,019)

are Austria, Canada, Denmark, England and Wales, Finland, France, the Netherlands, Scotland and Sweden. The countries in the bottom quartile (Q1 = 1,179) are Armenia, Azerbaijan, Belarus, Cyprus, Georgia, Kyrgyzstan, Moldova, Romania and Ukraine – all Central and Eastern European, less prosperous countries. Rather than viewing these statistics as true indicators of crime, it is worth considering that – to a large degree – these figures reflect the police capacity to record and keep track of crime.

- (3) With regard to suspects (per 100,000), the countries in the top quartile (Q3 = 1,402) are Austria, Canada, Finland, Greece, the Netherlands, Slovenia and the United States. The bottom quartile includes Armenia, Azerbaijan, Cyprus, Kyrgyzstan, Latvia, Moldova and Ukraine; with the exception of Cyprus, these are all countries in transition.
- (4) With regard to prosecutions (per 100,000), there is a wide range between the high of 3,750 for England and Wales, and the low of 146 for Cyprus. Andorra, Denmark, England and Wales, Finland, the Netherlands, Scotland and Turkey are in the top 25% of prosecutions per 100,000. Armenia, Azerbaijan, Bulgaria, Cyprus, Georgia, Kyrgyzstan and Moldova have the lowest number of prosecutions per 100,000.
- (5) With regard to convictions (per 100,000), again there is a wide range between the lowest (Cyprus with 86) and the highest (Turkey, with 1,228). The countries in the top 25% are Andorra, Denmark, England and Wales, Finland, Scotland, Switzerland and Turkey. At the low end, there is Armenia, Azerbaijan, Bulgaria, Cyprus, Georgia, Kyrgyzstan, Moldova and Portugal.
- (6) With regard to prison sentences (per 100,000), there is a wide international range from a low of 31 per 100,000 (Cyprus) to a high of 727 (Greece). Note that these are sentences, not prison admissions; also, these statistics do not reflect the length of the sentences. The countries in the top quartile are Greece, Italy, Moldova, the Netherlands, the Russian Federation, Scotland, Switzerland and Turkey. The countries in the bottom quartile are Austria, Azerbaijan, Bulgaria, Cyprus, Georgia, Germany, Slovakia and Slovenia. Compared to the earlier processing points (suspects, prosecutions, convictions), there is a less clear clustering of countries for this variable.

Table 22 presents the means for the EU countries and the Central and Eastern European countries for the five processing points. The Central and Eastern European countries have a much lower number of police-recorded crimes (1,491 vs. 7,206 for EU countries, almost five times higher). The EU countries also have a much higher number of suspects (per 100,000) than do the Central and Eastern European countries (1,908 vs. 764), and more than three times more prosecutions per 100,000 (1,821 vs. 515) than do the Central and Eastern European countries. The EU countries have almost three times the number of convictions per 100,000 (930 vs. 364) and EU countries also



Figure 3. Number of cases, 1994.

more prison sentences per 100,000 (205 vs. 124). Judging on the basis of these formal statistics, criminal justice personnel in the Central and Eastern European countries appear to have a lower work load than do their EU colleagues. (See Figure 3)

One would expect that countries with a high level of police-recorded crime also have higher volumes at the later stages of processing, since each of these stages provides the input for the next stage (except the prison sentencing stage). This is confirmed by the results of the bivariate correlations: the number of police-recorded offences (per 100,000 population) is related to the number of suspects (per 100,000 population) (r = .57, p=.002), the number of prosecutions (r = .81, p = .000), and the number of convictions (r = .74, p = .000). The number of suspects is related to the number of prosecutions (r = .81, p = .000) and the number of convictions (r = .82, p = 000). Finally, the number of prosecutions is related to the number of convictions (r = .91, p = .000).

### 4.3.4 Case attrition

At each stage of the criminal justice process, a certain number of cases are funneled away from the system. Not all arrested people are prosecuted; not all prosecuted people are convicted; and not all convicted people are sen-

#### В C D Ε F Country A G Convictions/ Prosecutions Convictions Prison/ Prosecutions Suspects/ Prison/ Offences<sup>1</sup> Prosecutions Convictions /Offences /Offences Offences /Suspects Andorra 0.33 0.14 Armenia 0.82 0.65 0.61 0.41 0.79 0.94 0.68 Austria 0.40 0.13 0.01 0.10 0.79 0.67 0.25 0.85 0.92 Azerbaijan 0.62 0.40 Belarus 0.55 0.39 0.13 0.33 Belgium 0.07 0.02 0.26 0.42 0.12 0.29 Bulgaria 0.05 0.04 0.39 0.82 Canada 0.24 0.09 0.04 0.01 0.37 0.41 0.30 Croatia 0.88 0.43 0.49 Cyprus 0.64 0.25 0.05 0.39 0.58 0.36 0.15 Czech Rep 0.59 0.22 0.27 0.14 0.51 Denmark England/W 0.37 0.23 0.01 0.61 0.04 0.26 1.00 Estonia 0.26 0.17 0.05 0.65 0.27 Finland 0.54 0.23 0.20 0.02 0.42 0.86 0.10 France 0.20 Georgia 0.48 0.25 0.99 0.53 0.47 Germany 0.48 0.07 Greece 0.90 0.26 0.25 0.96 0.76 Hungary 0.31 0.26 0.20 0.03 0.86 0.13 0.28 0.06 0.81 0.34 0.60 Italy 0.34 0.09 Kazakhstan 0.54 0.40 0.16 0.40 Kyrgyzstan 0.51 0.51 0.35 1.00 0.69 0.28 0.07 0.87 0.29 Latvia 0.33 0.25 0.87 0.10 0.44 Lithuania 0.36 0.23 FYR Macedonia 0.62 0.45 0.31 Moldova 0.48 0.45 0.36 0.30 0.93 0.81 0.83 Netherlands 0.19 0.18 80.0 0.03 0.96 0.42 0.45 N. Ireland 0.16 0.02 0.11 0.72 0.21 Norway 0.10 Portugal 0.31 0.45 Romania 0.74 Russ.Fed. 0.55 0.35 0.31 0.12 0.64 0.88 0.37 0.12 0.22 Scotland 0.10 0.02 0.82 Slovakia 0.34 0.31 0.17 0.04 0.90 0.56 0.21 0.73 0.29 Slovenia 0.21 0.14 0.02 0.67 0.15 Spain 0.33 Sweden 0.09 0.04 Switzerland 0.21 0.18 0.45 Turkey 0.32 Ukraine 0.47 United States 0.85

#### Table 23. Case Attrition, 1994.

Table 23 continues...

#### Table 23. ... continues

Country	A	B	C	D	E	F	G
	Suspects/	Prosecutions	Convictions	Prison/	Prosecutions	Convictions/	Prison/
	Offences <sup>1</sup>	/Offences	/Offences	Offences	/Suspects	Prosecutions	Convictions
Standard dev.	0.23	0.16	0.16	0.11	0.26	0.21	0.23
25% Quartile	0.33	0.18	0.12	0.02	0.41	0.45	0.19
Median	0.47	0.27	0.20	0.04	0.80	0.61	30.00
75% Quartile	0.70	0.43	0.34	0.13	0.91	0.82	0.44
Mean EU Mean Central and Eastern Europe mean	0.49 0.37 0.53	0.31 0.24 0.38	0.23 0.14 0.31	0.09 0.05 0.14	0.65 <sup>2</sup> 0.73 0.68 <sup>2</sup>	0.63 0.54 0.73	0.35 0.32 0.40

<sup>1</sup> This measure is commonly referred to as the "clearance rate". A comparison with Interpol statistics reveals considerable inconsistencies.

<sup>2</sup> Kyrgyzstan and Estonia have been excluded from the calculation of the mean, because both countries reported identical numbers of suspects and convictions.

tenced. Nations will vary in (a) the degree of overall case attrition (i.e. the difference between the first stage and the last), and (b) the manner in which attrition takes place (i.e. at what stage - prosecution, conviction, or sentencing to prison - the greatest "loss" of cases takes place). Table 23 presents seven case attrition measures: suspects/offences (column A); prosecutions/offences (column B); convictions/offences (column C), prison sentences/offences (column D), prosecutions/suspects (column E), convictions/prosecutions (column F), and prison sentences/convictions (column G).

These measures are presented, again, with a number of cautions (noted below). One general caution is that all of the data have been gathered more or less independently of one another, and refer to the same calendar year. Suspects apprehended during one year may not be prosecuted or convicted (if at all) until the next year. The measures presented below are therefore based on the assumption that the number of cases remains, by and large, stable from one year to the next.

Table 23, suspects/offences (column A). This measure mixes two different units of analysis: individuals (i.e., arrests) and crimes (i.e., incidents). In order to link these two units, one would need to include estimates about the

<sup>13</sup> The use of the word "attrition" in connection with the number of persons convicted who are not sentenced to imprisonment can, of course, be questioned. It is not our intention to suggest the value-laden position that most convicted offenders "should" be sentenced to imprisonment. Nonetheless, as shown below, there are significant differences between countries in the extent to which convicted persons are sentenced to imprisonment.

average number of offenders per crime. Unfortunately, this information is not available. To calculate this figure, the total number of suspects (question 5.1) is divided by the total number of recorded crimes (question 2.1). The denominator (i.e., total number of recorded crimes) is a very problematic statistic when used in international comparisons. It makes much more sense to use a specific crime (such as burglary or assault) as the baseline for this type of comparison. The catch-all category of "total offences" includes a wide diversity of illegal behaviour; some countries include a much more narrowly defined range of illegal behaviour (e.g., excluding traffic violations, for example) than others. (This point is reinforced by the fact that the figures presented in Table 23 deviate in several instances from the Interpol clearance rate). However, because it is one of the most frequently employed indicators of case attrition, we decided to include it in the present discussion.

With this "health warning" in mind, some cautious conclusions may be drawn about international variations in the proportion of criminal incidents that appear to be "cleared" by an arrest. Countries in the top quartile are Armenia, Azerbaijan, Croatia, Greece, Romania, Slovenia and the United States. The mean for all countries is .49, meaning that – on the average – countries report having one suspect (arrest, accused) for every two recorded crimes. The EU mean is .37 and the Central and Eastern Europe mean is .53; the latter figure may reflect the lower number of police recorded crimes in the Central and Eastern European countries.

*Table 23, prosecutions/offences (column B).* On the average, about one person is prosecuted for every three offences recorded by the police (mean = .31). Countries in the top quartile of prosecutions/offences are Armenia, Azerbaijan, Croatia, Georgia, Kyrgyzstan and Moldova. These are countries with a relatively low number of police recorded offences. The EU mean (.24) is lower than the mean for Central and Eastern Europe (.38).

Table 23, convictions/offences (column C). On the average, about one person is convicted for every four offences recorded by the police (.23). The top countries are – once again – Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan and Moldova (all countries with low volumes of recorded crimes). Belgium, Bulgaria, Canada, Italy, the Netherlands, Northern Ireland and Scotland have a relatively low convictions/offences ratio. Again, the EU mean (.14) is much lower than the Central and Eastern European mean (.31)

Table 23, prison sentences/offences (column D). This measure reflects which proportion of convictions included some type of prison sentence. Less than one in ten of the offences recorded by the police - on the average - resulted in some type of prison sentence (.09). Again, Armenia, Azerbaijan, Belarus, Georgia, Greece and Moldova are in the top quartile regarding the

likelihood that an offence will result in any type of prison sentence. The EU mean (.05) is almost one-third the mean for Central and Eastern Europe (.14).

Table 23, prosecutions/suspects (column E). Column E (prosecutions/suspects) is likely to reflect international differences in criminal justice procedure and policy (e.g. pre-trial diversion programs). In two countries (Estonia and Kyrgyzstan), the same figures are provided for both suspects and prosecutions (and these two countries have been excluded from the calculations of the mean). The mean of .65 indicates that - over all - about 65 out of 100 accused/suspects are actually prosecuted. The first quartile is .45, which reflects the fact that only about one-fourth of the countries (Bulgaria, Cyprus, Slovenia, Canada and Finland) prosecute less than half of the suspects.

*Table 23, convictions/prosecutions (column F).* Column F (convictions/prosecutions) may be the most straighforward attrition measure. Indeed, it appears to be a common objective of all criminal justice systems to secure a conviction of those who are prosecuted. There may be disagreement as to whether a person should be arrested or prosecuted, but once prosecuted, most systems are interested in securing a conviction. On the average, 63% of the prosecutions end up in a conviction. The mean for EU countries (.54) is lower than in the Central and Eastern European countries (.73). Countries where there appears to be a high likelihood of conviction (if the suspect is prosecuted) are Armenia, Azerbaijan, Finland, Georgia, Latvia, the Russian Federation and Scotland. Countries where there appears to be a relatively low likelihood of conviction are Andorra, Bulgaria, Canada, Italy, the Netherlands and Portugal.

About 63% of the prosecutions in the region ended with a conviction (the median is 61%). Thus, Armenia (.94), Azerbaijan (.92), England and Wales (.61), Estonia (.65), Finland (.86), Georgia (.99), Hungary (.76), Kyrgyzstan (.69), Latvia (.87), Moldova (.81), Northern Ireland (.72), the Russian Federation (.88), Scotland (.82) and Slovenia (.67) are in the top 50% with regard to likelihood of conviction if the suspect is prosecuted.

Table 23, prison/convictions (Column G). Column G (prison sentences/convictions) reflect cross-national differences in sentencing philosophies and policies. On the average, in the region about one-third of the convictions involve some kind of deprivation of liberty (.35). Countries in the top quartile (Q3 = .44) are Armenia, Bulgaria, Georgia, Greece, Italy, Lithuania, Moldova and the Netherlands. The EU mean (.32) is slightly lower than the mean (.40) in Central and Eastern Europe.

Figure 4 represents the level of case attrition in the region. The interpretation of the degree of case attrition is not straightforward. Is it reasonable to argue that countries with a low attrition rate perform their task better than countries where only a relatively small proportion of the cases arrives at the last processing point (i.e., prison)? Not necessarily so. One of the hallmarks



Figure 4. Case attrition, 1994.

of recent developments in criminal justice is the declining reliance on the courts (judges) in favour of a growing importance of alternative processing options which take place at the police or prosecutor's office (see Albrecht, 1998; van de Bunt and Marshall, 1998). A high case attrition rate may, therefore, mean two totally different things: either the police (prosecutors, judges) do a poor job at selecting cases for arrest (prosecution, conviction), *or* the system has a well-developed system of non-criminal justice system processing alternatives.

In this section, the primary focus has been on the flow of cases through the system. We described the degree to which police-recorded crime is consistent with the amount of crime found through victim surveys, the volume of cases (per 100,000 population) handled at five different stages of processing, and the degree of case attrition at the different stages of the criminal justice process. In section 4.4, we turn to a discussion of international variations in the performance of criminal justice systems.
# 4.4 Performance of criminal justice system

"The issues raised by performance measurement are both technical and political. In many public services, perhaps particularly in the police service, the technical problems involved in measuring performance are daunting. The relationships between inputs, outputs and outcomes – between the assignment of resources, what gets done and what effects that activity has – are not infrequently complex, tenuous, unknown and difficult to know" (Weatheritt 1993, p. 24)

This was written regarding the situation in the United Kingdom, but there is no doubt that it holds even more true for attempts at making cross-national assessments of the performance of criminal justice systems. There is a growing interest among researchers and practitioners in how to evaluate the performance of the police, or of the criminal justice system in general, but many unresolved questions remain. In 1993, a collection of discussion papers on this topic was published (Performance Measures for the Criminal Justice System, by the Bureau of Justice Statistics, 1993). More recently, a National Institute of Justice publication (Measuring what Matters: Developing Measures of What the Police Do, 1997) summarizes discussions by police experts on this topic. A recurrent theme is the importance of distinguishing between process evaluations (i.e., is the process efficient and fair? What are the costs of what the police do in relation to what they achieve?) and outcome evaluations (i.e., is the system effective in producing a more safe society, with acceptable levels of personal and property crime, a society where citizens are not afraid of crime?).

Most of the current evaluation efforts focus on the *efficiency* of the criminal justice system: what do the police (prosecutors, judges) *do*, and what are the costs of this? Measuring what police do is easier than measuring what *effect* their activities have had on society (cf. Bayley 1994, p. 97). Weatheritt (1993, p. 24) gets at the heart of the difficulties involved in performance evaluations: "The goals of policing are multiple and may conflict, the achievement of goals for which the police is routinely held accountable (e.g. public tranquillity or the absence of crime) may only be partially, minimally, and to an unknown extent dependent on police action; and the outputs of policing are often intangible and not readily identifiable."

As Bayley (1985, p. 17–18) points out, it is virtually impossible to determine variations in police effectiveness over time or space: "Judging police performance is a controversial multivariate process, elements of which change from place to place and time to time" (p. 18). The prevention of crime and improvement of public safety is a policing goal the world over; however, there are other important criteria by which to assess performance: "[A]dherence to law, absence of immoral behaviour, generation of public trust, display of sympathy and concern, openness to informed scrutiny, capacity for gen-

eralized problem-solving, protection of the integrity of political processes, and equitable treatment of persons" (Bayley 1985, p. 17–18).

Most of the data available internationally are measures of *process*, of the manner in which (*how*) the criminal justice system performs its assigned activities. Data on the *outcome* (*product*) of the activities of the criminal justice system are much harder to come by. Four performance measures are presented in the following: police recording practices (section 4.4.1); productivity (section 4.4.2); citizen satisfaction with the police (section 4.4.3); and police corruption (section 4.4.4). Section 4.4.5 provides a summary overview of the used performance indicators.

## 4.4.1 Police recording performance

An important task of police departments is to keep accurate records of crime. The integrity of the crime-recording process may be viewed as a measure of the quality of police work. In section 5.2, the issue of the mismatch between victimization and police record data was discussed, with the argument that the probability that a reported crime actually will be recorded by the police may be used as an indicator of police recording performance. The higher the recorded/reported crime ratio, the poorer the police recording performance. Table 20 provides data on 31 countries. Countries that rank high with regard to police recording practices are Austria, Canada, England and Wales, Finland, France, Norway, Scotland and Sweden. Georgia, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Romania, Slovakia and Ukraine rank at the bottom with regard to police recording performance.

## 4.4.2 Productivity

Efficiency means economically applying available resources to accomplish statutory goals as well as to improve public safety (Greenfeld 1993, p v). One measure of this may be the cost-effectiveness of the activities of the police, prosecutors, and judges, calculated on the basis of the per-unit-cost of arrests, prosecutions, convictions and prison sentences. We already described international variations in work load (measured as the number of cases - be it recorded offences, suspects, prosecutions, convictions, and prison sentences - per 100,000 population) (Table 22). In order to obtain a measure of the output per unit, the total number of arrests (prosecutions, convictions, prison sentences) is divided by the total number of police (and prosecutors), and multiplied by 100. Table 24 presents data on the average number of suspects, prosecutions, convictions and prison sentences produced by 100 police personnel (columns A, B, C and D), and comparable data for prosecutors (columns E, F and G).

Columns A through D provide data on police productivity (per 100 police officers). On the average, in Europe and North America, 100 police officers

"produce" 414 suspects (annually), 372 prosecutions, 213 convictions, and 50 prison sentences. The routine activities of most police officers consist of service-oriented activities and order maintenance, rather than crime control; the data in Table 24 support this view. "[M]ost of the time the police do not use the criminal law to restore calm and order. They rarely make arrests, although the threat of doing so always exists" (Bayley 1994, p. 20). For example, in Austria there were 668 arrests made for every 100 police officers, an (annual) average of slightly more than 6 per officer. The figure is higher for the United States, where for every 100 police officers, a total of 1519 arrests were made (about 15 per officer per year).

Austria, Canada, Finland, Greece, the Netherlands and the United States are in the top quartile, suggesting that the police forces in these countries on the average – "produce" the largest number of arrests (per officer). Armenia, Cyprus, Kazakhstan, Latvia, Lithuania, and the Russian Federation, on the other hand, show the lowest "productivity" (as measured by the number of arrests made per officer). There are very marked differences between the EU countries and the Central and Eastern European countries: the "productivity" of the police in EU countries is about three times higher than of those in the Central and Eastern European countries (based on numbers of suspects, prosecutions, convictions, and prison sentences).

The same general picture emerges when focusing on prosecutors. It has already been shown that there were more prosecutors in the Central and Eastern European countries than in the EU countries. Table 24 shows that on the average there are 19,692 prosecutions per 100 prosecutors (about 196 prosecutions annually per prosecutor); in the EU countries, that number is considerably higher (38,505). The top countries are Andorra, Denmark, England and Wales, Finland, the Netherlands and Turkey, and the bottom countries are Armenia, Azerbaijan, Cyprus, Georgia, Latvia and the Russian Federation.

When focusing on the number of convictions per prosecutor (column F), the numbers are slightly lower, with an average of 10,915 per 100 prosecutors (109 per year for each prosecutor). The EU mean is much higher: 21,510 convictions for every 100 prosecutors, about 6 times more than in the Central and Eastern European countries (3,389). A similar picture emerges for the number of prison sentences per 100 prosecutors: on the average in Europe and North America, every 100 prosecutors "produce" 2,770 prison sentences per year. The number in the EU countries is higher (5,067) than in the Central and Eastern European countries (1,320).

Table 24 shows that the quantitative "productivity" of prosecutors is significantly greater (as measured by the number of prosecutions – column E, the number of convictions – column F, and the number of prison sentences – column G) than the corresponding quantitative "productivity" of police officers. This reflects the different nature of the work of criminal justice officials at this stage of criminal justice processing. Whereas the work of police officers consist for a large part of service activities and order mainte-

Country	A Suspects/ Police	B Prosecutions /Police	C Convictions /Police	D Prison Sentences /Police	E Prosecutions /Prosecutors	F Convictions/ Prosecutions	G Prison Sentences/ Prosecutor
Andorra					66 233	21 967	3 167
Armenia	54	42	40	27	1 963	1 837	1 247
Austria	685		224	22	.,	33,068	3,271
Azerbaijan					1.015	939	374
Belarus					.,	3,165	1.049
Belgium			115	30		5 175	1 347
Bulgaria			110		4,102	1,608	1,319
Canada	964	360	146	44	1,102	1,000	1,010
Croatia	187	91	110		8 745		
Cyprus	72	28	16	6	1,513	885	318
Czech Ren		20	10		10 193	6 008	1 320
Denmark		1,332	678		42,693	21,725	.,0=0
England/W		1 082	664	29	92 287	56 649	2 506
Estonia	142	142	93	25	7,574	4,960	1,353
Finland	1,792	752	647	62	26,608	22,896	2,187
France	385		• • •		_0,000	,000	_,
Georgia					2.185	2.157	1.147
Germany		359	171	12	17.422	8.280	571
Greece	686		198	190	,	20,149	19.329
Hungary	398	342	261	34	8.922	6.793	879
Italv	276	215	73	44	-,	-,	
Kazakhstan	82		61	25		2.567	1.029
Kyrgyzstan					3,872	2,657	,
Latvia	113	99	86	25	2,923	2,540	738
Lithuania	105		68	30	,	2,332	1,036
FYR Macedonia	354	218	99	30	12,464	5,650	1,736
Moldova	170	159	129	107	3,565	2,896	2,409
Netherlands	619	596	252	112	56,087	23,737	10,567
N. Ireland		126	90	19			
Norway		245		50			
Portugal		220	68	30	9,370	2,884	1,296
Romania	359						
Russ.Fed.	80	51	45	17	3,243	2,852	1,064
Scotland		338	277	61	25,069	20,534	4,533
Slovakia	251	225	126	26	7,578	4,225	881
Slovenia	397	116	79	11	6,563	4,429	646
Spain	123						
Sweden	412						
Switzerland			398	73			
Turkey		1,422	647	208	70,113	31,882	10,243
Ukraine	124						
United States	1,519						

## Table 24. Productivity Police and Prosecutors (per 100), 1994.

Table 24 continues...

Table 24. ... continues

Country	A Suspects/ Police	B Prosecutions /Police	C Convictions /Police	D Prison Sentences /Police	E Prosecutions /Prosecutors	F Convictions/ Prosecutions	G Prison Sentences/ Prosecutor
Standard dev. 25% Quartile Median 75% Quartile	441 118 267 515	401 116 220 360	209 72 126 261	50 25 30 61	25,389 3,404 8,745 25,838	13,077 2,560 4,694 20,831	4,108 918 1,307 2,482
Mean EU Mean Central and Eastern Europe mean	414 621 201	372 612 149	213 306 99	50 59 32	19,692 38,505 5,660	10,915 21,510 3,389	2,770 5,067 1,320

nance which produce few "tangible" outcomes (such as arrests), the activities of prosecutors are primarily focused on the processing of "dossiers".

In sum, it seems that the police and prosecutors in the EU countries "produce" more suspects, prosecutions, convictions, and prison sentences than do their Central and Eastern European counterparts. Does this mean that the criminal justice work force in Central and Eastern Europe is less productive (i.e., less efficient) than their EU counterparts? Not necessarily. Equally plausible alternative explanations may be the relatively smaller number of police and prosecutors in EU countries, or the lesser crime problem or poorer record keeping practices in Central and Eastern European countries.

#### 4.4.3 Citizen satisfaction with the police

Soft or subjective indicators of the performance of the police (or of the criminal justice system in general) are being used to an increasing extent. Subjective measures are easier to obtain – commonly through surveys – than the more elusive objective "hard" measures of police performance. From a pragmatic policy perspective, it is reasonable to argue that one important objective of policing is increasing the sense of security and social well-being among the population, regardless of the objective threat of criminal victimization. If people feel that the police is performing well, if they feel secure, if they feel they can trust the police – that is half the battle.

In order to make international comparisons of the subjective assessment of members of the public of policing and public safety, we constructed the Citizen Evaluation of Police Performance Index (CEPPI), a *subjective* performance index, based on data from the International Crime Victimization Survey. The purpose of the Citizen Evaluation of Police Performance Index (CEPPI) is to provide a *composite* measure which incorporates more than one single dimension of the concept of citizen evaluation of police performance<sup>14</sup>. Three ICVS questions are used as the source variables for the CEPPI. There are both conceptual and empirical justifications (the variables are intercorrelated) for combining these three variables into one composite index. The three questions used are:

- (1) The percentage of victims of contact crimes who reported their victimization to the police. Willingness to report contact crimes to the police is not influenced by the demands of insurance companies (as in the cases of car theft or burglaries), but rather reflects the willingness of victims to confide and trust in the police. The higher the reporting rate, the higher the citizen satisfaction with the police. On the average, 29% of the victims in the 36 countries reported contact crimes to the police (standard deviation 11). The minimum value for this variable is 9% (Norway), the maximum value is 66% (N. Ireland). Victims of contact crimes in the EU countries are more likely to report their victimization to the police than are their Central and Eastern European counterparts (32% vs. 24%).
- (2) The percentage of victims who were satisfied with the way in which their report of a crime was handled by the police. This measure is a straightforward indicator of the extent to which victims appear to be satisfied with the manner in which the police responded to their report of victimization. In the region, on the average, slightly over half of the victims reported their satisfaction with the way the police handled their case (51%). The response was most positive in Scotland (84%) and least positive in Kyrgyzstan (20%). The proportion of people who indicated satisfaction with the way the police handled their report was about twice as high in the EU countries (66%) than in the Central and Eastern European countries (35%).
- (3) The percentage of all respondents who are satisfied with police crime control. This measure is an indicator of the extent to which the general public appears satisfied with crime control in general. Approximately half of the people in Europe and North America indicated satisfaction with the manner in which the police maintained crime control in their area. People in Canada were most satisfied (88%), and people in Estonia were least satisfied with crime control in their area (14%). Again, more people living in EU countries expressed satisfaction with crime control (68%) than did people living in Central and Eastern European countries (38%).

<sup>14</sup>See appendix D for an explanation of the construction of the CEPPI

Table 25 presents the CEPPI values, ranks and quartile position of 36 countries. Countries with the highest level of overall satisfaction with the police are Canada, England and Wales, France, the Netherlands, Northern Ireland, Scotland, Sweden, Switzerland and the United States. Respondents in Belarus, Estonia, Georgia, Kyrgyzstan, Latvia, Lithuania, Romania, the Russian Federation and Ukraine rank in the bottom quartile with respect to their evaluation of police performance. The mean value on the CEPPI for EU countries (37) is more than twice the mean CEPPI value for Central and Eastern European countries (17).

It is only to be expected that the subjective evaluation of the police in countries in transition is different from the corresponding evaluation in the remainder of Europe and North America. Indeed, "In all of the communist states the pre 1989-91 police systems were...the most powerful repressive agents of the state with the principal task of maintaining the rule of a particular political elite by suppressing dissent" (Gregory 1994, p. 85). The police systems in the countries in transition have been going through a major transformation in order to become compatible with the democratic process. Under communist rule, the police paid less concern to individual liberty and "were expected to convey party authority to the everyday lives of citizens" (Wilson and Walsh 1997, p. 45). (See Marenin 1996 for more discussion on the role of the police in times of major social change.) A related factor may be that because of the market economies developing in Central and Eastern European countries, the relative attractiveness of policing as a profession and means of economic support has decreased, resulting in "increasingly high attrition rates and difficulties in retaining trained and qualified personnel" (Wilson and Walsh 1997, p. 53).

Citizen evaluation of police is related to some, but not to all indicators of criminality. In Europe and North America, countries with a higher score on the corruption index (r = -.44, p = .06), the homicide index (r = -.84, p = .000), and the serious violence index (r = -.702, p = .001) tend to have a lower score on the CEPPI. No such association is found for the burglary index, the petty crime index, the violence against women index, and the motor vehicle theft index.

The World Competitiveness Yearbook 1997 ranks 25 countries on two dimensions that are related to subjective evaluation of the criminal justice system (0 is low; 10 is high). The first ("*security*") measures whether people have full confidence that person and property are protected; the second measures whether people have full confidence in the fair administration of justice in society ("*justice*"). There is an association between CEPPI and "security" (r = .67, p = .003), and between CEPPI and "justice" (r = .66, p = .005). The World Competitiveness Survey includes only four countries in transition (the Czech Republic, Hungary, Poland and the Russian Federation) all of which rank below any of the other countries on both the "security" and the "justice" questions.

Countries	CEPPI	CEPPI (Rank)	CEPPI (Quartile)
Albania	28	21	3
Austria	26	18	2
Belarus	13	7	1
Belgium	37	27	3
Bulgaria	21	13	2
Canada	47	34	¤
Croatia	18	11	2
Czech Rep	23	15	2
England/W	44	31	4
Estonia	13	6	1
Finland	33	26	3
France	41	28	4
Georgia	13	5	1
Germany (W)	33	25	3
Hungary	23	15	2
Italy	27	10	3
Kyravzstan	3	1	1
Latvia	11	3	1
Lithuania	14	q	1
EVB Macedonia	28	21	3
Malta	25	16	2
Netherlands	42 42	20	<u>2</u> <u>A</u>
N Ireland	12	20	4
Norway	30	22	3
Poland	15	10	2
Pomania	10	10	۲ ۲
Duccian Fod	12	4	1
Scotland	50	25	1
Slovakia	20	22	4
Slovania	52 25	17	2
Shore	20	24	2
Swodon	JZ 45	24	1
Sweden	40	26	4
Ukraino	14	50	4
United States	14	9 00	1
Vugoolovio	40	10	4
fuyosiavia	10	12	2
Standard Dov	10		
Statiuaru Dev.	10		
20 /0 Quai liit Madian	14		
Viculali 75% Quartila	20		
75% Quartile	40		
Moon	27		
Nitali Eli moon	21		
Control and Eastern Europa	3/ 17		
Central and Eastern Europe	17		
IIIcall			

## Table 25. Citizen Evaluation of Police Performance Index (CEPPI).

#### 4.4.4 Police corruption

The ICVS includes a question on corruption among public officials: "In some countries, there is a problem of corruption among government or public officials. During 1995, has any government official, for instance a customs officer, a police officer or inspector in your country asked you, or expected you to pay a bribe for his service?" Urban respondents in 31 countries answered this question. The mean for the 31 countries is 8.39% (standard deviation: 7.97). The countries in the top quartile are Bulgaria (19.1%) answered yes), Croatia (16%), Georgia (29.9%), Kyrgyzstan (21.3%), Latvia (14%), the Russian Federaton (18.7%), and Slovakia (13.9%). Very low levels of corruption were reflected in the responses from Canada (0.7%), England and Wales (.02%), Finland (0.0%), the Netherlands (0.6%), Northern Ireland (0.0%), Sweden (0.4%), and Switzerland (0.3%). The mean for the Central and Eastern European countries (n = 19) is 13.01 (standard deviation = 6.81); that is, on the average, 13% of the respondents indicated that they had direct personal experience with corruption among public officials. In the 7 EU countries included in the ICVS, on the other hand, less than 1% (.89%) of the respondents indicated problems with corruption (standard deviation: 1.09).

There is a strong negative association between perceived problems of corruption among public officials and CEPPI (r = -.75, p = .000), "justice" (-.93, p = .000), and "security" (r = -.85, p = .001). In other words, countries where people perceive a corruption problem among public officials (including the police) tend to have a much lower citizen's evaluation of police performance, less confidence that people's person and property is protected, and less confidence that the administration of justice is fair.

# 4.4.5 Overview of performance indicators in Europe and North America

None of the measures discussed so far truly measure performance of the criminal justice system. Experts have great difficulty accomplishing such a feat nationally; trying to do this internationally is an even greater challenge. At most, we have provided a limited description of what police *do* (i.e. police recording practices), *how much* police and prosecutors do (i.e., productivity), what people *think* of the police (CEPPI), how secure people *feel* (security), people's *opinion* about the fairness of the system (justice), and people's *self-reported exposure to corrupt public officials* (corruption). Thus far, we have not mentioned the most frequently used objective measure of the effectiveness of the criminal justice system: *crime rates*. Crime rates are the product of a complex set of social, political and economic factors; most likely, the quality of the work done by the criminal justice system has no – or only a minor – effect on the extent and seriousness of crime in a society. Crime

Countries	Police	F	Productivity	y	Subjective Measures			Crime Rates	
	Rec- ording	Police	Prosecu- tors	CEPPI	Security	Justice	Lack of Corrup- tion	Serious Violence	Petty Crime
Albania Andorra		4	4	3			2	3	2
Armenia Austria Azerbaijan	4	4	1	2	4	4	3	4 1 4	2
Belgium	3 3			1 3	2	1	2	3 2	1 1
Bulgaria Canada	2	Л	2	2	1	3	1	4	3
Croatia	2	2	3	2	4	5	1	3	1
Cyprus		1	1				1	1	
Czech Rep Denmark			3 4	2	1 4	1 4	2	2 2	4
England &W	4	0	4	4			4	2	3
Finland	2 4	2 4	2 4	3	4	4	3 4	4	4
France	4	3		4	1	2	3	1	2
Georgia Germany	1		1 3	1 3	3	3	1	4 2	1
Greece Hungary	3	4 3	3	2	3 1	2	3	1 2	1
Ireland	-	-	-		2	3	-		
ltaly Kazakhstan	3	3 1		3	1	1		2 4	2
Kyrgyzstan	2		2	1			1	4	3
Latvia	1	1	1	1			1	4	4
Liuiuailia Luxembourg	-	1	0	I	3	3	2	3 1	3
Malta	2	3	3	3			2	1	2
Netherlands	3	2	2	2	2	3	3	3	1
N. Ireland	3			4			4	3	4
Norway Poland	4			3 2	3	4	2	1 4	1 3
Portugal	4	2	3	-1	2	2	2	3	0
Russian Fed.	2	1	1	1	1	1	1	4	4
Scotland	4		3	4			4	2	2
Slovakia	1	2	2	3			1	3	4
Slovenia	2	3	2	2			3	3	3
Spain	2	2		3	3	2	л	2	1
Switzerland	3	3		4	4	4	4	1	3

## Table 26. Overview of Performance Indicators (Quartiles).

Table 26 continues...

Table 26. ... continues

Countries	Police Productivity			Subjective Measures			Crime Rates		
Rec- ording	Police	Prosecu- tors	CEPPI	Security	Justice	Lack of Corrup- tion	Serious Violence	Petty Crime	
Turkey Ukraine United States Yugoslavia	1 3	2 4	4	1 4 2	2 3	1 2	2 3 1	1 4 4 3	4 4 2

rates should definitely not be used as an indicator of criminal justice performance (Weatheritt 1993; Bailey 1994). Yet, because of the interrelationship between crime rates and criminal justice operations, it is reasonable to include crime rates (the serious violence index and the petty crime index) in the summary overview of the performance measures (Table 26).

Table 26 presents country quartile values on police recording practices, productivity (police and prosecutors), subjective measures (CEPPI, security, justice and lack of corruption), and crime rates (the serious violence index and the petty crime index). High values (3 or 4) indicate a high level of system performance; low values (1 or 2) reflect lower levels of system performance. For the two crime indices, high values (3 or 4) indicate a higher level of crime, and lower values (1 or 2) reflect a relatively lower level of crime. A "perfect" system would have high values in the first 7 columns (police recording, productivity, subjective measures), and low values in the 2 right-hand columns (crime rates). There are several countries that score high (3 or 4) on all the available performance indicators (Denmark, Germany, Italy, Norway, Scotland) and low (1 or 2) on the crime indices. There are also several countries that score low (1 or 2) on all the available performance indicators (Azerbaijan, Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Moldova, Poland, the Russian Federation, Ukraine and Yugoslavia) and high (3 or 4) on the crime indices. There are high crime countries which score high on the performance indicators: both Canada and the United States score high on all the performance indicators (with the exception of a '2' on the justice measure for the United States), and on the two crime indices. There are also countries which score poorly on the performance indicators, yet have a low level of crime (Cyprus).

# 4.5 Concluding remarks

The observations made in this chapter are based primarily on the results of the Fifth United Nations Crime Survey and the International Crime Victim Survey, the two main international data sources on crime and criminal justice. Although both data sources have improved significantly since they were first started years ago, they still remain open to serious criticism. Some of the problems cannot be solved by currently available methods (i.e., differences in legal definitions, differences in procedures, differences in the manner in which criminal justice data are collected, differences in cultural context), others may be lessened by careful handling and cautious interpretations, and by avoiding overemphasizing single data points or observations. One certainly can make a strong case for the argument that multiple international data sources used simultaneously are an important step in the right direction. The results of this chapter support this contention.

It is the purpose of Chapter 4 to provide a general overview of the operation of criminal justice systems in Europe and North America. It is admittedly a snapshot picture, since trend data have not been included. We describe international patterns, similarities and differences between the countries in the region. Comparisons are made between Central and Eastern European countries (countries in transition) and European Union (traditionally capitalist) countries, because these two groups of nations – although varying widely between and among themselves – also differ in significant ways from each other. The comparisons and statistical analyses are straightforward, mostly descriptive. It should be kept in mind that many of the analyses are based on different numbers and combinations of countries, because of missing data. Whenever appropriate, simple bivariate analyses have been done. Undoubtedly, more complex analyses and comparisons could have been accomplished; however, the nature of the data as well as the complicated character of international analyses using large numbers of countries suggest that simple descriptions and comparisons are an important and reasonable first step.

Despite the cautions needed when working with the available international data, the consistency in the observations in these sections does provide confidence that we are beginning to piece together some important parts of the intricate international puzzle of criminal justice. The more striking observations are summarized in the following seven points.

(1) There are large international variations in the rate of police, prosecutors, judges, and prison staff (per 100,000 population), but there is a striking international similarity in the distribution of criminal justice personnel among the police, prosecution, the judiciary, and corrections. Although Central and Eastern European countries have a significantly higher rate of population employed in criminal justice than do the EU countries, about 82% of criminal justice personnel in both groups of countries are

employed by the police, approximately 2% in prosecution, 3% in the judiciary, and 13% in corrections.

- (2) There appears to be a correlation between crime and the levels of criminal justice personnel: countries that have a higher level of petty theft, serious violence and homicide tend to have rather high levels of criminal justice personnel than do countries with lower levels of these crimes.
- (3) Criminal justice in Europe and North America remains a male-dominated profession. There is not a single country where half or more of the prison staff and police are female, and there are very few countries where females make up more than half of the prosecutors or judges. Central and Eastern European countries have a somewhat higher proportion of female judges and prison employees than do the EU countries. Yet, it is an oversimplification to conclude that Central and Eastern European countries in transition rank rather low on the gender balance index, whereas some EU countries, Canada and the United States rank in the top quartile of the gender balance Index.
- (4) The Fifth United Nations Survey and the International Crime Victimization Survey provide partially inconsistent portrayals of international variations in criminality. However, once national differences in the level of victim-reporting are taken into consideration, some of these inconsistencies disappear (when the focus is on "total crime").
- (5) There are large international variations in the likelihood that the police will record crimes that come to their attention. In the Central and Eastern European countries crime victims are less likely to report the crime to the police and the police appear less likely to record a reported offence than is the case in the EU countries.
- (6) International data on case flow are problematic and difficult to interpret, particularly when the focus is on "total crime". It is clear that EU countries have a significantly larger number of recorded offences, suspects, prosecutions, convictions, and prison sentences than do the countries in transition. Beyond that statement, it is difficult to draw any firm conclusions. Differences in case attrition (the rate at which cases and suspects appear to "drop out" of the criminal justice system at different stages of the process) likely reflect differences in national criminal justice procedures, recording practices and sentencing philosophy, rather than differences in the quality of work performed by criminal justice employees. Data on the later stages of processing are likely to be more reliable than those on the early stages; the ration between prosecutions and convictions (i.e. how many prosecutions lead to a conviction) shows relatively limited international variation and may, therefore, be a promising candidate for future international analysis.
- (7) Assessment of international variations in the performance of a large number of criminal justice systems remains a difficult, if not impossible task. The data are simply not adequate. Subjective measures are more

easily available than objective, "hard" measures. Crime rates - although obviously closely interlinked with the operations of criminal justice systems - are not useful performance indicators. Countries do appear to show (to a certain extent) a clustering on similar ranks in respect of the measures of police recording performance, productivity (of police and prosecutors, measured by number of suspects and prosecutions), and several subjective measures (the citizen evaluation of police performance index, evaluations of the fairness of the system and of the sense of security, and ICVS responses on corruption). Some countries are high on all (or most) performance indicators; other countries tend to be low on all (or most) performance indicators. This suggests that the performance indicators that have been developed for this study may have a reasonable degree of usefulness. Also, crime rates are apparently not completely randomly distributed among countries differing on the performance indicators. Any conclusions at this early stage about cause-and-effect should be avoided.

# 5 Sanctions and their Severity

André Kuhn

# 5.1 Sanctions imposed

The three main types of decisions made by the courts in formal adjudication are acquittal, dismissal and conviction. The Fifth United Nations Survey provided only perfunctory data on the first two but several questions were designed to obtain data on convictions and on the sanctions imposed (although essentially only on adults).

#### 5.1.1 The comparability of data on sanctions imposed

The courts in different countries have a wide range of sanctions at their disposal, and what is a court-imposed sanction in one country may be imposed by the prosecutor or even the police in another country. A sanction can be defined by its nature, by the body responsible for the decision, or by its administrative consequences, such as an entry into the criminal records. Thus, the number and structure of sentences in each country will inevitably depend on the definition of the sentences.

Even if one could create a uniform definition of a sentence at the international level, one would still face the constraints of the existing statistical systems, such as the different modalities of recording offences. Some sentences may or may not be recorded, depending on the type of court and the type of proceedings in which they have been passed.

For these reasons, the data provided by the different countries concerning the number and type of sentences delivered cannot easily be summarized in the form of tables. Nevertheless, we shall seek to look at the data provided through the Fifth United Nation Survey and the Council of Europe and provide some indications about the sentencing practices in Europe and North America.

#### 5.1.2 The Fifth United Nations Survey and data on sanctions

In the Fifth United Nations Survey instrument, the classification used for sanctions was as follows:<sup>1</sup> life imprisonment, corporal punishment, depriva-

<sup>1</sup> Question 11 in the Fifth Survey questionnaire "Adults convicted by number and type of sentence (all crimes): 11.1 Total, 11.2 Life Imprisonment, 11.3 Corporal punishment, 11.4 Deprivation of liberty, 11.5 Control in freedom, 11.6 Warning, admonition, 11.7 Fine, 11.8 Community service orders, 11.9 Other.

tion of liberty (including combined or split sentences where a part of the sentence involves deprivation of liberty), control in freedom (including probation and conditional sentences with an additional supervision requirement), warning or admonition (including suspended sentences, conditional sentences without supervision requirement, finding of guilt without sanctions, formal admonitions, formal warnings, conditional dismissal and conditional discharge), fine, and community service orders.

*Life imprisonment*: With a very few exceptions (such as Norway, where life imprisonment was abolished in 1981), life imprisonment is possible throughout Europe and North America for certain serious offences. Nevertheless, the available data show that life imprisonment represents only a very small part (less than one % in all the countries) of the total number of sentences imposed.

*Corporal punishment*: Corporal punishment is almost unknown in Europe and North America. Due to the way the table was structured – no line was provided for the sanction of capital punishment – it is probable that the only two countries in Europe and North America which filled in this line (Estonia, with about 2 cases a year, and Kyrgyzstan, with 3271 cases in 1990, 4173 in 1992, and 7710 in 1994) may in fact have been referring at least in part to capital punishment. This is true at least for Estonia (the death penalty was subsequently abolished in Estonia). It may be noted here that, during the period under review, several Central and Eastern European countries, as well as the United States used capital punishment. (A de facto moratorium on capital punishment has been in force in all Council of Europe member states since 1 January 1997.)

*Deprivation of liberty:* Imprisonment is the backbone of the system of sanctions of all countries in Europe and North America. It represents about one-third of all imposed sanctions and will therefore be analysed below. However, in order to provide a preliminary idea of the use by courts of deprivation of liberty as a sanction, it may be noted that – as was the case with the Fourth United Nations Survey (Kangaspunta 1995a, p. 40) – the Fifth United Nations Survey data show large variations when calculated per 100,000 inhabitants. The range goes from less than 50 sentences of deprivation of liberty per 100,000 inhabitants each year in Azerbaijan, Cyprus, and Germany, to over 200 in Greece, the Netherlands, Scotland, and Turkey (see table 27).

*Control in freedom*: Many sanctions involve considerable supervision and control of the offender. These include suspended or conditional imprisonment with supervision, probation, community service, reformative and educative labour, special forms of treatment, and local banishment. Because of this variety, it is not possible to find a common trend in the data on this sanction. The different countries report that between zero and about 70 % (for the Czech Republic and Slovakia) of their total number of sanctions consist of "control in freedom". A question in the Fifth United Nations Survey refers to the number of persons placed on probation (a procedure whereby an individual found guilty of an offence is released by the court

without imprisonment, and placed under the supervision of an official or officially sanctioned body), and another question asks for the number of persons on probation on a given day. In 1994, between about 10 (in Lithuania) and 536 (in the United States) persons per 100,000 inhabitants were placed on probation, and on a given day in the year the rates oscillated between 12 (in Slovenia) and 1137 (in the United States) per 100,000 population.

*Warning and admonition*: Here again, there is an enormous amount of international variation. The countries report that between zero and more than 50 % (in Bulgaria, Kazakhstan, Slovenia and Switzerland) of their sanctions were warnings or admonitions, including all suspended sanctions without a supervision requirement.

*Fine*: The financial sanction is clearly one of the most popular among European countries, especially in the western part of Europe. In Austria, England and Wales, Finland and Germany more than 70% of all sanctions are fines. At the other end of the scale, in Kyrgyzstan, Lithuania and Slovakia less than 10% of sanctions were fines. (Again, the cautions noted in sections 1.3 and 5.1.1 on the comparability of statistics on sanctions should be noted; it can be assumed that in many countries, fines may be imposed by the police and the prosecutor, and may not be entered into the statistics as fines.)

*Community service*: Many countries do not recognize community service as a sanction in their criminal justice system. According to the survey, the countries which make the greatest use of community service are the Russian Federation (about 15% of all sentences), Azerbaijan (13%), Georgia (12%), the Netherlands (8%), Scotland (7%), and Northern Ireland (6%). However, in this connection it should be recalled that the concept of community service can be substantively different from one country to the other and therefore caution is needed in making international comparisons on the topic. For example in several countries in transition (including, during the period under review, the Russian Federation, Azerbaijan and Georgia), "educative labour" has been defined as community service. This sanction requires the offender to continue working at his or her regular employment, but a part of the wages are deducted as a sanction.

Among the convicted persons in 1994, between 3.5% (in Kazakhstan) and 18.2% (in Austria) are women. In each country, the differences between 1990 and 1994 in the proportion of women among the convicted offenders are slight and go both ways; there are increases in some countries and decreases in others.

With regards to trends, table  $27^2$  shows that in most countries for which data are available in Europe, the use of deprivation of liberty by courts appears to have increased between 1990 and 1994, although in about one-third of the countries (Andorra, Bulgaria, Finland, Hungary, Northern Ire-

<sup>2</sup> The data is from question 11.4 in the Fifth Survey questionnaire; Adults convicted to deprivation of liberty

land, Slovenia and Switzerland) there appears to be a decline during this same time period. In 1990, on the average 107 sentences of deprivation of liberty were imposed; in 1994, the mean number of sentences of incarceration had increased to 141 per 100,000 inhabitants.

Country	1990	1992	1994	Trend <sup>1</sup>
Andorra	245	290	146	*
Austria	83	82	81	*
Azerbaijan	28	38	62	ѫ
Belarus	75	96	151	ѫ
Bulgaria	100	100	92	<b>X</b>
Cvprus	28	30	31	ѫ
Czech Republic	55	72	108	ѫ
England/Wales	81	84	101	ѫ
Estonia	58	78	111	ѫ
Finland	224	215	143	*
Georgia	40	29	81	₩
Germany	34	34	38	ѫ
Hungary	105	126	99	*
Italv	111	191	213	ѫ
Kazakhstan	93	106	191	ѫ
Latvia	86	110	115	ѫ
Lithuania	76	83	164	ѫ
FYR Macedonia	70	81	96	×
Moldova	166	145	258	×
Netherlands	282	263	286	≈
Northern Ireland	111	100	98	*
Portugal	106	128	134	ѫ
Russia	121	136	205	ѫ
Scotland	188	202	220	ѫ
Slovakia	63	87	92	ѫ
Slovenia	75		47	*
Switzerland	205	199	194	*
Turkey	81	319	394	ѫ
Variance	4428	6103	6674	
Standard deviation	66.6	78.1	81 7	
25 % quartile	66.5	81	92	
Median	84.5	100	113	
75 % guartile	116	191	192.5	
Mean	107	126	141	
EU mean	135.6	144,3	146.0	
Central and Eastern	79.9	90,8	120.1	
Europe mean				

Table 27. Deprivation of liberty imposed by courts, per 100,000 inhabitants, 1990–1994.

1 In all the following tables, two criteria have been taken into account in determining if a trend goes up or down: a steady up or down trend or a 5% difference between the first and the last year.

#### 5.1.3 The Council of Europe data on sanctions

The Council of Europe S.PACE data base includes data on sanctions imposed by courts. The questions are somewhat more detailed than those in the United Nations Surveys. Therefore, it is of interest to have a look at these data. Since deprivation of liberty is the backbone of European criminal justice systems, the results of the Council of Europe survey can be summarized by calculating the ratio between other sanctions and unsuspended prison sentences.

Country	Total suspension	Partial suspension	Deferred sentence	Other forms of probation	Day fine	Commu- nity service	Exemption of punishment
Belgium		_	45	***	***	***	***
Cyprus	169	—	_	—	_	—	182
Denmark	36	8	***	25		4	1
England/Wales	7	***	***	103	***	82	235
Finland	136	***	***	***	3150	5	14
France	204	13		***	4	15	8
Germany	225	***	***	_	1701	***	12
Lithuania	96	***	0	***	***	***	47
Luxembourg	54	18	0	504	***	0	***
Northern Ireland	—	***		***	1102	26	228
Romania	—	***	***	_		18	
***Scotland	***	***	***	***	***	34	150
Sweden	***	***	***	55	172	3	***
Switzerland	307	***	_	***	6	_	
Turkey	224	***	***	***	***	***	***

Table 28. The weight of the various sanctions and measures imposed in 1993 per 100 unsuspended prison sentences.

- Data not available \*\*\* Not applicable

Table 28 shows that where day-fines do exist, they are often applied. For example, in Finland, there are 31.5 times more day-fines imposed than unsuspended prison sentences. Also, in Germany, day-fines are used about 17 times more frequently than are unsuspended prison sentences, and in Northern Ireland, the ratio between day-fines and unsuspended prison sentences is 11:1. Suspended sentences are also a frequent way of avoiding the imposition of a sentence of imprisonment. As table 28 shows, in Switzerland, for every one unsuspended prison sentence, there are more than three suspended prison sentences. Correspondingly, in Cyprus, Finland, France, Germany, and Turkey, the number of suspended prison sentences outweigh the number of unsuspended prison sentences. Other forms of probation appear to be a frequently used alternative to a prison sentence in Luxembourg, and in England and Wales, and to a lesser degree, in Denmark and Sweden.

# 5.2 Calculating prison populations

Prison populations and particularly prison overcrowding are important concerns in almost all European and North American countries. The undesirable effects of overcrowding are legion, including increases in corrections costs, delays before imprisonment, and deterioration in living and working conditions for inmates and correction officers. Overcrowding depends as much on the number of available cells (i.e., the prison capacity), as on the number of inmates. Both of these factors vary through time and space. The former factor will be discussed only in brief here because it merely addresses the result of the problem (section 5.3). Since a real solution to a problem can only be found by trying to cope with the causes of the problem, the latter factor (i.e. the number of inmates) will be the main focus of this section (see also section 5.4). The main indicator of the number of inmates is the prisoner rate. This indicator is obtained by calculating the number of prisoners on a specific date (or as an annual average) and relating it to the number of inhabitants in a certain country. The prisoner rate is therefore a so-called statistic of stock. The prisoner rate is generally expressed as the number of inmates per 100,000 inhabitants. In 1994 it varied from about 25 in Cyprus to 580 in Russia (see Table 30).

In order to obtain a more dynamic view of the populations under study, it is also of interest to have a look at the *imprisonment rate*, i.e. the number of persons admitted into prison (also called the *flow* of prisoners) per 100,000 inhabitants and at the *length* of the imposed sentences (section 5.5.). As a matter of fact the prisoner rate is a composite of the imprisonment rate and the length of the sentences: Stock = (Flow times Length).

# 5.3 Prison capacity

The main indicator of prison capacity in the Fifth United Nations Survey is the total number of space (beds) available in penal or correctional institutions<sup>3</sup>. The ratio between the number of prison beds and the total population ("prison space per 100,000 inhabitants") increases between 1990 and 1994 in somewhat more than half of the countries for which data are available, but generally decreased in the EU member states. Table 29 shows those trends and the 1994 occupancy rate of prisons (the number of prisoners per 100 beds) according to the Fifth United Nations Survey and to the Council of Europe (Council of Europe, Penological Information Bulletin 1995, 19-20, p. 77).

<sup>3</sup> Questions 20.2, "Total number of spaces (beds) available (in adult prisons)", and 21.2, "Total number of spaces (beds) available (in juvenile prisons)" in the Fifth Survey questionnaire.

An examination of Table 29 shows that data on prison beds are provided for 14 Central and Eastern European countries, but for only 6 Western European countries (Austria, England and Wales, Finland, Northern Ireland, Portugal, and Scotland). The mean number of prison spaces available for the 20 countries for which data are available is 221.3 beds per 100,000. Judging by the large standard deviation (162.8), there is considerable international variation in the number of prison beds per 100,000 population. Central and Eastern European countries; however, there is also considerable variation within the group of Central and Eastern European countries (compare Croatia and Slovenia with less than 100 beds per 100,000 with Russia's 654.1 beds per 100,000).

Country	Prison space per 100,000 1990	Prison space per 100,000 1994	Occupancy rate per 100 places 1994 (UN)	Occupancy rate per 100 places 1994 (CE)
Austria	106.6	102.1	89.6	89.4
Belarus	246.7	290.3	164.6	_
Belgium	_	_	_	118.9
Bulgaria	102.8	109.6	90.4	_
Canada	—	—	—	114.5
Croatia	101.7	82.8	60.2	—
Cyprus	—	—	—	65.4
Czech Republic	_	—	—	106.2
Denmark	—	—	—	97.8
England/Wales	87.3	95.2	99.9	100.6
Finland	78.7	74.2	84.0	73.4
France	—	—	—	111.5
Germany	—	—	—	95.6
Greece				168.4
Hungary	185.5	116.1	106.5	/8.2
Iceland	—	—	—	89.5
Ireland	—	—	—	94.4
italy Kazakhatan			—	128.6
Kazakristan	392.0	384.2		—
Kyrgyzstan	 2.4E_0	457.4	00.0 07 F	—
Làlvia	340.9	410.0	07.0 77.0	07.0
	337.1	300.1	11.3	07.9
EVD Magadapia	120.6	110 5	 52.0	93.8
Moldova	100.0	110.0	00.0 70.0	
Nothorlando	221.1	271.5	19.2	102.9
Nethern Ireland	1/17	120 1	01.2	102.0
Norway	141.7	130.1	04.5	00.0
Poland		—	—	90.0
Portugal	78.4	83.1	122.8	126.9
i oi tuyai	70.4	00.1	122.0	120.3

Table 29. Prison space per 100,000 inhabitants and occupancy rate per 100 places.

Table 29. continues...

Country	Prison space	Prison space	Occupancy rate	Occupancy rate
	per 100,000	per 100,000	per 100 places	per 100 places
	1990	1994	1994 (UN)	1994 (CE)
Russia Scotland Slovakia Slovenia Sweden Turkey Ukraine		1654.1 109.8 167.4 90.4  309.8	88.7 99.1 82.8 57.8 — —	85.0 99.3 93.7  91.7 54.0 
Variance	10 584	26 496	668	477
Standard deviation	102.9	162.8	25.8	21.8
25% quartile	101.7	98.6	77.3	87.9
Median	135.0	128.3	85.9	94.4
75% quartile	246.7	334.9	99.1	106.2
Mean EU mean Central and Eastern Europe mean	176.7 100.7 198.6	221.3 100.4 248.5	88.5 96.6 86.2	97.8 105.0 90.5

There are ten countries for which both United Nations data and Council of Europe data on occupancy rate are available (Austria, England and Wales, Finland, Hungary, Lithuania, Northern Ireland, Portugal, Russia, Scotland and Slovakia). With the exception of one country (Hungary), there are only small divergences between the occupancy rates calculated on the basis of the Fifth United Nations Survey and the Council of Europe data, suggesting that both data sources are measuring the same phenomenon.

The United Nations data provide information on prison occupancy rate for 18 countries; the Council of Europe data provide information on 27 countries. The Fifth United Nations Survey includes occupancy data for 7 countries for which the Council of Europe lacks any information (Belarus, Bulgaria, Croatia, Kyrgyzstan, Latvia, the former Yugoslav Republic of Macedonia, Moldova and Slovenia). Only one of these countries (Belarus) has an occupancy rate which is over 100 % of the available places. According to the Council of Europe data (which provide information on 27 countries), one-third of the countries exceed the available prison space (Belgium, Canada, the Czech Republic, England and Wales, France, Greece, Italy, the Netherlands and Portugal). If one assumes that a prison is overcrowded only when its capacity is exceeded, it seems that in about one-third of the countries for which data are available, prisons are overcrowded. The mean occupancy rate is close to 100% (88.5% for the Fifth UN Survey data, 97.8% for the Council of Europe data). It is notable that several Central and Eastern European countries report an underutilisation of prison beds (for example, Croatia, Kyrgyzstan, the former Yugoslav Republic of Macedonia, and Slovenia).

# 5.4 The prisoner rate

The prisoner rate varies considerably from one country to another. The mean prisoner rate for 1995 is 157.9 prisoners per 100,000; the standard deviation (1995) is about the same magnitude (156.2). Table 30 suggests that the United States and the Central and Eastern European countries (with a few exceptions) have the highest prisoner rates among all European and North American countries. Belarus, the Czech Republic, Estonia, Latvia, Lithuania, Moldova, Poland, Romania, the Russian Federation, Ukraine, and the United States all rank in the top 25% of the prisoner rate. On the other hand, there are a few Central and Eastern European countries which rank very low with regard to their number of prisoners per 100,000: Croatia, the former Yugoslav Republic of Macedonia, and Slovenia. Other countries with relatively low prisoner rates are Cyprus, Greece, and the Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden).

Country	Prisoner rate 1990	Prisoner rate 1992	Prisoner rate 1994	Prisoner rate 1995	Trend
Austria	90.5	94,8	91.5	76.0 <sup>2</sup>	*
Belarus	204.7	314.8	477.8	505.0 <sup>3</sup>	ѫ
Belgium	58.9	70.9	74.1	75.7 <sup>2</sup>	ѫ
Bulgaria	122.7	93.9	99.1	103.2 <sup>2</sup>	*
Canada	111.0	112.6	117.9	115.0 <sup>3</sup>	ѫ
Croatia	40.3	43.0	49.9	$55.0^{3}$	ѫ
Cyprus	32.0	31.3	25.1	26.3 <sup>2</sup>	*
Czech Republic	79.4	135.4	181.5	188.0 <sup>2</sup>	ѫ
Denmark	62.1	64.4	67.4	66.0 <sup>2</sup>	ѫ
England/Wales	88.1	89.0	95.0	99.3 <sup>2</sup>	ѫ
Estonia	280.6	292.4	293.6	270.0 <sup>3</sup>	≈
Finland	67.8	69.5	62.4	59.3 <sup>2</sup>	*
France	82.2	83.7	90.3 <sup>1</sup>	89.0 <sup>2</sup>	ѫ
Georgia		66.2	140.9	<u> </u>	ѫ
Germany	77.8	<b>_</b>	83.0	81.0 <sup>2</sup>	~
Greece		59.5	71.0	55.0 <sup>3</sup>	≈
Hungary	118.8	154.1	123.7	120.0 <sup>3</sup>	≈
Iceland	40.6 <sup>1</sup>	38.5	38.2 <sup>1</sup>	44.4 <sup>2</sup>	~
Ireland	<u> </u>	61.6	58.6	58.7 <sup>2</sup>	≈
Italy	56.6	83.7	89.6	87,0 <sup>2</sup>	ѫ
Kyrgyzstan	201,2	216.1	299.7		ѫ
Latvia	326.7	313.5	359.7	375.0 <sup>3</sup>	ѫ
Liechtenstein			58.1	<u> </u>	
Lithuania	230.7	245.2	278.3	356.0 <sup>2</sup>	ѫ
Luxembourg	91.9	90.5	109.2	115.3 <sup>2</sup>	ѫ
FYR Macedonia	49.4	47.8	62.8	54.0 <sup>2</sup>	ѫ
Malta	32.5	46.6	56.0	62.0 <sup>2</sup>	ѫ

Table 30. Prisoner rate per 100,000 inhabitants, 1990-1995.<sup>1</sup>

Table 30. continues...

Table 30. continues...

Country	Prisoner rate 1990	Prisoner rate 1992	Prisoner rate 1994	Prisoner rate 1995	Trend
Moldova Netherlands Northern Ireland Norway Poland Portugal Romania Russian Federation Scotland Slovakia Slovenia Spain Sweden Switzerland Turkey Ukraine USA	$\begin{array}{c} 204.9\\ 46.9\\ 112.3\\ 56.5^{1}\\\\ 91.5\\\\ 92.6\\ 72.7\\ 51.3\\ 85.5^{1}\\ 61.1\\ 76.9^{1}\\ 80.6\\\\ 464.9\\ \end{array}$	$\begin{array}{c} 216.7\\ 49.4\\ 111.8\\\\ 97.4\\\\ 520.2\\ 102.8\\ 122.1\\ 54.5\\ 90.4^{1}\\ 63.5\\ 77.1^{1}\\ 54,5\\ 518,9\\ \end{array}$	$\begin{array}{c} 215.1 \\ 56.8 \\ 116.4 \\ 62.0^1 \\ 163.6^1 \\ 102.1 \\ \hline \\ 580.2 \\ 108.8 \\ 143.5 \\ 52.2 \\ 105.9^1 \\ 70.4 \\ \hline \\ 74.4 \\ \hline \\ 553.9 \end{array}$	$\begin{array}{c} 275.0^3\\ 65.0^3\\ 106.0^2\\ 55.8^2\\ 170.0^3\\ 125.0^3\\ 206.0^2\\ 694.0^2\\ 110.0^2\\ 147.0^2\\ 30.0^3\\ 122.4^2\\ 66.0^2\\ 80.8^2\\ 90.3^2\\ 392.0^2\\ 600.0^3\\ \end{array}$	<b>⊼</b> ≈ <b>⊼</b> <b>⊼</b> <b>⊼</b> <b>⊼</b> <b>⊼</b> <b>⊼</b> <b>⊼</b>
Variance Standard deviation 25% quartile Median 75% quartile Mean EU mean Central and Eastern Europe mean	8 546 92.4 57.2 81.4 117.2 112.3 77.7 148.5	14 331 119.7 61.1 89.7 140.1 131.5 80.2 187.1	18 269 135.2 62.6 95.0 153.6 145.4 85.4 214.8	24 401 156.2 63.5 99.3 158.5 157.9 85.7 262.7	

<sup>1</sup> Question 16.1 in the Fifth Survey questionnaire; persons held in incarceration; total.

<sup>2</sup> Council of Europe, *Penological Information Bulletin*.

<sup>3</sup> Roy Walmsley, *Prison Populations in Europe and North America*, HEUNI Papers, No 10, 1997.

The number of prisoners increased considerably among European and North American countries between 1990 and 1994. The total prison population for the 29 countries reporting<sup>4</sup> was 1,428,589 in 1990, 1,608,700 in 1992, and 1,775,021 in 1994. In 1990, the mean prisoner rate was 112.3; in 1994, the mean prisoner rate had increased to 157.9. That increase persists even if the United States, with its huge prison population, is removed from the list; the total prison population in Canada and Western Europe was 266,860 in

<sup>4</sup> The total prison population is admittedly an artificial term, since the dates on which the prison population was counted vary from country to country, and also the definition of "prisoners" is not necessarily the same. Among the countries which are not included in this calculation are France, Germany, Italy, the Russian Federation and Spain, which unfortunately did not give information on their number of prisoners in 1990, 1992 and/or 1994.

1990, 283,264 in 1992, and 329,281 in 1994. There are a few notable exceptions to the growth in prisoner rate (Austria, Bulgaria, Cyprus, Slovenia and Finland), which clearly shows that prison populations can be controlled (this is particularly the case of Finland, cf. Törnudd 1993) and that prisoner rates are not destined to increase.

The Fifth United Nations Survey instrument uses the term "incarceration" to refer to deprivation of liberty. This includes different forms of deprivation of liberty, such as pre-trial detention (remand imprisonment), detention as a convicted offender, administrative detention, etc. Therefore, the survey instrument divides the total number of incarcerated persons into the following categories:

- awaiting trial or adjudication;
- sentenced;
- otherwise adjudicated;
- administrative detention;
- incarceration for non-payment of penal fine;
- civil law incarceration.

Since the two main categories are the sentenced prisoners and those awaiting trial or adjudication, Table 31 shows – for 1994 – the total prisoner rate, the sentenced prisoner rate, and the pre-trial prisoner rate (those awaiting trial or adjudication). The four other categories are combined as an "other prisoners" rate. It should be noted that countries which have similar (sentenced) prisoner rates per 100,000 are likely to differ in the % of the total prisoner rate consisting of (sentenced) prisoners. Examples are Belgium (respectively, 36.6 and 49.4%) and Malta (37.1 and 66.3%). Or, conversely, countries which have a similar proportion of sentenced prisoner rates. Compare Latvia (respectively, 270.8 and 75.3%) and Northern Ireland (87.6 and 75.3%).

	Prisoner rate 1994	Sentenced		Pre-trial		Other	
Country	(= 100%)	per 100,000 popula- tion	% of prisoner rate	per 100,000 popula- tion	% of prisoner rate	per 100,000 popula- tion	% of prisoner rate
Austria Belarus Belgium Bulgaria Canada Croatia Cyprus Czech Republic Denmark England/ Wales Estonia Finland Hungary Italy Kyrgyzstan Latvia Liechtenstein Lithuania Luxembourg FYR Macedonia Malta Moldova Netherlands Northern Ireland Portugal Scotland Slovakia Slovenia Sweden Turkey	91.5 477.8 74.1 99.1 117.9 49.9 25.1 181.5 67.4 95.0 293.6 62.4 123.7 89.6 299.7 359.7 58.1 278.3 109.2 62.8 56.0 215.1 56.8 116.4 102.1 108.8 143.5 52.2 70.4 74.4	$\begin{array}{c} 60.1\\ 363.4\\ 36.6\\ 68.1\\ 96.8\\ 36.4\\ 19.4\\ 96.1\\ 49.6\\ 68.5\\ 173.1\\ 51.8\\ 87.2\\ 44.8\\ 229.4\\ 270.8\\ 6.5\\ 197.7\\ 75.6\\ 53.6\\ 37.1\\ 167.1\\ 32.4\\ 87.6\\ 65.1\\ 86.1\\ 105.5\\ 27.6\\ 58.7\\ 34.2\\ \end{array}$	$\begin{array}{c} 65.7\\ 76.1\\ 49.4\\ 68.7\\ 82.1\\ 72.9\\ 77.3\\ 52.9\\ 73.6\\ 72.1\\ 59.0\\ 83.0\\ 70.5\\ 50.0\\ 76.5\\ 75.3\\ 11.2\\ 71.0\\ 69.2\\ 85.4\\ 66.3\\ 77.7\\ 57.0\\ 75.3\\ 63.8\\ 79.1\\ 73.5\\ 52.9\\ 83.4\\ 46.0\\ \end{array}$	$\begin{array}{c} 26.2\\ 114.4\\ 25.9\\ 18.9\\ 18.4\\ 13.0\\ 3.7\\ 85.4\\ 15.5\\ 24.3\\ 115.1\\ 5.7\\ 33.5\\ 42.5\\ 70.3\\ 88.9\\ 51.6\\ 80.6\\ 33.2\\ 7.4\\ 18.4\\ 48.0\\ 19.9\\ 26.9\\ 37.0\\ 19.8\\ 38.0\\ 9.8\\ 11.7\\ 40.2\end{array}$	$\begin{array}{c} 28.6\\ 23.9\\ 35.0\\ 19.1\\ 15.6\\ 26.1\\ 14.7\\ 47.1\\ 23.0\\ 25.6\\ 39.2\\ 9.1\\ 27.1\\ 47.4\\ 23.5\\ 24.7\\ 88.8\\ 29.0\\ 30.4\\ 11.8\\ 32.9\\ 22.3\\ 35.0\\ 23.1\\ 36.2\\ 18.2\\ 26.5\\ 18.8\\ 16.6\\ 54.0\\ \end{array}$	$\begin{array}{c} 5.2\\ 0.0\\ 11.6\\ 12.1\\ 2.7\\ 0.5\\ 2.0\\ 0.0\\ 2.3\\ 2.3\\ 5.4\\ 4.9\\ 3.1\\ 2.2\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.5\\ 1.7\\ 0.5\\ 0.0\\ 4.5\\ 1.9\\ 0.0\\ 2.9\\ 0.0\\ 14.8\\ 0.0\\ 0.0\\ 0.0\\ \end{array}$	5.7 0.0 15.7 12.2 2.3 1.0 8.0 0.0 3.4 2.4 1.8 7.9 2.5 2.5 2.5 0.0 2.7 0.0 2.8.4 0.0 0.0 0.0
Variance Standard deviation 25% quartile Median 75% quartile Mean EU mean Central and Eastern Europe mean	11397 106.8 62.7 97.1 153.0 133.7 87.0 194.4	6632 81.4 37.0 66.6 99.0 92.9 59.7 137.0	58.5% 71.6% 76.7%	965 31.1 17.7 26.6 48.9 38.1 24.1 54.2	19.0% 25.7% 35.0%	15 3.9 0.0 1.8 3.5 2.7 3.2 3.1	0.0% 1.7% 4.0%

Table 31. Prisoner rate per type of incarceration, 1994.<sup>1</sup>

<sup>1</sup> Question 16 in the Fifth Survey questionnaire; Persons held in incarceration; number and type of incarceration: 16.2 Awaiting trial or adjudication, 16.3 Sentenced. The category "Other" refers to 16.4 Otherwise adjudicated, 16.5 Administrative detention, 16.6 For non-payment of penal fine, 16.7 Civil law incarcerations, and 16.8 Other.

In more than half of the countries, at least two-thirds of the total prison population have been sentenced for an offence. With two exceptions, the proportion of the prisoner rate that consists of pre-trial prisoners is below 50% in all countries. The highest pre-trial prisoner rates are to be found in Liechtenstein (88.8%) and Turkey (54%). However, it should be noted that the total number of prisoners in Liechtenstein was only 18, and that both Liechtenstein and Turkey included in the pre-trial prisoner rate persons who have been sentenced in a court of first instance but who have appealed the verdict. The high "other prisoners" rate in Slovenia (28.4% of the total number of inmates) is mainly due to a high administrative detention rate (11.6 per 100,000 inhabitants or 22.2% of all inmates).

Among the convicted prisoners (including juveniles) in 1994, between 1.1% (in Georgia) and 7.0% (in Portugal) are women. In other words, all over Europe and North America, more than 90% of convicted prison inmates are men. The only exception to that rule may be the United States, where the 1992 adult convicted female rate was 10.2%. Unfortunately, 1994 US data on the proportion of women out of all convicted prisoners are unavailable.

The rate of juveniles among the convicted prisoners in 1994 oscillates between 0.2% in Sweden (where juveniles are defined as those between 15 to 18 years of age) and 16.0% in Scotland (where juveniles are defined as those between 8 to 21 years of age). The rate of foreign inmates among the convicted prisoners in 1994 varies – in the few countries which provided this information – from 0.02% in Latvia and the Russian Federation to 42.1% in Belgium.<sup>5</sup>

# 5.5 The imprisonment rate and the length of sentence

It is not easy to deal with flow data because some multiple entries may be overlooked by those compiling the statistics, and a number of single entries may be counted several times. This happens when the data refer to "events" and not to "persons". On the one hand, a person who has been convicted of several offences at different court appearances may be admitted to prison for one offence and then serve successive sentences without being counted as serving time for the other offences. On the other hand, inmates who move from one prison to another and between different forms of imprisonment (such as week-end detention) may "produce" several admissions for a single sentence. This is why Table 32 cannot be used for comparisons between countries, but is much more an indication of the evolution of the number of entries in each country.

<sup>5</sup> It is, however, not clear what the different respondents meant by "foreigners". On that topic, see Tomasevski 1994.

Country	1990	1991	1992	1993	1994	Trend
Austria	219.5	236.2	241.1	231.6	216.9	~
Belarus	234.2	265.3	372.3	454.1	484.2	ѫ
Belgium	173.4	180.8	189.8	184.7	169.5	*
Bulgaria	50.4	60.9	65.7	55.1	54.6	≈
Canada	416.7	311.8	300.6	431.5	419.5	~
Croatia <sup>3</sup>	64.5	—	37.8		30.6	~
Cyprus	80.5	63.1	63.3	54.0	65.9	
Czech Republic <sup>3</sup>	43.6	79.8	68.3	77.4	159.7	~
Denmark	300.0	277.3	283.8	280.2	289.5	*
England/Wales	256.0	271.5	279.9	275.5	304.3	~
Estonia		_		269.6	303.7	*
Finland	177.1	177.0	195.4	186.2	171.0	*
France <sup>2</sup>	140.3	157.1	155.3	140.3	149.1	*
Georgia		—	110.4	110.1	142.9	≈
Germany <sup>2</sup>	160.9	—	149.2	174.3	208.0	₩
Greece	45.4	42.4	49.6	53.4	46.7	ѫ
Hungary	172.5	188.4	198.4	170.3	178.4	~
Iceland <sup>2</sup>	134.3	119.0	125.0	108.0	107.5	≈
Italy	100.1	141.4	164.9	173.6	176.3	*
Latvia	599.6	_	706.0		767.9	ѫ
Lithuania3	103.6	104.5	152.9	192.8	244.2	ѫ
Luxembourg <sup>2</sup>	171.2	163.2	174.2	165.0	162.6	*
FYR Macedonia	74.6	55.2	59.1	64.5	78.5	ѫ
Malta	119.2		192.3	185.3	173.6	≈
Moldova	74.7	84.0	78.6	100.6	124.4	ѫ
Netherlands <sup>2</sup>	137.8	182.8	187.2	193.5	_	ѫ
Northern Ireland	295.2	301.5	310.5	318.1	300.1	~
Norway	255.6	_			271.3	ѫ
Portugal	112.4	105.2	123.3	115.9	80.2	*
Russia	1229.2	_	1225.9	1405.8	1542.1	ѫ
Scotland	335.8	356.9	390.6	432.7	411.3	ѫ
Slovakia	129.7	174.6	146.8	170.0	165.9	ѫ
Slovenia	61.5	100.3	92.8	94.1	90.9	~
Sweden	185.0	155.8	159.6	164.2	161.7	~
Switzerland	161.5	—			145.5	*
Turkey <sup>3</sup>	79.9	94.0	92.9	90.0	99.3	ѫ
Ukraine	55.4	74.4	77.3	82.4	107.1	ѫ
United States	189.7	190.0	194.1	200.1	207.7	ѫ
Variance	44478	7411	47521	55309	68719	
Standard deviation	211.9	86.1	218.0	235.2	262.1	
25% quartile	80.1	89.0	92.8	99.0	107.3	
Median	150.6	157.1	159.6	172.0	169.5	
75% quartile	230.5	213.1	241.1	241.1	280.4	
Mean	198.4	162.6	211.8	217.8	238.2	
EU mean	187.3	196.4	203.6	205.9	203.4	
Central and Eastern Europe mean	222.6	92.2	215.7	214.8	298.3	

Table 32. Imprisonment rate per 100,000 inhabitants, 1990-1994.<sup>1</sup>

<sup>1</sup> Question 25.1 in the Fifth Survey questionnaire; Number of admissions to prison per year; total. <sup>2</sup> Data from the Council of Europe, *Penological Information Bulletin*. <sup>3</sup> Data only for sentenced persons, for Lithuania admissions only of new persons.

In the 28 North American and European countries which reported such data<sup>6</sup>, the total number of admissions increased from 1,005,409 in 1990 to 1,150,253 in 1992 and to 1,236,153 in 1994. If we again subtract the United States from the total, the total number of admissions still increases from 531,311 in 1990 to 654,497 in 1992 and to 694,719 in 1994. The mean number of prison admissions was 198.4 in 1990, and the mean number of prison admissions in this 5-year period.

The country trends in prison admissions are even more interesting when compared to the trends in prisoner rates. Somewhat surprisingly, the data on changes in the prison population do not necessarily follow the data on changes in the number of admissions to prison. In some countries, a decrease in the number of incarcerated persons (i.e., prison admissions) has been accompanied by an increase in the prison population (Belgium, Croatia, Luxembourg and Portugal). In other countries a stable imprisonment rate has been accompanied by a decrease in the prisoner rate (Austria, Bulgaria, Cyprus and Slovenia) or by an increase in the prisoner rate (Canada, Denmark, France and Sweden). And finally both a decreasing (Iceland) or an increasing (Estonia, Germany and Norway) imprisonment rate may be accompanied by a stable prison population.

Another apparent oddity is that in 1994 countries such as Austria, Denmark and Germany are in the top quartile for the imprisonment rate but below the 50% mark for the prisoner rate, whereas countries such as the Czech Republic, Georgia and Moldova are below the 50% mark for the imprisonment rate but in the top quartile for the prisoner rate.

These apparent anomalies suggest that the prisoner rate may be much more influenced by a factor other than the imprisonment rate. That key factor is the length of the time spent in prison.

<sup>6</sup> Among the countries which are not included in this calculation are France, Germany, the Russian Federation and Spain which unfortunately did not give information on the number of prison admissions in 1990, 1992, and/or 1994.

Country	1990	1994	Trend sentence length	Trend imprison- ment rate	Trend prisoner rate
Belarus Belgium Canada Cyprus	198 73 3 11	239 82 4 9	ж ж ж	₩ ₩ ≈	я я я
Denmark England and Wales Finland Hungary Latvia	14 28 29 220 218	15 24 33 250 218	7 7 7 7	~ *	× × ×
Netherlands Norway Slovakia Slovenia Switzerland	25 11 58 56 17	32 13 41 48 23	* * *	⊼ ⊼ ⊼ ≈	<i>≈</i> <i>×</i> ×
United States Variance Standard deviation 25% quartile Median 75% quartile	87 6021 77.6 14 29 87	109 7629 87.3 15 33 109	×	*	*
Mean EU mean Central and Eastern Europe mean	69.9 33.8 150.0	76 37.2 159.2			

Table 33. Average length (in weeks) of prison sentences actually served by adults in prison, 1990-1994, and trends in sentence length, imprisonment rate and prisoner rate. <sup>1</sup>

<sup>1</sup> Question 18.13 in the Fifth Survey questionnaire; Average length of prison sentence actually served in prison, for all offences.

In Table 33, the data for Canada include only some provincial institutions. The Canadian data do not include those offenders held in federal institutions who, by definition, have sentences of two years or more.

Only 15 countries provided data on the average length of prison sentence actually served by adults in prison. Table 33 shows that the length of sentences has increased in a majority of the countries which have provided that information. The average length of prison sentences imposed in Europe and North America also increased between 1990 (69.9 weeks) and 1994 (76 weeks). The comparison of the different trends (in Tables 31, 32, and 33) often suggests an inverse relationship between imprisonment rate and length of stay (i.e. higher rate of admissions is associated with a shorter length of stay once admitted), and the trend in the prisoner rate (i.e., number of people incarcerated on a given day) seems much more related to the trend in the length of the sentences than to the trend in the imprisonment rate. Therefore, the length of the sanctions seems to be a determining factor in the explanation

of the prisoner rate. The 1994 correlation<sup>7</sup> between those two variables (length of sentence and prisoner rate) is .60 (p = .032), whereas the correlation between the prisoner rate and the flow factors is lower and not significant.<sup>8</sup> Thus, the prisoner rate appears to depend more on the length of the sanctions than on the number of people sent to prison. If the goal of a country is to reduce its prisoner rate, it seems therefore more important to try to find ways to reduce the average length of the prison terms than to reduce the number of admissions.

Table 33 also gives an insight into the differences in length of average sentences. These range (in 1994) from 4 weeks in Canada to 250 weeks (roughly five years) in Hungary. This indicator certainly depends on a number of variables, such as the use of remand detention, early release (parole), and perhaps even a confusion in the mind of the person responding to the Fifth United Nations Survey between weeks and months. However, the wide range seems to justify the conclusion that the length of sentence reflects primarily the fundamental premise of criminal policy in a given country, which in fact determines whether it is more or less "punitive".

The data on persons released on parole (conditional release of a prisoner which allows the individual to serve the remainder of the sentence outside the prison) during the year, or on the number of parolees on a given day in the year provide additional insight on what can be termed "punitiveness". In 1994, between zero (in Bulgaria) and 158 (in the United States) persons per 100,000 inhabitants were paroled from prison, and on a given day of the year between zero (Bulgaria) and 265 (the United States) per 100,000 population were on parole.

With regard to gender, the survey instrument used in the Fifth United Nations Survey did not ask for the length of the sentences by gender. However, data on the imprisonment rate have been given by sex. In 1994 between 1.2% (in Georgia) and 11.1% (in Greece) of persons admitted into prison were women, and in most of the countries, the proportion of women *entering* the prisons is higher than the proportion of women *staying* in the prisons. That suggests that the prison sentences served by men tend to be longer than those served by women and therefore, that men are punished more severely than women. Although this could be an effect of a sexist criminal justice system, it is more likely due to the effect of the lesser seriousness of the offences committed by women. To place this in context, Table 34 shows the proportion of women at different stages throughout the entire criminal justice system.

<sup>7</sup> Spearman's correlation coefficient (Rho).

<sup>8</sup> Rho = .55 (N.S.) for the relation with the incarceration rate and Rho = .42 (N.S.) for the correlation with the delivered deprivations of liberty rate.

Country	Suspected	Prosecuted	Convicted	Admitted to prison	In the prison population	Trend
Andorra	_	10.8	117	_		ѫ
Austria	191		18.2	7 0	49	*
Azerbaijan	6.2	5.9	4.5			*
Belarus	16.6	_	13.6	6.2	3.4	*
Belaium	_	_	_	8.1	5.0	*
Bulgaria	8.8	_	7.2	3.8	3.8	*
Canada	16.5	_	13.4	8.8	_	*
Croatia	4.8	9.9	7.9	3.3	2.8	*
Cyprus	5.5	6.3	5.0	4.1	1.3	*
Czech Republic		7.7	8.6	4.4	3.1	*
Denmark	18.6	14.4	11.8	5.7	—	*
England and Wales		12.1	12.7	5.4	3.6	*
Estonia	7.3	7.3	7.2	2.2	1.9	*
Finland	14.1	15.8	15.8	4.0	3.8	*
Georgia	5.7	—	—	1.2	2.0	*
Germany	—	15.4	17.5	—	—	ѫ
Greece	12.0	—	12.8	11.1	6.8	*
Hungary	10.3	9.4	8.8	5.7	5.4	*
Italy	—	17.0	16.2	8.0	4.5	*
Kazakhstan	12.4	—	3.5	—	3.1	*
Kyrgyzstan	11.6	11.3	—	2.6	1.8	*
Latvia	9.0	—	9.5	8.0	4.4	*
Lithuania	11.4	—	5.4	4.7	2.8	*
FER Macedonia	—	6.0	5.1	1.1	1.3	*
Moldova	9.3	—	7.6	1.5	2.1	*
Netherlands <sup>1</sup>	—	12.3	10.7	—	—	*
Northern Ireland	—	11.0	11.0	4.0	1.8	*
Portugal	—	12.8	8.8	8.8	7.0	<b>X</b>
Russian Federation	13.1	9.1	9.1	—	—	<b>*</b>
Scotland		13.2	13.6	6.7	2.9	*
Slovakia	7.2	6.7	4.7		3.0	<b>X</b>
Slovenia	11.5	—	12.4	4.5	5.3	<b>X</b>
Sweden	17.4		15.9	5.5	5.4	<b>X</b>
lurkey	5.7	5.8	5.2	2.3	2.3	
Ukraine	15.5	—	—	4.5	3.4	
United States	20.0	_	—	8.4	—	<b>X</b>
25% quartile	7.25	7.0	7.2	3.6	2.2	
Median	11.5	10.8	9.5	4.7	3.3	
75% quartile	16.0	13.0	13.4	7.5	4.8	

Table 34. Proportion (in %) of women through the different stages of the criminal justice system, 1994.  $^1$ 

<sup>1</sup> The data from the Fifth Survey used for the table are: **Suspected**-question 5.2 Number of persons brought into formal contact with the criminal justice system, female; **Prosecuted**-question 8.2 Number of persons prosecuted, female; **Convicted**-question 15.3 Number of persons convicted in the criminal courts, female; **Admitted to prison**-question 25.2 Number of admissions to prison per year, female; **In the prison population**-question 26.3 Number of convicted prisones, female.

The further one goes into the criminal justice system, the lower the percentage of women among all those being processed. This decrease in the proportion of women can be found in every European and North American country, with the possible exceptions of Andorra and Germany (for which only data about prosecuted and convicted women are available). Next to the fact that women are far less involved in (reported) crime than men, the most noticeable difference between females and males is that it seems much easier for courts to send men to prison than it is to deprive women of their liberty. Thus, on the average, less than 4 % (3.6%) of the persons admitted to prison are female, which is exactly half of the average proportion of women convicted (7.2%). Once the decision to impose a prison term is made, judges additionally are more severe with men than they are with women (with the exception of Bulgaria, the former Yugoslav Republic of Macedonia, Moldova, Slovenia and Turkey).

Since the questionnaire used in the Fifth United Nations Survey did not ask for such data, it is unfortunately impossible to make offence-specific tables about the proportion of women at each stage. It is therefore not clear if that gender difference is the result of differential treatment by gender or - which is *prima facie* more likely – of different crime patterns.

# 5.6 Patterns in the use of imprisonment

The preceding has shown some basic patterns in the use of imprisonment in Europe and North America:

- a) The overall use of imprisonment has increased between 1990 and 1994. In several countries the number of prison sentences imposed and the number of prison admissions have in fact decreased during this period. Nevertheless, it seems that an increase in the length of the prison terms actually served compensates for such a decrease in admissions and even results in an increase in prison populations. Some interesting exceptions (Austria, Cyprus, Finland and Slovenia) show that prison populations can be controlled and that prisoner rates are not destined to increase.
- b) There appear to be substantial differences in the way imprisonment is used. Some countries seem to have made a deliberate policy decision to decrease the use of imprisonment (as with Finland), while others seem to have made a deliberate policy decision to increase its use (as with the United States). Some countries sentence only a few offenders to long terms of imprisonment, others sentence many offenders to short terms, and still others sentence many offenders to long terms. The Nordic countries appear to represent one end of the spectrum, with the Central and Eastern European countries (with a few exceptions) as well as the United States at the other end.

c) The length of the sentences seems to be the main factor in the explanation of the prisoner rate. The length of sentence depends primarily on the fundamental premise of criminal policy in a given country, which in fact determines whether it is more or less punitive. Thus, to reduce the prison population a criminal justice system has to find means to reduce the average length of prison terms rather than to try to reduce the number of admissions – although also a reduction in the number of admissions can of course contribute to a decrease in the prison population.

# 5.7 The severity of the sanctions

The severity of sanctions can be operationalized by several variables. Some of them have already been mentioned: the number of sentences of deprivation of liberty imposed by the courts per 100,000 inhabitants (Table 27), the imprisonment rate (Table 32), the average length of sentence (Table 33) and the prisoner rate (Table 30). The ratio between suspects and custodial sentences, and the proportion of sentences which are custodial are two other "measures" of severity. Table 35 shows all these factors for 1994.

Country	Sentences of deprivation of liberty imposed per 100,000	Imprison- ment rate	Average length of sentences	Prisoner rate	Custodial sentences for 100 suspects	Proportion of custodial sentences
Andorra	146.2	_	_			14.4
Austria	81.5	216.9		91.5	3.2	9.9
Azerbaijan	61.7				31.5	39.9
Belarus	151.4	484.2	239	477.8	23.7	33.1
Belgium	103.5	169.5	82	74.1		26.0
Bulgaria	92.0	54.6	91	99.1	9.3	82.0
Canada	108.6	419.5	4	117.9	4.5	29.8
Croatia	_	30.6		49.9		
Cyprus	30.8	65.9	9	25.1	20.8	36.0
Czech Republic	107.7	159.7		181.5		22.0
Denmark	_	289.5	15	67.4		
England and Wales	101.4	304.3	24	95.0		4.4
Estonia	111.0	303.7	238	293.6	17.9	27.3
Finland	143.4	171.0	33	62.4	3.4	9.6
Georgia	80.7	142.9	370	140.9	55.8	53.2
Germany	37.7	—	—	—	—	6.9
Greece	_	46.7	—	_	27.7	95.9
Hungary	98.8	178.4	250	123.7	8.5	12.9

Table 35. Operationalization of the severity of the criminal justice system, 1994.

Table 35. continues...

Table 35. continues...

Country	Sentences of deprivation of liberty imposed per 100,000	Imprison- ment rate	Average length of sentences	Prisoner rate	Custodial sentences for 100 suspects	Proportion of custodial sentences
Italy Kazakhstan Kyrgyzstan Latvia Liechtenstein Lithuania Luxembourg FYR Macedonia Malta Moldova Netherlands Northern Ireland Norway Portugal Russian Federation Scotland Slovakia Slovenia Sweden Switzerland Turkey Ukraine United States	213.1 191.4 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c}$	89.6 	16.4 29.9 	60.1 40.1 
Variance Standard deviation 25% quartile Median 75% quartile Mean EU mean Central and Eastern Europe mean	6 299 79.4 92.2 109.8 191.4 138.9 141.9 120.1	73 910 271.9 107.1 172.3 289.5 248.1 211.6 298.3	12 097 110.0 19.0 48.0 228.0 107.4 37.2 195.0	21353 146.1 65.1 102.1 198.3 160.2 87.0 218.1	527 23.0 8.5 20.8 29.3 24.1 12.7 23.3	501.8 22.4 18.4 29.8 44.4 33.8 31.4 37.9

If one would take the first column of Table 35 – the number of sentences of deprivation of liberty imposed per 100,000 – as the measure of punitiveness, seven rather different countries (Italy, Kazakhstan, Moldova, the Netherlands, the Russian Federation, Scotland and Turkey) would rank in the top quartile. On the other hand, if one uses the imprisonment rate as the measure of punitiveness, only two of these countries (the Russian Federation and Scotland) would rank in the top quartile, together with Belarus, Canada, Denmark, England and Wales, Estonia and Northern Ireland. The average length of sentence is a third possible measure of punitiveness. (However, only a small number of countries provided data on this.) Three of the countries ranking in the top 25% (Belarus, Estonia and the Russian Federation) also ranked high on one or both of first two measures of punitiveness; two other countries (Georgia and Hungary) were not among the most punitive as measured by the number of sentences of deprivation of liberty imposed per 100,000 or the imprisonment rate.

According to a fourth possible measure of punitiveness (the prisoner rate), Belarus, Estonia, Kyrgyzstan, Latvia, Lithuania, Moldova, the Russian Federation and the United States are among the most punitive. Again, some of these countries also ranked high on the other punitiveness indicators (Belarus, Estonia and the Russian Federation), whereas the others did not. Examining Table 35 for international data on the number of custodial sentences per 100 suspects – a fifth possible measure of punitiveness – shows that Azerbaijan, Georgia, Kazakhstan, Moldova and Turkey rank in the top quartile.

Finally, the proportion of custodial sentences may serve as a sixth possible measure of punitiveness. Using 44.4% as the cut-off point (the 75th percentile), Bulgaria, Georgia, Greece, Italy, Lithuania, Moldova, the Netherlands and Portugal all could be considered high on punitiveness as measured by the proportion of custodial sentences. Keeping in mind that one needs to be extremely cautious in drawing generalizations from these indicators, it is worth noting that, although several (mostly Central and Eastern European) countries rank high on several of the measures of punitiveness, some countries score high on one (or more) measure(s) of punitiveness and low on others (examples are the United States and Canada).

Answering the question of which is the best indicator of the severity of the sanctions requires a philosophical discussion on punishment and its purposes. However, as has already been mentioned, the length of sentence and the number of persons in prison at any one time depend primarily on the fundamental premise of criminal policy, which in fact determines whether this criminal policy is more or less "punitive". Thus – in our opinion – the latter are the preferred indicators of the punitiveness of a criminal justice system.

Nonetheless, punitiveness can be considered at two levels. The first, the macro-sociological level, considers objective "attitudes" towards punishment, i.e. social characteristics such as the severity of the sentence imposed by the courts on the offenders. This is the punitiveness to which reference was made above. The second, a more micro-sociological level of punitiveness, considers public opinion-based subjective attitudes towards punishment, i.e. the attitudes of the persons who live in a given society and their desire for more or less punitive sentences.

The latter, i.e. subjective punitiveness, has been operationalized by the question in the International Crime Victim Survey (ICVS) asking the respondent what would be the most appropriate response in the case of a 21-year-old man who, having stolen a colour television set, is found guilty of a burglary for the second time. The options offered to the respondents range from a fine, commu-
nity service, suspended sentence, and imprisonment with variable length, to life imprisonment.

To know if the criminal justice system responds to what people expect of it, we analysed the relation between both objective and subjective measures of punitiveness. The results of this analysis are not statistically significant for five of the six of the measures of severity of punishment used in the present study (see Table 34); the exception is the prisoner rate. Figure 5 illustrates this point.

Figure 5 clearly shows that the link between the prisoner rate per 100,000 inhabitants and the national percentage of ICVS respondents who favoured imprisonment is very strong and significant.<sup>9</sup> However, this finding does not allow us to determine the direction of the causality: is it because the population of a given country is very punitive that courts tend to send a large number of persons to prison, or is it because there are many people in prison (because of a high degree of objective punitiveness) that the respondents tend to come to favour prison sentences? Due to the transverse nature of a victimization survey, this question cannot be answered on the basis of the present data (see the discussion in Beckett 1997).



Figure 5. Prisoner rate per 1994 and ICVS respondents who regard imprisonment as an appropriate sanction for the case of a 21 year old recidivist burglar.

<sup>9</sup> If a recalculation of the same correlation is done excluding the extreme cases of the Russian Federation, Slovakia, and the United States, the result obtained is identical: Rho = .53, p = .042

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- *http://unescostat.unesco.org/indicator/indframe.htm-* data on (female) participation in education, 2<sup>nd</sup> and 3<sup>rd</sup> levels 1995.
- *http://www.icpsr.umich.edu/cgi/subject.prl?path=ICPSR&query=XVIB* for different Values Studies, the abstract and the data of the World Values Study can be found on the last listing on this page.

# The Crime Guide

The Crime Guide is a database consisting of data from various sources. The primary sources of data for the Crime Guide are the Fifth United Nations Survey on Crime Trends and Operations of Criminal Justice Systems 1990-1994, and the International Crime Victim Surveys (collected in 1989, 1992, and 1996).

The data in the Crime Guide are divided into five separate spreadsheets: crime and attitudes, motivation and opportunity, policy indicators, the criminal justice system, and sanctions. In addition to these basic spreadsheets there are three sheets with the rank-based indices: crime indices, motivation and opportunity indices, and operation of the criminal justice system indices.

The 55 countries of Crime Guide are divided into three geographical regions: Western Europe (Andorra, Austria, Belgium, Cyprus, Denmark, England and Wales, Finland, France, Germany, Germany (W), Greece, Ireland, Italy, Lichtenstein, Luxembourg, Malta, Netherlands, Northern Ireland, Norway, Portugal, Scotland, Spain, Sweden, Switzerland, Turkey, united Kingdom), Central and Eastern Europe (Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazachstan, Kyrgyzstan, Latvia, Lithaunia, FYR Macedonia, Moldova, Poland, Romania, Russian federation, Slovakia, Slovenia, Tajikistan, Ukraine, Uzbekistan, Yugoslavia) and North America (Canada, United States).

The basic data sources used in creating the five main spreadsheets are the following:

1. Crimes and attitudes

Basic data on crime and victimisation

#### **Crime part**

Fifth UN Survey: recorded crimes in 1990 and 1994

*ICVS*: all crimes (11 crimes, excluding corruption and consumer fraud), burglary, sexual offences, assaults and threats, violence against women: (sexual offences, assaults and threats (five year rates), sexual assaults including rape, attempted rape and indecent assault), other thefts (theft of motorcycle/moped, theft of bicycle, theft of personal belongings), car crimes (car theft, theft from car), car theft (percentage of car thefts in which the car was not recovered, 5 year observation), pickpocketing (personal theft involving pickpocketing), car vandalism, robbery, corruption *Transparency International*: corruption index 1995 *World Competitiveness Yearbook (by the International Institute for Management Development)*: improper practices in the public sphere, harassment and violence in the workplace, alcohol and drug use at the workplace (all on a scale from 10-0)

*Nederlandse Vereniging van Banken*: bank robberies per bank *HEUNI Paper on Motor Vehicle Theft in Europe (by Liukkonen, M.)*: registered, stolen, and not- traced motor vehicles

World Health Organization: homicide data/ 100 000 population 1992 Interpol (contained in the United Nations International Study on Firearm Regulation, see also Interpol 1995): homicide data/ 100 000 population 1994 Centre for Disease Control (contained in the United Nations International Study on Firearm Regulation, see also Krug et al 1998): homicide data/ 100 000 population

#### Attitudes and fear of crime:

*ICVS*: % of population that avoid places at night, feel unsafe after dark index (average of four categories 1=low, 4=high), % of population that indicate that people in their neighbourhood help each other

#### 2. Motivation and opportunity

Basic data on social and development indicators

#### World Bank: GNP/capita 1990 and 1994

*Human Development Report 1995 and 1997*: human development index, gender-related development index, enrolment ratios, female share of income, parliamentary seats held by women, female unpaid family workers, female economic activity rate, real GDP/capita, richest and poorest 20%

UN Compendium on Human Settlements Statistics 1995: urbanisation

UN Statistical Yearbook 1994: unemployment

UNICEF: women at top levels of government

UNESCO (http://unescostat.unesco...): female education

*ICVS*: percentage of female working, divorce rates, type of housing, going out in the evening, satisfaction with income, urbanisation, car, motorcycle, bicycle ownership, firearm and handgun ownership, burglary prevention (burglar alarm, special locks and window grills)

Dutch Ministry of Justice (in Van Dijk, The Narrow Margins of the Dutch Drugs Policy): hard drug addicts

World Drink Trends 1996: strong alcohol, beer, and wine consumption

*World Values Study (http://www.icpsr...)*: justification of postmaterialism, misdemeanours, small crimes, and deviate lifestyles, and intolerance of minorities

*UN Study on Firearm Regulation*: license system, number and rate of licenses, number and rate of firearm owners, number and rate of firearms, houses with at least one firearm

3. Policy indicators

Basic data on reporting behaviour, attitudes toward the police and punishment, number of private security personnel

#### ICVS:

- victims of burglary, robbery, sexual offences and assaults & threats were asked if they received victim support from a specialised agency;
- if no, if such support would have been useful;
- all victims were asked if the incident was reported to the police, the reporting rates for the *11 crimes*, *contact crimes* (robbery, sexual offences, assaults & threats), *burglary*, and *assaults against women*
- victims of theft from car, burglary, robbery, sexual offences and assaults & threats who did report, were asked if they were satisfied with the way the police handled the report
- all respondents were asked if they are satisfied with the way the police controls crime in general, all respondents were asked what type of punishment they feel is appropriate for a repeated burglary (if prison detention is preferred, the duration of the preferred sentence was asked);
- victims of corruption were asked who the corrupted government official was (the percentage of victims saying that this official was a police officer)

*Dutch Ministry of Justice (in De Waard, The Private Security Industry)*: total police personnel and rate per 100 000 population, total security personnel and rate of security personnel per 100 000 population, police and private personnel per 100 000 population, rate of privatesecurity personnel per police personnel

World's Women 1995 (United Nations): NGO's working on violence against women

#### Interpol: clearance rate

*World Competitiveness Yearbook (by the International Institute for Management Development)*: security; confidence that person and property is protected, confidence in the fair administration of justice in society (both on a scale from 10-0)

### 4. Criminal justice system

Basic data on criminal justice personnel and financial resources of the criminal justice system

*Fifth UN Survey*: number of and rate per 100 000 population, and female shares, of police, prosecutors, judges and prison personnel *Fifth UN Survey*: financial resources allocated to police, prosecution, courts, and prisons, share of salaries per total financial resources allocated to the cjs,

total sums and shares of all budgetary resources

#### 5. Sanctions

Basic data on the length and use of sanctions

*Walmsley* (HEUNI Paper No. 10): prisoner rate 1995, prison populations in 1985, 1990, and 1995, percentage of juveniles in the prison population 1995, pre-trial prison population

*Fifth UN Survey*: suspects, juvenile suspects, incarcerated persons, prosecuted persons, remand lengths, pre-trial detention, convictions, imprisonment, sentences served, persons awaiting trial, admissions to prison *Council of Europe*: imprisonment length, sentences ordered, imprisoned population, suicides in prison, convicted persons according to offence: rape, assault

# ICVS Data in the Crime Guide <sup>1</sup>

#### Levels of aggregation

COUNTRIES AND SWEEPS. There were three sweeps of the ICVS: 1989, 1992 and 1996. However, some surveys were done in other years: Spain, (the region of Malaga in 1993 and 1994). In the Crime Guide, these were added to the 1992 sweep. Estonia 1995, was added to the 1996 sweep. Seven surveys were done in 1997 (Belarus, Bulgaria, Croatia, Lithuania, Malta, Slovakia, and Ukraine). These were also added to the 1996 sweep. For the Crime Guide, all available data from a country are taken together. For the items on victimisation there is a time frame of five years or one year and for the follow-up items on victimisation there is information on the last time a person was victimised. The rest of the items have no time frame as the figures reflect the situation/opinion of the respondents at the time of the survey. For some of the items on victimisation, there is a breakdown by year and gender.

NATION-WIDE, URBAN AND RURAL. There are two types of surveys in the ICVS. In all the industrialised countries, the surveys were nation-wide. For most of the countries in Central and Eastern Europe, the surveys were restricted to the capital cities. For some of these countries, the surveys were extended to a rural area in the country, where about 200 interviews were done.

<sup>1</sup> The ICVS data was provided by Leiden University, the Netherlands.

In the ICVS, there are data on 11 crimes (car theft, theft from car, car vandalism, theft of motorcycle/moped, theft of bicycle, burglary, attempted burglary, robbery, theft of personal belongings, sexual offences (women only), assaults and threats, and corruption and consumer fraud. The last two were partially added in the survey of 1992 and are therefore missing in the 1989 survey. All the victimisation statistics are prevalence rates, that is, the percentage of respondents who have been victimised at least once.

The respondents were asked if they have been a victim in the *past five years*. Since the surveys were done in the beginning of the year, the time frames are *1984-1988* for the 1989 sweep, *1987-1991* for the 1992 sweep and *1991-1995* for the 1996 sweep. The time frames are mentioned in the labels of the variables in the Crime Guide (no time frame is mentioned in those cases where the three sweeps are taken together).

All victims were asked when the victimisation happened, was it this year (a period of 2 or 3 months), *last year (1988* for the 1989 sweep, *1991* for the 1992 sweep and *1995* for the 1996 sweep) or before that. These years are mentioned in the labels of the variables.

# Appendix B The Indices

The Crime Guide offers an enormous amount of data form several sources. This totals up to more than 120 figures for each country for the crimes alone. Sometimes this is too much to handle. It is worthwhile to reduce them to a lesser number of variables that can serve as benchmarks.

The first step is to decide on how many categories of crimes should be created, combining all into one index does not do justice to the wide range of different crimes. Going towards 20 is too much, and we would not meet the purpose of this exercise. We came up with eight indices, of which one is a combination of two others. These indices cover a wide range of different types of crimes. Not all types of crimes are covered, simply because for some we do not have international comparative data. Not all of the data was used, some of them did not fit the profile of the index. These indices never replace the original data, it is up to the researcher to decide to use the indices or the original data.

Below, the computational method is described and evaluated, and a description of the crime indices plus the list of variables that were used to compute them are added. The variables are marked with the numbers as they appear in the Crime Guide.

#### Computing the indices

For each of the constituting variables, a ranking over the countries is computed, the country with the lowest score gets value one, the highest rank number depends on the number of countries for which the data is available. Since that number is not the same for the several sources, we need to standardise this ranking. This is done by dividing the rank by the number of countries for which that data is available and multiplying by 100. If data from one source is missing, the index for that country is based on the data from the remaining other sources.

#### Consistency of the indices

Although the data for each index come from different sources and are therefore different, they measure the same types of crime, and should have high correlations amongst each other. To evaluate this, the consistency of the index, Cronbach's alpha<sup>1</sup>, is computed. This alpha is based on those countries

<sup>1</sup> Cronbach's alpha can be interpreted as the average correlation between the constituting variables within a scale. More information on this measure can be found in any statistical manual.

that have no missing valves on any of the constituting variables. As described above, the index itself is available for more countries. The consistency for burglary is 0.55, this is acceptable, all others are good.

Index	Number of countries	Number of variables	Cronbach's alpha
burglary serious violence against persons homicide nonfatal violence violence against women motor vehicle crimes	15 7 10 23 19 11 22	5 11 5 6 5 5	0.55 0.87 0.71 0.81 0.81 0.88 0.85
corruption*	23	5	0.85

#### **Consistency of the indices**

\*If we include data on corruption from the UN Crime Survey (total recorded bribery crimes in 1990 and 1994), the consistency for the corruption scale cannot be computed because there are too many missing valves. The correlation between these two variables and the resulting corruption scale is very low (less than 0.20). Therefore the UN data was kept out of the index.

In case several surveys were carried out (in 1989, 1992 and 1996), these surveys were taken together for the indices on burglary, non-fatal violence, violence against women, motorvehicle crimes, opportunities for crime, and police performance.

Separate victimisation rates were computed for the nation-wide surveys, the main cities and the rural areas for the indices on burglary, non-fatal violence, violence against women, motorvehicle crimes, corruption, and police performance.

#### Burglary

V4AR	V Survey <sup>2</sup> : rate of burglaries recorded by the police 1990
V4BR	V Survey: rate of burglaries recorded by the police 1994
IN2	ICVS <sup>3</sup> national: percentage of the respondents who have been
	a victim of burglary in the year preceding the survey, average
	annual rate 1988–1995
IC2	ICVS city: percentage of the respondents who have been a
	victim of burglary in the year preceding the survey, average
	annual rate 1988–1995

<sup>2</sup> V Survey: the United Nations Survey on Crime Trends and Operations of Criminal Justice Systems

<sup>3</sup> ICVS: International Crime Victim Surveys: data are available for nation-wide surveys, urban areas and rural areas

2 ICVS rural: percentage of the respondents who have been a victim of burglary in the year preceding the survey, average annual rate 1988–1995

Country	BURGL	v4ar	v4br	in2	ic2	ir2
	Burglary index	Rate of burglaries recorded by 100 000 population 1990	Rate of burglaries recorded by 100 000 population 1994	ICVS national: burglary averaged rate 1988-95	ICVS city: burglary averaged rate 1988-95	ICVS rural: burglary averaged rate 1988-95
Albania Andorra Armenia	79				3,4	3,8
Austria Azerbaijan	38 04	1.155 17	1.123 16	0,9	0,2	1,1
Belarus Belgium Bosnia	17 61	71	198 1.534	2,2	1,5 2,7	2,2
Bulgaria Canada Croatia	94 79 37 22	1.427 489 174	1.326 405	3,3	5,8 4,0 1,0	2,8
Czech Republic Denmark	75	174	170	3,1	4,0	2,8
England/Wales Estonia Finland France Georgia	81 98 40 64 82	1.991 1.432 710	2.445 1.936 840	2,7 5,0 0,6 2,4	4,5 7,2 0,4 4,2 4,3	2,0 3,7 0,7 1,9 2,9
Germany Germany (W) Greece Hungary Iceland	25 39 52	292 744	356 769	1,3	1,8 2,5	1,1
Ireland Italy Kazakhstan	61 25	111	215	2,4	2,8	2,2
Kyrgyzstan Latvia	68 57		203		4,0 2,9	7,6 2,2
Lithuania	59	127	198	4,1	5,5	2,7
FYR Macedonia Malta	37 18	250	445	0,8	2,3 0,4	1,3
Moldova	27	169	198	· · · · ·		

Country	BURGL	v4ar	v4br	in2	ic2	ir2
Netherlands	60	687	806	2,3	3,5	2,0
Northern Ireland	50	932	1.036	1,3	3,3	1,1
Norway	25	152	86	0,7	4,2	0,1
Poland	43			2,0	2,5	1,8
Portugal						
Romania	29	46	134		1,1	2,9
Russian Federation	36				2,5	
Scotland	59	1.994	1.722	1,7	2,0	1,7
Slovakia	76	383	805	3,4	6,5	3,1
Slovenia	45	400	537	1,9	2,8	1,3
Spain	43	452	360	1,6	2,4	2,1
Sweden	54	1.800	1.609	1,3	2,6	1,0
Switzerland	18			1,1	1,6	1,1
Tajikistan						
Turkey						
Ukraine	67				3,6	
United Kingdom						
USA	80	1.230	1.041	3,3	3,9	3,2
Uzbekistan						
Yugoslavia	56				2,9	

#### Serious violence

#### Non-fatal violence

- IN4 ICVS national: percentage of the respondents who have been a victim of assault and threat, average annual rate 1988–1995
- IC4 ICVS city: percentage of the respondents who have been a victim of assault and threat, average annual rate 1988–1995
- IR4 ICVS rural: percentage of the respondents who have been a victim of assault and threat, average annual rate 1988–1995
- IN16 ICVS national: percentage of the respondents who have been a victim of robbery in the year preceding the survey, average annual rate 1988–1995
- IC16 ICVS city: percentage of the respondents who have been a victim of robbery in the year preceding the survey, average annual rate 1988–1995
- IR16 ICVS rural: percentage of the respondents who have been a victim of robbery in the year preceding the survey, average annual rate 1988–1995

# *Homicide (homicide index, including murder (premeditated) and manslaughter)*

V5AR V Survey: rate of homicides recorded/100000 population in 1990 V5BR V Survey :rate of homicides recorded/100000 population in 1994

- O6 WHO<sup>4</sup>: homicide rate 1992 (/100000 population)
- O7 Interpol homicide rate 1992 (/100000 population)
- O8  $CDC^5$ : homicides/100 000 population 1994

	SERVI0	VIO	НОМ	in4	ic4	ir4
Country	Serious violence index	Non-fatal violence index	homicide index	ICVS national: assault and threat averaged rate 1988-95	ICVS city: assault and threat averaged rate 1988-95	ICVS rural: assault and threat averaged rate 1988-95
Albania	52	52			3,2	2,4
Andorra	18		18			
Armenia	80	10	80			
Austria	22	12	33	2,1	2,8	1,8
Azerbaijan	68	50	68		0.5	
Belarus	59	50	62	10	3,5	0.0
Belgium	44	37	54	1,9	0,9	2,0
BUSIIIa	71	70	60		4.0	
Bulgaria	60	79	00	4.2	4,9	11
Creatia	51	73	44 60	4,3	4,0	4,1
Ciudila	1/	20	1/		3,3	
Czoch Popublic	50	10	55	2.0	2.0	2.0
Denmark	15	49	15	3,0	3,2	2,9
England/Wales	43	66	0/	3.0	11	27
Erigiariu/ Wales	96	00	04	5.9	7.5	3,7
Finland	58	55	62	3,4 4 0	5.4	35
France	31	30	32	28	3,4	2.6
Georgia	70	61	82	2,0	4.2	2,0
Germany	44	01	44		7,2	2,0
Germany (W)	39	43	16	31	4.0	27
Greece	28	10	28	0,1	1,0	_,.
Hungary	44	13	57		1.7	
Iceland					.,.	
Ireland	08		08			
Italy	48	37	61	0,8	1,2	0,6
Kazakhstan	88		88	,	,	,
Kyrgyzstan	73	65	88		4,9	2,6
Latvia	67	48	92		2,6	2,1
Liechtenstein						
Lithuania	65	63	72	3,0	3,3	2,7
Luxembourg	33		33			
FYR Macedonia	30	25	35		2,4	
Malta	35	38	29	3,3	2,9	3,8
Moldova	63		63			
Netherlands	42	60	14	3,8	6,3	3,1

<sup>4</sup> WHO: United Nations World Health Organization

<sup>5</sup> CDC: Centre for Disease Control (in *United Nations International Study of Firearm Regulation* and Krug et.al 1998)

	SERVI0	VIO	НОМ	in4	ic4	ir4
Northern Ireland	55	30	92	1,8	4,7	1,6
Norway	32	36	26	3,0	3,6	2,8
Poland	71	77	54	3,9	4,9	3,4
Portugal	55		55			
Romania	56	51	60		6,3	3,9
Russian Federation	93	88	96		5,3	
Scotland	37	40	32	3,0	4,2	2,8
Slovakia	52	61	34	3,5	2,9	3,7
Slovenia	58	61	54	4,6	4,0	4,4
Spain	45	59	18	3,1	2,6	1,6
Sweden	50	37	65	3,4	4,7	3,0
Switzerland	31	27	38	2,1	0,4	2,3
Tajikistan						
Turkey	17		17			
Ukraine	67	75	59		3,9	
United Kingdom						
USA	86	88	83	5,2	6,9	4,8
Uzbekistan						
Yugoslavia	58	58			5,5	

	in16	ic16	ir16	v5ar	v5br	06	07	08
Country	ICVS national: robbery averaged rate 1988-95	ICVS city: robbery averaged rate 1988-95	ICVS rural: robbery averaged rate 1988-95	Rate of homicides recorded by 100 000 population 1990	Rate of homicides recorded by 100 000 population 1994	WHO homi- cide 1992	Interpol: homiciderate per 100 000 population 1994	CDC Study total homicides per 100 000 population
Albania Andorra Armenia		1,4	2,4			06,10	01,59 05,36	01.17
Austria Azerbajan Belarus	0,2	2.0	0,2	3,3 7,2 6.5	4 9 10	01,50	02,48 08,07	01,17
Belgium Bosnia	1,0	2,7	0,8		3	1,40	31,50	01,41
Bulgaria Canada Croatia Cyprus	1,2	3,1 1,7 0,8	0,9	4,1 2,5 7,6 2,5	11 2 8 2	04,70 02,30	05,90 05,18 07,38 01,38	02,16
Czech Rep Denmark England/	1,2	1,1	1,3	5,2	5	02,10 01,30	04,91	01,21
Wales	1,1	1,7	0,8	1,3	1	00,60		00,55

	in16	ic16	ir16	v5ar	v5br	06	07	08
Estonia Finland France Georgia	3,3 0,7 0,6	4,9 0,9 0,7 3,8	2,3 0,6 0,6 1,3	9,5 8,6 8,2	26 10 14	03,40 01,10	24,33 00,63 04,67 10,65	28,21 03,24 01,12
Germany Germany(W) Greece Hungary Iceland	0,8	1,6 0,7	0,6	2,3 3,3	3 5	01,10 01,50 04,00	04,61 02,57 04,27	01,17 01,14 03,53
Ireland Italy KazakhstanK yrgyzstan	1,3	2,6 1,6	0,8 2,0	7,2 10,8 14,1	5 16 12	00,60 02,60	00,71 04,74	00,62 02,25
Latvia Liechten-		3,4	1,3		16	09,20	14,62	
Lithuania Luxembourg FYR	2,0	2,0	2,2	6,8	15	02,00	01,52	
Macedonia Malta Moldova	0,4	1,1 0,2	0,6	3,4 2,8 7,0	4 3 10		02,98	
Netherlands Northern	0,8	1,6	0,6	1,5	2	01,30		01,11
Ireland Norway Poland	0,5 0,5 1,8	1,6 1,6 2,2	0,4 0,3 1,6	19,3 2,9	21 3	04,70 01,50 02,90	03,14	06,09 00,97
Romania Russian		1,0	0,0	7,0	8	01,50 04,90	04,20 03,28	02,98
Fed Scotland Slovakia	0,7 1,6	3,8 1,1 1,2	0,6 1,6	11,5 1,7 3,5	23 2 4	15,30 02,70	21,82 00,00 02,41	02,24
Slovenia Spain Sweden Switzerland	0,9 3,1 0,4 0,7	1,1 3,8 0,5 1,3	0,6 1,9 0,3 0,6	4,7 11,1	6 12	01,00 01,30 01,50	04,86 02,57 09,49 02,29	02,01 00,95 01,30 01,32
Turkey Ukraine United		5,7		1,7 6,3	3 10			
USA Uzbekistan	1,6	2,4	1,4	9,4	9	09,90	08,95	09,93
Yugoslavia		1,1						

#### Violence against women

- IN5 ICVS national: percentage of the female respondents who have been a victim of sexual or nonsexual assault in the period of five years preceding the survey, average victimisation rate
- IC5 ICVS city: percentage of the female respondents who have been a victim of sexual or nonsexual assault in the period of five years preceding the survey, average victimisation rate
- IR5 ICVS rural: percentage of the female respondents who have been a victim of sexual or nonsexual assault in the period of five years preceding the survey, average victimisation rate
- V3AR V Survey: recorded rapes by the police per 100 000 population in 1990
- V3BR V Survey: recorded rapes by the police per 100 000 population in 1994

The violence (assaults) against women includes five year rates for: a) sexual offences: the last time it happened, what happened; was it rape, attempted rape or indecent assault (offensive behaviour was left out); b) assaults and threats: the last time it happened, what happened, was force used (only threatened (not assavited) was left out). All of these combined items are not available in the Crime Guide, thus they are not all given below.

	VIOWOM	in5	ic5	ir5	v3ar	v3br
Country	Violence against women index	ICVS national: violence against women averaged 5y rate 1984-95	ICVS city: violence against women averaged 5y rate 1984-95	ICVS rural: violence against women averaged 5y rate 1984-95	rate of rapes recorded by 100 000 population in 1990	rate of rapes recorded by 100 000 population in 1994
Albania	56		6,0	4,2		
Andorra Armenia Austria Azerbaijan Belarus Belgium Bospia	7 51 10 48 42	4,2 3,6	6,5 5,2 3,9	3,3 3,5	1,0 6,9 0,9 7,5	1 7 1 6 9
Bulgaria Canada	66 90	6,6	7,3 7,8	6,0	5,8 104,7	11 108

	VIOWOM	in5	ic5	ir5	v3ar	v3br
Croatia	31		5,5		3,4	2
Cyprus Czech Benublic	6 00	6.8	83	65	0,1	1
Denmark	74	0,0	0,0	0,5	9,5	9
England/Wales	51	4,1	4,9	3,9	6,7	10
Estonia	61	5,7	7,3	4,7	3,4	8
FINIANO France	76 54	0,0 3,8	10,2 5.4	5,3 3,4	7,0 8.1	8 11
Georgia	26	0,0	5,8	3,1	1,5	1
Germany						
Germany (W)	81	6,2	8,6	5,3	1.0	n
Hungary	38		1.8		7.2	2
Iceland			.,0		.,_	Ū
Ireland	10	07	0.4	0.5	10	0
ltaly Kazakhstan	16 84	2,7	3,4	2,5	1,2	2 11
Kyrgyzstan	80		13,1	7,2	8,0	9
Latvia	33		3,9	2,9	5,0	5
Liechtenstein	40	10	55	13	5.2	Л
Luxembourg	43	4,9	5,5	4,5	5,5	4
FYR Macedonia	21		3,8		2,7	2
Malta	15	2,6	2,6	2,5	1,1	3
Netherlands	59 57	3.8	67	31	0, I 8 8	0 10
Northern Ireland	37	1,6	3,3	1,5	7,9	13
Norway	52	3,0	13,4	1,1	9,4	8
Poland	25	3,2	4,7	2,6		
Romania	62		6,9	14,6	4,1	6
Russian Federation	83		8,6		10,1	9
Scotland	66 57	4,3	5,8	3,9	9,7	11
Slovakia Slovenia	74	7,0 4,9	2,1 7.7	7,5	10.6	4 12
Spain	22	3,2	3,2	2,4	3,6	3
Sweden	82	5,1	7,8	4,3	16,5	21
Switzerland Tajikistan	48	4,1	2,9	4,3	15,8	4
Turkey	5				0,5	1
Ukraine	37		5,5		4,1	3
United Kingdom	01	C A	61	C A	11 0	20
Uzbekistan	04	0,4	0, I	0,4	41,0	১৪
Yugoslavia	69		7,1			

### Motor vehicle crimes

(including theft of and theft from cars and other motor vehicles)

- IN9 ICVS national: percentage of the respondents who have been a victim of theft from/of car in the year preceding the survey, average annual rate 1988–95
- IC9 ICVS city: percentage of the respondents who have been a victim of theft from/of car in the year preceding the survey, average annual rate 1988–95
- IR9 ICVS rural: percentage of the respondents who have been a victim of theft from/of car in the year preceding the survey, average annual rate 1988-95
- O4 HEUNI Paper No.9<sup>6</sup>: stolen/misapp. mot. vehicles/100 000 in 1995
- O5 HEUNI Paper No.9: not-traced mot. vehicles/100 000 in 1995

	MVCI	in9	ic9	ir9	04	05
Country	Motor vehicle crime index	ICVS national: theft from/of car averaged rate 1988-95	ICVS city: theft from/of car averaged rate 1988-95	ICVS rural: theft from/of car averaged rate 1988-95	HEUNI Study: stolen/misapp motor vehicles per 10.000	HEUNI Study: not-traced motor vehicles per 100.000
Albania Andorra Armenia	24		4,9	3,8		
Austria Azerbaijan	26	1,8	2,2	1,6	13,5	4,5
Belarus Belgium Bosnia	16 47	3,9	3,4 5,0	3,8	2,2 28,9	1,7 12,2
Bulgaria Canada Croatia	92 70 33	7,9	13,4 10,5 5,1	6,4	4,6	2,6
Cyprus Czech Republic Denmark	22 79 97	8,1	11,3	7,5	4,0 70.6	1,6
England/Wales Estonia Finland France Georria	90 71 32 80 57	9,3 8,0 3,3 8,2	11,1 12,5 4,5 10,2 11 1	8,7 5,2 2,8 7,7	99,0 13,0 40,4 49,7	46,2 10,2 2,1 12,4

6 Liukkonen, M (1997), Motor Vehicle Theft in Europe

	MVCI	in9	ic9	ir9	04	05
Germany	66				23,4	5,7
Germany (W)	35	5,0	7,1	4,2		
Greece	58				12,3	7,4
Hungary	51		8,5		12,8	
Iceland	33				4,3	
Ireland	00	0.4	11.0	0.4	F0 4	
Italy Kazakhatan	89	9,4	11,9	8,4	53,4	
Kazakristan	12		4.0	0.0	0,8	0.5
Kyrgyzstari Listvio	10		4,0	2,2	0,7	0,5
Liechtenstein	50		0,1	3,2	13,4	0,0
Lithuania	58	7,0	11,2	3,9	12,3	6.9
Luxembourg	89	,	,	,	29,6	14,9
FYR Macedonia	23		7,4		4,1	0,3
Malta	83	9,4	12,6	5,5	26,4	13,0
Moldova	27				2,3	2,2
Netherlands	58	6,1	8,6	5,5	18,4	5,6
Northern Ireland	40	4,9	7,5	4,7		
Norway	29	3,5	8,7	2,5		
Poland	56	6,1	9,9	4,6	13,1	
Portugal	46				12,2	4,0
Romania	18		7,7	1,6	1,2	
Russian Federation	49		9,2		7,6	
Scotland	64	7,0	9,4	6,4		
Slovakia	60	4,6	16,0	4,6		
Slovenia	41	5,5	8,0	4,5	5,4	
Spain	99	10,1	14,6	8,8	47.0	3,2
Sweden	66	5,6	8,2	4,9	47,8	14,0
Switzerland	11	2,5	4,5	2,3		0.4
lajikistan	4				0,3	0,1
lurkey	b 00		4.0		0,7	-
Ukraine	23		4,6		1,7	2,3
United Kingdom	00	0.5	14.0	0.0		
USA	93	9,5	14,3	ბ,პ		
UZDEKISTALI	67		10 5			
TUYUSIAVIA	07		10,5			

#### Petty crimes

- car vandalism
- theft of motorcycle or moped
- theft of bicycle theft of personal belongings
- sexual offensive behaviour (no assaults)
- threats

The figures are the percentage of the population that has been victimised at least once of at least one of the crimes. The source variables for these

Country	Petty crime index	National data	Main cities	Rural area's
Country Albania Austria Belarus Belgium Bulgaria Canada Croatia Croatia Czech Republic England Estonia Finland France Georgia Germany Hungary Italy Kyrgyzstan Latvia Lithuani FYR Macedonia Malta Netherlands Northern Ireland Norway Poland Romania Russian Federation Scotland Slovakia	Petty crime index 30 52 8 18 66 78 13 90 64 80 43 37 12 52 16 32 63 73 66 11 40 98 13 15 64 38 75 30 72	National data 16,1	Main cities 19,0 24,6 14,6 13,4 22,7 23,2 15,1 24,6 19,8 25,0 20,9 21,0 16,1 22,6 15,7 19,6 18,4 20,1 20,8 14,6 13,9 29,9 16,4 15,8 23,7 22,7 23,5 18,3 26,3	Rural area's 12,8 12,9 13,6 16,7 19,7 16,9 15,4 13,6 13,5 7,7 14,9 13,4 20,3 22,7 16,4 13,4 20,3 22,7 16,4 17,3 22,0 9,9 12,5 15,2 8,6 13,8 16,5
Slovenia Spain Sweden Switzerland Ukraine USA Yugoslavia	57 26 71 58 97 76 50	17,3 15,4 17,8 17,6	21,8 18,6 23,9 16,7 28,4 24,3 20,3	15,4 12,5 16,3 17,7 16,4

prevalence rates are not available in the Crime Guide, therefore they are not given below  $^{7}$ .

<sup>7</sup> For industrialised countries see Mayhew, P. And Van Dijk, J. (1997) and for Central and Eastern European countries Zvekic 1998, Zvekic and Stankov 1998, Hatalak et al. 1998.

#### Corruption

- IN17 ICVS national: percentage of the respondents who have been confronted with a corrupted government official in the year preceding the survey, averaged annual rate 1988-1995
- IC17 ICVS city: percentage of the respondents who have been confronted with a corrupted government official in the year preceding the survey, averaged annual rate 1988-1995
- IR17 ICVS rural: percentage of the respondents who have been confronted with a corrupted government official in the year preceding the survey, averaged annual rate 1988-1995
- O1 Transparency International<sup>8</sup>: corruption index 1995
- O1A World Competitiveness Yearbook<sup>9</sup> 1997: improper practices (bribing/corruption) do not prevail in the public sphere (scale 10-0)

For the industrialised countries, the ICVS data is only available for the 1996 surveys.

	CORR	in17	ic17	ir17	01	o1a
Country	Corruptio nindex	ICVS national: corruption averaged rate 1991-95	ICVS city: corruption averaged rate 1991-95	ICVS rural: corruption averaged rate 1991-95	TI corruption index 1995 (reverse scale)	World Competitiveness Yearbook 1997: (reverse scale)
Albania Andorra Armenia	78		13,8	8,4		
Austria Azerbaijan	52	0,7	1,5	0,4	7,1	6,8
Belarus Belgium Bosnia	65 72		12,0		6,9	4,0
Bulgaria Canada Croatia	94 31 84	0,4	19,1 0,7 16,0	0,2	8,9	8,0
Cyprus Czech Rep Denmark England/Wales	76 04 34	7,9 0.3	8,8 0.2	7,6 0.4	9,3 8.6	3,7 9,5
Estonia Finland France	61 10 49	3,8 0,1 0,7	3,8 0,0 3,0	3,9 0,2 0,2	9,1 7,0	9,2 5,6

8 Transparency International Report 1996

9 World Competitiveness Yearbook 1997, International Institute for Management Development

	CORR	in17	ic17	ir17	01	o1a
Georgia	98		29,9	13,9		
Germany	56					6,7
Germany (W)	52				8,1	
Greece	88				4,0	3,1
Hungary	74		3,9		4,1	2,7
Iceland	12					9,0
Ireland	35				8,6	8,1
Italy	93				3,0	3,0
Kazaknstan	00		01.0	454		
Kyrgyzstan	98		21,3	15,1		
Lalvia	80		14,0	12,4		
Lieunenstein	86	11.0	12/	8.0		
Luvembourg	/18	11,0	15,4	0,9		7.5
EVR Macedonia	40 55		77			7,5
Malta	63	4 0	42	3.8		
Moldova	00	1,0	.,_	0,0		
Netherlands	37	0.5	0.6	0.5	8.7	8.0
Northern Ireland	06	0,0	0,0	0,0	- ,	- , -
Norway	25			,	8,6	8,6
Poland	74	5,0	7,4	4,0		3,0
Portugal	72				5,6	5,0
Romania	67		11,9	6,1		
Russian Federation	95		18,7			0,8
Scotland	33	0,3	0,5	0,2	8,6	
Slovakia	77		13,9			
Slovenia	52	1,2	1,5	1,3		E 4
Spain	12	0.0	0.4	0.0	4,4	5,4
Sweden	19	0,2	0,4	0,2	8,9	8,5
Switzerianu	24	0,2	0,3	0,2	0,0	7,9
Turkov	02				11	2.4
Illkraine	90 68		12.6		4,1	2,4
United Kingdom	24		12,0			8.2
lisa	33	0.3	13	0.0	78	7.6
Uzbekistan	00	0,0	1,0	0,0	7,0	,,0
Yugoslavia	87		17,4			

## Motivation for crime

ICVS data on percentage of the respondents who are young, male and either unemployed or dissatisfied with their income.

All available data were used. No distinction is made for the nation-wide surveys, the main cities or the rural areas. The data for calculating these indices is taken directly from the main database. All of the source variables are not found in the Crime Guide and therefore they are not given below.

#### Opportunities for crime

ICVS city: data on vehicle ownership (cars, motorcycles and bicycles),

ICVS city: data on average number of evenings spent away from home for recreation

ICVS city: data on the percentage of single person households

ICVS city: data on the percentage of females with paid employment.

	Opportunity index	ICVS car ownership, averaged rate 1989-99	ICVS motorcycle ownership averaged rate 1989-96	ICVS bicycle ownership rate 1989-96	Going out	Single person householdsa veraged rate 1989-96	Percentage of women working averaged rate 1989-96
Ibania Austria Belarus Belgium Bulgaria Canada Croatia Czech Republic England/W Estonia Finland France Georgia Germany (W) Hungary Italy Kyrgyzstan Latvia	27 68 33 57 33 78 49 61 65 51 75 68 28 67 38 62 26 29	21,3 76,4 34,5 80,9 64,1 87,2 71,7 65,9 78,1 48,7 73,3 78,4 59,9 72,9 61,3 86,2 43,4 46,0	11,1 8,7 5,2 12,1 3,5 8,0 9,8 13,8 7,5 8,7 14,2 8,7 7,8 8,7 14,2 8,7 7,8 8,7 33,9 5,7 6,7	56,2 74,3 39,0 48,2 36,9 69,9 61,9 67,0 44,1 56,1 84,1 48,0 39,5 71,0 50,7 57,8 35,9 40,6	2,51 3,35 2,66 2,98 3,07 3,60 3,04 2,99 3,52 2,81 3,13 2,99 2,75 3,31 2,21 3,05 2,79 2,72	1,7 18,8 7,5 19,7 7,0 12,5 5,5 4,9 13,3 11,3 25,7 20,7 1,2 29,5 7,5 8,9 2,1 3,7	33,5 44,3 50,0 38,2 42,4 54,5 38,7 52,4 51,9 54,4 55,6 49,2 38,8 45,9 44,1 31,1 47,5 44,4
Lithuania	29	56,3	4,7	39,6	2,44	6,8	46,5

	Opportunity index	ICVS car ownership, averaged rate 1989-99	ICVS motorcycle ownership averaged rate 1989-96	ICVS bicycle ownership rate 1989-96	Going out	Single person households averaged rate 1989-96	Percentage of women working averaged rate 1989-96
FYR Macedonia	50	74,0	13,6	66,5	3,20	1,2	33,9
Malta	51	90,6	13,1	43,4	3,48	2,7	26,0
Netherlands	72	68,8	14,9	86,8	3,37	22,5	39,0
Northern Ireland	54	68,3	4,4	52,8	3,78	13,5	41,5
Norway	73	75,9	6,1	57,7	3,33	38,8	61,8
Poland	41	56,7	10,4	66,0	2,46	5,9	41,2
Romania	11	45,5	1,7	21,1	1,97	3,1	38,9
Russian Federation	29	37,3	4,0	47,5	2,45	3,9	49,6
Scotland	53	70,1	4,0	36,8	3,54	15,1	48,9
Slovakia	48	60,7	2,5	66,7	2,92	4,1	66,7
Slovenia	70	83,5	19,1	83,9	2,90	9,0	46,2
Spain	53	77,5	25,1	34,6	2,69	8,6	47,0
Sweden	82	74,4	11,2	87,3	3,14	31,6	56,8
Switzerland	70	69,7	15,2	51,8	3,34	27,3	46,6
Ukraine	19	33,9	3,6	35,9	2,55	3,0	46,6
USA	82	92,5	11,0	64,8	3,69	13,3	57,8
Yugoslavia	47	67,8	5,4	48,3	3,29	5,2	47,8

The following three indices were created by Ineke Haen Marshall

LERI Law enforcement resources index

POLICE	V Survey: number of police (sworn and civilian) per 100,000
	for 1994
PRIVATE	Dutch Ministry of Justice: number of private police per
	100,000 for 1995
PROSEC	V Survey: number of prosecutors per 100,000 for 1994
JUDGES	V Survey: number of judges per 100,000 for 1994
PRISON	V Survey: number of correctional personnel (adult and
	juvenile institutions) per 100,000 for 1994

Country	LERI	POLICE	PRIVATE	PROSEC	JUDGES	PRISON
	Law Enforcement Resources Index	Police per 100000	Dutch Min. of Justice: private security private police per 100.000	Prosecutors per 100 000	Judges per 100 000	Correctional staff per 100 000
Albania Andorra Armenia Austria Azerbaijan Belarus	10 19 22 50 24	405 367	75	4,62 8,72 2,49 16,49 14,44	2,53 19,79 6,56	28 44 35
Belgium	27	344	109	7,68	11,88	52
Boshia Bulgaria Canada Croatia Cyprus	20 30 35 29	249 670 523		6,98 6,97 9.67	11,71 22,96 9 13	34 93 49 29
Czech Rep Denmark England/Wales	30 30 23	238 347	24 193 155	8,16 7,42 4,06	19,93 1,91	78 75 75
Finland France Georgia	20 28 15	436 232 349	69 121	6,56 7.03	12,34 18,23 4,56	53 37
Germany Germany (W)	31	320	217	6,60	27,19	37
Greece Hungary Iceland	16 36	383 293	19	3,76 11,24	13,10 21,42	18 64
Ireland Italy Kazakhstan Kyrgyzstan Latvia	29 30 40 29 38	304 488 779	143 76	18,60 11,73 15.62	6,71 5,22 7 30	54 80
Liechtenstein Liechtenstein Lithuania Luxembourg FYR Macedonia	30 38 31 19	403 190 545 276 318 507	121 201	9,68 15,80 6,73 5,56	25,81 6,88 26,68 18,63	55 107 46 23
Mala Moldova Netherlands Northern Ireland Norway Poland	24 25 21 35 20 10	241 255 520 231	132 112 26	10,74 2,71	5,56 8,10 2,70 9,71	58 61 193
Portugal Romania	34	440 214	156	10,33	12,70	42
Russian Fed Scotland Slovakia	45 23 37	1.225 360 352		19,27 4,85 10,47	8,50 2,67 20,91	154 86

Country	LERI	POLICE	PRIVATE	PROSEC	JUDGES	PRISON
Slovenia Spain	32 13	412 129	135 184	7,31 3,28	26,26	42
Sweden	25	282	108	8,17	4,44	51 39
Tajikistan	20	200	10	0.05	09,00	
lurkey Ukraine	30	190 419	10	3,85	8,76	40 46
United Kingdom USA Uzbekistan Yugoslavia	29	300	582	8,92	4,31	106

## Criminal Justice Gender Balance Index

FEMPOLR	V Survey: female share of police personnel (in percen-
	tages) in 1994
FEMPROP	V Survey: female share of prosecutors (in percentages)
	in 1994
FEMJUDR	V Survey: female share of judges (in percentages) in 1994
FEMPRIR	V Survey: female share of prison personnel (in percen-

FEMPRIR V Survey: female share of prison personnel (in percentages) in 1994

Country	GBI	FEMPOLR	FEMPROR	FEMJUDR	FEMPRIR
	Gender Balance Index	% female police	% female prosecutors	% female judges	% female prison staff
Albania Andorra Armenia Austria	55 20 21	17 14	67 5	23	12
Azerbaijan Belarus	02 34	14	3 19	41	32
Belgium Bosnia	23	5	33	29	
Bulgaria Canada	39 48	24	41	68	15
Croatia	35	21	31		25
Cyprus	15	5	34	9	4
Czech Rep	43		55	62	20
Denmark	40	19	42	_	
England/Wales	28		47	6	
Estonia	50		66	61	33

Country	GBI	FEMPOLR	FEMPROR	FEMJUDR	FEMPRIR
Finland	27	23	7		
France	03	3			
Georgia	18		5	13	25
Germany	21		29	26	
Germany (W)					
Greece	21	6	17	37	10
Hungary	29	10			23
Iceland					
Ireland					
Italy					
Kazakhstan	23	7	20	34	
Kyrgyzstan	26		15	28	27
Latvia	48	18	58	71	37
Liechtenstein	12	3	33	-	6
Lithuania	35	11	34	43	24
Luxembourg					
FYR Macedonia	24	5	31	41	13
Malta	19	13		3	12
Moldova	21	4	14	27	28
Netherlands	25	9	31	31	
Northern Ireland	13	10		-	7
Norway	33	31		16	
Poland					
Portugal	28		37	22	
Romania	23	10			
Russian Fed	41	21	33	57	30
Scotland	29	23	46	7	9
Slovakia	35	8	44	53	
Slovenia	40	20	45	56	20
Spain	20	2	40		
Sweden	40	33	32	31	34
Switzerland	26	10		39	8
lajikistan	07		10	_	_
Iurkey	07	3	10	5	5
Ukraine	11	4			1
United Kingdom	07	0.4			_
USA	27	24			5
UZDEKISTAN					
rugosiavia					

Citizen evaluation of police performance index

- SATIC26 ICVS city: percentage of respondents who are satisfied with police performance in general (police crime control), average annual rate 1988–95
- SATIC27 ICVS city: percentage of victims who reported their victimisation and were satisfied with how the police handled their case, average annual rate 1988–95
- IC24 ICVS city: percentage of victims of contact crimes who reported their last victimisation to the police in a period of five years (percentage of all), average annual rate 1988–95

Country	CEPPI	SATIC26	SATIC27	IC24
	Citizen Evaluation of Police Performance Index	% satisfied with crime control	% victims satisfied with police	ICVS city: report contact crimes averaged rate 1988-95
Albania Andorra Armenia	28	47	73	23
Austria Azerbaijan	26	56	66	20
Belarus Belgium Bosnia	13 37	32 69	36 57	21 33
Bulgaria Canada	21 47	39 73	38 88	25 34
Croatia Cyprus Crach Ban	18	40	56	19
Denmark	20	71	23	31
Estonia Estona	13	40	75 14 71	21
France	41 12	59 30	71	20 44 20
Germany Germany (W)	33	54	69	20
Greece Hungary	23	49	38	26
Iceland Ireland				
Italy Kazakhstan	27	56	46	24
Kyrgyzstan Latvia	3 11	20 33	18 29	16 21
Liechtenstein Lithuania	14	32	19	27

Country	CEPPI	SATIC26	SATIC27	IC24
Luxemboura				
FYR Macedonia	28	43	47	33
Malta	25	35	54	29
Moldova				
Netherlands	42	72	62	42
Northern Ireland	43	61	68	66
Norway	30	71	73	09
Poland	15	33	27	26
Portugal				
Romania	12	31	35	21
Russian Fed	4	29	15	19
Scotland	50	84	80	38
Slovakia	32	54	42	40
Slovenia	25	54	61	20
Spain	32	60	52	30
Sweden	45	82	76	31
Switzerland	50	77	79	53
Tajikistan				
lurkey				
Ukraine	14	21	29	27
United Kingdom	40	00		10
USA Ush shister	46	63	11	48
UZDEKISTAN	10	07	20	00
Yugosiavia	18	37	38	23
## **Crime Situation**

The composition of the data for the indices (10 lowest and 10 highest for each)

### **Data sources:**

V	Fifth UN Survey
ICVS	International Crime Victim Survey
HEUNI	Heuni Study (see Liukkonen 1997)
WHO	World Health Statistics
CDC	Centre for Disease Control (see United Nations International
	Study on Firearm Regulation and Krug et al 1998)
IP	Interpol (see United Nations International Study on Firearm
	Regulaton and Interpol 1995)
TI	Transparency International
WCS	World Competitiveness Yearbook (see International Institute
	for Management Development)

### **Burglary index**

### Data sources

lowest		
Azerbaijan	04	V
Belarus	17	V + ICVS
Malta	18	V + ICVS
Switzerland	18	V + ICVS
Cyprus	23	V
Kazakhstan	25	V
Germany (W)	25	ICVS
Norway	25	V + ICVS
Moldova	27	V
Romania	29	V + ICVS
highest		
Kyrgyzstan	<b>68</b>	V + ICVS
Czech Republic	75	ICVS
Slovakia	76	V + ICVS
Albania	<b>79</b>	ICVS
Canada	<b>79</b>	V + ICVS
<b>United States</b>	80	V + ICVS
<b>England/Wales</b>	81	V + ICVS
Georgia	82	ICVS
Bulgaria	94	ICVS
Estonia	<b>98</b>	ICVS

### Motor vehicle crime index Data sources

lowest		
Tajikistan	4	HEUNI
Turkey	6	HEUNI
Kyrgyzstan	10	ICVS + HEUNI
Switzerland	11	ICVS
Kazakhstan	12	HEUNI
Belarus	16	ICVS + HEUNI
Romania	18	ICVS + HEUNI
Cyprus	22	HEUNI
Ukraine	23	ICVS + HEUNI
FYR Macedonia	23	ICVS + HEUNI
highest		
Czech Rep.	<b>79</b>	ICVS
France	80	ICVS + HEUNI
Malta	83	ICVS + HEUNI
Luxembourg	89	HEUNI
Italy	89	ICVS + HEUNI
England/Wales	90	ICVS + HEUNI
Bulgaria	92	ICVS
<b>United States</b>	93	ICVS
Denmark	<b>97</b>	HEUNI
Spain	99	ICVS
Homicide index		Data sources
lowest		
<b>England/Wales</b>	04	V + WHO + CDC
Ireland	08	WHO + IP + CDC
Cyprus	14	V + IP
Netherlands	14	V + WHO + CDC
Germany (W)	16	WHO
Turkey	17	V
Andorra	18	IP
Spain	18	WHO + IP + CDC
Norway	26	V + WHO + CDC
Greece	28	V + WHO + IP + CDC
highest		
Lithuania	72	V
Armenia	80	$\dot{V} + WHO + IP$
Georgia	82	V + IP
United States	83	V + WHO + IP + CDC
Kazakhstan	88	V
1202012113101	00	v
Kvrovzstan	88	V

Northern Ireland	92	V + WHO + CDC
Latvia	92	V + WHO + IP
Estonia	95	V + IP + CDC
Russian Fed	96	V + WHO + IP
Serious violence index		Data sources
lowest	00	WHO I IR CDC
	Uð 14	WHO + IP + CDC
Cyprus	14	V + IF
Andonno	1/	v ID
Andorra	10	
	22	V + WHO + IP + CDC
Greece EVD Magadania	20	V + WHO + IF + CDC
F I K Wateuoma	30	ICVS + WHO + IP + CDC
Switzenland	21	ICVS + WHO + IP + CDC
Normov	31	ICVS + V + WHO + CDC
NOI way	32	1CVS + V + WIIO + CDC
highest		
Azerbaijan	68	V + IP
Georgia	70	ICVS + V + IP
Poland	71	ICVS + WHO + IP
Bulgaria	71	ICVS + V + WHO + IP
Kyrgyzstan	73	ICVS + V
Armenia	80	V + WHO + IP
United States	86	ICVS + V + WHO + IP + CDC
Kazakhstan	88	V
Russian Fed	93	ICVS + V + WHO + IP
Estonia	96	ICVS + V + IP + CDC
Violence ag. women inde	X	Data sources
lowest		
Turkey	05	V
Cyprus	06	V
Armenia	07	V
Azerbaijan	10	V
Malta	15	V + ICVS
Italy	16	V + ICVS
FYR Macedonia	21	V + ICVS
Greece	22	V
Spain	22	V + ICVS
Poland	25	ICVS

highest		
Denmark	74	V
Finland	76	V + ICVS
Kyrgyzstan	80	V + ICVS
Germany (W)	81	ICVS
Sweden	82	V + ICVS
Russian Fed	83	V + ICVS
United States	84	V + ICVS
Kazakhstan	84	V
Canada	90	V + ICVS
Czech Rep	90	ICVS
Corruption index		Data sources
lowest		
Denmark	04	TI + WCS
Netherlands	06	ICVS + TI + WCS
Finland	10	ICVS + TI + WCS
Iceland	12	WCS
Sweden	19	ICVS + TI + WCS
United Kingdom	24	WCS
Switzerland	24	ICVS + TI + WCS
Norway	25	TI + WCS
Canada	31	ICVS + TI + WCS
<b>United States</b>	33	ICVS + TI + WCS
highest		
Lithuania	86	ICVS
Latvia	86	ICVS
Yugoslavia	87	ICVS
Greece	88	TI + WCS
Italy	93	TI + WCS
Turkey	93	TI + WCS
Bulgaria	94	CVS
Russian Fed	95	ICVS + WCS
Georgia	<b>98</b>	ICVS
Kyrgyzstan	<b>98</b>	ICVS

## Appendix D

## Operation of the Criminal Justice System Indices: LERI, GBI AND CEPPI

## The law enforcement resources index (LERI)

The purpose of the Law Enforcement Resources Index (LERI) is to produce an index which uses all of the data available, while keeping the number of countries with missing data as small as possible. The main objective of the LERI is to differentiate between those countries with high levels of resources devoted to law enforcement (i.e, public police, private police, prosecutors, judges, prison staff), and those countries with low levels. The law enforcement resources index relies primarily on data reported in the Fifth United Nations Survey for 1990 and 1994, with some supplementary data on private policing drawn from a study conducted by the Dutch Ministry of Justice. Instead of using different data sources to measure the same phenomenon (e.g. homicide), the LERI uses data primarily from one data source (the United Nations Fifth Survey) to measure different dimensions of the same phenomenon: the proportion of the work force involved in different aspects of crime control (personnel employed as public and private police, judges, prosecutors and correctional staff). Thus, the LERI is a composite measure which - for those countries for which multiple data points are available - incorporates more than one single dimension of the concept of law enforcement resources. Such an index will be more robust than an index based on single-source measurement. Unfortunately, as will be explained later, for several countries, the LERI is limited to only one data point.

## The creation of the LERI

The two main indicators of the relative importance of the system of criminal justice in a particular society available in the Fifth UN Survey are (1) the proportion of the work force involved in criminal justice-related jobs, and (2) the proportion of the gross national product devoted to criminal justice activities and personnel.

The financial resources devoted to criminal justice activities and personnel are *not* used in the creation of the LERI, because of major problems associated with financial data provided by the UN Survey. First, such data are only available for a small number of countries. Although 18 countries report on police expenditures, 13 countries report on prosecutorial expenditures, 13 countries report on judicial expenditures, and 24 countries report on prison staff expenditures, only 6 countries report on ALL four categories of expenditures (Estonia, Finland, Hungary, Latvia, Moldova and Slovenia). Second, there is the additional problem that the original data are provided in the local currency. In order to make international comparisons, UN currency conversion tables need to be used. Particularly in countries in transition (i.e. Central and Eastern European countries) with a highly fluctuating currency, the resulting figures are questionable and should be approached with great caution.

The following data were used to create the Law Enforcement Resource Index:

- (1) The number of police (both sworn and civilian) per 100,000 people for 1994 reported in the Fifth United Nations Survey. If 1994 data were not available, 1990 data were used (Switzerland). For several countries where Fifth UN Survey data were not available, police data were taken from the Dutch Ministry of Justice study on private security (Germany, Ireland, Italy, the Netherlands and Portugal). [This variable is referred to as POLICE].
- (2) The number of private police per 100,000 population (Dutch Ministry of Justice study on private security). [This variable is referred to as PRI-VATE].
- (3) The number of prosecutors per 100,000 population for 1994 reported in the Fifth United Nations Survey. If 1994 data were not available, 1990 data were substituted (this was the case with the United States). [This variable is referred to as PROSEC].
- (4) The number of judges per 100,000 population for 1994 reported in the Fifth United Nations Survey. If 1994 data were not available, 1990 data were substituted (this was the case with the Netherlands and Switzerland). [This variable is referred to as JUDGES].
- (5) The number of (adult and juvenile) correctional staff per 100,000 population for 1994 reported in the Fifth United Nations Survey. If 1994 data were not available, 1990 data were substituted (the United States and Switzerland). [This variable is referred to as PRISON].

	Police per 100,000	Private Police per 100,000*	Prosecutors per 100,000	Judges per 100,000	Prison Staff per 100,000			
Reporting Countries	39	22	36	37	37			
Missing Countries	14	31	17	17	17			
Mean Rate	389.92	134.9	8.74	13.53	64.34			
SD	188.84	116.42	4.38	12.23	41.45			
25% Quartile	265.0	73.5	5.81	6.06	38.02			
Median	349.27	121	7.92	9.13	52.01			
75% Quartile	463.46	163	10.67	19.86	76.62			
Minimum	190	10	2.49	1.92	18.12			
(Country)	Turkey	Turkey	Austria	England&W	Greece			
Maximum	1,124.58	582	19.27	69.6	193.2			
(Country)	Russian	United	Russian	Switzerland	N. Ireland			
	Federation	States	Federation					
Data sources are the Fif	Data sources are the Fifth UN Survey and *the Dutch Ministry of Justice study on private security							

TADIE DT. LAW ENTORCEMENT RESOURCES DATA (LER	lable D1	. Law Enforcemen	t Resources	Data	(LERI
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Table D1 presents summary statistics on the five data sources for the law enforcement resource index. There is considerable variation in which countries provide data on each of the component variables. Only a small proportion of the countries reported data on *all* variables (Austria, Belgium, Greece, Finland, Germany, Luxemburg, Portugal and Sweden.) Twenty-four countries provide data on the number of police, prosecutors, judges *and* prison personnel.

The index is based on the assumption that it is not wise to place too much reliance on the accuracy of a country's exact rate on one particular variable. Instead, an index based on *rankings* is preferred, where the exact distance between two consecutive values is not important. Also, it is assumed that a *composite* measure - consisting of the average of the rankings on several variables - is more robust than a measure based on a single variable. The LERI is based on average rankings on the source variables.

The LERI was created as follows. First, the countries were ranked according to their rate on the basis of each of the five data sources (public police, private police, prosecutors, judges, prison staff). Before averaging the ranks, the ranks were weighted based on the number of countries for which data were available for that particular variable. Simply averaging the ranks has the problem that it would give undue weight to variables where there are *few* missing data (because the ranks would have the maximum value of, for example, 39 for police per 100,000 and only 22 for private police per 100,000). A simple correction procedure was employed to adjust for differences in the number of data points. Each individual ranking was multiplied as follows: (rank / number of countries) \* (X / 53 (maximum number of

countries). [These variables are referred to as WPOLICE, WPRIVATE, WPROSEC, WJUDGES, WPRISON].

After this correction procedure, each country was assigned a value on the LERI, reflecting the average of the rankings. This rank-averaging method has one major drawback: countries which have only one or two data points base their ranking on fewer data points than countries with more complete information. Also, the relative ranking of each country on a particular variable is determined by the (coincidental) mixture of countries on that variable. The obvious advantage is that this method minimizes the loss of cases, plus maximizes the use of all pertinent data simultaneously (i.e. it is a summary measure). This last point is important. One major advantage of the LERI is that it does not give undue weight to one of the components (i.e. the police) over other components ( which invariably account for a smaller proportion of all criminal justice resources and personnel). For example, if we would use a simple additive measure of total criminal justice personnel per 100,000, the countries with the largest police force would always end up at the top, as a mere artifact of their relative dominance of numbers. In the law enforcement resource index, on the other hand, each of the individual components (police, prosecutors, judges, private police, prison personnel) has an equal weight (i.e., just because a country has a large police force per 100,000 - as is the case for example in the Russian Federation - does not automatically mean that this factor will overshadow its ranking on the other dimensions). However, it should be noted that there is a relationship between the relative size of, respectively, police, judges, prosecutors, prison personnel and expenditures.

An additional advantage of using an index over a simple addition of the total number of criminal justice personnel is that it deals better with missing data. If a country has data only on police, or on judges, and not on the other components, the size of the criminal justice work force is likely to be lower than for countries with complete data on all five components. However, the LERI simply averages the rankings, adjusting for the availability (or lack thereof) of data by the size of the denominator (i.e., if there are data on 2 components, the total is divided by 2; if there are data on all 5 components, the total is divided by 5).

The procedure resulted in the law enforcement resource index (LERI) with a minimum value of 4.08, a maximum value of 50.06, a mean value of 26.95, and a standard deviation of 9.22 (n = 47).

Overall, 11 countries are low on the LER Index, 12 countries are high, and 24 countries are medium (Table D2). Romania, Poland, Andorra, Turkey, Georgia, Greece, Armenia, the former Yugoslav Republic of Macedonia, Bulgaria, Finland and the Netherlands are in the bottom quartile of the LER Index. The United States, Portugal, Northern Ireland, Croatia, Hungary, Slovakia, Latvia, Lithuania, Estonia, Kazakhstan, the Russian Federation and Azerbaijan are in the top quartile of the LER Index. With the exception of the United States, Portugal and Northern Ireland, the countries in the top

Law Enforcement Resources Index Category					
Low	Μ	edium	High		
1 <sup>st</sup> Quartile	2 <sup>nd</sup> Quartile	3 <sup>rd</sup> Quartile	4 <sup>th</sup> Quartile	Missing	
Romania(1) Poland (2) Andorra (3) Turkey (4) Georgia (5) Greece (6) Armenia (7) FYR Macedonia (8) Bulgaria (9) Finland (10) Netherlands (11)	Austria (12) Norway (13) Scotland (14) England/Wales (15) Belarus (16) Malta (17.5) Moldova (17.5) Sweden (19) Switzerland (20) Spain (21) Belgium (22) France (23)	Ireland (24) Canada (25) Cyprus (26) Kyrgyzstan (27) Ukraine (28) Czech Rep. (29) Denmark (30) Liechtenstein (31) Italy (32) Luxembourg (33) Germany (34) Slovenia (35)	United States (36) Portugal (37) Croatia (38) N. Ireland (39) Hungary (40) Slovakia (41) Latvia (42) Lithuania (43) Estonia (44) Kazakhstan (45) Russ. Fed. (46) Azerbaijan (47)	Albania Bosnia Iceland Tajikistan Uzbekistan Yugoslavia	
Note: the figures betw	veen parentheses are t	he ranks on the LERI.			

Table D2. Categorization of Countries According to Law Enforcement Resources Index (LERI).

quartile of the LER Index are all Central and Eastern European countries. The governments of these Eastern European countries have historically relied heavily on state security forces (police) to maintain order. The LER Index reflects different components of criminal justice (not only the police), however, and so that by itself the index could not explain the clustering of these countries in the top quartile of investment in law enforcement.

Table D3 shows that the LER Index differentiates well between the rates of countries on each of the component variables. That is, countries in the low quartile of the law enforcement resource index have a mean rate of 285.26 police per 100,000, compared with a mean rate of 547.54 police per 100,000 for the high quartile. The rates of police per 100,000 in countries in the top quartile of the LERI are 1.92 times higher than those in countries in the bottom quartile. Countries ranking in the bottom quartile of the LER Index have a lower mean private policing rate (51.20 per 100,000) than do countries in the medium (second and third) quartiles of the LER Index. Another noteworthy fact is that only three of the countries in the high quartile of the LER Index provide any information on private policing (these are countries in transition). Countries in the bottom quartile of the LER Index also have a lower average rate of prosecutors per 100,000 (5.53) than do countries in the medium quartiles (6.96 in the second quartile, and 8.41 in the third quartile) or in the top quartile (12.90 prosecutors per 100,000). The low:high LERI countries ratio is 2.33 for prosecutors. The pattern for prison personnel is also consistent with expectations: countries in the bottom quartile of the LER Index have an average rate of 3.677 prison personnel per 100,000, those in

Law Enforcement Resource Index		Mean Rate per 100,000 population					
	Public Police	Private Police	Prosecutors	Judges	Prison Staff		
Low	285.26	51.20	5.53	10.70	36.77		
(Q1)	(84.55)	(50.53)	(1.95)	(5.87)	(14.52)		
(n=11)	n=7	n=5	n=9	n=8	n=8		
Medium	342.58	124.87	6.96	13.45	52.56		
(Q2)	(88.34)	(33.19)	(4.11)	(19.26)	(12.04)		
(n=12)	n=11	n=8	n=8	n=11	n=10		
Medium	341.86	142.33	8.41	20.03	55.52		
(Q3)	(112.36)	(77.44)	(1.79)	(9.18)	(20.18)		
(n=12)	n=10	n=6	n=8	n=7	n=10		
High	547.54	286.33	12.90	11.52	111.73		
(Q4)	(268.84)	(256.65)	(4.36)	(7.21)	(56.60)		
(n=12)	n=11	n=3	n=11	n=11	n=9		
Ratio Low to High	1:1.92	1:5.59	1:2.33	1:1.08	1:3.04		

### Table D3. Mean Personnel Rates, by Law Enforcement Resource Index (LERI).

the medium quartiles average 52.56 (Q2) and 55.52 (Q3), while the top quartile averages 111.73 prison staff per 100,000.( Ratio low-to-high LERI is 3.04).

The pattern with regard to judges is less straightforward: although the bottom quartile shows a lower mean rate of judges per 100,000 (10.70) than does the top quartile (11.52), the intermediate quartiles have the highest mean rate (13.45 Q2 and 20.03 Q3) (the low:high LERI ratio is 1.08). The implications of these patterns are further explored in the next section.

### Criminal Justice Practitioner Gender Balance Index (GBI)

The procedure for constructing the criminal justice practitioner gender balance index (GBI) consists of (1) rank ordering the countries on each of the four component measures, (2) weighing the ranks based on the number of countries for which data were available for that particular variable (see explanation LERI), and (3) averaging the ranks for each country.

This procedure resulted in the GBI with a minimum of 1.66 (Azerbaijan), a maximum of 54.66 (Andorra), a standard deviation of 12.81, and a mean value of 27.62.

Table D4 shows the categorization of countries according to the criminal justice practitioner gender balance index.

	Female Share of Police (%)	Female Share of Prosecutors (%)	Female Share of Judges (%)	Female Share of Prison Staff (%)		
Reporting Countries	32	33	31	26		
Missing Countries	21	20	22	27		
Mean %	12.97	31.58	30.86	19.14		
EU mean	13.79	31.42	23.14	16.36		
Central and Eastern						
Europe mean	11.88	30.67	45.09	23.95		
25% Quartile	5.36	16.55	12.85	8.67		
Median	10.16	32.69	29.07	19.94		
75% Quartile	20.54	42.73	42.58	28.70		
Maximum	33.32	66.67	70.97	36.75		
Country	Sweden	Andorra	Latvia	Latvia		
Minimum	2.3	3.08	0	4.15		
Country	Spain	Azerbaijan	N. Ireland	Cyprus		
Note: Data are 1994 UN data, except Switzerland and the Netherlands (1990) For the proportion of female correctional staff, whenever there was no information for <i>both</i> juveniles and adult prisons, the total of the correctional staff in <i>adult</i> prisons divided by the female staff in <i>adult</i> prisons for 1994 was used						

### Table D4. Mean Rates of Female Share of Criminal Justice Workforce (%).

## Table D5. Categorization of Countries According to the Criminal Justice Practitioner Gender Balance Index (GBI).

Criminal Justice Practitioner Gender Balance Index Category						
Low	Me	edium	High			
1 <sup>st</sup> Quartile	2 <sup>nd</sup> Quartile	3 <sup>rd</sup> Quartile	4 <sup>th</sup> Quartile	Missing		
Azerbaijan (1) France (2) Turkey (3) Ukraine (4) Liechtenstein (5) N.Ireland (6) Cyprus (7) Georgia (8) Malta (9) Armenia (10)	Spain (11) Greece (12) Moldova (13) Austria (14) Germany (15) Kazakhstan (16) Romania (17) Belgium (18) FYR Macedonia (19) Netherlands (20) Kyrgyzstan (21)	Switzerland (22) Finland (23) Portugal (24) England/Wales (25) Hungary (26) Scotland (27) Norway (28) Belarus (29) Croatia (30) Lithuania (31) Slovakia (32)	Bulgaria (33) Slovenia (34) Denmark (35) Sweden (36) Russ.Fed. (37) Czech. Rep. 38 United States (39) Canada (40) Latvia (41) Estonia (42) Andorra (43)	Albania Bosnia Iceland Ireland Italy Luxembourg Poland Tajikistan Uzbekistan Yugoslavia		
Note: The figures be	etween parentheses are r	ranks				

The countries with the lowest females/males ratio in the criminal justice work force are Azerbaijan, France, Turkey, Ukraine, Liechtenstein, Northern Ireland, Cyprus, Georgia, Malta and Armenia. Bulgaria, Denmark, Slovenia, Sweden, United States, Estonia, Andorra, the Russian Federation, the Czech Republic, Canada and Latvia, on the other hand, rank in the top fourth with regard to the female/male ratio in the criminal justice work force. A total of 43 countries received a ranking according to the GBI, with 12 countries not providing data (Albania, Bosnia, Iceland, Ireland, Italy, Luxemburg, Poland, Tajikistan, the United Kingdom, Uzbekistan and Yugoslavia)

The GBI differentiates well between countries for the four component variables (Table D6).

Table D6	. Relation of C	riminal Justice	e Practitioner	<b>Gender Ba</b>	alance Index	to Mean R	ates of F	Female
Share of	<b>Criminal Just</b>	ice Workforce	(%).					

Gender Balance Index	Female Share of	Female Share of	Female Share of	Female Share of
	Police (%)	Prosecutors(%)	Judges(%)	Prison Staff (%)
Low	7.07	15.14	7.66	9.43
(Q1)	(5.31)	(14.45)	(8.27)	(7.10)
n=10	(n = 8)	(n=6)	(n=7))	(n = 7)
Medium	6.83	24.66	30.20	18.34
(Q2)	(3.42)	(9.09)	(6.46)	(8.85)
n=11	(n=9)	(n=10)	(n=9)	(n=5)
Medium	17.16	33.24	28.33	20.25
(Q3)	(3.42)	(13.92)	(17.8)	(9.66)
n=11	(n=8)	(n=8)	(n=8)	(n=6)
High	22.82	48.77	57.84	27.30
(Q4)	(5.19)	(13.10)	(13.10)	(8.02)
n = 11	(n=7)	(n=9)	(n=7)	(n=8)
Ratio Low to High	1:3.23	1:3.22	1:7.55	1:2.89

Countries that fall in the bottom quartile of the gender balance index have lower mean rates for female share of police (7.07), prosecutors (15.14), judges (7.66), and prison staff (9.43) than do countries in the top quartile of the GBI: (female share of police: 22.82, female share of prosecutors: 48.77, female share of judges: 57.84, and female share of prison staff: 27.30). The female-to-male ratios range between a low of 1:2.89 (prison staff) and a high of 1:7.55 (judges). These substantial differences in mean rates for the different categories of the GBI suggest that this index differentiates reasonably well between countries. It appears to make the most clear-cut distinction between the top and bottom quartiles; the patterns for the second and third quartiles are less clear-cut, although with one exception (Q2 for female share of police) the medium values are lower than the top quartile and higher than the bottom quartile. Averaging the second and third quartile would present values that are in between the top and bottom quartiles.

The advantage of using the GBI is that it makes use of all available information, it minimizes the number of missing countries, and it avoids placing undue emphasis on only one of the four components of the work force. It should be noted, however, that an index such as the criminal justice practitioner gender balance index by its very nature summarizes information, thereby obscuring information which more detailed examination of its component variables would reveal.

### Citizen Evaluation of Police Performance (CEPPI)

There is little doubt that a high level of citizen satisfaction with the police is an acceptable indicator of how well the police perform their job. Important indicators of criminal justice performance (specifically the police) are the ICVS measures related to the percentage of the victims who were satisfied with the response of the police (variables in26,ic26), and the percentage of the respondents who are dissatisfied with crime control (variables in27,ic27). The willingness of victims to report the crime to the police is another frequently used indicator of the perception that members of the public have of the police. Table D7 presents summary statistics on the three source variables for the citizen evaluation of police performance index (CEPPI).

	% Victims Reporting Contact Crime to Police	% Victims Satisfied with Report to Police	% Respondents Satisfied with Police Crime Control
Reporting Countries	36	36	36
Missing Countries	17	17	17
Mean %	29.04%	51.29%	51.13%
25% Quartile	(11.32)	(17.93)	(21.53)
Median	20.70%	35.32%	35.01%
75% Quartile	26.43%	52.13%	52.92%
Maximum	34.02%	67.38%	71.36%
Country	66.29%	83.86%	88.02%
Minimum	N. Ireland	Scotland	Canada
Country	9.32%	20.46%	13.52%
	Norway	Kyrgyzstan	Estonia
The numbers between parenthese	s are the standard deviation	ns	1

### Table D7. Citizen Evaluation of Police Performance Index (CEPPI).

The CEPPI was created as follows. First, the countries were ranked according to the percentage of respondents satisfied with how their report to the police was dealt with, the percentage of respondents satisfied with the way the police control crime in their area, and the percentage of victims of contact crimes who reported their victimization to the police. Before averaging the ranks, the ranks were weighted (see the explanation of weighting in the appendix explaining the construction of LERI). After this correction procedure, each country was assigned a value on the CEPPI, reflecting the average of the (corrected) rankings.

This procedure resulted in the citizen evaluation of police performance index (CEPPI) with a minimum value of 2.94, a maximum value of 50.06, a mean value of 27.24, and a standard deviation of 13.31 (n = 36).

Citizen Evaluation of Police Performance Index (CEPPI) Category						
Low	I	High				
1 <sup>st</sup> Quartile	2 <sup>nd</sup> Quartile	3 <sup>rd</sup> Quartile	4 <sup>th</sup> Quartile			
Kyrgyzstan (1) Russian Fed. (2) Latvia (3) Romania (4) Georgia (5) Estonia (6) Belarus (7) Lithuania (8.5) Ukraine (8.5)	Poland (10) Croatia (11) Yugoslavia (12) Bulgaria (13) Czech Rep. (14.5) Hungary (14.5) Malta (16) Slovenia (17) Austria (18)	Italy (19) Albania (20.5) FYR Macedonia (20.5) Norway (22) Slovakia (23) Spain (24) Germany (W) (25) Finland (26) Belgium (27)	France (28) Netherlands (29) N. Ireland (30) England/W (31) Sweden (32) United States (33) Canada (34) Scotland (35) Switzerland (36)			
The figures between parentheses are ranks.						

Table D8.	<b>Categorization of Countries</b> ,	According to Cit	tizen Evaluation o	f Police Performance	Index
(CEPPI).					

Table D9 shows that the CEPPI differentiates well between the countries' rates on each of the component variables. In countries which scored in the top quartile of the CEPPI, victims of contact crimes were more than twice as likely to report their victimization to the police (1:2.03), to be satisfied with the police report (1:2.32), and to be satisfied with police crime control (1:2.94) than was the case in countries in the lowest quartile of CEPPI.

CEPPI	% Victims of Contact Crime Reporting to Police	% of Victims Satisfied with Police Report	% of Respondents Satisfied with Police Crime Control			
Low (Q1)	21.52% (3.60) (n=9)	30.77 (6.59) (n=9)	25.61 (9.2) (n=9)			
Medium (Q2)	24.40 (4.06) (n=9)	43.65 (8.66) (n=9)	44.68 (14.82) (9)			
Medium (Q3)	26.61 (8.88) (n=9)	59.37 (11.99) (n=9)	58.92 (12.74) (n=9)			
High (Q4) (N = 11)	43.62 (10.89) (n=9)	71.35 (8.93) (n=9)	75.30 (7.46) (n=9)			
Ratio Low to High	1:2.03	1:2.32	1:2.94			
Figures between parentheses are standard deviations.						

Table D9.	<b>Relationship o</b>	f Citizen	<b>Evaluation</b>	of Police	Performance	Index	(CEPPI) to	Mean	% of
Source Va	riables.								

## The International Crime Victim Surveys (ICVS)<sup>1</sup>

As mentioned in chapter 1, most of the international information on crime and related subjects is taken from police reports and information provided for by governmental bodies. Characteristic of this information is that they were not meant for international comparison. Great efforts were taken by international organisations such as the United Nation and Interpol to make them comparable, but the problems will apparently always remain.

The International Crime Victim Survey was set up to overcome these difficulties. The general methodology is that in many countries, a random sample of the population is questioned on their experiences with crime, policing, crime prevention and feelings of unsafety. The questionnaires were standardised, as was the method of sampling and the interview methodology. This standardisation ensures that the results from these surveys are comparable.

The ICVS is similar to most crime surveys of households with respect to the crimes it covers. It is confined to counting crimes against clearly identifiable individuals, excluding children. Crime surveys cannot easily cover organisational crimes or victimless crimes such as drug abuse. For the crimes it covers, the ICVS asks about incidents which by and large accord with legal definitions of offences, although the offences are described in laymen terms. It therefore in essence accepts the accounts of respondents of what happenedor at least the accounts that they are prepared to give interviewers. In this respect, it applies to a broader definition of crime than that used by the police who, if incidents are reported to them, are likely to filter out those which may not be felt to merit the attention of the criminal justice system, or meet demands for reasonable evidence.

### The count of crime

The respondents are asked about eleven main forms of victimisation, three of which allow for further subdivision. Household crimes are those which can be seen to affect the household at large, and the respondents answered to all incidents known to them. For personal crimes, they reported on what happened to them personally.

<sup>1</sup> Comprehensive information on the ICVS can be found in Alvazzi del Frate et.al. (1993) and on the Internet; http://ruljis/leidenuniv.nl/user/jfcrjk/icvs

### Table E1

Household property crimes	Personal crimes
theft of car theft from cars vandalism to cars theft of mopeds/motorcycles theft of bicycles burglary with entry attempted burglary	robbery theft of personal property - pickpocketing - non-contact personal thefts sexual incidents - sexual assaults - offensive behaviour assaults and threats - assaults with force - assaults without force (threats)

The respondents were asked about their experiences of crime over the last five years. Those who mentioned an incident of any particular type were asked when it occurred, and if in the previous year, how many times. All victims reporting incidents over the past five years were asked some additional questions about what happened, if they reported it to the police and how they evaluated the incident.

Apart from the crimes, there are a number of items in the questionnaire concerning the attitude of the respondent towards the police, crime prevention and protection against crime. Attention is paid to social correlates that may help in explaining crime and of course demographic data such as age, gender, education and income.

### Data collection

### **Industrialised countries**

In all developed countries except Northern Ireland and Spain, interviews in the 1996 survey (as was usually the case in previous sweeps) were done by telephone. Interviewers used computers from which they read the questions and recorded the answers – a procedure known as computer-assisted telephone interviewing (CATI). The issue of telephone interviewing is returned to below.

Inter View was appointed as overall contractor for the 1996 surveys, as was the case in 1989 and 1992. The field work was sub-contracted to survey companies in the countries taking part. Interviews began in January 1996 and lasted six to seven weeks. An average interview lasted about 15 minutes depending mainly on the extent of victimisation experiences reported.

To keep costs in check and encourage as full participation as possible, samples in all sweeps of the ICVS have been relatively modest. In the 1996 surveys in industrialised countries, samples were usually of between 1,000 and 2,500 respondents per country. In each country, a regionally well spread sample of households was taken. Within each household, one randomly selected respondent aged 16 or more was questioned.<sup>2</sup> No substitution of the selected respondent was allowed. Selected respondents, who could not be contacted, were called again at least four times. Those who refused or were not available were recontacted one week later.

Results for the Western European and North American countries in this report are based on data which have been weighted to make the samples as representative as possible of national populations aged 16 or more in terms of gender, regional population distribution, age, and household composition. The weighting procedures in the 1996 surveys are the same as those used previously and details can be found in van Dijk and Mayhew (1992).

### **Countries in Central and Eastern Europe**

Field work in Central and Eastern Europe included the undertaking of feasibility/training missions and the carrying out of pilot studies in the countries which were participating in the ICVS for the first time. The main aim of the missions was to pass on experience and provide advice as to the technical and organisational aspect of the ICVS, with the assistance of the "Manual" developed by UNICRI for this purpose (Alvazzi del Frate, 1996). Details regarding sampling, translation of the questionnaire into local language(s), organisation of the project, selection and training of the interviewers, data collection method, data entry procedure, data analysis and the structure of the national report were discussed and mutually agreed upon. Training on the conduct of the face-to-face survey and on the use of the ICVS data entry software developed by the University of Leiden was provided to selected members of the local team who, in turn, provided further training to the interviewers.

In principle, pilots were carried out in all countries that were newcomers to the ICVS. The results of the pilots carried out in Albania (and, outside the region, in Bolivia, Mongolia, Romania, and Zimbabwe) in late 1995 were used for the drafting of the revised version of the questionnaire adopted by the 1996-97 ICVS and for necessary modifications taking into account local conditions.

Samples of 1,000 respondents were generally drawn from the population of the largest city, although in a few countries the survey covered either several cities with or without the addition of a small rural sample (Estonia,

<sup>2</sup> The respondent was generally selected by the Troldahl-Carter method.

Georgia, Latvia, and Kyrgyzstan) or a national sample (Czech Republic, Poland).

Full standardisation of the sampling designs was not feasible. The manual lays down some basic principles of random-stratified sampling. Sampling designs were prepared by local experts and approved by UNICRI. The procedures are explained in the reports of the national co-ordinators. The samples were stratified geographically on the basis of administrative zones in the cities. Where possible the sample was also stratified according to the social status of the zones ( higher status, middle status, lower status). This criterion was not always applicable in the countries in transition where the social status of areas is often mixed.

The respondents in the selected areas were chosen by a step-by-step procedure aimed at identifying 1) streets, 2) blocks, 3) households, and lastly the person aged 16 or more whose birthday is next.<sup>3</sup> The households were selected at random (e.g. through random walk techniques or the selection of each 10th household starting from a randomly chosen start address). Interviewers were instructed to recontact the selected address or person at least two times if there was no response. No substitution of the address or of the selected respondent was allowed. In some countries it was difficult to contact sufficient numbers of young males. In these countries quota sampling was used to ensure a more equal representation of gender and age groups. The data were in all cases weighted to make the samples representative in terms of gender and age (three groups).

In all the countries in Central and Eastern Europe, except Slovenia, the survey was carried out face to face. In most countries the survey was carried out by an ad hoc team of interviewers, whereby the national co-ordinators relied on senior students. In some countries, data collection was subcontracted to survey companies (Czech Republic, Estonia, Georgia, Hungary, Kyrgyzstan, Poland, and Russia) whose work was supervised by the national co-ordinator.

In most of the countries the full-fledged survey was administered during the period January-March 1996. However, due to certain problems in terms of funding in some countries, the survey was carried out somewhat later in the year.

Data collection lasted from eight to ten weeks in each country and was followed by the data entry and logical validation process. On average, fieldwork lasted four months including translation of the questionnaire, sampling, data collection and preparation of the data set for delivery. A final report was prepared by each national co-ordinator.

<sup>3</sup> The questionnaire starts with a few questions for the primary respondent in the household and then continues with questions for the member of the household whose birthday is next

### Sample sizes

Sample sizes in the ICVS are small by the standards of most 'bespoke' national crime surveys. However, the decision to accept relatively modest samples was carefully made. It was considered simply unrealistic to assume a sufficient number of countries would participate if costs were too high (especially as some countries had their own 'bespoke' surveys). The value of the ICVS rests on the breadth of countries which have participated; this would have been considerably reduced if costs had been higher.

Modest sample sizes produce relatively large sampling error, but for straightforward comparisons of national risks, samples of 1,000 or more suffice to judge broad variations in levels of crime across country. This is even more true for city or urban area only samples. Modest samples, however, restrict the scope for analysis issues about which a small proportion of the sample would provide information.

	Туре		City			
	National survey	City survey	Townsize not coded	Urban area	Rural area	
Albania 1996		1200		983	217	
Austria 1996	1507			433	1074	
Belarus 1997		999		999	0	
Belgium 1989	2060			123	1937	
1992 Bulgaria	1485			242	1243	
1997 Canada		1076		1076	0	
1989	2074			968 683	1106 1469	
1996 Czech Pepublic	2134			702	1432	
1992	1262			237	1025	
Croatia	1001			111	1004	
1997 England & Wales		994		994	0	
1989 1992	2006 2001		•	628 496	1378 1505	
1996 Estonia	2171			559	1612	
1992 1995	1000 1173			457 364	543 809	
Finland 1989	1025			222	803	
1992	1655			420	1235 2853	
France	1500			047	1155	
1989 1996	1003	•	•	199	804	
Georgia 1992		1395	1395		0	
1996 Germany(West)		1137		567	570	
1989 Hungary	5274			1523	3751	
1996 Italy		756		756	0	
1992 Kvrovzstan	2024			550	1474	
1996		1750		1494	256	
1996	•	1411		1011	400	

# Table E2 lists the countries participating in the ICVS, in what year, type of survey (nationwide or capital city) and the number of urban and rural cases.

	Туре		City			
	National survey	City survey	Townsize not coded	Urban area	Rural area	
Lithuania 1997	1176			656	520	
FYR Macedonia 1996		700		700	0	
Malta 1997	1000		1	543	456	
Netherlands 1989	2000			386	1614	
1992 1996	2000 2008	•		409 434	1591 1574	
Northern Ireland 1989	2000				2000	
1996	1042			262	780	
Norway 1989 Dologd	1009			145	864	
1992 1996	2033 3483			666 1073	1367 2410	
Romania 1996		1091		1000	91	
Russian Fed. 1992		1002		1002	0	
Scotland		1018		1018	U	
1989 1996	2007 2194	•		484 353	1523 1841	
510Vakia 1992 1997	508	1105		21 1105	487 0	
Slovenia 1992 1997	2053	1000		1000	0	
Spain	2000		·		540	
1989 1993 1994	2041	1634 1505		895 842 920	1146 792 585	
Sweden 1992 1996	1707 1000			327 234	1380 766	
Switzerland 1989	1000			128	872	
1996 Ukraine	1000			110	890	
1997 United States		1000		1000	0	
1989	1996			390	1606	
1992 1996	1501 1003	•		354 193	1147 810	
Yugoslavia 1996		1094		1094	0	