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Crime and Criminal Justice in Europe  
and North America 1995–1997:  
**Report on the Sixth United Nations Survey  
on Crime Trends and Criminal Justice Systems**

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# Foreword

The current report is the result of an innovative analysis of national responses to the Sixth United Nations Survey of Crime Trends and Operations of the Criminal Justice Systems (1995-1997). Responses to the Sixth United Nations Survey were received from most of the European region member states. Corresponding data from the United States and Canada were secured through other channels. The analysis has been carried out by an international working group. The group has, in addition to the United Nations Survey responses, had access to large amounts of other data, in particular the data emerging from the International Crime Victim Survey.

The working group consists of following international experts: Mr Adam Bouloukos (the Centre for International Crime Prevention, United Nations), Professor Graham Farrell (United States), Professor Gregory Howard (United States), Professor Gloria Laycock (England), Dr Patricia Mayhew (England/Australia), Professor Tony Smith (United States) and Professor Elmar Weitekamp (Germany/Belgium). Professor Károly Bárd (Hungary), Dr Matti Joutsen (Finland) and Mr Roy Walmsley (England) have actively assisted the group in their work. Mr Kauko Aromaa (HEUNI), Mr Seppo Leppä (HEUNI), Mr Sami Nevala (HEUNI) and Ms Natalia Ollus (HEUNI) have overseen the compilation of the data as well as the editing. Mr Mikko Myrskylä (HEUNI) has worked on the validation of the data. HEUNI wishes to express its heartfelt appreciation to the members of the working group for their time, expertise and dedication to the cause of international comparisons.

The views expressed in the texts are those of the authors and do not necessarily reflect the views of the organizations with which the authors are affiliated.

Helsinki, 26 June 2003

Kauko Aromaa  
Director, HEUNI

# To the reader

The data used in this report are taken primarily from the responses submitted by the countries in question. Supplemental data have frequently been used, in which case 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 issue. Replies were received from most, but not all, of such respondents.

In several passages of the report the difficulties in analyzing official or research data on crime and criminal justice from different countries are noted. The importance of bearing these cautions in mind when reading the present report cannot be stressed too highly.

The report as a whole is the result of co-operation, but at the same time each author is responsible for his or her own contribution.

The spreadsheets containing the basic data compiled from the Sixth United Nations Survey may be accessed at the ODCCP web site of the United Nations Secretariat, the address of which is: [www.uncjin.org/ Statistics/WCTS/wcts.html](http://www.uncjin.org/Statistics/WCTS/wcts.html).

## Symbols used in the tables and figures

na	indicates that data are not available
ns	indicates that the value is not significant
,	separates thousands and hundreds
.	separates wholes and decimals
<	denotes that the value is less than the smallest whole used

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# Summary

## The Sixth United Nations Survey

The purpose of the report is to describe public safety in the European and North American region as a whole, and in the individual countries within the region. The report is based on an analysis of national responses to the Sixth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems. It covers the years 1995 through 1997. The Sixth United Nations Survey data have been supplemented by other information, including in particular the results of the International Crime Victim Survey. It must be underlined, however, that an assessment of "public safety" by means of crime statistics and other crime-related data cannot be reliably made, owing to the fact that the level of criminality as a phenomenon cannot be reliably measured.

During the last few decades the impact of demographic and social changes on crime and on crime control in the region has been a marked one. Consequently, the structure of crime has also changed. 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 acquired a more international character. All this is seen to overburden the criminal justice systems of many European and North American countries. This is particularly true in the former socialist states of the Central and Eastern European region, where considerable restructuring efforts of the criminal justice systems can be observed. When reforming the system legislators have frequently turned to the pre-Soviet traditions of their country. In the Western European region and in North America, it is not possible to point at reforms comparable to those of the Central and Eastern Europe. In Western Europe and North America, the scope of reforms is targeted at larger geographical areas. In this respect the roles of the European Union and the Council of Europe must be seen to be in the forefront.

As to the levels of crime in the region analysed, only comparisons over time are the only ones that can be seen as meaningful, while comparisons between responding states are more or less artificial, owing to the fact that legal definitions of offences vary considerably from one country to the next. Similarly, comparisons are meaningful only within certain clear-cut crime categories, but even then certain reservations should be borne in mind. It is, for example, pointless to compare the numbers of total crime between countries. It has not been possible to explain, in most cases, what have been the causes of great variations in the chosen crime categories, i.e. burglary, motor vehicle crime, petty crime, violent crime, and corruption, from the time period 1990-1994 to the time period 1995-1997 in many of the countries studied. The data readily available have only allowed a descriptive approach; no in-depth analysis was feasible, unless a common knowledge base has made it possible to point to a certain fact as the cause for the variation. We know, for example, with reasonably high certainty, on one hand, that the upward trend as regards homicide in Scotland is due to the Dunblade mass mur-



der case in March 1996 with 18 people killed. But we only guess what lies behind the quite strong downward tendency of motor vehicle theft in many of the Central and Eastern European (CEE) countries, with Bulgaria and Russian Federation in the lead.

One crime category of which few standardized measures exist is transnational organized crime. While some of the data gathered through the periodic United Nations surveys or the International Crime Victim Surveys might be construed as indicators of organized crime, the surveys do not systematically collect information which directly measures the prevalence of transnational organized crime. It might, however, be possible in connection with the future sweeps of the United Nations surveys to develop tools to capture data on organized crime. Member states could be encouraged to include transnational organized crime in their legislation and to record offences that fit that category. There are also plans to develop, with the assistance of national experts, criminal economy profiles. The intention is to better understand the phases through which an illicit or licit product moves through the economy with the assistance of criminal actors.

What has been said above also holds true in many respects when the operations of the national criminal justice systems are examined. The use of explanatory measures by means of comparing the results given by the responding states is not recommendable, even if quantitative information on the operations is presented. The main results as regards this sector are that in all the responding countries, police officers made up by far the highest proportion of criminal justice personnel. The police appeared more productive in Western European and North American countries than in Central and Eastern Europe. According to the analysis, neither of the two competing views on policing levels received absolute support - one being that 'more police equals more crime' (because of greater capacity to record crime), and the other 'more policing equals less crime' (because the police are an effective deterrent). In respect of prosecutors, the median number of them in the CEE countries was over double that in Western countries. On the other hand, the greater number of prosecutors in the CEE countries, on the other hand, processed far fewer prosecutions (median: 56 cases per prosecutor) than in Western countries (median: 270 cases per prosecutor). As far as the judges were concerned, there was no marked difference between the CEE countries and Western ones. All countries with judicial rates around or above the median were civil law countries. The highest correctional staff rates equaled high imprisonment levels, but generally there was only a modest tendency to have more correctional staff when there were more prisoners to look after. In the countries with the most unfavourable staff/inmate ratios, the situation was usually caused by high prisoner numbers, not by particularly low staffing rates.

It is clear that criminal justice is still fairly male dominated. Women were least well represented in the police: overall, 9 % of the officers were women. In a number of countries, the figure was much lower. Women were better represented among prosecutors and judges, whose work is probably seen as less dependent on physical, "masculine" traits. In all, about a third of prosecutors and judges, and about a fifth of staff in correctional institutions were women.

The analysis of differential attrition, i.e. the progressive funnelling away of the number of crimes the police know about to the number of convictions in

court, was done mindful of the substantial problems that result from the wide range of procedural arrangements, and the lack of linkage within countries between respective measures of crimes, suspects, prosecutions and convictions. The volume of crime is much greater in Western countries, and this may well be because of more complete recording. In any event, though, the fall-off between recorded crime and suspects is much more marked in Western countries (29 suspects for every 100 crimes) than in the CEE (53 suspects for 100 crimes). Taking all countries together, for every 100 crimes, there were 41 suspects, 28 prosecutions and 21 convictions.

There was no clear association between the overall performance measure and the level of crime in different countries. This may reflect the fact that countries that appear to be performing badly in terms of the volume of crime simply have more capacity to record it. It may also signify that criminal justice systems play a minor part in determining crime levels when compared with social, political and economic dynamics.

In the field of sentencing one quite obvious positive trend, notwithstanding the validity and reliability problems discussed, is the continued reduction of death penalty sentences imposed during the period analysed. This is mainly due to the former republics of the Soviet Union which have reduced the use of this sanction, but also in the USA, a slight reduction can be observed. Another feature backed by hard figures in the sanctions sector is the substantial growth in prison populations both in Europe and North America. Crime rates alone cannot explain the increases. In the 1990s many countries of the region experienced a reduction in their crime rates and, in particular, in the rates of serious crimes. The increase in imprisonment rates might be seen as the end result of fear of crime and of a belief that locking up people is the best solution. In several country responses it was also indicated that the proportion of pre-trial detainees among the prison population exceeds one fourth of the total population, not only in Central and Eastern Europe, but also in Western European countries. However, between 1995 and 1997, the length of time spent in prison awaiting trial increased only in a few cases. A slight increase during the period can also be observed as regards the number of imprisoned females.

All that has been said above amounts to three central issues. First, as far as the reliability and validity of popular cross-national measures of crime are concerned, it must be asked whether official measures of national crime rates substantially agree with one another and with victimization data from the International Crime Victim Survey in their representations of criminal offending. Second, owing to observations reported in the extant comparative criminological literature concerning the unique causal mechanisms linked to violent and non-violent crime, it must be asked whether key concepts from modernization, inequality, and opportunity theory differentially explain violent and non-violent crimes. Third, since previous studies in the field of comparative criminology have employed a variety of data sources with which to construct dependent variables, it should be examined whether measures of theoretical concepts explain more or less variation in crime rates depending on the source of the crime data. As to the first issue, while official measures of cross-national crime rates seem to be reliable, there is little evidence to support the validity of either the official or victim-

ization measures. Looking at the second issue, it seems that theoretical accounts of cross-national variation in crime rates need to take account of the types of crime that are examined since some crimes seem to have distinct causal mechanisms at work. Conclusions that can be drawn from studying the third central issue are that theoretical accounts of cross-national variation in crime rates may yield different pictures depending on the source of crime data deployed. In sum, these findings suggest that comparative criminologists should be especially careful when engaging in quantitative analyses, and that they should pursue theoretical models that are more narrowly specified. Taking a step further, it might be worth testing the explanatory power of indicators and variables that are not directly connected with the phenomenon of crime.

# Résumé

## La sixième Enquête des Nations Unies

L'objet du présent rapport est de décrire la sécurité publique dans la région Europe-Amérique du Nord, dans son ensemble, et au sein des pays de la région, pris individuellement. Le rapport se base sur une analyse des réponses à la Sixième Enquête des Nations Unies sur les tendances du Crime et des Systèmes de la Justice pénale. Il couvre les années 1995 à 1997. Les données de la Sixième Enquête des Nations Unies ont été complétées par une autre information, laquelle fait place, en particulier, aux résultats de l'Enquête internationale sur la Victime du Crime. Il convient toutefois de souligner qu'une évaluation de la « sécurité publique » s'appuyant sur des statistiques et sur d'autres données se rapportant au crime ne saurait être fiable, compte tenu du fait que le niveau de la criminalité, en tant que phénomène, ne peut être mesuré de manière fiable.

Au cours des dernières décennies, l'impact des changements démographiques et sociaux sur le crime et sur le contrôle du crime dans la région a été prononcé. En conséquence, la structure du crime a également changé. De nouvelles formes de criminalité ont été adoptées, par exemple dans les domaines de l'environnement, de l'économie, de l'informatique, de la circulation et de la drogue. En outre, le crime a acquis un caractère plus international. Tout ceci semble devoir surcharger les systèmes de la justice pénale de nombreux pays d'Europe et d'Amérique du Nord. C'est particulièrement vrai dans les Etats ex-socialistes d'Europe centrale et orientale, où des efforts considérables de restructuration des systèmes de la justice pénale peuvent être observés. Lorsqu'ils ont procédé à la réforme du système, les législateurs se sont fréquemment penchés sur les traditions pré-soviétiques de leur pays. Dans la région Europe-Amérique du Nord, on ne peut parler de réformes comparables à celles de l'Europe centrale et orientale. En Europe occidentale et en Amérique du Nord, le champ des réformes est ciblé sur des espaces géographiques plus vastes. A cet égard, le rôle de l'Union européenne et du Conseil de l'Europe doit être vu comme un rôle de premier plan.

En ce qui concerne les taux de criminalité dans la région sujette à l'analyse, les comparaisons dans le temps sont les seules qui semblent pertinentes; les comparaisons entre les Etats qui répondent (à l'enquête) étant plus ou moins artificielles, du fait que les définitions juridiques des crimes/délits varient considérablement d'un pays à un autre. De même, les comparaisons n'ont de sens qu'au sein de certaines catégories, clairement délimitées; toutefois, même dans leur cas, certaines réserves s'imposent. Comparer, par exemple, le nombre total de crimes/délits entre les pays serait sans intérêt. Il n'a pas été possible d'expliquer, dans la plupart des cas, la cause des variations importantes selon les catégories de crimes/délits retenus - cambriolage, vol de véhicule, délit mineur, crime violent et corruption – entre la période 1990-1994 et la période 1995-1997 dans plusieurs pays étudiés. Les données déjà disponibles n'ont permis qu'une

approche descriptive; il n'était pas possible de procéder à une analyse en profondeur, à moins qu'une base de connaissance commune ne permette de désigner un fait particulier pour expliquer la variation. Nous savons, par exemple, avec une relative certitude, que la tendance à la hausse des homicides en Ecosse résulte de l'affaire des meurtres en série de Dunblade, en mars 1996 - 18 personnes avaient alors été tuées. Mais nous ne pouvons que deviner ce qui peut expliquer la tendance, relativement prononcée, à la diminution des vols de véhicules dans plusieurs pays d'Europe centrale et orientale (PECO), la Bulgarie et la Fédération de Russie venant en tête.

Le crime organisé transnational est une des catégories de crime pour laquelle il n'existe que peu de mesures standardisées. Si certaines des données recueillies dans le cadre des enquêtes périodiques des Nations Unies ou des Enquêtes internationales sur les Victimes du Crime peuvent être érigées en indicateurs du crime organisé, les enquêtes ne recueillent pas systématiquement d'informations mesurant directement la prévalence du crime organisé transnational. Il pourrait cependant être possible, à l'occasion de futurs balayages des enquêtes des Nations Unies, d'élaborer des outils destinés à saisir des données sur le crime organisé. Les Etats membres pourraient être encouragés à inclure dans leur législation la notion de crime organisé transnational et à enregistrer les crimes et délits qui entrent dans cette catégorie. Il existe également des plans visant à élaborer, avec le concours d'experts nationaux, des profils criminels concernant l'économie. L'intention visée est de mieux comprendre les étapes par lesquelles un produit, illicite ou licite, se déplace dans l'économie avec l'assistance de quelques acteurs criminels.

Ce qui précède vaut également, à maints égards, lorsque l'on examine le fonctionnement des systèmes de la justice pénale. L'utilisation de mesures explicatives en comparant les résultats fournis par les Etats qui ont répondu n'est pas recommandable, même si une information quantitative sur les fonctionnements est présentée. Les principaux résultats concernant ce secteur, indiquent que dans tous les pays qui ont répondu, les policiers représentent, de loin, la plus forte proportion de leur personnel de la justice pénale. La police semblait plus productive dans les pays d'Europe occidentale et d'Amérique du Nord que dans les pays d'Europe centrale et orientale. Selon l'analyse, aucune des deux vues concurrentes sur les niveaux de maintien de l'ordre n'a reçu de soutien absolu - l'une consistant à dire « s'il y a plus de policiers c'est qu'il y a plus de crimes » (en raison d'une plus grande capacité d'enregistrer les crimes), et l'autre signifiant « plus de maintien de l'ordre signifie moins de crimes » (parce que la police joue un rôle préventif). En ce qui concerne les procureurs, leur nombre moyen, dans les PECO est deux fois supérieur à leur nombre dans les pays d'Europe occidentale. D'un autre côté, les procureurs, plus nombreux dans les PECO, traitaient beaucoup moins de poursuites (moyenne : 56 cas par procureur) que dans les pays occidentaux (moyenne: 270 cas par procureur). S'agissant des juges, il n'y avait pas de différence marquée entre les PECO et les pays occidentaux. Tous les pays où les taux relatifs au judiciaire sont voisins ou supérieurs à la moyenne sont des pays de droit civil. Les proportions les plus élevées de personnel carcéral correspondaient à des taux d'incarcération élevés; mais, en général, la tendance à avoir plus de personnel carcéral là où le nombre

de détenus était plus élevé, n'était que modeste. Dans les pays où le rapport personnel/détenu est le plus défavorable, la situation s'explique habituellement par des effectifs de prisonniers plus élevés, et non pas par des taux d'effectifs particulièrement bas.

Il est clair que la justice pénale reste nettement dominée par les hommes. C'est dans la police que les femmes étaient les moins bien représentées: dans l'ensemble, 9% de femmes parmi les policiers. Dans un certain nombre de pays, la proportion était beaucoup plus faible. Les femmes étaient mieux représentées parmi les procureurs et parmi les juges, dont le travail est probablement perçu comme moins dépendant de caractéristiques physiques, « masculines ». En tout, environ un tiers des procureurs et des juges, et environ un cinquième du personnel des établissements pénitenciers étaient des femmes. L'analyse de l'usure différentielle, c'est à dire l'écart entre le nombre de crimes connus de la police par rapport au nombre de condamnations prononcées par les tribunaux, a été faite en étant parfaitement conscient des problèmes de fond qui résultent du large éventail des dispositions de procédure, et du manque de liens entre les mesures concernant, respectivement, les crimes, les suspects, les poursuites et les condamnations. Le volume des crimes est beaucoup plus élevé dans les pays occidentaux, ce qui peut s'expliquer par leur enregistrement plus complet. En tout cas, cependant, l'écart entre le crime enregistré et le nombre de suspects est beaucoup plus net dans les pays occidentaux (29 suspects pour 100 crimes) que dans les PECO (53 suspects pour 100 crimes). Si l'on parle de tous les pays réunis, pour 100 crimes on dénombrait 41 suspects, 28 poursuites et 21 condamnations.

Il n'y avait pas de lien clairement défini entre la mesure de performance d'ensemble et le taux de criminalité observé dans différents pays. Ceci peut refléter le fait que les pays qui semblent produire de mauvais résultats, en terme de volumes de crimes, ont, tout simplement, une plus grande capacité de les enregistrer. Il peut également être significatif que les systèmes de la justice pénale jouent un rôle mineur dans la détermination des taux de criminalité, si l'on compare avec les dynamiques sociale, politique et économique.

Au chapitre des condamnations, la diminution constante du nombre des condamnations à la peine capitale prononcées durant la période analysée, sans considération de la validité ni de la fiabilité des problèmes discutés, est une tendance positive tout à fait évidente. Ceci s'explique essentiellement par les ex-républiques d'URSS, lesquelles ont moins fréquemment recours à cette sanction, mais également aux Etats-Unis, où une légère diminution peut être observée. Autre caractéristique, confirmée par les chiffres crus, dans le secteur des sanctions, l'augmentation substantielle des effectifs de la population carcérale, tant en Europe qu'en Amérique du Nord. Les taux de criminalité ne peuvent expliquer les augmentations. Dans les années 1990, de nombreux pays de la région ont connu une diminution de leur taux de criminalité et, en particulier, des taux relatifs aux crimes graves. L'augmentation des taux d'emprisonnement peut être considérée, au bout du compte, comme le résultat de la crainte inspirée par le crime et la conviction que mettre les gens sous les verrous est la meilleure solution. Dans plusieurs pays, les réponses indiquent aussi la proportion des détenus en attente de jugement, dans la population

carcérale, représente plus d'un quart de la population totale, non seulement en Europe centrale et orientale, mais également dans les pays d'Europe occidentale. Toutefois, la durée de la détention dans l'attente de passer en jugement, n'a augmenté que dans quelques cas. Durant la période considérée, une légère augmentation du nombre de femmes incarcérées peut également être observée.

Tout ce qui précède se ramène à trois questions principales. Premièrement, en ce qui concerne la fiabilité et la validité des mesures transnationales habituelles du crime, on doit se demander s'il y a, au fond, correspondance entre les mesures officielles du taux de criminalité national et avec les données relatives aux repréailles dans l'Enquête internationale sur la Victime du Crime, dans leur représentation du délit pénal. Deuxièmement, compte tenu des observations dont l'abondante littérature pénale comparative, relative aux mécanismes uniques de causalité liés au crime violent et non-violent, on doit se demander si les concepts-clés relatifs à la théorie sur la modernisation, l'inégalité et l'opportunité expliquent, de manière différenciée, les crimes violents et les crimes non-violents. Troisièmement, puisque les études antérieures menées dans le domaine de la criminologie comparative ont puisé à toute une variété de sources de données, utilisées pour élaborer des variables dépendantes, il conviendrait d'examiner si les mesures de concepts théoriques permettent d'expliquer une variation plus ou moins forte des taux de criminalité, selon la source de données relatives au crime. S'agissant de la première question, si les mesures officielles du crime transnational semblent être fiables, on trouve peu de preuves à l'appui de la validité des mesures officielles ou relatives aux repréailles. Considérant la seconde question, il semble que les calculs théoriques d'une variation transnationale des taux de criminalité doivent tenir compte des types de crimes examinés; dans la pratique, en effet, certains crimes semblent obéir à des mécanismes de causalité distincts. Les conclusions qui peuvent être tirées de l'étude de la troisième question principale sont que les calculs théoriques de la variation transnationale des taux de criminalité peuvent produire des vues différentes selon la source de données relatives au crime qui a été utilisée. En résumé, ces observations permettent de penser que les criminologues qui procèdent à des études comparatives devraient être particulièrement prudents lorsqu'ils s'engagent dans des analyses quantitatives et qu'ils devraient suivre des modèles théoriques plus strictement définis. Pour aller plus loin, il pourrait s'avérer utile de tester le pouvoir d'explication d'indicateurs et de variables qui ne sont pas directement liés au phénomène du crime.



# Содержание

## Шестой обзор ООН

Настоящий отчет предназначен для обзора состояния общественной безопасности в регионе Европы и Северной Америки в целом, а также по отдельно взятым странам. Отчет основан на анализе информации, подданной странами в рамках VI обзора ООН по преступности и работе уголовно-правоохранительных систем в период 1995-97 гг. Данные, полученные в ходе обзора, дополнены прочей информацией, в частности, результатами Международного обзора по жертвам преступности. Тем не менее, следует подчеркнуть, что надежная оценка состояния «общественной безопасности» через анализ статистики по преступности и прочих данных по криминогенной обстановке невозможна ввиду того, что уровень преступности как явления не поддается объективному количественному измерению.

За последние десятилетия в регионе отмечается влияние демографических и социальных перемен на криминогенную обстановку и борьбу с преступностью. Сама структура совершаемых преступлений также изменилась. Были приняты решения по криминализации новых действий, например, в сфере экологической и экономической преступности, компьютерных технологий, транспорта и наркотиков. Преступная деятельность приобретает все более международный характер. Все это приводит к перегрузке потенциала правоохранительных структур многих стран Европы и Северной Америки, что особенно проявляется в бывших соцстранах Центральной и Восточной Европы, где наблюдаются серьезные усилия по реорганизации правоохранительной системы. Проводя реформу системы, законодатели зачастую обращаются к досоветским традициям своих стран. В регионе Западной Европы и Северной Америки реформ, по масштабам сравнимым с тем, что происходит в странах ЦВЕ, не отмечается. В Западной Европе и Северной Америке реформы направлены на более крупные географические пространства. В этом смысле на передний план выходит роль Евросоюза и Совета Европы.

Что касается уровня преступности в анализируемом регионе, то можно считать, что знаковым выступает лишь сравнение во временной ретроспективе, в то время как сравнение между показателями различных стран представляется более или менее искусственным, ввиду того факта, что юридическое определение правонарушений серьезно различается от страны к стране. Точно так же сравнения обретают смысл только в рамках определенной и четкой категории преступлений, но даже и здесь необходимо учитывать известные допуски. Так, нет смысла сопоставлять страны по количественным показателям преступлений. В большинстве случаев невозможно объяснить причины,



приводящие к сильным вариациям в определенной категории правонарушений, - например, кража со взломом, угон автомобилей, мелкие преступления, насильственные преступления и коррупция, которые отмечены во многих анализируемых странах в период 1990-94 гг. и 1995-97 гг. Имеющиеся данные позволили использовать только описательный подход, не обеспечивая целесообразности глубокого анализа, если не удавалось выявить в общей базе данных наличия определенного факта как причины таких вариаций. Например, в достаточно высокой степени вероятности известно, с одной стороны, что тенденция к повышению убийств в Шотландии выводится из т.н. Данблэйдского случая массового убийства, когда в марте 1996 года было убито 18 человек. Но с другой стороны, только можно гадать о причинах тенденции к снижению угонов автомобилей во многих странах Центральной и Восточной Европы (ЦВЕ), причем с Болгарией и Россией во главе.

Среди категорий преступлений, по которым не существует большого количества стандартизованных мер, - это международная организованная преступность. Хотя некоторые данные, собранные по линии периодических обзоров ООН или Международных обзоров по жертвам преступности, и могут рассматриваться как показатели оргпреступности, сбор такой информации в обзорах не поставлен на систематическую основу с прямым выходом на анализ распространения международной оргпреступности. Видимо, тем не менее, будет возможно в рамках будущих обзоров ООН разрабатывать инструменты сбора данных конкретно по оргпреступности. Следует предлагать странам-членам переходить к включению определений по международной оргпреступности в их законодательство и учитывать правонарушения, вписывающиеся в эту категорию. Имеются также планы разработки профилей криминальной экономики, привлекая к этому национальных экспертов, с целью повышения уровня понимания фаз передвижения неразрешенных или разрешенных продуктов в структуре экономики, которому содействуют криминальные силы.

Сказанное выше во многих отношениях применительно и к анализу функционирования государственных правоохранительных систем. Здесь также не рекомендуется использование простого сопоставления результатов, поданных различными странами, для толкования явлений, даже при наличии количественной информации по оперативной работе. По данной линии основным результатом по всем странам выступает то, что во всех странах-респондентах подавляющее большинство занятых в системе уголовного права составляют полицейские силы. Полиция показывает большую степень продуктивности в странах Западной Европы и Северной Америки, нежели в странах ЦВЕ. В ходе анализа выявляется, что ни один из двух конкурирующих подходов к уровню полицейской работы не получает абсолютно однозначной поддержки – «чем больше полицейских, тем больше преступности» (так как повышается потенциал регистрации и выявления преступлений) и «чем больше полиции, тем меньше преступности (ввиду эффективности

полиции как фактора сдерживания). Что касается прокуратуры, то среднее количество прокуроров в странах ЦВЕ более чем вдвое превосходит соответствующие показатели по Западным странам. С другой стороны, большее количество прокуроров в странах ЦВЕ справляется с гораздо меньшим количеством дел (в среднем 56 дел на одного прокурора) по сравнению с Западом (в среднем 270 дел на прокурора). В отношении судей различий между странами ЦВЕ и Западными странами не отмечено. Все страны с показателями по судьям на среднем уровне и выше относятся к категории стран гражданского права. Наивысшие показатели по количеству пенитенциарно-исправительного персонала сопутствовали высоким уровням тюремных приговоров, но в целом отмечена только небольшая тенденция к тому, что большее количество пенитенциарного персонала проявляется там, где имеется больше заключенных пенитенциарных учреждений. Страны с наиболее невыгодными соотношениями персонала и заключенных обычно обладают большими количествами заключенных, а не заниженным обеспечением соответствующих работников.

Понятно, что в системе уголовной юстиции по-прежнему работают в основном мужчины. Наиболее низкая доля женщин наблюдается в полиции: средний показатель – женщины составляют 9 %. В ряде стран этот показатель находится на гораздо более низком уровне. Женщины лучше представлены среди судебных и прокурорских работников, функции которых не в такой мере рассматриваются как зависящие от физических, «мужских» качеств. В целом около трети судей и прокуроров и около пятой части работников пенитенциарно-исправительных учреждений – женщины.

Анализ т.н. дифференциальной аттриции, т.е. нарастающего перемещения количества преступлений, ставших известными правоохранительным органам, в количество судебных приговоров, производился с учетом существенной проблематики, связанной с широким разбросом различных процедурно-процессуальных вариантов, а также отсутствия связи внутри стран между соответствующими количественными мерами преступлений, подозреваемых, уголовных расследований и приговоров. Объем преступности в Западных странах – гораздо больше, что может объясняться более эффективной регистрацией преступлений. В любом случае, разброс показателей подозреваемых и преступлений более проявляется на Западе (29 подозреваемых на 100 преступлений), нежели в странах ЦВЕ (53 подозреваемых на 100 преступлений). Совокупно по всем странам на 100 преступлений приходится 41 подозреваемый, 28 уголовных преследований и 21 приговор.

Между показателями функциональности и уровнем преступности в разных странах четкой взаимозависимости не отмечается. Возможно, этим отражается тот факт, что страны, которые показывают большие объемы преступности просто обладают более эффективным потенциалом ее регистрации. Также это может свидетельствовать, что

система уголовной юстиции не играет такой роли при определении уровня преступности, как факторы социальной, политической и экономической динамики.

В сфере приговоров отмечена явная положительная тенденция, невзирая на отмеченные проблемы сопоставимости и корректности данных, - это продолжение уменьшения количества смертных приговоров, вынесенных за анализируемый период. Это в основном связано с сокращением использования этой меры наказания в бывших республиках СССР, но небольшое сокращение наблюдается и в США. Другое явление, отражаемое в четкой статистике, в сфере мер наказания – серьезный рост населения тюрем и в Европе, и в Северной Америке. Это нельзя объяснить лишь ростом преступности. В 90-е годы во многих странах региона отмечалось снижение преступности, в частности, тяжких преступлений. Рост числа заключенных может рассматриваться как конечный результат страх перед преступностью и убеждения, что оптимальный выход – это лишение свободы. В материалах, поданных рядом стран, отмечалось, что заключенные СИЗО составляют более четверти всех заключенных, причем не только в ЦВЕ, но и в некоторых странах западной Европы. Правда, в период с 1995 по 1997 гг. длительность сроков, проведенных под стражей в ожидании суда, возросла только в отдельных немногих случаях. Также может быть отмечено и небольшое увеличение в тот же период количества находящихся под стражей женщин.

Все отмеченное выше сводится к трем основным выкладкам. Во-первых, что касается надежности и корректности популярных сравниваемых показателей преступности между разными странами, следует поднять вопрос о сопоставимости официальной государственной статистики по преступности и данных по преступности согласно Международному обзору по жертвам преступности. Во-вторых, ввиду наблюдений, отмеченных в существующей криминологической литературе по уникальным каузальным механизмам, связанным с насильственной и ненасильственной преступностью, следует задать вопрос, не объясняется ли феномен насильственной и ненасильственной преступности по-разному в теориях, основанных на влиянии модернизации, неравенства или использования предоставленной возможности. В третьих, так как в ранее проводимых исследованиях в сфере сопоставительной криминологии для конструирования зависимых переменных применялись различные источники данных, следует проанализировать, как показатели теоретических концепций могут в большей или меньшей степени объяснять вариации уровней преступности в зависимости от применяемого источника данных по преступности. Что же касается первого вопроса, то наряду с тем, что официальные показатели сопоставления преступности по странам представляются корректными, не существует достаточных свидетельств для обоснования достоверности ни официальных показателей, ни показателей по виктимизации. Если посмотреть на второй вопрос, то

представляется, что для теоретических выкладок по различиям в уровнях преступности при сопоставлении между странами требуется учитывать виды анализируемых преступлений, так как для некоторых видов преступлений очевидно влияние каузальных механизмов. Анализ третьего основного вопроса подводит к выводу, что теоретическими выкладками сопоставления стран в плане уровня преступности может создаваться различная картина, в зависимости от источника используемых данных. В конечном итоге, все это позволяет полагать, что криминологам-компаративистам следует с особой осторожностью подходить к применению количественного анализа, а также стремиться к использованию более узко специализированных теоретических моделей. В качестве дальнейших шагов может быть полезно апробирование интерпретационного потенциала показателей и переменных, не связанных напрямую с феноменом преступности.

# 1 Introduction

Kauko Aromaa and Matti Joutsen<sup>1</sup>

## 1.1 The Sixth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems

This report is based on an analysis of national responses to the Sixth United Nations Survey. It is supplemented by other information available to the members of the expert group that performed the analysis. This international expert group consisted of Professor Gregory Howard (Western Michigan University, the United States), Professor Tony Smith (Saint Anselm College, the United States), Dr Pat Mayhew (Australian Institute of Criminology, Australia), Professor Elmar Weitekamp (Catholic University of Leuven, Belgium), Dr Adam Bouloukos (United Nations Office at Vienna, Austria), Dr Graham Farrell (Police Foundation, the United States), Professor Gloria Laycock (Jill Dando Institute for Crime Sciences, University College London, the United Kingdom), and Mr Kauko Aromaa (HEUNI). Professor Károly Bárd (Central European University, Hungary) has contributed to the text of the report, as has Mr Roy Walmsley, an English expert on penological issues. Mr Walmsley has also validated the responses to the penal institutions section of the questionnaire. Mr Mikko Myrskylä (HEUNI) has undertaken the validation of the responses to the police, prosecution and courts sections of the questionnaire. Mr Seppo Leppä (HEUNI), Mr Sami Nevala (HEUNI), and Ms Natalia Ollus (HEUNI) have overseen the compilation of the data and the editing. Last but not least: the editing team gratefully acknowledges the opportunity to make use of texts (in a slightly modified form) written by Dr Matti Joutsen (Ministry of Justice, Finland) for the Fifth Survey report and for other purposes.

In the Sixth Survey, responses were received from all European and North American countries except Austria, France, Georgia, Liechtenstein, Luxembourg, Malta and the Former Republic of Yugoslavia. In addition to the responses from the European and North American region, also national responses from Kazakhstan and Kyrgyzstan (both of which belong to the Central Asian region) and Israel are included in the analysis. The Central Asian states were considered relevant, because they are former republics of the Soviet Union, while Israel, although geographically part of the Near East, has traditionally participated in this regional analysis.

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<sup>1</sup> Much of what is written in sequences 1.2 to 1.6 are modified versions of texts by Matti Joutsen, published in Kangaspunta, K., M. Joutsen and N. Ollus (1998).

The report consists of eight chapters. The present chapter provides a background to the Sixth Survey itself as well as a discussion of the problems of international comparisons. It is to a considerable extent based on the corresponding chapter in the Fifth Survey report, written by Dr Matti Joutsen. Chapter two discusses the background to the criminal justice systems of the region. Also parts of that chapter have been quoted from the Fifth Survey report, written by Dr Joutsen. Chapter three provides an analysis on cross-national variations in crime rates. Chapter four explores the crime situation and the relevant methodology. Chapter five presents findings on the operation of the criminal justice systems in the region. Chapter six concentrates on the sanctions delivered by the criminal justice system. Chapter seven brings a new element to the report, namely that of organized crime, reflecting the new priorities adopted by the United Nations crime prevention programme. It should be noted that systematic comparable information on (transnational) organized crime phenomena is still much harder to come by than that on traditional crime. In chapter eight a few concluding notes are presented. Annex A. to the report reproduces the survey questionnaire form, while annex B. lists the data sets used in computing the different indices utilized in analyzing the response results (see sequence 1.6 below for a more detailed discussion on the indices). Annex C. comprises two presentations of trend distributions in two crime sub-categories.

## 1.2 The purpose of the report

The purpose of the report is to describe public safety in regards of crime both 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. However, it must be underlined at the outset that an assessment of "public safety" by means of crime statistics and other crime-related data cannot be reliably made, owing to the fact that the level of criminality as a phenomenon cannot be reliably measured. The available tools are simply not valid enough (on a more detailed discussion on this dilemma; see chapter 3 below; cf. also for example Barberet, 1999), and for want of better devices in this respect, the use of the data must be accepted. However, chapters three to seven of the report attempt to shed light on various comparative approaches to studying crime as a phenomenon internationally. The purpose of this endeavour is to learn whether it is on the whole opportune and judicious to continue with these types of transnational research efforts.

The basic idea of the surveys has been to collect routinely produced and published data on recorded crime trends and features of the criminal justice system, as provided by national correspondents for each country. It is evident that such data are as a rule not fully comparable across countries, and even the comparability over time may cause some problems.

A very basic and perennial problem seems to be that some member countries are not able to provide any or some of the required information. This state of affairs reflects the need of motivation, as well as of technical assistance and support, both in regards of information systems and of criminological expertise in the countries concerned.

A further problem is related to the unavoidable time lag: data collection, validation, complementation, and analysis/reporting all require a certain amount of time. Overcoming undue delays poses a major practical challenge to the entire endeavour. This is vitally important to the final objective of the exercise: monitoring trends in crime and the criminal justice system is a necessary exercise if governments are to understand and evaluate the consequences and successfulness of their policies.

In the end, assessing how successfully United Nations standards and norms are applied provides in this sense a justification for the entire data collection and reporting work. Interest in knowing how recommendations become action stems not from scientific curiosity but from practicality.

At a national level, monitoring the situation and trends is possible only if the data are reliable and reflect central features of the target as defined from a policy perspective. At a comparative level, the same requirements are necessary but not sufficient: comparability must also be established. As far as the routinely produced data on recorded crime and on features of the criminal justice system are concerned, comparability is notoriously hard to achieve.

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

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

The Sixth Survey questionnaire 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 of the survey instrument is a necessity since even the basic terms are defined differently in the different countries of the region. However, even the most rigorous definitions are of little help if countries have not adopted them also in their statistical reporting systems. In this respect, as in some others, the United Nations Surveys are expected to function as an instrument of “emancipation”. But progress in these matters is slow, and in practice, the problem of imprecise definitions remains.

Imprecision results in several inconsistencies: First, the detection rate or the *likelihood of crimes being recorded* varies considerably both across crime categories and also over time. Consequently the desire to measure some aspects of public safety by using recorded crime does not have a very realistic basis.

Second, the *legal definitions* of offences vary considerably from one country to the next. For example, “assault” may be an independent crime category in some jurisdictions, while others may not consider an incident to be an assault unless it results in bodily injury. Similarly, “burglary” and “robbery” may encompass quite dissimilar types of acts. Another illustration is the extent to which negligence affects the determination of criminal responsibility. The scope of



criminalization poses yet another problem: Matters that in one country are dealt with by regulatory authorities (such as labour safety authorities) may be matters for the police in another. Acts that are criminalized in some countries (such as the possession of drugs, certain sexual behaviour, and gambling) may be tolerated elsewhere. Similarly, the scope of criminalization may vary considerably across countries even if the crime definitions would seem to be similar, as for example the different blood alcohol limits (or the total lack of precise limits) stipulated for drunken driving, or the dissimilar criteria applied when ascertaining driving under the influence of drugs. All such differences call for extreme caution in comparisons of *crime rates* or *absolute numbers*. It is often held that such problems become less central if the assessment and the comparisons concentrate on *trends*. Even then, however, pitfalls remain. Trends, too, are vulnerable to changes in definitions and counting rules, both of which do indeed occur occasionally.

Problems of definition may also be encountered elsewhere. For example, a classic case is the comparison of imprisonment rates. The deprivations of liberty included in the country-specific counts may show significant variations as to what kinds of institutions they comprise. Persons imprisoned as a consequence of offending may be kept in institutions that are not classified as prisons at all.

Third, there are considerable *procedural differences* between countries. Crimes are not always dealt with by the police and the lower courts. Certain cases may be handled with a simplified procedure or by special investigatory and adjudicatory bodies. Some respondents may understand a category such as “persons prosecuted” to refer only to persons against whom the public prosecutor brings charges in court, while others 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 significance 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 not recorded in the statistics). Without a full appraisal of these procedural differences, countries that include such petty offences in their statistics will show 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 (“*principle of legality*”). Other countries may allow more discretion (“*principle of opportunity*”, also known as the “*principle of expediency*”), which may in practice mean that further measures are waived in a large portion of the cases. In still other countries, the police and the 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 is generally not recorded as an offence.

A fourth 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, this crime category may or may not include burglary or theft of a motor vehicle, simple or aggravated theft as defined by the law of the jurisdiction in question, or shoplifting.



Fifth, the rules of *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 a successful outcome of police investigations. Some countries count “arrests”, others use “reported offences”, and still others use “cleared offences”. Any comparison of statistics based on such different units would be quite misleading.

Variations in counting units occur also with prosecutorial data. Some countries count persons prosecuted, others may count cases dealt with by the prosecutor. In the latter instance, several persons may be included in one “case”.

Furthermore, counting rules differ in admissions to prison. Some countries count only the instances when an individual is admitted to prison for the first time during the present imprisonment period, often as a suspect remanded in pre-trial custody. Other countries may be of the view that, for example, a change in the status from pre-trial detainee to convicted prisoner counts as a new “admission”. Yet other countries may take the word “admission” literally, and count each time a prisoner enters the prison doors, for example on returning from an appearance in court or from a prison furlough.

Sixth, the *comprehensiveness of the statistics* varies. Some countries include only the major criminal offences. Others include petty offences or 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 such as “all crimes recorded”.

In addition to the differences in laws, procedures and statistical routines, there are differences also in *legal terminology*. They not only confound comparisons when translation into a foreign language is required (where concepts such as “plea-bargaining” may not exist) but also comparisons between jurisdictions in which the same language is nominally used. Examples from English-speaking countries range from differences in spelling (jail/gaol) to those in definitions (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. The current statistics have been prepared by administrators for administrative purposes and, for them, this purpose remains the most important.

A more realistic approach has been pursued in connection with the United Nations Surveys: Respondents are asked to compare their usage with a basic, relatively precise definition of terms, provided by the United Nations Secretariat, and note how their definition is different (if there are differences). The amount of respondents who submit their responses to the Secretariat together with these notes seems to be on the increase. The comments and notes provided by the respondents may be accessed through the web address [www.uncjin.org/Statistics/WCTS/WCTS6/wcts6data/6\\_section\\_comments.pdf](http://www.uncjin.org/Statistics/WCTS/WCTS6/wcts6data/6_section_comments.pdf).

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 remain unanswered. The detection rate for, for example, drug crimes, economic crimes and environmental crimes is believed to be very low, and so there are few recorded/reported cases. Another example is that, despite the strong interest in Europe and North America in organized crime, the present report offers very little relevant quantitative information on the matter; in chapter seven a few qualitative features as regards this phenomenon are delineated. We know, on the other hand, that much of what could be termed organized crime is categorized – in terms of traditional criminal law – 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. Organized crime does not allow simple counting of “offences”, and this poses a fundamental counting problem – a point well illustrated in the annual Organized Crime reports of the European Union or the Council of Europe, or int country level, for example, the Netherlands or the U.K. (NCIS).

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. Cross-national 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. The last point concerning the differences in the structure and intensity of overall social – formal and informal – control across countries and over time is practically entirely overlooked in the existing statistical sources.

## 1.4 Errors and non-response

No country was capable of providing data on all 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 particular research. 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 in federal states such as Canada, Germany, and the United States).

Third, the information may exist, but it is several years out of date. It seems that while many countries would be capable of furnishing more recent data than what is expected in the questionnaire (for example already being able to cover the years 2000 through 2002), there are countries where the lag in the production of statistics tends to be very long.

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 United Na-

tions 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 analyzed for the present report. As a precaution the United Nations Secretariat has attempted to reduce the possibility of error by asking countries 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: an attempt to develop indicators of crime and of performance

The dangers of using statistics as a reflection of crime and crime control at a national level are well documented, not to mention the use of statistical data in order to manifest changes with regard to crime as a phenomenon. We all know that reported crime is not the same as actual crime and that statistics have been developed for administrative purposes, not for satisfying research interests. The vagaries of changing laws, statistical practices 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 repeatedly noted in discussions concerning the United Nations Surveys (see, for example sequences 1.3 and 1.4 above)<sup>2</sup>.

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2 The following discussion on the attempts to make various aspects of crime data commensurable has also benefited from observations and comments by Mr John van Kesteren (Research Officer, UNICRI, Italy) acting as the coordinator of the International Crime Victim Survey (ICVS) project. The general methodology of the Survey is to randomly sample respondents from several countries, and to examine their experiences with crime policing, crime prevention and feelings of unsafety. Attention is paid to social correlates that may help in explaining crime and to demographic data such as age, gender, education and income. Sample sizes in the ICVS are small by the standards of most “bespoke” national crime surveys, and this results in relatively large sampling errors. However, for straightforward comparisons of national risks, samples of 1,000 or more suffice to judge broad variations in levels of crime. Modest samples do, on the other hand, restrict the scope for analyzing issues about which a small portion of the sample would provide information. Comprehensive information on the ICVS can be found in Alvazzi del Frate, A., U. Zvekic, and J.J.M. van Dijk (eds.) (1993), *Understanding Crime: Experiences of Crime Control*. Acts of the International Conference, Rome, 18-20 November 1992. Rome: UNICRI, Publication No. 49; and on the Internet: [www.unicri.it/icvs](http://www.unicri.it/icvs).

At least in the short run, no uniform basis will be developed for international statistics. When reading the forthcoming comments on the results of the Sixth 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.

One plausible remedy for this problematic situation is to gather data from *differing but tangential*, preferably *independent* sources in the field to see if they point in the same direction. The idea represents an analogy which in research terms is denoted as “triangulation”, and which in quantitative survey and other data analysis is used when constructing sum scales: several unsatisfactory measures, if combined, represent a more robust and often more valid measure of the phenomenon under scrutiny.

In preparing the previous report in this very same series (Kangaspunta, Joutsen and Ollus, 1998), data were taken not only from the Fifth Survey (which, alike the Sixth Survey, 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) had already at that time been carried out in almost every European and North American country. The ICVS was considered to provide a welcome supplement to statistical data on reported crime, including unique information on differences in the reporting behaviour of the population.

The key findings of the ICVS include percentages of the public victimized by crime – as measured by a standard list of crimes – over the past five years, and respectively, during the last year, respectively. Data from countries where the survey has been conducted more than once were averaged for the analysis of the Fifth Survey. If, for example, the survey was carried out in 1989, 1992, and 1996, the three victimization rates were averaged. In the analysis of the Sixth Survey, a slightly more nuanced solution has been employed for countries that show a major change in rates over the four surveys of, for example, 1989, 1992, 1996 and 2000.

Selected other studies have also been used in the Sixth Survey report, foremost among them the European Sourcebook materials<sup>3</sup>.

A second way to augment the explanatory power of statistical data is to try to measure different *dimensions* of one and the same phenomenon. For example, the combined number of reported assaults and reported robberies measure different dimensions of non-fatal physical violence in society. Somewhat similarly, an index of motor vehicle theft combines data derived from a HEUNI study (see Liukkonen, 1997) and the ICVS. A further example could be an index of the way in which the public evaluates the performance of the police, developed by combining measures of how often victims of certain types of crime report them to the

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3 In the mid 1990's the European Committee on Crime Problems of the Council of Europe entrusted a Group of Specialists with preparing a compendium of crime and criminal justice data for the whole of Europe (i.e. the European Sourcebook on Crime and Criminal Justice). The adopted methodology of the Group consists of a co-ordinated network of national correspondents providing data from current statistical sources within each country. This data is then supplemented by the collection of information on statistical and legal definitions. For additional information on the European Sourcebook project, see [www.europeansourcebook.org/esb/index.html](http://www.europeansourcebook.org/esb/index.html).

police, the degree to which victims who have reported an offence to the police are satisfied with the way the matter was handled, 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 these questions have been addressed in the International Crime Victim Surveys.

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

Three sets of indicators were developed. The first set contained indicators on 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 contained indicators on motivation and opportunity. The third set contained indicators on 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 usage of these sets are explained in a greater detail in the respective sections of this report. An overview is provided in section 1.6 below.

## 1.6 Developing combined indicators of crime and of performance

As was already noted, one of the difficulties in making international comparisons is that corresponding data may be missing, or the data cover different years. On the other hand, the wealth of data available from a variety of sources that could shed 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 its the response to the Sixth Survey. Often, the country does not have the required data, or data are available for only a limited number of 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 brought together to form an index, the problem with missing data is somewhat eased. These indices are also more reliable than the raw data, and hence compensate for at least some of the flaws in the data. One source can give an overly high estimate of the actual situation, another an underestimate. In addition, the indices can, at least partially, overcome the problem of “outliers” (i.e. of country data from a single source have values that deviate sig-

nificantly 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 variables into indices<sup>4</sup>:

1. The different variables describing the same phenomenon are identified;
2. The rank order is determined for each of the variables. The country with the lowest value gets rank 1, the second lowest rank 2, and so on;
3. The rank orders are standardized<sup>5</sup> by dividing by the highest rank and subsequently multiplying by 100;
4. The index is the average of these standardized rankings.

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

0–25	very low
26–40	below average
41–60	average
61–75	above average
76–100	very high

Differences of less than 10 are deemed insignificant.

We are aware that the procedure can justly 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, what percentage of the population has been victimized 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 the same country. For instance, if one country has an index of 60 on, say burglary, and the corresponding index of another country is 40, it is not justified to say that the level of burglary in the first country is 50 % higher than in the second. It is, however, justified to say that the level of burglary is higher in the first country (where it is a bit above average), than in the second (where it is a bit below average). Similarly, if a country has an index value of 10 on homicide and 90 on petty crimes, we cannot conclude that there are nine times more petty crimes than murders. What we can conclude is that the rate of petty crimes in that country is, internationally speaking, among the highest, whilst the rate of homicide is comparatively among the lowest;

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4 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.

5 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 variable, the rankings need to be standardized.



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. With surveys carried out using 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 Sixth Survey is in fact designed to collect, this assumption is much weaker – so weak, in fact, that in earlier HEUNI reports on the United Nations Surveys, with the exception of the report analyzing the results of the Fifth Survey, we have deliberately down-played the making of such comparisons. We now believe that sufficient research data and supplemental statistical data, at least on conventional crime, 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 response to the criticism that international comparisons should not be made, 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 there occurs an unusually large amount of violent crime in a country, then there are reasonable grounds to assume that the indicators are correct, and that an unusually large amount of violent crime does indeed occur;
4. The procedure assumes that the data on which each index is based are at least to some degree commensurable. It assumes, for example, that data on ownership of autos, motor cycles, 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. Even though this assumption is more difficult to substantiate, we have chosen to examine the data in this way mainly in order to test the index approach and its explanatory quality in the context of crime prevention and criminal justice<sup>6</sup>.
5. The procedure also 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 between, for example, 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 in-

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6 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 .55, which is acceptable. The consistency for the homicide index was .71, and the consistency for all other crime indices was over .80; all of these can be regarded as good.

cluded 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. It is unfortunate that international data sets that shed light on such factors are so far not available. When and if 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 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 show a low amount of violence on the national level, but this may mask the fact that there are regions within that country where the amount of crime is extraordinary high. Similarly, a country may have a low unemployment rate, but unemployment may be particularly high among young urban males.

The data sets used in computing the different indices are presented in annex B at the end of the report. The analysis presented in chapter five is based mainly on these indices. A somewhat different index-based approach is being utilized in chapter three. These indices are described more in detail at the end of that chapter. Chapters four and six use a more straightforward methodological approach in terms of the statistical analysis applied. The methods of analysis with respect to chapters two and seven, respectively, are of more descriptive nature, all in line with the materials discussed within their framework.



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## 2 A Backgrounder to the Criminal Justice Systems of the Region

Károly Bárd, Matti Joutsen and Seppo Leppä

### 2.1 General observations<sup>1</sup>

The difficulties in comparing national crime scenes derives not only from problems of interpreting statistical data. Another source of concern lies in the differences between national criminal justice systems. Readers with a background in comparative criminal justice are well aware of the differences between the Germanic-based, the French-based and the common law criminal justice systems. 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. No two countries define crimes the same way or have quite the same criminal justice systems.

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 mass crimes. The broad outlines of the process are also much the same: the police investigates 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. At the same time we are bound to notice that 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 very much serve to explain changes in the day-to-day operation of the criminal justice.

During the few recent decades, the impact of demographic and social changes on crime and on crime control in the European and North American region has been a marked one. As a consequence of this 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 acquired a more international character. All this is seen to overburden 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

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<sup>1</sup> This passage is a modified version of “Background to European and North American criminal justice systems” by Matti Joutsen. Pp. 15-19 in Kangaspunta, K., M. Joutsen and N. Ollus (eds.) (1998).

and/or the prosecutor powers to settle the matter, or by adopting simplified court procedures), and to deal with certain serious offences (narcotics offences, in particular) more punitively. There has also been a growing interest in crime prevention programmes and in revitalizing community-based informal social control. Finally, attempts have been made to improve the position of the victim.

Two examples of increasing convergence 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 brings charges whenever there is sufficient evidence of the guilt of an identifiable suspect. The opportunity principle, in turn, gives the prosecutor discretion to decide, in any individual case, whether there exists a public interest (or other overriding interest) in prosecution. 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 Europe and North America 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 are being increasingly 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, the prohibition of torture and of inhuman or degrading treatment or punishment, the right to liberty and security, the right to due process, the prohibition of criminalization ex post facto, and the prohibition of discrimination in the enjoyment of the rights and freedoms set forth in the Convention (Council of Europe, 1950). As the Convention has been signed by the 41 member States of the Council of Europe (as of November 1999), 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 exists a strong tendency to review national legislation to ensure that it accords with the requirements of, for example, the European Convention.

The impact of the Council of Europe does, however, vary from country to country, and issue to issue. With perhaps the exception of the criminalization of money laundering, which follows the ratification of the 1990 Convention, the Conventions and numerous resolutions adopted by the Council of Europe allow the 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 the steps to be taken.

The role of the European Union in fostering reconciliation in the field of criminal justice within the member states, and also to some extent within the candidate states, will be discussed in chapter 2.3.

The Council of Europe and the European Union are not, however, the only intergovernmental organizations seeking to influence criminal justice reform in Europe (and, *ceteris paribus*, also in North America). Other examples include the United Nations, the World Bank, the International Monetary Fund, the Organisation for Economic Co-operation and Development, the G-7/P-8, and the European Bank for Reconstruction and Development. The Financial Action Task Force (which was set up by the G-7) has worked to improve the 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, 1996).

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

## 2.2 Central and Eastern European Scene

Owing to the political and social upheavals within the former socialist states of the Central and Eastern European region at the end of the 1980's and at the beginning of the 1990's, considerable restructuring efforts of the criminal justice systems can be observed throughout the region. The main features in respect of these changes are outlined below.

Prior to the political turnover in the late 80's and early 90's, the countries nowadays referred to as post-communist states, new democracies or transition countries used to be considered from the outside as a homogenous entity. This was also the case with their criminal justice systems. However, a more thorough look at the criminal justice systems of the region reveals that just as there were variations in the degree to which the political system of the states under Soviet dominance deviated from the values of liberal democracy, also the criminal justice systems were considerably different. When in some European states cautious penal reforms in the early 70's resulted in the introduction of Western type institutions, the criminal justice system of some others was shaped by the Stalinist criminal justice doctrine until the collapse of the communist political regime. Similarly, while in some of the countries the autonomy of the criminal justice system was more or less respected in the last decade of the communist regime, in others the interference of the political elite in the operation of the prosecution service and even the courts was a daily practice until the political turnover. However, it is true that certain typical "socialist" traits shaped the criminal justice systems of the countries under Soviet dominance, clearly distinguishing them from Western European models.

One of the most important differences between the "socialist" procedural law and the Western European model concerns the distribution of competence: "so-

cialist” procedural laws allowed the courts a far less significant role. This is reflected primarily in the fact that in the pre-trial phase, the court had almost no power; decisions on restricting fundamental rights by, for example, pre-trial detention, search and seizure were made by the police, investigators or the prosecutor. In addition, as the primary ”guardian of legality”, the prosecutor had the power to exercise supervision over court proceedings. A further characteristic of the distribution of competence in the so-called socialist procedural laws was that the police, the militia, and organs coming under the competence of the Ministry of Interior were empowered with far broader licenses than their counterparts in Western Europe. The police or other agencies subordinated to the Ministry of Interior conducted investigation and were linked to the prosecution service through the institution of prosecutorial supervision over investigation. The licenses covered by this institution included on the one hand the prosecutor’s authorization to carry out acts of investigation, giving instructions on how to investigate, and on the other hand the power to review measures taken by the investigating agency on their lawfulness.

The distribution of competence affected the status and the position of the defense counsel as well. Although ”socialist” procedural laws did not deny the defendant’s right to a defense counsel yet the role of the latter was considerably less important than that of his/her Western European counterpart. In the most decisive phase of the ”socialist” criminal procedure, the pre-trial stage, the defense lawyer’s rights were considerably limited.

Further differences between ”socialist” and Western models of criminal justice derive from a general refusal by socialist doctrine of formalism in criminal procedure, from an underestimation of the importance of legal professional skills and from the limited autonomy of the parties. In addition, financial considerations, the idea that limited resources should be rationally distributed were alien to ”socialist” procedural doctrine. Legislators in the former ”socialist” countries opted for the principle of mandatory prosecution, though the so-called material concept of the criminal offense enabled the crime control agencies to refrain from prosecuting minor offences.

Finally, socialist doctrine did not regard legal security as a value of criminal justice. The absolute priority of the duty to ascertain material truth in the criminal process resulted in an underestimation of the principle of legal security. Final court judgments could easily be annulled and altered through particular extraordinary remedies whose preconditions were vaguely defined, and which were not at the disposal of the parties but exclusively of persons holding top positions in the administration of justice, such as the General Prosecutor, the Minister of Justice or the Head of the highest judicial body.

After the political turnover, legislators in Eastern Europe and the former Soviet Union have been facing the difficult task of creating an efficient criminal justice system, which at the same time would provide for safeguards meeting international standards. The transition in all countries has been accompanied by an increase in reported crime. New forms of criminality have emerged, and criminals have become more professional and well equipped. Kidnapping, extortion, economic and organized crime, illegal trafficking in goods and people have called, among others, for adequate provisions in the criminal laws and the laws

on criminal procedure that would provide for effectively counteracting new forms of criminality. Rules on the use of undercover agents, on wire tapping, and witness protection schemes have been introduced. At the same time novel provisions on criminal organizations, economic crime or on honoring cooperating criminals have been adopted.

In addition to the introduction of institutions likely to guarantee efficiency in law enforcement and crime prevention, the transition countries started to completely reconstruct their system of administration of justice. When reforming the system, legislators frequently turned to the pre-Soviet traditions of their country. This trend is the most obvious in reforms related to the structure of the administration of justice, particularly the court system. A number of countries have returned to their former four-level judicial system, and the role of the Supreme Court as a kind of Cassation Court has also been shaped according to pre-war patterns. Russian Federation has re-introduced juries and justices of peace, and some other countries, following their pre-war model, have subordinated the prosecution agency to the executive.

International criminal justice standards have also served as sources of the reform. The change in the political domain was accompanied by the re-assessment of the relation between international and domestic law. Several new Constitutions or amendments to the old ones explicitly pronounced the supremacy of international human rights instruments over national regulations, and in order to guarantee the compatibility of domestic law with international agreements, provisions identical with those set forth in international human rights instruments were included in the new Constitutions (or the amendments made to the old ones) and the laws on the operation of criminal justice were modified accordingly.

Today, almost all constitutions include the basic principles of fair criminal justice, such as the *nullum crimen* and *nulla poena sine lege* principle, the presumption of innocence, the rule according to which individuals may be deprived of their liberty only by a court's order, or the right to an independent and impartial tribunal. The majority of the new democracies have become members of the Council of Europe and thereby parties to the European Convention on Human Rights and Fundamental Freedoms. Pre-accession monitoring of the candidate countries' legal systems, and the jurisprudence of the European Court of Human Rights after accession have shaped the individual countries' criminal justice systems.

The structure of the laws on criminal procedure in the transition countries follows the model of the Continental mixed system, i.e. elements of an inquisitorial procedure are blended with elements of an accusatorial (adversary or party) procedure.

The pre-trial phase is dominated by inquisitorial elements (*ex officio* procedure; lack of strict separation of functions; secrecy) while the trial phase bears the characteristics of a party procedure (publicity; separation of the prosecution, the defense and the judicature; strict adherence to the prosecutor's charge, etc.). The fact that certain elements of the accusatorial process (e.g. participation of the defense counsel of the accused is ensured within certain limits) are present also in the pre-trial phase provides further proof for the mixed nature of the system.

On the other hand, the trial phase is not entirely free from the elements of an inquisitorial procedure: the examination of the witnesses and the interrogation of the defendant is primarily the duty of the judge and information collected in the course of the pre-trial stage can be used to a large extent. Prosecution is governed by the so-called legality principle: as a general rule all crimes reported are investigated, and the prosecutor cannot refrain from bringing the case before the court for expediency considerations. However, the number of exceptions is on the increase; prosecutors may discontinue cases with defendants' consent, and instruct them to comply with orders to undergo treatment, compensate the victim or do community service, etc.

In some countries the newly adopted laws on criminal procedure indicate a shift towards the adversary model. Parties acquire more rights to present evidence and examine witnesses. However, in all countries the court has retained its power to introduce evidence it deems important for ascertaining the facts of the case and necessary for fair adjudication. In this context it should be mentioned that constitutional courts established after the political turnover have through their decisions played an important role in a number of countries, contributed to separating the functions of prosecution and adjudication, and thereby relieved judges of part of their inquisitorial role.

## 2.3 Western European and North American Scene

In the Western European region and in North America it is not possible to indicate reforms comparable to those of Central and Eastern Europe. Powers with the aim to continue with the harmonization of the criminal justice systems can surely be observed, but the scope differs from the country-based efforts of the Central and Eastern European region in that larger geographical areas are targeted. In 2.1 above, the roles of the European Union and the Council of Europe in this field were already examined. The following discuss the issue in greater detail<sup>2</sup>.

As already mentioned, although the EU has been traditionally oriented towards economic cooperation, it has taken over many functions related to police and judicial cooperation in criminal matters, with the emphasis on organized crime, terrorism and drug trafficking. Decisions on these matters are made by the Council of Ministers, i.e. the relevant ministers of the cabinets of the member states. Since these are matters involving the sensitive issue of national sovereignty, decisions require full consensus among the fifteen members. In addition, there are ongoing debates what could be dealt with by the Union, and what matters should be left entirely to the individual member states.

In general, it is safe to say that particularly during the second half of the 1990's and the first years of the new millennium, the European Union has transformed the

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2 Based on the article by M. Joutsen (2002).



European debate on criminal policy. Many key debates previously conducted on the national level have now moved to the European Union level, and European Union decisions have considerable influence on national law, policy and practice. Agreement has been reached on the minimum requirements when criminalizing a number of different offences, such as racism and xenophobia, trafficking in human beings and sexual exploitation of children, and participation in a criminal organization. International cooperation in criminal matters has been smoothed by the establishment of Europol and the European Judicial Network. Conventions have been adopted in order to simplify extradition and mutual assistance.

Cooperation in the police sector rests not only on Europol, but also, for example, on the Schengen arrangements. Europol can be best characterized as a coordination body that seeks to ensure that the police force in every member state has the cooperation and resources it needs to carry out its functions. The Schengen arrangements (which do not apply to the United Kingdom and Ireland) allow for extensive operational cooperation and the sharing of information. New structures for police cooperation that are being developed include the European Police Chiefs Task Force, and a European Police College.

The European Judicial Network has been up and running for several years. Its purpose is to facilitate the exchange of information between prosecutors and courts. In addition to improving general understanding of how the different criminal justice systems work, the Network has produced tools by which practitioners in one country can readily identify who is the competent authority in another country for certain cases, and what are the requirements for extradition and mutual assistance requests. Work is proceeding on a secure telecommunications system between competent prosecutors. Also, plans are well advanced for Eurojust, as a more or less parallel body to Europol to promote cooperation among prosecutors. Eurojust will not have operational powers in the sense that it could itself order prosecution or demand certain investigations. Instead, it will be a body consisting of one prosecutor from each member state. These prosecutors meet together, either in plenary to discuss over-all strategy, or in different compositions to deal with the coordination of cross-border cases.

Extradition and mutual recognition among the EU countries have to a large extent been based on two conventions worked out already in the 1950's within the framework of another European organization, the Council of Europe. Since that time, practices in respect of extradition and mutual recognition have developed considerably, including those restricting the grounds of refusal, expanding the rights of the person in question, and developing a "good practice" in processing requests. Two conventions designed to simplify extradition and supplement the 1957 Council of Europe Extradition Convention were adopted in 1995 and 1996, and in 2000, a convention designed to supplement the 1959 Council of Europe Convention on Mutual Assistance in Criminal Matters was adopted.

More complicated issues arise when the victim of, as a rule, white collar or organized crime turns out to be the European Community itself. As pointed out by Pedersen, Elholm and Kolze (1999), "traditionally, Member States have laid great store by the fact that penalties for contravening Community law are part of the general system of national penalties that are based on national traditions and



crime policies. However, significant differences in national criminal law have given rise to a legal disparity difficult to reconcile with the development within the European Community in general” (op.cit., p. 164). Thus, “in a series of cases the European Court of Justice has established that the Community (...) is empowered to impose the sanctions it considers necessary to ensure effective and uniform administration of the rules concerning (the misappropriation of subsidies affecting the Community’s financial interests)” (op.cit., p. 168). This practice might indicate that in the future an intergovernmental agency, in this case the European Community/European Union will increasingly dictate the extent of the juridical independence of the national administrations of the European region, particularly in view of the Union’s ongoing enlargement process.

The rapprochement of the operative efforts in the field of law enforcement and crime policy reached within the EU member states, and in the coming years also in the candidate countries, is exemplified by the already mentioned Schengen Agreement. Marc (2001) writes that already in the late 1980s “immigration control became the most important argument to justify compensatory measures for the abolition of border controls. Only the combination of policing and immigration arguments made it possible to mobilise financial resources, namely for the Schengen Information System (SIS). The practical implementation of the SIS and the intensified police controls in the border regions have shown since then that immigration control is the most important aspect under which the Schengen cooperation has had practical impacts” (op.cit., p. 105). Also in this context it can be observed that “international police cooperation has reached a major extent in a context of governance without government”, since “institutions coordinating the use of force at international levels exist without the formal framework of a state” (op.cit., p. 111).

Comparing the North American scene with the European one in this respect makes it plausible to claim that the existing mechanisms of transborder cooperation in the field of crime prevention and criminal justice, particularly the systems constructed between the law enforcement bodies, are much less complicated. It has been notified that “due, in part, to the smaller number of partners involved (namely, USA, Canada and, to a lesser extent, the most important countries of Latin America) and, to a much bigger extent, to the inevitable weight of the USA, cross-border police cooperation on the American continent appears to be more straightforward than the European approach” (op.cit., p. 115). The straightforwardness of the police cooperation is not the only common feature characterizing the crime prevention and criminal justice structures of the North American region.

The legal systems of the North American countries have their roots in English criminal law and the practices (especially common law) were transplanted to those countries hundreds of years ago. Another factor having a profound effect on the form and structure of the criminal justice administration of the two countries is the federalist system of government; responsibility for the various parts of the criminal justice system is shared and divided among all levels of government: federal, state or provincial, and municipal.

## 2.4 Information on the national criminal justice systems

Passages 2.2 and 2.3 above delineate the recent major changes in criminal justice systems in those parts of the European and North American region where large-scale reforms have been implemented or are planned. Those readers who would like to examine details of the national systems, in which no notable reforms have taken place during the period in question, are recommended to study the relevant country reviews in Kangaspunta et al. (1999).

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# 3 Understanding Cross-national Variations of Crime Rates in Europe and North America

Gregory Howard and Tony Smith

## 3.1 Introduction

The purpose of this chapter is to understand cross-national variations of crime rates in Europe and North America during the middle of the 1990s. We are concerned with three related questions. First, do official measures of national crime rates (United Nations, Interpol, European Sourcebook and, for homicide, the World Health Organization) substantially agree with one another as well as with victimization data from the International Crime Victim Survey in their representations of criminal offending? Second, do measures of important concepts from modernization, inequality, and opportunity theory differentially explain variations in national violent and nonviolent crime rates? Third, do these measures of theoretical concepts explain more or less variation in a crime rate, say homicide or theft, depending upon the source of crime data? With the analysis to be reported below, we wish to confirm an important point already made in the comparative criminology literature, that theoretical accounts of cross-national variation in crime rates need to take account of the types of crime that are examined as well as the source of the crime data that are used.

Our first question, about the degree to which the different data series provide similar pictures of crime and criminal offending, is basically concerned with the notion of triangulation. A standard warning in the comparative criminology literature alerts readers to the suspect nature of international crime data. We are generously reminded, for instance, that official data are collected in national data systems of varying sophistication, and the process by which they are collated and disseminated by reporting agencies like the United Nations, Interpol, European Sourcebook, and the World Health Organization are more or less rigorous. Given the problems associated with official measures of crime, the International Crime Victim Survey has been developed, but as with any method of measuring social phenomenon, this technique also has its own share of difficulties. Indeed, all sources of crime data will harbor various errors, both systematic and random. While we can make solemn efforts to reduce these errors in the construction of the various data series, the secretive nature of crime as well as the subjectivity involved in all measurement exercises ensures that no data series will be perfect. Nonetheless, we need not despair. If the different data series, despite their varying errors, converge on a particular image of crime, then we can feel more confident that the data are measuring what they are intended to measure. Such conver-

gence is known as triangulation. We will assess triangulation in the crime data studied in this chapter by examining agreement about crime rates among various sources of official data as well as agreement between sources of official data and a source of victimization data. This question of triangulation, then, speaks to the quality of the dependent variables often used in comparative criminological investigations; simply put, quantitative studies of comparative criminology depend crucially on the reliability and validity of cross-national indicators of criminal offending. Triangulation provides confidence that the concept of crime is being measured reasonably well and that assessments of theoretical efficacy are giving theories a fair shake.

Our second question addresses the possibility that comparative criminological theories might have differential explanatory power depending on the type of crime under consideration. Messner (1986), for example, has provided evidence that structural characteristics of a society are variously related to property crime and violent crime. Similarly, Bennett (1991) has observed that modernization and development are differentially related to crimes of violence and theft, while LaFree and Kick (1986: 213) have suggested that “development, wealth distribution, and national demographic characteristics affect murder and theft rates differently” (see also, LaFree, 1999). Moreover, in a crisply worded refutation of general theory in comparative criminology, Groves and Newman (1989: 28) have concluded on logical grounds that universal theory, claiming applicability to all crimes, all offenders, and all cultures, “should be recognized for the dead end that it is.” Accordingly, we assemble a host of variables linked to major concepts in popular comparative criminological theories and assess their utility in accounting for variations in different kinds of crime rates. If criminological theories differentially explain violent and nonviolent crime, comparative investigators will do well to specify their theories more narrowly and to consider other situational and contextual features of criminal offending in their efforts at theoretical elaboration.

Related to the two questions already discussed, our third question attends to the possibility that different theoretical accounts explain more or less variance in national crime rates depending upon the data source that it used by the investigator. While LaFree (1999) has concluded that certain generalizations may now be stated as a result of dozens of published comparative criminological studies, the listing of 34 studies considered in his meta-analysis of cross-national homicide indicates that five different crime data sources have been used by researchers, including figures from the World Health Organization, Interpol (modal homicide data source), United Nations, Comparative Crime Data File, and the Human Relations Area Files. Generally speaking, these previous studies have not considered more than one data source for purposes of constructing dependent variables (But see, Neapolitan, 1994; 1996; 1997). In this study, we assess whether the relationship between explanatory variables and crimes rates is conditioned by the data source from which the dependent variable derives.

This is a preliminary analysis of cross-national variations in crime rates (1) using a variety of crime data sources (i.e., United Nations, Interpol, European Sourcebook, World Health Organization, and the International Crime Victim Study) for multiple dependent variables (i.e., violent and nonviolent crime) to

explore triangulation and (2) deploying a set of explanatory variables from four different domains (i.e., modernization, inequality, opportunity, and controls) to assess differences in theoretical efficacy by type of crime and source of data. We begin this study with a few words about the sources of crime data and then discuss the types of crime to be examined. We move next to describe the theoretical perspectives evaluated in this analysis. From there, we spell out the method that we followed in carrying out this investigation and then report on the results of the analysis. We close with a discussion of these results and a number of general conclusions.

## 3.2 Sources of crime data

*Official data and varieties of error.* The larger part of the literature in comparative criminology has been built on the back of admittedly fallible official data. Indeed, no published study of cross-national variations in national crime rates is complete without a standard litany of cautionary words. These alerts about the quality of comparative crime data are warranted for two important reasons. First, official data even within a single nation are saddled with systematic and random error. For one thing, as records of official action, these data do not tell us anything about crimes that go unreported to the police nor those that go unrecorded by these authorities. Studies that have compared victimization data with official data in the United States and around the world have consistently found that official data dramatically undercount the number of criminal offenses in a society. To the extent that criminal events that go unrecorded are different from those that do find their way to the police ledgers, representations of crime based on these figures will be biased. Moreover, official records of law enforcement and criminal prosecution are dependent upon the content of laws; as radical criminologists have been keen to demonstrate, law oftentimes acts in the interest of the few over the many (Reiman, 1990; Chambliss and Zatz, 1993). Thus, official measures of crime typically overlook the offenses of the powerful. Neither the Federal Bureau of Investigation in the United States nor the Center for International Crime Prevention of the United Nations publishes figures on corporate or government crime in their standard statistical series. Another problem with official data is that they are dependent upon the subjective judgments of law enforcement officials, prosecutors, and judges who must engage in discretionary practices that might vary considerably by jurisdiction even within nations. Of course, these are only a few of the many flaws associated with official data; a comprehensive discussion of other limitations associated with these data can be found in any introductory criminology textbook.

Second, hygiene warnings about official crime data are especially warranted in the case of cross-national figures. For one thing, different nations may define particular types of crime much differently; thus, what might be considered a felonious act in one country may only be treated as a misdemeanor in another, and perhaps not even deemed offensive at all in still a third (Newman, 1999). Discretionary practices that vary within the nation-state, such as the decision to arrest,

charge, and convict, may be even more variant cross-nationally. Consequently, systemic differences in legal standards under which police officers may make an arrest or can initiate charges can have an influence on crime rates quite apart from the actual amount of crime in the society. Another problem with official cross-national data is that they are generally available for only a small number of the world's nations; the typical sample of countries is generally biased toward highly developed nations. As a result, theoretical formulations that account for the available data well may be criticized for the "cultural imperialism" roundly derided by Beirne (1983). In any case, that official cross-national crime data are confronted by threats to reliability and validity is a commonplace in the comparative criminology literature; for useful reviews of the sources of error in official cross-national data, the reader is referred to the work of LaFree (1999) and Neapolitan (1997).

***Victimization data and varieties of error.*** Because of the much noted problems of reliability and validity associated with official crime data, victimization surveys have been instituted in single nations (e.g., the National Crime Victimization Survey in the United States and the British Crime Survey in the United Kingdom) and, with the advent of the International Crime Victim Survey in 1989 (van Dijk, Mayhew, & Killias, 1990; van Dijk, 1991; van Dijk & Mayhew, 1993), globally as well. While these victimization surveys at the national and international level avoid many of the troubles linked to official data, such as a reliance on legal definitions of crime that typically vary from one country to another, this measurement technique is unfortunately troubled by its own limitations (Beirne & Perry, 1994; Neapolitan, 1997). For one, the reliability and validity of the survey data are largely dependent upon the memory of the respondents and their willingness to report about their victimizations to social scientists. Moreover, sensitivity toward certain types of crimes, such as sexual assault or domestic violence, may make a respondent less likely to report about certain kinds of victimizations (a problem, by the way, that also threatens official measures). Another crucial threat to the reliability and validity of victimization data is the problem of telescoping. When a respondent telescopes, she or he reports an experience of victimization that actually occurred outside the time period of interest to the researchers. Telescoping is minimized in some victimization surveys through the use of bounded interviews; unfortunately, the International Crime Victim Survey does not employ this procedure (Neapolitan, 1997). Still another problem with all surveys is response rate. The danger is that those individuals who refuse to participate in the survey may be different in crucial ways from those people who agree to participate. While the International Crime Victim Survey has experienced a range of responsiveness from about 30 percent to over 90 percent, depending upon the national survey, van Dijk and Mayhew (1993) report that criminal victimization does not seem to vary with responsiveness and therefore conclude that bias in the data is minimal. Although this is good news about the earlier surveys, response bias is always a concern with successive administrations of the survey. In short, the reliability and validity of victimization data need to be assessed as cautiously as the reliability and validity of official data.

***On triangulation.*** We have just offered a very brief overview of the varieties of error associated with the two most common methods for measuring crime



cross-nationally. This review was naturally not exhaustive, but it serves to make an important point. While both victimization and official data sources are plagued by threats to reliability and validity, the varieties of error are generally different for these two general types of crime data. If the data sources have relatively distinct error structures and they converge nonetheless on a similar image of crime in a society, then we can be a bit more confident in the validity of our crime measures. Consequently, the extent of agreement between official and victimization data should speak most directly to the validity of these measures of criminal offending. While validity is concerned with the accuracy or “truthfulness” of data, reliability is concerned with the consistency of similar crime measures. Because the various measures of official crime considered in this study have similar error structures, we should expect to find that these data sources yield a consistent image of criminal offending. Therefore, the extent of agreement among the official data sources should address the reliability of these crime figures.

### 3.3 Types of crime

Most comparative criminological studies have focused on homicide as the dependent variable since this type of crime is generally considered the most reliable and valid indicator of cross-national criminal offending and serious violence is typically a phenomenon of great interest to criminologists and the public alike (Neapolitan, 1997). While homicide has enjoyed the most criminological interest to date, one can certainly find a number of studies that have considered various types of property crime as well. Interestingly, as Neuman and Berger (1988: 291) have observed, “studies that examined both homicide and property crimes have not found both to be caused by the same factors.” LaFree (1999) has also noted that when comparative studies of crime examine both violent and property crimes, there is little support found for the contention that both types of crime are produced by a common causal mechanism. In his study of the relationship between development and crime, for example, Bennett (1991) has maintained that development serves to decrease crimes of violence but simultaneously acts to increase crimes of theft. In their study of violent and nonviolent crime, Kick and LaFree (1986: 223) have concluded that “contrary to the predominant theoretical explanations in recent quantitative cross-national analyses of crime, measures of development, inequality, and population growth generally have opposite effects on murder and theft rates.” “Although a general explanatory theory is a desirable long-term goal,” counsel Neuman and Berger (1988: 292), “researchers cannot assume that homicide and property crime result from the same causal process and should specify the link between causal processes and each type of crime.” While we resist the tendency to pursue general theories of crime along with Groves and Newman (1989), we agree with Neuman and Berger as well as other researchers who have called for comparative studies that consider violent and property crimes separately.

**Violent crime.** In this study, we have examined four types of violent crime as dependent variables. As with most prior investigations, we will consider homicide along with assault, rape, and robbery. Each of these dependent variables is measured by multiple sources so we shall be able to draw some conclusions about the relationship between explanatory models and different types of violent crime measured by multiple data series.

**Nonviolent crime.** In addition to the four types of violent crime identified above, we have also examined four types of nonviolent crime. Traditionally, previous studies that have explored nonviolent crime have focused on theft, and we will follow suit here as well. In addition to theft, however, we will also consider other types of nonviolent crime, including burglary, auto theft, and drug-related crimes. Using multiple measures for each of these dependent variables from different data series, we will be in a position to make conclusions about the relationship between explanatory models and different types of nonviolent crime.

In short, our analysis of a variety of crime types allows us to assess whether existing observations about the differential power of standard theoretical models to explain violent and nonviolent crime apply to these most recent data. Moreover, by examining different forms of violent and nonviolent crime, we are able to present evidence concerning differential theoretical efficacy in accounting for variations in crime rates within these standard categories.

### 3.4 Theoretical explanations for cross-national variations of crime rates

We do not intend to present a comprehensive review of the theoretical literature in comparative criminology in these few pages as this task has been undertaken at length in other venues (Howard, Newman, & Pridemore, 2000; LaFree, 1999; Neapolitan, 1997; Neuman & Berger, 1988). Instead, we will focus on three theoretical camps commonly considered in published studies of comparative criminology: modernization, inequality, and opportunity. Our aim is to review briefly the central tenants of each theoretical perspective and to summarize the available empirical evidence related to these theories.

**Modernization.** This perspective draws heavily from the ideas of Durkheim (1964; 1966), and it has been advanced most notably in comparative criminology by Shelley (1981) and by Clinard and Abbott (1973). The central contentions of Durkheimian-modernization theory are that the evolution of societies through developmental stages leads to a more complex division of labor, a breakdown of mechanical solidarity and the collective conscience, a drop in control over savage material desires or anomie, and more deviant behavior. On this view, norms and values fail in their regulative functions during periods of rapid social change, which are linked to the collapse of traditional society as evidenced by a breakdown of the extended family, local community ties, traditional beliefs, and ascribed status relations. In this context, individualism is brought to the fore and, without new controls and norms put into place, this individualism along with conflict arising from growing cultural heterogeneity lead to crime and deviance



(LaFree, 1999; Neuman & Berger, 1988). Organic solidarity may sprout from the mutual interdependence of a modern society, but even Durkheim seemed torn about whether this newfangled community control would be as effective as that arising from mechanical solidarity. Thus, comparative researchers working in the modernization perspective have argued that modernization and development should be associated with increasing levels of crime and that they should also be associated with permanently higher rates of criminal offending, especially property crime, owing to the suspected weakness of organic solidarity (Neapolitan, 1997). According to Neapolitan (1997), modernization theory asserts that industrialization and urbanization have more to say about cross-national variations in violent and nonviolent crime than the unique characteristics of the nations being studied.

A review of the comparative criminological literature easily reveals that modernization is the most common theory employed in cross-national studies (LaFree, 1999; Neuman & Berger, 1988). Perhaps due to the popularity of this theoretical perspective and the wide range of data sets used to assemble independent variables, a number of tacks have been taken with respect to operationalization. LaFree (1999) has listed the following as common indicators (per capita) of economic development and modernization: gross national (or domestic) product, telephones, energy consumption, industrialization and development indexes, and proportion in agriculture. LaFree (1999) has reported that most studies of modernization and homicide surprisingly find an inverse rather than a positive relationship. Neuman and Berger (1988) have confirmed this general conclusion and have contended that modernization may be positively related to property crime.

***Inequality.*** One of the standard accounts of the relationship between inequality and crime derives from the work of Blau (1977), in which social structure is depicted as a function of heterogeneity (nominal parameters that divide a population into discrete groups with no inherent rank ordering such as religion and race) and inequality (graduated parameters that depict status through continuous measurements such as income and wealth). In terms of interpersonal violence, heterogeneity can lead to conflict between those who belong to a particular nominal group and “outsiders” while inequality can lead to conflict as those “without” try to reduce imbalances while those “with” try to maintain the status quo. Messner (1989: 597) has also reported that “the structuring of economic inequality on the basis of ascribed characteristics is a particularly important source of lethal violence in contemporary societies.” In other words, an interaction between heterogeneity and inequality, such that a particular group is disadvantaged economically or educationally, is likely to exacerbate societal violence (Avison & Loring, 1986). The results of these two studies are consistent with the earlier work of Blau and Blau (1982). More generally, this perspective maintains that economic distress associated with inequality, poverty, and unemployment leads to crime. Given its focus on conflicts owing to material conditions and class relations, this stance is most clearly related to “radical” criminology (LaFree, 1999; Lynch and Groves, 1986).

A positive relationship between economic inequality and homicide is one of the most consistent findings in comparative criminology (LaFree, 1999;

Messner, 1989). However, Neuman and Berger (1988) have reported that economic inequality is unrelated to property crime. Lee and Bankston (1999) have also reported support for the relationship between economic inequality and homicide rates, while also presenting some evidence that economic inequality may have an enhanced relationship to criminal violence in nations with democratic environments. This latter claim is consistent with the results of research by Krahn, Hartnagel, and Gartrell (1986) in which the effects of economic inequality were found to be more pernicious in more democratic nations, a result that they argue supports relative deprivation theory.

**Opportunity.** Relative to the other perspectives described above, opportunity theory is little studied (LaFree, 1999; Neuman & Berger, 1988). Neuman and Berger (1988: 288) have said that opportunity theory “connects macro-level evolution to a micro-level explanation of crime through the concept of opportunities.” “In the ‘routine activity’ version of the theory,” they continue, “attractive ‘suitable targets’ become increasingly vulnerable through socioeconomic activities that are dispersed away from the home, reducing protection from ‘capable guardians’.” Whereas modernization and inequality theory speak to motivational factors associated with criminal and deviant behavior, Cohen and Felson (1979: 589) as well as other advocates of opportunity theory take “criminal inclinations as given and examine the manner in which the spatio-temporal organization of social activities helps people to translate their criminal inclinations into action.” Cohen and Felson (1979) have argued that development in the United States, and presumably other nations as well, has brought changes in “routine activities” that take people away from their homes and therefore increase opportunities for certain types of crime. On this view, lower crime is associated with active guardianship norms, decentralized populations, low youth mobility and independence, and women in homemaking roles rather than the labor force. Neuman and Berger (1988: 288) have explained that the opportunity perspective in cross-national studies, which they trace back to the Chicago School of Park and Burgess, predicts the appearance of crime “where there is a mix of growing material resources and environments which provide increased opportunities for unsanctioned criminal behavior.” Bennett (1991) has reported qualified support for routine activities theory, noting that the theory appears to be crime specific as it fits property crime better than personal crime. Similarly, van Dijk (1998) has reviewed a series of studies conducted with the International Crime Victim Survey and concluded that violent crime is most highly related to measures of poverty and inequality while property crime is most associated with opportunity indicators.

We should add that these theoretical perspectives are often compatible with one another. Neuman and Berger (1988) have maintained that modernization and opportunity theory are similar in their evolutionary perspective, focus on adaptation, and concern with industrialization, urbanization, cultural diversity, and population growth, but they also have argued that opportunity theory stresses material conditions (technological, organizational, and demographic) while modernization theory highlights cultural values, normative patterns, and psychological motivations. LaFree and Kick (1986) have melded modernization theory to opportunity theory to argue that modernization will lead to decreased homicide rates since these crimes are largely committed between intimates and

the heightened mobility and impersonal nature of modern life diminishes these types of relationships and therefore opportunity. Neapolitan (1999), for his part, has added that the marriage of modernization and opportunity theory “explains both property and violent crimes in terms of social control, motivation, and opportunity.” Finally, van Dijk (1998: 50) has described a useful interactionist model, “which sees crime rates as the result of the dynamic interplay between motivational and opportunity factors at the macro level.” While the analysis reported below segregates independent variables into theoretical domains, it should be clear to the reader that integration between the conceptual clusters is not only possible but likely advisable for future investigations.

## 3.5 Method

The objective of this study is to evaluate the relative degree of empirical agreement among crime measures reported by different data sources and to assess the differential power of independent variables from three theoretical domains to explain cross-national variations in various forms of violent and nonviolent crime. As indicated at the start of this chapter, we are concerned with three main questions:

1. Do official measures of national crime rates (United Nations, Interpol, European Sourcebook and, for homicide, the World Health Organization) substantially agree with one another as well as with victimization data from the International Crime Victim Survey in their representations of criminal offending?
2. Do measures of key concepts from modernization, inequality, and opportunity theory differentially explain violent and nonviolent crime rates?
3. Do these measures of theoretical concepts explain more or less variation in a crime rate, say homicide or theft, depending upon the source of crime data?

### Data

This study analyzes data from nations drawn mostly from Western, Central and Eastern Europe but also includes statistics for Canada, the United States, Israel, and Turkey for a total of 54 countries.<sup>1</sup> Crime statistics are provided by five different sources in HEUNI’s *Crime Guide*: (1) Sixth United Nations Survey on

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1 In order to assess whether the relationships between theoretical domains and crime rates were conditioned by the regional placement of the nations included in the sample, we constructed a regional dummy variable where nations were coded as zero if they were located in Europe or North America and one if they were listed as central independent states in the HEUNI Crime Guide. Because these latter countries are in a period of transition as they embrace market economies and the like, explanations of criminal offending might be different in these locations than in the more stable countries further to the west. When we introduced this regional dummy variable into our regression models, we found that it was often significant but only in the control variable only models. While the regional dummy variable did not achieve statistical significance in the vast majority of models including inequality, modernization, and opportunity, it should be noted that some significant coefficients in these models were rendered nonsignificant. Taken together, these results provide further support for our general conclusion in this chapter that theoretical statements in comparative criminology are likely to be most useful when they are tightly and narrowly specified. In other words, theoretical development might be well-served by efforts to specify predictions about regional variation in criminal offending rates.

Crime Trends and Operations of the Criminal Justice Systems (1995–1997), (2) International Crime Victim Surveys (collected between 1991–2000), (3) Interpol International Crime Statistics (1997–1998), (4) European Sourcebook of Crime and Criminal Justice Statistics (1995–1996), (5) and the World Health Organization (1995–1997). The study also analyzes crime indices, created by combining some of the five crime sources together, developed by HEUNI’s expert group. Additionally, data for the independent variables are provided by the World Bank, the United Nations Development Programme’s *Human Development Report* (2000), United Nations Statistical Division, the International Crime Victim Survey, and Kurian (1997).

**Table 1. Variable list**

Variable Name	Description	N	Mean	SD	Skewness
<b>Homicide</b>					
UNHOMAVG	UN average rate of recorded committed intentional homicide, 1995-1997	39	5.25	5.18	1.45
IPHOMAVG*	Interpol average homicide rate, 1997-1998	49	6.62	8.20	4.21
WHOHMAVG*	WHO average homicide rate, 1995-1997	42	8.99	10.95	2.22
ESIHCAVG*	European Sourcebook [ES] average rate of completed intentional homicide, 1995-1996	31	3.51	3.79	2.33
HOMIND	HEUNI Homicide Index	47	51.20	26.17	.04
<b>Assault</b>					
UNASSAVG*	UN average rate of serious assaults, 1995-1997	28	59.57	112.06	3.25
IPSASAVG*	Interpol average rate of recorded major assaults, 1997-1998	48	91.85	127.04	2.07
INC4	ICVS (national or city) assault and threat average (%)	34	3.50	1.39	-.02
ESASAVG*	ES average assault rate, 1995-1996	37	175.94	224.49	1.96
<b>Rape</b>					
UNRAPAVG*	UN average rate of recorded rapes, 1995-1997	42	9.58	14.61	4.67
IPRAPAVG*	Interpol average rape rate, 1997-1998	47	7.22	6.27	2.19
INC6	ICVS (national or city) sexual assault average (%)	34	.87	.68	1.02
ESRAPAVG*	ES average rape rate, 1995-1996	36	7.50	6.40	3.00
VIOWOM	HEUNI Violence Against Women Index	48	50.45	26.68	-.08

\* Natural log \*\* Squared

**Table 1.** Variable list (continued)

<b>Variable Name</b>	<b>Description</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Skewness</b>
<b>Robbery</b>					
UNROBAVG	UN average rate of recorded robberies, 1995-1997	43	62.01	56.26	1.38
IPROBAVG	Interpol average robbery rate, 1997-1998	48	61.17	55.34	1.46
INC16*	ICVS (national or city) robbery average (%)	34	1.58	1.18	1.79
<b>Major Theft</b>					
UNMTFAVG*	UN average rate of recorded major thefts, 1995-1997	21	559.26	912.47	2.00
IPAGTAVG	Interpol average major theft rate, 1997-1998	43	725.15	732.19	1.39
ESTFTAUG	ES average total theft rate, 1995-1996	35	2,444.40	2,244.85	1.16
<b>Burglary</b>					
UNBURAVG	UN average rate of recorded burglaries, 1995-1997	33	743.70	603.54	.73
IPBURAVG	Interpol average burglary rate, 1997-1998	44	789.57	710.52	1.13
INC2	ICVS (national or city) burglary average (%)	34	2.55	1.19	.58
ESBRTAVG	ES average burglary rate, 1995-1996	33	948.95	692.29	1.14
BURGIN	HEUNI Burglary Index	44	50.06	22.60	-.00
<b>Drug-Related</b>					
UNDRGAVG*	UN average rate of recorded drug-related crimes, 1995-1997	43	123.01	181.33	1.81
IPDRGAVG*	Interpol average drug-related crime rate, 1997-1998	47	153.19	193.32	1.83
ESDRTAVG	ES average drug-related offense rate, 1995-1996	33	142.54	180.79	1.48
<b>Auto Theft</b>					
UNATMAVG	UN average rate of recorded auto thefts, 1995-1997	42	242.53	257.29	1.12
IPAUTAVG	Interpol average auto theft rate, 1997-1998	47	224.81	278.57	1.49
INC10	ICVS (national or city) auto theft average (%)	34	1.12	.70	.74
ESTFMAVG	ES average car theft rate, 1995-1996	35	315.04	267.82	.99
MVCI	HEUNI Motor Vehicle Crime Index	48	47.86	26.55	.08

\* Natural log \*\* Squared

**Table 1.** Variable list (continued)

<b>Variable Name</b>	<b>Description</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Skewness</b>
<b>Controls</b>					
HDRDIV98	Divorces (as % of marriages) 1998	46	35.37	20.97	.72
UNDER15*	Percent of total population under age 15 (1998)	49	21.55	5.90	1.66
ETHNHOM**	% Ethnic Homogeneity	32	80.47	16.90	-1.78
<b>Macro-Structural</b>					
<i>Economic Inequality</i>					
INC34	ICVS (national or city) satisfied with income, averaged (4 = very satisfied, 1 = not satisfied)	33	2.57	.55	.23
TOP20	Percent of income or consumption to upper 20%	32	39.53	4.39	1.02
<i>Gender Inequality</i>					
GEM	Gender Empowerment Measure	31	.60	.14	-.00
GDI98	Gender Development Index	42	.84	.08	-.58
GENINEQ	Factor score variable (GEM & GDI98)	31	.00	1.00	-.29
<i>Modernization</i>					
URBPOP98	Urban population (as % of total)	48	67.10	15.58	-.22
AGRICULT	Percent workforce in agriculture (1990)	43	15.33	12.33	1.49
ENERGY	Energy use/consumption (oil equivalent) per capita (kg) (1994)	44	3,084.45	1,746.78	.80
SANITATE**	Percent of population with access to sanitation	34	88.65	17.89	-1.52
HDI98	HDR 2000: Human Development Index (1998)	48	.83	.08	-.28
HDRTEL98	HDR 2000: Televisions per 1000 people	48	420.35	161.75	.05
MODERN	Factor score variable (all six modernization variables named above)	30	.00	1.00	-.47
<b>Opportunity</b>					
INC31A	ICVS (national or city) % living alone	33	8.39	6.05	.91
INC33	ICVS (national or city) evenings out, average	34	2.90	.42	-.15
LIFESTYLE	Factor score variable (INC31A & INC33)	33	.00	1.00	.28
HDRFEA98	HDR 2000: Female economic activity rate (%), 1998	48	53.10	9.18	-.97
INC36	ICVS (national or city) car ownership (%), average	34	67.10	19.69	-.61
INC38*	ICVS (national or city) handgun ownership (%), average	34	5.36	5.35	2.34

\* Natural log \*\* Squared

## Dependent Variables

As summarized in Table One, violent crime is represented in this study by figures on homicide, assault, rape, and robbery while nonviolent crime is measured by major theft, burglary, drug-related offenses, and motor vehicle theft.<sup>2</sup> All variables from the UN Survey, Interpol, WHO, and European Sourcebook (official sources of data) were computed by using averaged yearly rates to offset possible random fluctuations in the data series. However, when incomplete data series were encountered for a given country, an average for the available subset of years was computed or only a single data point was used to avoid losing cases. Criminal victimization statistics employ a different unit of measurement than the official crime rates (standardized per 100,000) mentioned above. ICVS statistics, after averaging three survey sweeps, represent the percent of respondents who had been victimized in the past five years. When national level data were not available for a specific case, city level survey data were substituted.<sup>3</sup> Finally, HEUNI crime indices for homicide, violence against women, burglary, and motor vehicle theft are included in the analyses.<sup>4</sup>

## Independent Variables

The theoretical perspectives discussed above – modernization, inequality, and opportunity – are represented by a number of independent variables which will be discussed below. In addition to these three popular theories of comparative criminology, we also employ a few control variables to account for other commonly specified relationships.

**Modernization.** The modernization hypothesis is measured by a single composite factor score variable, called modernization, which is composed of six variables: urban population (as percent of total population in 1998), percent of workforce employed in agriculture in 1991, energy consumption (oil equivalent) per capita (in kilograms) in 1994, percent of the population with access to sanitation in 1994–1995, televisions per 1000 people in 1998, and the Human Development Index for 1998. The Human Development Index is predicated on indicators of life expectancy at birth, educational attainment (combination of adult literacy rates and school enrollment rates), and standard of living (measured by real Gross Domestic Product per capita in U.S. dollars). Table Two provides the fac-

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2 When statistical data for the United States were missing, crime rates from the *Uniform Crime Report* (UCR) were substituted. UCR figures for murder/nonnegligent manslaughter, forcible rape, robbery, aggravated assault, motor vehicle theft, or burglary rates were used in the computation of UN Survey, Interpol, and European Sourcebook dependent variables.

3 Our colleagues in the expert group conducting analyses of the Sixth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems for HEUNI were concerned that our practice of substituting city data when national level figures were absent might bias our results. To determine whether this was the case, we created a dummy variable to examine the effect of our substitution on the regression models for the ICVS data reported later in the chapter. The dummy variable was scored zero if no substitution of national level data was made and one if city figures were used in the absence of the more desirable national level data. For the assault, burglary, and auto theft equations, the substitution of city data seemed to make little difference. In the robbery model, income satisfaction was no longer statistically significant. With respect to sexual assault, modernization and divorce were rendered statistically significant, although beta coefficients over one indicated that serious problems of multicollinearity existed in the model.

4 See the introduction to this volume for a detailed discussion of the HEUNI crime indices.

tor load scores and the amount of variance explained by the unrotated component. The factor score variable represents the relative level of modernization for each nation. High scores represent greater levels of modernization.

**Table 2. Factor analysis results**

<b><i>Modernization</i></b>	<b>Factor Loading</b>	<b>Variance Explained</b>
Urban population (as % of total)	.69	65.57
Percent of workforce in agriculture (1990)	-.85	
Energy use/consumption (oil equivalent) per capita (kg) (1994)	.89	
Percent of population with access to sanitation (squared)	.49	
Human development index (1998)	.94	
Televisions per 1000 people	.91	
<b><i>Lifestyle</i></b>		75.16
Percent living alone (ICVS national or city)	.87	
Average number of evenings out (ICVS national or city)	.87	
<b><i>Gender Inequality</i></b>		93.73
Gender Empowerment Measure (HDR 2000)	.97	
Gender Development Index (HDR 2000)	.97	

Notes: This table reports the results of three separate factor analysis runs that employed a principal components extraction method. None of the components required rotation because only one component was identified.

***Inequality.*** We have operationalized inequality along two dimensions referred to as economic and gender inequality. The two measures of economic inequality are income satisfaction and top 20 percent share of income/consumption. Income satisfaction is derived from an ICVS question that asks respondents how they feel about their level of household income (1 = *not satisfied*, 4 = *satisfied*); accordingly, low scores are taken to indicate greater income inequality. Top 20 percent is a World Bank indicator representing the degree of inequality in terms of the percentage share of income or consumption claimed by the upper 20 percent of income earners and consumers in a nation. High scores represent greater economic disparities. Gender inequality is a composite factor score variable created with two Human Development Report (2000) statistics: Gender



Empowerment Measure and Gender Development Index. The Gender Empowerment Measure represents the relative empowerment of men and women in the political and economic spheres. The measure is an index consisting of women's and men's percentage shares of administrative and managerial positions and percentage shares of professional and technical jobs (economic participation) as well as women's and men's percentage shares of parliamentary seats (political participation). Low scores indicate a society with greater gender inequality. The Gender Development Index represents the differences between males and females with respect to their achievements in life expectancy, educational attainment, and earned income. Low scores indicate a society with greater gender inequality. Table Two provides the factor loading scores and the percentage of variance explained by the unrotated component.

**Opportunity.** Opportunity theory is tested with four different variables. The first predictor, termed lifestyle, is a factor score variable composed of two ICVS variables: percent of respondents living alone and the average number of evenings out (see Table Two for factor load scores). The second opportunity predictor, female economic activity rate, measures women's share of the adult labor force for those aged 15 and above. As more women enter the labor force, we assume that households are less likely to be occupied on a consistent basis. Both of these variables are intended to be proxy measures of guardianship. Finally, the last two opportunity variables are the percent of respondents who own a handgun and percent of respondents who own a car. These last two opportunity variables are used only in equations predicting homicide and motor vehicle theft rates, respectively.

**Controls.** There are also a number of control variables used for the multivariate portion of our study. To control for the criminogenic effects of instability in family structure, we include a measure of divorces as the percentage of marriages. Another measure, percent of total population under 15 years of age in 1998, is used to control for age structure and is provided by the United Nations Statistics Division (United Nations, 1999). The final control variable, Kurian's (1997) Ethnic Homogeneity Index, is used to control for population diversity. This index represents the homogeneity of a nation-state in terms of ethnicity, religion, and language. Countries that contain fewer ethnic groups, have fewer religious traditions, and enjoy less variety in language score higher on the Ethnic Homogeneity Index. Descriptive statistics for all variables, prior to any transformation, are provided in Table One above.

## 3.6 Results

The results of our analyses will be presented in two main sections. First, we will discuss findings concerning the bivariate relationships between official and victimization measures of violent and nonviolent crime. As noted earlier, these correlations speak to our first question about the reliability and validity of the information about cross-national variations in crime. Next, we will consider the results of multivariate analyses. These models permit us to address our second question regarding the differential power of competing theories to account for violent and nonviolent crime and to pursue our third question centered on whether theoretical conclusions are conditioned by the source of data for dependent variables.

### **Bivariate Analyses**

Zero-order correlations between the various measures of violent crime are presented in Table Three. Correlations among homicide variables, excluding HEUNI's homicide index, range in strength from moderate between Interpol and European Sourcebook ( $r = .60, p < .001$ ) to strong between WHO and European Sourcebook ( $r = .91, p < .001$ ). The average correlation among the four homicide variables (.91), as measured by Cronbach's standardized alpha, is the highest among all violent crimes examined (see Table Five). Most measures of rape correlate very strongly with one another with the exception of the ICVS sexual assault variable. Curiously, all official crime measures exhibited negative associations with the ICVS sexual assault variable, although they were not statistically significant. Likewise, a similar pattern emerged for the set of robbery variables. Though most of the official crime measures correlated strongly with each other, the ICVS measure was weakly associated with the UN Survey ( $r = .33, p = .077$ ) and not significantly associated with the other official robbery measures. Finally, correlations between the assault measures were the weakest among all violent crime variable clusters, ranging from a weak association between Interpol and the European Sourcebook measures ( $r = .34, p = .04$ ) to a modest association between Interpol and the UN Survey measures ( $r = .68, p < .000$ ). The ICVS measure was not statistically significantly related to any assault variables and even produced an unexpected negative correlation with the European Sourcebook measure.

Zero-order correlations between the various measures of nonviolent crime are reported in Table Four. The magnitude of the relationships between official measures of nonviolent crime were, on the average, moderate to strong. Drug-related measures exhibited the highest average correlations (.94), as measured by Cronbach's standardized alpha, followed by auto theft, major theft, and burglary (see Table Five). Again, the cluster of ICVS measures correlated weakly with variables from official data sources, generating statistically insignificant coefficients and two unanticipated negative relationships for burglary. The ICVS measure for auto theft, however, achieved statistical significance in its relationship to the UN Survey and European Sourcebook measures, although the correlations were weak to moderate in strength.

**Table 3. Zero-order correlations of violent crime by data source**

		<b>UN Survey</b>	<b>Interpol</b>	<b>European Sourcebook</b>	<b>ICVS</b>	<b>HEUNI</b>	<b>WHO</b>
UN Survey		1.00					
Interpol	A	.73 (p = .000) (n=38)	1.00				
	B	.93 (p = .000) (n=39)					
	C	.85 (p = .000) (n=41)					
	D	.68 (p = .000) (n=26)					
European Sourcebook	A	.85 (p = .000) (n=26)	.60 (p = .000) (n=30)	1.00			
	B	.97 (p = .000) (n=31)	.92 (p = .000) (n=34)				
	C	.84 (p = .000) (n=31)	.83 (p = .000) (n=34)				
	D	.57 (p = .008) (n=21)	.34 (p = .040) (n=36)				
ICVS	A	na	na	na	1.00		
	B	-.05 (p = .794) (n=28)	-.07 (p = .703) (n=31)	-.04 (p = .838) (n=26)			
	C	.33 (p = .077) (n=29)	.29 (p = .106) (n=32)	.19 (p = .366) (n=26)			
	D	.07 (p = .766) (n=20)	.12 (p = .512) (n=32)	-.20 (p = .326) (n=27)			
HEUNI	A	.85 (p = .000) (n=39)	.74 (p = .000) (n=46)	.96 (p = .000) (n=31)	na	1.00	
	B	.89 (p = .000) (n=42)	.87 (p = .000) (n=45)	.89 (p = .000) (n=36)	.22 (p = .218) (n=33)		
	C	na	na	na	na		
	D	na	na	na	na		
WHO	A	.82 (p = .000) (n=34)	.65 (p = .000) (n=41)	.91 (p = .000) (n=28)	na	-.85 (p = .000) (n=42)	1.00
	B	na	na	na	na		
	C	na	na	na	na		
	D	na	na	na	na		

Notes: (Row A) Homicide (Row B) Rape (Row C) Robbery (Row D) Assault

**Table 4. Zero-order correlations of nonviolent crime by data source**

		<b>UN Survey</b>	<b>Interpol</b>	<b>European Sourcebook</b>	<b>ICVS</b>	<b>HEUNI</b>
UN Survey		1.00				
Interpol	A	.76 (p = .000) (n=30)	1.00			
	B	.76 (p = .000) (n=40)				
	C	.49 (p = .033) (n=19)				
	D	.82 (p = .000) (n=41)				
European Sourcebook	A	.66 (p = .000) (n=24)	.93 (p = .000) (n=29)	1.00		
	B	.97 (p = .000) (n=29)	.79 (p = .000) (n=34)			
	C	.68 (p = .011) (n=13)	.79 (p = .000) (n=29)			
	D	.81 (p = .008) (n=29)	.82 (p = .000) (n=31)			
ICVS	A	-.01 (p = .971) (n=23)	-.06 (p = .772) (n=30)	.01 (p = .981) (n=24)	1.00	
	B	.39 (p = .042) (n=28)	.23 (p = .191) (n=33)	.43 (p = .024) (n=27)		
	C	na	na	na		
	D	na	na	na		
HEUNI	A	-.76 (p = .000) (n=33)	.58 (p = .000) (n=39)	.72 (p = .000) (n=33)	.62 (p = .000) (n=32)	1.00
	B	-.86 (p = .000) (n=42)	.68 (p = .000) (n=46)	.82 (p = .000) (n=35)	.53 (p = .001) (n=33)	
	C	na	na	na	na	
	D	na	na	na	na	

Notes: (A) Burglary (B) Auto theft (C) Major Theft (D) Drug-Related

**Table 5. Reliability analysis**

<b>Crime</b>	<b>N</b>	<b>Variables</b>	<b>Standardized Item Alpha</b>
Homicide	22	4	.91
Rape	21	4	.71
Robbery	21	4	.83
Assault	16	4	.66
Burglary	17	4	.68
Auto Theft	22	4	.85
Major Theft	11	3	.83
Drug-related	27	3	.94

Notes: HEUNI crime indices were not included in the analysis.

In summary, the measures of violent crime from official data sources were either moderately or strongly related to one another. Variables from the ICVS were, however, largely unrelated to all other measures of violent crime. Additionally, measures for assault produced the weakest correlation coefficients among all clusters of violent crime variables. Measures of nonviolent crime produced modest relationships overall. As was the case for violent crimes, the ICVS measures were generally weakly correlated to measures from official data sources. The cluster of nonviolent crime measures exhibiting the strongest relationship was drug-related offenses. In short, crime variables from official sources were related to one another in a statistically significant manner. There was general agreement between UN Survey, Interpol, European Sourcebook, and WHO data. This agreement evidences acceptable reliability among the official measures of crime. ICVS variables, with the exception of automobile theft and robbery, were not associated with official crime sources (and then weakly and inconsistently). This lack of agreement between official and victimization measures of crime casts some doubt on the validity of the crime data. Either the official data or the victimization data, or both, seem to miss the mark. In any case, the two types of crime data paint fundamentally different pictures about cross-national variations in crime.<sup>5</sup>

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5 At a meeting of experts affiliated with HEUNI, several colleagues suggested that the well-known problem of underreporting crimes to the police might account for the observed differences between the ICVS and official measures of crime. In order to address this possibility, we computed new dependent variables with the ICVS data that discounted the percent of crimes not reported to the police. The HEUNI Crime Guide provides two reporting rate variables with which to accomplish this end. One is crime specific, percentage of burglaries reported to the police, while the other covers personal contact crimes, presumably sexual assault, assault, and robbery. We used the burglary reporting rate to discount the ICVS burglary variable and the general personal contact crime reporting rate to discount the ICVS sexual assault, assault, and robbery figures. Substituting these new dependent variables that discount the percent of crimes not reported to the police, we find little convergence between the two types of data sources.

## Multivariate Analyses

We estimated our models using Ordinary Least Squares (OLS) regression techniques. Because many of the independent variables were highly correlated with one another (see Table Six), four separate regression equations were estimated in order to avoid problems with multicollinearity. The models were defined as follows:

- X Model 1 estimates an equation for only the control variables.
- X Model 2 estimates an equation for the inequality measures and controls.
- X Model 3 estimates an equation for the modernization measure and controls.
- X Model 4 estimates an equation for the opportunity variables and controls.

*Homicide.* Table Seven presents the results of an OLS regression on homicide variables. Overall, the models calculated for each data source generated a number of similar results. First, regression coefficients for all theoretical variables were consistently in the same predicted direction. Second, the inequality models explained the most amount of variance in the dependent variable for three of the data sources (i.e., UN Survey, European Sourcebook, and Interpol), although the opportunity models also posted respectable  $R^2$  statistics for all but the Interpol data. Finally, a majority of the models tested reported income satisfaction, top 20, modernization, lifestyle, and handgun ownership to be statistically significant predictors of homicide.

Though many similarities existed between data sources, a few conspicuous differences appeared. First, the Interpol homicide data failed to replicate many of the findings from the other official data sources. None of the theoretical predictors tested were significantly related to Interpol homicide rates. Second, only two data sources found female economic activity to be significantly related to homicide (European Sourcebook and HEUNI). Finally, the relative influence for each theoretical variable as measured by the standardized regression coefficients varied by each data source. For instance, some sources find income satisfaction exerts the most influence in the inequality model while other models find top 20 percent as the strongest explanatory predictor.

**Table 6. Zero-order correlations of independent variables**

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11
X1	1.00										
X2	-.36*	1.00									
X3	-.26	-.29	1.00								
X4	-.04	-.20	.16	1.00							
X5	.27	.02	-.04	.12	1.00						
X6	.09	-.18	-.05	.94**	-.09	1.00					
X7	.44*	-.57	-.16	.72**	.33	.93**	1.00				
X8	.24	-.27	.00	.84**	.16	.92**	.84**	1.00			
X9	.29	.34	-.45*	-.34	.07	.03	-.21	-.10	1.00		
X10	-.13	-.49**	.12	.74**	.08	.87**	.82**	.74**	-.51**	1.00	
X11	-.19	-.09	-.09	.06	.23	.26	.28	.15	-.07	.21	1.00

\*  $p \leq .05$     \*\*  $p \leq .01$

- X1 HDRDIV98 (Divorces as % of marriages)
- X2 UNDER15 (% of population under 15)
- X3 ETHNHOM (% ethnic heterogeneity)
- X4 INC34 (ICVS income satisfaction)
- X5 TOP20 (% of income or consumption to upper 20 %)
- X6 GENINEQ (Gender inequality factor score variable)
- X7 MODERN (Modernization factor score variable)
- X8 LIFESTYLE (Opportunity factor score variable)
- X9 HDRFEA98 (Female economic activity rate)
- X10 INC36 (ICVS car ownership average percentage)
- X11 INC38 (ICVS handgun ownership average percentage)

**Table 7. OLS regression of homicide**

	UN CRIME SURVEY				INTERPOL (ln)			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.51** [.04]	.28 [.03]	.62* [.03]	.60** [.04]	.32 [.01]	.24 [.01]	.13 [.01]	.33 [.01]
% Under 15 Years (ln)	.17 [4.97]	.17 [7.52]	.04 [3.65]	-.13 [10.13]	-.05 [.71]	-.13 [2.16]	-.32 [.87]	-.22 [2.04]
% Ethnic Homogeneity (sq)	-.25 [.00]	.02 [.00]	-.19 [.00]	.04 [.00]	-.43* [.00]	-.20 [.00]	-.51 [.00]	-.35 [.00]
<b>Inequality</b>								
Income Satisfaction		-.48 [1.00]				.32 [.31]		
Top 20 Percent		.55 [.12]				.34 [.04]		
<b>Modernization</b>								
Level of Modernization			-.47 * [.58]				.44 [.17]	
<b>Opportunity</b>								
Lifestyle				-.61** [.73]				.32 [.16]
Female Economic Activity				.43 [.16]				.13 [.03]
% Handgun Ownership (ln)				.36 [1.12]				.01 [.25]
(N)	25	17	16	19	29	18	19	22
Constant	-9.11 [17.00]	-38.93 [22.93]	.02 [11.53]	-2.46 [26.86]	2.85 [2.44]	3.91 [6.90]	5.89 [2.89]	5.65 [5.58]
Adjusted R <sup>2</sup>	.37**	.83***	.50*	.63**	.29**	.23	.19	.08

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.



**Table 7.** OLS regression of homicide (continued)

	EUROPEAN SOURCEBOOK (ln)				WHO (ln)			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.34 [.01]	-.14 [.01]	.31 [.02]	.44* [.01]	.42* [.01]	.21 [.01]	.71** [.01]	.58** [.01]
% Under 15 Years (ln)	-.10 [1.32]	.19 [1.45]	-.12 [2.27]	-.14 [1.45]	.00 [1.35]	.25 [1.64]	-.53* [1.37]	.01 [1.71]
% Ethnic Homogeneity (sq)	-.56* [.00]	-.46* [.00]	-.88* [.00]	-.03 [.00]	-.25 [.00]	.03 [.00]	-.24 [.00]	.01 [.00]
<b>Inequality</b>								
Income Satisfaction		-.35 [.23]				-.58** [.25]		
Top 20 Percent		.48* [.03]				.43* [.03]		
<b>Modernization</b>								
Level of Modernization			-.40 [.22]				-.44* [.23]	
<b>Opportunity</b>								
Lifestyle				-.69** [.14]				-.63*** [.13]
Female Economic Activity				.56* [.02]				.27 [.03]
% Handgun Ownership (ln)				.51* [.19]				.42* [.19]
(N)	17	13	11	15	25	17	17	20
Constant	4.39 [4.28]	-3.61 [4.46]	6.81 [7.31]	-3.33 [4.55]	1.87 [4.59]	-5.64 [5.21]	11.15* [4.33]	-2.00 [4.37]
Adjusted R <sup>2</sup>	.46*	.79**	.53	.75**	.19	.66 **	.54 **	.66**

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 7.** OLS regression of homicide (continued)

	<b>HOMICIDE INDEX (HEUNI)</b>			
	(1)	(2)	(3)	(4)
<b>Controls</b>				
Divorces	.28 [.19]	.07 [.23]	.38 [.29]	.37* [.17]
% Under 15 Years (ln)	.05 [24.95]	.13 [47.89]	-.09 [31.32]	-.20 [42.24]
% Ethnic Homogeneity (sq)	-.42 [.00]	-.08 [.00]	-.25 [.00]	-.12 [.00]
<b>Inequality</b>				
Income Satisfaction		-.62** [6.91]		
Top 20 Percent		.41* [.82]		
<b>Modernization</b>				
Level of Modernization			-.50 [5.01]	
<b>Opportunity</b>				
Lifestyle				-.68*** [3.33]
Female Economic Activity				.45* [.69]
% Handgun Ownership (ln)				.51** [5.22]
(N)	28	18	18	22
Constant	55.14 [85.08]	-36.80 [152.68]	83.44 [99.42]	72.52 [115.37]
Adjusted R <sup>2</sup>	.25*	.56**	.21	.57*

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

Notes: Standardized regression coefficients are shown with standard errors in brackets.

*Rape.* Table Eight presents the results of an OLS regression on rape variables by source of data. There is general agreement across models. First, theoretical predictors in official data models are consistently in the same direction. Second, four of the five OLS regression models find gender inequality and modernization to be significantly related to rape and three models report lifestyle to be a significant predictor of sexual assault. Third, three of the five data sources find that the inequality model significantly explained more of the variance in the dependent variable than any other regression model tested.

Despite the agreement across data sources, some noticeable differences did emerge. First, the ICVS models failed to duplicate many of the significant relationships found in the other models. In fact, none of the ICVS models found theoretical predictors to be significantly related to sexual assault. Finally, the explanatory contribution of the controls varied by data source with divorce being the only stable predictor of rape (control only models).

*Robbery.* Table Nine presents the results of an OLS regression on robbery variables. Three of the four data sources find modernization to be positively and significantly related to robbery. Other theoretical variables were consistent in that they were statistically poor predictors of robbery. Although income satisfaction is a significant predictor in two regression models, they have opposing valences. The ICVS model finds a negative relationship while the European Sourcebook reports a positive relationship. Lifestyle, too, in the ICVS regression model departs from other models by generating a theoretically unexpected negative relationship in the prediction of robbery rates.

*Assault.* Table Ten presents the results of an OLS regression on assault. Most theoretical variables are statistically poor predictors of assault across all data sources. Only two variables were significantly predictive of assault in more than a single model: divorce and modernization.

Regression equations for the European Sourcebook data generated many statistically significant models finding the theoretical variables ethnic homogeneity, income satisfaction, and female activity rate to be predictive of assault rates. Surprisingly, however, ethnic homogeneity was positively related to assault. This measure was negatively associated to all other forms of violence tested previously (i.e., homicide, rape, robbery).

**Table 8. OLS regression of rape**

	<b>UN CRIME SURVEY (ln)</b>				<b>INTERPOL (ln)</b>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.37 [.01]	-.03 [.01]	.12 [.01]	.19 [.01]	.55* [.01]	-.10 [.01]	.01 [.01]	.41 [.01]
% Under 15 Years (ln)	-.17 [1.02]	.21 [.96]	.10 [.79]	.09 [2.29]	.00 [1.07]	.24 [1.26]	.13 [.91]	.13 [1.99]
% Ethnic Homogeneity (sq)	-.33 [.00]	-.48* [.00]	-.45** [.00]	-.23 [.00]	.14 [.00]	-.10 [.00]	-.33 [.00]	.35 [.00]
<b>Inequality</b>								
Gender Inequality		.68*** [.13]				.83** [.15]		
Top 20 Percent		.16 [.03]				.29 [.03]		
<b>Modernization</b>								
Level of Modernization			.65*** [.16]				.85** [.20]	
<b>Opportunity</b>								
Lifestyle				.65** [.17]				.52* [.14]
Female Economic Activity				-.04 [.03]				-.05 [.02]
(N)	27	17	18	20	27	15	17	20
Constant	4.79 [3.54]	-1.51 [3.24]	1.34 [2.59]	.11 [6.19]	.18 [3.79]	-3.23 [4.35]	1.25 [3.47]	-3.131** [6.16]
Adjusted R <sup>2</sup>	.27*	.67**	.73***	-.43*	.18	.62*	.55**	.50**

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 8.** OLS regression of rape (continued)

	EUROPEAN SOURCEBOOK (ln)				ICVS			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.65 [.01]	-.09 [.01]	.41 [.01]	.39 [.01]	.39 [.01]	.05 [.01]	.45 [.01]	.34 [.01]
% Under 15 Years (ln)	.00 [1.00]	.72**[1.17]	.06 [.96]	.43 [1.77]	.02 [1.33]	.03 [1.90]	-.25 [1.98]	-.10 [1.57]
% Ethnic Homogeneity (sq)	.11 [.00]	-.11* [.00]	-.32 [.00]	.36 [.00]	.08 [.00]	.09 [.00]	-.15 [.00]	.09 [.00]
<b>Inequality</b>								
Gender Inequality		.57* [.12]				-.18 [.16]		
Top 20 Percent		-.06 [.02]				.51 [.03]		
<b>Modernization</b>								
Level of Modernization			.54* [.21]				-.15 [.20]	
<b>Opportunity</b>								
Lifestyle				.35 [.15]				-.21 [.12]
Female Economic Activity				.08 [.02]				.19 [.02]
(N)	21	13	14	17	22	16	15	22
Constant	.51 [3.39]	-11.84* [3.65]	1.65 [3.26]	-8.70 [5.36]	-.06 [4.21]	-2.23 [6.04]	4.15 [5.85]	.86 [4.44]
Adjusted R <sup>2</sup>	.27*	.78**	.64**	.40	.00	-.02	-.20	-.05

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 8.** OLS regression of rape (continued)

	<b>Violence against women index (HEUNI)</b>			
	(1)	(2)	(3)	(4)
<b>Controls</b>				
Divorces	.41* [.21]	.11 [.21]	.11 [.30]	.19 [.21]
% Under 15 Years (ln)	-.04 [25.14]	.45* [28.18]	.20 [27.77]	.08 [50.97]
% Ethnic Homogeneity (sq)	-.21 [.00]	-.17 [.00]	-.27 [.00]	.04 [.00]
<b>Inequality</b>				
Gender Inequality		.58* [3.85]		
Top 20 Percent		.09 [.83]		
<b>Modernization</b>				
Level of Modernization			.57* [5.51]	
<b>Opportunity</b>				
Lifestyle				.49* [4.03]
Female Economic Activity				.25 [.79]
(N)	29	17	19	22
Constant	61.50 [86.55]	-152.841 [95.12]	-13.71 [91.79]	-50.42 [144.42]
Adjusted R <sup>2</sup>	.18*	.50*	.37*	.26

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 9. OLS regression on robbery**

	UN CRIME SURVEY				INTERPOL			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.56** [.37]	.24 [.57]	.09 [.56]	.54* [.47]	.65*** [.37]	.52* [.65]	.25 [.52]	.80*** [.45]
% Under 15 Years (ln)	-.14 [41.46]	.13 [117.70]	.03 [51.95]	-.23 [125.34]	-.15 [44.59]	.02 [134.01]	-.03 [48.37]	.11 [110.88]
% Ethnic Homogeneity (sq)	-.32 [.00]	-.40 [.00]	-.40 [.00]	-.28 [.01]	-.10 [.00]	-.10 [.01]	-.15 [.00]	-.10 [.00]
<b>Inequality</b>								
Income Satisfaction		.18 [16.99]				.37 [19.34]		
Top 20 Percent		.42* [2.01]				.35 [2.29]		
<b>Modernization</b>								
Level of Modernization			.49* [10.32]				.60** [9.60]	
<b>Opportunity</b>								
Lifestyle				.13 [8.95]				.27 [8.74]
Female Economic Activity				.26 [1.97]				-.35 [1.81]
% Handgun Ownership (ln)				.36 [14.01]				.20 [13.70]
(N)	27	18	18	20	29	18	19	22
Constant	163.28 [143.78]	-332.91 [375.23]	79.83 [171.32]	257.69 [326.55]	141.53 [153.50]	264.31 [427.24]	77.22 [159.88]	-30.06 [302.86]
Adjusted R <sup>2</sup>	.52***	.53*	.35*	.50*	.47***	.46*	.46*	.52**

**Table 9.** OLS regression on robbery (continued)

	EUROPEAN SOURCEBOOK				ICVS (ln)			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.57* [.49]	.09 [.88]	-.08 [.64]	.62* [.65]	.22 [.01]	.06 [.01]	.36 [.01]	.25 [.01]
% Under 15 Years (ln)	-.02 [68.43]	.10[163.11]	.17 [51.72]	.05[155.47]	-.06 [1.69]	-.17 [1.59]	-.19 [2.42]	-.34 [1.54]
% Ethnic Homogeneity (sq)	-.17 [.01]	-.65 [.01]	-.64* [.01]	-.26 [.01]	-.43 [.00]	-.37 [.00]	-.44 [.00]	-.35 [.00]
<b>Inequality</b>								
Income Satisfaction		.62* [26.39]				-.59** [.23]		
Top 20 Percent		.14 [3.03]				.21 [.03]		
<b>Modernization</b>								
Level of Modernization			.91**[11.30]				-.48 [.24]	
<b>Opportunity</b>								
Lifestyle				.35 [15.34]				-.64** [.12]
Female Economic Activity				-.24 [2.42]				.41 [.03]
% Handgun Ownership (ln)				.17 [20.41]				.27 [.19]
(N)	21	14	14	17	22	18	15	22
Constant	57.26 [231.27]	-193.85 [504.27]	94.81 [175.21]	58.18 [479.95]	2.22 [5.32]	5.25 [5.06]	4.48 [7.15]	4.91 [4.20]
Adjusted R <sup>2</sup>	.34*	.41	.73**	.32	.12	.44*	.09	.49**

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

Notes: Standardized regression coefficients are shown with standard errors in brackets.



**Table 10. OLS regression on assault**

	UN CRIME SURVEY (ln)				INTERPOL (ln)			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.30 [.01]	.05 [.03]	-.01 [.02]	.53* [.01]	.09 [.01]	-.02 [.02]	-.19 [.02]	.20 [.02]
% Under 15 Years (ln)	-.07 [1.77]	.36 [8.59]	.32 [2.29]	.07 [3.45]	.04 [1.61]	.38 [3.84]	.51* [1.74]	.50 [3.89]
% Ethnic Homogeneity (sq)	.45 [.00]	.63 [.00]	.54 [.00]	.36 [.00]	-.01 [.00]	.00 [.00]	.00 [.00]	.01 [.00]
<b>Inequality</b>								
Income Satisfaction		.13 [1.02]				.47 [.55]		
Top 20 Percent		.18 [.15]				.09 [.07]		
<b>Modernization</b>								
Level of Modernization			.47 [.37]				.63* [.35]	
<b>Opportunity</b>								
Lifestyle				.35 [.24]				.188 [.31]
Female Economic Activity				-.59* [.05]				-.31 [.06]
% Handgun Ownership (ln)				.38 [.37]				.04 [.48]
(N)	18	12	13	14	29	18	19	22
Constant	2.67 [5.93]	-19.16 [25.77]	-5.19 [7.29]	3.73 [9.79]	2.67 [5.56]	-14.11 [12.25]	-7.64 [5.77]	-11.44 [10.62]
Adjusted R <sup>2</sup>	.09	-.23	.13	.55	-.11	.04	.29	-.11

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 10.** OLS regression on assault (continued)

	EUROPEAN SOURCEBOOK (ln)				ICVS			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.49* [.01]	.51* [.02]	.23 [.02]	.45* [.01]	.29 [.01]	-.31 [.02]	-.27 [.03]	.10 [.02]
% Under 15 Years (ln)	-.01 [1.88]	.09 [2.80]	.27 [1.29]	.26 [2.63]	.11 [3.38]	.53 [4.04]	.61 [4.44]	-.12 [4.06]
% Ethnic Homogeneity (sq)	.51* [.00]	.22 [.00]	.25 [.00]	.38 [.00]	-.05 [.00]	-.04 [.00]	-.17 [.00]	-.04 [.00]
<b>Inequality</b>								
Income Satisfaction		.76** [.45]				-.30 [.58]		
Top 20 Percent		-.17 [.05]				.34 [.07]		
<b>Modernization</b>								
Level of Modernization			.77** [.28]				-.25 [.44]	
<b>Opportunity</b>								
Lifestyle				.65** [.26]				-.11 [.32]
Female Economic Activity				-.34 [.04]				.47 [.07]
% Handgun Ownership (ln)				.15 [.34]				.03 [.50]
(N)	21	14	14	17	22	18	15	22
Constant	.39 [6.36]	5.81 [8.64]	-4.64 [4.36]	-6.47 [8.10]	-1.28 [10.65]	-18.99 [12.87]	-19.10 [13.13]	2.91 [11.08]
Adjusted R <sup>2</sup>	.18	.72	.77	.69	-.04	.10	.19	-.05

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

*Burglary.* Table Eleven presents the results of an OLS regression on burglary. First, among the theoretical variables, modernization and lifestyle were significantly related to burglary in three out of five regression models from different data sources. Income satisfaction was significant in two models. Second, all of the significant predictors exhibited a positive relationship. Third, divorce emerged as a significant control variable in several equations calculated for the European Sourcebook and Interpol regression series. Again, the ICVS regression series produced no significant models or predictors of burglary.

*Auto Theft.* Table Twelve presents the results of an OLS regression on auto theft. There was a high degree of consistency between data sets. First, the inequality model explained the most amount of variance among all regression models tested. Income satisfaction and modernization were significant predictors of auto theft for four data series.<sup>6</sup> Lifestyle was also a significant predictor but for only one model. Finally, the ICVS models failed to duplicate the robust relationships observed in other data series tested.

*Major theft.* Table Thirteen below presents the results of an OLS regression on major theft. The UN Survey and Interpol data converge on most models finding no significant relationships between the independent variables and theft with the exception of modernization (for the Interpol model only). Results from the European Sourcebook depart from other official data sources finding divorce, ethnic homogeneity, income satisfaction, and lifestyle to be significant predictors of major theft.

*Drug-Related Offenses.* Table Fourteen presents the results of an OLS regression on drug-related offenses. There is a remarkable amount of agreement among the three official data sources. All three data series find income satisfaction, modernization, and lifestyle to be statistically significant predictors of drug-related offenses. Among all crimes analyzed in this study, the greatest level of agreement between data series exists with the prediction of drug-related offenses.

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<sup>6</sup> The standardized coefficient for modernization in the European Sourcebook model is above 1.00 in value indicating a problem with collinearity. Caution is warranted in interpreting this statistic because collinearity increases the chance of committing a Type I error (failure to find a statistically significant relationship when one exists) and renders comparisons between beta coefficients, to determine relative explanatory strength, impossible.

Table 11. OLS regression on burglary

	UN CRIME SURVEY				INTERPOL			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.44 [7.69]	.32 [5.71]	.01 [8.18]	.20 [5.65]	.47* [5.82]	.39** [3.82]	.08 [5.66]	.28* [3.63]
% Under 15 Years (ln)	-.06 [1025.93]	-.24 [1625.20]	.07[807.07]	-.14 [1616.53]	-.17 [698.46]	-.31* [1003.67]	.07[535.31]	-.03[1055.40]
% Ethnic Homogeneity (sq)	.31 [.08]	.26 [.05]	.30 [.06]	.31 [.05]	.32 [.06]	.18 [.03]	.33* [.04]	.29* [.04]
<b>Inequality</b>								
Income Satisfaction		.83** [206.85]				.88*** [113.39]		
Top 20 Percent		.13 [37.22]				.01 [13.21]		
<b>Modernization</b>								
Level of Modernization			.82**[127.49]				.84***[98.34]	
<b>Opportunity</b>								
Lifestyle				.79**[99.49]				.78***[65.30]
Female Economic Activity				.09 [29.23]				-.09 [13.41]
(N)	18	13	14	14	26	17	18	20
Constant	506.18 [3,323.31]	2,633.28 [5,446.85]	-560.77 [2,565.20]	2,914.10 [4,463.87]	1,321.99 [2,383.79]	5,574.14 [3,079.19]	-725.71 [1,788.52]	1031.13 [3,039.59]
Adjusted R <sup>2</sup>	.00	.74	.52	.68	.21	.84	.69	.76

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 11.** OLS regression on burglary (continued)

	EUROPEAN SOURCEBOOK				ICVS			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.63* [5.59]	.81* [6.90]	.15 [15.58]	.43* [4.43]	-.12 [.01]	-.10 8 [.02]	-.04 [.03]	-.02 [.01]
% Under 15 Years (ln)	.06 [974.50]	.04 [1,460.29]	.72 [2,612.26]	.14 [1,201.17]	-.14 [3.02]	-.16 [4.04]	-.17 [4.97]	-.38 [3.34]
% Ethnic Homogeneity (sq)	.50 [.08]	.44 [.08]	.85 [.19]	.29 [.07]	-.39 [.00]	-.38 [.00]	-.33 [.00]	-.37 [.00]
<b>Inequality</b>								
Income Satisfaction		.55 [258.62]				-.24 [.58]		
Top 20 Percent		-.33 [23.23]				.24 [.07]		
<b>Modernization</b>								
Level of Modernization			.35 [177.29]				.04 [.49]	
<b>Opportunity</b>								
Lifestyle				.64** [125.27]				-.24 [.26]
Female Economic Activity				-.05 [15.24]				.44 [.05]
(N)	18	12	12	15	22	18	15	22
Constant	-1,603.11 [3,200.77]	-1,814.21 [4,109.28]	-11,182.11 [8,407.76]	-2,277.07 [3,740.39]	8.58 [9.52]	9.84 [12.87]	9.97 [14.72]	12.57 [9.46]
Adjusted R <sup>2</sup>	.27	.70	.58	.68	.00	-.06	-.28	.07

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 11.** OLS regression on burglary (continued)

	<b>BURGLARY INDEX (HEUNI)</b>			
	(1)	(2)	(3)	(4)
<b>Controls</b>				
Divorces	.20 [.24]	.05 [.34]	-.26 [.33]	-.02 [.27]
% Under 15 Years (ln)	.04 [35.93]	.20 [70.42]	.36 [33.93]	.10 [63.01]
% Ethnic Homogeneity (sq)	-.10 [.00]	-.09 [.00]	.07 [.00]	.01 [.00]
<b>Inequality</b>				
Income Satisfaction		.43 [10.19]		
Top 20 Percent		.07 [1.23]		
<b>Modernization</b>				
Level of Modernization			.71**[5.51]	
<b>Opportunity</b>				
Lifestyle				.26 [5.11]
Female Economic Activity				.36 [.97]
(N)	25	17	17	21
Constant	31.77 [117.74]	-119.68 [226.89]	-86.29[107.10]	-68.13 [178.86]
Adjusted R <sup>2</sup>	-.07	-.11	.30	-.01

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 12. OLS regression on auto theft**

	UN CRIME SURVEY				INTERPOL			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.18 [2.73]	.03 [2.05]	-.29 [2.17]	-.07 [2.07]	.07 [2.45]	-.04 [2.46]	-.40* [2.77]	-.12 [2.50]
% Under 15 Years (ln)	-.12 [299.83]	.00 [443.16]	.26 [203.44]	-.04 [445.34]	-.04 [303.63]	-.04 [506.42]	.28 [258.83]	-.17 [505.36]
% Ethnic Homogeneity (sq)	.19 [.03]	.02 [.02]	.04 [.02]	.13 [.02]	.11 [.03]	-.13 [.02]	-.11 [.02]	-.02 [.02]
<b>Inequality</b>								
Income Satisfaction		.90*** [65.90]				.84*** [73.09]		
Top 20 Percent		.03 [11.65]				.03 [8.66]		
<b>Modernization</b>								
Level of Modernization			.95*** [40.42]				.83*** [51.39]	
<b>Opportunity</b>								
Lifestyle				.73* [66.79]				.67 [83.73]
Female Economic Activity				.13 [7.50]				.21 [8.73]
% Own Car				.17 [3.95]				.07 [4.97]
(N)	26	17	18	19	28	18	19	22
Constant	462.22 [1,041.84]	-941.37 [1,526.13]	-658.76 [670.96]	100.39 [1,304.68]	247.43 [1,043.80]	318.80 [1,614.51]	654.13 [855.44]	924.46 [1,583.45]
Adjusted R <sup>2</sup>	-.05	.74***	.68***	.69***	-.10	.59**	.51**	.42*

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 12.** OLS regression on auto theft (continued)

	EUROPEAN SOURCEBOOK				ICVS			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.31 [2.76]	.05 [3.17]	-.50 [5.12]	-.08 [2.57]	-.03 [.01]	.06 [.01]	-.01 [.01]	-.08 [.01]
% Under 15 Years (ln)	-.03 [448.78]	.02 [590.02]	.11 [342.30]	-.13 [570.02]	-.35 [1.61]	-.55 [1.90]	-.52 [2.23]	-.43 [1.99]
% Ethnic Homogeneity (sq)	.41 [.04]	.01 [.04]	.18 [.05]	.21 [.03]	-.43 [.00]	-.46 [.00]	-.38 [.00]	-.43 [.00]
<b>Inequality</b>								
Income Satisfaction		.87** [95.44]				.13 [.27]		
Top 20 Percent		-.04 [10.96]				.10 [.03]		
<b>Modernization</b>								
Level of Modernization			1.14** [93.95]				.21 [.22]	
<b>Opportunity</b>								
Lifestyle				.76 [96.85]				-.09 [.33]
Female Economic Activity				.24 [9.78]				.11 [.03]
% Own Car				-.04 [6.09]				-.07 [.02]
(N)	19	14	13	17	22	18	15	22
Constant	-150.84 [1,477.68]	-822.43 [1,824.10]	-377.94 [1,166.32]	613.90 [1,895.43]	8.41 [5.07]	11.63 [6.07]	10.99 [6.60]	9.50 [6.22]
Adjusted R <sup>2</sup>	.02	.63	.51	.56	.00	.05	-.05	-.16

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

Notes: Standardized regression coefficients are shown with standard errors in brackets.



**Table 12.** OLS regression on auto theft (continued)

	<b>Motor Vehicle Theft Index (HEUNI)</b>			
	(1)	(2)	(3)	(4)
<b>Controls</b>				
Divorces	.10 [.23]	-.15 [.22]	-.41* [.27]	.11 [.24]
% Under 15 Years (ln)	-.26 [27.51]	-.07 [44.68]	.19 [25.63]	-.26 [48.78]
% Ethnic Homogeneity (sq)	.02 [.00]	-.20 [.00]	-.14 [.00]	-.07 [.00]
<b>Inequality</b>				
verflowIncome Satisfaction		.79***[6.45]		
Top 20 Percent		.15 [.76]		
<b>Modernization</b>				
Level of Modernization			.83***[5.09]	
<b>Opportunity</b>				
Lifestyle				-.07 [8.08]
Female Economic Activity				.51 [.84]
% Own Car				.80 [.48]
(N)	29	18	19	22
Constant	137.09 [94.70]	14.92 [142.45]	1.68 [84.70]	49.82 [152.84]
Adjusted R <sup>2</sup>	-.03	.56**	.50**	.36*

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 13. OLS regression on major theft**

	UN CRIME SURVEY (ln)				INTERPOL			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.26 [.02]	.27 [.15]	-.01 [.05]	.11 [.03]	.38 [4.64]	.28 [8.09]	.01 [7.51]	.48 [5.14]
% Under 15 Years (ln)	-.32 [2.72]	-.07 [36.65]	.11 [9.69]	-.08 [9.21]	-.33 [604.77]	-.33 [2025.39]	-.12 [856.28]	-.07 [1341.78]
% Ethnic Homogeneity (sq)	.12 [.00]	.23 [.00]	.28 [.00]	.16 [.00]	-.09 [.05]	-.16 [.07]	-.08 [.06]	-.22 [.06]
<b>Inequality</b>								
Income Satisfaction		.65 [1.55]				.53 [267.84]		
Top 20 Percent		-.09 [.49]				.20 [26.87]		
<b>Modernization</b>								
Level of Modernization			.44 [.80]				.63* [140.30]	
<b>Opportunity</b>								
Lifestyle				.56 [.56]				.33 [113.83]
Female Economic Activity				.30 [.10]				.49 [21.44]
(N)	14	8	10	10	25	15	16	19
Constant	11.26 [9.20]	5.59 [92.67]	-.53 [28.58]	13.10 [26.71]	3352.12 [2,062.69]	5591.60 [6,177.44]	2041.68 [2,746.36]	4124.32 [4,061.95]
Adjusted R <sup>2</sup>	.00	-.83	-.38	-.03	.25*	.16	.30	.36

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 13.** OLS regression on major theft (continued)

	EUROPEAN SOURCEBOOK			
	(1)	(2)	(3)	(4)
<b>Controls</b>				
Divorces	.50* [20.51]	.16 [46.21]	-.01 [47.22]	.08 [15.41]
% Under 15 Years (ln)	-.11 [2,908.39]	.23 [8,626.16]	.23 [3,654.86]	-.01 [3,985.48]
% Ethnic Homogeneity (sq)	.52* [.28]	.14 [.53]	.00 [.62]	.38 [.23]
<b>Inequality</b>				
lnIncome Satisfaction		.78*[1,414.88]		
Top 20 Percent		-.08 [124.96]		
<b>Modernization</b>				
Level of Modernization			.87 [1,243.31]	
<b>Opportunity</b>				
Lifestyle				.65*** [351.55]
Female Economic Activity				.28 [53.47]
(N)	20	13	13	16
Constant	-97.18 [9,775.40]	-25,157.53 [26,147.69]	-5,581.50 [10,718.59]	-5,380.92 [11,843.65]
Adjusted R <sup>2</sup>	.25	.50	.36	.74**

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 14. OLS regression of drug-related offences**

	UN CRIME SURVEY (ln)				INTERPOL			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Controls</b>								
Divorces	.08 [.02]	.10 [.02]	-.12 [.02]	.11 [.01]	.22 [.01]	.20 [.01]	.04 [.01]	.21 [.01]
% Under 15 Years (ln)	.09 [1.80]	.24 [3.66]	.22 [1.66]	.46 [3.81]	-.04 [1.60]	.15 [2.61]	.09 [1.39]	.14 [2.91]
% Ethnic Homogeneity (sq)	-.04 [.00]	.03 [.00]	-.13 [.00]	.08 [.00]	.09 [.00]	.08 [.00]	-.05 [.00]	.17 [.00]
<b>Inequality</b>								
Income Satisfaction		.78*** [.53]				.87*** [.38]		
Top 20 Percent		.18 [.06]				.15 [.04]		
<b>Modernization</b>								
Level of Modernization			.82*** [.33]				.82*** [.28]	
<b>Opportunity</b>								
Lifestyle				.69** [.27]				.73** [.23]
Female Economic Activity				-.46 [.06]				-.21 [.05]
% Handgun Ownership (ln)				.19 [.43]				.15 [.36]
(N)	27	18	18	20	29	18	19	22
Constant	1.21 [6.26]	-17.94[11.66]	-1.41 [5.47]	-12.95[9.94]	3.84 [5.52]	-11.56 [8.31]	1.96 [4.60]	-.67 [7.95]
Adjusted R <sup>2</sup>	-.11	.52*	.53**	.45	-.06	.69***	.59**	.50**

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

Notes: Standardized regression coefficients are shown with standard errors in brackets.

**Table 14.** OLS regression of drug-related offences (continued)

	EUROPEAN SOURCEBOOK			
	(1)	(2)	(3)	(4)
<b>Controls</b>				
Divorces	.33 [.02]	.02 [.02]	-.30 [.04]	.28 [.02]
% Under 15 Years (ln)	.16 [3.03]	.31 [3.65]	.40 [6.34]	.25 [4.12]
% Ethnic Homogeneity (sq)	.53 [.00]	.09 [.00]	.02 [.00]	.43 [.00]
<b>Inequality</b>				
Income Satisfaction		.85*** [.59]		
Top 20 Percent		.22 [.07]		
<b>Modernization</b>				
Level of Modernization			.99** [.49]	
<b>Opportunity</b>				
Lifestyle				.57* [.41]
Female Economic Activity				-.17 [.06]
% Handgun Ownership (ln)				.22 [.54]
(N)	20	14	13	17
Constant	-6.41 [9.96]	-24.82 [11.28]	-10.32[20.23]	-11.35[12.71]
Adjusted R <sup>2</sup>	.07	.69**	.58*	.48*

\* p ≤ .05    \*\* p ≤ .01    \*\*\* p ≤ .001

Notes: Standardized regression coefficients are shown with standard errors in brackets.

## 3.7 Discussion and conclusions

In this chapter, we were concerned with answering three main questions. First, concerned about the reliability and validity of popular cross-national measures of crime, we inquired whether official measures of national crime rates substantially agree with one another and with victimization data from the ICVS in their representations of criminal offending. Second, owing to observations reported in the extant comparative criminological literature concerning the unique causal mechanisms linked to violent and nonviolent crime, we asked whether key concepts from modernization, inequality, and opportunity theory differentially explain violent and nonviolent crime rates. Finally, because previous studies in the vein of comparative criminology have used a variety of data sources with which to construct dependent variables, we examined whether measures of theoretical concepts explained more or less variation in crime rates depending upon the source of the crime data.

Turning to the first question, we learned generally that official measures of crime are mostly consistent in their depictions of crime rates while official measures and victimization measures were typically in disagreement. For violent crime, we saw that the official measures of rape were correlated strongly ( $r=.92$  to  $r=.97$ ) while measures of robbery were moderately associated ( $r=.83$  to  $r=.85$ ) and measures of homicide were modestly to strongly related ( $r=.60$  to  $r=.91$ ). Among the official measures of crime, the poorest measures of association were obtained for indicators of assault ( $r=.34$  to  $r=.68$ ), which probably results from the variation with which assault is defined and treated by police cross-nationally. With respect to the association between official and victimization measures, we observed that there was little agreement between the two types of data. The only significant correlation results from the UN Survey and ICVS measures of robbery, although this coefficient was rather weak. As for nonviolent crime, we once again found significant consistency among the official measures, although for these crime types the measures of association were less robust. Official measures of drug-related crimes were correlated moderately ( $r=.81$  or  $r=.82$ ) while auto theft ( $r=.76$  to  $r=.97$ ), burglary ( $r=.66$  to  $r=.93$ ), and major theft ( $r=.49$  to  $r=.79$ ) displayed more range in the resulting coefficients. While the ICVS measures of auto theft were modestly related to those derived from the UN Survey ( $r=.39$ ,  $p=.04$ ) and European Sourcebook ( $r=.43$ ,  $p=.02$ ), suggesting that official and victimization sources are in agreement with respect to their renderings of this form of crime, no such relationship was uncovered for official and victimization measures of burglary. In conclusion, we can say that the official measures demonstrate a reasonable degree of reliability. However, this finding says nothing about their accuracy. As every introduction to methodology textbook reports earnestly, data may be consistently wrong in their depiction of “reality.” That so little agreement is found between the official and victimization measures leads us to suspect the validity of standard measures of cross-national crime. While it is true that one type of crime data may be more accurate than the other, it is almost impossible to know for sure from only two types of data series. Indeed, a firmer answer to the question of validity will have to await a more complete application of the notion of triangulation, and as the name suggests this exercise will require

at least three different types of crime data, each with their own sources of error. Perhaps a robust effort to implement rigorous cross-national self-report studies of crime will help to resolve this problem in the future.

With respect to the second question, we found that homicide rates tend to be negatively related to income satisfaction, modernization, and lifestyle while the other measures of violent and nonviolent crime tend to be positively related to these same variables. In other words, homicide rates seem to be highest in those nations where people are generally dissatisfied with their income (a measure of inequality for purposes of this study), modernization has not been achieved fully, and folks tend to live with others and stay at home in the evenings. However, other forms of violent crime, such as rape and robbery, as well as nonviolent crimes are more likely to occur in nations where people are satisfied with their incomes (or in the rape models where gender equality is high), modernization has occurred,<sup>7</sup> and folks tend to live alone and go out in the evenings. These outcomes are consistent with the reports of previous studies in which the causal pathways for violent and nonviolent crime seem to be different (Bennett, 1991; LaFree, 1999; LaFree and Kick, 1986; Messner, 1986). In conclusion, these results lend support to the injunction of Groves and Newman (1989) against general theory in comparative criminology and should serve to encourage the development of more tightly and narrowly specified theoretical accounts for cross-national variations in criminal behavior.

Looking finally at our third question, we have seen that the relationships between key explanatory variables and measures of crime are dependent in important ways on the data source for the dependent variables. Generally speaking, few of the theoretical variables explained much of the variance in cross-national criminal offending reported by the ICVS data series and when these variables achieved statistical significance, their valences were in the opposite direction of those returned in the models using official data. Even within the official measures, however, depending upon the data source that one chose to employ, one might reach fundamentally different conclusions regarding the efficacy of particular theoretical indicators. Consider, for example, the regressions of homicide measures. While the UN Survey models show divorce (+), income satisfaction (-), top 20 percent in income/consumption (+), modernization (-), and lifestyle (-) to be significant predictors of cross-national variations in homicide rates, none of these variables emerge as significant in the models using Interpol data. Or consider, for another example, the regression of burglary measures. Examining the UN Survey models, we see that income satisfaction (+), modernization (+), and lifestyle (+) are significant predictors of cross-national variations in bur-

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7 On the suggestion of our colleagues in the HEUNI expert group, we included a measure of the rate with which crimes are reported to the police taken from the ICVS (i.e., percent reporting contact crime to the police for the rape/sexual assault, robbery, assault models or percent reporting all crime to police for all other dependent variables) as well as a measure of police efficiency (i.e., conviction rates per 100,000 for each type of crime divided by police personnel rates per 100,000) in order to see whether the observed relationships between modernization and cross-national variations in crime rates might be washed away. While the number of cases available for the regression models was reduced drastically in some cases and multicollinearity was an obvious problem, these two measures did mediate the relationship between modernization and crime rates in a number of models. As indicated by our colleagues, these findings suggest that the modernization-crime relationship may be spurious, attributable perhaps to the better reporting practices of police agencies in modernized nations. Of course, this possibility deserves more refined attention in further analyses.

glary rates while the European Sourcebook models yield significant coefficients for divorce (+) and lifestyle (+). In conclusion, the results of the present study indicate that the choice of data source from which dependent variables are gleaned can have a measurable impact on the support, or lack thereof, for different theoretical stances in comparative criminology.

We began this chapter by indicating that our purpose in carrying out the reported analyses was to understand cross-national variations of crime rates in Europe and North America during the middle of the 1990s. Addressing three main questions, we have concluded: (1) while official measures of cross-national crime rates seem to be reliable, there is little evidence to support the validity of either the official or victimization measures; (2) theoretical accounts of cross-national variation in crime rates need to take account of the types of crime that are examined since some crimes seem to have distinct causal mechanisms at work; and (3) theoretical accounts of cross-national variation in crime rates may yield different pictures depending upon the source of crime data deployed. Taken together, these conclusions suggest that comparative criminologists should be especially careful when engaging in quantitative analyses and, further, that they should pursue theoretical models that are more narrowly specified.

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## 4 Crime Trends: Europe and North America

Kauko Aromaa and Seppo Leppä

### 4.1 Constructing indices of different types of crime

In chapter one (section 1.6) the construction of crime indices was briefly described. In this present chapter, the national scores on the indices are presented. As reported previously, indices were constructed by averaging rank numbers on the source variables. The procedure resulted in rank numbers for all countries which responded to the relevant items. One advantage of making use of the indices approach is that it enables a time series comparison of the results of both the Fifth United Nations Survey, covering the time period 1990 to 1994 (see van Dijk, Block and Ollus, 1998) and those of the Sixth Survey, covering the time period 1995 to 1997. As also explained in section 1.6 above the indices are based on a variety of source variables. A list of these variables is found in annex B of this report.

As delineated in section 1.6 above the calculation of the indices results in a scale of scores from 1 to 100. Comparison of score values should be strictly limited to analysing them over time, i.e. only horizontal examination is recommended, not vertical one, involving comparison between countries. These cautionary recommendations are based on the inherent problems related to the questionable quality of crime statistics, as already discussed in chapter one. This is also the reason why only eight crime categories have been selected for the following time series analysis. The categories of crime settled upon are: burglary, motor vehicle crime, petty crime, violent crimes (homicide, serious violence, non-fatal violence, violence against women), and corruption.

### 4.2 The crime indices per country and per crime category

As mentioned, the focus is on the possible change over time, particularly in cases where remarkable changes in the score points can be observed<sup>1</sup>. A change of only

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1 The national scores were not always available for the time periods in question, in which case the entry n.a. has been written in the relevant column. This factor, naturally, renders the comparative effort impossible. In some cases the score values may be based only on information on officially recorded crimes, i.e. responses to the United Nations Surveys. Accordingly, in the context of coming exercises of this kind they should be checked against more reliable data, based for example on future ICVS results.

a few score points can also be of relevance, for example at the extremely low end of the scale, when at the opposite end only really marked changes of score points, say more than fifteen units, ought to be taken as significant. In the tables of this chapter, the mean values of the scores for the countries of the Central and Eastern European region<sup>2</sup>, Western European region<sup>3</sup>, for the countries of North America, for the member states of the European Union, and also, for the time period of 1995-1997, for the applicant states of the EU are presented, as well. These aggregated score values have been calculated with the idea in mind to look at the developments within larger regional areas.

### 4.3 Burglaries

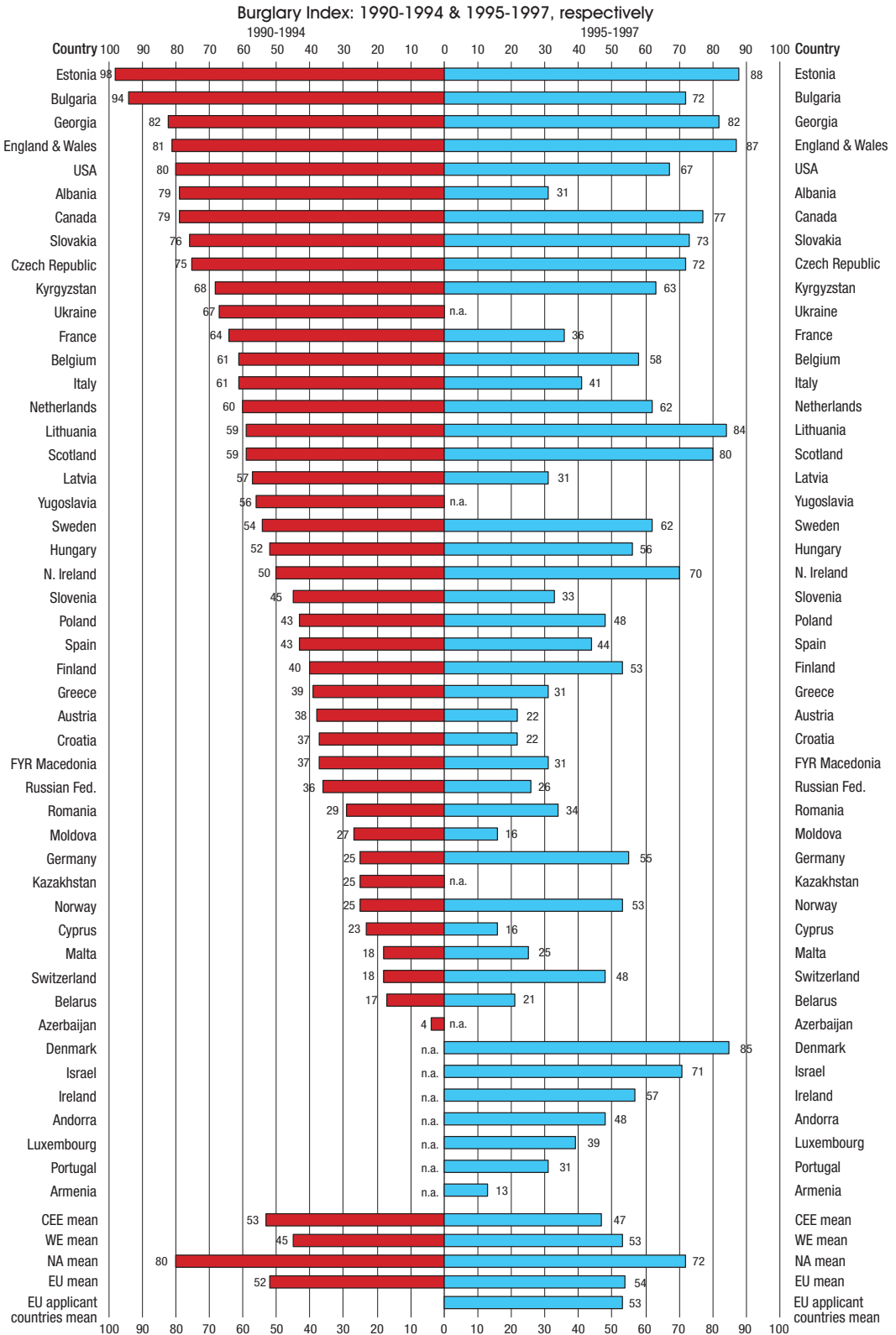
Household burglaries can be viewed – more so than other types of crime – as a cross-cultural phenomenon. The prevalence of burglary is apparently not to any considerable extent influenced by country-specific opportunity structures. The availability of targets is roughly the same everywhere. Previous analyses of the ICVS data have shown that burglary rates are the best predictors of overall crime victimization rates. If burglary rates in a country are high, the overall victimization rate of the public also tends to be relatively high in that country (van Dijk, 1998a). It has also been established that national household burglary rates correlate highly with national burglary rates of business premises (van Dijk and Terlouw, 1996).

Regionally, no great variations can be observed between the time periods studied. When one looks at the national scores, the most significant downward changes are found in Albania, with 48 points down, France (28 points down), Latvia (26 points down), and Bulgaria and Italy (each approx. 20 points down). These descending trends are balanced by the ascending tendencies in Switzerland (up 30 points), Germany and Lithuania (25 points), Norway (23 points), and Scotland and Northern Ireland (approx. 20 points). On the other hand, the starting positions of, for example, both Norway and Switzerland are very low if compared with those of Bulgaria, Estonia and USA, which also show a downward curve.

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2 The acronym CEE is used in the tables for the countries of the Central and Eastern European region, which consists of former socialist block states, including the former Soviet Union republics of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan; as previously mentioned these countries have been included for reasons of comparison with previous United Nations Survey analyses. The abandonment of these states should, however, be considered in the future, since they geographically belong to the Central Asian region.

3 Also in this regional group reconsideration in terms of the countries included should perhaps be given some thought. An idea might be, in the future exercises of similar kind, to form an Eastern Mediterranean sub-regional group consisting of Cyprus, Israel and Turkey. The United Kingdom, on the other side, which consists of England and Wales, Northern Ireland and Scotland, is in this analysis divided into those three constituent parts, owing to fact of different criminal justice systems of their own. The acronym WE stands for the countries of the Western European region, while NA denotes the North American countries, and EU, naturally the European Union member states. The EU applicant countries are as follows: Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.



**Fig. 1. Burglary index**

## 4.4 Motor vehicle crime

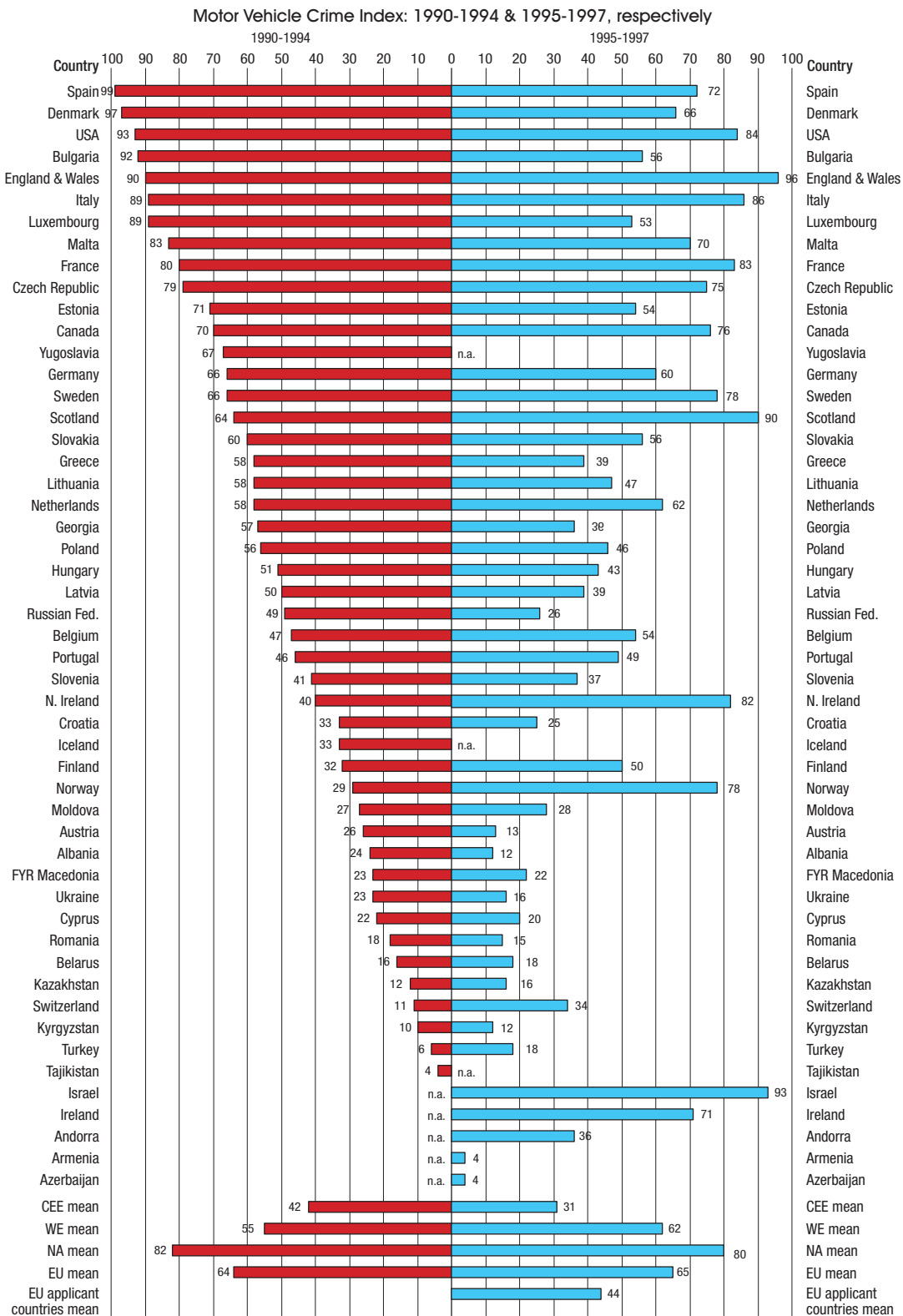
The average scores for motor vehicle crime – theft of or from a car – are quite unsurprisingly higher in North America and the Western European region than in the Central and Eastern European countries. In addition, the score points decreased in the Central and Eastern Europe, but increased in Western Europe. One of the conclusions might be that an increasing number of cars have been stolen in the West and taken over to the East, as confirmed by Liukkonen (1997).

A more detailed analysis reveals that when national scores over time are examined, some modifications seem to have taken place in this trafficking. In most of the Central and Eastern European countries, a decreasing tendency seems to be predominant, with Bulgaria in the lead with a drop of 36 score points, followed by the Russian Federation (23 points). For the Western European region, a more confused picture emerges. A steep downward trend is evident in several countries, particularly in Denmark and Spain (down 31 and 27 score points respectively), while in Germany, for example, which is regarded as one of the main sources of the cars trafficked to the East, the decrease is fairly small, only six points. At the same time an upward trend can be observed in the British Isles, the Scandinavian countries except Denmark, and Switzerland. Improved theft-prevention technology installed in new cars may serve as a partial explanation for the developments.

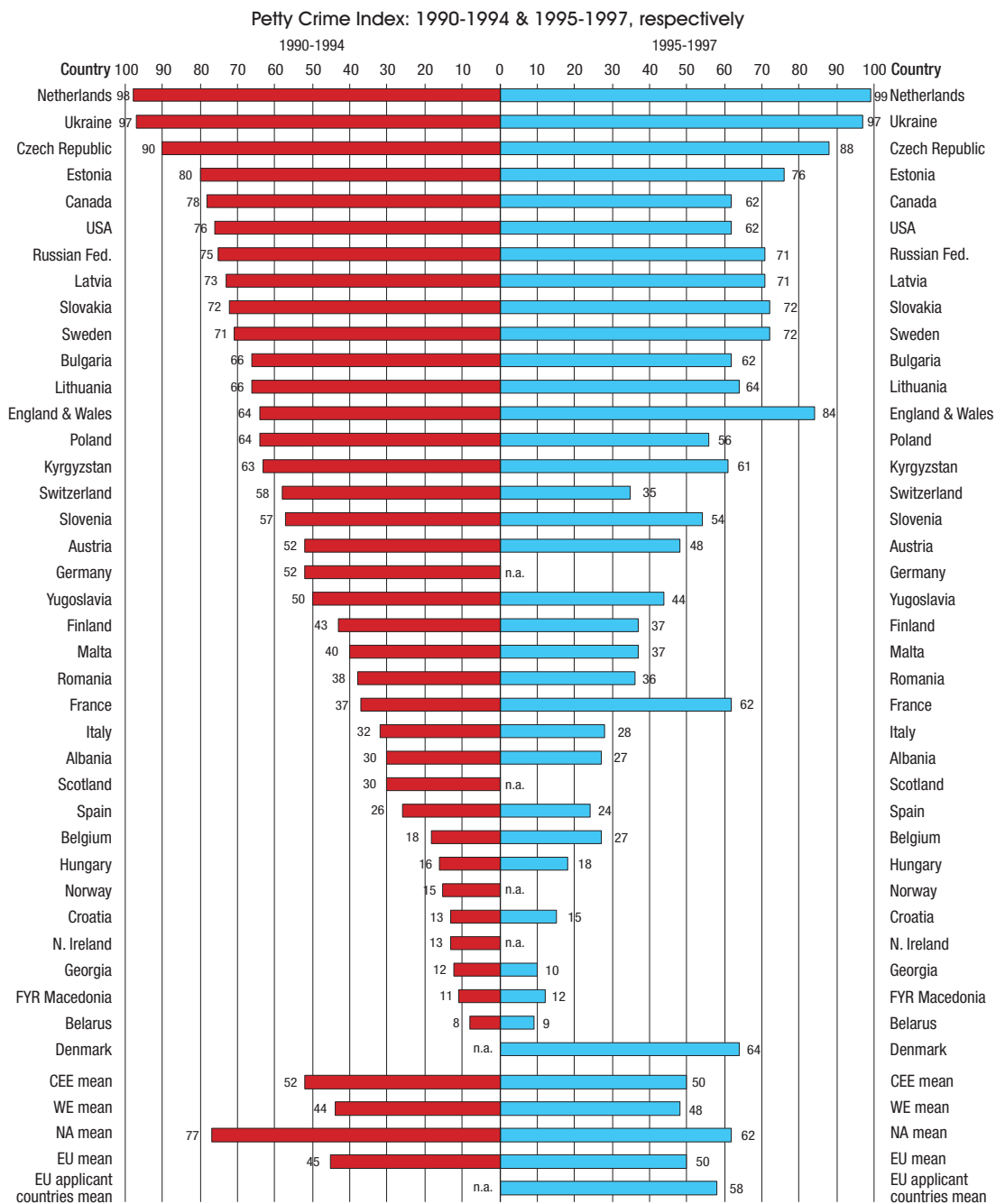
## 4.5 Petty crimes

In the ICVS, the respondents who report victimizations are asked to assess the seriousness of their own victimization on a three-point scale (very serious, somewhat serious, not very serious). The ranking of the types of crime in terms of seriousness shows marked similarity across countries (van Dijk, 1998a). Car vandalism, theft from garages, theft from a car, bicycle theft, indecent behaviour, attempted burglary, personal theft and threats are considered least serious. It should be noted that theft from cars is included in the index for motor vehicle crime (see section 4.4 above). Our index for petty crimes consists of the percentage of respondents victimized by at least one of the five less serious types of crime, i.e. car vandalism, theft of bicycle, theft of personal belongings, sexual offensive behaviour (no assault), threats or of theft of a motorcycle (a type of crime rated as moderately serious by the victims). Since police figures for less serious crime are notoriously unreliable owing to widely varying legal definitions and national reporting patterns, no attempt has been made to include official statistics in the petty crimes index.

Excepting a few countries like England and Wales, and France where an upward tendency is quite clear (France 25 score points, England and Wales 20 points), and Canada, Switzerland and USA where a downward trend is discernible (Switzerland 23 score points, Canada 16 points and USA 14 points) no large scale alterations are seen. The same holds true for the regional averages, naturally. We see that the North American mean is down 15 score points, consistent



**Fig. 2. Motor vehicle crime index**



**Fig. 3. Petty crimes index**



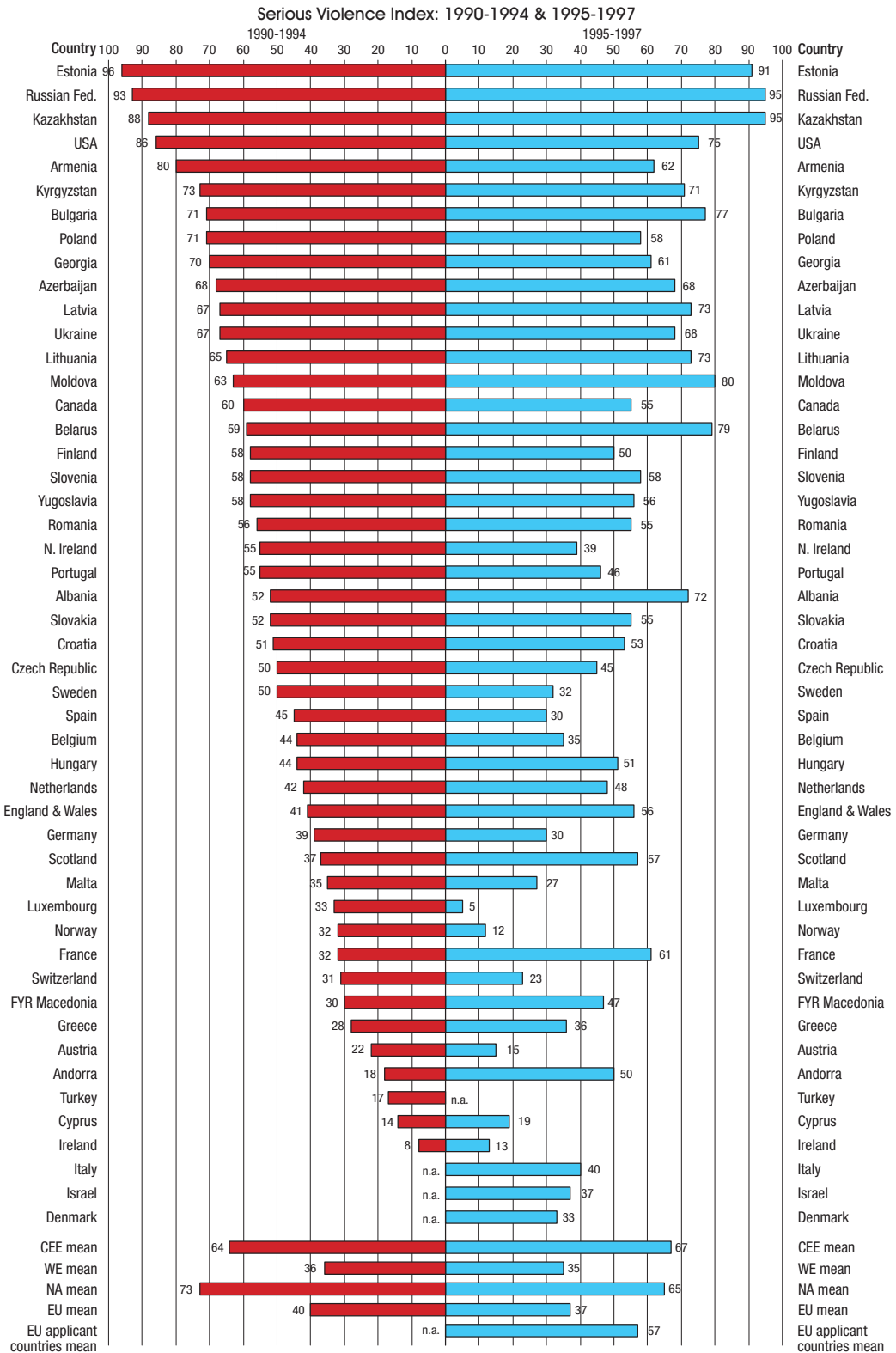
with the Canadian and US trends. A more detailed analysis of trends within indices could disclose important developments on this dimension as “petty crime” admittedly is quite a non-analytical concept; there is no good reason to expect that the different items included in the petty crime index would behave in a uniform manner over time.

## 4.6 Violent crimes

Four different indices were constructed for types of violent crime: non-fatal violent crime, homicide, serious violent crime and violence against women (including serious sexual violence). Since the first three indices are strongly correlated (see van Dijk, 1998b), only the national scores for serious violence and violence against women indices are presented here. The data on non-fatal violence and homicide are summarized below. (the index distributions as regards these sub-categories of crime are presented in annex C).

The upward trend has been the most remarkable in Andorra and France, with rise of 32 and 30 score points respectively. A more modest increase can be observed in some of the CEE countries (Albania and Belarus, up 20 points, Macedonia and Moldova, up 17 points), but also for example in England and Wales (up 15 points), and Scotland (up 19 points). Some of the Western European countries show the opposite trend, with Luxembourg (down 28 points), Norway (down 20 points), Sweden (down 18 points), Northern Ireland (down 16 points) and Spain (down 15 points) as the lead countries. In the CEE region the greatest drop occurred in Armenia (down 18 points), followed by Poland (down 13 points). Of particular interest is the US development in this sector, with the downward course of 11 points.

Homicide (for index distribution, see annex C, fig. I), as already disclosed, is strongly correlated with the serious violence index. If the homicide index is used as a separate individual analysis tool, it is worth remembering that when countries with no more than a few million inhabitants are considered, the homicide index is strongly influenced by the annual fluctuations in actual numbers of committed homicides. Two contrasting cases might illustrate the point: during the time period in question, the homicide index of Northern Ireland dropped 53 score points, while in Scotland, there was an increase of 25 points. In Scotland, the main factor behind the upward trend is quite probably the Dunblade mass murder case in March 1996 with 18 people killed. For Northern Ireland, the ongoing peace negotiations during the latter part of the 1990s were quite probably apt to decrease the number of homicides in that part of the United Kingdom. It is more complicated, however, to try to find explanations for why the index goes up 32 score points in Andorra, 30 points in the Netherlands, 27 points in Belarus, 24 points in France, 23 in Macedonia, and 20 points in England and Wales, not to mention the many minor upward changes. The downward trend, after Northern Ireland, is steepest in Sweden, with 41 score points down, followed by Luxembourg (28 points down), Belgium (24 points down), Malta (21 points down), Switzerland (18 points down), Denmark and Italy (both 16 points down), and Austria (15 points down). Should this result be interpreted to mean, for example,



**Fig. 4. Serious violence index**

that the potential murderers kept on moving from Belgium and Luxembourg to the Netherlands in the second half of the 1990s? On an aggregate level these changes mean that in the Western European region the mean over time dropped 4 score points. At the same time the European mean dropped only one point, obviously mainly owing to the fact that the German score went up 14 points. In the Central and Eastern European region, the downward tendency was most evident in Armenia (18 score points down), in Georgia and in the Czech Republic (both 13 points down).

The non-fatal violence variable (for index distribution, see annex C, fig. II) is based on the ICVS victimization rates for assaults and threats and for robbery. The main “climbers” are France (35 score points up), and England and Wales (12 points up), whilst the United States leads the “descendig” group (16 score points down), followed by Spain (11 points down) and Poland (9 points down). The status of the United States also explains much of the downward trend of the North American region (11 points down).

The 1990s trend in violence against women seems to be, with some exceptions, an increasing one in the Western European region, and the opposite one in the CEE countries, while in North America, a relatively stable state of affairs prevails.

It is a well-known fact that police statistics are not a reliable source of information when determining the annual figures of actually committed offences in this crime category (see e.g. Johnson, 1996). As a matter of fact, only those countries where the ICVS has been undertaken should qualify for the current analysis. In a few of the countries, the figures are based on mere official rape statistics, and would need further scrutiny. This is the case particularly with the four countries ranked with the lowest indices. But since the analyses of the previous United Nations Survey results are based on similar data, it was considered apposite for continuity's sake to review the phenomenon also in this context. In the United Kingdom as a whole the upward tendency seems to be the most manifest (Northern Ireland 59 score points up, England and Wales 26 points up, and Scotland 13 points up). Also France (29 points up), Belgium (24 points up), and Norway (22 points up) show a steep ascending course. The more remarkable downward trends, perhaps with the exception of Denmark (28 points down), are more or less questionable and would need more detailed examination.

Violence Against Women Index: 1990-1994 & 1995-1997, respectively

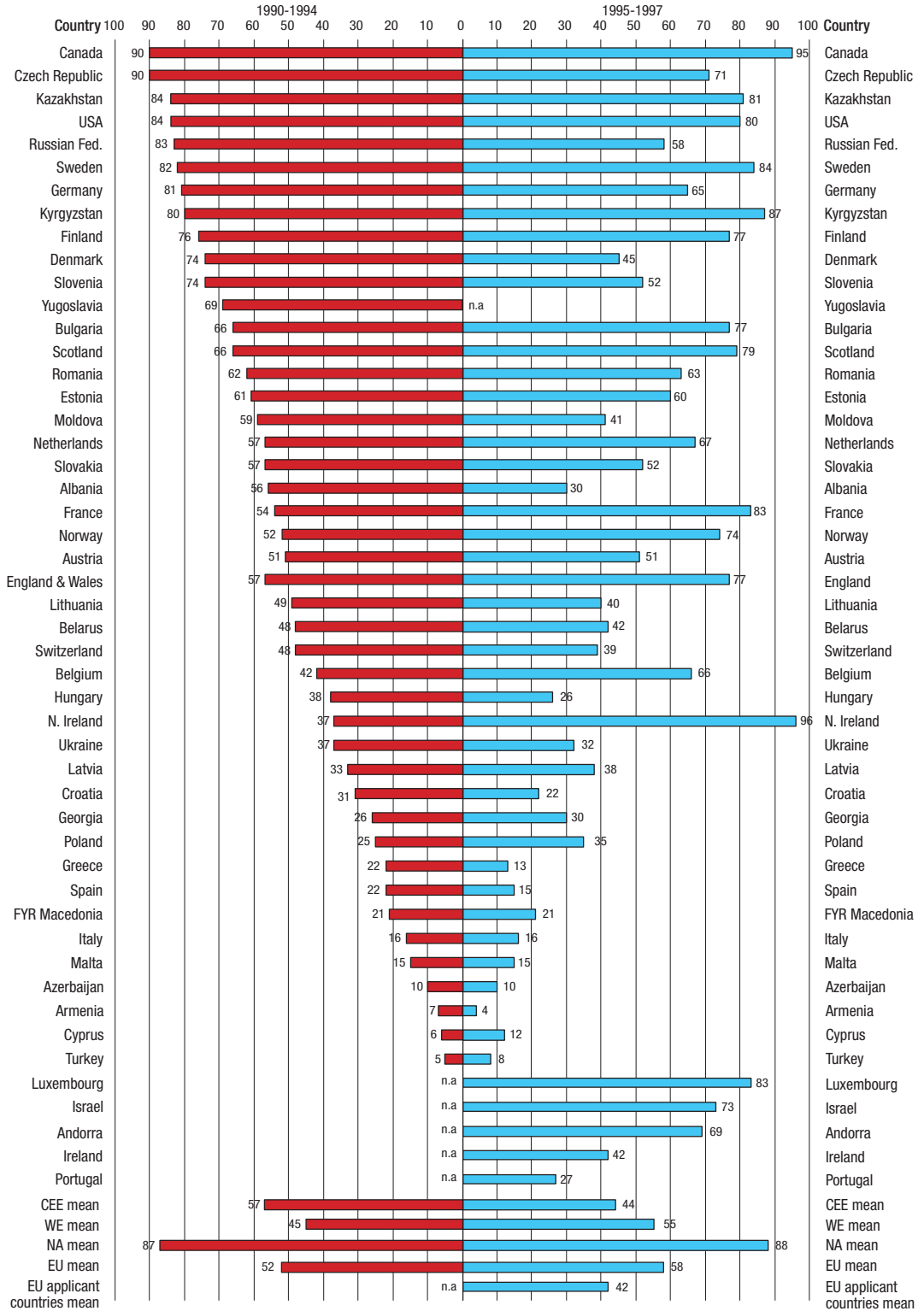


Fig. 5. Violence against women index

## 4.7 Corruption (taking of bribes by government officials)

The corruption index is based on information from three independent sources (cf. the list of variables, annex B). 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 at different levels of society is somehow intercorrelated. Corruption of the highest echelons seems to go hand in hand with street-level corruption.

The aggregated indices point to the fact that the region splits into two parts: in the East, the phenomenon is considered to be quite widespread and to be rather on the increase. In the West and in North America, the scores that are already fairly low seem to be decreasing. More or less the same picture emerges when changes in the indices over time of separate countries are studied. The only notable exceptions from this overall impression are the downward trend in Hungary (down 17 score points) and, to a minor degree, the upward orientation of Denmark (up 14 points – although here we should take into account the quite low initial point of departure of that country). Correctly positioned, at the far ends of the dimensions are on one side Ukraine (up 18 points), and Belgium (down 35 points), on the other, followed by Portugal, and England and Wales (17 points down). It should perhaps also be pointed out that in this crime dimension, the lack of data is fairly manifest.

Corruption Index: 1990-1994 & 1995-1997, respectively

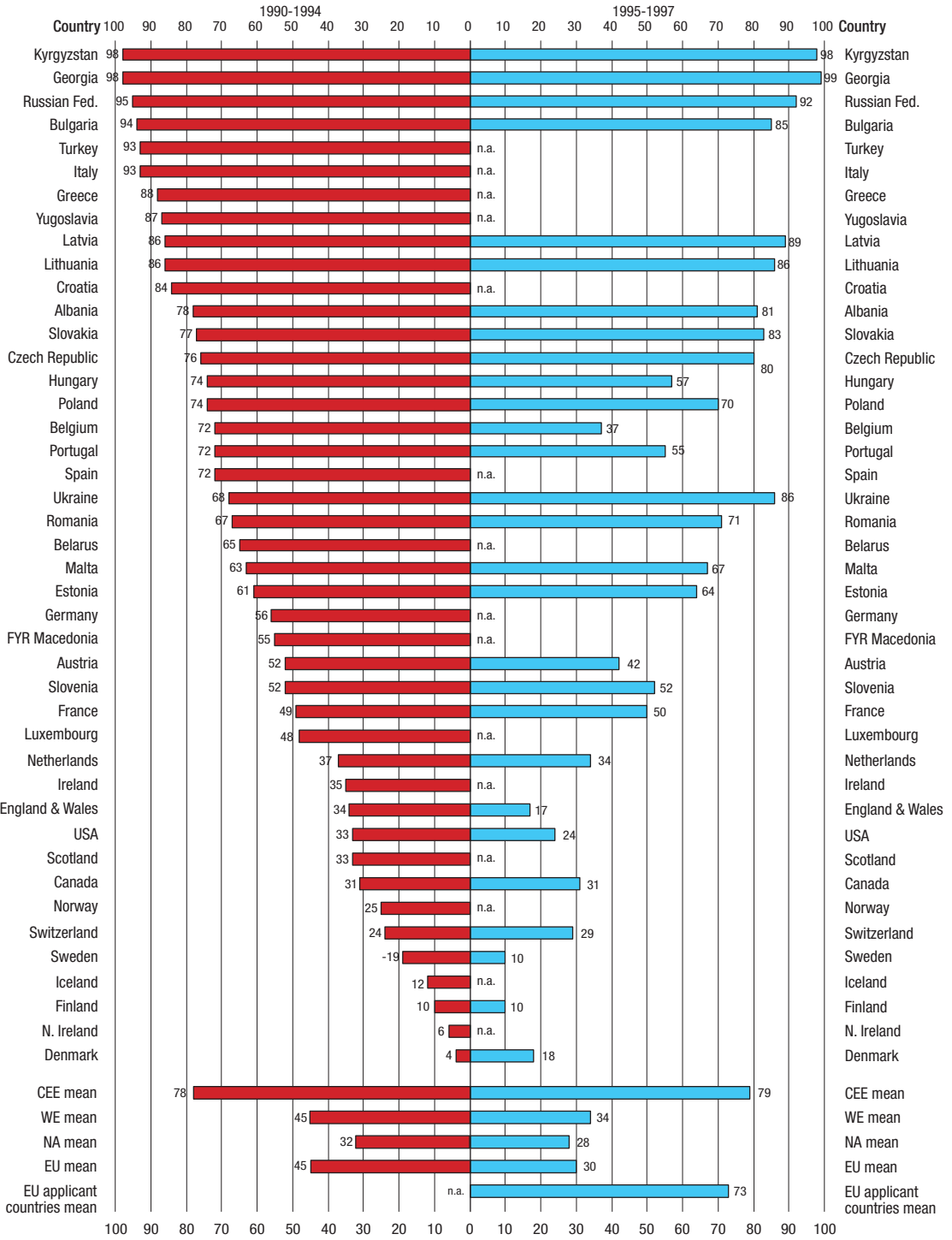


Fig. 6. Corruption index

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# 5 The Operation of Criminal Justice Systems

Pat Mayhew

## 5.1 Introduction

This chapter discusses a variety of indicators relating to the operation of criminal justice systems across a wide range of countries in Western and Central Europe and North America. The data mainly comes from countries' replies to the Sixth United Nations Survey (the Sixth Survey hereon), but use is also made of additional material from the International Crime Victim Survey (ICVS hereon). Use is made of three indices derived from the (analysis of the Fifth Survey results) Sixth Survey: the Gender Balance Index, the Citizen Evaluation of Police Performance Index, and the Corruption Index (see: Kangaspunta, Joutsen and Ollus, 1998). (Each of these indices has been adapted slightly by the author, and they are described more in due course.)

Much of the analysis in this chapter mirrors that done by Ineke Haen Marshall (1998) when she looked at equivalent data from the Fifth United Nations Survey. For instance, use is made of simple summary measures for two groupings of countries: (i) Central and Eastern Europe;<sup>1</sup> and (ii) countries in Western Europe (including Israel and Turkey), to which are added the USA and Canada.<sup>2</sup> For convenience, the latter group are called 'Western' countries. Obviously, there are important differences between individual countries within the two groups, but the classification nonetheless proves to be discriminating.<sup>3</sup> Other analysis of the material from the UN Surveys on criminal justice resources was done by Newman and Howard (1999b) in the *Global Report on Crime and Justice*. This was based on all countries that responded to the survey, not just those in Europe and North America.

Section 2 describes resourcing in terms of criminal justice personnel, looking at police, prosecutors, judges, and correctional staff. Some attention is also paid to the gender balance in personnel. Section 3 takes up various indicators of the productivity of these personnel – for instance, how many suspects the police

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1 The Central and Eastern European countries covered are: 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, and the Ukraine. Data are not available for all topics. No data are available for Tajikistan, Turkmenistan, Uzbekistan, and Yugoslavia.

2 The Western European countries comprise: Andorra, Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland Ireland, Israel, Italy, and Liechtenstein. Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the three UK countries. Again, data are not available for all topics.

3 Marshall also used means for two groupings of countries: (i) the European Union countries, and (ii) Central and Eastern European countries. North America (the USA and Canada) and non EU Western countries were included in her total means.



catch, and how many prosecutions and convictions are achieved. Section 4 looks at other indicators of performance: citizen satisfaction with the police, and indicators of corruption that may also spill over to criminal justice personnel. Section 5 brings the previous data together in terms of an overall measure of performance. Section 6 provides a summary.

It should be emphasized that the comparability of indicators on the operation of criminal justice systems is a major problem that could potentially compromise many of the analyses in this chapter. The main difficulties are referred to at appropriate points below. Highlighting them does not solve them of course, and while some issues of comparability can be identified, there are no doubt many others that cannot. The difficulties of international comparisons have been very well rehearsed (see among many others, Newman and Howard, 1999a, and Killias and Rau, 2000). Discussion of the material here in the main simply touches again on the known problems.

## 5.2 Criminal justice resources

### 5.2.1 General points

The focus here is limited to four counts of criminal justice resources: police, prosecutors, judges/magistrates, and correctional staff. Of course, crime control can be seen as in the hands of a much wider range of people: for instance, private security, policy makers, politicians, local authorities, community crime prevention groups, probation officers, and other youth justice teams. The UN Survey did not attempt to collect any information on total resources committed to crime control – and indeed it is difficult to see how reliable information here would be forthcoming. One important omission is private security: companies offering security services on a commercial basis. The numbers employed in private policing are substantial: using data for selected countries from a survey by the Dutch Ministry of Justice, Marshall (1998) showed per capita rates to be about a third the level of that of the police – a ratio which might now be conservative (see, e.g. Sarre and Prenzler, 2000; Bayley, 1994).

Although the Sixth Survey collected budgetary information in relation to the police, prosecution services, courts and correctional institutions, there is no analysis of this here. There was much missing information, and the data are in local currencies, making conversion to a standard unit tedious (and somewhat problematic insofar as currency rates fluctuate across the counting period). Purchasing power will also vary over time and from place to place. Of course, the majority of criminal justice budgets will be spent on personnel, so the numbers of staff involved will give a fair indication of the financial resources being set aside.

The count of criminal justice personnel was asked for from 54 countries in Europe and North America. Figures for 1995 and 1997 were requested. Some countries supplied data for both years, although some did so only for one of the two (and this could vary according to category of personnel). Where data for both years were available, the average has been taken in all analyses reported here. For some countries not providing data for either 1995 or 1997, available information

for 1994 from the Fifth Survey was used instead to increase the number and range of countries for analysis.<sup>4</sup> Some data for 1990 for the Netherlands and Switzerland was also used. Table I in Annex B provides details of the year(s) to which the data analysed in this chapter refers. There was least complete data on prosecutors (15 countries missing). For each of the other three sectors, information was missing for nine of the 54 countries.

It is important to note that what is counted within respective categories of personnel may differ somewhat across country, reflecting differences in the organisation of law enforcement. More important still is that counts of personnel are simply the most basic and tangible resource measure. They leave aside anything to do with training, available technological support, or the quality of service staff provide in terms of professionalism, equity, or moral integrity. How far these other resource elements would alter the picture of investment in criminal justice is impossible to say, though they certainly would to some degree.

## 5.2.2 The police

The Sixth Survey questionnaire defines police or law enforcement personnel as those *whose principal functions are the prevention, detection and investigation of crime and the apprehension of alleged offenders*. In some countries, these functions are performed by paramilitary/military forces or by national security forces. For this reason, the person completing the UN questionnaire is asked to *...try to focus your replies as much as possible on the civil police rather than on the national guard or local militia*. The questionnaire also specifies that *.....if there are many local forces, please provide data on those forces if possible*. It also asks that *data concerning support staff (secretaries, clerks etc) should be excluded*.<sup>5</sup> Information was asked for by gender, as was the case for the three other categories of criminal justice personnel.

Inspection of national responses to the question on police personnel suggests caution is needed.

- Although countries were asked to exclude support staff, it may be that some civilian staff remain included if there is no separate count of them, or they are seen as performing the policing functions specified (e.g., crime laboratory technicians). Employing civilians to perform some policing duties is, in fact, an increasing trend in many developed countries.
- Some countries have complex policing systems which make a summary measure of 'total police' difficult. There are particular problems in some countries in differentiating between police and military personnel, with a substantial overlap of function between them. The treatment of regulatory personnel (e.g., those who investigate fraud) may also differ (cf. Nalla and Newman, 1993).

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4 The countries for which 1994 data were exclusively or mainly used were: Armenia, Austria, France, Hungary, Luxembourg, Macedonia (FYR), Malta, Norway, and the Russian Federation.

5 The 1994 return asked for data on *police personnel (sworn/uniform and civilian)*. For just under half the countries with figures for 1994, as well as 1995 and 1997, the 1994 per capita policing rates were much higher. For the other countries 1994 rates were similar or even lower than in 1995 and 1997.

Table 1 shows the number of police per 100,000 population in 45 countries, rank ordered. (Table II in Annex B shows further details.) The highest rates are in the Russian Federation (1,225 police per 100,000 population, 1994 value) and Kazakhstan (788). (Newman and Howard (1999b) reported a policing rate in between these for Singapore, well known for a high policing level.) The lowest rate was in Finland (156), albeit this is a lower figure than in 1994 (232), so data quality may be an issue.

**Table 1. Number of police per 100,000 population (1)**

Russian Federation	1,225	Macedonia	318
Kazakhstan	788	Germany	309
Northern Ireland	714	Ireland	300
Italy	544	Hungary	293
Cyprus	527	Luxembourg	276
Malta	507	Sweden	269
Lithuania	481	Poland	260
Ukraine	468	USA	253
Portugal	453	England & Wales	244
Croatia	427	Romania	240
Israel	424	Norway	231
Latvia	417	Iceland	226
Czech Rep.	415	Slovenia	224
Albania	408	Turkey	216
Armenia	405	Andorra	214
Scotland	370	Switzerland	202
Greece	370	Netherlands	196
Austria	367	Denmark	193
Slovakia	352	Liechtenstein	190
France	349	Canada	183
Belgium	344	Moldova, Rep. of	164
Spain	338	Finland	156
Estonia	318		
	Police per 100,000 population		
	Median	Mean	Standard deviation
CEE countries	405	424	249
Western countries	288	320	134
All countries	318	359	190
25% quartile	231		
Median	318		
75% quartile	417		

*Note*

1 In most cases the average of 1995 and 1997 (see Table I in Annex B for details).

Some broad conclusions about policing levels are:

- Policing rates are generally higher in Central and Eastern European (CEE hereon) countries, consistent with their having historically relied heavily on state security forces to maintain order (cf. Bayley, 1985). Eleven of the 17 CEE countries have policing rates above the median.
- Italy, Cyprus, Malta, Portugal, and Israel are other countries with apparently high policing rates. The same applies to Northern Ireland, although special circumstances apply.
- Finland and Denmark have relatively low rates of police per capita; the rate in Sweden and Norway (1994 value) were also below the Western Europe average. There were also three CEE countries with low rates: Moldova, Slovenia, and Romania.

For the 45 countries all told, the median value was 318 police officers per 100,000 people – or one police employee for every 314 people. (Medians are mainly used hereon as averages can be distorted by extreme values. Where means are used, each country is given equal weight.) The median for CEE countries was 405, or one police employee for every 247 people. (Excluding the Russian Federation still gives a CEE median of 379.) In Western countries, the median was 288 (one police employee for every 347 people).

One explanation for differences in policing levels will be country differences in the functions that police officers are expected to perform. But other factors may also play a part. The level of development is one fairly commonly used correlate. With the current selection of countries, there was a weak negative relationship between policing rates and the United Nations 1998 Human Development Index ( $r = -0.27$ ,  $p < 0.10$ ;  $n = 42$ ). In other words, countries that scored lower on the HDI tended to have rather *more* police officers per capita. This relationship goes in the opposite direction to that found by Newman and Howard (1999b) on a broader range of countries. It is also somewhat fragile. For instance, simply excluding the Russian Federation and Kazakhstan reduced the correlation (to  $-0.11$ ) to a non-statistically significant level.

There are three premises as regards the relationship between policing levels and crime. The first is that a higher policing level curbs crime. The second – working in the opposite direction – is that more police will be employed when crime levels are high. The third premise (going in the same direction as the second) is that more police officers increase the amount of crime recorded simply because there is greater official capacity to record. On the basis of the present selection of countries, assessing police per capita alongside the various Sixth Survey crime indices shows little support for either ‘more police equals less crime’, or ‘more police equals more crime’ – although the direction of the association slightly more often supported the second position. The strongest relationship was that higher policing levels were significantly associated with higher homicide rates. Marshall also found the same, as did Newman and Howard (1999b) on

the basis of a worldwide selection of countries. With the current data, the association was boosted in particular by high levels of both police and homicide in the Russian Federation, Kazakhstan, Latvia, and Albania.<sup>6</sup>

### 5.2.3 Prosecutors

Comparing prosecutorial resources is arguably even more difficult than the police, as there can be markedly different arrangements for the organisation of prosecutorial work. The majority of countries examined here have a civil law tradition in which – to generalise broadly – the prosecution process involves the judicial police, prosecutors (or procurators), and examining magistrates/judges (Reichel, 1994). In some instances the functions of prosecutors and judges are the same. Essentially, a prosecution is brought on behalf of the state, and the prosecutorial agencies tend to play more part in the investigation of cases. In countries with a common law tradition, offenders are prosecuted on behalf of the victim rather than the state. Of the 39 countries for which there was information on numbers of prosecutors, five have a common law tradition.<sup>7</sup> Within them, though, there are differences. In England and Wales, for instance, the Crown Prosecution Service instigates the prosecution, while in the United States the prosecutor is a district attorney – an elected official.

The Sixth Survey offered advice for completing the questionnaire as follows:

*Prosecution personnel may be understood to mean 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. In some countries, a prosecutor is a member of a separate agency; in others, a prosecutor is 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 (e.g. federal/provincial systems or civilian/martial systems) please provide separate information about prosecutorial functions in each system. Data concerning support staff (secretaries, clerks etc) should be excluded.*

The median number of prosecutors per 100,000 population, seven, is as one would expect very much smaller than the median number of police – 45 times lower. Rates vary from three or less in Spain, the Netherlands, Austria and Ireland to nineteen or more in Latvia, Lithuania, Kazakhstan and the Russian Federation (1994 data). Fifteen of the twenty countries in the top two quartiles are CEE countries, and all but one (the USA) operate under civil law. The CEE countries have a median of 11 prosecutors per 100,000 – over double that in Western ones (5). Newman and Howard (1999b) speculate that the higher figure may be partly because prosecutors have a wide role in the processing of cases, and partly

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6 The correlation between homicide and per capita police levels overall was  $r = 0.36$  ( $n = 42$ ,  $p < 0.02$ ). Without the four countries mentioned however, there was no statistical relationship ( $r = 0.02$ ).

7 The common law countries are: England & Wales, Ireland, Israel, Scotland and the USA. Cyprus has an amalgam of common and civil law (Reichel, 1994).

**Table 2. Number of prosecutors per 100,000 population (1)**

Latvia	24	Slovenia	7
Lithuania	20	Bulgaria	7
Kazakhstan	20	Israel (2)	7
Russian Federation	19	Luxembourg	7
Georgia	17	Croatia	7
Azerbaijan	16	Germany	6
Belarus	15	Cyprus	6
Sweden	14	Macedonia, FYR	5
Kyrgyzstan	12	Iceland	5
Moldova, Rep. of	12	Scotland	5
Hungary	11	Andorra	5
Slovakia	10	Finland	5
Estonia	10	Turkey	5
Portugal	10	England & Wales	4
Denmark	9	Greece	4
USA	9	Spain	3
Armenia	9	Netherlands	3
Romania	8	Austria (3)	2
Czech Rep.	8	Ireland	2
Belgium	7		
Prosecutors per 100,000 population			
	Median	Mean	Standard deviation
CEE countries	11	13	5
Western countries	6	6	3
All countries	9	9	5
25% quartile	5		
Median	7		
75% quartile	12		

*Notes*

- 1 In most cases the average of 1995 and 1997 (see Table I in Annex B for details).
- 2 Israel: the figure includes police prosecutors.
- 3 Austria: total prosecutors do not include district prosecutors (the 'Bereichsanwalt').

because prosecutors are career public servants and more likely to be reliably counted. Table 2 shows the number of prosecutors per 100,000 population, rank ordered. (Table III in Annex B shows further details.)

There tended to be more prosecutors per capita in countries classified as 'medium development' on the HDI scale (the median was 12 per 100,000) than in 'high development' countries (6 per 100,000).

## 5.2.4 Judges

Information was requested on both professional and lay judges and magistrates (called ‘judges’ hereon). The advice for providing the information was as follows:

*Professional judges or magistrates may be understood to mean both full and part-time officials authorised to hear civil, criminal and other cases, including in appeal courts, and make dispositions in a court of law. Please include in that category associate judges and magistrates, who may be authorised as above.*

*Lay judges and magistrates may be understood to mean persons who perform the same functions as professional judges or magistrates but who do regard themselves, and are not normally considered by others, as career members of the judiciary. Data concerning support staff (secretaries, clerks etc.) should be excluded.*

### **Lay judges**

In some countries (and particularly so in Africa), the participation of lay people in the justice process is notable. But the unpaid and sometimes informal role they play may be one reason why statistical information is scarce. Only about a third of countries here provided information on lay judges. Of the rest, few indicated whether there were no lay judges to count, or no data available.

For the present countries, lay judges were more common in CEE countries with a civil law tradition. (Estonia stands out in particular.) In countries making comparatively high use of lay judges, they outnumbered professionals by around a factor of five, although the ratio of lay judges to professionals was much higher than this in Estonia, Scotland, and England and Wales. (Details are in Table IV in Annex B).

### **Professional judges**

There are large variations in the number of professional judges per capita (see Table 3 and Table V in Annex B). At the low end, there were five or under per 100,000 population in Armenia, Ireland, Azerbaijan, Northern Ireland, the USA, the Ukraine, and the UK. At the high end, there were over 25 in Switzerland, Slovenia, Andorra, Croatia, Luxembourg and Germany. The rate in Switzerland (70) was appreciably higher than elsewhere, although this was based on 1990 information. Unlike prosecutors, there was no marked difference between the CEE countries and others, with the median rate of professional judges in the former group (11) close to the rest (12). The majority of countries being compared here operate under civil rather than common law, but all countries with judicial rates around or above the median were civil law countries – in line with Newman and Howard’s (1999b) worldwide analysis.

**Table 3. Number of professional judges and magistrates per 100,000 population (1)**

Switzerland	70	Latvia	10
Slovenia	37	Norway	10
Andorra	32	Belarus	9
Croatia	28	Turkey	9
Luxembourg	27	Cyprus	9
Germany	26	Russian Federation	9
Macedonia, FYR	24	Spain	8
Czech Rep.	22	Netherlands	8
Slovakia	22	Malta	8
Hungary	21	Georgia	7
Greece	20	Kazakhstan	7
Austria	20	Israel	7
Finland	18	Kyrgyzstan	7
Iceland	17	Moldova, Rep. of	6
Italy	15	Scotland (2)	5
Estonia	14	England & Wales	4
Sweden	13	Ukraine	4
Romania	13	USA (3)	4
Lithuania	13	Northern Ireland	3
Bulgaria	12	Azerbaijan	3
Denmark	12	Ireland	3
Portugal	12	Armenia	3
Belgium	12		
Judges and magistrates per 100,000 population			
	Median	Mean	Standard deviation
CEE countries	11	13	9
Western countries	12	15	14
All countries	12	14	12
25% quartile	7		
Median	12		
75% quartile	20		

Notes

- 1 In most cases the average of 1995 and 1997 (see Table I in Annex B for details).
- 2 Scotland: the number of professional judges and magistrates includes judges, magistrates, sheriffs and stipendiary magistrates.
- 3 USA: includes judges from federal and state courts, but not from the lower courts (e.g. municipal and police courts).



## 5.2.5 Correctional staff

The UN questionnaire asks for data on prison staff, who are defined as:

*... all individuals employed in penal or correctional institutions, including management, treatment, custodial and other (maintenance, food service etc) personnel.*

Information was requested for adult and juvenile establishments separately. Some countries indicated that there was no separate juvenile correctional system. Other countries simply did not provide information, which may mean that no juvenile institutions existed, or that no information was available. Table 4 is based on figures in which adult and juvenile staff are added together if separate figures were given; otherwise, total prison staff is assumed to equal adult staff (see also Table VI in Annex B). An additional measure of investment in the prison system is the staff/inmate ratio: countries where the staff/inmate ratio is low (close to one staff member per one inmate) might be assumed to devote more resources to corrections than countries where the ratio is high. The data on inmate levels used here are taken from the Sixth Survey.

There are wide variations in the number of correctional staff per 100,000 population among the countries providing information. At one end, the highest figures are in Northern Ireland (189), Estonia (163), the Russian Federation (154) and the USA (147); these reflect high imprisonment levels, although less so in Northern Ireland where special factors apply. At the other end of the scale, there are less than 30 staff per 100,000 in Greece, Macedonia, Kyrgyzstan, Armenia, and Cyprus. There is large international variation, and the median for the CEE Europe countries (49) is not dissimilar to that for Western ones (53). Table 4 shows the countries rank ordered in terms of correctional staff (see also Table VI in Annex B).

The most obvious factor that should affect the number of correctional personnel is the actual number of people in prison. (This, incidentally, seems little to do with crimes rates (Aebi and Kuhn (2000))). The statistical relationship goes in that direction on the basis of all countries for which there was data ( $r = 0.483$ ;  $n = 42$ ). However, there were many exceptions. (Estonia for instance had a high staffing level relative to its imprisonment rate, while the reverse was true in Belarus). And simply omitting the four countries with the highest correctional staff rates reduced the correlation considerably ( $r = 0.191$ ; not significant).

It is also plausible that economic development is a factor – with lower correctional staffing rates in the least well-developed countries. This was broadly endorsed (using HDI values for 1998), although more strongly after omitting two outliers with very high staffing rates but relatively low values on the HDI index (Estonia and the Russian Federation). The bottom five countries in terms of correctional officers per 100,000 population were all representative of either least developed or emerging economies. Newman and Howard (1999b) found similar results with global data from the Sixth Survey.

**Table 4. Correctional staff per 100,000 population (1)**

Northern Ireland	189	Spain	50
Estonia	163	Ukraine	50
Russian Federation	154	Croatia	49
USA	147	Switzerland	47
Canada	94	Azerbaijan	46
Lithuania	88	Luxembourg	46
Czech Rep.	87	Belgium	45
Slovakia	85	Slovenia	45
Scotland	84	Germany	44
Italy	82	Austria	44
Netherlands	80	Turkey	40
Latvia	79	Georgia	37
England & Wales	69	Bulgaria	35
Ireland	69	Belarus	35
Hungary	65	Iceland	35
Denmark	64	Malta	33
Israel (2)	64	Romania	32
Sweden	62	Cyprus	28
Portugal	56	Armenia	28
Finland	54	Kyrgyzstan	23
Norway	53	Macedonia, FYR	23
Andorra	51	Greece	20
Moldova, Rep. of	50		
Correctional staff per 100,000 population			
	Median	Mean	Standard deviation
CEE countries	49	62	37
Western countries	53	63	36
All countries	50	63	37
25% quartile	40		
Median	50		
75% quartile	79		

*Note*

1 In most cases the average of 1995 and 1997 (see Table I in Annex B for details).

Thirdly, higher correctional staffing rates might mean that there are better conditions in prison – i.e., a lower staff/inmate ratio. There was little support for this, however, in line with Marshall's previous results from the Fifth Survey.<sup>8</sup>

<sup>8</sup>  $r = -0.19$ ; ns;  $n = 37$

The countries with the least favourable staff/inmate ratios (i.e., in the bottom quartile) are Belarus, Romania, Latvia, Moldova, Georgia, Lithuania, the USA, Bulgaria, Greece, and Kyrgyzstan.<sup>9</sup> Most of these were characterised by high prison populations rather than comparatively low per capita staffing level.

With the exception of the U.S. and Greece, all the countries in the bottom (‘worst’) quartile as regards inmate/staff ratio were in Eastern and Central Europe. In the CEE countries, the median was 3.1 inmates per correctional employee – over double the figure in the other countries (1.4). Finland, Cyprus, Italy, the Netherlands, Denmark, Sweden, Norway, Ireland, Slovenia, and Northern Ireland ranked in the highest (‘best’) quartile as regards the staff/inmate ratio with one or less than one inmate for each staff member.

In sum, then, higher correctional staffing rates are very broadly associated with higher economic development and – less strongly – with higher imprisonment rates. However, there are many deviations, with some countries having high prison populations but low staffing rates, and others having high staffing relative to prisoners.

## 5.2.6 Total criminal justice personnel

Table 5 presents the rate of criminal justice personnel per 100,000 for the 33 countries for which data are available for all four sectors (see also Table VII in Annex B). Of these countries, the Russian Federation has the highest rate of criminal justice personnel per capita (1,407), and Moldova and Finland the lowest (233). The overall median was 401 criminal justice personnel per 100,000 population – or one for every 249 persons. The figure in the CEE countries was 469 (one for every 213 person). This was higher than the 379 in the Western countries for which data were available (one for every 264 person). As a corollary, the rate of personnel in countries classified as medium on the HDI was higher (an average of 518 personnel per 100,000) than in ‘high’ HDI countries (401).

### **The distribution of resources**

Although there are significant international differences in the number of people working in criminal justice, the distribution of resources across the four sectors is not dissimilar. Figure 1 shows that in all countries by far the highest proportion criminal justice personnel are police officers. The mean is 78.5%, with a small standard deviation (8%). The United States ranks lowest with 61% of the criminal justice personnel in the police, followed by Estonia (reflecting the fact that the proportion of correctional staff is high). At the other end of the scale, the police in Cyprus, Armenia, Greece and the Russian Federation form the highest proportion of criminal justice personnel. Despite the fact that there are about a third more people employed as criminal justice personnel in the CEE countries than in Western ones, there is a striking similarity in distribution among police,

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<sup>9</sup> The Fifth survey showed similar results with a high ratio also for the Russian Federation (4.3) and the Ukraine (3.9).

**Table 5. Total criminal justice staff per 100,000 population: police officers, prosecutors, judges and magistrates and staff in correction institutions (1)**

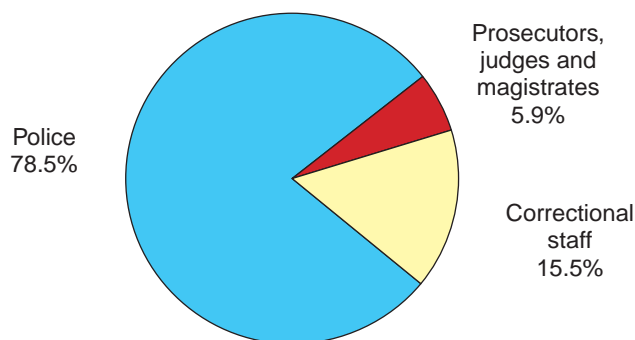
Russian Federation	1,407	Hungary	390
Lithuania	603	Germany	386
Cyprus	570	Ireland	373
Czech Rep.	532	Macedonia, FYR	370
Portugal	531	Sweden	358
Latvia	530	Luxembourg	356
Croatia	511	England & Wales	322
Estonia	505	Slovenia	313
Israel	502	Andorra	302
Slovakia	469	Romania	294
Scotland	464	Netherlands	287
Armenia	444	Iceland	284
Austria	433	Denmark	279
Greece	414	Turkey	269
USA	414	Moldova, Rep. of	233
Belgium	408	Finland	233
Spain	401		
Total criminal justice staff per 100,000 population			
	Median	Mean	Standard deviation
CEE countries	469	508	291
Western countries	379	379	92
All countries	401	430	202
25% quartile	313		
Median			
75% quartile	502		

*Note*

1 In most cases the average of 1995 and 1997 (see Table I in Annex B for details).

court and prison staff. The proportion of police (78.5%) is the same, while court staff comprise only slightly more (6.6%) in the CEE countries than elsewhere (5.5%).

The numerical importance of court staff (prosecutors, judges and magistrates) is fairly low: taken together they account for 6% of all criminal justice staff (with a standard deviation of 3%). At the high end were Slovenia, Andorra, Finland and Luxembourg – where more than 9% of the criminal justice work force consists of court staff.



**Figure 1. Distribution of personnel in the criminal justice workforce (33 countries)**

The proportion of resources in prisons is 16% overall (standard deviation of 8%). The United States and Estonia appear to employ almost one-third of all criminal justice personnel in correctional services, and a quarter or so are thus employed in the Netherlands, Finland and Denmark. At the other extreme, less than 10% of criminal justice staff are employed in corrections in Greece, Cyprus, Macedonia, Armenia and Croatia.

The picture appears to be clear. The bulk of criminal justice personnel in all countries for which there are complete data are police officers. These are followed some way behind by prison staff; only a rather small proportion of all criminal justice personnel are judges and prosecutors. The predominance of the police is not of course surprising given their much broader range of functions.

### 5.2.7 The gender balance in criminal justice personnel

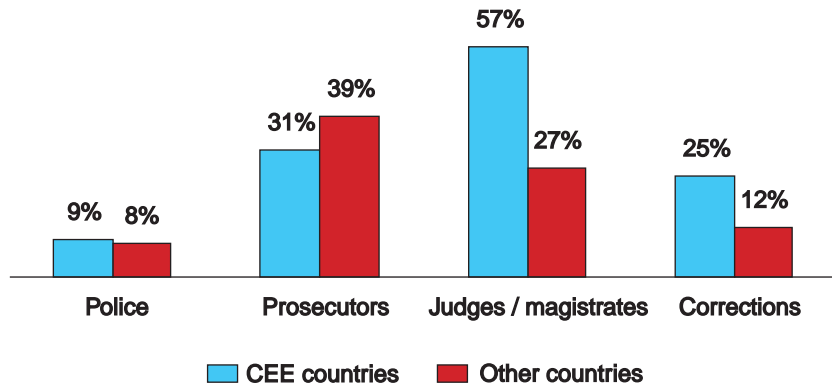
Information was collected again in the Sixth Survey on the extent to which women participate in the criminal justice workforce. Results for each sector are taken up below.

#### **Police**

In three countries, about a third of police officers were female: the Russian Federation, Sweden, and Norway. But the median was much lower – 9% (data for 41 countries). A number of countries had very low figures: 5% or less. There was large variability in the proportion of female officers within the country groupings, and the medians were similar between the CEE countries and the rest (see Figure 2).

#### **Prosecutors**

Compared to police officers, prosecutors were generally more likely to be women: about a third were (data for 29 countries). The highest proportion was in Estonia, with the lowest in Georgia, Azerbaijan, Turkey and Armenia (all 5% or



**Figure 2. Proportion of the criminal justice workforce that were female (median)**

less). The median proportion in the CEE countries (31%) was slightly lower than in the other countries (39%), but as with the police figures there was a large degree of variability within the country groupings.

### Judges

Again, about a third of judges were female taking together all the countries providing information (40 countries). But the proportion ranged from 60% or more in Kyrgyzstan, Latvia, Estonia, Slovenia, the Czech Republic and Romania, to around 10% or less in Malta, Azerbaijan and the UK. Here, the CEE median was appreciably higher (57%) than for Western ones (27%).

### Correctional staff

Overall, about a fifth of staff in correctional institutions was women (data for 34 countries). Although the USA had a comparatively high proportion (30%), the highest figures were mainly in CEE countries. Reflecting this, the CEE median was higher (25%) than the other countries (12%).

## 5.2.8 The gender balance index

Since not all countries provided information on all four sectors, a Gender Balance Index (GBI) was constructed to minimize the effect of incomplete data, but at the same time reflect the male: female staff ratios in the various sectors for which results were available. Details of the construction of the Index are in Annex B. Forty-eight countries were ranked on the GBI, and quartile positions are shown in Table 6. CEE countries mainly had the best representation of female staff (see the top, fourth quartile), although this was also true of the USA, Sweden, and Canada. CEE countries were distributed somewhat irregularly in the other quartiles. In the bottom quartile, women featured least often in criminal justice staffing in France, Liechtenstein, Turkey, Azerbaijan, and Northern Ireland.

**Table 6. Categorisation of countries according to the Criminal Justice Practitioner Gender Balance Index (CJPGBI)**

<b>Low gender balance</b>	<b>Medium</b>	<b>High gender balance</b>	
1 <sup>st</sup> quartile	2 <sup>nd</sup> quartile	3 <sup>rd</sup> quartile	4 <sup>th</sup> quartile
France (48)	Italy (36)	Spain (25)	Croatia (12)
Leichenstein (47)	Austria (35)	Scotland (24)	Canada (11)
Turkey (46)	Greece (34)	Ukraine (23)	Belarus (10)
Azerbaijan (45)	Cyprus (33)	Israel (22)	Lithuania (9)
N. Ireland (44)	Armenia (32)	Poland (21)	Czech Rep. (8)
Georgia (43)	Portugal (31)	Eng & Wales (20)	Russian Fed (7)
Kazakhstan (42)	Macedonia (30)	Norway (19)	Sweden (6)
Moldova (41)	Kyrgyzstan (29)	Slovenia (18)	Bulgaria (5)
Iceland (40)	Andorra (28)	Denmark (17)	Hungary (4)
Malta (39)	Finland (27)	Romania (16)	USA (3)
Belgium (38)	Ireland (26)	Netherlands (15)	Latvia (2)
Germany (37)		Slovakia (14)	Estonia (1)
		Switzerland (13)	

**Notes**

- 1 Figures in parentheses are ranks: (1) having the most equal gender balance; (48) having the least.
- 2 The proportion of women in each sector (police, prosecutors, judges and correctional staff) is in effect given equal weight (see Annex A for more detail).

In sum, criminal justice is still fairly male dominated. Table 7 gives another summary picture, additional to that from the GBI. It relates to the 31 countries with the most complete data: namely, those with a value for the percentage of police officers who were women, and at least two out of three of the other indicators (prosecutors, judges/ magistrates and correctional staff). The picture differs somewhat from the GBI, since the absolute number of different types of personnel is taken, which weights the figure towards the proportion of females in the police (the biggest sector). In Table 6 (based on the GBI), each sector was given equal weight.

In all but four countries, less than one in five criminal justice workers were female. With the countries covered here, there was little association between the 1998 UN Gender-related Development Index and the percentage of women in the criminal justice workforce, no doubt because some of the countries with the highest levels of female CJS penetration were not particularly well-developed in other socio-economic terms.

It was also clear that the penetration of women depends somewhat on function. The proportion of female workers was greatest for prosecution and judicial staff – whose work is probably seen as less dependent on ‘heavier-weight’ masculine skills. The proportion was lowest overall for police officers, although a

**Table 7. Proportion of women in the the criminal justice workforce**

Russian Federation	33	Finland	10
Estonia	26	Northern Ireland	9
Scotland	23	Greece	9
Latvia	20	Macedonia, FYR	9
Netherlands	18	Cyprus	8
Israel	17	Moldova, Rep. of	8
England & Wales	16	Ukraine	7
Armenia	16	Belgium	7
Czech Rep.	16	Ireland	7
Lithuania	15	Spain	7
Austria	14	Iceland	6
Romania	13	Italy	6
Slovenia	12	Portugal	5
Croatia	12	Turkey	4
Andorra	10	Kazakhstan	2
Denmark	10		
Proportion of women in criminal justice workforce			
	Median	Mean	Standard deviation
CEE countries	13	15	8
Western countries	9	10	5
All countries	10		
25% quartile	7		
Median	10		
75% quartile	16		

*Notes*

- 1 In most cases the average of 1995 and 1997 (see Table I in Annex B for details).
- 2 Countries with a value for the percentage of police officers who were women, and at least two out of the three other indicators (prosecutors, judges/magistrates, and correctional staff).

few countries seemed to draw more on women – either reflecting a tradition of female participation in military activities (eg, Russia, Estonia, and Armenia), or fairly higher levels of social development (eg, Sweden and the USA). As a broad generalization, countries that reported a high rate of female participation in one arena also reported high rates in the others. (Full details by sector for each country are in Table VIII in Annex B.)



## 5.3 The productivity of criminal justice personnel

### 5.3.1 General points

The measures of staff capacity discussed so far have addressed the resources available for criminal justice in different countries, but they say little about how well different systems might be performing. The Sixth UN survey is, frankly, limited in how much it can offer here – and bear in mind that this will be a difficult issue to judge anyway. Nonetheless, the data collected can be manipulated in various ways to provide some pointers – at least as regards productivity of performance, though not of course its quality. The productivity indicators presented in this and the next section will necessarily be broad-brush because of uncertainty about how far ‘like for like’ is being measured by the information submitted in the country returns. With this caution, this section turns to a set of productivity indicators. Again, the approach taken mirrors in many ways that taken by Marshall (1998) in her analysis of the previous UN survey results. The following indicators are addressed in this section:

- a. *Police recording productivity*. This looks at what variation there is as regards the extent to which the police record crimes reported to them by victims. This productivity measure is obtained by linking results from the International Crime Victimization Survey (ICVS) with the Sixth Survey returns on crimes recorded by the police. Since not all countries have taken part in the ICVS, this measure is available for 34 countries. (There is further discussion below.)
- b. *Police productivity*. This looks at how many suspects the police deal with per capita, and how many convictions they produce.
- c. *Prosecutors’ productivity*. This looks at how many prosecutions prosecutors achieve per capita, and how many convictions they produce.

The information on police recording productivity – (a) above – also presents the opportunity to see whether the ICVS gives a different picture of *relative crime levels* in different countries to figures of crimes recorded by the police. Although not central to the issue of police productivity, results are shown for interest at the end of the section. Also, the information on how many suspects the police ‘produce’, and how many convictions prosecutors secure, can be presented not only as measures of productivity, but also to describe the process of ‘attrition’ between recording offences, catching suspects, and prosecuting and convicting them. Results on attrition are also presented at the end of the section, although at broad brush level and with some strong reservations.

### 5.3.2 Police recording productivity

It is a truism that the number of crimes the police record is substantially less than the number of crimes experienced by victims. The first reason is non-reporting. A multitude of victim surveys have shown that many crimes are not reported to the police – albeit with the proportion varying by type of offence. Briefly here,

non-reporting is primarily because victims feel that what has happened is not serious enough to warrant formal attention, or that the police will not, or cannot do much about it (eg, Skogan, 1984; Mayhew, 1993). What victims feel about how far the police are likely to help is returned to shortly when measures of confidence in the police are considered. The ICVS has done a great deal to chart variations in reporting rates in different countries, even though the samples taken in different countries have been relatively small (see van Kesteren, Mayhew and Nieuwbeerta, 2000 for further details).

The second reason for the gap between police and survey estimates is the shortfall between the estimated number of crimes reported to the police and the number recorded by them. This *recording proportion* needs explaining. Many people might assume that the police record *all* crimes they come to know about. In fact, though, a number of studies have testified that this is not the case (see e.g., Burrows et al., 2000). The police may not record a complaint of crime if they do not think there is sufficient evidence; some incidents may go unrecorded because of police compliance with victims' wishes not to proceed; other incidents may be regarded by the police as too trivial to warrant a formal investigation; or the police may feel that the report is mistaken or disingenuous. In addition, though, it is plausible to suppose that when the police fail to record incidents drawn to their attention, this denotes some lack of responsiveness to victims, or at least less efficient systems for capturing victim complaints. In essence, then, the recording proportion can stand as a measure of police 'energy' such that the police in countries in which a relatively high proportion of reported crimes are recorded can be considered the most energetic and efficient. The pertinent issue for present purposes, then, is not *variations in reporting rates* in different countries evidenced by the ICVS, but rather the indicative measure it provides as to the *recording proportion*. (Variations in reporting rates are considered later as part of a measure of citizen satisfaction with the police.)

In the interests of simplicity, the comparison here is between (i) all crimes measured by the ICVS, and (ii) all crimes recorded by the police (see below for further details). One difficulty is that this is *not* comparing 'like with like'. For one, the ICVS coverage of crime differs from that of the police. (The ICVS only covers crimes against householders and their property, whereas police figures also cover victimless crimes as well as those targeted on institutional victims for instance.) Another difficulty is that the breadth of the 'total' police crime count will obviously be important, in that those countries which include a broader range of illegal behaviour could appear to have lower recording productivity. Nonetheless, linking the ICVS and police counts in the way that has been done is likely to give a *broad* indication of recording differentials.

The first ICVS measure taken is the percentage of respondents who said they had been victim of one or more on the eleven main types of crime measured by the ICVS.<sup>10</sup> (The total ICVS crime count is taken mainly to maximise the reli-

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<sup>10</sup> For convenience, a 'prevalence' measure is taken from the additional information added to the database for the Sixth Survey - i.e. the percentage of people victimised once or more by any of the crimes covered by the ICVS. The alternative would have been the more complete incidence risk, taking into account multiple victimisation. It is unlikely that results would have differed.

**Table 8. Police recording productivity based on ratio between all recorded crime rate and ICVS measure of victimisation (all ICVS crimes), adjusted to exclude offences not reported to the police**

<b>Lowest ratio of recorded crime to ICVS crime 0.192 or less</b>	<b>Medium 0.193 – 0.270</b>	<b>Medium 0.271 – 0.53</b>	<b>Highest ratio of recorded crime to ICVS crime 0.54 or more</b>
1 <sup>st</sup> quartile	2 <sup>nd</sup> quartile	3 <sup>rd</sup> quartile	4 <sup>th</sup> quartile
Georgia (34) Slovakia (33) Ukraine (32) Slovenia (31) Macedonia (30) Latvia (29) Lithuania (27) Romania (27) Kyrgyzstan (26)	Spain (25) Malta (23) Croatia (23) Russian Fed. (22) Czech Republic (21) Bulgaria (20) Poland (19) Estonia (18)	Belarus (17) Switzerland (16) Northern Ireland (14) USA (14) Italy (13) Netherlands (12) France (11) Hungary (10)	Eng & Wales (9) Portugal (8) Belgium (7) Scotland (6) Canada (5) Austria (4) Denmark (3) Finland (2) Sweden (1)

*Note*

1 Figures in parentheses are ranks. Some countries are in joint position.

ability of the ICVS figures, since the relatively small samples taken in each country means that there is inevitably large sampling error attached to the ICVS estimates of specific offences).<sup>11</sup> As many results as are available from the last three sweeps of the ICVS are taken, and averaged. There is a further adjustment to account for city as against national surveys.<sup>12</sup>

This ICVS estimate of crime is next adjusted to take account of the percentage of crimes said to have been reported to the police.<sup>13</sup> This provides an indication of the proportion of people in a country who have experienced a crime that has been reported to the police. This proportion is then set against the average 1995-1997 per capita rate of the total number recorded by the police as reported in the Sixth Survey.<sup>14</sup> The ratio of the second (police) measure to the first (ICVS) one is the indicator of recording productivity.

11 Marshall (1998), for instance, took what was on the face of it a useful route in comparing ICVS levels of residential burglary with police figures of residential and non-residential burglary. However, results were rather unclear and this may well have been because of the greater sampling error on the ICVS rates and more missing police information from countries which do not record burglary as a separate category.

12 Overall victimisation levels were adjusted for countries with city surveys only to take account of higher victimisation rates in more densely populated areas. To do this, the average differential (0.78) between national and city rates in 21 countries was applied to reduce the values for countries with city surveys only. This adjustment applied to Belarus, Bulgaria, Croatia, Hungary, Kyrgyzstan, Latvia, Macedonia, Romania, Russian Federation, Spain, and the Ukraine.

13 Victims are asked whether they reported the incident to the police. Those who experienced any particular type of crime more than once are asked whether they reported the last incident. There was no adjustment made for national or city ICVS coverage since there was no evident pattern of reporting rates differing.

14 Recorded crime figures for 1994 were used for Austria, France, Macedonia, and Malta.

Table 8 groups the 34 countries into quartiles according to the ratio of police-recorded crime to the estimate of victim-reported crime. (Only quartile positions are shown to avoid giving the impression of spurious accuracy.) In the top quartile (quartile 4), the ratio was 0.55 or more (ie, the per capita rates of all recorded crime was 55% or more the rate of offences said to have been reported to the police, as measured by the ICVS). The highest figure was in Sweden. In the lowest quartile, the ratio was about 0.20 in all countries, suggesting less energetic and/or efficient police recording. The lowest ratio was in Georgia. All but two countries in the bottom two quartiles were CEE ones.

### 5.3.3 Police productivity: suspects

The following few measures link manpower capacity with criminal justice output in various ways. This is done cognisant of the difficulties of making comparisons. For one, data on case output (suspects, prosecutions, and convictions) are typically collected by different agencies using independent data systems, with no cross checking between them, and no necessary linkage as regards crime coverage, or methods of case counting.<sup>15</sup> Moreover, suspects, prosecutions and convictions do not necessarily mean the same thing in all countries even if the same terminology is used.

This said, the first measure links the number of police officers to the number of suspects (see Table 9).<sup>16</sup> On the face of it, police officers dealt with the greatest number of suspects in Finland (nearly 2,700 suspects per 100 officers in a year), the USA and Canada. At the other extreme, in Armenia, the Russian Federation, Kazakhstan, Latvia and Spain, each officer appeared to deal with one suspect or less a year. The differences are hard to believe. Variability in the count of police officers may be one issue, but probably more important are differences in how suspects are defined in different countries. This, for one, may reflect variations in pre-arrest procedures, in particular whether offenders are diverted away from 'suspect' status by the use of informal cautioning for example. On the face of it, though, the median number of suspects per 100 officers was just over 200 per year in the CEE countries (two suspects per officer), and just over 500 in the others (5.2 suspects per officer). Neither of these figures might seem high to a lay audience, although in fact they will simply reflect the diverse nature of policing work, which will be largely concerned with routine order maintenance and the provision of services that are not directly offender-related.

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15 Cases can mean individuals, incidents, or processing decisions. There is also a timing problem. Annual data is used, but suspects, for instance, may be prosecuted or convicted a year later than they were caught. Thus in linking cases it needs to be assumed that the numbers remain largely stable year-on-year.

16 The Sixth Survey questionnaire asked for information on *persons brought into formal contact with the police .... where formal contact might include being suspected, arrested, cautioned etc.* The term 'clearance rate' would not be constant, and is not used here. In the US, for instance, it means a suspect being charged and turned over for prosecution. In other countries, it simply means that the police have identified an offender, irrespective of whether any further action is taken.

**Table 9. Productivity of the police: suspects per 100 police (1)**

Finland	2,692	Israel	360
USA	2,260	Macedonia, FYR	353
Canada	1,043	Slovenia	332
Germany	872	Slovakia	251
Netherlands	845	Italy	249
Greece	769	Estonia	225
Austria	684	Moldova, Rep of	201
Norway	684	Croatia	173
England & Wales	558	Cyprus	137
Portugal	475	Lithuania	132
Hungary	415	Ukraine	122
Poland	404	Spain	102
Romania	404	Latvia	100
France	385	Kazakhstan	82
Sweden	371	Russian Federation	79
Ireland	366	Armenia	53
Number of suspects per 100 police officers			
	Median	Mean	Standard deviation
CEE countries	201	222	131
Western countries	516	714	705
All countries	360	490	577
25% quartile	137		
Median	360		
75% quartile	558		

*Note*

1 In most countries the average of 1995-1997. Figures for Armenia, Austria, France, Macedonia, Slovakia, and the Russian Federation are for 1994.

### 5.3.4 Police productivity: convictions

One can also look at the productivity of the police in terms of convictions. In line with previous UN survey results, the police in Western countries produced more convictions (a median of 225 per 100 officers, as against 108 in CEE countries). Finland stood out with the most convictions per 100 officers (over 1,000), and there were also high figures in Denmark, Canada, Andorra and Turkey. Some countries had very low figures, and while these tended to be CEE ones, Cyprus, Northern Ireland, Italy and Portugal were among them.

### 5.3.5 Prosecutors' productivity: prosecutions

The most pertinent measure of productivity here is the number of prosecutions per prosecutor – albeit this is particularly problematic because of differences in inputs (have the police already had the discretion to drop cases?) and outputs (do prosecutors *have* to prosecute?) – cf. Jehle (2000).<sup>17,18</sup> In any event, there was a very wide range in the figures – from over 500 prosecutions per prosecutor in the USA, Turkey, Ireland and the Netherlands, to less than 30 per prosecutor in Georgia, Armenia, Latvia, Cyprus, and Moldova (Table 10). By and large, prosecutors in CEE countries – although more numerous as seen – processed far fewer prosecutions (the median was 56 per prosecutor) than in the other countries (270). At country level, though, there was a particularly large variation in the figures in CEE countries (denoted by a much smaller median (56) than mean (73)). The productivity of prosecutors in general (106 prosecutions per prosecutor all told) is higher than that of the police in relation to suspects (under 4 suspects per police officer), though this is to be expected given the respective nature of their work.

Using data from thirteen countries in the European Sourcebook project, Jehle (2000) observed that where a prosecution authority had a low workload of cases (measured by prosecutions per capita), the rate of cases brought to court was higher, suggesting that prosecutors in some countries may have more time for case preparation. With the current data for a larger number of countries, the relationship went in the same direction.<sup>19</sup>

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17 The Sixth survey says that 'persons prosecuted' may be understood to mean alleged offenders prosecuted by means of an official charge, initiated by the public prosecutor, or the law enforcement agency responsible for prosecution.

18 Linking the number of prosecutions to the number of suspects produces unreliable results, for one because in nearly half of the countries for which there was both suspect and prosecution data, the number of prosecutions was greater or virtually the same as suspects. This might imply that there is no separate prosecution stage. Also, the prosecutions to suspects ratio is likely to reflect pre-trial diversion programmes.

19 Jehle's measure of cases that came to court was rather different from that available from the Sixth Survey in that he put all cases coming to court (irrespective of outcome) over the base of all disposed cases (including dropped cases, cases brought to court, and other disposals). Here, the correlation between prosecutions per 100,000 population and the ratio of convictions to prosecutions was  $-0.561$ ;  $n = 31$ ;  $<0.001$ .

**Table 10. Productivity of prosecutors: prosecutions per prosecutor (1)**

USA	571	Israel	102
Turkey	553	Iceland	100
Ireland	551	Portugal	96
Netherlands	532	Hungary	93
Andorra	383	Estonia	70
Finland	347	Slovakia	68
Scotland	307	Belarus	45
England & Wales	233	Kazakhstan	35
Macedonia, FYR	191	Russian Federation	32
Croatia	156	Moldova, Rep. of	28
Slovenia	127	Cyprus	27
Czech Rep.	127	Latvia	24
Germany	124	Armenia	21
Sweden	110	Georgia	9
Prosecutions per prosecutor			
	Median	Mean	Standard deviation
CEE countries	56	73	57
Western countries	270	288	202
All countries	106	181	182
25% quartile	43		
Median	106		
75% quartile	252		

*Note*

1 In most countries the average of 1995-1997. Figures for Denmark, and the Russian Federation are for 1994.

### 5.3.6 Prosecutors' productivity: convictions

There is further attrition between prosecutions and convictions, although this will be influenced, for one, by what filtering has been done by police or prosecutors before cases get to court.<sup>20</sup> In CEE countries, the median number of convictions per prosecutor was 33; in Western countries it was 198 (see Table 11). This again denotes greater productivity in more economically developed countries, although it might also signify of course that there is more court capacity with which to process offenders. The highest number of convictions achieved by prosecutors seemed to be in Finland, Austria, and Romania – where there were

<sup>20</sup> The Sixth Survey says that 'persons convicted' may be understood to mean persons found guilty by any legal body duly authorised to pronounce them convicted under national law, whether the conviction was later upheld or not.

**Table 11. Productivity of prosecutors: convictions per prosecutor (1)**

Finland	333	Croatia	46
Austria	331	Slovakia	43
Romania	298	Bulgaria	41
Turkey	254	Belarus	39
Scotland	248	USA	39
Andorra	244	Portugal	39
Denmark	230	Kyrgyzstan	34
Netherlands	223	Poland	33
Greece	208	Slovenia	33
Spain	198	Russian Federation	29
England & Wales	152	Moldova, Rep. of	27
Israel	99	Lithuania	24
Germany	97	Latvia	19
Hungary	75	Armenia	18
Czech Rep.	67	Cyprus	17
Macedonia, FYR	64	Kazakhstan	14
Estonia	56	Azerbaijan	11
Belgium	52	Georgia	8
Sweden	48		
Number of convictions per prosecutor			
	Median	Mean	Standard deviation
CEE countries	33	49	62
Western countries	198	165	105
All countries	48	102	102
25% quartile	33		
Median	48		
75% quartile	198		

*Note*

In most countries the average of 1995–1997. Figures for Austria, Denmark, and the Russian federation are for 1994.

about 300 or more convictions per prosecutor. The lowest figures were in Georgia, Azerbaijan, Kazakhstan, Cyprus, Armenia and Latvia – where there were fewer than 20.

The figures for the number of prosecutions per prosecutor and the number of convictions per prosecutor are closer together in the CEE countries, implying that more cases prosecuted are taken forward to court. However, system differences are likely to be more the issue here rather than any ‘real’ differences in how well prosecutors achieve convictions. In many CEE countries it might be that there is little scope for prosecutors to drop cases at their own discretion.



### 5.3.7 In parenthesis: relative crime levels according to the police and the ICVS

The issue of whether the ICVS gives a different picture of relative crime levels in different countries to figures of crimes recorded by the police is essentially tangential here, as mentioned. The answer may be of interest nonetheless. Of the 34 countries with both an ICVS and a police measure of crime, 11 fell into the same quartile on both crime measures (see Table 12A). (Of these, England & Wales and the Netherlands were in the top quartiles with the highest crime rates on both measures. Belarus, Croatia, Georgia and Macedonia, in contrast, were in the bottom quartiles on both measures). The largest discrepancies were Finland (which was in the ‘worst’ quartile as regards police crime rates, but the ‘best’ one for the ICVS measure), and the Russian Federation and the Ukraine where the opposite applied (with the lowest police rates and the highest ICVS ones).

Of further interest is whether the two crime measures correspond more closely when ICVS figures are adjusted to reflect only crimes reported to the police. There was indeed more correspondence, as one would expect. Compared to the 11 countries in the same quartiles on the two initial crime measures, there were 21 in the same quartiles when overall recorded crime was set against the ICVS estimate of reported crime. The quartile positions also came closer together for a further eight countries (see Table 12B). In other words, then, police figures seem a fair guide to the level of reported crime, but a much less good one as to the level of everyday experience of crime in different countries, much of which remains beyond police knowledge. By the same token, these results confirm the validity of the ICVS for the purpose of international comparisons of crime levels.

**Table 12A. Quartile positions on all police-recorded crime (Sixth UN Survey) and the International Crime Victimization Survey (unadjusted figures)**

		Police (total recorded crime)			
		Q1 (lowest crime rates)	Q2	Q3	Q4 (highest crime rates)
ICVS (all survey crimes)	Q1 (lowest crime)	Belarus Croatia Georgia Macedonia		Austria Hungary N. Ireland Portugal	Finland
	Q2	Kyrgyzstan Romania	Malta Poland Slovakia	Switzerland	Belgium Denmark
	Q3	Latvia	Spain	Italy USA	Canada France Scotland Sweden
	Q4 (highest crime)	Russian Federation Ukraine	Bulgaria Estonia Lithuania Slovenia	Czech Republic	England & Wales Netherlands

**Table 12B. Quartile positions on all police-recorded crime (Sixth UN Survey) and the International Crime Victimization Survey (adjusted to exclude offences not reported to the police)**

		Police (total recorded crime)			
		Q1 (lowest crime rates)	Q2	Q3	Q4 (highest crime rates)
ICVS (all survey crimes, excluding those not reported to the police)	Q1 (lowest reported crime rate)	Belarus Croatia Georgia Kyrgyzstan Macedonia Romania Russian Federation Ukraine		Portugal	
	Q2	Latvia	Estonia Poland Spain	Austria Hungary Italy	Finland
	Q3		Bulgaria Lithuania Malta Slovenia	N. Ireland Switzerland USA	Belgium
	Q4 (highest reported crime rate)		Slovakia	Czech Republic	Canada Denmark England & Wales France Netherlands Sweden Scotland

### 5.3.8 In parentheses: attrition

The above indicators all bear in their way on the process of attrition, or the progressive funnelling away of the number of crimes the police know about to the number of convictions in court. Attempts to look at attrition in criminal justice processing have grown somewhat in popularity as a means of better illustrating the limited scope of the criminal justice system in dealing with crime (see, e.g., Marshall (1998); Farrington, Langan and Wikström (1994); Langan and Farrington (1998); Mukherjee and Reichel (1999); Barclay and Tavares (1999); Tonry and Farrington (forthcoming)). The most complete measure of attrition starts by using victim survey results to provide the initial count of crimes experienced by victim, then follows these through to crimes reported by victims,

crimes recorded by the police, offences for which an offender is caught, convicted, and – in some analyses – sent to prison. No use is made here of the victim survey measure provided by the ICVS for the Sixth Survey. For one, it reduces the number of countries that could be included in analysis (particularly CEE ones). Also, as discussed earlier, the ICVS total count of crime can only be loosely aligned the total count of offences recorded by the police.

Even with a more reduced focus, assessing differential attrition rates is very problematic due simply to procedural difference.

- First, for instance, the number of suspects per 100 crimes will be heavily dependent on the number of crimes recorded in the first place. Some countries will tend only to record when there *is* a suspect.<sup>21</sup> Other countries will record crimes across a much broader range than that to which suspect information might apply, or at least a different coverage to the coverage of suspects (the USA is an example).<sup>22</sup>
- Second, differences in prosecutorial arrangements will also affect the link between suspects and convictions, while convictions themselves may be differently counted.
- Third, the attrition assessment sets *offences* recorded against *offenders* suspected, prosecuted or convicted: one offence could have more than one offender, and one offender could be responsible for more than one offence.
- Fourth, the respective annual measures will be gathered independently. Crimes in one year may not lead to suspects being caught and dealt with in the same year, and thus the assumption needs to be made that the respective case-loads remain fairly stable year-on-year.

The following analyses, therefore, are tentative. (Information on per capita rates of recorded crime, the number of suspects, prosecutions and convictions in each country are shown in Table IX in Annex B.)

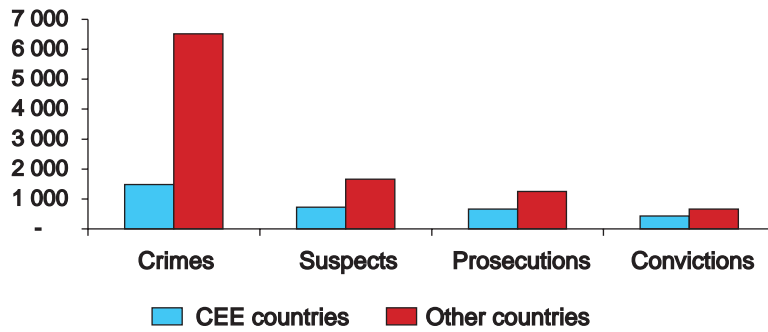
There is a clear difference between CEE and Western countries as regards attrition. As Figure 3 shows, the volume of crimes recorded by the police per 100,000 population is much greater in Western countries – although this may well be because of more complete recording of criminal incidents. The average (median) rate of suspects, prosecutions and convictions, however, is much more similar between the two groups of countries. The result is that the higher level of crime in Western countries means that the fall-off at suspect stage is particularly substantial.

Figure 4 shows the process of attrition for the two sets of countries by indexing to 100 the per capita rate of recorded crimes. Rather more than half of offences recorded resulted in a suspect being counted in the CEE countries, whereas it was about three in ten in the other countries. The attrition at the prosecution stage was again less pronounced in the CEE countries than in other countries where the

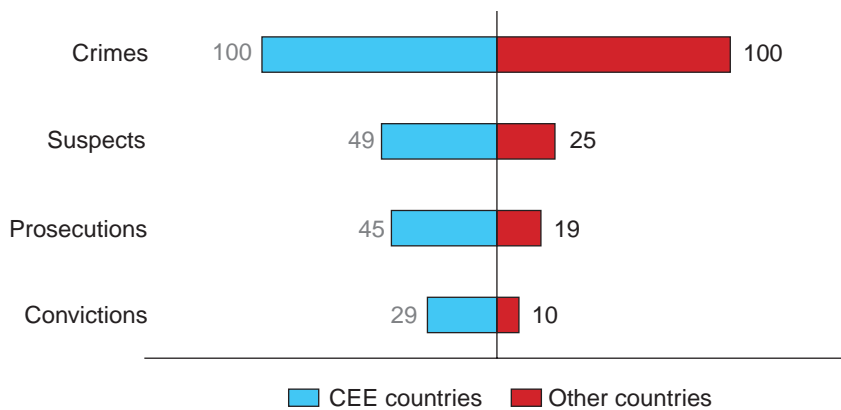
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21 Cyprus, the USA and Turkey actually reported *more* suspects than recorded crimes.

22 A potentially more reliable assessment would come from examining differential attrition in relation to particular types of offences - as Barclay (2000) did with data from the European Sourcebook, for instance. Here, this would have reduced the number of countries that could be examined. And substantial problems of interpretation would still remain, as Barclay found.



**Figure 3. Rates of police-recorded crimes, suspects and convictions per 100,000 population (medians)**



**Figure 4. Attrition in the criminal justice process**

number of prosecutions was only two-thirds the number of suspects. The rate of fall-off between prosecutions and convictions was similarly smaller in the CEE countries than in others, where again only two out of three prosecutions led to a conviction.

Comparing overall attrition (recorded crime to convictions), the median for CEE countries was about three convictions per ten crimes. In Western countries it was just over one conviction per ten crimes. Thus, attrition was in general greatest in more developed countries, although as mentioned this is probably much less an indication of poor system performance than a reflection of more complete recording of minor crimes (especially minor property crimes for which the police are unlikely to catch offenders). In addition, the greater fall-off between crimes and convictions in some countries may also indicate a deliberate funnelling of cases away from the courts through the use of less formal case processing alternatives.

For all countries for which there were data, for each 100 crimes, there were 41 suspects, 28 prosecutions and 21 convictions.

### 5.3.9 Country differences

The attrition values vary widely by country at each of the attrition stages. (Table X in Annex B shows the data for all countries for which attrition could be at least partially tracked from recorded crimes.) Not all countries provided information on all four measures (crime, suspects, prosecutions and convictions), so no complete picture is possible. This said, on the face of it, the results suggest:

- *Crimes to suspects.* There is most attrition in England & Wales, Spain, France, Canada and the Netherlands, where there is only about one suspect or less for every five crimes recorded. At the other end of the scale, there was marginal attrition at this stage in Greece and Azerbaijan: there were nearly as many suspects as crimes.
- *Suspects to prosecutions.* For many countries, the suspect and prosecution figures were the same or very similar, suggesting that suspects are counted only when a prosecution is made. Attrition was most marked in Germany, Finland, Portugal and Israel: in each, less than half of suspects were prosecuted. In contrast, the least pronounced attrition was in Canada, Macedonia, and the USA – where about 90% of suspects appeared to be prosecuted.
- *Prosecutions to convictions.* This segment of attrition might be thought to vary less than others, since one would assume that a common objective of all justice systems would be to secure a conviction for cases that had passed the prosecution hurdle. In fact, though, there was still much country variation. The fall-off between prosecutions and convictions appeared greatest in Slovenia, Macedonia, and Norway – where only around one in three prosecutions led to a conviction.<sup>23</sup> There was least fall-off in Israel, Finland, Moldova, and Georgia – where more than nine in ten prosecutions led to a conviction. On average, about two in three prosecutions secured a conviction.
- *Overall attrition (crimes to convictions).* Overall attrition levels for different countries ranged widely from about one or less convictions per ten crimes in Belgium, Norway, England & Wales, the Netherlands, Germany, Italy, and Portugal, to five or more convictions per ten crimes in Azerbaijan, Georgia, Armenia and Kyrgyzstan.

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23 In the USA, the gap was so pronounced as to suggest the basis of the data on convictions did not match prosecutions.

## 5.4 Other indicators

The Sixth survey offers a few other ways forward to assess aspects of police performance. The measures presented here cover two main components:

- a. Public satisfaction with policing, using responses from the ICVS;
- b. Corruption among the police.

### 5.4.1 Citizen satisfaction with the police

Three measures can be used from the ICVS to assess aspects of the public's response to the police. They are relatively modest indicators in some ways (based on relatively small samples, and using simple questions), but they have the unique advantage of being internationally comparable, and wide in coverage (there was information for 35 countries). The three measures are:

- a. The level of reporting to the police. Reporting levels are taken for 'contact crime' (robbery, assaults and sexual assaults) since this is arguably less influenced by pragmatic considerations such as insurance claims.<sup>24</sup> The assumption is that higher reporting levels denote more confidence in the willingness and ability of the police to deal with crimes brought to their attention. For the 35 countries for which results were available, on average (median) 31% of contact crimes were reported to the police. The median for CEE countries was lower at 25% than for other countries (34%). By country, the highest level of reporting (about 40% or more) was in the USA, Scotland, the Netherlands, and the UK. The lowest (about 20% or less) was in Kyrgyzstan, Austria, Croatia, the Russian Federation, Latvia, Belarus, Georgia, and Romania.<sup>25</sup>
- b. For victims who did bring in the police: how satisfied were they with the way they felt the police handled their report? On average, nearly half of victims of contact crime were satisfied. The median for CEE countries was appreciably lower (36% were satisfied on average) than in the other countries (68%). By country, the highest level of satisfaction (about 75% of victims or more being satisfied) was in Denmark, Finland, Sweden, the Netherlands, and Canada. The lowest (about 30% or less) was in Kyrgyzstan, the Ukraine, Georgia, the Russian Federation, and Lithuania.
- c. The satisfaction of all country respondents (victims and non-victims) with police performance in their local area. This taps more general attitudes towards the adequacy of policing. On average, just over half of those in all countries were satisfied, with the median in CEE countries again being appreciably lower (36%) than in other countries (76%). By country, the highest level of satisfaction (80% or more satisfied) was in Canada, Scotland, the

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24 However, substituting a measure of reporting of *all* crimes measured by the ICVS by the Citizen Evaluation of Police Performance Index (CEPPI) made little difference to the results.

25 Some of the differences in reporting, it should be noted, may reflect the different makeup of contact crimes, since reporting rates for the component parts differs somewhat

USA, Denmark, and Switzerland. The lowest (about 20% or less) was in the Russian Federation, Kyrgyzstan, Lithuania, and Estonia.

These three measures are combined into an Index of Citizen Evaluation of Police Performance (CEPPI), the construction of which is described in Annex A. (There was a fair degree of correlation between them). Table 13 shows the quartile groupings. Countries with the highest CEPPI scores are Scotland, the USA, Canada, Denmark, and England and Wales – all with scores of nearly 90 or more out of 100 (the maximum value). Countries with the poorest assessment of police performance were Kyrgyzstan, the Russian Federation, Georgia and Latvia – with scores of 11 or less. The median value for CEE countries (27) was about a third less than for other countries (77) – denoting a marked difference in police-public relations. All countries in the lowest quartile were CEE ones, as were most of those in the next quartile. These results are in line with those from the Fifth UN Survey and are not altogether surprising given the status of the police in the Soviet system – perhaps not quickly forgotten (cf. Zvekic, 1998).

**Table 13. Categorisation of countries according to the Citizen Evaluation of Police Performance indicator (CEPPI)**

Poor evaluation	Medium		High evaluation
	2 <sup>nd</sup> quartile	3 <sup>rd</sup> quartile	
1 <sup>st</sup> quartile			4 <sup>th</sup> quartile
Kazakhstan (1)	Bulgaria (10)	Spain (19)	France (27)
Russian Fed. (2)	Croatia (11)	Macedonia (20)	N. Ireland (28)
Georgia (3)	Hungary (12)	Slovakia (21)	Netherlands (29)
Latvia (4)	Poland (13)	Malta (22)	Sweden (30)
Romania (5)	Czech Rep. (14)	Slovenia (23)	Eng & Wales (31)
Ukraine (5)	Italy (15)	Finland (24)	Denmark (31)
Estonia (5)	Portugal (16)	Belgium (25)	Canada (33)
Belarus (8)	Austria (16)	Switzerland (26)	USA (34)
Lithuania (9)	Albania (16)		Scotland (35)
	Median	Mean	Standard deviation
CEE countries	27	29	19
Western countries	77	74	18
All countries	46	51	30

## 5.4.2 Corruption

Use was made of an Index of Corruption to look at another aspect of the performance of criminal justice workers. The Index was derived from three independent sources.<sup>26</sup>

- a. The first was a measure from the ICVS pertaining to what might be seen as ‘low level’ corruption by public officials.<sup>27</sup>
- b. The second was the Transparency International Corruption Ranking, based on corrupt practices as perceived by the business sector:
- c. The third was the World Economic Forum measure on whether improper practices (bribery/corruption) prevailed in the public sphere.

Clearly, all three are slightly tangential measures of the behaviour of criminal justice personnel. For instance, in the ICVS a “police officer” is only one of the examples given of officials who might have asked for a bribe, and for those who admitted having been subject to this form of corruption, there is no way of saying whether it involved a police officer (or indeed another criminal justice worker). Nonetheless, it is reasonable to assume that such corruption as exists at country level is also likely to spill over to those within the criminal justice sector. The high correlations between the three indicators also suggest some underlying proclivities.<sup>28</sup>

The mean scores of the Corruption Index varied considerably by region: from 27 in the CEE countries, to 74 in the remainder (highest scores denoted less corruption). Although there was more variation in the CEE countries (indicated by a higher standard deviation relative to the mean), the ‘worst’ quartile nonetheless comprised all CEE countries, with the exception of Turkey. In the second quartile CEE also predominated, although Italy, Greece and Malta also featured. There was a strong negative association between the Corruption Index and citizens’ evaluations of the police as captured in CEPPI (0.83;  $n=35$ ). In other words, countries where corruption seems more rife are generally those where the public also seem to have less confidence and support for the police. Table 14 shows the quartile groupings on the Corruption Index.

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26 The Corruption Index was computed by the author, not taken from the UN Database.

27 In its last two sweeps, the ICVS has included the following question: “In some countries, there is a problem of corruption among government or public officials, During [year], 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?” Data were available for 33 countries.

28 The correlation between the ICVS measure and the Transparency Index was 0.78 ( $n=29$ ); between the ICVS and the World Economic Forum (WEF) data was 0.83( $n=18$ ); and between the TI and the WEF data,  $r=0.91$  ( $n=30$ ).



**Table 14. Categorisation of countries according to the Corruption Index (CI)**

<b>Higher corruption</b>	<b>Medium</b>		<b>Low corruption</b>
1 <sup>st</sup> quartile	2 <sup>nd</sup> quartile	3 <sup>rd</sup> quartile	4 <sup>th</sup> quartile
Azerbaijan (1)	Ukraine (13)	Ireland (24)	Luxembourg (36)
Georgia (2)	Slovakia (14)	Hungary (25)	Switzerland (37)
Kyrgyzstan (3)	Latvia (15)	Estonia (26)	Canada (38)
Kazakhstan (4)	Lithuania (16)	Spain (27)	Netherlands (39)
Russian Fed. (5)	Romania (17)	Portugal (28)	Eng & Wales (40)
Armenia (6)	Macedonia (18)	Belgium (29)	Iceland (41)
Moldova (7)	Belarus (19)	Slovenia (30)	Norway (42)
Albania (8)	Italy (20)	France (31)	N. Ireland (43)
Croatia (9)	Greece (21)	Israel (32)	Denmark (44)
Bulgaria (10)	Poland (22)	Austria (33)	Scotland (45)
Turkey (11)	Malta (23)	USA (34)	Sweden (46)
Czech Rep. (12)		Germany (35)	Finland (47)
	Median	Mean	Standard deviation
CEE countries	27	26	18
Western countries	74	69	24
All countries	51	50	30

## 5.5 Combining the indicators

For reasons described, the measures presented so far are all rather problematic as sound indicators of the performance of criminal justice systems in different countries. But in truth they are as good as any likely to be available. Seven measures are combined below to produce an overall picture. They give some indication of what police and prosecutors do, and how much they do; what people think of the police; and what people’s exposure to corruption might be. The seven measures are:

- a. Police recording productivity – the extent to which the police appear to record crimes reported to them by victims.
- b. The number of suspects generated by police officers
- c. The number of prosecutions that prosecutors generate
- d. The number of convictions relative to prosecutors
- e. The number of convictions relative to the number of police – additional to (d) as differences in prosecutorial arrangements may influence (d) as much as productivity.
- f. The Citizen Evaluation of Police Performance Index (CEPPI)
- g. The Corruption Index

Each of these seven measures has a quartile value. An average of the quartile values is used as a broad overall indicator of performance. It needs to be kept in

mind that some countries could be assessed on more measures than others.<sup>29</sup> No attention is paid to the earlier measures of criminal justice staff capacity in different countries (e.g., the number of police per capita). There is no clear relationship between resourcing levels and the volume of crime dealt with – indeed as regards the police at least, *more* police is likely to be associated with *more* crime – probably because of a greater capacity to record it. Likewise, the number of prosecutors and judges seemed to be largely a function of different procedural arrangements (with the CEE countries having higher per capita rates). Correctional staffing levels also seemed simply related to economic development.

Table 15 presents the average of the quartile values for the seven measures used. (Table XI in Annex B shows the full details). For each measure, quartile 4 represents the ‘best’ performance – e.g., the closest correspondence between the level of crime recorded by the police and the ICVS, or the highest number of prosecutions per prosecutor. Quartile 1 represents the poorest performance. The potential ‘top score’ is four; with the bottom score one. Because assessment is sounder the more measures available, Table 14 shows the average quartile scores taking into account the number of measures on which the average is based. The main points are:

- There are eleven ‘best performing’ countries with average quartile scores of 3.4 or more. However, this assessment is based on only one measure for Luxembourg, and on a still modest three measures for Andorra and Norway. Of the remaining countries, the full seven measures produced high scores for Finland, the Netherlands, England and Wales and Sweden. Five or six measures produced high scores for Scotland, Canada, and Denmark. Four measures did the same for Switzerland,
- In the next band down (scores of 2.7 to 3.3) were the USA, Hungary (on the basis of seven measures), Austria and Spain (six measures), Belgium (five measures), France, Germany, Turkey and Northern Ireland (four measures) On less data, Greece, Ireland and Iceland were also in this group.
- The worst performing countries (scores under 2.0) were, with the exception of Cyprus, all in CEE: Croatia, Latvia, the Russian Federation, Georgia, Lithuania, Kazakhstan, Moldova, Armenia, Ukraine, Bulgaria, Kyrgyzstan, Albania and Azerbaijan. Countries performing slightly better were also mainly CEE ones – although Portugal, Israel, Italy and Malta were among them.

There was no clear association between this overall performance measure and the level of crime in different countries. There was a positive correlation with the Conventional Crime Index constructed from the UN Sixth Survey (which was based on both police and ICVS crime measures) – indicating that comparatively well performing systems are also those with the highest level of crime.<sup>30</sup> There was no association with the Petty Crime Index (based on ICVS values only)<sup>31</sup> while the correlation between performance and the Serious Violence Indices was

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29 Thirteen countries had seven measures; nine had six measures; ten had five measures; seven countries had four; six had three measures, and three countries had two measures. Luxembourg had a measure only for corruption.

30 The correlation was 0.449; n = 45; p < 0.01.

31 The correlation was 0.075; n = 30; ns.

**Table 15. Overall assessment of performance (based on quartile positions with regard to a maximum of seven measures)**

	<b>Best performers</b>	<b>Medium</b>	<b>Worst performers</b>	
Average of quartiles:	3.4 or more	2.7 to 3.3	2.00 to 2.6	Under 2.0
<i>Scores based on 7 measures</i>				
	Finland, Netherlands, Eng & Wales, Sweden	USA, Hungary	Portugal, Estonia, Slovenia, Slovakia,	Croatia. Latvia, Russian Federation
<i>Scores based on 6 measures</i>				
	Scotland	Austria, Spain	Czech Rep., Macedonia, Romania	Georgia, Lithuania, Kazakhstan
<i>Scores based on 5 measures</i>				
	Canada, Denmark	Belgium	Israel, Poland, Belarus, Italy	Moldova, Armenia, Ukraine
<i>Scores based on 4 measures</i>				
	Switzerland	France, Germany, Turkey, N. Ireland		Bulgaria, Cyprus
<i>Scores based on 3 measures</i>				
	Andorra, Norway	Greece, Ireland	Malta	Kyrgystan
<i>Scores based on 2 measures</i>				
		Iceland		Albania, Azerbaijan
<i>Scores based on 1 measure</i>				
	Luxembourg			

Note

- 1 Based on the average of quartile positions for (i) police recording productivity; (ii) suspects / police officers; (iii) prosecutions / prosecutors; (iv) convictions / prosecutions; (v) convictions / police; (vi) CEPPI; and (vii) the Corruption Index. Table XI in Annex B shows full details of the quartiles.

negative – with better performance going alongside lower violent crime.<sup>32</sup> However, since the measurement of violent crime across country can be considered more problematic than conventional property crime, the relationship between violence and performance will be more tenuous. The fact, then, that systems which appear to be performing comparatively well have higher property crime rates may simply reflect, for one, higher general recording productivity. It is also the

32 The correlation was -0.561; n = 47; p <001.

case of course that crime rates are largely determined by social, political and economic dynamics, against which the performance of the criminal justice system is a minor influence.

## 5.6 Summary and conclusions

This chapter has drawn on data from 54 countries in Europe and North America who replied to the Sixth United Nations Survey as regards the level of criminal justice personnel and indicators of output, such as suspects known, and convictions achieved. (Information for 1995 and 1997 was asked for.) Use is also made of additional material from the International Crime Victim Survey (ICVS). Problems with the data on personnel centre mainly on the fact that what is counted in occupational categories may differ according to the organisation of law enforcement. (Comparison of prosecutorial resources may be the most problematic.) The problems with data on outputs (suspects, prosecutions, and convictions) are partly a function of differences in procedures and terminology (suspects, prosecutions and convictions do not even necessarily mean the same thing in all countries). Another difficulty is the way data on outputs are collected and organised – typically collected within independent statistical systems, with no cross checking between them, or common counting methods. (Cases can mean individuals, incidents or processing decisions.) The ICVS also is not without problems, in particular with respect to the fragility of sample sizes in some of the country sweeps carried out.

Issues of comparability severely undercut the reliability of the comparisons of how the criminal justice system operates in different countries. Still, nothing ventured, nothing gained on the comparative front – and this would be unfortunate as most other analyses have focused less on resources and operations than on differences between countries in crime levels (eg, Killias and Rau, 2000), or imprisonment rates (e.g., Walmsley, 1997; Tkachuk and Walmsley, 2001).

A number of indicators were developed to measure performance productivity. They do not bear on the quality of performance (in terms of fairness, professionalism or moral integrity). Nor do they bear on the effectiveness of performance in reducing crime and deterring offenders. Both quality and effectiveness will depend, as Newman and Howard (1999b) say, more on intangible resources to do with educational level, the sophistication of organisational structures, training, leadership, technological support, and the political culture in which the criminal justice system operates. There is no way of assessing these intangibles here.

One merit of the UN Survey data is the breadth of its coverage of countries – indeed wider than the countries concentrated on here. The only other equivalent dataset is that in the European Sourcebook (Council of Europe, 1999). This tackles fewer countries and does not set out to collect quite the same criminal justice system information as here. This said, though, it is fair to say that the Sourcebook probably attends more to comparability and reliability of the data it collects – helped perhaps by its more restricted scope.

The focus here has been on two groupings of countries: (i) Central and Eastern Europe (CEE); and (ii) countries in Western Europe (including Israel and Turkey), to which are added the USA and Canada. For convenience, the latter group are called 'Western' countries. Much of the analysis in this chapter mirrors that done by Ineke Haen Marshall (1998) when she looked at equivalent data from the Fifth United Nations Survey.

## The police

As regards the police, the main results were:

- It is clear – and not surprising – that in all countries police officers form by far the highest proportion of criminal justice personnel. The mean was just under 80%. The police share was the same in CEE countries as in Western ones despite the per capita rate of criminal justice personnel as a whole being about a third higher.
- Policing rates are generally higher in CEE countries, consistent with their having historically relied heavily on state security forces to maintain order. The Scandinavian countries tended to have comparatively low per capita policing levels. For 45 countries all told, there was one police employee for every 314 people. For CEE countries the figure was one every 247 people, and in Western ones it was one employee for every 347.
- The police appear more productive in Western countries. This is endorsed by a closer correspondence between recorded crime figures and an ICVS count of crime, indicating more responsiveness to victims and perhaps more efficient systems for recording victims' reports. Another pointer is the higher number of suspects dealt with per officer in a year (five) than in the CEE countries (two). There were also more convictions per officer in Western countries (2.3) than in CEE ones (1.1).
- The very wide variations in the number of suspects dealt with by the police are hard to believe. The issue of how suspects are defined and dealt with may be even more problematic than the count of police officers.
- There was no very clear support for either of two competing explanations of policing levels: one being that 'more police equals more crime' (because of greater capacity to record crime), the other being 'more policing equals less crime' (because the police are an effective deterrent). The amount of crime that is counted, irrespective of how much there may 'really' be, could well be a compromising factor.
- Pertinent to this was that the results provided the opportunity to look very roughly at whether the ICVS gives a different picture of relative crime levels to figures of crimes recorded by the police. This was possible for 34 countries. A third (11) fell into the same quartile on both crime measures (ie, they might have been in the 'worst' quartile as regards both the ICVS and police figures, or in both of the 'best' ones.) England & Wales and the Netherlands fared poorly with high crime on both measures. Belarus, Croatia, Georgia and Macedonia, in contrast, fared well with low crime on both. The largest discrepan-

cies were for Finland (faring poorly on police figures but well on the ICVS), and the Russian Federation and the Ukraine where the opposite applied.

- When ICVS results were restricted to crimes reported to the police there was much more correspondence between the survey measure and police figures. Broadly, then, crime recorded by the police may be a fair guide to the level of reported crime, but a less good one as regards everyday experience of crime, much of which remains beyond police knowledge. These results were seen as confirming the validity of the ICVS for the purpose of international comparisons of crime levels.
- Three ICVS measures were harnessed to form an Index of Citizen Evaluation of Police Performance (CEPPI). (They centred on reporting to the police, victims' satisfaction and general attitudes to police performance.) The median CEPPI value for CEE countries (27) was about a third less than for Western ones (77) – denoting a very marked difference in police-public relations.

## **Prosecutors**

As regards prosecutors, the main results were:

- In CEE countries, the median number of prosecutors (11 per 100,000) was over double that in Western countries. This may be because prosecutors have a much wider role in the processing of cases, and / or because they are more likely to be career public servants and thus more systematically counted (Newman and Howard, 1999b). As a corollary, there tended to be more prosecutors per capita in countries classified as 'medium development' on the HDI scale than in 'high development' countries.
- There was a very wide range as regards the number of prosecutions per prosecutor, although this is likely to reflect both arrangements for passing on cases for prosecution, and for what prosecutors can do with them. By and large, the greater number of prosecutors in CEE countries processed far fewer prosecutions (the median was 56 per prosecutor) than in Western countries (270). There was diversity in the CEE countries however.
- As a corollary, the CEE countries produced fewer convictions per prosecutor (33) than Western ones (198). How much this might have to do with the extent of court capacity is unknown.
- The number of prosecutions and convictions per prosecutor are closer together in the CEE countries. This might imply that more cases prosecuted are taken forward to court, although system differences in the scope for prosecutors to drop cases may be a firmer explanation.

## **Judges**

As regards judges, the main results were:

- There are large variations in the number of professional judges per capita. (Information was rather incomplete on lay judges).

- Unlike prosecutors, there was no marked difference between the CEE countries as a whole (11 judges per 10,000) and Western ones (12). The majority of countries compared here operate under civil rather than common law, but all countries with judicial rates around or above the median were civil law countries.

## **Correctional staff**

As regards correctional staff, the main results were:

- The proportion of resources in prisons (16% taking all countries together) was highest after the police. One-third of all criminal justice personnel were in correctional services in the United States and Estonia, and about a quarter in the Netherlands, Finland and Denmark.
- There was also wide variation in per capita rates of correctional staff, but again there was no marked difference between the CEE countries as a whole (49 corrections officer per 100,000) and Western ones (53). Nonetheless, less well-developed countries tended to have lower correctional staffing rates.
- The countries with the very highest correctional staff rates had high imprisonment levels (Estonia, the Russian Federation, and the USA), but generally there was only a modest tendency for there to be more correctional staff where there were more prisoners to look after. (Special factors may explain the very high rate of correctional staff in Northern Ireland.)
- In the CEE countries, there were 3.1 inmates per correctional employee – over double the figure elsewhere 1.4). In the countries with the least favourable staff/inmate ratios, this was more because of high prisoners numbers than because of particularly low staffing rates comparatively. With the exception of the U.S. and Greece, all the countries with the worst inmate/staff ratios were CEE ones.

Overall, in the countries in this analysis, there was one criminal justice system employee for every 249 people. The figure in the CEE countries was one for every 213 people, and one for every 264 people elsewhere.

## **Gender balance**

Some attention was paid to how far the gender balance of criminal justice personnel differed across country. Since not all countries provided information on all four sectors, a Gender Balance Index (GBI) was constructed to minimize the effect of incomplete data.

- It is clear that criminal justice is still fairly male dominated. Women were least well represented in the police: overall, 9% of officers were women. A number of countries had much lower figures. There was large variability in the proportion of female officers within the two country groupings, but the medians in each. A few countries seemed to draw more on women – either re-

flecting a tradition of female participation in military activities (eg, Russia, Estonia, and Armenia), or fairly higher levels of social development (eg, Sweden and the USA).

- Women were better represented among prosecutors and judges, whose work is probably seen as less dependent on 'heavier-weight' masculine skills. Overall, about a third of prosecutors and judges were women. For judges, the CEE median was appreciably higher (nearly 60%) than the other countries (just over a quarter).
- Overall, about a fifth of staff in correctional institutions was women. The highest figures were mainly in CEE countries.
- There was little association between the 1998 UN Gender-related Development Index and the percentage of women in the criminal justice workforce. This could well be because some of the countries with the highest levels of female CJS penetration were not particularly well-developed in other socio-economic terms
- On the Gender Balance Index, CEE countries mainly had the best representation of female staff, although this was also true of the USA, Sweden, and Canada.

### **Attrition**

The productivity indicators discussed above – e.g. how many suspects the police 'produce', and how many convictions prosecutors secure – was also used to assess the process of attrition, or the progressive funnelling away of the number of crimes the police know about to the number of convictions in court. The analysis of differential attrition rates was done mindful of the substantial problems that follow from the wide range of procedural arrangements, and the lack of linkage within countries between respective measures of crimes, suspects, prosecutions and convictions. (The attrition analysis, it should be noted, compares offences recorded against offenders suspected, prosecuted or convicted. Thus, it does not provide an exact measure of how many crimes lead (for example) to a conviction – since one offence could have more than one offender, and one offender could be responsible for more than one offence. Moreover, there is no linkage between individuals, but rather simply a count of the different constituencies.) The main results were:

- The volume of crime is much greater in Western countries, and this may well be because of more complete recording. In any event, though, the fall-off between recorded crime and suspects is much more marked in Western countries (29 suspects for every 100 crimes) than in the CEE ones (53 suspects for 100 crimes).
- There was also less attrition at the other stages in the CEE countries. Three-quarters of suspects were prosecuted (or more accurately there were 0.75 times the number of prosecutions as suspects), and three-quarters of prosecutions led to a conviction. In Western countries, about two-thirds of suspects were prosecuted and about two-thirds of prosecutions led to a conviction.



- Taking all countries together, for every 100 crimes, there were 41 suspects, 28 prosecutions and 21 convictions. In the CEE countries, there were 53 suspects, 40 prosecutions and 30 convictions. For Western countries, the figures were 29 suspects, 19 prosecutions and 12 convictions.

## **Corruption**

Three corruption measures were used to create a Corruption Index which – taking some licence – it was assumed reflected the behaviour of criminal justice personnel as well as that of other public officials. There was much more corruption in the CEE countries, although there was variation within them. Not surprisingly, there was a strong negative association between the Corruption Index and CEPPI: countries where corruption seems more rife are generally those where the public also seem to have less confidence and support for the police.

## **An overall assessment**

Five measures of productivity as well as CEPPI and the Corruption Index were combined to produce an overall measure of performance. It is a fairly blunt measure, but better than nothing as a summary tool. For some countries, there were too few of the seven measures to produce useful conclusions. For countries with a reasonable number of measures, the best performers were Finland, the Netherlands, England and Wales, Sweden, Scotland, Canada, Denmark and Switzerland. The next best performers were the USA, Hungary, Austria, Spain, Belgium, France, Germany, Turkey and Northern Ireland. The worse performers were, with the exception of Portugal, Israel, Italy, Malta and Cyprus, all in CEE countries.

There was no clear association between the overall performance measure and the level of crime in different countries. This may reflect the fact that countries that appear to be performing badly in terms of the volume of crime simply have more capacity to record it, or more opportunities for it provided by comparatively affluent conditions (e.g., van Dijk, 1999). It may also signify that criminal justice systems play a minor part in determining crime levels compared to social, political and economic dynamics.

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# Annex A

## The Indices

Each of the three Indices used is available on the UN Sixth Survey data. However, the Indices used were reconstructed by the author after a process of tidying, correcting and adding some data. The Indices were constructed as follows:

- (i) Countries were ranked-order on the basis of values for each of the measures available.
- (ii) For the Gender Balance Index and the Corruption Index, these ranks were adjusted to take account of the fact that the number of countries with values on each measure differed. (This was done as any simple averaging of the ranks would give undue weight to measures for which more countries had values). For CEPPI, the three measures were available for all countries included.
- (iii) These adjusted ranks were summed and then averaged according to the number of measures available.
- (iv) These averages were then rank ordered.
- (v) Then these ranks were scaled to 100.

### **Gender Balance index**

The four possible measures were the proportion of staff who were female among (i) the police; (ii) prosecutors; (iii) judges; and (iv) correctional staff. Only one measure was available for: Bulgaria (correctional staff), Canada (police); France (police), Liechtenstein (police) and Poland (police). Values for these countries, therefore, are problematic. There was missing data for: Albania, Luxembourg, Tajikistan, Turkmenistan, Uzbekistan, and Yugoslavia

### **Citizen Evaluation of Police Performance Index (CEPPI)**

All countries had the three measures from the ICVS on (i) the percentage of contact crimes reported to the police; (ii) the percentage of reporting victims who were satisfied with police performance after reporting a crime (any crime); and (iii) the percentage of all ICVS respondents satisfied with police performance in the local area. No adjustment was made for differences between national and city surveys, since there was no clear pattern that attitudes differed. There was missing data for: Andorra, Armenia, Azerbaijan, Cyprus, Germany, Greece, Iceland, Ireland, Israel, Kazakhstan, Liechtenstein, Luxembourg, Moldova, Norway, Tajikistan, Turkey, Turkmenistan, and Uzbekistan. There was data for Yugoslavia, but this is omitted because there are no data on other measures. (Attitudes on the three dimensions were rather below the average in Yugoslavia.)

## **The Corruption Index**

The first of the three measure from the ICVS question on 'low level' corruption by public officials. Data was available for 33 countries. Those in countries with city survey were rather more likely to have experienced corruption than in the national surveys and therefore city values were downgraded by the median of the difference in victimisation rates (1.7). There were 43 countries with 1999 data available on the Transparency International Corruption Ranking, based on corrupt practices as perceived by the business sector. The third was the World Economic Forum measure on whether improper practices (bribery/corruption) prevailed in the public sphere (see World Competitiveness Yearbook 1999, published by the Institute of Management Development. The values for 1999 were taken. Data were used for 23 countries.

There was missing data for: Andorra, Cyprus, Liechtenstein, and Yugoslavia.

# Annex B

**Table I. Availability of data for analyses (year)**

	<b>Police</b>	<b>Prosecutors</b>	<b>Judges</b>	<b>Correctional staff</b>
Albania	97	na	na	na
Andorra	95, 97	95, 97	95, 97	95, 97
Armenia	94	94	94	94
Austria	94	94	94	94
Azerbaijan	na	95, 97	95, 97	95, 97
Belarus	na	94	95, 97	94
Belgium	94	95	95	95, 97
Bulgaria	na	95, 97	95, 97	95, 97
Canada	95, 97	na	na	95, 97
Croatia	97	95, 97	95, 97	94
Cyprus	95, 97	95, 97	95, 97	95, 97
Czech Rep.	95, 97	95, 97	95, 97	95, 97
Denmark	95, 97	95, 97	97	95, 97
England & Wales	95, 97	95, 97	97	97
Estonia	95, 97	95, 97	95, 97	95, 97
Finland	95, 97	95, 97	95, 97	95, 97
France	94	na	na	na
Georgia	na	95, 97	95, 97	95, 97
Germany	95, 97	95, 97	95, 97	97
Greece	95, 97	95, 97	95, 97	95, 97
Hungary	94	94	94	95, 97
Iceland	95, 97	95, 97	95, 97	95, 97
Ireland	95, 97	95, 97	95, 97	95, 97
Israel	95, 97	95, 97	95, 97	95, 97
Italy	95, 97	na	95, 97	95, 97
Kazakhstan	97	95	94	na
Kyrgyzstan	na	95, 97	95, 97	95, 97
Latvia	95, 97	95, 97	95, 97	95, 97
Liechtenstein	94	na	na	na
Lithuania	95, 97	95, 97	95, 97	95, 97

	<b>Police</b>	<b>Prosecutors</b>	<b>Judges</b>	<b>Correctional staff</b>
Luxembourg	94	94	94	94
Macedonia, FYR	94	94	95, 97	94
Malta	94	na	94	94
Moldova, Rep. of	95, 97	95, 97	95, 97	95, 97
Netherlands	95, 97	94	90	95, 97
Northern Ireland	95, 97	na	95, 97	95, 97
Norway	94	na	94	94
Poland	95, 97	na	na	na
Portugal	95, 97	95, 97	95, 97	95, 97
Romania	95, 97	95, 97	95, 97	95, 97
Russian Federation	94	94	94	94
Scotland	95, 97	95, 97	95, 97	95, 97
Slovakia	94	95, 97	95, 97	95, 97
Slovenia	95, 97	95, 97	95, 97	95, 97
Spain	95, 97	95, 97	95, 97	95, 97
Sweden	95, 97	95, 97	95, 97	95, 97
Switzerland	95, 97	na	90	95, 97
Tajikistan	na	na	na	na
Turkey	95, 97	95, 97	95, 97	95, 97
Turkmenistan	na	na	na	na
Ukraine	95, 97	na	95, 97	95, 97
USA	95, 97	97	97	95, 97
Uzbekistan	na	na	na	na
Yugoslavia	na	na	na	na
Missing data (na)	9	15	9	9
1995 & 1997 data	30	28	32	34
1997 only	3	1	2	2
1995 only		2	1	
1994 data	12	8	8	9
1990 data			2	
Total countries	54	54	54	54

**Table II. Levels of policing**

	<b>Police per 100,000 (1)</b>	<b>Total police numbers</b>	<b>Quartile</b>	<b>Rank (1 = highest)</b>				
Albania	408	15,216	3	14				
Andorra	214	152	1	38	Police per 100,000 population			
Armenia	405	15,191	3	15		Median	Mean	Standard deviation
Austria	367	29,474	3	18				
Belgium	344	34,712	3	21	CEE countries	405	424	249
					Western countries	288	320	134
Canada	183	54,864	1	43	Total	318	359	190
Croatia	427	19,227	4	10				
Cyprus	527	3,949	4	5	25% quartile	231		
Czech Rep.	415	42,845	4	13	Median	318		
Denmark	193	10,160	1	41	75% quartile	417		
England & Wales	244	126,835	2	32				
Estonia (2)	318	4,681	3	23				
Finland	156	7,984	1	45				
France	349	201,132	3	20				
Germany	309	252,626	2	25				
Greece	370	38,790	3	17				
Hungary	293	30,041	2	27				
Iceland	226	609	1	35				
Ireland	300	10,897	2	26				
Israel	424	24,137	4	11				
Italy	544	312,492	4	4				
Kazakhstan	788	132,701	4	2				
Latvia	417	10,387	4	12				
Liechtenstein	190	59	1	42				
Lithuania	481	17,844	4	7				
Luxembourg	276	1,100	2	28				
Macedonia	318	6,807	3	24				
Malta	507	1,845	4	6				
Moldova, Rep. of	164	7,121	1	44				
Netherlands	196	30,440	1	40				



**Table II.** (continued)

	<b>Police per 100,000 (1)</b>	<b>Total police numbers</b>	<b>Quartile</b>	<b>Rank (1 = highest)</b>
Northern Ireland (3)	714	11 492	4	3
Norway	231	10,042	2	34
Poland	260	100,283	2	30
Portugal	453	44,680	4	9
Romania	240	54,242	2	33
Russian Federation	1,225	1,812,344	4	1
Scotland	370	18,985	3	16
Slovakia	352	18,834	3	19
Slovenia	224	4,453	1	36
Spain (4)	338	132,658	3	22
Sweden	269	23,757	2	29
Switzerland	202	14,261	1	39
Turkey	216	135,571	1	37
Ukraine	468	238,425	4	8
USA	253	672,640	2	31

*Notes*

- 1 In most cases, the average of 1995 and 1997 (see [Table I in Annex B](#) for details).
- 2 Estonia: security police board personnel are excluded. The 1994 figure was much higher.
- 3 Northern Ireland: total police personnel includes full-time reserve figures (c. 3,000 in each year). These were excluded from the Fifth Survey.
- 4 Spain: figures include the gendarme, the three corps of the autonomic regions. Figures for local forces are not available.

**Table III. Levels of prosecutors**

	<b>Prosecutors per 100,000 (1)</b>	<b>Total prosecutor numbers</b>	<b>Quartile</b>	<b>Rank (1 = highest)</b>				
Andorra	5	4	1	31				
Armenia	9	327	3	17	Prosecutors per 100,000 population			
Austria (2)	2	200	1	38		Median	Mean	Standard
Azerbaijan	16	1,223	4	6				deviation
Belarus	15	1,495	4	7				
					CEE countries	11	13	5
Belgium	7	753	3	20	Western countries	5	6	3
Bulgaria	7	606	2	22				
Croatia	7	307	2	25	Total	7	9	5
Cyprus	6	47	2	27				
Czech Rep.	8	855	3	19	25% quartile	5		
					Median	7		
Denmark	9	481	3	15	75% quartile	12		
England & Wales	4	2,151	1	34				
Estonia	10	151	3	13				
Finland	5	250	1	32				
Georgia	17	896	4	5				
Germany	6	5,293	2	26				
Greece	4	429	1	35				
Hungary	11	1,153	3	11				
Iceland	5	14	2	29				
Ireland	2	57	1	39				
Israel (3)	7	406	2	23				
Kazakhstan	20	3,133	4	3				
Kyrgyzstan	12	567	4	9				
Latvia	24	603	4	1				
Lithuania	20	758	4	2				
Luxembourg	7	27	2	24				
Macedonia, FYR	5	113	2	28				
Moldova, Rep. of	12	528	4	10				
Netherlands	3	417	1	37				
Portugal	10	953	3	14				

**Table III.** (continued)

	<b>Prosecutors per 100,000 (1)</b>	<b>Total prosecutor numbers</b>	<b>Quartile</b>	<b>Rank (1 = highest)</b>
Romania	8	1,906	3	18
Russian Federation	19	28,514	4	4
Scotland	5	254	1	30
Slovakia	10	563	3	12
Slovenia	7	146	2	21
Spain	3	1,227	1	36
Sweden	14	1,280	4	8
Turkey	5	2,835	1	33
USA	9	24,040	3	16

*Note*

- 1 In most cases, the average of 1995 and 1997 (see [Table I in Annex B](#) for details).
- 2 Austria: total prosecutors do not include district prosecutors (the 'Bereichsanwalt').
- 3 Israel: the figure includes police prosecutors.

**Table IV. Lay and professional judges and magistrates (per 100,000 population) (1)**

	Lay judges	Professional judges	Ratio of lay judges to professionals
Estonia	373	14	27
Slovenia	192	37	5
Croatia	151	28	5
Macedonia, FYR	131	24	5
Hungary	120	21	6
Czech Rep.	111	22	5
Slovakia	108	22	5
Scotland (2)	80	5	16
Finland	74	18	4
Sweden	69	13	5
England & Wales	58	4	13
Germany	37	26	1
Belgium	22	12	2
Spain	20	8	2
Italy	8	15	1
Latvia	7	10	1
Northern Ireland	3	3	1
Malta	2	8	<1
Cyprus	1	9	<1
USA (3)	<1	4	<1

*Note*

- 1 In most cases, the average of 1995 and 1997 (see [Table I in Annex B](#) for details).
- 2 Scotland. The number of professional judges and magistrates includes judges, magistrates, sheriffs and stipendiary magistrates.
- 3 USA. Includes judges from federal and state courts, but not from the lower courts (e.g. municipal and police courts).

**Table V. Levels of judges and magistrates**

	Judges / magistrates per 100,000 (1)	Total numbers	Quartile	Rank (1 = highest)	Judges / magistrates per 100,000 population			
					Median	Mean	Standard deviation	
Andorra	32	23	4	3				
Armenia	3	95	1	45				
Austria	20	1,589	4	12				
Azerbaijan	3	210	1	43				
Belarus	9	932	2	26				
Belgium	12	1,242	3	23	CEE countries	11	13	9
Bulgaria	12	1,038	3	20	Western countries	12	15	14
Croatia	28	1,276	4	4				
Cyprus	9	65	2	28	Total	12	14	12
Czech Rep.	22	2,243	4	8				
					25% quartile	7		
Denmark	12	653	3	21	Median	12		
England & Wales	4	2,262	1	39	75% quartile	20		
Estonia	14	202	3	16				
Finland	18	935	3	13				
Georgia	7	387	2	33				
Germany	26	21,567	4	6				
Greece	20	2,119	4	11				
Hungary	21	2,198	4	10				
Iceland	17	47	3	14				
Ireland	3	95	1	44				
Israel	7	379	1	35				
Italy	15	8,343	3	15				
Kazakhstan	7	1,142	2	34				
Kyrgyzstan	7	299	1	36				
Latvia	10	259	2	24				
Lithuania	13	483	3	19				
Luxembourg	27	107	4	5				
Macedonia, FYR	24	498	4	7				
Malta	8	29	2	32				
Moldova, Rep. of	6	271	1	37				
Netherlands	8	1,204	2	31				
Northern Ireland	3	46	1	42				
Norway	10	422	2	25				

**Table V.** (continued)

	<b>Judges / magistrates per 100,000 (1)</b>	<b>Total numbers</b>	<b>Quartile</b>	<b>Rank (1 = highest)</b>
Portugal	12	1,216	3	22
Romania	13	2,968	3	18
Russian Federation	9	12,577	2	29
Scotland (2)	5	254	1	38
Slovakia	22	1,162	4	9
Slovenia	37	737	4	2
Spain	8	3,196	2	30
Sweden	13	1,164	3	17
Switzerland	70	4,296	4	1
Turkey	9	5,512	2	27
Ukraine	4	5,684	1	40
USA (3)	4	10,021	1	40

*Note*

- 1 In most cases, the average of 1995 and 1997 (see [Table I in Annex B](#) for details).
- 2 Scotland: the number of professional judges and magistrates includes judges, magistrates, sheriffs and stipendiary magistrates.
- 3 USA: includes judges from federal and state courts, but not from the lower courts (e.g. municipal and police courts).

**Table VI. Levels of correctional staff**

	Correctional staff per 100,000 population(1)	Total number of staff	Quartile	Rank (1 = highest)	Staff / inmate ratio	Quartile	Staff / inmate rank (1 = highest)
Andorra	51	36	3	22	1.3	3	12
Armenia	28	1,064	1	42	na	na	na
oAustria	44	3,514	2	33	2.1	2	23
Azerbaijan	46	3,479	2	28	na	na	na
Belarus	35	3,611	1	37	15.8	1	38
Belgium	45	4,536	2	30	1.8	3	18
Bulgaria	35	2,925	1	36	3.3	1	31
Canada	94	28,026	4	5	1.3	3	13
Croatia	49	2,185	2	26	1.4	3	15
Cyprus	28	213	1	41	1.1	4	9
Czech Rep.	87	8,999	4	7	2.3	2	25
Denmark	64	3,370	3	16	1.0	4	6
England & Wales	69	35,746	3	13	1.6	3	16
Estonia	163	2,394	4	2	1.9	2	20
Finland	54	2,756	3	20	1.1	4	10
Georgia	37	2,028	1	35	4.5	1	34
Germany	44	36,148	2	32	1.9	3	19
Greece	20	2,066	1	45	2.8	1	30
Hungary	65	6,621	3	15	2.0	2	22
Iceland	35	94	1	38	1.1	3	11
Ireland	69	2,495	3	14	0.9	4	3
Israel (2)	64	3,623	3	17	2.3	2	26
Italy	82	46,966	4	10	1.1	4	8
Kyrgyzstan	23	1,056	1	43	2.8	1	29
Latvia	79	1,968	3	12	5.0	1	36
Lithuania	88	3,278	4	6	4.1	1	33
Luxembourg	46	185	2	29	na	na	na
Macedonia, FYR	23	500	1	44	na	na	na
Malta	33	120	1	39	na	na	na
Moldova, Rep. of	50	2,183	2	23	4.7	1	35
Netherlands	80	12,369	4	11	1.0	4	7
Northern Ireland	189	3,040	4	1	0.6	4	1
Norway	53	2,281	3	21	0.9	4	4
Portugal	56	5,485	3	19	2.5	2	28
Romania	32	7,318	1	40	6.2	1	37

**Table VI.** (continued)

	<b>Correctional staff per 100,000 population(1)</b>	<b>Total number of staff</b>	<b>Quartile</b>	<b>Rank (1 = highest)</b>	<b>Staff / inmate ratio</b>	<b>Quartile</b>	<b>Staff / inmate rank (1 = highest)</b>
Russian Federation	154	228,495	4	3	na	na	na
Scotland	84	4,302	4	9	1.4	3	14
Slovakia	85	4,581	4	8	1.7	3	17
Slovenia	45	885	2	31	0.8	4	2
Spain	50	19,765	2	24	2.3	2	27
Sweden	62	5,438	3	18	1.0	4	5
Switzerland	47	2,867	2	27	2.1	2	24
Turkey (2)	40	25,100	2	34	1.9	2	21
Ukraine	50	25,645	2	25	na	na	na
USA	147	391,204	4	4	4.0	1	32
	<b>Median</b>	<b>Mean</b>	<b>Standard deviation</b>		<b>Median</b>	<b>Mean</b>	<b>Standard deviation</b>
CEE countries	49	62	37		3.1	4.0	3.7
Western countries	53	63	36		1.4	1.6	0.8
All countries	50	63	37		1.9	2.5	2.6
25% quartile	40				1.1		
Median	50				1.9		
75% quartile	79				2.8		

*Note*

1 In most cases, the average of 1995 and 1997 (see [Table I in Annex B](#) for details).

2 The inmate:staff ratio for Turkey is from 1994 data.



**Table VII. Levels of total criminal justice staff (police officers, prosecutors, judges and magistrates, and staff in correctional institutions)**

	Staff per 100,000 population(1)	Quartile	Rank (1 = highest)	% police	% Prosecutors, judges and magistrates	% correctional staff
Andorra	302	1	26	70.9	12.3	16.8
Armenia	444	3	12	91.2	2.5	6.3
Austria	433	3	13	84.7	5.1	10.2
tBelgium	408	3	16	84.2	4.8	11.0
Croatia	511	4	7	83.7	6.8	9.6
Cyprus	570	4	3	92.4	2.6	5.0
Czech Rep.	532	4	4	78.0	5.6	16.4
Denmark	279	1	30	69.4	7.7	22.9
England & Wales	322	2	24	76.0	2.6	21.4
Estonia	505	4	8	63.0	4.8	32.2
Finland	233	1	33	67.0	9.9	23.1
Germany	386	2	19	80.0	8.5	11.5
Greece	414	3	14	89.4	5.9	4.8
Hungary	390	2	18	75.1	8.4	16.5
Iceland	284	1	29	79.8	8.0	12.2
Ireland	373	2	20	80.5	1.1	18.4
Israel	502	4	9	84.6	2.7	12.7
Latvia	530	4	6	78.6	6.5	14.9
Lithuania	603	4	2	79.8	5.5	14.7
Luxembourg	356	2	23	77.6	9.5	12.9
Macedonia, FYR	370	2	21	85.9	7.9	6.2
Moldova, Rep. of	233	1	32	70.5	7.9	21.6
Netherlands	287	1	28	68.3	3.7	28.0
Portugal	531	4	5	85.4	4.1	10.5
Romania	294	1	27	81.6	7.3	11.0
Russian Federation	1,407	4	1	87.1	2.0	10.9
Scotland	464	3	11	79.8	2.1	18.1
Slovakia	469	3	10	75.0	6.8	18.2
Slovenia	313	1	25	71.6	14.2	14.2
Spain	401	3	17	84.6	2.8	12.6

**Table VII.** (continued)

	<b>Staff per 100,000 population(1)</b>	<b>Quartile</b>	<b>Rank (1 = highest)</b>	<b>% police</b>	<b>% Prosecutors , judges and magistrates</b>	<b>% correctional staff</b>
Sweden	358	2	22	75.1	7.7	17.2
Turkey	269	1	31	80.2	4.9	14.9
USA	414	3	15	61.3	3.1	35.6
	<b>Median(rate)</b>	<b>Mean(rate)</b>	<b>Standard deviation</b>	<b>Mean (%)</b>	<b>Mean (%)</b>	<b>Mean (%)</b>
CEE countries	469	508	291	78.5	6.6	14.8
Western countries	379	379	92	78.5	5.5	16.0
All countries	401	430	202	78.5	5.9	15.5
25% quartile (of rate)	313					
Median	401					
75% quartile	502					

*Note*

1 In most cases, the average of 1995 and 1997 (see [Table I in Annex B](#) for details).

**Table VIII. Female criminal justice personnel (percentages) (1)**

	Female share of criminal justice staff (%)				
	Police	Prosecutors	Judges	Corrections	All sectors (2)
Andorra	9	57	15	11	10
Armenia	17	5	23	na	16
Austria	14	16	19	13	14
Azerbaijan	na	3	10	13	na
Belarus	na	19	58	32	na
Belgium	6	34	31	7	7
Canada	10	na	na	na	na
Croatia	7	na	56	25	12
Cyprus	8	55	21	4	8
Czech Rep.	12	56	63	21	16
Denmark	6	46	50	na	10
England & Wales	15	46	13	21	16
Estonia	21	64	64	29	26
Finland	6	38	30	na	10
France	3	na	na	na	na
Georgia	na	3	16	24	na
Germany	na	28	26	na	na
Greece	6	24	50	10	9
Hungary	10	na	na	34	na
Iceland	4	na	19	13	6
Ireland	8	52	14	na	7
Israel	19	na	41	3	17
Italy	4	na	30	14	6
Kazakhstan	1	20	34	na	2
Kyrgyzstan		15	78	10	na
Latvia	14	55	70	32	20
Liechtenstein	3	na	na	na	na
Lithuania	10	38	44	32	15
Luxembourg	na	na	na	na	na
Macedomia	5	31	47	13	9
Malta	13	na	4	12	na
Moldova, Rep. of	2	16	28	23	8
Netherlands	14	31	31	27	18
Northern Ireland	10	na	4	9	9
Norway	31	na	16	na	na

**Table VIII.** (continued)

	Female share of criminal justice staff (%)				
	Police	Prosecutors	Judges	Corrections	All sectors (2)
Poland	9	na	na	na	na
Portugal	3	41	31	na	5
Romania	9	40	63	16	13
Russian Federation	33	33	57	30	33
Scotland	24	na	8	17	23
Slovakia	na	44	58	13	na
Slovenia	4	na	63	24	12
Spain	3	43	32	23	7
Sweden	33	na	36	na	na
Switzerland	10	na	39	na	na
Turkey	3	5	27	5	4
Ukraine	5	na	na	26	7
USA	23	na	na	30	na
	Median	Median	Median	Median	Median
CEE countries	9	31	57	25	13
Western countries	8	39	27	12	9
All countries	9	34	31	19	10

*Note*

- 1 In most cases, the average of 1995 and 1997 (see [Table I in Annex B](#) for details).
- 2 Shown only for those countries which provided information for the police and at least two of the other sectors.

**Table IX. Criminal Justice processing information (cases per 100,000 population) (1)**

	<b>Offences recorded by the police</b>	<b>Suspects</b>	<b>Prosecutions</b>	<b>Convictions</b>
Andorra	2,854	na	1,890	1,204
Armenia	314	217	180	160
Austria	6,283	2,512	na	824
Azerbaijan (2)	238	191	na	184
Belarus	1,260		654	569
Belgium	7,472	na	na	397
Bulgaria (2)	2,574	1,162	na	296
Canada	9,037	1,911	1,773	1,112
Croatia	1,290	740	1,064	315
Cyprus (3)	na	721	167	105
Czech Rep.	3,792	na	1,054	556
Denmark	10,135		3,166	1,611
England & Wales	9,463	1,364	966	629
Estonia (4)	2,630	718	718	580
Finland	7,366	4,194	1,691	1,623
France	6,787	1,343	na	na
Georgia	259	139	150	136
Germany	8,103	2,689	804	628
Greece	3,359	2,843	na	853
Hungary	4,849	1,224	1,048	853
Iceland	na	na	522	na
Ireland	2,703	1,099	866	na
Israel	5,744	1,527	727	705
Italy	4,141	1,356	1,051	433
Kazakhstan	1,094	644	660	257
Kyrgyzstan	859	484	na	418
Latvia	1,527	414	571	452
Lithuania	1,839	636	na	491
Luxembourg	5,254	na	na	na
Macedonia, FYR		1,124	1,037	346
Malta	2,114	na	na	na
Moldova, Rep. of	871	331	345	329
Netherlands	7,777	1,656	1,429	598
Northern Ireland	4,133	na	660	512
Norway	6,740	1,567	1,067	397

**Table IX.** (continued)

	<b>Offences recorded by the police</b>	<b>Suspects</b>	<b>Prosecutions</b>	<b>Convictions</b>
Poland	2,473	1,050	na	na
Portugal	3,274	2,150	930	376
Romania (2)	1,444	969	na	559
Russian Federation	1,757	974	625	549
Scotland	9,699	na	1,522	1,227
Slovakia	1,901	885	707	449
Slovenia	1,876	743	935	240
Spain	1,763	346		620
Sweden	13,263	997	1,597	690
Switzerland	4,509	na	na	955
Turkey (5)	na	na	2,500	1,148
Ukraine	1,207	571	665	442
USA (6)		5,728	5,174	352
25% quartile	1,506	642	660	352
Median	2,779	1,023	933	512
75% quartile	6,397	1,537	1,339	705
Mean	4,013	1,310	1,145	600
Standard deviation	3,221	1,138	957	369
	Median	Median	Median	Median
CEE countries	1,485	718	665	418
Western countries	6,014	1,567	1,067	660
Total	2,779	1,310	933	512

*Note*

- 1 In most cases the average of 1995 and 1997. Exceptions are as follows, for which 1994 data are used where other 1995/97 values are sufficiently close to those for 1994:
  - (i) Crime rates: Austria, France, Luxembourg, Malta,
  - (ii) Suspect rate: Armenia, Austria, France, Macedonia, Russian Federation, Slovakia.
  - (iii) Prosecution rate: Denmark, Italy, Russian Federation.
  - (iv) Conviction rate: Armenia, Austria, Belgium, Denmark, Russian Federation.
- 2 The values for Azerbaijan, Bulgaria and Romania for prosecutions are omitted as they are much smaller than convictions.
- 3 There are fewer recorded crimes in Cyprus than suspects. The former therefore are omitted.
- 4 Estonia does not distinguish between suspected, and prosecuted individuals, Thus, the figures are similar.
- 5 The rate in Turkey for crimes (475) and suspects (488) are so low as to be implausible, especially given the number of prosecutions.
- 6 The USA data on offences only covers selected offences (the so-called Index crimes).

**Table X. Attrition between crimes recorded, suspects, prosecutions and convictions (1)**

	Offences recorded by the police = 100	Suspects	Prosecutions	Convictions
Andorra	100	na	66	42
Armenia	100	69	57	51
Austria	100	40	na	13
Azerbaijan	100	80	na	78
Belarus	100	na	52	45
Belgium	100	na	na	5
Bulgaria	100	45	na	12
Canada	100	21	20	12
Croatia	100	57	na	24
Cyprus	100	na	30	19
Czech Rep.	100	na	28	15
Denmark	100	na	31	16
England & Wales	100	14	10	7
Estonia	100	27	27	22
Finland	100	57	23	22
France	100	20	na	na
Georgia	100	53	58	52
Germany	100	32	10	8
Greece	100	85	na	25
Hungary	100	25	22	18
Ireland	100	41	32	
Israel	100	27	13	12
Italy	100	33	25	10
Kazakhstan	100	59	60	24
Kyrgyzstan	100	56	na	49
Latvia	100	na	37	30
Lithuania	100	35	na	27
Moldova, Rep. of	100	38	40	38
Netherlands	100	21	18	8
Northern Ireland	100	na	16	12
Norway	100	23	16	6
Poland	100	42	na	na
Portugal	100	66	28	11
Romania	100	67	na	39
Russian Federation	100	55	36	31
Scotland	100	na	16	13
Slovakia	100	47	37	24
Slovenia	100	na	50	13
Spain	100	20	na	35
Sweden	100	na	12	5
Switzerland	100	na	na	21
Ukraine	100	na	55	37
CEE countries median		49	45	30
Western countries median		25	19	12
All countries median		40	34	21

*Note*

- 1 See Table IX for countries for which 1994 data are used.
- 2 For Macedonia and the USA, although there is no appropriate recorded crime measure, other data on suspects, prosecutions and convictions was used in Figures 3 and 4.

**Table XI. Overall assessment of performance indicators (quartiles)**

	Police recording productivity	Suspects per 100 police	Prosecutions per prosecutor	Convictions per prosecutor	Convictions per 100 police	CEPPI	Corruption Index	Average of quartiles
Albania	na	na	na	na	na	2	1	1.5
Andorra	na	na	4	4	4	na	na	4.0
Armenia	na	1	1	1	1	na	1	1.0
Austria	4	4	na	4	3	2	3	3.3
Azerbaijan	na	na	na	1	na	na	1	1.0
Belarus	3	na	2	2	na	1	2	2.0
Belgium	4	na	na	3	2	3	3	3.0
Bulgaria	2	na	na	2	na	2	1	1.7
Canada	4	4	na	na	4	4	4	4.0
Croatia	2	2	3	2	1	2	1	1.9
Cyprus	na	1	1	1	1	na	na	1.0
Czech Rep.	2	na	3	3	2	2	2	2.3
Denmark	4	na	na	4	4	4	4	4.0
England & Wales	4	4	3	3	3	4	4	3,6
Estonia	2	2	2	3	3	1	3	2.3
Finland	4	4	4	4	4	3	4	3.9
France	3	3	na	na	na	4	3	3.2
Georgia	1	na	1	1	3	1	1	1.3
Germany	na	4	3	3	na	na	3	3.2
Greece	na	4	na	4	na	na	2	3.3
Hungary	3	3	2	3	4	2	3	2.9
Iceland	na	na	2	na	na	na	4	3.0
Ireland	na	3	4	na	na	na	3	3.3
Israel	na	2	2	3	2	na	3	2.4
Italy	3	2	na	na	1	2	2	2.0
Kazakhstan	na	1	1	1	1	1	1	1.0
Kyrgyzstan	1	na	na	2	na	na	1	1.3
Latvia	1	1	1	1	2	1	2	1.3
Lithuania	1	1	na	1	2	1	2	1.3
Luxembourg	na	na	na	na	na	na	4	4,0



**Table XI.** (continued)

	<b>Police recording productivity</b>	<b>Suspects per 100 police</b>	<b>Prosecutions per prosecutor</b>	<b>Convictions per prosecutor</b>	<b>Convictions per 100 police</b>	<b>CEPPI</b>	<b>Corruption Index</b>	<b>Average of quartiles</b>
Macedonia, FYR	1	2	3	3	na	3	2	2.3
Malta	2	na	na	na	na	3	2	2.3
Moldova, Rep. of	2	1	1	3	na	1	5	1.6
Netherlands	3	4	4	4	4	4	4	3,9
Northern Ireland	3	na	na	na	1	4	4	3.0
Norway	na	4	na	na	3	na	4	3.7
Poland	2	3	na	2	na	2	2	2.2
Portugal	4	3	2	2	1	2	3	2.4
Romania	1	3	na	4	3	1	2	2.3
Russian Fed.	2	1	1	1	1	1	1	1.1
Scotland	4	na	4	4	4	4	4	4.0
Slovakia	1	2	2	2	2	3	2	2.0
Slovenia	1	2	3	2	2	3	3	2.3
Spain	2	1	na	4	3	3	3	2.7
Sweden	4	3	3	3	3	4	4	3.4
Switzerland	3	na	na	na	4	3	4	3.5
Turkey	na	na	4	4	4	na	1	3.2
Ukraine	1	1	na	na	1	1	1	1.0
USA	3	4	4	2	2	4	3	3.1

# 6 Sanctions<sup>1 2</sup>

Elmar G.M. Weitekamp

## 6.1 Introduction

The Sixth United Nations Survey provided with regard to sanctions information on the number of adults convicted, the death penalty, corporal punishment, life imprisonment, the deprivation of liberty, control in freedom, warning or admonition, fines, and community service orders. According to Kuhn (1998) countries have a wide range of sanctions at their disposal and they can be imposed, depending on the country, either by courts, prosecutors or even the police. By comparing the reported sanctions one has to take into account that the defining, handling, recording and reporting modalities of the countries can vary substantially. The validity of these kind of data has often been questioned and it is quite difficult to summarize the number and types of the reported sentences. One finds a similar problem with police data, where there are also huge differences between countries with regard to crimes reported to and recorded by the police. However, these inherent biases within each criminal justice system, based on the way the police define, handle and count offenses, might be relatively stable over time. According to Killias and Aebi (2000) police recording practices do not change very much over time and therefore police statistics are relatively valid indicators of crime trends. The authors think that this pragmatic point of view is particularly true if one compares crime trends between Europe and America. There are good reasons to believe that this is also true for comparing the reported data on sentencing as found in the Sixth United Nations Survey and the European Sourcebook. In looking at data on sentences and punishment, Shinkai and Zvekic (1999) warn in addition rightly, that one cannot conclude that one country is more punitive than another based on the percentages of types of punishments reported. Since the question asked in the survey is how many persons were sentenced to a particular punishment, the reported percentages give answers about the spectrum of punishments available in a particular country. Even if, according to Shinkai and Zvekic (op.cit.), one considers corporal punishment far more punitive or harsh than other punishments, this would be a value judgment about the comparative severity of punishments, regardless of to whom and how often such sentences were imposed.

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1 The author would like to thank Petra Bossert for making the necessary computer runs and for the creation of the tables.

2 This chapter has been modified by the editors taking into account the comments brought forth by well-informed expertise in the field.

## 6.2 The sixth United Nations survey and data on sanctions

In the Sixth United Nations Survey participating countries were asked to report the imposition of the following sanctions: *the death penalty*, which was supposed to be understood as any sentence by which the convicted person is to be legally deprived of life and which may be carried out by any one of a variety of means such as electrocution, hanging, firing squad, lethal injection, stoning, etc.; *corporal punishment*, meaning any sentence in which the convicted person's body is to be subjected to physical pain such as, among other things, flogging, mutilation, electric shock or branding; *life imprisonment*, meaning any sentence in which the convicted person is to be deprived of liberty in an institution of any kind for the duration of his or her natural life; *deprivation of liberty*, which may be understood as various forms of detention, including security measures, combined or split sentences (where at least one part of the sentence involves deprivation of liberty) or any other sanction in which the person is forced to spend at least one night in an institution of any kind, whereby the period of detention is fixed at some interval short of the natural life span of the convicted person (i.e. a determinate sentence); *control in freedom*, including probation orders, electronic monitoring, conditional sentences with additional supervision requirements, and other forms of so-called controlled liberty (i.e. where the person is required to fulfil special requirements with regard to supervision); *warning or admonition*, including suspended sentences, conditional sentences, findings of guilt without sanctions, formal admonitions, formal warnings, imposing of duties without control, conditional dismissals, conditional discharges; *fines*, meaning all sentences that involve paying a sum of money, including punitive mea-

**Table 1. Adults on whom death penalty sentences were imposed: 1995, 1997**

Country	1995	1997	Change
Armenia	5	2	-60.0%
Azerbaijan	30	23	-23.3%
Belarus	37	46	+24.3%
Estonia	na	4	na
Georgia	25	7	-72.0%
Latvia	4	na	na
Lithuania	na	3	na
Russian Federation	141	106	-24.8%
Turkey	0	4	na
USA	240	228	-5.0%
Ukraine	191	128	-33.0%
<b>Total</b>	<b>674</b>	<b>551</b>	<b>-18.2%</b>

Source: 6th Survey

asures as well as compensation and restitution; and finally *community service orders*, meaning sentences in which the convicted person is expected to perform some activity which provides some benefit to the community.

*The death penalty*: eleven of the participating countries reported the imposition of death penalty sentences for adults.

There was an 18% reduction in the number of death penalty sentences that were reported to have been imposed between 1995 and 1997. Nine of the eleven countries reporting such sentences are former republics of the Soviet Union; there was a 26% fall in the number of such sentences in these countries. Belarus reported an increase (of 24%) between the two years and Estonia and Lithuania, which made no response in respect of 1995, reported four and three respectively in 1997. The other six former Soviet republics reported fewer cases in 1997 than in 1995; Ukraine and Russia, the European countries whose courts made most use of this penalty, reported 33% fewer and 25% fewer respectively. Georgia's total fell from 25 to seven. Turkey is a member state of the Council of Europe and a de facto moratorium on the death penalty has been in force there since 1 January 1997; nonetheless four such sentences were imposed in 1997 (there had been none in 1995).

The USA is the only country in Western Europe or North America where the death penalty still exists, but the number of death sentences imposed decreased between 1995 and 1997 by 5% (from 240 to 228). Amnesty International (2001) reported that 85 prisoners were executed in the USA in the latest 12 months for which figures were available, bringing to 683 the total number executed since the use of the death penalty was resumed in 1977. As of 1 January 2000 over 3,700 prisoners were under sentence of death in the USA where 38 of the 50 US States provide for the death penalty in law. Amnesty International (op.cit.) reports further that over half of the countries in the world have now abolished the death penalty in law or practice. 75 countries have abolished the death penalty for all crimes, while 13 countries abolished the death penalty for all but exceptional crimes such as crimes in wartime. An additional 20 countries can be considered abolitionist in practice since they have not carried out any executions in the past 10 years although according to their laws the death penalty can still be imposed. Thus 108 countries have abolished the death penalty in law or practice, while 87 countries still retain the death penalty. During 2000 at least 1,457 prisoners were executed in 28 countries and 3,058 persons were sentenced to death in 65 countries, but these are only figures known to Amnesty International (op.cit.) and the actual numbers are higher. 88 per cent of all known executions took place in only four countries: in China at least 1,000, followed by Saudi Arabia with 123 executions, while Amnesty International recorded for the USA 85 and Iran 75. Even though international human rights treaties prohibit anyone under 18 years old at the time of the crime being sentenced to death, 110 countries still have laws under which such people can be sentenced to death. However, only seven countries are known, in 2000, to have executed prisoners who were under 18 years at the time of the offense: Democratic Republic of Congo, Iran, Nigeria, Pakistan, Saudi Arabia, USA and Yemen. The country, which carried out the highest number of executions of child offenders is the USA, where since 1990 14 have been executed.

*Life imprisonment:* In most European and North American countries life sentences can be imposed in cases of severe crimes. However, such sentences constitute only a very small portion of the total number of sentences imposed. Norway is one of the very few countries where life imprisonment has been abolished (in 1981).

There was a 7% increase in the number of life imprisonment sentences imposed between 1995 and 1997, with a 20% increase in European countries, a 3% rise in the United States and a rise from 13 to 23 (77%) in Canada. The biggest reductions in terms of percentage change were reported by Slovakia, where no life sentences were imposed in 1997, Northern Ireland and Italy while the steepest increases were in Canada, Turkey, Moldova, England and Wales and Germany .

**Table 2. Adults receiving life imprisonment sentences, per 100,000 inhabitants: 1995, 1997**

<b>Country</b>	<b>1995</b>	<b>1997</b>	<b>Change</b>
Canada	13	23	+76.9%
Czech Republic	na	3	na
England and Wales	247	309	+25.1%
Finland	6	5	-16.7%
Germany	100	122	+22.0%
Greece	37	44	+18.9%
Israel	12	13	+8.3%
Italy	40	6	-85.0%
Latvia	na	1	na
Moldova	4	5	+25.0%
Northern Ireland	22	3	-86.4%
Romania	15	9	-40.0%
Russian Federation	na	16	na
Scotland	36	35	-2.8%
Slovakia	4	0	-100.0%
Sweden	13	9	-30.8%
Switzerland	4	na	na
Turkey	259	379	+46.3%
USA	3,002	3,086	+2.8%
<b>Total</b>	<b>3,814</b>	<b>4,068</b>	<b>+6.7%</b>
Total: European countries	799	959	+20.0%

Source: 6th Survey

**Table 3. Deprivation of liberty imposed by courts, per 100,000 inhabitants: 1995, 1997**

<b>Country</b>	<b>1995</b>	<b>1997</b>	<b>Change in %</b>
Armenia	89.4	96.9	+8.4
Azerbaijan	76.9	75.5	-1.8
Belarus	190.3	207.9	+9.3
Belgium	298.4	na	na
Bulgaria	107.8	193.5	+79.5
Canada	299.1	273.0	-8.8
Croatia	29.6	33.4	+12.8
Cyprus	21.2	35.1	+66.1
Czech Republic	112.9	126.9	+12.4
England and Wales	87.5	104.0	+18.8
Estonia	130.3	164.7	+26.4
Finland	125.1	108.8	-13.0
Georgia	71.8	72.8	+1.4
Germany	36.9	41.6	+12.7
Ireland	674.2	621.4	-7.8
Israel	118.1	125.5	+6.2
Kyrgyzstan	243.5	249.9	+2.6
Latvia	103.1	115.1	+11.6
Lithuania	174.8	175.0	+0.1
Moldova	61.7	57.6	-6.7
Netherlands	170.0	159.7	-6.1
Northern Ireland	106.2	97.3	-8.4
Norway	138.0	138.1	+0.1
Portugal	88.4	62.9	-28.8
Romania	145.2	187.2	+28.9
Scotland	174.1	168.3	-3.3
Slovakia	93.7	82.7	-11.8
Slovenia	27.7	31.7	+14.6
Spain	167.1	169.6	+1.5
Sweden	170.7	159.4	-6.6
Switzerland	146.3	134.2	-8.3
Turkey	396.7	360.1	-9.2
USA	235.7	257.0	+9.0
Ukraine	136.1	154.6	+13.7
Mean	154.4	152.8	
Standard deviation	123.3	112.9	
Percentile			
25	88.2	79.1	
50	127.7	134.1	
75	174.3	181.1	

Source: 6th Survey

*Corporal punishment:* According to Kuhn (1998) corporal punishment is almost unknown in Europe and North America and he considered it probable that two countries which reported the use of corporal punishment in their replies to the Fifth United Nations Survey had misunderstood the information that was being sought. No imposition of corporal punishment was reported by the 54 countries who participated in the Sixth United Nations Survey.

*Deprivation of liberty:* The imposition of prison sentences constitute according to Kuhn (1998) the backbone of the system of sanctions in Europe and North America. As noted by Kangaspunta (1995) for the 4<sup>th</sup> and by Kuhn (1998) for the 5<sup>th</sup> United Nations Survey, we find also in the 6<sup>th</sup> Survey a wide range of the imposition of deprivation of liberty sentences.

At the low end we find countries where less than 50 sentences of deprivation of liberty per 100,000 inhabitants in 1995 and 1997 were imposed, countries such as Croatia, Cyprus, Germany, and Slovenia. At the upper level we find countries with rates over 200 such as Belgium, Canada, Ireland, Kyrgyzstan (Note: Kyrgyzstan, although actually a Central Asian country has been considered here as belonging to the group of Central and Eastern European states, owing to the fact that it was a republic of the former Soviet Union, and in our previous analyses was treated, together with Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan as if it were a Central and Eastern European state, cf. section 1.1 above), Turkey and the USA. The highest level was reached by Ireland with a rate for both years of over 600 sentences of deprivation of liberty per 100,000 inhabitants. While Cyprus is one of the countries with one of the lowest rates it had the steepest increase between 1995 and 1997 (66%). Substantial increases were also registered for Romania (29%), Estonia (26%), England and Wales (19%), Slovenia (15%), Ukraine (14%), Croatia (13%), Germany (13%), Czech Republic and Latvia (12%), while the most substantial decreases could be found in Portugal (29%), Finland (13%), Slovakia (12%), Turkey and Canada (9%), Northern Ireland and Switzerland (8%).

*Control in freedom:* The proportion of adults who received a control in freedom sentence varies drastically from 0.1 per 100,000 inhabitants for Greece to 420.2 for Israel (Note: Israel, although not a European country has, as in previous analyses of U.N. survey results, been included with Europe, following guidance from the United Nations Secretariat). Many of these sentences involve various degrees of supervision, ranging from very close to loose. Sentences of community service have been included with this category.

Between 1995 and 1997 the use of control in freedom sentences increased in general more than they decreased. The biggest increase can be found for Sweden where use of the sanction increased by 587 per cent, followed by Kyrgyzstan with 472 per cent and Greece by 111 per cent. However, the countries in question have reported that their courts do not impose these sentences very often.

The changes for probation between 1995 and 1997 again vary substantially. Probation is according to Kuhn (op.cit., pp. 116-117) a "procedure whereby an individual found guilty of an offense is released by the court without imprisonment, and placed under the supervision of an official or officially sanctioned body". The lowest rate reported for the number of persons on probation on a selected day of the year was 0.4 per 100,000 (just one person) in Iceland in 1995, which rose to 1.1 per cent (three people) in 1997. Ukraine had the highest in-

**Table 4. Adults receiving control in freedom sentences, per 100,000 inhabitants: 1995, 1997**

Country	1995	1997	Change in %
Canada	233.3	243.3	+4.3
Croatia	203.9	190.2	-6.8
Cyprus	1.6	0.8	-52.2
Czech Republic	312.1	329.0	+5.4
England and Wales	103.4	109.6	+6.0
Germany	77.5	85.2	+9.9
Greece	0.1	0.2	+111.1
Israel	420.2	443.5	+5.5
Italy	203.1	268.6	+32.3
Kyrgyzstan	0.4	2.0	472.2
Latvia	136.5	190.1	39.4
Lithuania	17.0	17.0	-0.1
Moldova	150.9	131.1	-13.1
Northern Ireland	47.5	42.7	-10.2
Norway	103.2	112.6	+9.1
Portugal	na	14.5	na
Romania	157.8	151.4	-4.0
Scotland	50.8	56.7	+11.6
Slovakia	259.0	218.8	-15.5
Sweden	5.1	34.9	+586.8
USA	96.3	115.7	+20.2
Ukraine	104.7	157.8	+50.8
Mean	127.8	132.5	
Standard deviation	112.7	116.9	
Percentile			
25	32.3	30.4	
50	103.4	114.1	
75	203.5	197.3	

Source: 6th Survey

crease per 100,000 inhabitants, a rise of 196%. The highest rate was found in Canada (469 in 1997), followed by Lithuania (400, also in 1997). The countries of Bulgaria, the Czech Republic, Estonia, Georgia, Greece, Ireland, Kyrgyzstan, Latvia, Slovenia, Spain, and Turkey reported no probation sentences, but they all reported conditional release from prison on parole. Parole may be understood to mean conditional release of a prisoner, whereby the individual is allowed to serve the remainder of the sentence outside prison, assuming that all the conditions of that release are met. On the other hand three countries, which did not report any cases of parole, namely Cyprus, Northern Ireland and Slovakia, re-



**Table 5. Persons on probation or parole, per 100,000 inhabitants: selected day of the year 1995, 1997**

Country	Probation 1995	Probation 1997	Change in %	Parole 1995	Parole 1997	Change in %
Azerbaijan	na	na	na	24	29	+19.6
Belarus	171	178	+4.3	65	70	+6.7
Bulgaria	na	na	na	10	11	+9.5
Canada	455	469	+3.0	42	33	-21.8
Cyprus	8.3	7.8	-5.9	na	na	na
Czech Republic	na	na	na	24	32	36.6
Denmark	37	38	+1.4	23	20	-13.9
England + Wales	207	226	+8.9	3.5	4.4	+27.0
Estonia	na	na	na	13	13	-3.8
Finland	41	35	-14.0	23	23	-0.6
Georgia	na	na	na	14	17	+21.9
Greece	na	na	na	11	17	+46.8
Hungary	148	165	+11.4	50	42	-15.7
Iceland	0.4	1.1	+195.6	87	61	-30.2
Ireland	na	na	na	11	14	+23.5
Israel	13	18	+40.8	50	46	-8.1
Kyrgyzstan	na	na	na	80	100	+25.6
Latvia	na	na	na	53	34	-35.5
Lithuania	370	400	+8.2	66	78	+17.9
Moldova	85	103	+21.2	7.1	6.7	-6.3
Northern Ireland	100	108	+7.6	na	na	na
Norway	na	na	na	72	68	-5.2
Portugal	8	12	+39.0	27	28	+3.2
Romania	51	na	na	117	114	-3.0
Slovenia	na	na	na	26	21	-17.2
Slovakia	51	52	+0.8	na	na	na
Spain	na	na	na	23	22	-5.3
Sweden	89	75	-15.0	43	44	+1.3
Turkey	na	na	na	7.5	7	+3.9
Ukraine	51	151	+196.0	20	25	+24.5
Mean	114.7	127.3		36.7	36.2	
Standard deviation	132.1	138.3		28.9	28.4	
Percentile						
25	18.7	22.0		13.0	16.6	
50	68.1	89.0		24.4	27.6	
75	165.2	174.9		52.7	45.9	

Source: 6th Survey

ported probation sentences in their countries. The reported parole rates per 100,000 inhabitants did not vary as much as the reported probation rates. The changes for increase of parole between 1995 and 1997 range between 1% in Sweden, followed by Portugal (3%) and Turkey (4%), and reach their height in England and Wales with 27%, the Czech Republic 37% and Greece with 47%. The steepest decreases can be found in Latvia with 36% and Iceland with 30% and the smallest in Finland with less than 1% and Romania with 3%.

**Table 6. Adults receiving a warning or admonition, per 100,000 inhabitants: 1995, 1997**

Country	1995	1997	Change in %
Armenia	0.1	0.4	+622.5
Azerbaijan	0.3	1.1	+323.8
Belarus	0.2	0.6	+237.5
Bulgaria	0.3	0.4	+29.5
Canada	13.2	22.4	+69.6
Croatia	4.7	5.2	+12.4
Cyprus	21.3	28.7	+36.0
Czech Republic	307.9	328.1	+6.5
Denmark	343.4	341.1	-0.7
England and Wales	79.4	80.1	-0.9
Estonia	175.3	198.9	+13.4
Finland	248.1	239.0	-3.7
Georgia	9.9	21.4	+116.1
Latvia	na	0.7	na
Moldova	0.1	0.3	+454.6
Netherlands	145.3	140.6	-3.2
Northern Ireland	175.4	150.6	-14.1
Norway	2.5	3.9	+56.1
Portugal	98.5	64.8	-34.2
Scotland	108.3	100.5	-7.2
Slovakia	10.1	9.6	-4.8
Slovenia	129.9	197.2	+51.8
Sweden	191.9	159.5	-16.9
Switzerland	466.4	507.1	+8.7
Turkey	201.2	214.1	+6.4
Ukraine	0.4	1.5	+289.2
Mean	109.4	108.4	
Standard deviation	128.8	133.8	
Percentile			
25	1.4	1.4	
50	79.4	46.8	
75	183.7	197.6	

Source: 6th Survey

*Warning and admonition:* Once again, we find under the reported rates per 100,000 inhabitants considerable variations in the reported rates for warnings and admonitions.

We find that the biggest changes in the use of these sentences occurred in countries which in 1995 did not use warnings very often; the changes in terms of percentages look dramatic but the number of warnings per 100,000 inhabitants changed only slightly. Armenia reported an increase of 622% between 1995 and 1997, however, the number of adults involved rose only from two to fourteen and the rate increased from 0.1 to 0.4 per 100,000 inhabitants. The picture is similar for Moldova, Azerbaijan, Ukraine and Belarus, all of whom had increases of more than 200% but rates of less than 1.6 per 100,000. While their rates are very low, we find on the other side of the spectrum Switzerland with a rate of 507 per 100,000 inhabitants (1997) and 466 (1995), Denmark 343 (1995) and 341 (1997), the Czech Republic 328(1997) and 308 (1995), and Finland 248 (1995) and 239 (1997).

*Fine:* Again we find, as in the Fifth United Nations Survey, that the fine is the most popular sanction in Western Europe. As Kuhn (op.cit.) pointed out, one has to be cautious in interpreting these findings and comparisons are difficult to make since the imposition of fines can in certain countries be made through the police and prosecutors and may not be recorded in the statistics.

By far the highest rate for fines was reported by Ireland with 4031 per 100,000 inhabitants in 1995 and 3587 in 1997. Belgium reported for 1995 a rate of 1,461, followed by Finland with a rate of 1,043 in 1995 and 1,032 in 1997. At the low end we find countries like Georgia with a rate of 2.5 in 1997 and 4.7 in 1995, Azerbaijan with a rate of 5.5 in 1997 and 14.9 in 1995 and Slovenia with a rate of 16.6 in 1995 and 21.5 in 1997. The sharpest increase is recorded for Bulgaria where the rate increased between 1995 and 1997 by 178 per cent and from 15.0 to 41.8 per 100,000 inhabitants. Countries with rates above 300 include Canada, Denmark, Germany, Hungary, Israel, Northern Ireland, Sweden, Switzerland and Turkey.

*Non-custodial sentences:* The European Sourcebook of Crime and Criminal Justice Statistics includes some information about the types of non-custodial sentences and how often they are imposed per 100,000. Of the seventeen countries studied, Moldova uses non-custodial sentences most often with a rate of 405 per 100,000 inhabitants, followed by Northern Ireland with 303, Lithuania with 229, England and Wales with 207, France with 188, and Ireland with 104. In the remaining eleven countries the rate is below 100 and at the bottom we find Cyprus with a rate of 8 per 100,000 inhabitants, Albania, Portugal and Switzerland with 12, and Malta with 16. We can obtain information in which form these non-custodial sentences were imposed: as suspended sentences with supervision, community service orders, probation and other non-custodial sentences with supervision or care of the correctional services. Albania, Cyprus and Malta use only probation as a form of non-custodial sentences, while Switzerland uses only community service orders as such. 82 per cent of the non-custodial sentences in Lithuania were suspended sentences with supervision, while the percentage for France is 80, for Austria 77, for Portugal 66, for Belgium 63, for Hungary 57, for Denmark 52, for Northern Ireland 49 and for Norway 44. Commu-

**Table 7. Adults receiving a fine, per 100,000 inhabitants: 1995, 1997**

<b>Country</b>	<b>1995</b>	<b>1997</b>	<b>Change in %</b>
Armenia	21.8	23.9	+9.4
Azerbaijan	14.9	5.5	-62.9
Belarus	64.0	64.3	+0.5
Belgium	1,461.1	na	na
Bulgaria	15.0	41.8	+177.9
Canada	326.3	274.6	-15.9
Croatia	56.1	46.1	-17.8
Cyprus	41.6	54.1	+29.9
Czech Republic	46.9	44.9	-4.3
Denmark	858.0	719.0	-16.2
England and Wales	127.5	126.3	-1.0
Estonia	139.5	143.7	+3.0
Finland	1,043.1	1,031.6	-1.1
Georgia	4.7	2.5	-45.8
Germany	416.1	426.8	+2.6
Greece	31.3	44.2	+41.0
Hungary	375.8	376.3	+0.1
Ireland	4,030.9	3,587.4	-11.0
Israel	305.1	303.2	-0.6
Italy	146.1	233.7	+59.9
Kyrgyzstan	26.5	30.4	+14.7
Latvia	65.9	76.8	+16.7
Lithuania	32.4	21.9	-32.3
Moldova	35.2	70.4	+99.8
Netherlands	266.2	273.3	+2.7
Northern Ireland	134.8	116.8	-13.4
Norway	126.4	119.9	-5.1
Portugal	178.0	242.5	+36.2
Romania	92.1	99.2	+7.7
Scotland	474.8	436.6	-8.1
Slovakia	24.1	26.7	+10.9
Slovenia	16.6	21.5	+29.9
Spain	126.7	78.6	-37.9
Sweden	347.3	243.4	-29.9
Switzerland	307.2	290.5	-5.4
Turkey	409.9	377.3	-8.0
USA	69.7	74.5	+6.9
Ukraine	73.5	46.0	-37.4
Mean	324.6	275.6	
Standard deviation	689.2	598.9	
Percentile			
25	34.5	44.5	
50	126.5	99.2	
75	331.5	282.6	

Source: 6th Survey

nity service orders were only imposed in twelve of the seventeen countries and represented, with the exception of Switzerland, in England and Wales 34 per cent of the non-custodial sentences, while in the rest of the countries the percentage was below 25 per cent. Probation as a form of non-custodial sentences was not imposed in six of the 17 countries, but constituted in Sweden 78 per cent of such sentences, in England and Wales 51, Ireland 38, Northern Ireland 34, Hungary 33, while in Portugal only 13 and in Austria 9. Other non-custodial sentences with supervision or care of the correctional services were non-existent in six of the seventeen countries, while, with the exception of Moldova, where the percentage was 56, in the remaining countries the percentage was below 40 with a low of 2 in France and Northern Ireland.

### 6.3 Prison population: facts and trends

Prison populations grew substantially during the 1990s in many parts of the world, and in Europe that increase was over 20 per cent in most countries, while in North America the increase was 12 per cent for Canada and over 60 per cent in the United States of America (Walmsley, 2001). Going hand in hand with growing prison populations are concerns about overcrowding and the resulting financial and human rights problems. These entail increasing costs in corrections, poorer living and working conditions for both inmates and prison staff, increased chances of violence between prisoners and aggressive acts against staff, and fewer treatment programmes. The third edition of the World Prison Population List (Walmsley, 2002) shows that more than 8.75 million people are imprisoned, either in pretrial detention or serving a sentence after conviction, throughout the world. This figure does not include all the juveniles in custody worldwide since they are often held in institutions that are not part of the prison system. About half of the world's prisoners can be found in only three countries, namely the China, Russia and the United States of America. The USA had the highest prison population rate at the beginning of the year 2001 with 700 per 100,000 followed by Russia which also exceeded 650. Next we find Belarus and Kazakhstan. It has to be pointed out that the rates of countries who have prison population rates of 450 and higher per 100,000 are not the norm and Walmsley (2002) also reports that almost two thirds of all countries have rates of 150 per 100,000 or less. All in all we find considerable variations in prison population rates all over the world as well as in the same continents. The median rate for Central and Eastern European countries, for example, is more than three times as great as in Southern European countries.

Walmsley (2001) points out the well established fact that crime rates alone cannot explain the increases or decreases in the prison populations. In the 1990s many countries experienced a reduction in their crime rates and often of the rates of serious crimes. The United States of America, for example, experienced a substantial reduction in crime rates and violent crime rates, but the imprisonment

**Table 8. Prison places (beds) available per 100,000 inhabitants and occupancy rate per 100 places**

Country	Prison places 1995	Prison places 1997	Change in %	Occupancy rate 1995	Occupancy rate 1997	Change in %
Andorra	117.7	108.1	-8.1	61.3	55.0	-10.2
Azerbaijan	184.0	237.4	+29.7	na	na	na
Belarus	405.0	424.9	+4.9	131.8	135.7	+3.0
Bulgaria	54.0	54.7	+1.2	185.2	237.7	+28.3
Cyprus	65.5	62.7	-4.3	42.1	54.8	+30.2
Czech Republic	176.0	183.5	+4.3	107.3	114.0	+6.3
England and Wales	109.0	126.4	+16.0	90.5	93.4	+3.1
Finland	78.6	73.6	-6.4	80.9	75.0	-7.3
Georgia	248.9	277.9	+11.7	59.7	66.6	+11.5
Germany	86.9	88.2	+1.5	86.1	102.1	+18.6
Greece	41.4	41.2	-0.7	135.9	na	na
Iceland	39.0	50.9	+30.7	94.2	79.0	-16.2
Ireland	61.4	65.1	+6.1	92.0	101.7	+10.6
Israel	153.2	154.8	+1.0	93.1	96.1	+33
Italy	72.5	78.9	+8.8	125.1	109.2	-12.7
Latvia	524.0	394.5	-24.7	71.7	103.9	+44.8
Lithuania	370.4	377.2	+1.8	96.6	97.5	+0.9
Moldova	244.5	284.1	+16.2	97.5	82.1	-15.8
Netherlands	74.7	87.5	+17.1	102.9	101.1	-1.8
Northern Ireland	127.4	129.2	+1.4	86.2	78.2	-9.2
Norway	64.6	65.8	+1.8	77.6	71.0	-8.5
Portugal	91.4	117.9	+29.0	136.2	126.6	-7.0
Romania	200.2	193.6	-3.3	102.1	102.6	+0.5
Scotland	104.2	113.7	+9.1	105.6	104.0	-1.5
Slovakia	174.9	176.8	+1.1	84.2	77.8	-7.6
Slovenia	52.9	52.9	+0.1	60.4	73.3	+21.3
Spain	80.6	99.3	+23.1	150.0	111.3	-25.8
Switzerland	92.0	94.1	+2.3	93.7	91.2	-2.6
Mean	146.2	150.5		98.1	97.7	
Standard deviation	118.5	109.6		30.8	34.9	
Percentile						
25	67.2	67.8		80.9	77.1	
50	98.1	110.9		93.7	96.8	
75	181.2	191.1		107.3	105.3	

Source: 6th Survey

rate is steadily increasing and increased alone between 1997 and 2000 by 9 per cent. This is partly due to the fact that we find in countries with high incarceration rates high rates of fear of crime and a belief that locking up people is the best answer to crime rather than looking for alternatives. Blumstein (1993) maintains in this context that it is quite possible that criminal policy makers, who are in favour of hard and tough punishments, understand the limits of such policies quite well. However, they introduce them since the public pressure to do something about the “severe” crime problem is so big and the policy makers have to do something. Not having better alternatives, they just can think about getting tough on crime and to introduce more severe sanctions and they do so not because they believe that these sanctions will lead to a successful criminal policy but because they have learned that the introduction of them constitutes an effective way to avoid political pressure.

The Sixth United Nations Survey measured the prison capacity by asking how many places (beds) are available in the penal institutions or correctional facilities. The survey defines prisons, penal institutions or correctional facilities as all public and privately financed institutions where persons are deprived of their liberty. The institutions may include, but are not limited to, penal, correctional or psychiatric facilities under prison administration. Between 1995 and 1997 the number of places decreased in only six of the 28 countries for which data are available (Andorra, Cyprus, Finland, Greece, Latvia, Romania). The mean number of places increased between those years only slightly (from 146.2 to 150.5), but the standard deviations show quite a broad range of prison places available per 100,000 in the participating countries. Most of the Central and Eastern European countries have by far the highest number of prison beds available. (No figures were to hand for the USA.) In 1997 Belarus had the highest number of prison places per 100,000 inhabitants (405), followed by Latvia, who despite a decrease of 25 per cent between 1995 and 1997, was second with 396 beds, followed by Lithuania (377), Moldova (284) and Georgia (278). The countries of western and southern Europe have in general much lower numbers of places available, with Greece having the lowest (41), followed by Iceland (51) and Slovenia with 53 places per 100,000 inhabitants.

The mean occupancy rate per 100 places in the 26 countries for which data are available remained at about 98 in 1995 and 1997, but we have again substantial standard deviations. Bulgaria reports exceptionally high occupancy rates with 185.22 in 1995 and 237.65 in 1997, indicating that the situation worsened dramatically between those two years. Belarus follows Bulgaria with an occupancy rate of 131.8 in 1995 and 135.6 in 1997. Portugal comes in third with a rate of 136.2 for 1995 and 126.6 which represents a reduction by 7 per cent. That Portugal has such a high occupancy rate surprises not too much, since Walmsley (2001) reports that Portugal has the highest prison population rate in Western Europe. Portugal had in the beginning of the 1990s an average rate for Western European countries, but a change in the penal code made it more difficult to grant

**Table 9. Prisoner rate per 100,000 inhabitants: 1995, 1997**

<b>Country</b>	<b>1995</b>	<b>1997</b>	<b>Change in %</b>
Andorra	72.1	59.5	-17.5
Belarus	533.7	576.4	+8.0
Belgium	73.3	85.5	+16.6
Bulgaria	100.0	129.9	+29.9
Canada	130.4	121.6	-6.7
Cyprus	27.6	34.3	+24.6
Czech Republic	188.8	209.2	+10.8
Denmark	66.5	64.3	-3.3
England and Wales	98.7	118.0	+19.6
Estonia	284.6	329.2	+15.7
Finland	63.6	55.2	-13.2
Georgia	148.6	185.0	+24.5
Germany	74.8	90.1	+20.4
Greece	56.3	na	na
Hungary	121.8	132.0	+8.4
Iceland	36.7	40.2	+9.6
Ireland	56.4	66.2	+17.3
Israel	142.6	148.8	+4.3
Italy	90.7	86.2	-5.0
Latvia	375.9	409.7	+9.0
Lithuania	357.7	367.7	+2.8
Moldova	238.3	233.1	-2.2
Netherlands	76.9	88.5	+15.1
Northern Ireland	109.8	101.1	-7.9
Norway	50.1	46.7	-6.9
Portugal	124.5	149.3	+19.9
Romania	204.3	198.6	-2.8
Scotland	110.0	118.3	+7.5
Slovakia	147.3	137.6	-6.5
Slovenia	31.9	38.8	+21.3
Spain	120.9	110.5	-8.6
Sweden	65.3	59.0	-9.6
Switzerland	86.2	85.9	-0.4
Turkey	96.7	115.1	+19.0
USA	569.4	612.9	+7.6
Mean	144.4	156.3	
Standard deviation	129.7	141.4	
Percentile			
25	66.3	65.2	
50	99.3	115.1	
75	148.2	185.0	

Source: 6th Survey



parole and the other main reason is that the imposed prison sentences are longer than they used to be.

The mean prisoner rate (i.e. prison population rate) per 100,000 inhabitants of the European and North American countries responding to the 6th United Nations Survey, increased between 1995 and 1997 from 144 to 156 and there is considerable variation in the number of people who are incarcerated in the 38 countries for which data are available. On top we find the United States of America where the rate increased from 569 in 1995 to 613 in 1997, an increase of 7.6 per cent. This trend continued in the USA who had by the end of 2000, according to Walmsley (2002), a rate of 700 per 100,000 inhabitants. Next comes Belarus with a rate of 534 in 1995 and 576 in 1997. Belarus experienced an almost identical increase between those years as the USA with 8 per cent. The next highest rates for 1997 that are reported in the 6th Survey are in respect of Central and Eastern European countries such as Latvia (410), Lithuania (368), Estonia (329) and Moldova (233).

Walmsley (2001) reports that after the fall of the iron curtain there was a marked rise of the crime rate in central and eastern European countries in the early 1990s and that this seems to have been reflected in the increasing use of imprisonment. However, the rise stopped in most of these countries and after 1993 they experienced quite stable crime rates while the prisoner rate continued to rise substantially. Some of the reasons could be, according to Walmsley (*op.cit.*), that the public, media and politicians were alarmed at the changes in the nature of crimes committed. Numerous crimes unheard of before, such as transnational organized crime and economic crimes, appeared and created a climate of fear in these countries and led to an attitude of getting tough on all forms of crime, to higher rates of pretrial detention, more and longer prison sentences and a more restricted use of conditional release (parole).

Twelve of the 32 European countries on which information was received show increases of over 15% in the prisoner rate between 1995 and 1997. The highest increases were in Bulgaria (29.9%), Cyprus (24.6%), Georgia (24.5%), Slovenia (21.3%), Germany (20.4%), Portugal (19.9%) and England and Wales (19.6%). It is to be noted that Cyprus and Slovenia were the two countries with the lowest prisoner rates both in 1995 and 1997. Walmsley (2001) states that many people explain the rise in England and Wales, where the prison population in 2000 was more than 50 per cent higher than in the early 1990s, as attributable to public anxiety, aggravated by media reaction, to one particularly serious murder and to crime in general. The use of custodial sentences rose by 40 per cent and the length of the sentences increased by 10 per cent. A very similar trend happened in the Netherlands. The Netherlands, long known for their liberal approach towards criminals and a low prisoner rate, experienced in the 1990s the largest increase of any west European country and almost doubled the prison population. Again, these dramatic changes in sentencing can be explained by a rise in the use of prison sentences and an increase in the length of sentences.

The Scandinavian countries experienced a similar development of their prisoner rates between 1995 and 1997; the number of prisoners in Denmark, Finland, Norway and Sweden decreased and all four countries have in general very low prisoner rates. At the lowest end we find Norway with a prisoner rate of 46.7 in 1997, having recorded a reduction of 6.9 per cent between 1995 and 1997. Next

**Table 10. Prisoner rate per type of incarceration: 1997**

Country	Prisoner rate (=100 %)	Sentenced		Pre-trial	
		Per 100,000 population	% of prisoner rate	Per 100,000 population	% of prisoner rate
Andorra	59.5	23.0	38.6	36.5	61.4
Belarus	576.4	461.6	80.1	114.8	19.9
Belgium	85.5	49.6	58.0	25.2	29.5
Bulgaria	129.9	82.2	63.3	47.7	36.7
Canada	121.6	98.1	80.6	22.6	18.6
Cyprus	34.3	27.4	79.9	5.5	16.0
Czech Republic	209.2	134.2	64.1	75.1	35.9
Denmark	64.3	45.1	70.1	17.4	27.0
England and Wales	118.0	93.5	79.2	16.4	13.9
Estonia	329.2	218.6	66.4	107.3	32.6
Finland	55.2	48.7	88.2	5.1	9.2
Georgia	185.0	147.0	79.4	38.0	20.6
Germany	90.1	60.9	67.6	25.4	28.2
Hungary	132.0	92.7	70.2	36.0	27.3
Iceland	40.2	32.5	80.7	7.0	17.4
Israel	148.8	127.9	86.0	20.9	14.1
Italy	86.2	61.2	71.0	22.7	26.3
Latvia	409.7	244.8	59.7	165.0	40.3
Lithuania	367.7	298.2	81.1	69.5	18.9
Moldova	233.1	148.8	63.9	84.3	36.2
Netherlands	88.5	48.3	54.6	28.5	32.2
Northern Ireland	101.1	76.0	75.1	22.7	22.4
Norway	46.7	32.0	68.5	12.7	27.2
Portugal	149.3	105.1	70.4	44.2	29.6
Romania	198.6	120.8	60.8	77.4	39.0
Scotland	118.3	100.0	84.4	16.5	14.0
Slovakia	137.6	106.8	77.6	30.8	22.4
Slovenia	38.8	27.0	69.7	na	na
Spain	110.5	82.3	74.5	28.2	25.5
Sweden	59.0	46.0	77.9	12.5	21.2
Switzerland	85.9	60.0	69.9	25.8	30.1
Turkey	115.1	52.0	45.2	40.5	35.2
Mean	142.8	105.5		39.1	
Standard deviation	118.7	93.1		36.6	
Percentile					
25	64.9	47.7	63.6	16.5	18.0
50	112.8	82.2	70.2	25.8	26.3
75	158.2	129.4	79.6	45.9	32.4

Source: 6th Survey

comes Finland with a rate of 55.2 and a decrease of 13.2 per cent, Sweden with a rate of 59.0 and a reduction of 9.6 per cent and finally Denmark with a rate of 64.3 and a reported decrease of 3.3 per cent.

In 24 of the 33 of the countries for which data are available over two thirds of the prisoners were under sentence after being convicted and not in pretrial detention. The only country reporting that over 50 per cent of its prisoners were in pretrial detention is Andorra. However, the total number of prisoners (49) is very small. The highest proportion of sentenced prisoners among the prison population was in Finland (88.2%), Israel (86.0%), Scotland (84.4%) Lithuania (81.1%) and Canada (80.6%). With the exception of Finland, England and Wales and Scotland who, with 9.2 per cent, 13.9 percent and 14.0 per cent respectively, reported the lowest proportion of pretrial detainees among the prison population, all other EU countries reported pretrial detention percentages of over 20 per cent; the Netherlands was highest with 32.2 per cent. Sweden reported 21.2 per cent and Northern Ireland 22.4, while Belgium, Denmark, Germany, Italy, Portugal and Spain reported percentages of pretrial detention between 25 and 29.5 per cent.

As table 11 reveals, there are different trends in the prisoner rates in the countries for which data are available. On the one hand we have countries where the rates increased steadily between 1990 and 1997 and mostly by substantial amounts, namely in Belarus, the Czech Republic, Estonia, Georgia, Kyrgyzstan, Latvia, Lithuania, Malta, the Netherlands, Portugal, Russia, Slovakia, Turkey and the USA. With the exception of Malta, the Netherlands, Portugal and the USA these are all Central and Eastern European countries. Countries with moderate but more or less steady increases of their prisoner rates year by year are mainly EU countries such as Belgium, England and Wales, France, Germany, Ireland, Italy, Luxembourg, Scotland and Spain and they are accompanied by countries like Hungary, Moldova, and Switzerland. A further cluster of countries which can be identified are countries in which the rate went up and down, but by 1996 or 1997 the rate was going down: Austria, Croatia, Greece, Macedonia, Northern Ireland, Poland, Norway and Sweden. More or less equal or little change was experienced by Bulgaria, Cyprus, Denmark, Iceland and Romania. In only two countries has the prisoner rate been going down during the 1990s: Finland and Slovenia.

Table 12 gives information about the conviction rates in 1995 and 1997 in the countries which supplied data, and the proportion of females among the total of persons convicted.

Conviction rates for 1995 and 1997 vary between those of five countries with rates in excess of 1,000 per 100,000 inhabitants, namely Finland (1,642 in 1995; 1,605 in 1997), Denmark (1,535; 1,377), Andorra (1,375; 1,249), Scotland (1,255; 1,199) and Canada (1,156; 1,070), and those of six countries with rates of under 200, namely Cyprus (87 in 1995; 123 in 1997), Georgia (131; 141), Bulgaria (140 in 1995 but 263 in 1997), Armenia (167; 195), Azerbaijan (198; 171) and Slovenia (199 in 1995 but 281 in 1997).

**Table 11. Prisoner rate per 100,000 inhabitants: 1990 – 1997**

Country	1990	1991	1992	1993	1994	1995	1996	1997
Andorra	na	na	na	na	na	72.1	na	59.5
Austria	90.5	87.0*	94.8	91.0*	91.5	na	84.0*	na
Belarus	204.7	na	314.8	na	477.8	533.7	na	576.4
Belgium	58.9	60.0*	70.9	72.0*	74.1	73.3	76.0*	85.5
Bulgaria	122.7	68.0*	93.9	99.0*	99.1	100.0	126.0*	129.9
Canada	111.0	na	112.6	na	117.9	130.4	na	121.6
Croatia	40.3	43.0*	49.9	55.3*	na	na	45.0*	na
Cyprus	32.0	na	31.3	30.0*	25.1	27.6	35.0*	34
Czech Republic	79.4	na	135.4	165.0*	181.5	188.8	202.0*	209.2
Denmark	62.1	na	64.4	66.0*	67.4	66.5	61.0*	64.3
England and Wales	88.1	91.0*	89.0	89.0*	95.0	98.7	107.0*	118.0
Estonia	280.6	na	292.4	na	293.6	284.6	na	329.2
Finland	67.8	63.0*	69.5	62.0*	62.4	63.6	58.0*	55.2
France	82.2	84.0*	83.7	86.0*	90.3	na	90.0*	na
Georgia	na	na	66.2	na	140.9	148.6	na	185.0
Germany	77.8	79.0*	na	81.0*	83.0	74.8	83.0*	90.1
Greece	na	49.0*	59.5	68.0*	71.0*	56.3	51.0*	na
Hungary	118.8	146.0*	154.1	132.0*	123.7	121.8	129.0*	132.0
Iceland	40.6	39.0*	38.5	39.0*	38.2	36.7	na	40,2
Ireland	na	60,0*	61,6	60,0*	58,6	56,4	62,0*	66.2
Israel	na	na	na	na	na	142.6	na	148.8
Italy	56.6	56.0*	83.7	89.0*	89.6	90.7	85.0*	86.2
Kyrgyzstan	201.2	na	216.1	na	299.7	359.7**	412.0**	458.6**
Latvia	326.7	na	313.5	na	359.7	375.9	405.0*	409.7
Liechtenstein	na	na	na	na	58.1	na	na	na
Lithuania	230.7	na	245.2	275.0*	278.3	357.7	323.0*	367.7
Luxembourg	91.9	90.0*	90.5	107.0*	109.2	na	104.0*	na
Macedonia, FYR	49.4	na	47.8	na	62.8	na	50.0*	na
Malta	32.5	na	46.6	na	56.0	na	62.0*	na
Moldova	204.9	na	216.7	na	215.1	238.3	263.0*	233.1
Netherlands	46.9	na	49.4	51.0*	56.8	76.9	75.0*	88.5
Northern Ireland	112.3	106.0*	111.8	118.0*	116.4	109.8	na	101.1
Norway	56.5	59.0*	na	60.0*	62.0	50.1	52.0*	46.7
Poland	na	na	na	160.0*	163.6	na	148.0*	na
Portugal	91.5	82.0*	97.4	111.0*	102.1	124.5	140.0*	149.3

**Table 11.** (continued)

Country	1990	1991	1992	1993	1994	1995	1996	1997
Romania	na	na	195.0*	200.0*	na	204.3	194.0*	198.6
Russian Federation	na	na	520.2	na	580.2	na	713.0*	na
Scotland	92.6	95.0*	102.8	115.0*	108.8	110.0	101.0*	118.3
Slovakia	72.7	na	122.1	136.0*	143.5	147.3	144.0*	137.6
Slovenia	51.3	na	54.5	na	52.2	31.9	31.0*	38.8
Spain	85.5	92.0*	90.4	115.0*	105.9	120.9	na	110.5
Sweden	61.1	55.0*	63.5	66.0*	70.4	65.3	65.0*	59.0
Switzerland	76.9	85.0*	77.1	81.0*	na	86.2	85.0*	85.9
Turkey	80.6	44.0*	54.5	52.0*	74.4	96.7	87.0*	115.1
Ukraine	na	na	518.9	na	na	na	425.0*	na
USA	464.9	na	na	na	553.9	569.4	na	612.9

Source: UN 5th and 6th Surveys

\* European Sourcebook data

\*\* These figures for Kyrgyzstan are based on the response to the Survey question about convicted prisoners, but other sources (e.g Walmsley, 2000) imply that the response gave the figures for the total prison population.

For later figures for all countries in Table 11 see Walmsley, 2002.

Countries with the highest proportion of females among the total of persons convicted of a crime in 1995 and 1997 are Germany (17.4% in 1995; 17.5% in 1997), Denmark (17.3%; 16.9%), Finland (15.8%; 15.6%), Italy (14.3%; 17.1%), and Switzerland (15.1%; 15.1%); Belarus recorded 16.2% in 1997. Countries with the lowest proportion of females being convicted in 1995 and 1997 are: Slovakia (4.1% in 1995; 3.7% in 1997), Georgia (5.1%; 4.9%), Armenia (5.7%; 5.8%) and Macedonia (6.7%; 6.2%). Azerbaijan (5.2%) and Latvia (6.9%) were the other countries recording less than 7% in 1995 and Bulgaria (6.4%), and Spain (6.9%) did so in 1997. Most countries reported that females constituted between 7% and 15% of the total number of convicted persons.

The imprisonment of convicted females is, in general, not a very common phenomenon as compared with the imprisonment of convicted males. There is much variation among the countries for which data are available. The mean for convicted females rose from 4.5 per 100,000 inhabitants in 1995 to 4.8 in 1996 and 5.5 in 1997. The highest rates were reported by Belarus with 17.9 per 100,000 inhabitants in 1995, increasing to a rate of 24.6 in 1996 and 24.8 in 1997. Rates of above 10 were reported in 1997 also by Ukraine (22.0), Kyrgyzstan (16.1), Lithuania (14.4) and Latvia (10.4). However, in Latvia the imprisonment rate decreased from 1995 to 1996 by 5.6 per cent and again between 1996 and 1997 by 5.9 per cent. Kyrgyzstan and Lithuania reported decreases between 1995 and 1996 of 5.4 and 28.7 per cent respectively and then dramatic increases

**Table 12. Conviction rates for 1995 and 1997, and proportion of females among the total of persons convicted**

<b>Country</b>	<b>Conviction rate 1995</b>	<b>Conviction rate 1997</b>	<b>Females 1995 (%)</b>	<b>Females 1997 (%)</b>
Andorra	1,375.0	1,248.6	na	na
Armenia	166.7	194.5	5.7	5.8
Azerbaijan	198.3	170.6	5.2	7.4
Belarus	572.1	566.3	13.7	16.2
Belgium	426.3	na	14.2	na
Bulgaria	140.0	263.3	7.2	6.4
Canada	1,156.1	1,069.6	14.1	14.4
Croatia	326.7	290.0	8.7	8.2
Cyprus	86.5	123.0	8.4	7.4
Czech Republic	532.0	580.1	8.4	9.1
Denmark	1,535.2	1,376.7	17.3	16.9
England and Wales	609.7	648.4	12.6	13.3
Estonia	539.5	622.2	7.2	9.0
Finland	1,641.6	1,605.2	15.8	15.6
Georgia	131.0	140.7	5.1	4.9
Germany	609.8	646.2	17.4	17.5
Greece	na	na	12.2	na
Hungary	838.3	867.5	9.5	10.3
Israel	610.1	649.0	10.3	10.2
Italy	356.9	509.3	14.3	17.1
Latvia	409.1	539.6	6.9	8.0
Lithuania	493.8	488.4	11.3	13.9
Macedonia, FYR	453.1	250.1	6.7	6.2
Moldova	353.5	343.2	9.4	8.2
Netherlands	590.3	606.1	11.5	11.0
Northern Ireland	542.7	480.7	11.5	11.8
Norway	403.8	390.2	na	13.6
Portugal	366.8	384.8	9.8	9.4
Romania	448.4	496.0	10.9	10.9
Russian Federation	699.3	688.9	11.8	11.8
Scotland	1,254.9	1,199.0	14.1	14.5
Slovakia	481.7	416.2	4.1	3.7
Slovenia	199.2	281.4	12.3	11.2
Spain	297.7	263.6	7.1	6.4
Sweden	768.3	612.1	12.5	12.1
Switzerland	950.6	960.2	15.1	15.1
USA	332.0	na	15.0	na
Ukraine	415.2	469.0	14.4	14.8

Source: 6th Survey

**Table 13. Convicted females in the prison population, selected day 1995-1997, per 100,000 inhabitants**

Country	1995	1996	Change in %	1997	Change in %
Azerbaijan	1.9	3.1	+62.6	4.0	+30.2
Belarus	17.9	24.6	+37.7	24.8	+0.7
Bulgaria	2.7	2.4	-11.3	2.5	+3.6
Cyprus	0.8	1.2	+49.0	0.7	-46.5
Czech Republic	3.9	4.3	+10.2	4.6	+7.1
England and Wales	2.8	3.1	+11.7	3.7	+21.6
Estonia	3.6	4.3	+20.1	6.3	+47.4
Finland	2.8	2.5	-10.2	2.6	+3.6
Georgia	2.0	3.6	+79.8	3.0	-16.3
Germany	1.9	2.1	+6.4	2.1	+4.2
Greece	1.3	1.2	-10.6	na	na
Iceland	1.1	0.7	+33.8	2.2	+197.8
Ireland	1.1	1.4	+30.7	1.6	+12.9
Israel	3.9	3.2	-16.6	2.4	-26.9
Italy	2.1	2.1	-1.5	2.0	-2.4
Kyrgyzstan	12.3	11.7	-5.4	16.1	+37.6
Latvia	11.7	11.0	-5.6	10.4	-5.9
Lithuania	13.3	9.5	-28.7	14.4	+51.9
Moldova	4.6	5.0	+8.5	5.4	+7.3
Netherlands	1.9	2.0	+8.9	2.1	+3.7
Northern Ireland	1.7	1.3	-25.2	1.3	-0.3
Norway	1.5	1.3	-11.2	1.8	+38.9
Portugal	4.2	5.4	+29.3	8.2	+51.7
Romania	4.1	4.1	+0.1	4.1	-0.7
Scotland	2.1	2.4	+14.3	2.3	-5.9
Slovakia	3.6	3.8	+5.5	4.1	+9.2
Slovenia	1.3	1.2	-8.1	1.1	-4.2
Spain	7.5	7.0	-6.8	6.9	-0.6
Sweden	2.6	2.5	-4.4	2.2	-11.7
Switzerland	3.7	3.4	-7.0	3.5	+2.2
Turkey	1.1	1.4	+27.6	1.7	+24.6
Ukraine	16.2	20.2	+24.5	22.0	+9.2
Mean	4.5	4.8		5.5	
Standard deviation	4.6	5.4		6.0	
Percentile					
25	1.8	1.5		2.1	
50	2.7	3.1		3.0	
75	4.2	4.8		6.3	

Source: 6th Survey

between 1996 and 1997; in Kyrgyzstan the rate went up by 37.6 per cent and in Lithuania by 51.9 per cent. Other Central and Eastern European countries such as Georgia, Estonia, Azerbaijan, Moldova, Bulgaria, Romania and Turkey differ from the above described countries of that region quite substantially and report rates which are similar to those of Western European countries. The lowest rate in 1997 can be found in countries like Cyprus (0.7 per 100,000 inhabitants), Slovenia (1.1), Northern Ireland (1.3), Ireland (1.6), and Norway (1.8).

Table 14 presents for 1995 and 1997 the average time spent in prison awaiting trial for all offenses and the average time actually served under a prison sentence. Pretrial detention is generally shorter in Western European countries than in Central and Eastern European countries, with the longest time being reported by the Czech Republic, Lithuania and Slovakia, each averaging 7-12 months in 1995. The first two of these countries reported a decrease between 1995 and 1997 to 4-6 months, but the average in Slovakia remained at 7-12 months. Estonia and Portugal, who reported in 1995 an average of 4-6 months pretrial detention were the only countries reporting an increase in 1997, both rising to 7-12 months. The shortest pretrial detention period of less than 1 month was reported by Cyprus, Scotland and Sweden, both in 1995 and 1997.

In examining the average length of time actually spent in prison under sentence, we find that inmates in the Western European countries serve on average less than a third as long as inmates in Central and Eastern European countries. The longest average times inmates have to serve under a prison sentence (over 4 years) are in Azerbaijan, Estonia, Moldova, Portugal, Romania and Ukraine. The shortest average lengths of time served under sentence were reported by Canada (less than 1 month) and Denmark (1-3 months).

In most countries the average time spent in pretrial detention did not change very much between 1995 and 1997, although reductions were recorded in the Czech Republic and Lithuania and increases in Estonia and Portugal. The picture is also very similar for the average time spent in prison under sentence, which remained stable in all countries for which data are available for both years except the USA (state prisons) where it increased.



**Table 14. Average length of time in prison awaiting trial, and time actually served under a prison sentence: 1995, 1997**

Country	Months spent in prison awaiting trial: average,1995	Months spent in prison awaiting trial: average,1997	Months served under prison sentence: average,1995	Months served under prison sentence: average,1997
Andorra	4-6	4-6	25-36	25-36
Azerbaijan	na	na	49+	49+
Belarus	4-6	4-6	37-48	37-48
Canada	na	na	Under 1	Under 1
Cyprus	Under 1	Under 1	4-6	4-6
Czech Republic	7-12	4-6	37-48	37-48
Denmark	1-3	1-3	1-3	1-3
England & Wales	1-3	1-3	4-6	4-6
Estonia	4-6	7-12	49+	49+
Finland	1-3	1-3	1-3	1-3
Georgia	1-3	1-3	37-48	25-36
Germany	1-3	1-3	4-6	7-12
Hungary	4-6	4-6	37-48	37-48
Iceland	na	1-3	na	4-6
Italy	na	4-6	1-3	1-3
Kyrgyzstan	4-6	4-6	25-36	25-36
Lithuania	7-12	4-6	25-36	25-36
Moldova	na	na	49+	49+
Netherlands	na	na	4-6	4-6
Norway	1-3	1-3	na	na
Portugal	4-6	7-12	49+	49+
Romania	13-24	13-24	49+	49+
Slovakia	7-12	7-12	na	na
Slovenia	na	na	13-24	13-24
Spain	1-3	1-3	7-12	7-12
Sweden	Under 1	Under 1	4-6	4-6
Switzerland	1-3	1-3	4-6	4-6
Turkey	1-3	1-3	4-6	4-6
Ukraine	4-6	4-6	49+	49+
UK-Northern Ireland	na	na	7-12	7-12
UK-Scotland	Under 1	Under 1	Under 1	Under 1
USA (state prisons)	4-6	4-6	13-24	25-36
Percentile				
25	1-3	1-3	4-6	4-6
50	4-6	4-6	25-36	25-36
75	4-6	4-6	37-48	37-48

Source: 6th Survey

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# 7 Transnational Organised Crime in Europe and North America: Towards a Framework for Prevention<sup>1,2</sup>

Adam Bouloukos, Graham Farrell and Gloria Laycock

## 7.1 Introduction

Previous volumes of the HEUNI regional reports have paid little or no attention to transnational organized crime.<sup>3</sup> Although the literature on transnational organized crime (hereafter TOC) is expanding rapidly, there remain few standardized measures of the problem. There is even less of a formal framework for thinking about how to prevent TOC in its various forms. The present chapter begins to address these issues, with an emphasis upon practical aspects of the latter.

In the following section, TOC is defined and set in a global context, a broad overview of factors relating to recent changes is given, and international legislative responses are described. This is followed by the presentation of a framework that is frequently used in discussions of more general crime prevention efforts. It is proposed that its utilization in this context will help inform the analysis of efforts to prevent TOC.

## 7.2 Globalisation produces criminal opportunities

The term globalisation is simultaneously praised and criticized for many positive and negative aspects of recent world developments. This reflects the observation that the world appears to be engaged in a complicated restructuring of its understanding of classical national security. Historically, the terms defence and arms control, as well as the use of force, were primarily referred to in relation to the sovereign state. Several related factors are believed to have combined to produce

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- 1 The views expressed are those of the authors and not necessarily those of the organizations with which they are affiliated.
  - 2 Limiting a discussion of transnational organized crime to a sizable regional designation such as “Europe and North America” is a bit difficult. Therefore, while this chapter makes reference to regional concerns, it should also be understood that the scope of criminal activities that emanate or exist in Europe and North America are not limited to but often extend beyond the region.
  - 3 While the HEUNI regional reports have paid little or no attention to this subject, HEUNI published Adamoli, et al (1998) which formed part of the discussions below on matters of definitions, trends, and responses. Definitions and responses were also addressed by Bouloukos and Farrell (1997). See also Winer (1998) for a discussion of trends and responses.

situations conducive to the increase in transnational organized crime: significant political change (the end of the cold war being the most prominent) has increased international movement of people and trade, the increasing global economy and free-market movement of goods, combined with rapid technological change including improvements in communications and transportation. It is also sometimes difficult to distinguish factors in western industrialised countries from those in developing countries, since transnational organised crime can involve movements between the two in both directions. These significant and widespread changes appear, despite the lack of reliable quantifiable indicators, to have manufactured a tipping point that has triggered widespread increases in transnational organized crime. In short, one negative result of globalisation has been a significant increase in the number of criminal opportunities open to exploitation by transnational organized criminals. Box 1 shows the types of factors involved, grouped into two broad categories. The first is of technological change. The second is socio-economic and political change. The box also includes a brief description of how each aspect facilitates organized crime and transnational organized crime.

**Box 1: Globalisation Factors producing Opportunities for Transnational Organised Crime**

*A. Technological Change*

- Cheaper and faster transportation. Effect: Facilitator to trafficking of illicit products.
- Postal system distribution improvements. Effect: Facilitator to trafficking.
- Improved computer and electronic communication technologies. Effect: Facilitates large and rapid cash transactions in layering stages of money laundering. Facilitates covert communications between and within criminal groups.

*B. Socio-economic and political change*

- General trade liberalisation, particularly in developing countries. Effect: Increased trade provides cover and markets for trafficking illicit products.
- Increases shipping and aviation (trade and tourism).
- Trade agreements (EC, NAFTA). Effect: Increased flow of licit trade and reduced border checks both reduce risk of trafficking illicit goods.
- Political integration (Eastern Europe and CIS; South Africa). Effect: Increased trade to new markets gives increased cover and markets to traffickers.
- Increased migration. Effect: Family networks, ties and cover for trafficking and distribution networks.
- Increased global communications and financial transactions. Effect: Provides opportunity and cover for international money laundering.

Source: Adapted from Keh and Farrell, 1997, p. 91

The listing of factors that provide opportunities for TOC has one principal advantage. It implies that, since criminal opportunities can create TOC, then reducing criminal opportunities can be utilized to prevent TOC. The two sides of the opportunity coin are necessarily related, and, as suggested below, the aim of crime policy should be to minimise new opportunities and to eliminate existing opportunities. The crime prevention framework presented later in this chapter is intended to encourage the stifling and closing of criminal opportunities.

## 7.3 Definitions

The recent formal definitions of organized crime and transnational organized crime outlined below have been based upon a platform of related research. “The concept of ‘transnational crime’ is exactly a quarter century old. The then United Nations Crime Prevention and Criminal Justice Branch coined the term in order to identify certain criminal phenomena transcending international borders, transgressing the laws of several states or having an impact on another country” (Mueller, 2001, p. 13). In a supplemental survey to the Fourth United Nations Survey of Crime Trends and Criminal Justice Operations, transnational crime was defined in the following manner: “Offences whose inception, prevention and/or direct or indirect effects involved more than one country”. (United Nations, 1995, para 9.)

In 1976, Michael Maltz identified six means by which organized crimes are executed: violence, theft, corruption, economic coercion, deception, and victim participation. Kenney and Finckenauer (1995) provide a definition of organized crime that combines “actors” (those participating in organized criminal and crime groups) with “acts” (the means of organized crime). For them, organized crime groups: are non-ideological; have an organized hierarchy; have continuity over time; use force or threat of force; restrict membership; obtain profit through illegal enterprises; provide illegal goods and services desired by the general populace; use corruption to neutralize public officials and politicians; seek a monopoly position to obtain exclusive control over specific goods and services; have job specialization within the group; have a code of secrecy; and plan extensively to achieve long-term goals.

Crime is often considered organized if the actors are involved on a sustained basis, that is, if the activity is one of continuing criminal enterprise. In order to meet this criteria, organized crime groups often incorporate strategies similar to those employed in licit markets, including entrepreneurial skill, specialization, and coordination with the additional components of violence and corruption that allow for the propagation of illicit activities. Phil Williams draws many parallels between TOC and the operations of legitimate industry (Williams, 1992) and suggests that they form strategic alliances (Williams, 1994). It may be, however, that because transnational organised criminals so clearly pursue profits, and take explicit account of the costs and benefits of exploiting criminal opportunities, they are vulnerable. This feature of TOC makes it an attractive prospect for preventive measures that seek to reduce opportunities, impose additional costs, and reduce the rewards of crime, as discussed later in this report.

In the context of a debate about whether a set definition of transnational organized crime is either possible or desirable, the United Nations Convention against Transnational Organized Crime outlined some useful characteristics of TOC without imposing the strict constraints of a tight definition.<sup>4</sup> Article 2 of The Convention deals with use of terms and defines organized criminal group, serious crime, and structured groups as shown in Box 2.

**Box 2: Definitions outlined in the United Nations Convention Against Transnational Organized Crime**

*Article 2 states that*

“Organized criminal group” shall mean a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit;

“Serious crime” shall mean conduct constituting an offence punishable by a maximum deprivation of liberty of at least four years or a more serious penalty; [and,]

“Structured group” shall mean a group that is not randomly formed for the immediate commission of an offence and that does not need to have formally defined roles for its members, continuity of its membership or a developed structure.

*Article 3 notes that an offence is transnational in nature if*

- a) It is committed in more than one State;
- b) It is committed in one State but a substantial part of its preparation, planning, direction or control takes place in another State;
- c) It is committed in one State but involves an organized criminal group that engages in criminal activities in more than one State; or
- d) It is committed in one State but has substantial effects in another State.

In a similar fashion, The European Union drafted a set of Characteristics of Organized Crime, containing the eleven components shown in Box 3:<sup>5</sup>

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4 The Convention was adopted by resolution A/RES/55/25 of 15 November 2000 at the fifty-fifth session of the General Assembly of the United Nations. In accordance with its article 36, the Convention was open for signature by all States and by regional economic integration organizations, provided at least one Member State of such organization has signed the Convention, from 12 to 15 December 2000 at the Palazzi di Giustizia in Palermo, Italy, and thereafter at the United Nations Headquarters in New York until 12 December 2002.

5 EU/12247/1/94 Rev.1, Annex.

**Box 3: Eleven Components of Organized Crime as defined by the European Union**

At least six of these components must be present, three of which must be those numbered 1, 5 and 11, for any crime or criminal group to be classified as organized:

1. Collaboration of more than 2 people;
2. Each with own appointed tasks;
3. For a prolonged or indefinite period of time;
4. Using some form of discipline and control;
5. Suspected of the commission of serious criminal offences;
6. Operating on an international level;
7. Using violence or other means suitable for intimidation;
8. Using commercial or businesslike structure;
9. Engaged in money laundering;
10. Exerting influence on politics, the media, public administration, judicial authorities or the economy;
11. Determined by the pursuit of profit and/or power.

The United Nations International Centre for Crime Prevention has recently emphasised the notion of dangerousness, that is, the threat that organized crime poses to persons, institutions, and licit markets, and these elements are outlined in Box 4. By defining the elements of dangerousness it was intended that governments would be able to increase the focus of their preventive efforts.

**Box 4: Elements of 'Dangerousness' of Organized Crime as outlined by the United Nations International Centre for Crime Prevention**

- transnational organized crime groups engage in crimes which are *mala in se*, wrong in themselves;
- in economic terms, the groups bring about material loss to victims;
- in psychological terms, the groups foster intimidation, coercion and fear;
- in a social sense, the groups generate mistrust in institutions;
- an ability to challenge political and institutional authority;
- an ability to invest illicit proceeds into the licit economy;
- the investment in proceeds abroad thus removing resources from the domestic economy. (United Nations, 2000a, p. 5-7)

This discussion suggests that there is no generally agreed definition of transnational organized crime. However, while a definition of TOC may be necessary for some legal purposes (if, for example, persons involved in TOC are to be treated differently by the legal system), a definition that suffices may be suffi-



cient from the viewpoint of crime prevention. In part this is because the key focus of crime prevention efforts is largely upon the individual types of crime that are committed, and the closing of crime-specific opportunities.

## 7.4 Data collection efforts

The normal practice of the United Nations crime prevention and criminal justice programme, of which HEUNI is an affiliated member, is to base analyses of global and regional crime on the periodic Surveys of Crime Trends and Criminal Justice Operations or on the International Crime Victim Survey. While some of the data gathered through these methods might be construed as proxies for organized crime they do not systematically collect information which directly measures levels of TOC. It is possible that the UNCJS survey could provide some indirect indicators of transnational organized crime via its measures related to drug offences, bribery, fraud and embezzlement. Although many such offences are not necessarily linked to organized or transnational crime, it is possible that changes in them over time may reflect underlying increases relating to organized crime. Some of these have recently been exploited: Van Horne and Farrell (1999) examined drug offenders in the global criminal justice system and found that their numbers had almost universally increased at the same time as it was known that there had been significant increases in the global drug trade. Such figures provide imperfect and indirect supporting measures of the spread of organized crime.

Future sweeps of the UNCJS survey however, may benefit from efforts to capture data on organized crime. Member states could be encouraged, as suggested by the UN Convention, to include transnational organized crime in their legislation and to record offenses that fit that category. The Survey could ask Member States to estimate the proportion of drug offences, bribery, fraud and embezzlement (and other crimes) that were committed by organized crime groups, and to provide specific counts relating to organized crime. In addition, the Centre for International Crime Prevention has considered preparing thematic supplemental surveys that would be linked to the UNCJS survey proper. Such a supplemental survey on transnational crime was conducted in 1994 as part of the Fourth Survey and could surely be modified and repeated in the future. Apart from these more traditional data collection methods of survey, the Centre has also begun to prepare, with the assistance of national experts, criminal economy profiles. The intent is to better understand the phases through which an illicit or licit product moves through the economy with the assistance of criminal actors.

Elsewhere, pioneering efforts such as those by Phil Williams (1999) have been made to gather pieces of the picture relating to various specific types of transnational organized crime. Such efforts should be similarly encouraged – the old adage that, with a little ingenuity, much knowledge can often be gained from imperfect partial data – seems to be the case (or more likely the necessity) in this instance. Williams typically builds a picture by putting together many small data items from different sources. Often the whole is greater than the sum of the parts and it is possible to derive larger-scale inferences from the resultant collage.

It is exactly this collage technique that forms the basis of this HEUNI volume and the preceding volume. As transnational organized crime is multidimensional, the authors are certain that HEUNI is pointing in the right direction with regard to the manner in which it purports to describe and explain crime in Europe and North America.

## 7.5 Significant developments in transnational organized crime trends

While some of the components of globalisation that have affected transnational criminal opportunities were given brief mention above (see Box 1 and related discussion), this section outlines some of the specific resultant trends. It gives an overview of some of the factors related to and broad developments in transnational organized crime in Europe and North America.

Perhaps the most significant individual socio-political event of recent decades that has created new opportunities for transnational organized crime has been the advent of Perestroika, the subsequent dissolution of the Soviet Union, and the resultant market-oriented economies. These changes created new opportunities for organized crime in the region, concurrent with new government institutions that were ill equipped to address the growing problem. The result was that

*“[a]t the end of the 1990’s, official sources reported that Russian organized crime was composed of around 70,000 members and controlled an estimated 50 percent of the economy, including one third of the country’s 1,800 banks, 1,500 state-owned companies and 4,000 companies quoted on the stock exchange. There were an estimated 110 transnational criminal groups based in Russia, which operated in 40 countries.” (United Nations, 2000b, p. 27)*

Organized crime groups infiltrated both public and private institutions and industries, and, as a result, legitimized themselves so that the line between licit and illicit rapidly became blurred. Organized crime groups have become major employers by replacing the formerly state run labor markets and trade unions (Voronin, 1996). High levels of corruption in public government and private industry have reduced public trust and the willingness of foreign firms and agencies to invest in the region. The instability of the financial sector has resulted in massive capital flight, estimated to be about \$1 billion per month, which is likely to include laundered funds from criminal activity (United States, 2000).

The scope of organized crime activities and groups emanating from the former Soviet Union is difficult to assess. It is broadly accepted that Russian organized crime groups are active in its neighboring countries including Estonia, Latvia, Lithuania, Belarus, Armenia, Azerbaijan, Kazakhstan, Georgia, and the Ukraine, and that its reaches extend into much of Europe as well as North America. The United States Government suggests that

*“Russian criminal organizations in the United States are adept at moving funds through a global complex of front companies, offshore financial service*

*centers, and crime-controlled banks to facilitate extraction of criminal proceeds originating in Russia, as well as to launder funds generated from US-based criminal operations.” (op.cit., ch.3:17)*

It is claimed that Russian groups are fully familiar with modern technologies and business practices, and make use of documentation fraud, health care fraud, and credit defaults all of which makes their criminal activities complex and difficult to detect. (op.cit.).

In contrast to Eastern Europe, Western Europe and North America have experienced a period of economic stability and unity unprecedented in their history.

*“The single market reforms of the European Union (EU) under the Schengen Agreement that permitted unfettered movement of goods, services, labor, and capital throughout most of Western Europe; sophisticated infrastructure for facilitating international trade; and tremendous volume of people and goods passing through commercial airports and seaports are exploited by international criminals to move drugs, arms, illegal aliens, and other contraband throughout Western Europe and to use EU gateways to reach every other region in the world.” (op.cit., ch.3:2)*

Flows of licit and illicit goods and services, both east to west and west to east, are exacerbated by the proximity of regions experiencing divergent economic, social and political realities. The situation is further enhanced by “middleman” States such as Hungary, Poland and the Czech Republic each possessing a sufficiently complex and near-Western infrastructure of roads, railways, and telecommunications but lacking the law enforcement and institutional mechanisms to guard against infringements of these institutions. We should note here that we are not characterizing the West as victims of crime exported from the East, but rather that the rapid socio-economic transformation of the east has sped the growth of criminal opportunities (as in the West but arguably from a more developed base) so that it has outpaced the growth of legislation and prevention efforts.

## 7.6 Responses

The United Nations Convention Against Transnational Organized Crime (2000) makes use of legal mechanisms intended to “promote cooperation to prevent and combat transnational crime more effectively” (Article 1). It attempts, among other things, to promote rules and practices that encourage States to define, design and enforce instruments for law-enforcement and prosecutorial agencies, and thus to encourage legislative consistency across jurisdictions. Such consistency should minimise the loopholes that organized crime can exploit. Part of the Convention (Article 31) encourages the development, evaluation and sharing of best practices; the reduction of the possibility of illicitly obtained monies from entering the licit economy; the reintegration into society of persons convicted of organized crimes; the periodic evaluation of legislation and administrative regu-

lations; the promotion of public awareness campaigns; and, the sharing of agencies and authorities that might assist other States.

The Convention encourages a number of approaches to the prevention of TOC. Specifically, it encourages ‘rule setting’ that blocks the criminal opportunities available to organised crime (Clarke and Homel, 1997). This approach is one of many in the preventive repertoire. Efforts to develop preventive approaches to TOC would benefit from greater conceptual clarification of the kind that is common in the discussion of crime prevention more generally. There are a number of options for classifying crime prevention (e.g. Lab, 1999; Lavrakas and Bennett, 1988; Van Dijk and De Waard, 1991). In what follows, Brantingham and Faust’s (1976) classification of primary, secondary or tertiary is utilised. *Primary crime prevention*, rather like preventive medicine, is intended to stop the crime before it happens. *Secondary prevention* is directed at those at heightened risk of offending. *Tertiary prevention* deals with known offenders – in effect it operates through the criminal justice system. Much of the discussion of ‘prevention’ in the existing literature relating to TOC conflates these approaches to prevention.

For the reasons given below, the discussion that follows focuses upon primary prevention. Primary prevention “identifies conditions in the physical and social environment that provide opportunities for or precipitate criminal acts”. Primary prevention can be divided into social and situational components. Social prevention addresses the inclination to offend; it might include education programs, job training, or the alleviation of poverty. Such schemes would be available to all citizens – potential offenders or not.

Although clearly social crime prevention has a role to play in the prevention of crime generally, its potential is limited and it is inefficient as a means of preventing transnational organised crime. The crime prevention ‘pay-off’ from such social interventions is longer term. It is not until the children grow that the benefits of education as a crime prevention measure, for example, come into their own. Arguably, something more immediate is required in tackling transnational organised crime. Furthermore, although there are many excellent reasons for trying to improve education levels, provide job training schemes, and reduce poverty, the prevention of transnational organised crime would not be among the key contenders. Citizens have the right of access to education and employment opportunities for their own sake, not simply as a crime prevention measure.

Not only is the potential preventive effect of social measures long term, but their relevance may be questionable in relation to transnational organised crime. There is no evidence that all members of organised crime syndicates are socially marginalised. Indeed, in the former Soviet Union some of the major members of organised gangs, rather like the Italian Mafia, are wealthy and well-educated individuals. Furthermore, there is no evidence that the members of organised crime groups come from any particular locality. They could be drawn from a very wide region, and attempting to improve education levels or provide school-based or other social programs as a means of preventing transnational organised crime, would require investment over a potentially vast area. It is difficult to see how it could be targeted on high-risk individuals and therefore difficult to see how it could be cost effective. Finally there is no shortage of transnational organised

criminals operating in advanced democracies where education levels and legitimate job opportunities are relatively common. To somehow suggest, as some commentators have, that an education program in Colombia might reduce the incidence of corruption and transnational drug trafficking, when it has had limited success in the United States, does not seem a rational or efficient use of limited resources.

Situational crime prevention, on the other hand, offers more immediate pay-off as a preventive approach and is as effective in preventing crime by rich and poor, disorganised and organised. It has been defined by Clarke (1983) as comprising measures:

- 1 that are directed at highly specific forms of crime
- 2 that involve the management, design, or manipulation of the immediate environment in as systematic and permanent a way as possible
- 3 that reduce the opportunities for crime and increase the risks as perceived by a wide range of offenders.

This approach to prevention addresses features of the environment in which crimes occur, or aspects of the target against which crimes occur. It analyses, with some precision, the context within which criminal events happen and then reduces the opportunity for their recurrence. It is closely affiliated with the problem-oriented approach to policing (see Goldstein 1990) that is too rarely discussed in the context of TOC.

The remainder of this section considers the potential of situational crime prevention when applied to transnational organised crime. It argues that, from one perspective, it already operates as an approach to the prevention of transnational organised crime, and has already demonstrated its efficacy. In addition, and most importantly, however, it proposes that it might be more effective if applied more formally and systematically, taking lessons from situational applications in other crime control contexts.

There are numerous examples of changes in the 'situation' resulting in reductions in crime. Clarke (1992) produced a useful classification of these situational techniques which illuminates the underlying principles through which they operate. This classification was later elaborated upon by Clarke and Homel (1997), resulting in a sixteen-cell framework laying out the techniques of situational crime prevention and providing examples from the research literature. The framework is set out below in Box 5, including examples that are routinely (or specially) used to prevent organised crime.

The list of preventive techniques and the examples given in Box 5 will not be explained in full. The interested reader is referred to Clarke (1998) for the most up-to-date explanation of these preventive techniques. It is, however, worth explaining the framework and some of the examples in order to demonstrate their general utility and the manner in which they should assist the international community in developing a portfolio of prevention efforts to tackle TOC.

The framework divides into four broad categories of preventive effort: increasing the effort, increasing the risks, reducing the rewards, and removing the excuses. These categories fit the analysis of organized crime as being based upon, broadly speaking, rational decision-making of criminal actors that incor-

### Box 5: Prevention Techniques for Organized Crime (and ‘traditional’ crime)

Technique (and brief definition)	‘Traditional’ crime prevention	Preventing organized crime
<b>A. Increasing the Effort</b>		
1. <i>Target hardening</i> : making the commission of a crime more difficult.	Slug rejecter devices Steering locks Bandit screens	Tower of London (Crown Jewels) Fort Knox (Gold) Car anti-theft devices stop organized car theft
2. <i>Controlling access to targets</i> : limiting access of would-be perpetrators to the place where crime is possible.	Parking lot barriers Fenced yards Entry phones Password protection	Security at art galleries Border checkpoints Crop-dusting plane registers
3. <i>Deflecting offenders and victims</i> : inducing offenders or victims to be elsewhere than at a place where crime is possible.	Bus stop placement Tavern location Street closures	Decoy Vehicles Decoy shipments Ships travelling in convoy
4. <i>Controlling crime facilitators</i> : Controlling the means whereby crime is made possible or easier.	Credit card photo Gun controls Caller-ID	Controlling precursors chemicals used in the production of drugs
<b>B. Increasing the risks</b>		
5. <i>Screening entrances and exits</i> : increasing conspicuousness when rules are not being observed.	Automatic ticket gates Baggage screening Merchandise tags	Passport and Visa controls Import and Export Documents Biometric scans
6. <i>Formal surveillance (of victims and offenders)</i> : locating perpetrators, victims or crime-prone places in time and space.	Red light cameras Burglar alarms Security guards	X-ray machines Custom’s checks Satellite surveillance
7. <i>Surveillance by employees</i> : the oversight by those at work as part of their work function.	Pay phone locations Parking attendants CCTV systems	Support for whistle-blower policies in employee regulations
8. <i>Natural surveillance</i> : making crime or the identity of those committing crime more visible.	Defensible space Street lighting Cab driver ID	Journalistic reports on mafia bosses Ten Most Wanted list
<b>C. Reducing the rewards</b>		
9. <i>Removing targets</i> : making a crime impossible because its purpose is precluded or its object unavailable.	Removable car radio Women’s refuges Phonecard	Eliminating high value bank notes stops their forgery
10. <i>Identifying property</i> : making stolen goods more easily recognisable.	Property marking Vehicle licensing Cattle branding	Unique dot-marking of art and valuables Intellectual property registers

**Box 5:** (continued)

<b>Technique (and brief definition)</b>	<b>'Traditional' crime prevention</b>	<b>Preventing organized crime</b>
11. <i>Reducing temptation:</i> limiting occasions on which a potential target is publicly identifiable as such.	Gender-neutral phone lists Off-street parking Rapid repair	Decoy shipments (money; prisoners etc.) GPS tracking of goods
12. <i>Denying benefits:</i> design or later action make the crime less profitable after the fact.	Ink merchandise tags PIN for car radios Graffiti cleaning	Exploding dye on bank money Asset seizure legislation
<b>D. Removing Excuses</b>		
13. <i>Setting rules:</i> clearly defining the law and unacceptable conduct (and the consequences).	Harassment codes Customs declaration Hotel registrations	Cash deposits limits to stop money laundering No-negotiation anti-hijacking policy
14. <i>Alerting conscience:</i> publicising the rules (subtly or otherwise) to make offenders think twice.	'Walking tall' Roadside speedometers 'Shoplifting is stealing' 'Idiots drink and drive'	Goods to declare channel at customs "Drug production by-products damage the environment" message
15. <i>Controlling disinhibitors:</i> reducing the frequency of states that may induce rule breaking.	Drinking age laws Ignition interlock V-chip	Control of precursors of drugs Clear definitions of corruption Sealed cargo containers
16. <i>Assisting compliance:</i> making it easy to follow the rules or law.	Easy library checkout Public lavatories Trash bins	Regular monitoring of arms manufacturers Assistance in destroying biological weapons International decommissioning bodies (eg. Monitoring arms decommissioning) Bomb-proof trash bins

porates an assessment of the costs and benefits involved. Transnational organized crime occurs because those involved perceive the likely benefits to outweigh the likely costs. The overarching aim of the situational approach therefore, is to tip the scales of this analysis by increasing the costs and/or reducing the rewards to transnational organized crime.

Although the column of cells addressing measures to tackle organized crime focuses upon crimes that are 'traditionally' thought of as organized, it is of note that many measures directed at 'ordinary' crimes can have an effect on some forms of organised crime. Street lighting could impact upon criminal opportunities for organized car crime, as could legislation that made car immobilizers compulsory. Alarms, sensor systems and closed-circuit television on business



premises may reduce thefts of goods that would result in transnational shipments prior to sale. Sealed cargo containers can eliminate an avenue for illicit transnational shipments if illicit goods cannot be added to a container that is shipped under the auspices of a reputable licit trader. Such measures may have positive domino effects – for example, if the removal of the shipment opportunity meant that there was no point (that is, reward to) obtaining the illicit goods for shipment.

The boundary between organized crime and transnational organized crime is somewhat blurred in the final column of Box 5. It is proposed that the prevention of many types of organized crime, in addition to those of a transnational nature, will benefit from the more widespread formal development of situational crime prevention interventions. Many types of crime that were previously just labelled ‘organized’ are increasingly being labelled ‘transnational’ because the process of globalization has created the potential for interaction between new markets. Organized car theft and shipment is one example of such a crime. It is also an example of a type of crime where modifications to the potential target (design changes to cars) are likely to be a fruitful avenue for prevention since law enforcement efforts aimed simply at organizations leave the same criminal opportunities to be adopted by others. The highly dynamic illicit drug trade has demonstrated this kind of adaptation on several occasions when the collapse of one large criminal organization has left it to be replaced by one or more others.

Some efforts to prevent TOC are so common that they appear second-nature and are not recognized as crime prevention efforts. Passports are one of the most straightforward examples of everyday efforts to tackle TOC. By providing a means of controlling access to and from countries, they discourage and make it more difficult and risky to cross international borders illegally, and reduce the level of the illicit movement (trafficking) of humans. Although the smuggling of humans across borders still occurs, it is far less prevalent than it would be in the absence of passports and border checks. Passports have become such an everyday part of many people’s lives that their formal crime prevention role, and the mechanism by which they work to prevent transnational crime, can be easily overlooked. As the manufacture of passports has become more sophisticated, the costs of forging passports, and the skills required, have increased significantly. This increases the costs to organized crime and will have eliminated most illegal border crossings that would occur in the absence of passports and border checks. Those organized border crossings that remain are in vastly reduced numbers and are far more risky and costly to organized criminals than they would otherwise be. Hence, although we would be hard pressed to provide the relevant empirical evidence, it is reasonable to conclude that simple and accepted measures such as passports can have significant effects upon the prevalence of TOC. The organized crime of counterfeiting of money has likewise become more difficult as production technologies have improved, although even here an ‘arms race’ can take place between criminals and crime preventers. Many relatively simple situational measures – for example, using paper that is difficult to obtain, incorporating watermarks, using complex designs that are difficult to replicate, have served to make the counterfeiting of money extremely difficult and costly, as well as in-



creasing the likelihood of detection. Still, new criminal opportunities arise. The new European currency unit, the Euro, is alleged to have at least one coin that is virtually indistinguishable from a lower value coin from another country. This presents a new opportunity for TOC – the transnational shipments of such coins and their substitution for the higher value coins will prove a profitable continuing enterprise unless efforts are made to remove the opportunity. Possible interventions could include coin re-design, publicity to alert potential victims, re-valuing or withdrawing one of the coins, or improved techniques for the identification and marking of one of the coins.

The monitoring of the level of cash that can be deposited in financial institutions in single over-the-counter transactions is another simple situational measure used to tackle money laundering. Many criminal transactions utilise cash since it is seldom traceable, but the result can be that higher-level criminals are left with large sums of money to deposit and launder. Without receipts and invoices (a paper trail that can be traced) there is little alternative to depositing this money in banks in large amounts. However, since this is not an everyday occurrence for most people, imposing a limit on cash deposits and introducing simple monitoring procedures will primarily hinder organized crime without imposing significant costs on legal transactions. Legal depositors can complete the relevant paperwork with impunity, whereas illegal depositors are unlikely to do so. The result in some instances has been a tactical displacement to ‘smurfing’ – multiple small deposits by different individuals working for the same criminal network. However, smurfing incurs far more effort and risk for organized crime: it means that many more low-level criminals have to be both paid, and entrusted with lumps of money. These workers may, if detected, be more likely to give up any intelligence information they may have. When combined with additional situational measures such as tracing the paper-trail of suspect monies, the gradual closing of legal loopholes that exist in certain countries (such as off-shore havens with limited legal requirements for financial transactions), and other situational measures such as asset seizure (which remove the rewards to organized crime), organized criminals are constantly being squeezed, making such crime a less attractive prospect.

Despite claims that money laundering is still relatively easy, it does not seem unreasonable to expect that continued efforts to close the loopholes and to trace illegal money via various methods, will prove a long-term success in the fight against many types of organized crime. While such situational prevention efforts are specific to the crime of money laundering, they also impact upon a range of related organized crime that provides the money to be laundered. In general, such efforts also increase the skill-level that is required of organised criminals, producing an effective ‘barrier to entry’ to criminals who do not have these skills. In this way, situational prevention may in the longer term also reduce the propensity to turn to organised crime among the pool of potential offenders.

Problem-oriented policing and crime analysis techniques that allow the identification of patterns and trends in crime and its characteristics, have all proved useful in tackling many types of non-organised crime. These approaches should be encouraged in relation to the prevention of organised crime and are a comple-

ment to situational prevention efforts. While the international community has begun to foster some movement towards the dissemination of such techniques in relation to 'traditional' non-organized crime, there appears to be a need for such work to be promoted in relation to TOC.

## 7.7 Conclusions

The conclusions to this chapter take two forms. The present chapter has focused primarily upon a theoretical rather than an empirical contribution to the prevention of transnational organized crime in Europe and North America. It is proposed that the accumulation of knowledge must be incremental and that efforts in the future might benefit from drawing together the empirical data sources on specific types of transnational organized crime. This includes analysis of those aspects of the UNCJS survey that might fruitfully provide some indirect indicators relating to organized crime – measures relating to drug offences, bribery, fraud and embezzlement. Their combination with other indicators such as the Corruptions Perception Index developed by Transparency International may shed empirical light upon general trends and patterns in these crimes. It is also hoped that future sweeps of the UNCJS survey might incorporate more direct measures of organized crime. This knowledge will prove of more practical utility if it can be combined within a preventive framework and if it is supported by local and crime-specific analyses. Increased knowledge and understanding of TOC is, after all, only useful and worthwhile if it is used to inform preventive efforts in some fashion.

The emphasis of a significant part of this chapter has been upon developing a framework around which practical efforts to prevent organized crime might be developed. This seems appropriate given the stage which we have now reached in relation to the study and prevention of transnational organised crime. There have been many recent efforts to describe the nature and extent of organized crime. These are certainly important and should continue, with increasing emphasis upon the details of the crime and context-specific analysis. To date, however, there has been little effort expended upon the study and evaluation of practical preventive efforts. There is, therefore, a great need for the delineation of a formal prevention framework such as that proposed here. The transfer of a proven and existing framework for these purposes provides a significant opportunity for knowledge transfer. The approach is only new in the present context – hence there are potential benefits of cross-fertilization to the field of transnational organised crime from the established situational crime prevention experience of dealing with other offences. It is proposed that increasing the costs and reducing the benefits to organised crime should prove a more productive and cost-effective approach to tackling the problem. It is likely that the most significant inroads into organised crime will be made through the continued adoption of the techniques of situational prevention. A formal framework such as that proposed here provides a means by which such efforts can be promoted and encouraged.

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## 8 Concluding notions

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The report in hand is the fifth of its kind, aiming at analyzing and summing up the results of the United Nations Surveys on Crime Trends and Operations of Criminal Justice Systems, originating in the national responses of the member states of the European and North American regions. The consecutive reporting undertakings, covering the survey cycles from the second to the fifth, have aspired time after time to refine the exploratory power of the final analysis by methodological means. In contrast to these efforts, the idea dominating this sixth survey report has from the outset been, *inter alia*, to explore various comparative approaches utilized in this enterprise in order to find out whether it is on the whole apposite to continue with this type of a research efforts.

Mixed exposure is given to this question by chapters two to seven of the report. The trustworthiness of the available data is not very much questioned in chapters five and six: the data are taken largely at face value and utilized as baseline material for further analysis. The limitations of the data are, however, given a central role in, for example, chapters three and four, and consequently very advanced conclusions are not drawn on the basis of the resulting analysis. In the two remaining chapters (two and seven), it is explained at the outset that the aim of the exercise is by nature descriptive rather than explanatory.

All in all, the picture is not a too encouraging one. The main cause of this uncertainty is the structural incommensurability of the indicator variables used in measuring phenomena in the field of crime. In [chapter 3](#) above Howard and Smith suggest that triangulation, i.e. the application of more than one – as a rule three – measuring instruments, might be one way out of this dilemma. Commonly, there are only two measuring tools are applicable in the crime context, namely the official crime statistics and the data emanating from victim surveys. After rigorous statistical analyses of these two sources of data, Howard and Smith conclude that precious little agreement exists between the entities, which leads the researchers to mistrust the validity of cross-national measurements in this field. They say that the further inference of this is that “a firmer answer to the question of validity will have to await a more complete application of the notion of triangulation, and as the name suggests this exercise will require at least three different types of crime data, each with their own sources of error. Perhaps a robust effort to implement rigorous cross-national self-report studies of crime will help to resolve this problem in the future” (see [ch. 3, pp. 66-67](#) above).

The hopes of Howard and Smith might be crushed at least by the following facts: As regards self-report studies, only less serious offences will be reported to the researchers, It is fairly safe to assume- even though there is no direct experience of the matter – that actual career criminals are rather reluctant to reveal serious crimes in a standard survey, particularly if organized crime is involved, and that studies in this category can hence be meaningful only among the target

groups composed either of juveniles or ordinary people. Criminal careers of delinquent juveniles very seldom incorporate really serious offences or crimes demanding special skills. And serious offences committed by ordinary people, or acts that they see as aggravated transgressions of the law, are too infrequent for a satisfactory measurement, and since quite large samples of study objects are needed, this kind of exercises will become quite expensive and are thus not easily realized. As to the victim studies we have to keep in mind that a great number of offences are so-called victimless crimes (or in many cases the context is such that victims are not even aware of being victimized), and a lot of actual cases will not, therefore, be recorded as such in victim studies.

All this means that a considerable number of crimes actually committed will not be recorded by any of the triangulation instruments. The consequence, as we understand it, is that we will never be able to produce robust methodical tools aiming at comparative cross-national exercises by utilizing crime-connected indicators, however much effort we put in to refine them qualitatively. A part of the phenomenon will always remain concealed from us.

A further option might be to look for more valid and reliable indicators with sufficient explanatory power in this field, which would not be connected with the phenomenon at all or at least to a lesser degree than those presently used. The next exercise to analyze the results of the United Nations Survey on Crime Trends and Operations of Criminal Justice Systems, should avail itself primarily of this kind of considerations.



**Centre for International Crime Prevention  
Office for Drug Control and Crime Prevention  
and  
Statistics Division  
Department of Economic and Social Affairs,  
United Nations**

**Questionnaire for the  
Sixth United Nations Survey of Crime Trends  
and Operations of Criminal Justice Systems,  
covering the period 1995-1997**

**Country name:** \_\_\_\_\_

The officer responsible for coordinating the collection of the data for the entire questionnaire should return all sections of the completed questionnaire no later than **1 October 1999** to the Centre for International Crime Prevention, Office for Drug Control and Crime Prevention, P.O. Box 500, A-1400, Vienna, Austria, or to the Statistics Division, United Nations, New York, N.Y. 10017, United States of America.

This questionnaire is being distributed through the Statistics Division network.

In order to facilitate any clarification of the data provided, information about the coordinating officer should be given below and on the first page of each of the sections of the questionnaire.

Coordinating officer's name: \_\_\_\_\_

Functional title: \_\_\_\_\_

Agency: \_\_\_\_\_

Street: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

City/state/country: \_\_\_\_\_

Telephone (including country code and city code): \_\_\_\_\_

Fax (including country code and city code): \_\_\_\_\_

E-mail: \_\_\_\_\_

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## Introduction

### A. Objectives of the Sixth Survey

1. The Economic and Social Council, in its resolution 1984/48 of 25 May 1984, requested the Secretary-General to maintain and develop the United Nations crime-related database by continuing to conduct surveys of crime trends and operations of criminal justice systems.
2. The main goal of the Sixth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, covering the period 1995-1997, is to collect data on the incidence of reported crime and the operations of criminal justice systems with a view to improving the analysis and dissemination of that information throughout the world. The results of the Sixth Survey will provide an overview of crime trends and relationships between various parts of the criminal justice system and promote informed decision-making in administration, at the national and international levels.
3. The data gathered by the Sixth Survey will benefit both the international community as a whole and each responding Government. The information will be used in determining crime trends and problem areas for intervention in the form of technical cooperation, in preparing reports such as the *Global Report on Crime and Justice*<sup>1</sup> and in comparing the crime situation in one country with that of another country in a similar position.
4. The questionnaire for the Sixth Survey consists of a series of questions designed to elicit responses in the form of data, primarily statistical data, on the main components of criminal justice systems for the period 1995-1997. The questionnaire for the Sixth Survey is 65 per cent shorter than the questionnaire for the Fifth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, which covered the period 1990-1994. The instructions in the paragraphs below should be carefully studied before the questionnaire is completed. Partial replies should be reviewed by the central responding office to ensure that the jurisdictions to which the data refer (for example, national or federal jurisdictions) are clearly defined and that the data are statistically valid. It is important to review the replies in all parts of the questionnaire for consistency.

### B. Instructions for completing the questionnaire

5. The questionnaire is compiled in such a way that it can be divided up between different agencies and reassembled in the central responding office before it is returned. In the replies received for the Fifth Survey: (a) the same information was given in two parts of the questionnaire; (b) there were figures on operations in later stages of the criminal justice process that were higher than the corresponding figures in earlier stages of the process; and (c) no explanations given for significant statistical changes. In those cases, the Secretariat sent requests for validation of the data. The procedure was very time-consuming for all those involved in the provision and analysis of the data, resulting in considerable delays. Respondents are requested to bear that in mind when completing the questionnaire for the Sixth Survey.
6. In addition, respondents completing the tables are requested to keep the following in mind:

(a) If figures provided in one table differ significantly from one year to the next, the discrepancy should be explained in notes to the table;

(b) If it is not possible to provide data as classified or defined in a table, an attempt should be made to adjust the data as far as possible and to describe the steps involved in notes to the table or on the facing page;

(c) If data are not yet available, provisional data or estimates may be inserted and noted accordingly;

(d) If a table can be completed only in part, it should be explained in a note in the appropriate section that the rest of the data are "not available";

(e) If no data at all are available, the words "not yet available", "not tabulated" or "not collected" as the case may be, should be written in the appropriate space;

(f) In most cases, the calendar year should be used as the reporting period. Where some other annual period is used, such as a fiscal year not corresponding to the calendar year, that fact should be noted;

(g) Statistics on such matters as criminal justice personnel, court action and the prison population should include data from all levels of government, that is, from the national, state and local authorities.

7. Requests for any clarification or further information in respect of this questionnaire should be addressed to the Director, Centre for International Crime Prevention, Office for Drug Control and Crime Prevention, P.O. Box 500, A-1400 Vienna, Austria. Such requests can also be sent by fax (43-1-26060-5898) or by e-mail ([adam.bouloukos@cicp.un.or.at](mailto:adam.bouloukos@cicp.un.or.at)).

<sup>1</sup> Graeme Newman, ed., *Global Report on Crime and Justice* (New York, Oxford University Press, 1999).



**Questionnaire for the  
Sixth United Nations Survey of Crime Trends  
and Operations of Criminal Justice Systems,  
covering the period 1995-1997**

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**I. Police**

**Country name:** \_\_\_\_\_

Please complete this section of the questionnaire and return it no later than **1 September 1999** to the coordinating officer, whose name is provided in the box below. The coordinating officer will, in turn, send all sections of the completed questionnaire to the Centre for International Crime Prevention, Office for Drug Control and Crime Prevention, P.O. Box 500, A-1400, Vienna, Austria, or to the Statistics Division, United Nations, New York, N.Y. 10017, United States of America.

This questionnaire is being distributed through the Statistics Division network.

Coordinating officer's name: \_\_\_\_\_

Functional title: \_\_\_\_\_

Agency: \_\_\_\_\_

Street: \_\_\_\_\_

City/state/country: \_\_\_\_\_

Telephone (including country code and city code): \_\_\_\_\_

Fax (including country code and city code): \_\_\_\_\_

E-mail: \_\_\_\_\_

**Definition of terms**

1. The definitions below are applicable to many legal codes.
2. "*Intentional homicide*" may be understood to mean death deliberately inflicted on a person by another person, including infanticide.
3. "*Non-intentional homicide*" may be understood to mean death not deliberately inflicted on a person by another person. That includes the crime of manslaughter but excludes traffic accidents that result in the death of persons.
4. "*Assault*" may be understood to mean physical attack against the body of another person, including battery but excluding indecent assault. Some criminal or penal codes distinguish between aggravated assault and simple assault, depending on the degree of resulting injury. If such a distinction is made in your country, please provide the relevant data for aggravated assault under the category "Major assault". Under the category "Total assault" should be included data on both aggravated assault (i.e. major assault) and simple assault. Please provide the main criterion for distinguishing between aggravated assault and simple assault if such a distinction is made in your country.
5. "*Rape*" may be understood to mean sexual intercourse without valid consent. Please indicate whether statutory rape is included in the data provided. If, in your country, a distinction is made between sexual assault and actual penetration, please provide relevant information.
6. "*Robbery*" may be understood to mean the theft of property from a person, overcoming resistance by force or threat of force.
7. "*Theft*" may be understood to mean the removal of property without the property owner's consent. "Theft" excludes burglary and housebreaking as well as theft of a motor vehicle. Some criminal and penal codes distinguish between grand and petty theft, depending on the value of the goods and property taken from their rightful owner. If such a distinction is made in your country, please provide the relevant data for grand theft under the category "Major theft". The category "Total theft" should include data on both grand theft (i.e. major theft) and petty theft. Please provide the main criterion for distinguishing between grand theft and petty theft if such a distinction is made in your country.
8. "*Automobile theft*" may be understood to mean the removal of a motor vehicle without the consent of the owner of the vehicle.
9. "*Burglary*" may be understood to mean unlawful entry into someone else's premises with the intention to commit a crime.
10. "*Fraud*" may be understood to mean the acquisition of another person's property by deception. Please indicate whether the fraudulent obtaining of financial property is included in the data provided.
11. "*Embezzlement*" may be understood to mean the wrongful appropriation of another person's property that is already in the possession of the person doing the appropriating.
12. "*Drug-related crimes*" may be understood to mean intentional acts that involve the cultivation, production, manufacture, extraction, preparation, offering for sale, distribution, purchase, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit,

transport, importation and exportation of internationally controlled drugs. Where applicable, reference may be made to the provisions of the Single Convention on Narcotic Drugs of 1961<sup>1</sup> and other regulations adopted in pursuance of the provisions of the Convention on Psychotropic Substances of 1971<sup>2</sup> and/or the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.<sup>3</sup>

13. "*Bribery and/or corruption*" may be understood to mean requesting and/or accepting material or personal benefits, or the promise thereof, in connection with the performance of a public function for an action that may or may not be a violation of law and/or promising as well as giving material or personal benefits to a public officer in exchange for a requested favour.

14. "*Recorded crimes*" may be understood to mean the number of penal code offences or their equivalent (i.e. various special law offences), but excluding minor road traffic offences and other petty offences, brought to the attention of the police or other law enforcement agencies and recorded by one of those agencies.

15. "*Police personnel or law enforcement personnel*" may be understood to mean personnel in public agencies whose principal functions are the prevention, detection and investigation of crime and the apprehension of alleged offenders. If the police are part of the national security force in your country, please try to focus your replies as much as possible on the civil police rather than on the national guard or local militia. If there are many local forces, please provide data on those forces if possible. If police or law enforcement personnel fulfil prosecutorial functions, that fact should be noted in the space below table 1. Data concerning support staff (secretaries, clerks etc.) should be excluded from your replies.

16. If the categories given in paragraphs 2-13 above are not fully compatible with the legal code in your country, please try to adjust the data as far as possible. Alternatively, you may indicate in the space below the table concerned or on the facing page what kinds of crime are included in your statistics that might be comparable to the categories suggested or how the comparable types of crime are defined in your country.

<sup>1</sup> United Nations, *Treaty Series*, vol. 520, No. 7515.

<sup>2</sup> *Ibid.*, vol. 1019, No. 14956.

<sup>3</sup> *Official Records of the United Nations Conference for the Adoption of a Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, Vienna, 25 November-20 December 1988*, vol. 1 (United Nations publication, Sales No. E.94.XL5).

Table 1  
Police personnel,<sup>a</sup> by sex, and financial resources, 1995-1997

Category	As at 31 December <sup>b</sup>	
	1995	1997
1.1 Total police personnel		
1.2 Females		
1.3 Males		
1.4 Total police budget/ financial resources (millions of local currency units) <sup>c</sup>		

<sup>a</sup> Please see the definition of the term "police personnel" in paragraph 15 on page 7.

<sup>b</sup> If some alternative reference date has to be used, please indicate that date here: \_\_\_\_\_.

<sup>c</sup> Total police budget/financial resources should include all monies allocated to the civil police function at the national level, including salaries and fixed assets. When calculating salaries, please include total monies spent on every individual employed in the given area. When calculating fixed assets, please include all monies invested in non-personnel assets, such as buildings, automobiles and office equipment.

**Table 2**  
**Crimes recorded in criminal (police) statistics, by type of crime including attempts to commit crimes, 1995-1997**

Type of crime <sup>a</sup>	1995	1996	1997
2.1 Total recorded crimes, regardless of type <sup>b</sup>			
2.2 Intentional homicide: Committed			
2.3 Attempted			
2.4 Committed with a firearm			
2.5 Non-intentional homicide			
2.6 Assault: Major assault			
2.7 Total assault			
2.8 Rape			
2.9 Robbery			
2.10 Theft: Major theft			
2.11 Total theft			
2.12 Automobile theft			
2.13 Burglary			
2.14 Fraud			
2.15 Embezzlement			
2.16 Drug-related crime			
2.17 Bribery and/or corruption			

Source(s) of the data provided in this table:

---

<sup>a</sup> Please see the definitions of the terms in paragraphs 2-13 on pages 6-7.

<sup>b</sup> Please note that the total number of recorded crimes may be greater than the sum of the figures given for the individual types of crime listed in the table. The total should not include minor road traffic offences.

**Table 3**  
**Persons brought into initial formal contact with the police and/or the criminal justice system, by type of crime, where initial formal contact might include being suspected, arrested, cautioned etc., 1995-1997**

Type of crime <sup>a</sup>	1995	1996	1997
3.1 Total persons brought into initial formal contact with the police and/or the criminal justice system, regardless of the type of crime <sup>b</sup>			
3.2 Intentional homicide: Committed			
3.3 Attempted			
3.4 Committed with a firearm			
3.5 Non-intentional homicide			
3.6 Assault: Major assault			
3.7 Total assault			
3.8 Rape			
3.9 Robbery			
3.10 Theft: Major theft			
3.11 Total theft			
3.12 Automobile theft			
3.13 Burglary			
3.14 Fraud			
3.15 Embezzlement			
3.16 Drug-related crime			
3.17 Bribery and/or corruption			

Source(s) of the data provided in this table:

---

<sup>a</sup> Please see the definitions of the terms in paragraphs 2-13 on pages 6-7.

<sup>b</sup> Please note that the total number of persons brought into formal contact with the criminal justice system may be greater than the sum of the numbers given for the individual types of crime listed in the table.

**Table 4**  
**Persons brought into formal contact with the criminal justice system, by sex and age group, where formal contact might include being suspected, arrested, cautioned etc., 1995-1997**

<i>Category</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>
4.1 Females			
4.2 Males			
4.3 Adults			
4.4 Female adults			
4.5 Male adults			
4.6 Juveniles			
4.7 Female juveniles			
4.8 Male juveniles			

Source(s) of the data provided in this table:

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Please provide the definitions of "adult" and "juvenile" that are used in the national criminal justice system:

Adult: \_\_\_\_\_

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Juvenile: \_\_\_\_\_

---

*If, in your opinion, there are some additional explanations that might contribute to a better understanding of the data that you have entered in this part of the questionnaire, please provide those explanations in the space below or on an attached sheet.*

**Questionnaire for the  
Sixth United Nations Survey of Crime Trends  
and Operations of Criminal Justice Systems,  
covering the period 1995-1997**

---

**II. Prosecution**

**Country name:** \_\_\_\_\_

Please complete this section of the questionnaire and return it no later than **1 September 1999** to the coordinating officer, whose name is provided in the box below. The coordinating officer will, in turn, send all sections of the completed questionnaire to the Centre for International Crime Prevention, Office for Drug Control and Crime Prevention, P. O. Box 500, A-1400, Vienna, Austria, or to the Statistics Division, United Nations, New York, N.Y. 10017, United States of America.

This questionnaire is being distributed through the Statistics Division network.

Coordinating officer's name: \_\_\_\_\_

Functional title: \_\_\_\_\_

Agency: \_\_\_\_\_

Street: \_\_\_\_\_

City/state/country: \_\_\_\_\_

Telephone (including country code and city code): \_\_\_\_\_

Fax (including country code and city code): \_\_\_\_\_

E-mail: \_\_\_\_\_

**Definition of terms**

1. The definitions below are applicable to many legal codes.
2. "*Intentional homicide*" may be understood to mean death deliberately inflicted on a person by another person, including infanticide. Please indicate whether certain categories of attempted homicide are charged or prosecuted as "aggravated assault".
3. "*Non-intentional homicide*" may be understood to mean death not deliberately inflicted on a person by another person. That includes the crime of manslaughter but excludes traffic accidents that result in the death of persons.
4. "*Assault*" may be understood to mean physical attack against the body of another person, including battery but excluding indecent assault. Some criminal or penal codes distinguish between aggravated assault and simple assault, depending on the degree of resulting injury. If such a distinction is made in your country, please provide the relevant data for aggravated assault under the category "Major assault". Under the category "Total assault" should be included data on both aggravated assault (i.e. major assault) and simple assault. Please provide the main criterion for distinguishing between aggravated assault and simple assault if such a distinction is made in your country.
5. "*Rape*" may be understood to mean sexual intercourse without valid consent. Please indicate whether statutory rape is included in the data provided. If, in your country, a distinction is made between sexual assault and actual penetration, please provide relevant information.
6. "*Robbery*" may be understood to mean the theft of property from a person, overcoming resistance by force or threat of force.
7. "*Theft*" may be understood to mean the removal of property without the property owner's consent. "Theft" excludes burglary and housebreaking as well as theft of a motor vehicle. Some criminal and penal codes distinguish between grand and petty theft, depending on the value of the goods and property taken from their rightful owner. If such a distinction is made in your country, please provide the relevant data for grand theft under the category "Major theft". The category "Total theft" should include data on both grand theft (i.e. major theft) and petty theft. Please provide the main criterion for distinguishing between grand theft and petty theft if such a distinction is made in your country.
8. "*Automobile theft*" may be understood to mean the removal of a motor vehicle without the consent of the owner of the vehicle.
9. "*Burglary*" may be understood to mean unlawful entry into someone else's premises with the intention to commit a crime.
10. "*Fraud*" may be understood to mean the acquisition of another person's property by deception. Please indicate whether the fraudulent obtaining of financial property is included in the data provided.
11. "*Embezzlement*" may be understood to mean the wrongful appropriation of another person's property that is already in the possession of the person doing the appropriating.
12. "*Drug-related crimes*" may be understood to mean intentional acts that involve the cultivation, production, manufacture, extraction, preparation, offering for sale, distribution, purchase, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit, transport, importation and exportation of internationally controlled drugs. Where applicable, reference may be made to the provisions of the Single Convention on Narcotic

Drugs of 1961<sup>1</sup> and other regulations adopted in pursuance of the provisions of the Convention on Psychotropic Substances of 1971<sup>2</sup> and/or the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.<sup>3</sup>

13. “*Bribery and/or corruption*” may be understood to mean requesting and/or accepting material or personal benefits, or the promise thereof, in connection with the performance of a public function for an action that may or may not be a violation of law and/or promising as well as giving material or personal benefits to a public officer in exchange for a requested favour.

14. “*Prosecution personnel*” may be understood to mean 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. In some countries, a prosecutor is a member of a separate agency, in others, a prosecutor is 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 (e.g. federal/provincial systems or civilian/martial systems) please provide separate information about prosecutorial functions in each system. Data concerning support staff (secretaries, clerks etc.) should be excluded.

15. “*Persons prosecuted*” may be understood to mean alleged offenders prosecuted by means of an official charge, initiated by the public prosecutor or the law enforcement agency responsible for prosecution.

16. If the definitions given in paragraphs 2-13 above are not fully compatible with the legal code in your country, please try to adjust the data as far as possible. Alternatively, you may indicate below the table concerned or on the facing page what kinds of crime are included in your statistics that might be comparable to the categories suggested or how the comparable types of crime are defined in your country.

<sup>1</sup> United Nations, *Treaty Series*, vol. 520, No. 7515.

<sup>2</sup> *Ibid.*, vol. 1019, No. 14956.

<sup>3</sup> *Official Records of the United Nations Conference for the Adoption of a Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, Vienna, 25 November-20 December 1988*, vol. 1 (United Nations publication, Sales No. E.94.XI.5).

Table 5

**Prosecution personnel,<sup>a</sup> by sex, and financial resources, 1995 and 1997**

Category	As at 31 December <sup>b</sup>	
	1995	1997
5.1 Total prosecution personnel		
5.2 Females		
5.3 Males		
5.4 Total prosecution budget/financial resources (millions of local currency units) <sup>c</sup>		

<sup>a</sup> Please see the definition of the term “prosecution personnel” in paragraph 12 on pages 14-15.

<sup>b</sup> If some alternative reference date has been used, please indicate that date here:

<sup>c</sup> Total prosecution budget/financial resources should include all monies allocated to the prosecution function at the national level, including salaries and fixed assets. When calculating salaries, please include total monies spent on every individual employed in the given area. When calculating fixed assets, please include all monies invested in non-personnel assets, such as buildings, automobiles and office equipment.

Table 6  
Persons prosecuted, by type of crime, 1995-1997

Type of crime <sup>a</sup>	1995	1996	1997
6.1 Total persons prosecuted for any type of crime <sup>b</sup>			
6.2 Intentional homicide: Committed			
6.3 Intentional homicide: Attempted			
6.4 Intentional homicide: Committed with a firearm			
6.5 Non-intentional homicide			
6.6 Assault: Major assault			
6.7 Assault: Total assault			
6.8 Rape			
6.9 Robbery			
6.10 Theft: Major theft			
6.11 Theft: Total theft			
6.12 Automobile theft			
6.13 Burglary			
6.14 Fraud			
6.15 Embezzlement			
6.16 Drug-related crime			
6.17 Bribery and/or corruption			

Source(s) of the data provided in this table:

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---

<sup>a</sup> Please see the definitions of the terms in paragraphs 2-13 on pages 14 and 15.

<sup>b</sup> Please note that the total number of persons prosecuted may be greater than the sum of the numbers given for the individual types of crime listed in the table.

Table 7  
Persons prosecuted, by sex and age group, 1995-1997

Category	1995	1996	1997
7.1 Total persons prosecuted			
7.2 Females			
7.3 Males			
7.4 Adults prosecuted			
7.5 Female adults			
7.6 Male adults			
7.7 Juveniles prosecuted			
7.8 Female juveniles			
7.9 Male juveniles			

Source(s) of the data provided in this table:

---



---

Please provide the definitions of "adult" and "juvenile" that are used in the national criminal justice system:

Adult: \_\_\_\_\_

---



---

Juvenile: \_\_\_\_\_

---



---

*If, in your opinion, there are some additional explanations that might contribute to a better understanding of the data that you have entered in this part of the questionnaire, please provide those explanations in the space below or on an attached sheet.*

**Questionnaire for the  
Sixth United Nations Survey of Crime Trends  
and Operations of Criminal Justice Systems,  
covering the period 1995-1997**

---

### III. Courts

Country name: \_\_\_\_\_

Please complete this section of the questionnaire and return it no later than **1 September 1999** to the coordinating officer, whose name is provided in the box below. The coordinating officer will, in turn, send all sections of the completed questionnaire to the Centre for International Crime Prevention, Office for Drug Control and Crime Prevention, P. O. Box 500, A-1400, Vienna, Austria, or to the Statistics Division, United Nations, New York, N.Y. 10017, United States of America.

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Coordinating officer's name: \_\_\_\_\_

Functional title: \_\_\_\_\_

Agency: \_\_\_\_\_

Street: \_\_\_\_\_

City/state/country: \_\_\_\_\_

Telephone (including country code and city code): \_\_\_\_\_

Fax (including country code and city code): \_\_\_\_\_

E-mail: \_\_\_\_\_

### Definition of terms

1. The definitions below are applicable to many legal codes.
2. "*Intentional homicide*" may be understood to mean death deliberately inflicted on a person by another person, including infanticide. Please indicate whether certain categories of attempted homicide are charged or prosecuted as "aggravated assault".
3. "*Non-intentional homicide*" may be understood to mean death not deliberately inflicted on a person by another person. That includes the crime of manslaughter but excludes traffic accidents that result in the death of persons.
4. "*Assault*" may be understood to mean physical attack against the body of another person, including battery but excluding indecent assault. Some criminal or penal codes distinguish between aggravated assault and simple assault, depending on the degree of resulting injury. If such a distinction is made in your country, please provide the relevant data for aggravated assault under the category "Major assault". Under the category "Total assault" should be included data on both aggravated assault (i.e. major assault) and simple assault. Please provide the main criterion for distinguishing between aggravated assault and simple assault if such a distinction is made in your country.
5. "*Rape*" may be understood to mean sexual intercourse without valid consent. Please indicate whether statutory rape is included in the data provided. If, in your country, a distinction is made between sexual assault and actual penetration, please provide relevant information.
6. "*Robbery*" may be understood to mean the theft of property from a person, overcoming resistance by force or threat of force.
7. "*Theft*" may be understood to mean the removal of property without the property owner's consent. "Theft" excludes burglary and housebreaking as well as theft of a motor vehicle. Some criminal and penal codes distinguish between grand and petty theft, depending on the value of the goods and property taken from their rightful owner. If such a distinction is made in your country, please provide the relevant data for grand theft under the category "Major theft". The category "Total theft" should include data on both grand theft (i.e. major theft) and petty theft. Please provide the main criterion for distinguishing between grand theft and petty theft if such a distinction is made in your country.
8. "*Automobile theft*" may be understood to mean the removal of a motor vehicle without the consent of the owner of the vehicle.
9. "*Burglary*" may be understood to mean unlawful entry into someone else's premises with the intention to commit a crime.
10. "*Fraud*" may be understood to mean the acquisition of another person's property by deception. Please indicate whether the fraudulent obtaining of financial property is included in the data provided.
11. "*Embezzlement*" may be understood to mean the wrongful appropriation of another person's property that is already in the possession of the person doing the appropriating.
12. "*Drug-related crimes*" may be understood to mean intentional acts that involve the cultivation, production, manufacture, extraction, preparation, offering for sale, distribution, purchase, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit, transport, importation and exportation of internationally controlled drugs. Where applicable, reference may be made to the provisions of the Single Convention on Narcotic Drugs of 1961<sup>1</sup> and other regulations adopted in pursuance of the provisions of the

<sup>1</sup> United Nations, *Treaty Series*, vol. 520, No. 7515.



Convention on Psychotropic Substances of 1971<sup>1</sup> and/or the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.<sup>2</sup>

13. “*Bribery and/or corruption*” may be understood to mean requesting and/or accepting material or personal benefits, or the promise thereof, in connection with the performance of a public function for an action that may or may not be a violation of law and/or promising as well as giving material or personal benefits to a public officer in exchange for a requested favour.

14. “*Persons convicted*” may be understood to mean persons found guilty by any legal body duly authorized to pronounce them convicted under national law, whether the conviction was later upheld or not. If persons are convicted by any agency other than the courts, please state which agency and provide statistical details in the space provided after tables 10 and 11. In those tables the total number of persons convicted includes the number convicted of serious special law offences but excludes the number convicted of minor road traffic offences and other petty offences.

15. “*Professional judges or magistrates*” may be understood to mean both full-time and part-time officials authorized to hear civil, criminal and other cases, including in appeal courts, and make dispositions in a court of law. Please include in that category associate judges and magistrates, who may be authorized as above.

16. “*Lay judges or magistrates*” may be understood to mean persons who perform the same functions as professional judges or magistrates but who do not regard themselves, and are not normally regarded by others, as career members of the judiciary. Data concerning support staff (secretaries, clerks etc.) should be excluded.

17. If the categories given in paragraphs 2-13 above are not fully compatible with the legal code in your country, please try to adjust the data as far as possible. Alternatively, you may indicate below the table concerned or on the facing page what kinds of crime are included in your statistics that might be comparable to the categories suggested or how the comparable types of crime are defined in your country.

<sup>1</sup> *Ibid.*, vol. 1019, No. 14956.

<sup>2</sup> *Official Records of the United Nations Conference for the Adoption of a Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, Vienna, 25 November-20 December 1988*, vol. 1 (United Nations publication, Sales No. E.94.XI.5).

**Table 8**  
**Judges, by status and sex, and financial resources, including in appeal courts, 1995 and 1997**

Category	As at 31 December <sup>a</sup>	
	1995	1997
8.1 Total professional judges or magistrates <sup>b</sup>		
8.2 Females		
8.3 Males		
8.4 Total lay judges or magistrates <sup>c</sup>		
8.5 Females		
8.6 Males		
8.7 Total court budget/financial resources (millions of local currency units) <sup>d</sup>		

<sup>a</sup> If some alternative reference date has to be used, please indicate that date here: \_\_\_\_\_.

<sup>b</sup> Please see the definition of the term “professional judges or magistrates” in paragraph 15 on page 21.

<sup>c</sup> Please see the definition of the term “lay judges or magistrates” in paragraph 16 on page 21.

<sup>d</sup> Total court budget/financial resources should include all monies allocated to the judiciary at the national level, including salaries and fixed assets. When calculating salaries, please include total monies spent on every individual employed as a judge in the criminal justice system. When calculating fixed assets, please include all monies invested in non-personnel assets, such as buildings, automobiles and office equipment.

Table 9  
Persons brought before the criminal courts, 1995 and 1997

Category	1995	1997
9.1 Total persons brought before the criminal courts:		
9.2 Convicted		
9.3 Acquitted		
9.4 Other (please specify): _____ _____ _____		

Table 10  
Persons convicted in the criminal courts, by type of crime, 1995-1997

Type of crime <sup>a</sup>	1995	1996	1997
10.1 Total persons convicted of any type of crime <sup>b</sup>			
10.2 Intentional homicide: Committed			
10.3 Attempted			
10.4 Committed with a firearm			
10.5 Non-intentional homicide			
10.6 Assault: Major assault			
10.7 Total assault			
10.8 Rape			
10.9 Robbery			
10.10 Theft: Major theft			
10.11 Total theft			
10.12 Automobile theft			
10.13 Burglary			
10.14 Fraud			
10.15 Embezzlement			
10.16 Drug-related crime			
10.17 Bribery and/or corruption			

Source(s) of the data provided in this table:

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<sup>a</sup> Please see the definitions of the terms in paragraphs 2-13 on pages 20-21.

<sup>b</sup> Please note that the total number of persons convicted may be greater than the sum of the figures given for the individual types of crime listed in the table.

**Table 11**  
**Adults convicted of any type of crime, by type of sentence, 1995 and 1997**

Type of sentence <sup>a</sup>	1995	1997
11.1 Total adults convicted, regardless of type of sentence		
11.2 Death penalty <sup>b</sup>		
11.3 Corporal punishment <sup>c</sup>		
11.4 Life imprisonment <sup>d</sup>		
11.5 Deprivation of liberty <sup>e</sup>		
11.6 Control in freedom <sup>f</sup>		
11.7 Warning or admonition <sup>g</sup>		
11.8 Fine <sup>h</sup>		
11.9 Community service order <sup>i</sup>		

- <sup>a</sup> If there is more than one sentence per adult convicted, please count the most severe sentence.
- <sup>b</sup> "Death penalty" may be understood to mean any sentence in which the convicted person is to be legally deprived of life. The death penalty may be carried out by any one of a variety of means, including electrocution, hanging, firing squad, lethal injection or stoning.
- <sup>c</sup> "Corporal punishment" may be understood to mean any sentence in which the convicted person's body is to be subjected to physical pain, such as, among other things, flogging, mutilation, electric shock or branding.
- <sup>d</sup> "Life imprisonment" may be understood to mean any sentence in which the convicted person is to be deprived of liberty in an institution of any kind for the duration of his or her natural life.
- <sup>e</sup> "Deprivation of liberty" may be understood to mean various forms of detention, including security measures, combined or split sentences (where at least one part of the sentence involves deprivation of liberty) or any other sanction in which the person is forced to stay at least one night in an institution of any kind, whereby the period of detention is fixed at some interval short of the natural life span of the convicted person (i.e. a determinate sentence).
- <sup>f</sup> Including probation orders, electronic monitoring, conditional sentences with additional supervision requirements and other forms of so-called controlled liberty (i.e. where the person is required to fulfil special requirements with regard to supervision).
- <sup>g</sup> Including suspended sentences, conditional sentences, findings of guilt without sanctions, formal admonitions, formal warnings, imposing of duties without control, conditional dismissals, conditional discharges.
- <sup>h</sup> "Fines" may be understood to mean all sentences that involve paying a sum of money and may include punitive measures as well as compensation and restitution.
- <sup>i</sup> "Community service orders" may be understood to mean sentences in which the convicted person is expected to perform some activity which provides some benefit to the community.

**Table 12**  
**Persons convicted in the criminal courts, by sex and age group, 1995-1997**

Category	1995	1996	1997
12.1 Females			
12.2 Males			
12.3 Adults			
12.4 Female adults			
12.5 Male adults			
12.6 Juveniles			
12.7 Female juveniles			
12.8 Male juveniles			

Source(s) of the data provided in this table:

\_\_\_\_\_

\_\_\_\_\_

Please provide the definitions of "adult" and "juvenile" that are used in the national criminal justice system:

Adult: \_\_\_\_\_

\_\_\_\_\_

Juvenile: \_\_\_\_\_

\_\_\_\_\_

*If, in your opinion, there are some additional explanations that might contribute to a better understanding of the data that you have entered in this part of the questionnaire, please provide those explanations in the space below or on an attached sheet.*

**Questionnaire for the  
Sixth United Nations Survey of Crime Trends  
and Operations of Criminal Justice Systems,  
covering the period 1995-1997**

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#### IV. Prisons/penal institutions

**Country name:** \_\_\_\_\_

Please complete this section of the questionnaire and return it no later than **1 September 1999** to the coordinating officer, whose name is provided in the box below. The coordinating officer will, in turn, send all sections of the completed questionnaire to the Centre for International Crime Prevention, Office for Drug Control and Crime Prevention, P.O. Box 500, A-1400, Vienna, Austria, or to the Statistics Division, United Nations, New York, N.Y. 10017, United States of America.

This questionnaire is being distributed through the Statistics Division network.

Coordinating officer's name: \_\_\_\_\_

Functional title: \_\_\_\_\_

Agency: \_\_\_\_\_

Street: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

City/state/country: \_\_\_\_\_

Telephone (including country code and city code): \_\_\_\_\_

Fax (including country code and city code): \_\_\_\_\_

E-mail: \_\_\_\_\_

#### Definition of terms

1. The definitions below are applicable to many legal codes.
2. "*Prisons, penal institutions or correctional institutions*" may be understood to mean all public and privately financed institutions where persons are deprived of their liberty. The institutions may include, but are not limited to, penal, correctional, or psychiatric facilities under prison administration.
3. "*Prison staff*" may be understood to mean to all individuals employed in penal or correctional institutions, including management, treatment, custodial and other (maintenance, food service etc.) personnel.
4. If the categories given in paragraphs 2 and 3 above are not fully compatible with the legal code in your country, please try to adjust the data as far as possible. Alternatively, you may indicate below the table concerned or on the facing page what kinds of crime are included in your statistics that might be comparable to the categories suggested or how the comparable types of crime are defined in your country.

**Table 13**  
**Adult prisons and penal or correctional institutions, 1995 and 1997**

Item	As at 31 December <sup>a</sup>	
	1995	1997
13.1 Adult prisons, penal institutions or correctional institutions <sup>b</sup> (excluding temporary jail lock-ups)		
13.2 Places (beds) available		

<sup>a</sup> If some alternative reference date has to be used, please indicate that date here: \_\_\_\_\_.

<sup>b</sup> Please see the definition of the term "prisons and penal or correctional institutions" in paragraph 2 on page 28.

**Table 14**  
**Juvenile prisons and penal or correctional institutions, 1995 and 1997**

Item	As at 31 December <sup>a</sup>	
	1995	1997
14.1 Juvenile prisons, penal institutions or correctional institutions <sup>b</sup> (excluding jail lock-ups)		
14.2 Places (beds) available		

<sup>a</sup> If some alternative reference date has to be used, please indicate that date here: \_\_\_\_\_.

<sup>b</sup> Please see the definition of the term "prisons and penal or correctional institutions" in paragraph 2 on page 28.

**Table 15**  
**Staff of adult or juvenile prisons and penal or correctional institutions,<sup>a</sup> by sex, and financial resources, 1995 and 1997**

Category of prison staff <sup>b</sup> members	As at 31 December <sup>c</sup>	
	1995	1997
15.1 Total staff of adult prisons		
15.2 Females		
15.3 Males		
15.4 Total staff of juvenile prisons		
15.5 Females		
15.6 Males		
15.7 Total prison budget/financial resources, for adult and juvenile institutions (millions of local currency units) <sup>d</sup>		

<sup>a</sup> Please see the definition of the term "prisons and penal or correctional institutions" in paragraph 2 on page 28.

<sup>b</sup> Please see the definition of the term "prison staff" in paragraph 3 on page 28.

<sup>c</sup> If some alternative reference date has to be used, please indicate that date here: \_\_\_\_\_.

<sup>d</sup> Total prison budget/financial resources should include all monies allocated to prison staff in both adult and juvenile facilities, including salaries and fixed assets. When calculating salaries, please include total monies spent on every individual employed as a prison staff member in the criminal justice system. When calculating fixed assets, please include all monies invested in non-personnel assets, such as buildings, automobiles and office equipment.

Table 16  
Persons incarcerated, by category of incarceration, selected day, 1995 and 1997

Category of incarceration	Selected day of the year: <sup>a</sup> _____	
	1995	1997
16.1 Total persons incarcerated <sup>b</sup>		
16.2 Awaiting first trial or adjudication <sup>c</sup>		
16.3 Sentenced		
16.4 Administrative detention		
16.5 For non-payment of penal fine		
16.6 Civil law incarceration		

<sup>a</sup> The population of incarcerated people awaiting trial or adjudication and/or imprisoned offenders on one selected day should be given, preferably a day that may be considered typical for the year.

<sup>b</sup> The total number of persons incarcerated should not include the number of persons detained due to public intoxication. Please note that the total number of persons incarcerated may be greater than the sum of the figures given for the other categories of incarceration listed in the table.

<sup>c</sup> Please indicate whether the figure in the category "Awaiting first trial or adjudication" includes persons who were sentenced in the court of first instance but appealed the verdict:  
Yes \_\_\_ No \_\_\_

Table 17  
Adult prisoners: time spent in prison awaiting trial, 1995 and 1997

Length of detention (months)	1995	1997
17.1 Average length of time spent in prison awaiting trial, <sup>a</sup> for all offences	Less than one month 1-3 months 4-6 months 7-12 months 13-24 months 25 months or more	Less than one month 1-3 months 4-6 months 7-12 months 13-24 months 25 months or more

*Note:* Please circle the average length of time for each year. (Circle only one time period under the column heading "1995" and one time period under the column heading "1997".)

<sup>a</sup> "Time spent in prison awaiting trial" may be understood to mean the time spent in custody (e.g. police custody, remand prison) between the time of arrest or apprehension and the time of pronouncement of guilt or innocence by a criminal court or other legal body duly authorized to make such a finding by national law, irrespective of whether the decision was later upheld or not.

Table 18  
Adult prisoners: time actually served in prison after conviction, 1995 and 1997

Item	1995	1997
18.1 Average length of time actually served in prison	Less than one month 1-3 months 4-6 months 7-12 months 13-24 months 25-36 months 37-48 months 49 months or more	Less than one month 1-3 months 4-6 months 7-12 months 13-24 months 25-36 months 37-48 months 49 months or more

*Note:* Please circle the average length of time served in prison for each year. (Circle only one time period under the column heading "1995" and one time period under the column heading "1997".)

Table 19  
Persons on probation,<sup>a</sup> by age group, selected day, 1995 and 1997

Category	Selected day of the year:	
	1995	1997
19.1 Total persons on probation		
19.2 Adults		
19.3 Juveniles		

<sup>a</sup> "Probation" may be understood to mean a procedure whereby an individual found guilty of a crime is released by the court without imprisonment and is placed under the supervision of an official.

Table 20  
**Persons on parole,<sup>a</sup> by age group, selected day, 1995 and 1997**

Category	Selected day of the year	
	1995	1997
20.1 Total persons on parole		
20.2 Adults		
20.3 Juveniles		

<sup>a</sup> "Parole" may be understood to mean conditional release of a prisoner whereby the individual is allowed to serve the remainder of the sentence outside the prison, assuming that all the terms of that release are met.

Table 21  
**Convicted prisoners, by sex and age group, selected day, 1995-1997**

Category	Selected day of the year:		
	1995	1996	1997
21.1 Total convicted prisoners			
21.2 Females			
21.3 Males			
21.4 Adult convicted prisoners			
21.5 Female adults			
21.6 Male adults			
21.7 Juvenile convicted prisoners			
21.8 Female juveniles			
21.9 Male juveniles			
21.10 Convicted prisoners who are citizens of other countries			

Source(s) of the data provided in this table:

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Please provide the definitions of "adult" and "juvenile" that are used in the national criminal justice system:

Adult: \_\_\_\_\_

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Juvenile: \_\_\_\_\_

---

*If, in your opinion, there are some additional explanations that might contribute to a better understanding of the data that you have entered in this part of the questionnaire, please provide those explanations in the space below or on an attached sheet.*

# Annex B

## Variables used in constructing indices and tables of this report

Variables used in constructing the tables of chapter three (in addition to the Sixth United Nations Survey variables UNHOMAVG, UNASSAVG, UNRAPAVG, UNROPAVG, UNMTFAVG, UNBURAVG, UNDRGAVG and UNATMAVG)

- Centre for Disease Control, "Firearm-related deaths" (acronym: CDC data), reported in Krug, Powell and Dahlberg (1998); statistical data based on information collected by the CDC in January and February 1996 from the Ministry of Health or the National Institute for Statistics in each of the countries covered;
- Council of Europe, "European Sourcebook of Crime and Justice Statistics" (1999) (acronyms: ESIHCAVG, ESASAVG, ESRAPAVG, ESRBTA VG, ESTFTA VG, ESBRTAVG, ESDRTAVG and ESTFMAVG), statistical data provided by a co-ordinated network of 34 national correspondents within the framework of a Council of Europe project;
- Hatalak, Alvazzi del Frate and Zvekic (1998), and Mayhew and van Dijk (1997), "International Crime Victim Survey" (ICVS data) (acronyms: INC2, INC4, INC6, INC10, INC16, INC31A, INC33, INC34, INC36, INC38 and LIFESTYLE), quantitative data collected on crime victimization from numerous European and North American countries, random samples of the population, nationally or the largest city, carried out in 1989, 1992 and 1996;
- HEUNI, "HEUNI Burglary Index" (acronym: BURGIND), compilation of an index from the Sixth United Nations Survey data, and ICVS data (see above); "HEUNI Homicide Index" (acronym: HOMIND), compilation of an index from the Sixth United Nations Survey data, WHO data (see below), CDC data (see above) and Interpol data (see below); "HEUNI Motor Vehicle Crime Index" (acronym: MVCI), compilation of an index from Liukkonen, M. "Motor Vehicle Theft in Europe" and ICVS data (see above); "HEUNI Violence Against Women Index" (VIOWOM), compilation of an index from the Sixth United Nations Survey data and ICVS data (see above);
- Interpol, "International Crime Statistics" (Interpol data) (acronyms: IPHOMAVG, IPSASAVG, IPRAPAVG, IPROBAVG, IPAGTAVG, IPBURAVG, IPDRGAVG and IPAUTAVG), statistical data provided by the national Interpol bureaux of the member states;
- Kurian (1997), "Ethnic Homogeneity" (acronym: ETHNHOM);
- United Nations Development Programme (2000), "Human Development Report" (acronyms: AGRICULT, ENERGY, GDI98, GEM, GENINEQ, HDI98, HDRDIV98, HDRFEA98, HDRTEL98, MODERN, SANITATE and URBPOP98), data emanating from the year 2000 volume of the report;



- United Nations Statistical Division (1999), "Indicators on Youth and Elderly Population" (acronym: UNDER15), data emanating from UNSD database;
- World Bank (1997), "World Development Report" (acronym: TOP20), data emanating from the year 1997 volume of the report;
- World Health Organization (1999), "Atlas on Violence" (acronym: WHOMAVG), data emanating from the WHO Mortality Database.

(For bibliographical references, see the list at the end of chapter three).

## Indices used in constructing the figures and tables of chapter four and five, respectively

### Burglary index

- Averaged ICVS national burglary rate, 1991, 1995, 1999
- Averaged ICVS city burglary rate, 1991, 1995, 1999
- Averaged ICVS rural burglary rate, 1991, 1995, 1999
- Sixth UN Survey: Burglary, 1995 and 1997
- European Sourcebook: Burglary, 1995 and 1997

### Homicide index

- Sixth UN Survey: Committed intentional homicide 1995 and 1997
- Interpol: rate of murder 1998
- WHO: rate of homicide 1995 and 1997
- European Sourcebook: Rate of completed intentional homicide 1995 and 1996

### Non-fatal violence index

- Averaged ICVS national assault and threat rate 1991, 1995, 1999
- Averaged ICVS city assault and threat rate 1991, 1995, 1999
- Averaged ICVS rural assault and threat rate 1991, 1995, 1999
- Averaged ICVS national robbery rate 1991, 1995, 1999
- Averaged ICVS city robbery rate 1991, 1995, 1999
- Averaged ICVS rural robbery rate 1991, 1995, 1999

### Violence against women

- Averaged ICVS national violence against women 5-year rate 1987-99
- Averaged ICVS rural violence against women 5-year rate 1987-99
- Averaged ICVS city violence against women 5-year rate 1987-99
- Sixth UN Survey: Rape 1995 and 1997
- European Sourcebook: Rape 1995 and 1996

#### Motor vehicle crime index

- Averaged ICVS national theft from/of car rate 1991, 1995, 1999
- Averaged ICVS city theft from/of car rate 1991, 1995, 1999
- Averaged ICVS rural theft from/of car rate 1991, 1995, 1999
- Sixth UN Survey: Automobile theft, 1995 and 1997
- European Sourcebook: Theft of motor vehicle, 1995 and 1996

#### Petty crime index

- Averaged ICVS prevalence of victimisation (1991, 1995, 1999) for: car vandalism, theft of motorcycle or moped, theft of bicycle, theft of personal belongings, indecent or offensive behaviour, threats.

#### Corruption index

- Averaged ICVS national corruption 1991, 1995, 1999
- Averaged ICVS city corruption 1991, 1995, 1999
- Averaged ICVS rural corruption 1991, 1995, 1999
- World Economic Forum: Corruption 1999

#### Opportunity for crime index

- ICVS data on ownership of autos, of motorcycles or mopeds, and 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

#### Law enforcement resources index

- Sixth UN Survey: Police officers 1995 and 1997
- Sixth UN Survey: Prosecutors 1995 and 1997
- Sixth UN Survey: Professional judges and magistrates 1995 and 1997
- Sixth UN Survey: Prison personnel 1995 and 1997

#### Criminal justice gender balance index

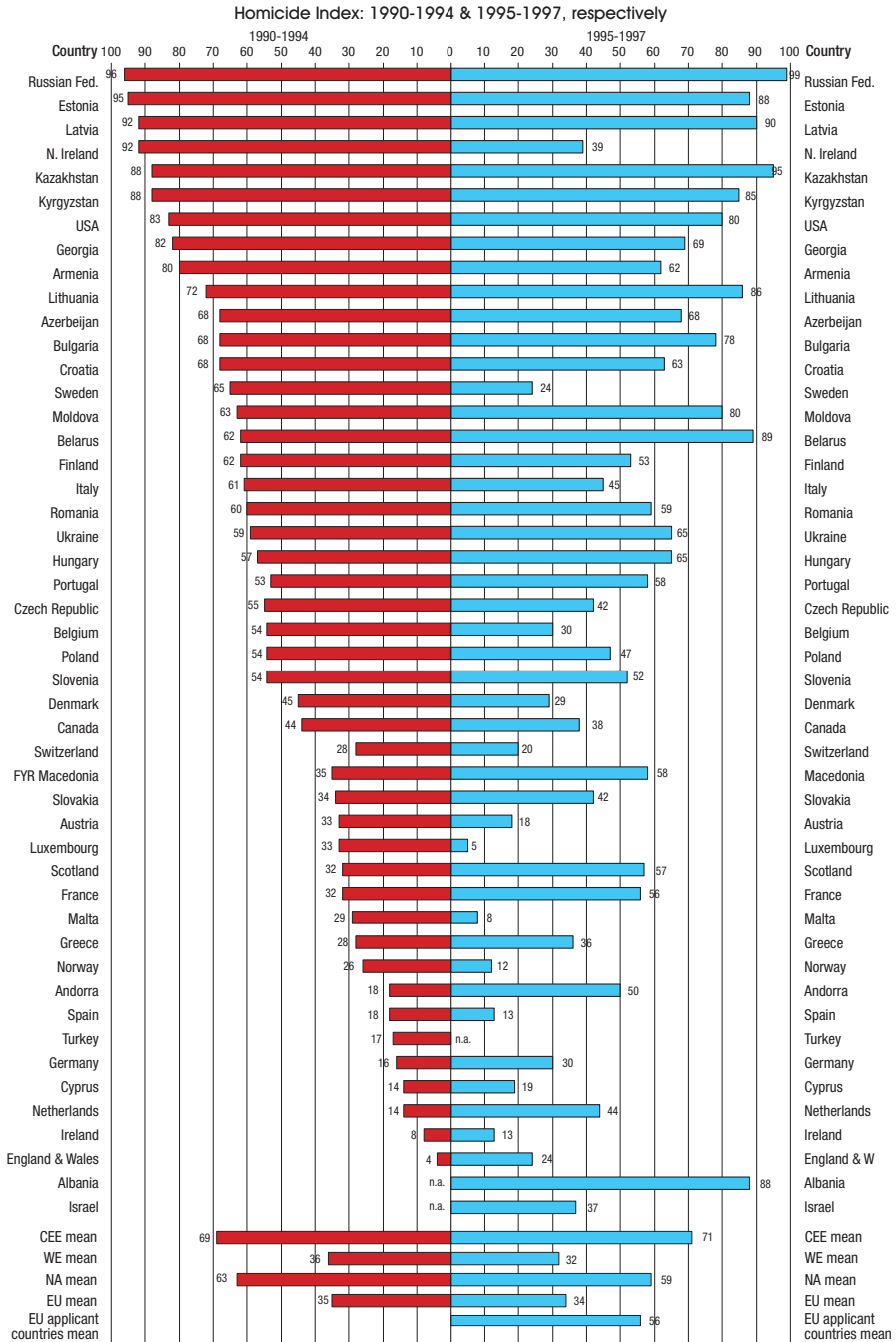
- Sixth UN Survey: Percentage of female police officers of all police officers 1995 and 1997
- Sixth UN Survey: Percentage of female prosecutors of all prosecutors 1995 and 1997
- Sixth UN Survey: Percentage of female professional judges and magistrates of all professional judges and magistrates 1995 and 1997
- Sixth UN Survey: Percentage of female prison personnel (adult and juvenile prisons) of all prison personnel (adult and juvenile prisons) 1995 and 1997

Citizen evaluation of police performance

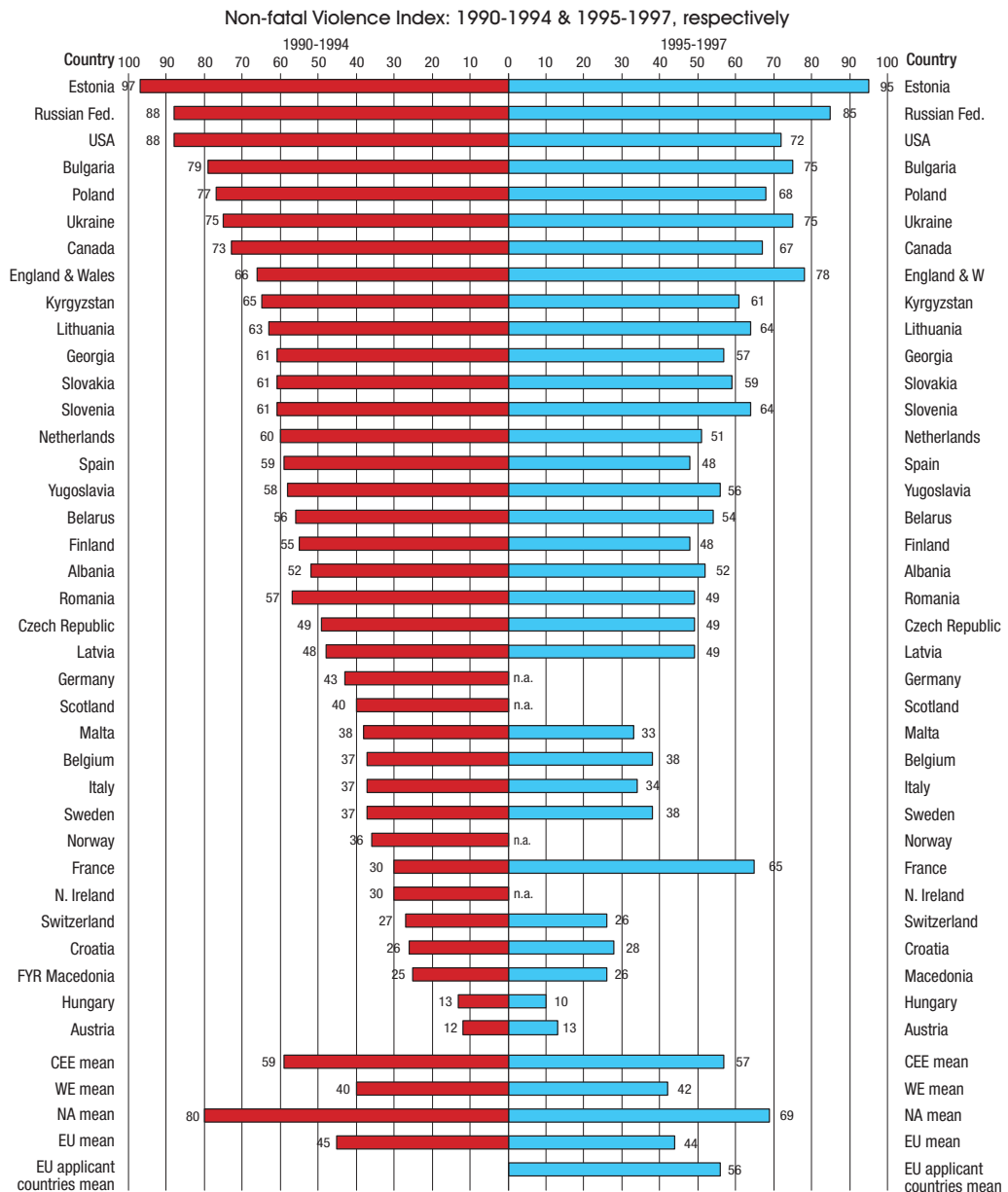
- Averaged ICVS city percentage of victims of contact crimes who reported their victimization to the police 1987-1999
- Averaged ICVS city percentage of victims who where satisfied with their report to the police 1987-1999
- Averaged ICVS city percentage of all respondents who are satisfied with the police crime control 1992, 1996, 2000

# Annex C

The two indices strongly correlated with the serious violence index:



**Fig. I. Homicide Index**



**Fig. II. Non-fatal Violence Index**