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INTERNATIONAL STATISTICS on CRIME AND JUSTICE



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Contents

Introduction

Kauko Aromaa*

The United Nations Surveys on Crime Trends and the Operations Criminal Justice Systems (denoted UN-CTS below for the sake of brevity) collect basic information on recorded crime and on resources of criminal justice systems in the member states. Its mandate being Europe and North America, HEUNI has analysed and reported on the surveys for this part of the world from the very beginning. For other regions of the world, such reporting has not been achieved.

The present volume, prepared in partnership of HEUNI and the UNODC, for the first time pulls together global responses to the UN-CTS questionnaire, the most recent one included here is UN-CTS-10 that allows the analysis of data up to 2006.

In the current report, the improvement introduced in the previous one (looking only at Europe and North America; Aromaa and Heiskanen 2008) was retained: also this time, the report addresses a time period of about ten years in order to provide more stability to the situation assessment. In a global report, it is more difficult to keep to the ten-year framework since many countries have not responded regularly but data gaps are frequent. In this case, the basic solution has been that data for 1996, 2000, and 2006 are used for the ten-year (actually, eleven-year) perspective to be covered. For many countries, this could be achieved, for many others, one or more of these years had to be complemented by data for adjacent years because the country response for one (or several) of the required years had not been made available.

Reporting for more recent years has not been possible. This may not be satisfactory to those who require more up-to-date information. However, the timeliness of large-scale comparative data has always been a significant problem and remains one. First of all, statistical data on crime and criminal justice are typically not available until after the relevant year. Country-level data on police-recorded crime are often released relatively soon after the shift of the year, but statistics on later stages of the criminal justice procedure are more delayed. Next, disseminating the UN-CTS data collection instrument to member states, collecting and validating the responses, drafting a reporting plan and creating a database necessary for the analysis, analysing the data and writing up the report are stages in the process that cannot be avoided, and they do consume time.

As a consequence, reports of this kind are always providing results that do not refer to the current year or the previous one but will shed light on the situation 3-4 years back in time. So far, ways to introduce significant improvements to this dilemma have not been found. For many, a delay of 3-4 years would seem to be too long for an up-to-date assessment of the current situation, whether globally or for one region only, even considering that experience has shown that crime data of the kind analysed here usually do not vary radically over short time periods. A marked improvement would however require much more advanced statistical systems in many member states, and a much higher priority to be given to the UN data collection exercise than is the case today.

Another, even more disturbing observation that has been made repeatedly is that many member states continue to be unable to answer the UN-CTS questionnaire at all, or are only able to provide a partial response. This state of affairs is in part due to a very basic reason: some or all of the required data are not available. However, less excusable is the situation for many other countries that are known to possess the required data but do not respond.

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For those in need of improving their statistics, the UNODC has been working on a support and assistance approach which is also bearing fruit in the long term. Those member states that, for a multiplicity of reasons, have failed to respond to the Surveys although they are in the possession of the relevant data, should take this task more seriously in the future. This would also be in their own interest as they would benefit from knowing their position in a global dataset. Also others in the global community would be keen to know how others have been doing in core issues of crime and criminal justice.

Some of the unavoidable delay problems have been partially resolved by the UNODC in that they publish some data from the country responses on their website as soon as they are made available by the member states. The advantage is that the delay is as short as it can be under the circumstances, where national responses are the basis. Of course, before there is a national response, nothing can be made available. It is therefore of paramount importance that delays caused by member states are minimized. –The drawback of the UNODC solution is that the information on the website is not – and cannot be – validated and processed, leaving the potential user without expert assistance when trying to interpret the data. It is highly problematic and perhaps not advisable at all to publish raw data of this kind without adequate commentary regarding known problems related to its validity and interpretation problems.

The ten-year time span applied should illustrate that for many criteria, it is often of no massive importance that the data are never fully up to date: many of the trends displayed can be seen to be rather stable, meaning that simple basic indicators of features of recorded crime and operations of the criminal justice system are often of a rather robust nature. Consequently, a large proportion of the presented data and findings, even if outdated, are unlikely to change significantly from one year to another. Consequently, the current delay in the timeliness of the presented data is mostly of no major concern. The most obvious exceptions are countries undergoing irregular rapid transformations – for such countries, however, a UN-CTS is hardly of immediate interest anyway.

We have not reproduced the data collection instruments in this volume. Due to various changes over time, each UN-CTS questionnaire is slightly different. The questionnaires can be found in all UN languages at the address:

http://www.unodc.org/unodc/en/data-and-analysis/Ninth(Tenth)-United-Nations-Survey-on-Crime-Trends-and-the-Operations-of-Criminal-Justice-Systems.html

The report comprises eight chapters. They are designed to deal with all central issues addressed in the questionnaires. First, police-recorded crime is discussed, with separate chapters on homicides (chapter 1), other police-recorded crimes (chapter 2), and drug-related crime and drug trafficking (chapter 3). Also, complex crimes are analysed separately, such as organised crime, and trafficking in human beings (chapter 4). Such offences have played a marginal role in traditional crime statistics, and in order to improve the relevance of the data on such offences, new solutions need to be developed. Chapter 5, shifting to the next stage of the criminal justice system, presents data on responses of the criminal justice system, including an innovation where attrition issues are being discussed. A parallel issue to responses of the criminal justice system are resources and performance. These are discussed in chapter 6 where also a discussion on the punitivity of criminal justice systems is included. Next, a presentation on prison populations of the world closes the analysis of criminal justice data. The last chapter, finally discusses challenges with crime and criminal justice statistics, arguing for the importance of further improvements in the area.

The objective of this report is to show potential users of international crime data what they could learn from these, and provide guidance as to restrictions, pitfalls and strengths of the unique set of data that is now available thanks to the countries that have responded to the UN Surveys.

Chapter 1 – Homicide

Steven Malby*

Abstract

This chapter presents available data on the crime of intentional homicide – the intentional killing of a person by another. As one of the most effectively recorded crimes, law enforcement data on intentional homicide is typically more readily available than for other crimes. As such, rates of intentional homicide per 100,000 population have sometimes been used as a proxy for levels of violent crime or even overall crime. Data from both law enforcement and public health sources may be combined to increase data availability and geographic coverage. Results suggest that the highest homicide levels are found in the Americas and Africa region, with the lowest homicide levels generally in countries in Europe. For those countries where trend data is available, the majority show decreasing or stable homicide rates, with the exception of a number of countries, predominantly in the Americas that show high and increasing rates. Such increases may be linked to the challenges of organized crime, drug trafficking, and gang activity. Significant data challenges remain however, particularly in Africa, where criminal justice data on intentional homicide is presently very limited.

Introduction

The intentional killing of a person by another ('intentional homicide') represents the most serious end of the spectrum of violent crime. Recent attention on the issue of armed violence and the growing importance of homicide as an indicator has resulted in increased efforts to improve statistics at international, regional and national levels.

The results presented in this chapter derive primarily from criminal justice data. Despite varying definitions, 'homicide' is perhaps the most widely collected and reported crime in law enforcement and criminal justice statistics. Due to its seriousness, the killing of a person tends to be recorded more effectively than other crimes.

Nonetheless, the challenges of cross-national comparability are considerable. National legal systems may have different thresholds for categorising a death as intentional homicide. Whilst intentional homicide usually requires that the perpetrator purposefully intends to cause the death or serious injury of a victim, in some countries a death that occurs in the act or attempted act of another serious crime may also qualify as 'intentional' homicide or murder. Infanticide, assault leading to death and killings carried out by law enforcement officers (acting legitimately in the line of duty or not) all may or may not be included in police-recorded statistics. In addition, differences in police recording practices such as differences in counting units (offences, suspects or cases), whether or not attempted homicide or non-intentional homicides are included in published figures, and the point in the investigation at which a suspicious death is classified as homicide all vary as between countries.

Moreover, as forms of organized criminality and state insecurity become increasingly intertwined, the line between violent deaths that occur in armed conflict and those that can be labelled 'crime' is often blurred. Acts which are likely to be recorded by law enforcement and criminal justice institutions as intentional homicide can take place in a wide range of contexts, including the home, family, social or domestic setting, in the course of burglary, theft or robbery, or associated with gang, organized, or drug-related crime.

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Combining data sources

This chapter differs from others in this publication in that – for criminal justice information – it draws on data wider than that reported through the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS).

Whilst UN-CTS data is included in the analysis, in order to provide as wide a geographic coverage as possible the chapter uses data from other available criminal justice sources. These include other cross-national data sources, such as data collected and published by the Statistical Office of the European Communities (Eurostat), the United Nations Children's Fund (UNICEF), the International Police Organization (Interpol), and the Observatorio Centroamericano sobre Violencia (OCAVI). The analysis also makes use of data available at the national level, including that published on national police, Ministry of Interior and Ministry of Justice websites. Priority was given to data available at the regional or international level over national data due to the fact that cross-national data collections (such as the UN-CTS and Eurostat) make use of standardized definitions of intentional homicide and are usually supported by extensive metadata that allows the user to better understand the content of reported numbers.

Although this chapter derives its results primarily from such 'multi-source' *police-recorded* crime statistics, the fact of a death means that homicides are usually processed both by the medical system and the criminal justice system, creating two potential sources of administrative statistics. These two systems measure subtly different phenomenon and – whilst figures can be expected to show reasonable levels of agreement – they are unlikely to generate identical numbers. In order to provide as complete a picture of possible of the level and trend of homicides in the world, and for comparative purposes, this chapter provides data available from public health sources alongside those from criminal justice. The public health sources used are predominantly cross-national, including data published by the World Health Organization (WHO) and the Pan-American Health Organization (PAHO). Public health statistics on intentional homicide typically consist of data recorded under the International Classification of Disease (ICD-10) codes corresponding to 'injuries inflicted by another person with intent to injure or kill, by any means'. For a death to be classified in this category, there must be sufficient evidence for a medical professional to determine that the cause of death was assault and not an accident or self-harm.

Whether from criminal justice or public health sources, it must be remembered that official statistics rarely capture the number of actual criminal events that have occurred. Homicide can be reported by relatives and witnesses, but obviously cannot be measured through reports by victims. The quality of homicide figures is also affected by approaches to case recording and the capacity of national institutions to gather data and accurately record events.

The capacity gap between developed and developing countries particularly affects the cross-national comparison of police-recorded crime statistics, with the result that administrative statistics are not a particularly strong basis for the study of cross-national differences in criminal activity. As shown in this Chapter, the differences between health and police statistics are especially marked in developing countries. In higher income countries, such as those in West and Central Europe, significant differences also remain for countries between police and health statistics. Such differences may be linked to limitations in the capacity of police and law enforcement agencies to identify and record homicide events, and to other factors such as the lethality of assaults. Indeed, the lethality of assaults can be a particularly important factor in understanding cross-national differences and long-term trends in homicides. Evidence suggests that the lethality of assaults in North America and Western Europe for example has dropped dramatically due to developments in medical technology and medical support services (Aebi 2004).

Global homicide levels

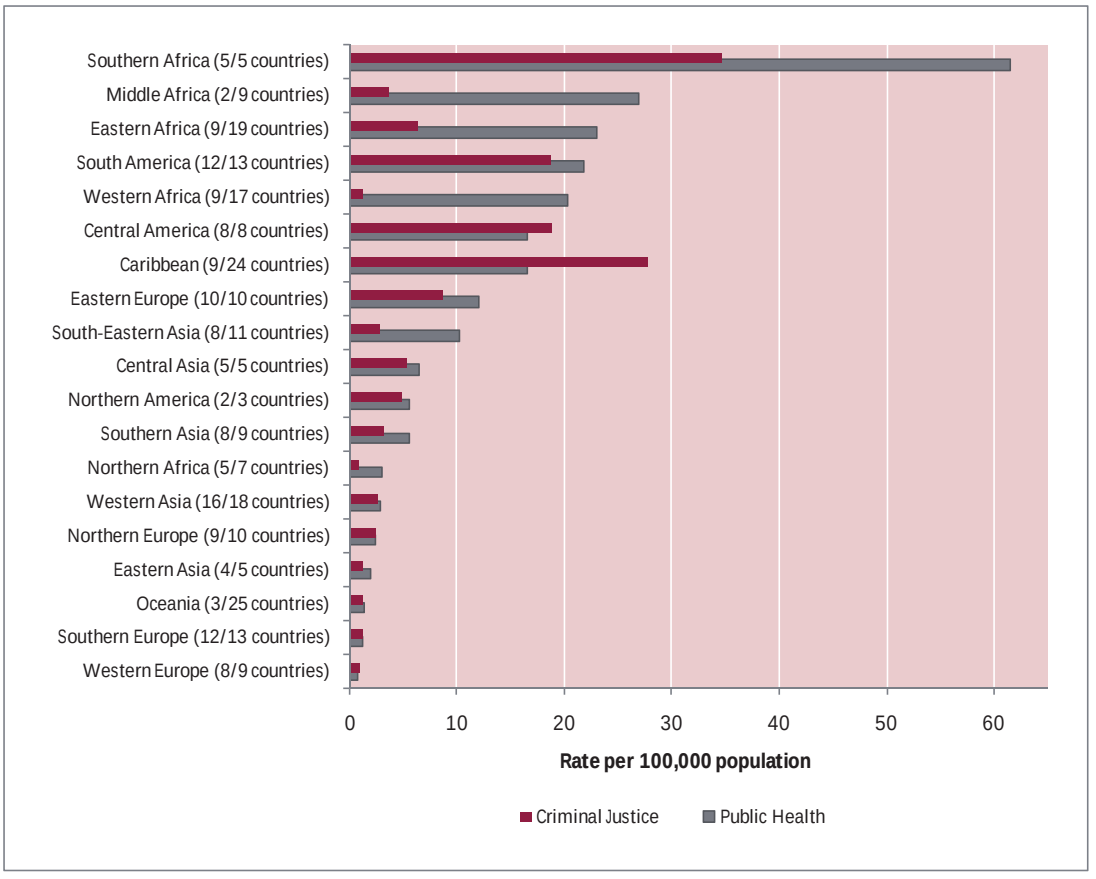
Data previously published by the United Nations Office on Drugs and Crime suggests that approximately 490,000 deaths from intentional homicide occurred in 2004 (Geneva Declaration 2008). This represented a world average homicide rate in 2004 of 7.6 per 100,000 population. The dataset used for this calculation focused on maximum geographic coverage at the expense of more recently available data for some countries in

order to produce a single global dataset for one point in time (UNODC 2008).

In contrast, this chapter takes the approach of 'latest available year' data in order to provide as timely information as possible, whilst also maintaining wide geographic coverage.

In order to represent the distribution of this nearly half a million annual homicides by regions of the world, figure 1 below shows the average of a limited set of countries in each sub-region (144 countries in total); being those for which at least one criminal justice *and* public health value for intentional homicide are available during the period 2003 to 2008. The range of countries for which data is available for each source alone is somewhat greater and it should be noted that average rates calculated on this wider set of countries would be different.

Figure 1. Average intentional homicide rate by sub-region, latest available year, criminal justice and public health data



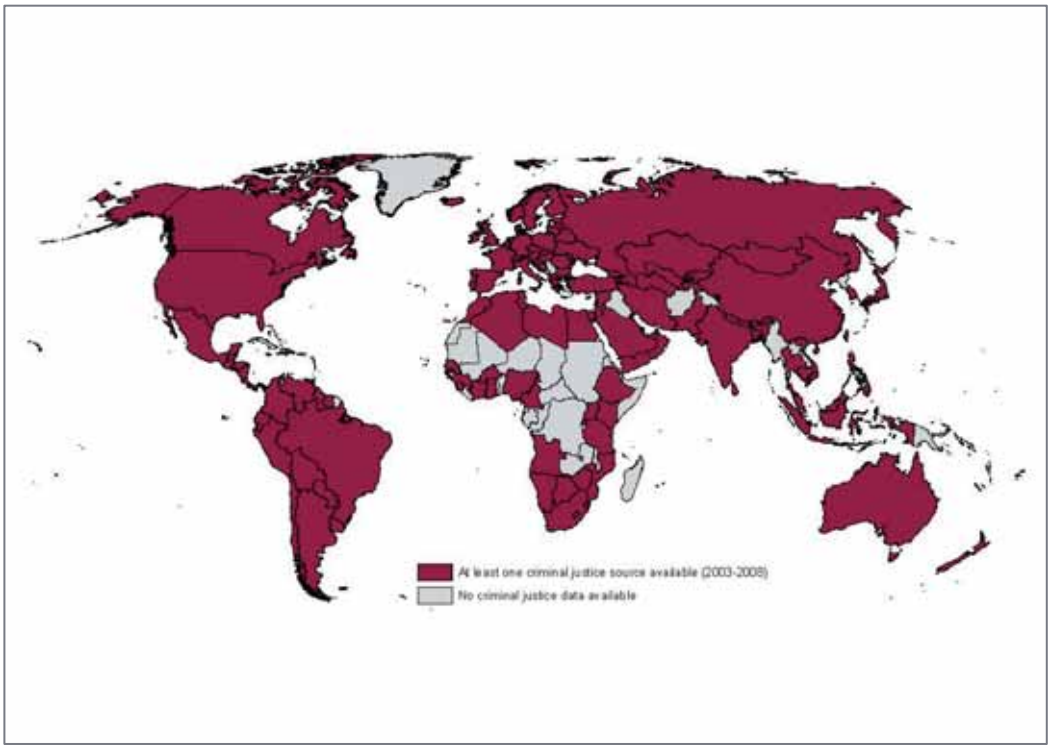
Note: Figure 1 includes only those countries for which at least one criminal justice and one public health value for intentional homicide are available in the period 2003-2008. This is indicated alongside each sub-region name by the number of countries included out of the total countries in the sub-region.

Overall, figure 1 shows comparatively low homicide levels in countries in Europe, Asia and North America, with reasonable agreement between criminal justice and public health data. In contrast, both criminal justice and public health data (albeit with less agreement) indicate significantly higher rates in South America, Central America, the Caribbean, and Southern Africa. Large data discrepancies remain for Middle, Western, and Eastern Africa. Substantive work on administrative data recording systems in both the criminal justice and public health fields is required in these sub-regions before meaningful comparisons can be made with other sub-regions of the world.

Figure 1 also reveals the continued existence of signficant data limitations. In particular, very few countries in Middle, West and Eastern Africa

are able to provide criminal justice data on intentional homicide. Where data is available, significant differences exist as compared with public health figures. The limitations in criminal justice data availability in Africa relative to other regions are shown in figure 2.

Figure 2. Availability of criminal justice data on intentional homicide: Countries with at least one criminal justice source available (2003-2008)



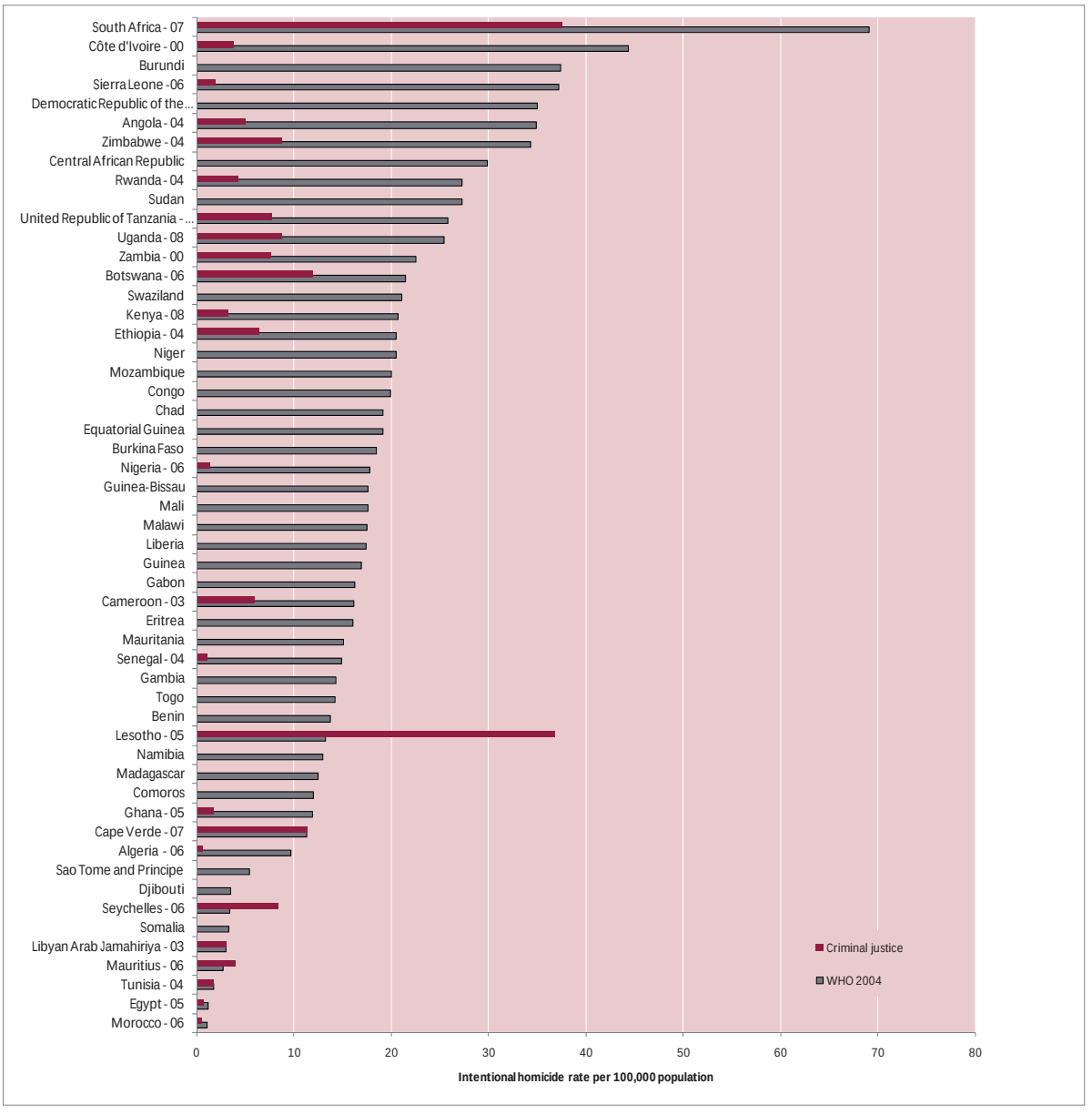
Note: The boundaries and designations used on this map do not imply endorsement or acceptance by the United Nations

For those countries where both criminal justice and public health data are available, significant differences often exist. As shown in figure 1, for nine countries in Western Africa, for example, the public health average rate is ten times that of the criminal justice average rate.

In countries in both Central America and the Caribbean sub-regions, the average rate of intentional homicide reported by criminal justice institutions is higher than that reported by public health institutions. This may be due to a number of factors. The dataset used in figure 1 relies primarily on national data for countries in Central America and the Caribbean. Data published by national authorities may be less comparable than that collected through cross-national initiatives, such as the UN-CTS, which make use of standard definitions and metadata. Further, with respect to the public health data, some countries in these regions have incomplete death registration data, resulting in possible under-capture of violent deaths. Finally, as shown later in this chapter, homicide rates in a number of countries in the Central America and Caribbean sub-regions have increased in recent years. Criminal justice data for countries in these sub-regions corresponds to more recent years (mostly 2007 and 2008) than public health data (mostly 2003-2006). A combination of these factors may explain the pattern observed.

The pattern of differences between criminal justice and public health data, and indeed the level of availability of criminal justice data on homicide, can be more clearly seen at the individual country level. Figures 3 to 5 represent the latest year criminal justice data available by country, presented alongside a set of country 'death by violence' estimates produced by the World Health Organization for the year 2004 (WHO 2009).

Figure 3. Homicide rate per 100,000 population, Africa region, by country (criminal justice, latest available year; public health, 2004)



Note: Number by country name signifies year of criminal justice data

Figure 3 shows clearly the extremely limited availability of police-recorded data on homicide in Africa. Of all countries in the continent, only 25 report police-recorded homicide data at the international level or make such information publicly available at the national level. This is not to say that the other countries do not record deaths that come to the attention of the police, or that such data is not available to law enforcement institutions and government ministries internally. The situation of data completeness and availability within the police and government institutions likely varies from country to country.

Nonetheless, it is the case that although one fifth of the world's population lives in Africa and more than a quarter of all countries in the world are in Africa, the continent is, by far, the least documented region in terms of data on crime. This absence of reliable information contributes to the limited attention devoted to solving crime and safety challenges in the region.

Where police-recorded homicide data is available, rates per 100,000 population are typically significantly lower than WHO 2004 estimates, with the exception of a few countries including Egypt, Tunisia, Mauritius, Libyan Arab

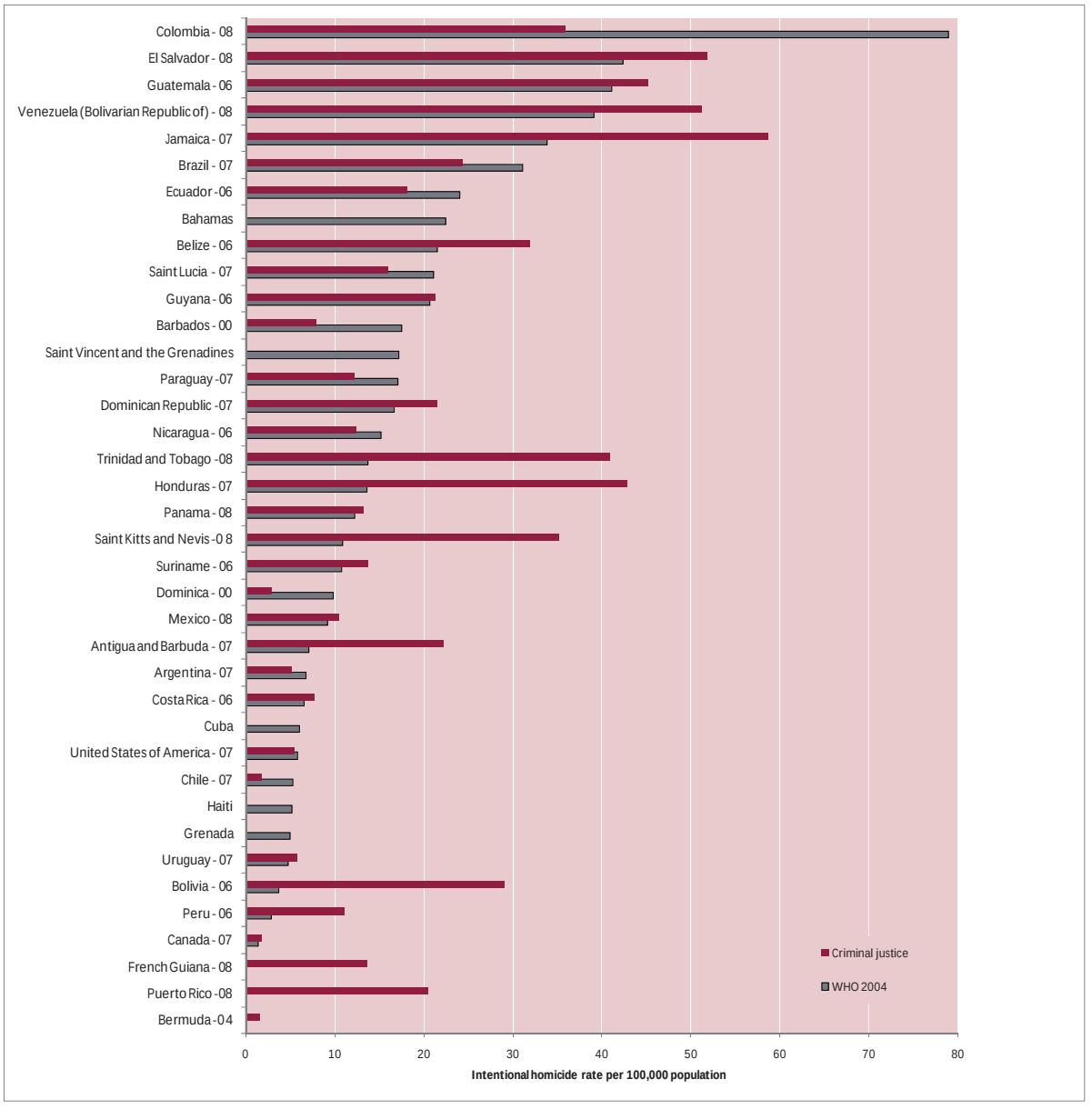
Jamahiriya, and Cape Verde. Further research is needed to identify 'true' underlying homicide rates in countries in Africa. WHO estimates of death by violence rates for the majority of countries on the continent (with the exception mostly of countries in North Africa) are typically high, ranging from around 7 to 40 times that of averages in Western Europe. Country information on mortality is not available for the majority of countries in Africa and public health values for these countries are mostly derived from estimates using cause-of-death models. (WHO 2009) Only in very few countries are estimates based on cause of death registration data with complete or almost complete geographic coverage. Whilst the accuracy of WHO estimates is unknown, at the same time it is likely that law enforcement and criminal justice institutions in these countries do significantly under-capture levels of violent deaths. This can be due to factors including limitations in the capacity of police and law enforcement agencies to identify and record homicide events.

Figure 4 shows significantly greater criminal justice data availability in the Americas but also some significant differences at the country level as between criminal justice and public health data. As noted above, this may be due to a number of factors, including the fact that some WHO country estimates are not based on complete cause of death recording systems and the fact that a number of countries in the Americas show significantly increased homicide rates as between 2004 and 2006/2007. As shown later in this chapter, increasing homicide rates may explain the significant public health/criminal justice differences for Belize, Trinidad and Tobago, Honduras, and Jamaica in particular.

Both criminal justice and public health data are clear, however, that some of the countries with the highest homicide rates in the world can be found in the Americas region. El Salvador, Guatemala, Venezuela, Honduras, Trinidad and Tobago and Jamaica all show police-recorded homicide rates over 40 per 100,000 population. Colombia has shown declines in police-recorded homicide rates in recent years and according to police data for 2008 is now well under 40 homicides per 100,000 population. WHO 2004 data for Colombia estimates a far higher figure and this may be due to both the difference in year of measurement and the possibility that a higher proportion of conflict-related deaths (as opposed to criminal homicide) are captured by public health figures.

As shown later in this chapter, a number of the countries with some of the highest homicide rates have shown significant increases in homicide rate over the last five years. Research suggests that homicide related to intimate, family or other close/known persons tends to stay relatively stable, or only change slowly over time. As such, it is likely that particularly high and increasing homicide rates in a number of countries in the Americas are due on the most part to increasing presence of organized crime, drug trafficking and gang activity (UNODC 2007).

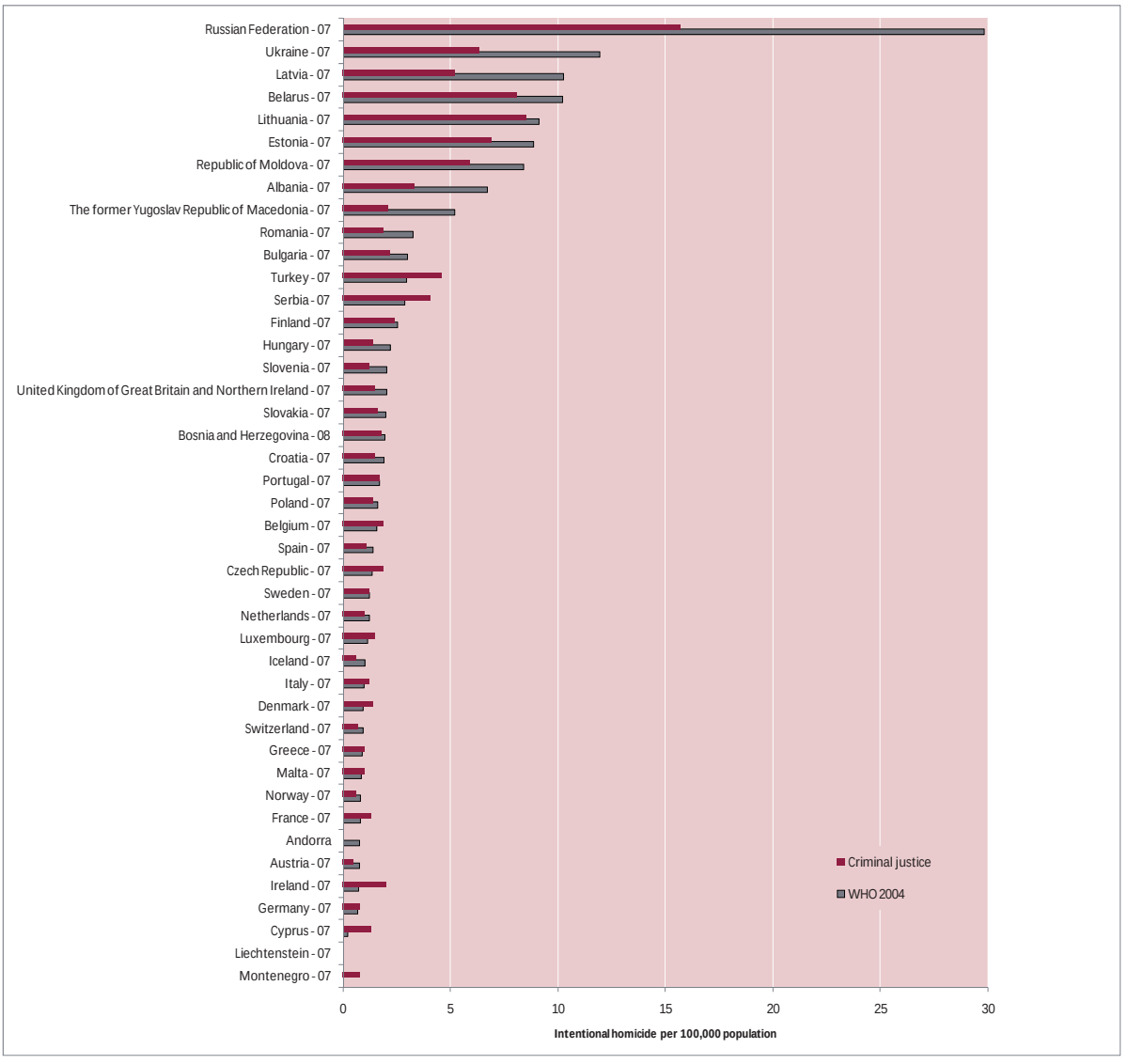
Figure 4. Homicide rate per 100,000 population, Americas region, by country (criminal justice, latest available year; public health, 2004)



Note: Number by country name signifies year of criminal justice data

Figure 5 shows yet another different pattern to that for Africa and the Americas. Criminal justice data availability is very high with reasonable or good agreement with public health figures for the majority of countries. Notably, those countries with poorer agreement between public health figures and criminal justice data are also those with the overall higher homicide rates in the region. The link may be more than coincidental. Good agreement between data sources suggests effective administrative recording systems. High quality crime data is in turn both a valuable tool for crime prevention and indicative of methodical and organized policing. Indeed, countries in Europe with low homicide rates (under 2 per 100,000 population) have generally achieved such rates through a focus on crime prevention and evidence-led policing. Overall, homicide rates in the region are relatively similar across countries, with countries in Northern and Western Europe showing rates typically under 2.5 per 100,000 population. In contrast, countries in Eastern Europe show rates from this level up to around 10 per 100,000.

Figure 5. Homicide rate per 100,000 population, Europe region, by country (criminal justice, latest available year; public health, 2004)



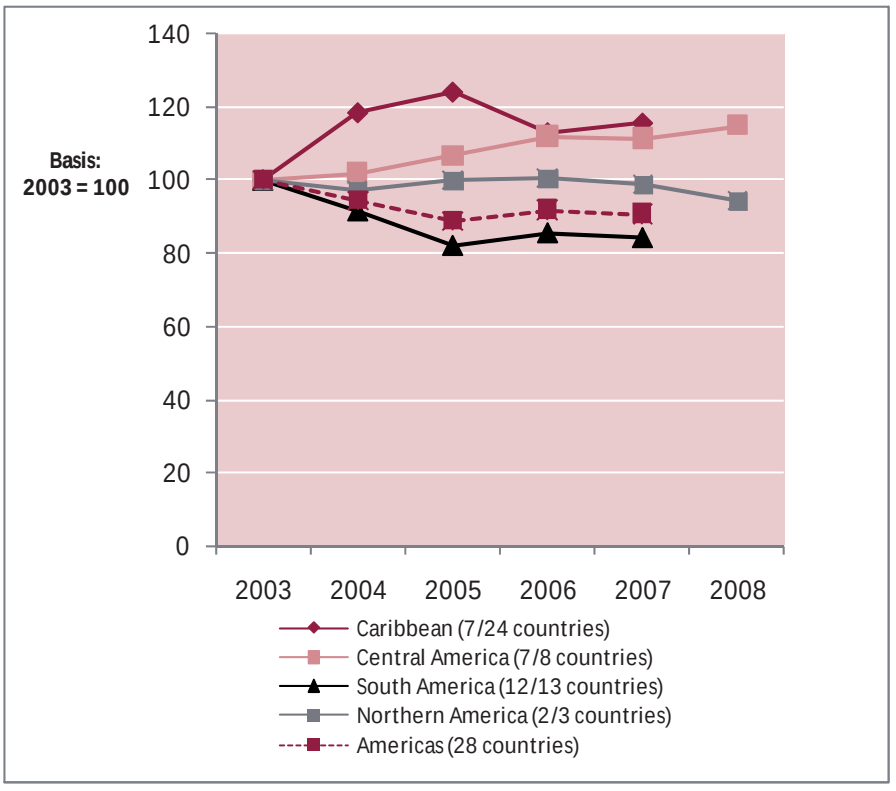
Note: Number by country name signifies year of criminal justice data

Trends in intentional homicide

Whilst country and regional homicide rates can be used for cross-national comparison only with caution, somewhat greater confidence may be placed in the analysis of yearly *trend* data. As long as factors such as approaches to police data recording remain constant, then changes over time can be effectively followed, irrespective of absolute levels. In so far as intentional homicide has been used as a proxy indicator for forms of violent crime, and even crime in general, such information is important in determining patterns of crime and emerging threats.

The underlying dataset used in this chapter contained sufficient information for calculation of yearly trend data for some 88 countries in the Americas, Asia, Europe and Oceania. This set of countries is smaller than that used in figure 1. Whilst many countries have a value for at least one recent year available, far fewer are able to report a consistent time series. Figures 6 to 9 show average intentional homicide rates in these 88 countries, organized by sub-region. Overall averages for countries in the Americas, Asia and Oceania, and Europe regions are also shown.

Figure 6. Average intentional homicide rates for countries in the Americas (2003-2008)



Note: Weighted average of homicide rates in countries consistently reporting homicide for the entire period 2003-2008 (basis: 2003 = 100)

Figure 7. Average intentional homicide rates for countries in Asia and Oceania (2003-2008)

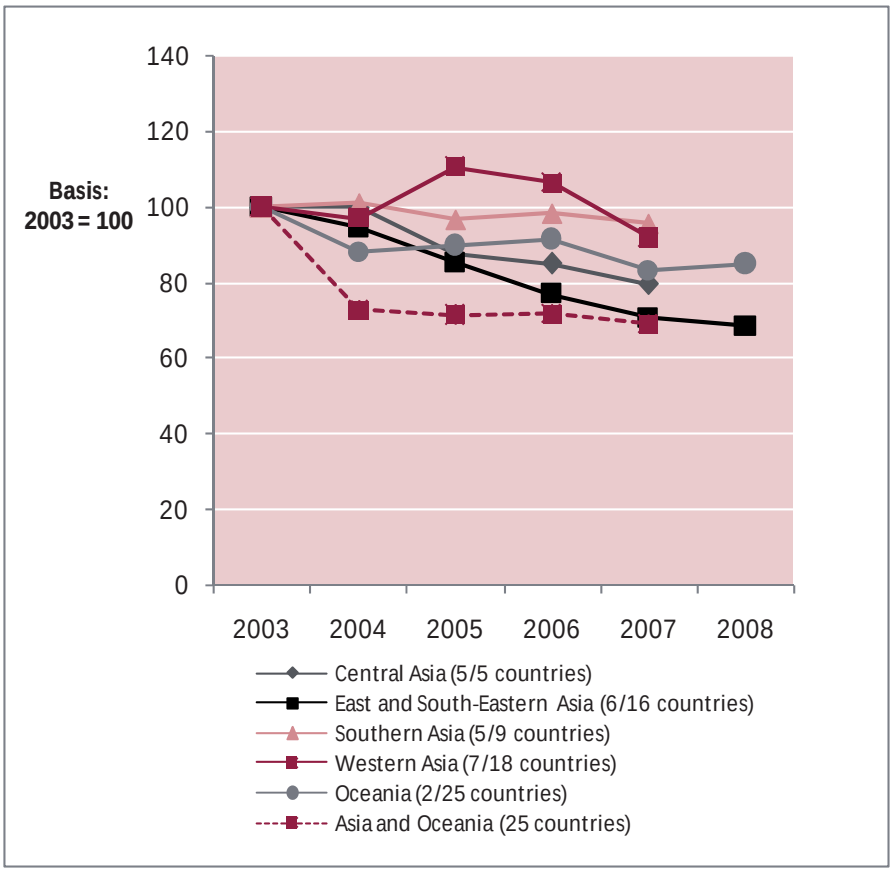
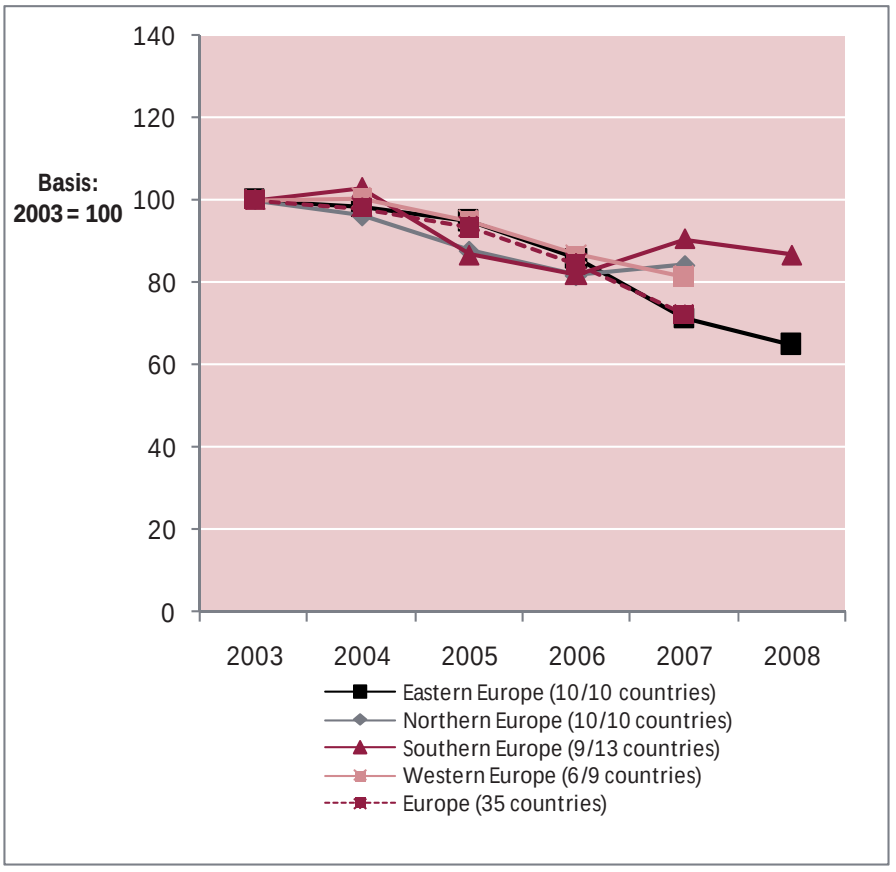


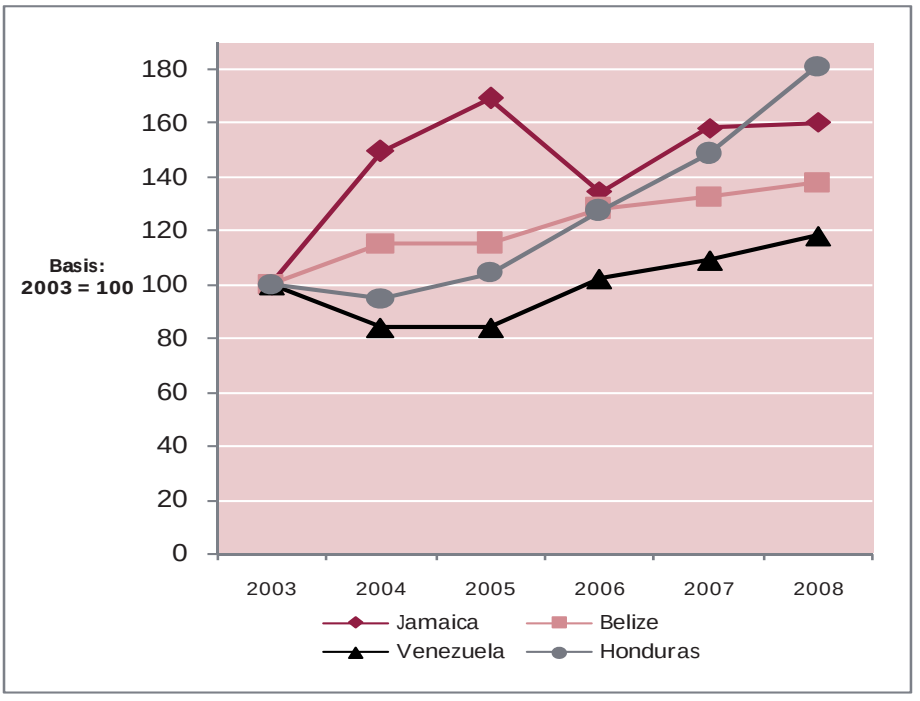
Figure 8. Average intentional homicide rates for countries in Europe (2003 – 2008)



At the regional level, average intentional homicide rates recorded by criminal justice institutions decreased over the time period for counties in Asia and Oceania and Europe. They stayed largely constant for countries in the Americas. At the sub-regional level however, sub-regions with high homicide rates such as Central America and the Caribbean showed average increases over time. Nonetheless, sub-regional rates in general changed reasonable slowly and did not exhibit unpredictable large increases or decreases from year to year.

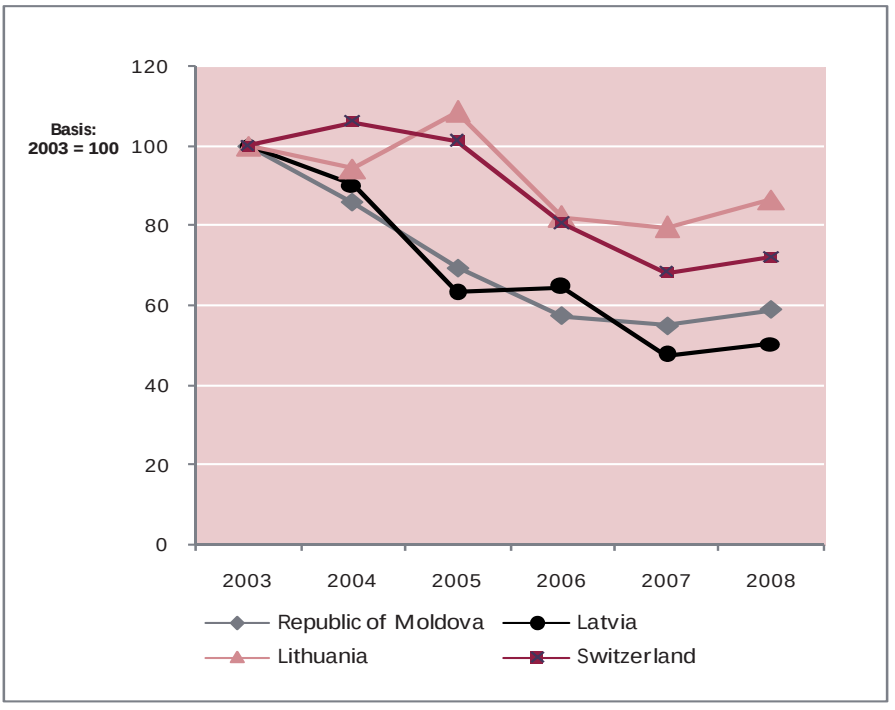
The story can be different at national level. As shown in figure 9, countries in the Central America and Caribbean sub-regions such as Belize, Guatemala, Honduras, Jamaica, Trinidad and Tobago, as well as in Venezuela, show significant increases in homicide rates in recent years. According to police statistics, the homicide rate in Honduras, for example, approximately doubled between 2004 and 2008. (UNODC 2010) Increases in homicide rates in the Central America and Caribbean sub-regions may be linked to homicide associated with gang, drug-related or organized crime. The drug trade fuels crime in numerous ways, through violence linked to trafficking, by normalizing illegal behaviour, by diverting criminal justice resources from other activities, and importantly with respect to homicide, by contributing to the widespread availability of firearms.

Figure 9. Increasing homicide rates in selected countries



In contrast, those sub-regions with lower homicide rates also tend to be those that show either stable or gradually decreasing homicide rates over time. Countries in Central Asia, Eastern Europe and Western Europe show consistent decreasing trends over the time period. Whilst trends in these sub-regions are encouraging, continued concerted crime prevention action is required to maintain low and decreasing homicide rates. At the national level, a number of countries in the Europe region, including Switzerland, Latvia, Lithuania, and the Republic of Moldova show small but noticeable increases in police-recorded intentional homicide rates from 2007 to 2008. Such changes must be interpreted with caution as they may be related to changes, for example, in police recording methods. Nonetheless, the pattern is particularly striking when observed in more than one country for the same year.

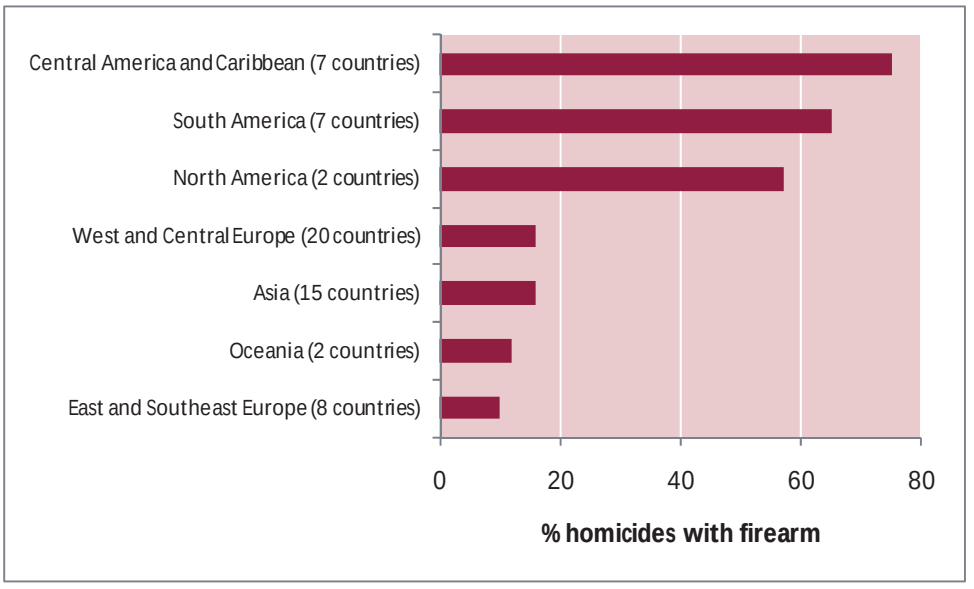
Figure 10. Decreasing homicide rates in selected countries



Homicide weapons

Although firearms are not the only weapons used in homicide, their availability can be a key factor in driving levels of armed violence and homicide rates. Sub-regions with high homicide rates tend to be amongst those where a high percentage of homicides are committed by firearm. Available data from 61 countries indicate that the percentage of homicides committed by firearm varies from 10 percent in countries in East and Southeast Europe to around 75 percent in Central America and the Caribbean.

Figure 11. Percentage of homicides committed with a firearm, latest available year (2003-2008)



Although a number of interpretations may be given to the data, such as the effect of gun control laws and differing availability of firearms, the results must be interpreted with caution. Countries operate different recording systems and may inaccurately record the number of homicides committed by firearms. This may be the result of limited criminal justice statistics-gathering capacity or factual difficulties in identifying the cause of death.

Summary and conclusions

The overall global homicide rate was estimated at 7.6 per 100,000 population in 2004, corresponding to some 490,000 violent deaths in that year. 'Latest available year' data shows that, despite significant difference between criminal justice and public health data in some sub-regions, the highest homicide rates are likely in Southern Africa, Central America and the Caribbean sub-regions. Based on criminal justice data, these sub-regions show rates between 20 and 30 per 100,000 population. The lowest global homicide rates are found in Western Europe, Southern Europe, Oceania, Eastern Asia and Northern Europe sub-regions. Both criminal justice and public health data show rates under 3 per 100,000 population in these sub-regions. The majority of countries for which trend data is available show decreasing or stable homicide trends over the period 2003 – 2008. Overall regional rates based on data from these countries show decreasing trends. At the sub-regional level however, increasing sub-regional rates are seen in the Caribbean and Central America. Such increases are likely due to a relatively limited set of countries that show increasing homicide rates including Guatemala, Venezuela, Jamaica, Belize, Trinidad and Tobago, and Honduras. Increasing rates in these countries may be linked in particular to the challenges of organized crime, drug trafficking and gang activity.

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Chapter 2 – Trends in Police Recorded Crime

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Abstract

This chapter presents prevalence rates and trends on five "traditional" crimes: assault, rape, robbery, burglary and motor vehicle theft. Also data on kidnapping and crime suspects are shown. The source of information is the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS) covering the years 1996-2006. The results of this chapter are based on police data and describe therefore only those crimes that are recorded by the police. In general, it seems that recorded property crimes, burglaries and motor vehicle thefts, have decreased. Rapes and robberies have slightly increased, and assaults have increased considerably. The average level of kidnappings has not changed. The large differences in crime between regions and countries can partly be explained by diverging criminalisation, efficiency of the criminal justice systems and recording practices. Country level results show that especially the latest data is often from Western Europe, North America and Oceania. A smaller number of countries are represented from Africa and Latin America, but even the scarce available information shows that crime is common in these areas. In the Asian region, the level of recorded crimes is lower than in other regions.

Introduction

Police recorded crime is, as known, not equivalent to "all" crime. A well known fact is that a large proportion of "all" crime remains unrecorded. Recorded crime may vary significantly as a consequence of dissimilar reporting rates and recording practices. In the UN-CTS, the total of all recorded crimes was included. However, the crimes comprised in the figure for total crime are in practice incomparable across countries, because the scope of criminal codes in different countries is far from identical. Furthermore, the concept of total crime is very abstract making it very difficult to interpret any figures on this level.

Data on recorded crime, collected by the UN-CTS, is available for over 100 countries. The number of countries to be included in the analysis can be maximised if we focus on certain common crime categories. Both rate comparisons and trends of those particular crimes can be presented. Country level figures should, however, rather be seen as examples than as comparable indicators.

Levels and trends of the following recorded crimes are described in this chapter: assault, rape, robbery, burglary, motor vehicle theft and kidnapping. Assault, rape, robbery, burglary and motor vehicle theft represent types of offences that are common in many countries. Kidnapping is a more serious crime that violates severely the personal integrity of the victim. In the end of the chapter, also total rates of persons suspected are analysed. Analysis of homicide has not been included here, because a separate chapter has been devoted to lethal violence.

The crimes are reported first by presenting regional estimates of the volume of recorded offences. Non-weighted median values of the crime rates (crimes / 100,000 population) are used in the analysis. This means that the rates of large and small countries have equal weight when calculating the median. The choice is based on the argument that we often compare crime rates between countries without taking into account the size of the country. On the other hand, if countries would be represented by the actual number of crimes, very large countries would totally dominate their regions. The disadvantage of the chosen method is that we cannot say, for instance, how common rapes are in Europe overall. Accurate regional comparisons are however impossible, because not all countries have responded to the UN-CTS. Furthermore, countries with a population of less than 100,000 were excluded from the analysis.

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Figures are presented also on the country level. These comparisons are based on latest available data since the year 2000. The results are interpreted against the metadata collected in the survey. Crime definitions differ between the countries because of different penal codes, and dissimilar reporting behaviour and recording practices; consequently the differences of crime levels in different countries may be based on different definitions, reporting behaviour and recording practices rather than differences in actual crime. Therefore trend analysis is a more fruitful approach as it shows how crime has developed. The problem in trend analysis is that the available data will be considerably reduced when describing the trends between 1996-2001-2006 because of missing data from many countries.

Victim surveys (e.g. van Dijk et al. 2007) provide more extensive and comparable data of criminal victimisation of households than the police records, since they capture also crimes that are not reported to the police, and because similar crime definitions can be applied in the participating countries. This Chapter focuses on an overview of the results of the UN-CTS, comprising police data only.

Assault

According to the definition in the Crime Trends Survey questionnaire: "*Assault* may be understood to mean physical attack against the body of another person, including battery but excluding indecent assault". The respondents were asked whether the definition was applied in their countries in the 2005-2006 survey. One-half of the 80 countries that provided data on assaults in the 2005-2006 survey replied that they had applied this standard definition. Many of those countries that did not say that they used the basic definition did also not specify the difference in the definition they had applied. Therefore the proportion of the countries that were following the standard definition is probably higher than 50 per cent. However, applying the standard definition does not yet guarantee the comparability; 20 per cent of the countries replied that their data on assault included threats, and almost 60 per cent said that they included punching and/or slapping. The inclusion of threats and punching/slapping may increase the number of assaults. On the other hand, in some countries the penal code limits assaults to comprise incidents causing visible injuries. The basic standard definition is therefore not accurate enough for reliable comparison.

In the 10th UN-CTS, the respondents were asked whether a distinction was made in their country between aggravated and simple assault, depending on the degree of the resulting injury. If yes, they were asked for the main criteria for the distinction. Nearly one-half of the countries made the distinction, but the criteria for the distinction differed. For instance, the Canadian response stated that "simple assault is the least serious form of assault and includes pushing, slapping, punching and face-to-face verbal threats. Aggravated assault involves wounding, maiming, disfiguring or endangering the life of someone." Some countries defined the distinction by the resulting days of medical care or disability to work. Because some countries did not make the distinction between simple and major assault, there are fewer data on major assault and these are also less comparable.

Large differences in the police-recorded assaults exist between Oceania, West, Central and Southern Africa, North America and Asia, Southeast and East Europe. West and Central Europe are located between these extremes (figure 1). West, Central and Southern Africa show the highest rates of reported major assault (nearly 50 % of all assaults in the region), while in Oceania nine out of ten assaults were simple assaults. The difference between the European sub-regions that was clearly visible in all assaults decreases considerably for major assaults (figure 2). Simple assault recorded by the police is uncommon in East and Southeast Europe, but in West and Central Europe over 90 per cent of assaults were simple ones.

According to victimisation surveys, the differences in assaults and threats between North America and West & Central Europe are small, and the figures from the countries of Oceania are somewhat higher. Unfortunately, the last international crime victimisation surveys are available for these regions only (van Dijk et al. 2007, 81).

Figure 1. Major and simple assaults per 100,000 population in different regions, median, 2006 or latest available rate (n=122, number of countries in parentheses)

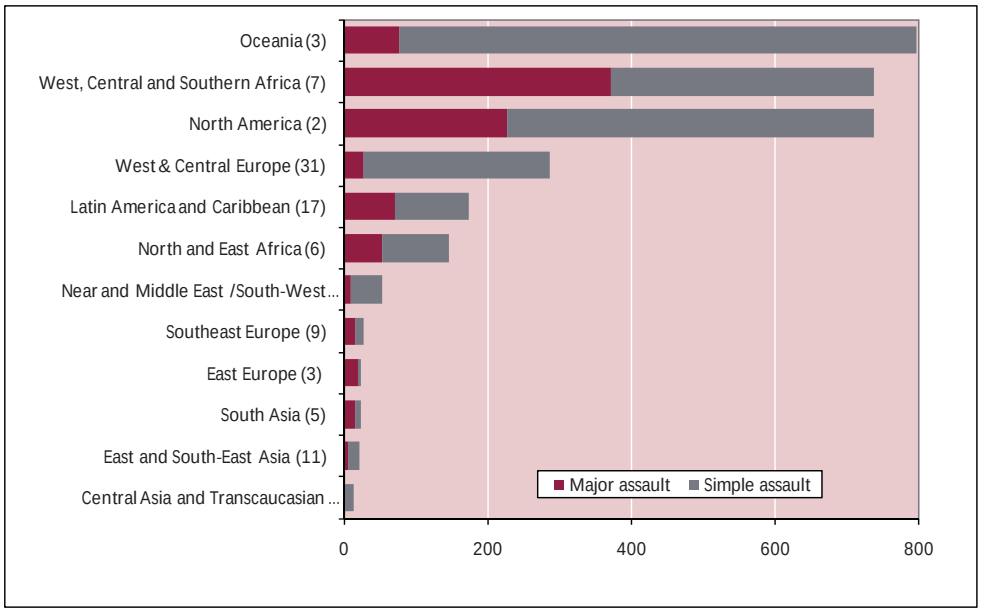
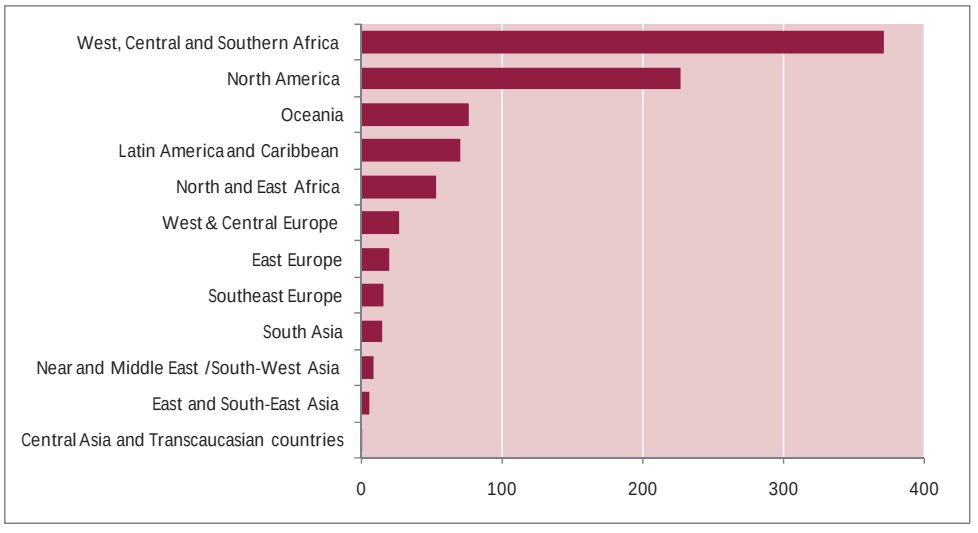


Figure 2. Major assaults per 100,000 population in different areas, median, 2006 or latest rate (n=99)



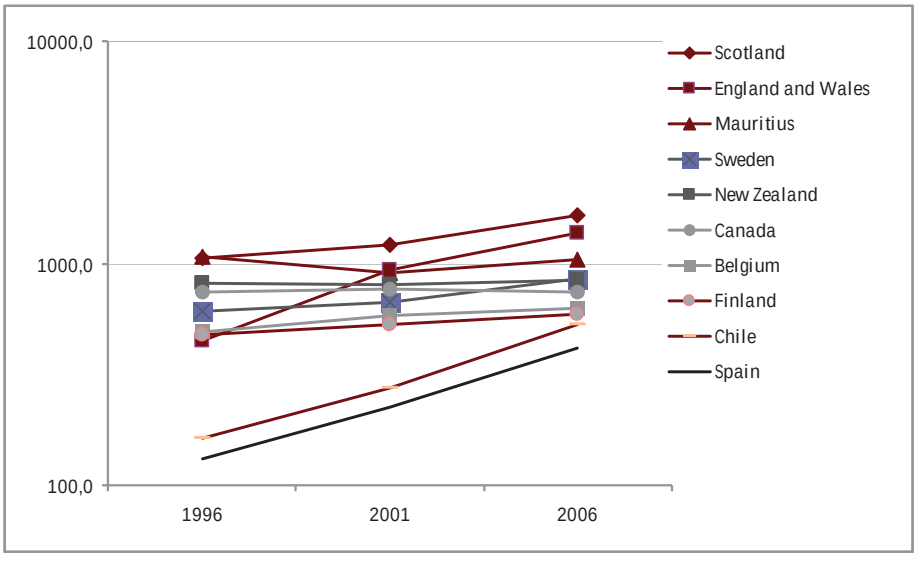
The country level comparisons do not evidently describe differences in real crime between the countries because of different crime definitions, reporting behaviour and recording practices. Nevertheless, the figures reveal how many offences are handled in the criminal justice system. The region of West and Central Europe was located in the middle of the regional comparison, but countries from West and Central Europe score high on country level (table 1 in the Annex). Below the first quartile (the group with lowest assault rates), there is only one country from West and Central Europe (Cyprus). By rates of major assault, many countries with a high assault rate would not have been high ranking countries. Victimisation surveys show that many European countries above the third quartile (table 1) were also above the Western average in assaults. Most of the countries with low assault rates come from Asia.

Total assault has increased between 1996 and 2006, while major assaults have increased since 1996, but not between 2001 and 2006 (table 1). The trend in ten selected countries (10 countries with highest assault rates) is increasing, and from 2001 to 2006 in many more countries, and the increase is larger than from 1996 to 2001 (figure 3). Table 2 in the Annex shows the mean annual changes in the individual countries.

Table 1. Trend of assault and major assault (median rates)

Crime	1996	2001	2006	n
Assault rate, total	178	264	349	37
Assault, trend	100	149	196	
Major assault rate	24	30	27	19
Major assault, trend	100	126	111	

Figure 3. Trend of assault in selected countries (10 highest rates, log. scale)



Rape

Rape was defined in the UN Crime Trends Survey questionnaire to mean sexual intercourse without valid consent. Two out of three respondents to the 10th survey replied that they were able to follow the definition. One reason why the definition was not followed was that attempted rapes were included in their data. This problem applies to other crime types as well, including assault.

The number of recorded rapes is relatively small since these offences are rarely reported to the police. Because of the very sensitive nature of the offence, it has been concluded that also victimisation surveys underestimate the number of rapes. Rapes are mostly committed by males, and the victims are women.[1] The penal codes of some countries define, however, rape as a gender neutral offence (in the metadata some countries explained that they could not follow the standard definition given in the questionnaire because according to their penal code the victim could only be a woman). In the UN-CTS data, the rape rate is calculated per 100,000 population. Therefore the rates for the female population, being the principal victims, are in practice twice as high as those presented in this chapter.

Southern Africa, Oceania and North America have the highest recorded rape rates, Asia the lowest. The differences between the regions are large. The comparability between the regions is limited because many figures from developing countries are from older surveys (e.g. no data were provided for Southern Africa in the most recent Crime Trends survey).

[1] Comparable information of the gender of the victims is not available. The European Sourcebook asks for the sex of the offender. In about one per cent of recorded rapes in 24 European countries the suspected offender was a woman (year 2006). This is, however, not evidence for that the victim was a man, and the female offender may have participated in the offence together with a male offender. Nor is it certain that in the cases with male perpetrators, the victim is a woman, although this is the situation in most cases.

The differences between the rape rates of individual countries are large in the highest quartile (figure 5, table 3 in the Annex). This indicates that the definition of rape is likely to be broader in North America, for instance in Canada (Canada's comment in the metadata: "Data includes sexual assaults, i.e. any physical sexual contact (includes touching) with a person against their will or without proper consent and may or may not include sexual intercourse."), compared to the European countries.

Figure 4. Rapes per 100,000 population in different regions, median, 2006 or latest rate (n=116)

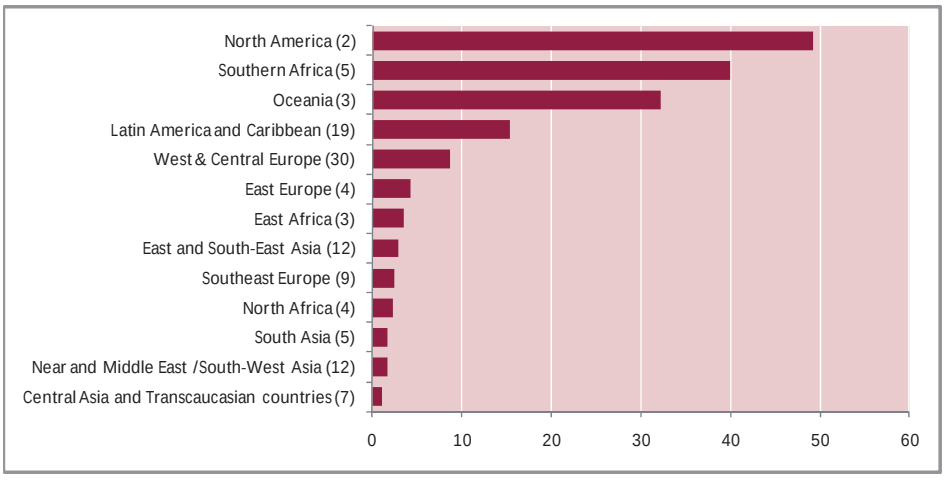
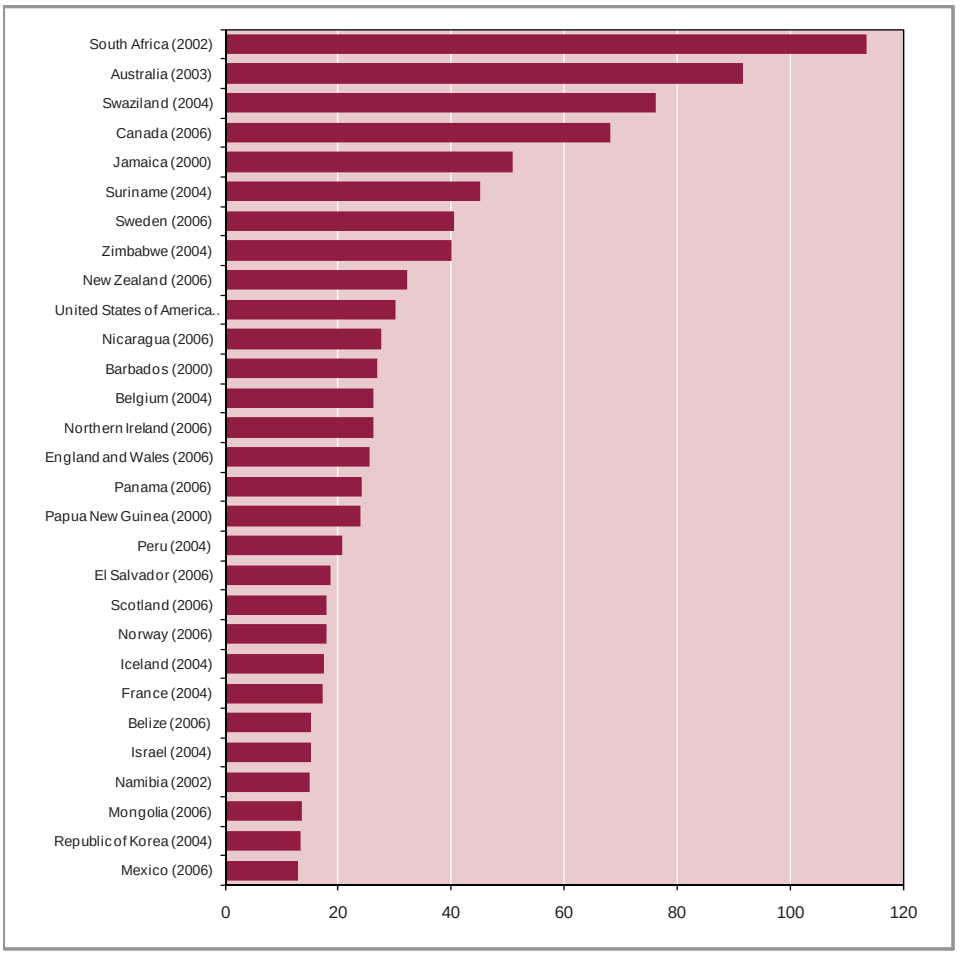


Figure 5. Countries above the 3rd Quartile according to the rape rate (police recorded rapes /100,000 population, latest rate)



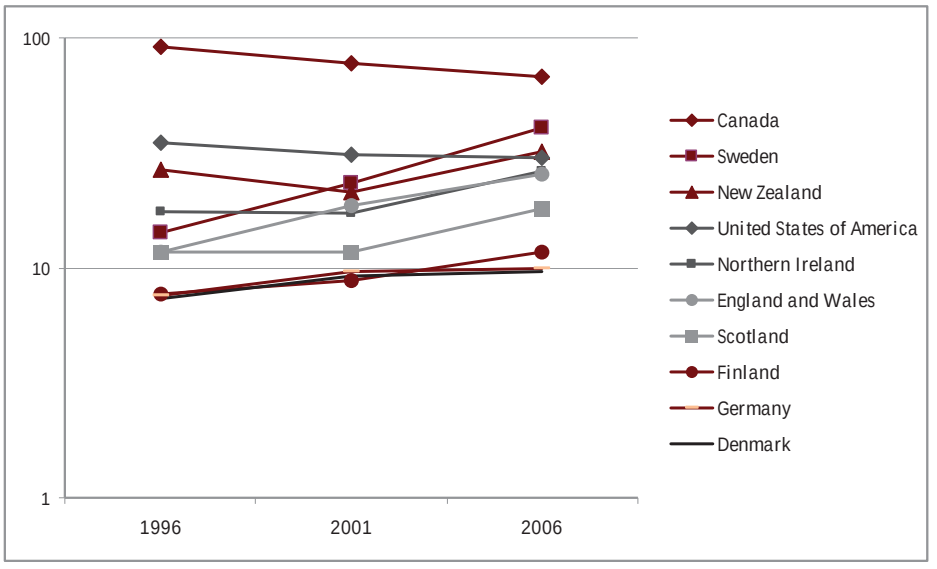
From the lowest quartile the developed countries are missing. Some developing countries have near to zero rates of rape, and some of these countries have also been recently in a state of war[2] and suffered from internal conflicts. In these countries rapes may not be recorded in a way comparable to other countries.

The trend in rape is increasing (table 2). Figure 6 shows the ten countries with the highest rape rates and data for all three (or nearby) points in time. The figure comprises developed countries only. The rates are levelling off; rapes in Canada and the United States were most frequent in 1996, but have decreased by 2006, while in the other countries they have increased (figure 6).

Table 2. Trend in rape (n=49)

	1996	2001	2006
Median	5.3	5.8	6.8
Trend	100	110	129

Figure 6. Trend of rape in selected countries (10 highest rates, log. scale)



Robbery

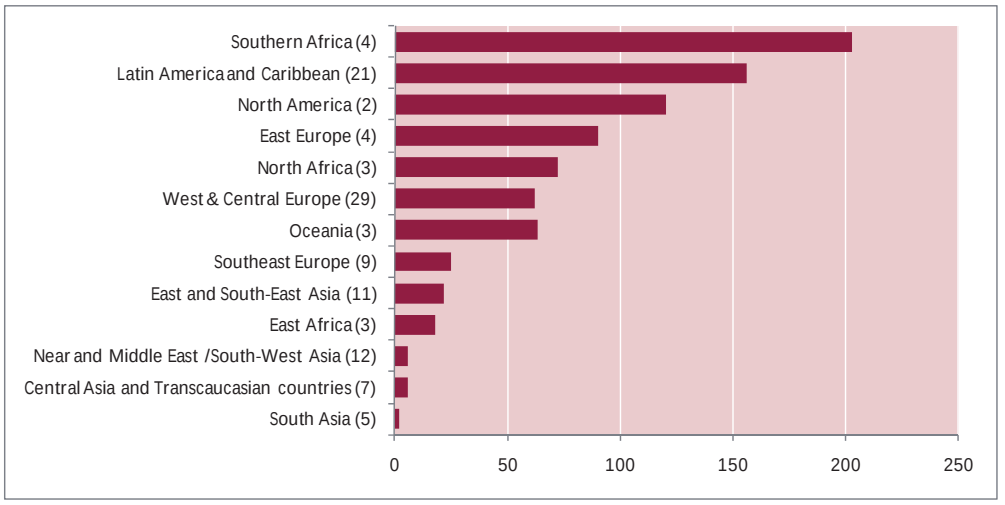
Robbery is a property crime that involves the use of violence or threat of violence. It was defined in the 10th UN-CTS Questionnaire to mean theft of property from a person, overcoming resistance by force or threat of force. Robbery included muggings, bag-snatching and theft with violence. The responses in the metadata comprised specifications of the crime scenes (e.g. banks, post offices, commercial businesses or streets), and the inclusion of attempts was reported. Two-thirds of the countries were able to apply the definition given in the questionnaire.

Bag-snatching was included in 54 per cent of the countries, but in Poland, and some other countries, offences below a certain monetary value are classified as misdemeanours. 59 per cent of the countries responded that theft with violence was included in robbery.

[2] "The incidence of violence against women in armed conflict, particularly sexual violence including rape, has been increasingly acknowledged and documented. Violence against women has been reported from conflict or post -conflict situations in many countries or areas including Afghanistan, Burundi, Chad, Colombia, Côte d'Ivoire, Democratic Republic of the Congo, Liberia, Peru, Rwanda, Sierra Leone, Chechnya/Russian Federation, Darfur, Sudan, northern Uganda and the former Yugoslavia" (Secretary-General's study on violence against women. http://www.un.org/womenwatch/daw/vaw/violenceagainstwomenstudydoc.pdf, 6.11.2009)

Robbery was most common in Southern Africa and in the Americas. East and Central & West Europe, North Africa and Oceania are on the global average level (figure 7).

Figure 7. Robberies per 100,000 population in different regions, median, 2006 or latest rate (n=112)



The trend of 35 countries is slightly increasing (table 3). The trend seems to be in line with the trend of assaults: both have increased over the ten year period studied. The level and trend in robbery in individual countries are presented in the Annex tables 5 and 6.

Table 3. Trend in robbery (n=35)

	1996	2001	2006
Median	49	56	60
Trend	100	115	122

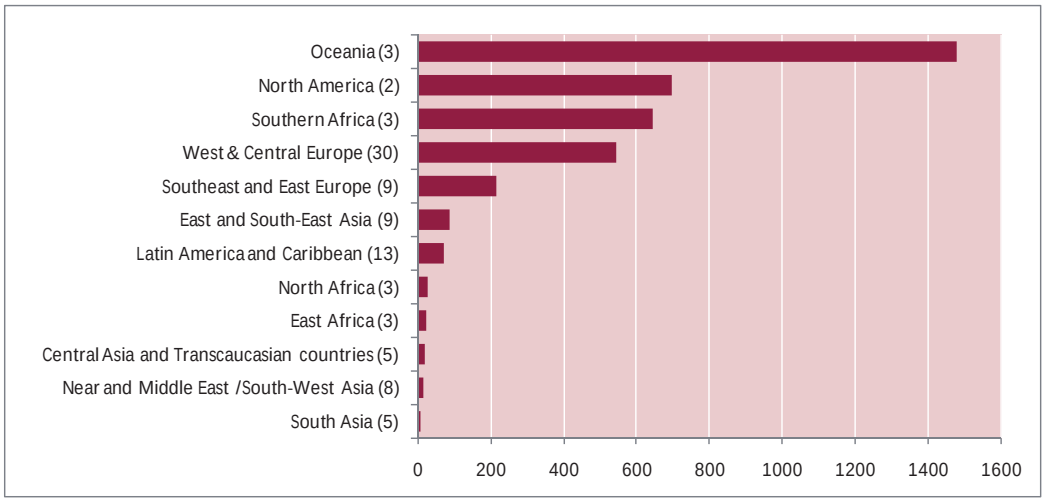
Housebreaking/burglary

Burglary was described to mean "to gain access to a closed part of a building or other premises by use of force with the intent to steal goods". Figures on burglary were asked to include theft from a factory, shop or office, theft from a military establishment, theft by using false keys, and to exclude theft from a car, theft from a container, theft from a vending machine, theft from a parking meter and theft from fenced meadow/compound. The inclusion and exclusion criteria were quite detailed, and 41 per cent of the 71 countries that responded to the metadata section replied that they were able to follow the definition. The metadata does not give information on the influence of the included or excluded items on the figures.

Domestic burglary is not distinguished from total burglary. Domestic burglary is an important safety indicator, because it resembles a crime against a person, such as violence, by its sensitive nature to the victim. According to the European Sourcebook, in most countries the majority of burglaries are, however, committed against businesses and corporations (Aebi et al. 2006).

The burglary rate is highest in the region of Oceania (especially in Australia and New Zealand). Of North America, Canada and the USA, as well as South Africa, Swaziland and Zimbabwe of Southern Africa (figure 8 and Annex table 7) have high rates. All of these regions are represented by 3-4 countries. Several countries in West & Central Europe have high burglary rates (the highest in Denmark, Austria, England & Wales and Sweden), but some have also relatively low rates (Estonia, Latvia, Norway). Israel belongs to the region Near and Middle East /South-West Asia, and it had a high burglary rate. In the other seven countries of the region the burglary rate is very low. No European or North American countries belong to the low crime category (below the 1st Quartile).

Figure 8. Burglaries per 100,000 population in different regions, median, 2006 or latest rate (n=95)

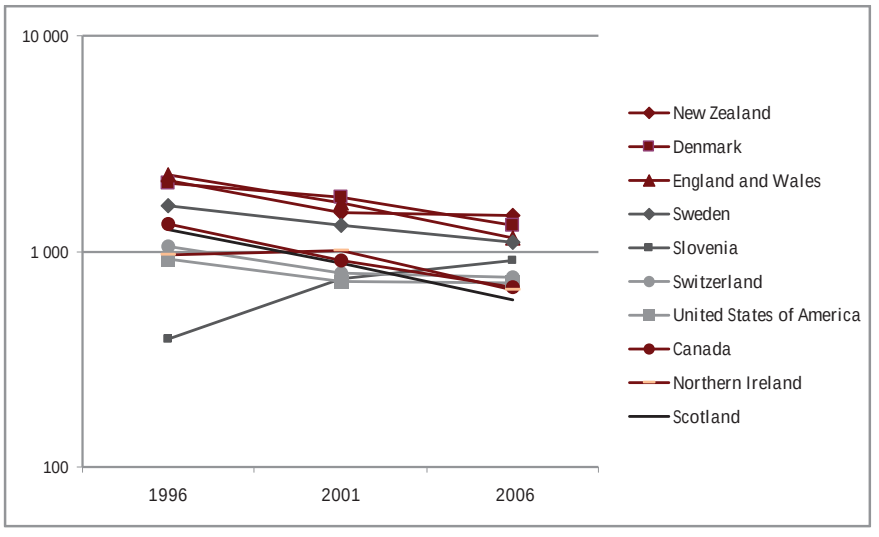


The trend of burglary is declining in most countries (table 4, figure 9, Annex table 8). At the same time differences between the countries are decreasing. In only five of 25 countries (Belarus, Croatia, Cyprus, Mauritius and Slovenia) burglary had increased from 1996 to 2006.

Table 4. Trend in burglary (n=25)

	1996	2001	2006
Median	676	619	458
Trend	100	91	68

Figure 9. Trend of burglary in selected countries (10 highest rates, log. scale)



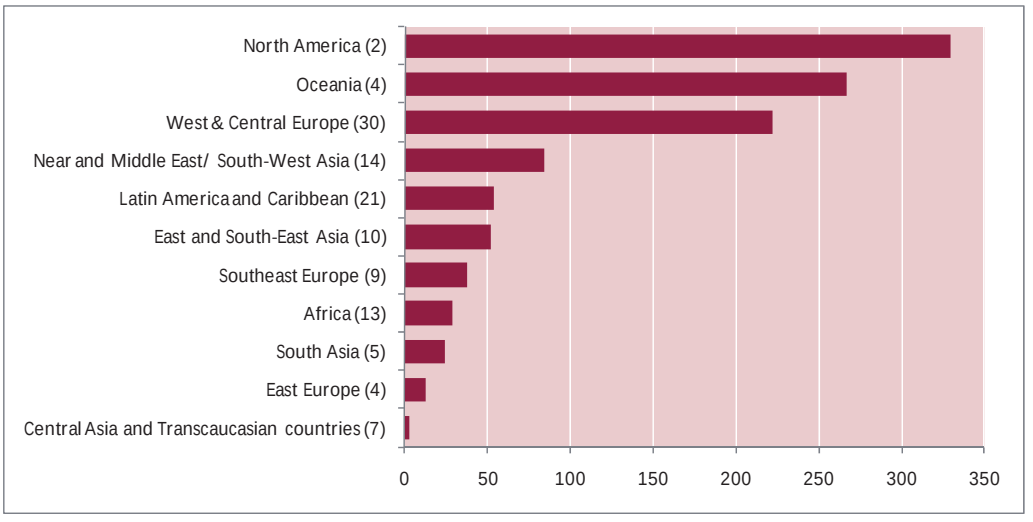
Motor vehicle/automobile theft

Crimes against motor vehicles represent an important element of property crime[3]. According to victimisation surveys, motor vehicle theft is very often reported to the police; in developed countries 80-90 per cent of car and motorcycle thefts are reported (Alvazzi del Frate 2005, van Dijk et al. 2007). The reason for reporting is the relatively high value of the commodities. Furthermore, in many countries police reporting is required for insurance compensation.

Automobile theft was defined as "the removal of a motor vehicle without the consent of the owner of the vehicle". 47 of the 74 countries reported that the definition could be applied in their countries in 2005/2006. For most countries, it was not clear, what the difference was, if the suggested definition was not applied. Also some countries that followed the definition reported of differences, for instance that attempts were included, and limitations in counting different types of motor vehicles (e.g. Canada: "Refers only to theft of automobiles and station wagons; excludes vans, trucks, and motorcycles"). The metadata collected on the questionnaire suggest that most countries do not record separately different types of motor vehicles (motorcycle was, however, recorded separately in 22 of 74 countries).

Reasons for motor vehicle thefts differ. Some cars are stolen for joyriding, and the vehicle is abandoned after a short-term driving. Sometimes, a stolen car has been used in the context of committing other crimes. Some vehicles are stolen with the purpose of keeping the commodity. Organised crime groups may move the stolen vehicles abroad. In different parts of the world, the structure of vehicle thefts differs, and so do the chances for the stolen property to be retrieved.

Figure 10. Motor vehicle theft in different regions per 100,000 population, median, latest year



Differences in motor vehicle theft are very large between developed (highest Quartile) and developing countries (lowest Quartile). Improved security systems of new cars, and the overall increase of cars outside the developed countries may change the situation in the future, and also between regions, if more expensive cars that are sold in wealthier countries are better protected against theft. Advanced protection of the vehicles may also change the way the vehicles are stolen, for instance if car hijacking becomes the only feasible way to drive the vehicle away from the crime scene.

The contents of the category of vehicles may be dissimilar in different parts of the world: e.g. motorcycles are probably more common in the developing countries compared to industrialised countries.

Adjusting the rates to the number of automobiles, automobile thefts were most common (in the highest Quartile) in Israel, South Africa, Malaysia and Sweden.

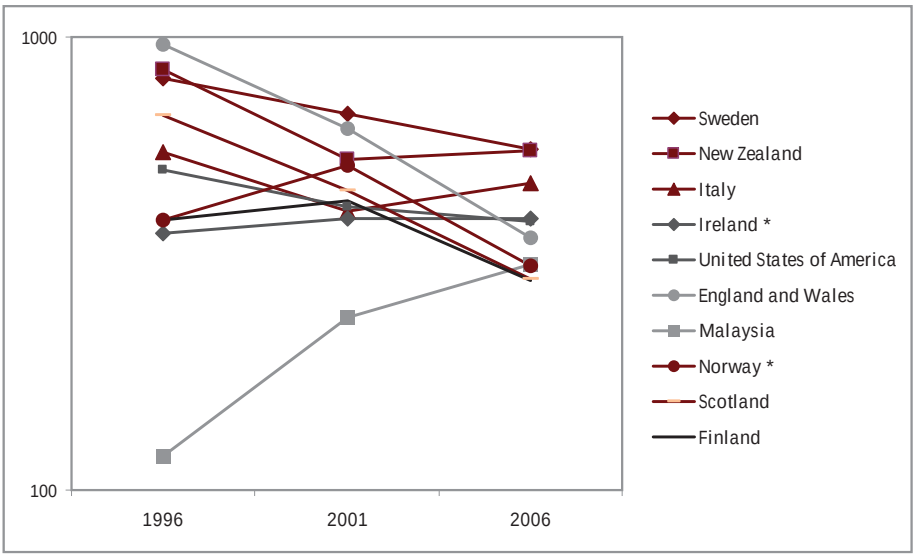
Trend data show decrease in most countries in the 2000s (table 5, Annex table 10). Of the ten countries that had the highest theft rates only Malaysia showed an increasing trend from 1996 to 2006 (figure 11). According to the International Crime Victimisation Surveys, thefts of cars have decreased slightly in all subsequent surveys since the beginning of the 1990s (van Dijk et al. 2007).

[3] In the end of December 2008 the database of Interpol held more than 4,6 million records of stolen motor vehicles (http://www.interpol.int/public/vehicle/default.asp, 5.11.2009)

Table 5. Trend in motor vehicle thefts (n=43)

	1996	2001	2006
Median	137	141	99
Trend	100	103	72

Figure 11. Motor vehicle theft rate trend in selected countries (10 highest rates, log. scale)



Kidnapping

The definition of kidnapping was as follows: "*Kidnapping* may be understood to mean unlawfully detaining a person or persons against their will (or national equivalent e.g. using force, threat, fraud or enticement) for the purpose of demanding for their liberation an illicit gain or any other economic gain or other material benefit, or in order to oblige someone to do or not to do something." About one-half of the countries replied that the definition was applied in their countries. Examples of specified definitions come from Canada (includes forcible confinement and transporting persons outside of Canada (i.e. human trafficking, etc.)) and Scotland (kidnapping is classified as abduction and plagium (child theft); it is simply the carrying off, or confining of any person, forcibly, and without lawful authority, and need not have a particular motive or purpose). Both countries had high kidnapping rates. In the United States data on kidnapping is not collected at national level in the Uniform Crime Report.

The kidnapping rate was highest in Southern Africa (figure 12). Here Southern Africa consists of three countries (South Africa (2002), Swaziland and Zimbabwe (both have provided data for 2004). In Zimbabwe the recorded rate was lower (1,6/100,000 pop.) compared to South Africa and Swaziland. Of individual counties, Turkey has the highest score.

Figure 12. Kidnappings per 100,000 population in different regions, median, 2006 or latest rate (n=89)

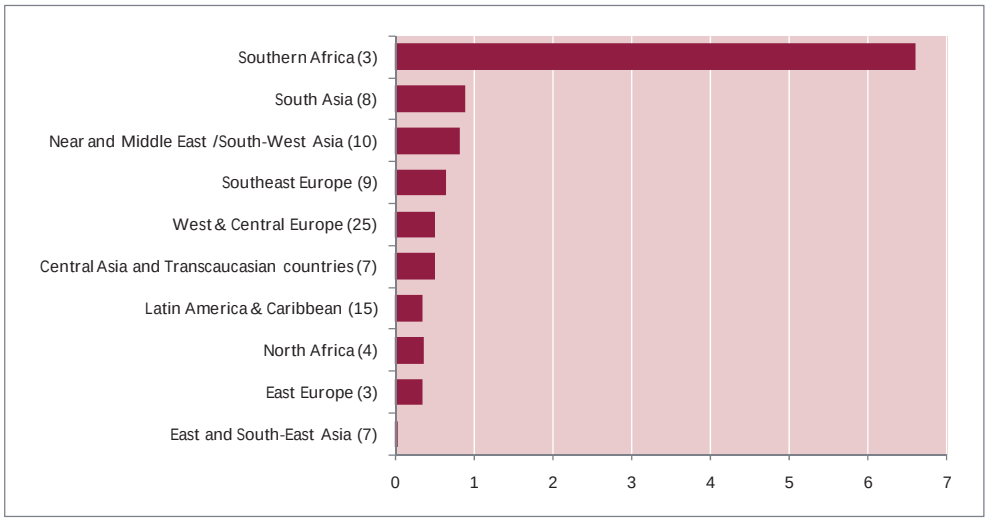
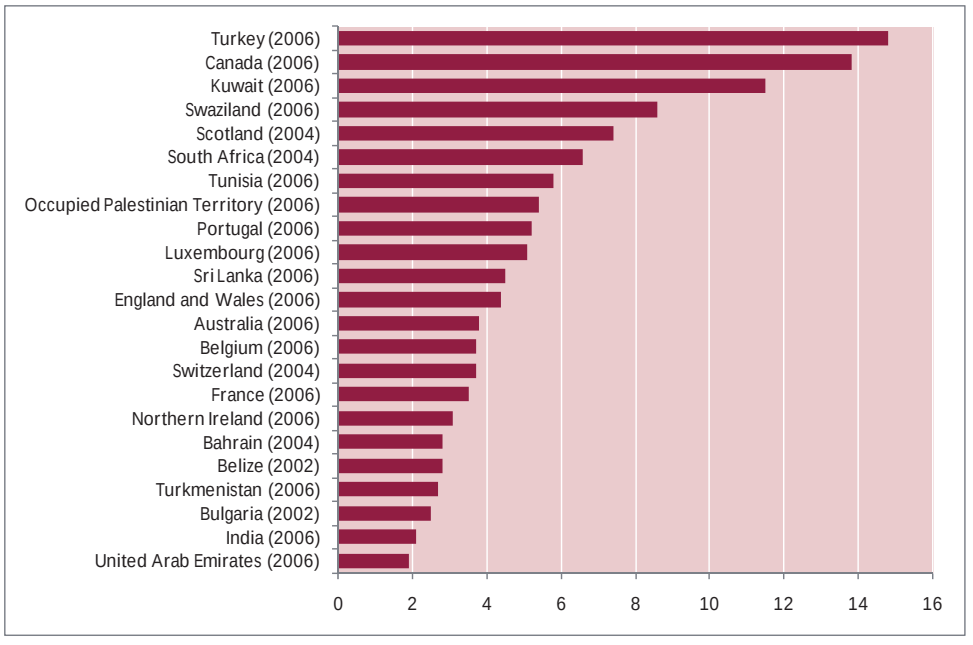


Figure 13. Countries above the 3rd quartile according to the kidnapping rate (police recorded kidnappings /100,000 population, latest rate



In India the kidnapping rate was one of the lowest in the highest quartile. Their number was, however, highest among the countries, nearly 24,000 offences in 2006.

Data on kidnapping have been collected from 1980 to 1986 and since 2001. Therefore the years 1986-2001-2006 were available for trend analysis. The trend of ten countries shows median rates of 1.3 – 2.0 – 1.3; the average level of kidnappings does not seem to have changed over the 20 years.

Suspects

The total number of persons brought into contact with the police or otherwise contacted by the criminal justice system – persons suspected, arrested or cautioned – were defined in a similar manner as the number of recorded crimes, excluding minor traffic offences and other petty offences. The number of suspects is in most countries smaller than the number of recorded crimes, because many crimes are not cleared, i.e. a suspect for the offence has not been found. On the other hand, one crime may involve more than one offender, and one offender may have committed many crimes. On the average, the ratio between offenders and offences is less than one (mean=0.69, median=0.48, in the highest quartile 0.85). The total number of offenders has been increasing steadily since 1996 (table 9). According to the 9th UN-CTS (detailed information on suspects was not asked in the 10th Survey) in Europe and North America 14 per cent of suspects were women in 2004 (the proportion varied between 2 and 26 per cent between the countries; Heiskanen 2008).

Table 9. Trend of suspects (n=104)

	1996	2001	2006
Median	765	842	876
Trend	100	110	115

North America has the highest suspect rates (figure 14), but of individual countries Finland has the highest suspect rates since 2001 (figure 15). The reason for the increase in the number of suspects in Finland between 1996 and 2001 is the penal code reform; from 1999 traffic offences have been included in the penal code. After subtracting suspects for traffic offences, the rate of suspects in Finland still remains high; the suspects are often coming from violent and property crimes, as is also the case in the USA and New Zealand. In the USA also drug suspects increase the rate. The background for the high and increasing level of suspects in the Republic of Korea is not clear. It is not based on a high number of traditional violent, property or drug offences.

Figure 14. Total rate of suspects per 100,000 population in different regions, median, 2006 or latest rate

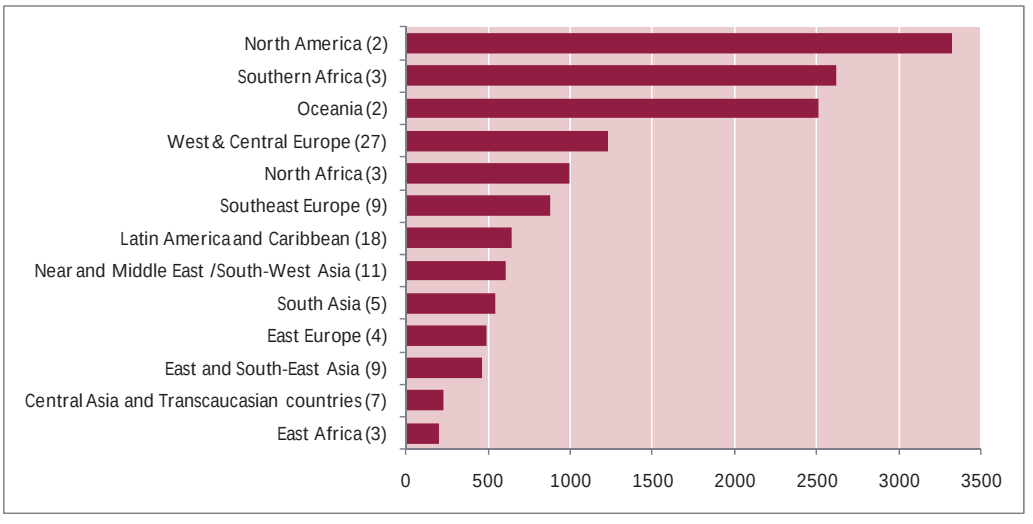
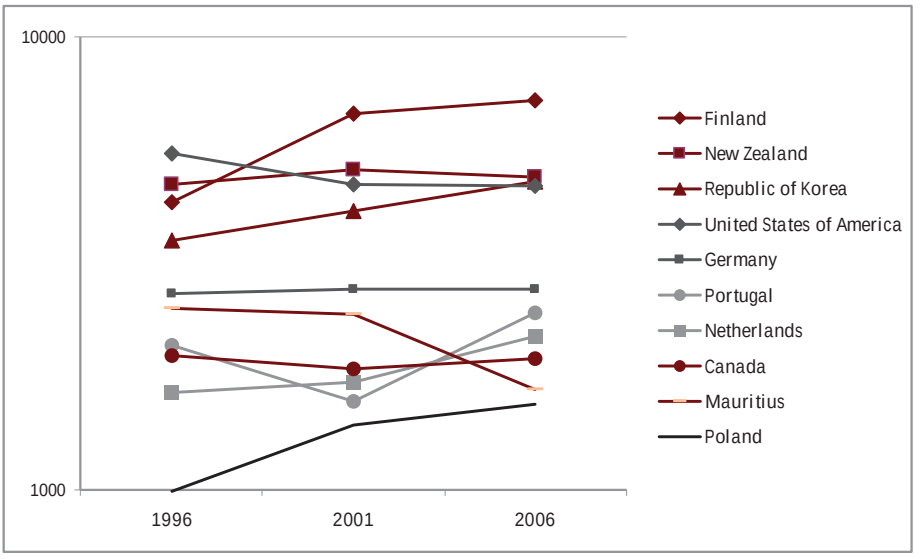


Figure 15. Suspect rate trend in selected countries (10 highest rates, log. scale)

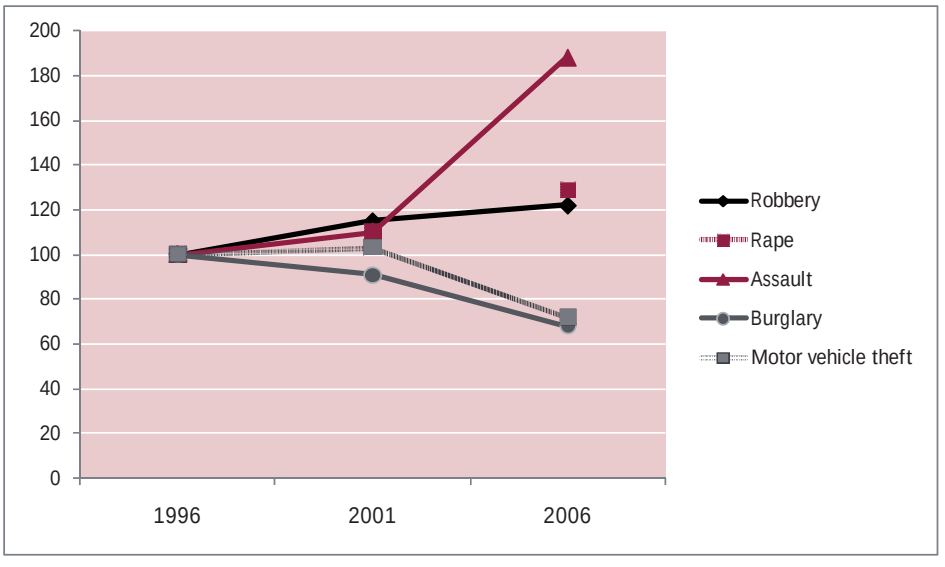


Countries that are missing from the trend figure, but had high rates of suspects were Uruguay (2004), Chile (2004), Austria (2006), England and Wales (2006), Swaziland (2004), Zimbabwe (2004), Sri Lanka (2004), Israel (2004) and El Salvador (2006) (suspect rates in these countries were over 2,000/100,000 pop.).

Summary and conclusions

"Traditional" violent and property crimes have taken different directions (figure 16; the figure summarises trends of individual crime rates presented earlier in this chapter). Assaults have increased, and the increase is larger from 2001 to 2006 as compared to the period 1996-2001. Also rapes and robberies have increased, but to a lesser extent. Property crimes, measured here by burglary and motor vehicle theft, have decreased. The decrease of motor vehicle thefts has occurred during the latter time period 2001-2006.

Figure 16. Trends of violent and property crimes



Crimes recorded by the police are in many ways a problematic measure for criminality, and in particular for country comparisons, because all crimes are not reported to the police (see e.g. Lewis 1999, Barclay et al. 2009). Especially violent crimes are very sensitive by nature, and for instance rapes are often not reported to authorities in fear of secondary victimisation (process of blaming the victims for their victimisation; it is also known that in many countries the perpetrator is rarely punished for the rape). The penal codes may also define limits for the cases (e.g. certain monetary values for property crimes) to be accepted for recording as crimes. On the other hand, most motor vehicle thefts and burglaries are in many countries reported to the police; these crime categories are therefore better represented in the police statistics.

The shortcomings of the police statistics speak strongly for victimisation surveys. From the developed world we have national trends and international comparisons. Unfortunately, representative victimisation surveys are scarce among the developing countries. But also the police data from the developing countries are defective; too many countries are totally missing from the UN-CTS data, and even those developing countries that have participated do not often have the possibility to deliver the data regularly; therefore their latest data may be old.

Nevertheless, the results of this chapter indicate that many developing countries are more heavily affected by crime that the developed countries. On the other hand, the more developed surveillance systems in the developed countries may produce relatively high crime rates compared to less developed statistical monitoring.

There are also large differences between developing countries in the different regions. It seems that violence is in Asia less common than elsewhere in the developing world, and certain areas of Africa, Oceania and America suffer severely from violence. Also inside the same region, the differences in recorded crime rates are often very large: developing countries from the same region are often found in the highest and the lowest quartile of a particular offence type.

Property crimes are more common in the developed world. For instance, burglary is more prevalent in Oceania, North America and West & Central Europe (and also in Southern Africa) compared to other parts of the world. Motor vehicle theft rates are high in the developed countries, because of the number of cars. The rates, which are calculated against the population, not the number of cars, are likely to exaggerate the differences further.

Also one crime that does not belong to volume crimes was studied; kidnapping seems to be overall in 2006 at the same level as it was in 1986, but its variation across regions is considerable.

Data analysis

The crime rates in the data were validated by studying the trends between the surveys in the respective countries. If there was reason to believe that the figure was incorrect, it was removed. In Europe two international sources are available for validating the data: The European Sourcebook (European Sourcebook… 2003, Aebi et al. 2006 and the fourth European Sourcebook database covering the years 2003-2007), and Statistics in Focus by Eurostat (Tavares, Thomas 2009). The UN-CTS data were controlled against these sources, and replaced if needed. No individual missing countries were, however, added to the data from the other sources.

The crimes are reported by region if at least three countries in the region had provided data. Otherwise, the countries were added to adjacent regions. North America is an exception comprising Canada and USA. Countries with a population less than 100,000 were excluded from the analysis.

Non-weighted median values of the crime rates (crimes / 100,000 population) are used in the figures. This means that the rates of large and small countries have equal weight when calculating the median. The choice was made to facilitate comparison of crime rates between countries without taking into account the size of the country. The disadvantage of the method is that we cannot exactly estimate the volume of crime in different regions. Accurate and complete regional comparisons are, however, impossible because not all countries have responded to the Crime Trends Survey.

Country level data are based on latest available data since the year 2000. The results are interpreted against the metadata collected in the survey. Crime definitions differ between the

countries because of different penal codes, reporting behaviour, and recording practices, and consequently differences in the crime levels in different countries may depend more on different definitions and features of the system than on actual crime. Therefore trend analysis represents a more fruitful approach: it shows how crime has changed in the countries under comparable circumstances.

The mean annual change in crime rates has been calculated using the formula

$$(x_2 / x_1)^{1/(t2-t1)} - 1,$$

where x_1 is the value at year t_1 and x_2 the value at year t_2.

In describing the trends between 1996-2001-2006, missing data is replaced by adjacent observation, if available. E.g. if valid data was available for the years 1996, 2000 and 2006, but not for 2001, data for 2000 was used as a proxy for the year 2001.

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Annex B to chapter 2

Table 1. Assault and major assault rates in different countries (police recorded assaults/100,000 population)[4]

Below the lowest Quartile (1)	Assault total	Major assault
Country		
Albania (2002)	18.0	14.3
Armenia (2006)	20.7	6.5
Azerbaijan (2006)	1.9	0.2
Bangladesh (2006/-)	0.4	..
China (2000/-)	9.5	..
Costa Rica (2006)	19.7	15.9
Croatia (2006)	27.9	24.1
Cyprus (2006)	15.9	12.3
India (2006/-)	23.1	..
Indonesia (2000)	9.0	5.2
Kyrgyzstan (2006)	3.9	0.7
Lebanon (2006)	10.0	0.1
Malaysia (2006/2000)	21.9	21.9
Myanmar (2002)	17.0	5.9
Nepal (2006)	3.8	0.1
Oman (2002)	28.9	2.0
Pakistan (2000)	0.1	0.0
Papua New Guinea (2000)	25.1	0.0
Philippines (2002)	0.1	0.0
Republic of Moldova (2004)	32.3	8.7
Sao Tome and Principe (2004)	0.7	0.0
Singapore (2006)	14.6	2.6
Syrian Arab Republic (2006)	28.0	0.9
Tajikistan (2006)	14.5	1.7
Turkmenistan (2006)	1.7	0.8
Ukraine (2006/-)	13.9	..
Yemen (2000/-)	5.6	..

Lowest Quartile - Median (2)	Assault total	Major assault
Country		
Belarus (2006)	46.3	20.3
Bolivia (2006)	54.2	1.4
Bosnia and Herzegovina (2006)	39.6	12.4
Bulgaria (2004)	47.6	0.9
Colombia (2000)	63.4	0.2
Czech Republic (2006/2000)	78.1	8.3
Ecuador (2006/2004)	49.8	27.9
El Salvador (2006)	75.9	3.5
Georgia (2006)	49.0	0.3
Greece (2006/-)	66.7	..
Guatemala (2000/-)	48.1	..
Japan (2006)	51.0	26.7
Kenya (2006/-)	35.9	..
Kuwait (2002)	86.0	24.8
Latvia (2006)	67.9	3.8
Panama (2006)	54.2	36.3
Paraguay (2006)	36.3	7.8
Poland (2006)	76.3	38.9
Qatar (2002/2004)	37.4	2.5
Republic of Korea (2002/-)	34.3	..
Romania (2006)	43.9	3.1
Saudi Arabia (2002/2000)	63.2	7.2
Serbia (2006)	36.9	15.9
Slovakia (2006/2002)	60.9	8.0
Thailand (2006/-)	38.8	..
Uganda (2004)	92.7	15.9
United Arab Emirates (2004/2006)	53.7	17.9

Median - highest Quartile (3)	Assault total	Major assault
Country		
Algeria (2006)	108.6	91.8
Brunei Darussalam (2006)	119.5	0.8
Denmark (2006/2004)	214.1	26.7
Dominican Republic (2006/-)	155.1	..
Estonia (2006)	291.5	10.5
France (2000)	180.1	0.3
Hungary (2004)	127.0	80.7
Ireland (2006)	93.9	93.9
Italy (2006)	123.7	100.3
Jordan (2006)	273.1	11.5
Lithuania (2006)	131.2	10.0
Luxembourg (2002)	296.5	91.8
Maldives (2004/2002)	212.6	15.0
Malta (2006)	272.9	27.5
Mexico (2006)	223.5	160.4
Mongolia (2006)	144.0	16.3
Morocco (2006)	186.0	113.3
Nicaragua (2006/-)	332.9	..
Norway (2006)	346.0	69.1
Occupied Palestinian Territory (2005)	174.7	14.4
Peru (2002)	99.9	70.3
Slovenia (2006)	120.2	1.0

Above the highest Quartile (4)	Assault total	Major assault
Country		
Argentina (2006/-)	366.4	0.0
Australia (2003/2006)	797.0	3.1
Austria (2006/-)	440.3	..
Bahrain (2006/2004)	464.7	5.9
Barbados (2000)	611.9	109.3
Belgium (2004/-)	627.2	..
Canada (2006)	737.5	173.8
Chile (2004)	531.3	49.4
England and Wales (2006)	1365.3	32.2
Finland (2006)	586.9	39.1
Germany (2006)	619.9	183.1
Iceland (2004)	394.0	20.2
Israel (2004)	763.3	50.3
Jamaica (2000)	421.9	220.0
Mauritius (2006)	1044.9	9.8
Netherlands (2006/-)	351.8	..
New Zealand (2006)	839.4	150.4
Northern Ireland (2006)	1426.0	70.3
Portugal (2006)	377.4	6.5
Scotland (2006)	1655.1	127.5
South Africa (2002)	1188.0	576.5
Spain (2006/2000)	414.7	25.2

[4]The countries are divided into four groups of equal size according to the recorded assault rate. The category “below the 1st quartile” (lower quartile) contains those 25 % of countries with lowest recorded crime rate, the group “above the 3rd quartile” (upper quartile) the 25 % that have highest rate.

Median - highest Quartile (3) Country	Assault total	Major assault	Above the highest Quartile (4) Country	Assault total	Major assault
(Contd.)					
Sri Lanka (2004)	109.4	35.1	Swaziland (2004)	1308.2	516.1
Switzerland (2006/2000)	108.3	2.9	Sweden (2006)	845.2	52.8
Turkey (2006/-)	192.7	..	Tunisia (2002)	371.2	154.7
Uruguay (2004)	336.4	48.1	United States of America (1999/2006)	786.7	281.6
Zambia (2000/-)	211.4	..	Zimbabwe (2004)	765.1	226.8
Only major assault		Major assault	Mean	251	50
Côte d'Ivoire (-/2000)		66.1	Median	93	16
Egypt (-/2004)	..	0.3	1st Quartile	34	3
Iran. Islamic Republic of (-/2004)	..	114.4	3rd Quartile	347	52
Montenegro (-/2006)	..	26.4			
Russian Federation (-/2000)	..	26.9	No data	..	
The fYRepublic of Macedonia (-/2006)	..	21.6			
Venezuela (-/2000)	..	104.2			

Table 2. Mean annual changes in the assault rates

	Assault rate			Mean annual change	Mean annual change	Mean annual change
	1996	2001	2006	2001-2006	1996-2006	1996-2006
Azerbaijan	17.2	2.4	1.9	-32.4	-5.0	-19.9
Belarus	15.1	19.8	46.3	5.5	18.5	11.8
Belgium	488.3	584.0	627.2	3.6	1.4	2.5
Bulgaria	39.4	38.5	47.6	-0.4	4.3	1.9
Canada	743.4	764.5	737.5	0.6	-0.7	-0.1
Chile	162.4	274.7	531.3	11.1	14.1	12.6
Costa Rica	17.3	55.9	19.7	26.5	-18.8	1.3
Croatia	24.2	98.9	27.9	32.5	-22.4	1.4
Denmark	163.6	188.3	214.1	2.8	2.6	2.7
England and Wales	444.7	936.5	1365.3	16.1	7.8	11.9
Estonia	35.5	33.6	291.5	-1.1	54.1	23.4
Finland	478.9	527.0	586.9	1.9	2.2	2.1
Georgia	5.8	10.3	49.0	12.0	36.6	23.7
Hungary	100.1	107.7	127.0	1.5	3.3	2.4
India	23.1	23.1	23.1	0.0	0.0	0.0
Italy	41.5	53.6	123.7	5.2	18.2	11.5
Japan	19.2	40.1	51.0	15.9	4.9	10.3
Latvia	29.6	35.0	67.9	3.4	14.2	8.7
Maldives	127.1	137.1	212.6	1.5	9.2	5.3
Mauritius	1070.3	902.6	1044.9	-3.4	3.0	-0.2
Mexico	250.7	256.6	223.5	0.5	-2.7	-1.1
Netherlands	192.9	304.3	351.8	9.5	2.9	6.2
New Zealand	818.0	804.1	839.4	-0.3	0.9	0.3
Norway	230.3	328.4	346.0	7.4	1.0	4.2
Occupied Palestinian Territory	218.1	211.3	174.7	-0.6	-3.7	-2.2
Poland	80.2	81.6	76.3	0.4	-1.4	-0.5
Portugal	352.2	371.4	377.4	1.1	0.3	0.7
Republic of Korea	11.0	32.1	34.3	24.0	1.3	12.1
Republic of Moldova	29.8	27.6	3.7	-1.5	-33.2	-18.9
Romania	6.1	59.0	43.9	57.7	-5.7	21.9
Scotland	1055.6	1211.3	1655.1	2.8	6.4	4.6
Singapore	21.8	13.3	14.6	-9.4	1.9	-4.0
Slovenia	92.9	111.1	120.2	3.6	1.6	2.6
Spain	132.2	224.6	414.7	11.2	13.0	12.1
Sweden	607.4	669.1	845.2	2.0	4.8	3.4
Turkey	72.6	80.5	192.7	2.1	19.1	10.3
Ukraine	9.7	10.8	13.9	2.1	5.2	3.6

Table 3. Rape rates in different countries (police recorded assaults/100.000 population)

Below the lowest Quartile (1)	Rape		Lowest Quartile - Median (2)	Rape
Albania (2006)	1.5		Belarus (2006)	3.6
Algeria (2006)	1.5		China (2000)	2.8
Armenia (2006)	0.3		Colombia (2000)	4.7
Azerbaijan (2006)	0.4		Croatia (2006)	4.2
Bahrain (2006)	2.3		Cyprus (2006)	3.4
Bosnia and Herzegovina (2006)	1.1		Georgia (2006)	3.8
Côte d'Ivoire (2000)	1.9		Greece (2006)	2.4
Egypt (2005)	0.2		Guatemala (2000)	3.3
Hong Kong Special Administrative Region of China (2004)	1.3		Hungary (2004)	2.6
India (2006)	1.7		Kenya (2006)	3.5
Indonesia (2000)	0.7		Kyrgyzstan (2006)	5.1
Japan (2006)	1.5		Malta (2006)	4.2
Jordan (2006)	1.9		Mauritius (2006)	5.1
Lebanon (2006)	0.5		Morocco (2006)	3.4
Maldives (2004)	0.3		Occupied Palestinian Territory (2004)	2.8
Montenegro (2006)	1.8		Oman (2002)	4.6
Myanmar (2002)	0.5		Philippines (2006)	3.0
Nepal (2006)	0.8		Portugal (2006)	3.2
Pakistan (2000)	0.0		Russian Federation (2000)	4.8
Qatar (2004)	1.6		Singapore (2006)	2.7
Saudi Arabia (2002)	0.3		Slovakia (2006)	3.2
Serbia (2006)	1.1		Slovenia (2006)	2.7
Syrian Arab Republic (2006)	0.6		Spain (2006)	4.8
Tajikistan (2006)	1.1		The former Yugoslav Republic of Macedonia (2006)	5.1
Turkmenistan (2006)	0.5		Tunisia (2002)	3.2
Uganda (2004)	2.0		Turkey (2006)	2.5
Ukraine (2006)	2.1		Zambia (2000)	2.9
United Arab Emirates (2006)	1.7			
Yemen (2000)	0.4			
Median - highest Quartile (3)	**Rape**		**Above the highest Quartile (4)**	**Rape**
Argentina (2006)	8.3		Australia (2003)	91.6
Austria (2006)	8.5		Barbados (2000)	27.0
Bangladesh (2006)	7.5		Belgium (2004)	26.3
Bolivia (2006)	7.8		Belize (2006)	15.3
Brunei Darussalam (2006)	7.4		Canada (2006)	68.2
Bulgaria (2004)	6.8		El Salvador (2006)	18.7
Chile (2004)	11.4		England and Wales (2006)	25.6
Costa Rica (2006)	11.0		France (2004)	17.3
Czech Republic (2006)	5.2		Iceland (2004)	17.5
Denmark (2006)	9.7		Israel (2004)	15.2
Ecuador (2006)	11.2		Jamaica (2000)	50.8
Estonia (2006)	11.4		Mexico (2006)	12.8

Median - highest Quartile (3)	Rape		Above the highest Quartile (4)	Rape
(Contd.)				
Finland (2006)	11.6		Mongolia (2006)	13.5
Germany (2006)	9.9		Namibia (2002)	15.1
Ireland (2006)	10.0		New Zealand (2006)	32.2
Italy (2006)	7.7		Nicaragua (2006)	27.6
Kazakhstan (2006)	10.4		Northern Ireland (2006)	26.2
Latvia (2006)	5.7		Norway (2006)	18.0
Lithuania (2006)	7.5		Panama (2006)	24.1
Luxembourg (2002)	8.7		Papua New Guinea (2000)	24.0
Malaysia (2000)	5.2		Peru (2004)	20.8
Netherlands (2006)	8.7		Republic of Korea (2004)	13.3
Paraguay (2006)	6.0		Scotland (2006)	18.0
Poland (2006)	5.2		South Africa (2002)	113.5
Republic of Moldova (2006)	6.2		Suriname (2004)	45.2
Romania (2006)	5.2		Swaziland (2004)	76.1
Sri Lanka (2004)	7.4		Sweden (2006)	40.6
Switzerland (2006)	8.5		United States of America (2006)	30.2
Thailand (2006)	8.0		Zimbabwe (2004)	40.0
Uruguay (2000)	9.8			
Venezuela (Bolivarian Republic of) (2000)	12.0			
Mean	11.7			
1st Quartile	2.4			
Median	5.2			
3 rd Quartile	12.2			

Table 4. Mean annual changes in the rape rates

Country	Rape rate			Mean annual change 1996-2001	Mean annual change 2001-2006	Mean annual change 1996-2006
	1996	2001	2006			
Armenia *	1.2	0.9	0.3	-5.3	-18.6	-12.2
Azerbaijan	0.9	0.5	0.4	-11.6	-3.9	-7.8
Belarus	5.4	7.5	3.6	6.6	-13.5	-4.0
Belgium	14.2	22.6	26.3	9.8	3.0	6.4
Bulgaria *	9.3	7.4	6.8	-4.4	-1.7	-3.1
Canada	91.4	77.6	68.2	-3.2	-2.6	-2.9
Chile *	4.2	8.8	11.4	16.1	5.4	10.6
Croatia	2.0	3.9	4.2	13.8	1.8	7.6
Cyprus	1.1	2.3	3.4	16.0	8.7	12.3
Czech Republic	6.6	5.5	5.2	-3.5	-1.2	-2.4
Denmark	7.4	9.2	9.7	4.5	1.1	2.8
England and Wales	11.7	18.6	25.6	9.8	6.7	8.2
Estonia *	6.6	5.3	11.4	-4.3	16.4	5.6
Finland	7.7	8.9	11.6	2.8	5.6	4.2
Georgia *	0.9	1.0	3.8	1.0	30.8	14.9
Germany	7.6	9.6	9.9	4.8	0.5	2.6
Greece *	1.3	1.0	2.4	-4.9	18.2	6.0
Hungary *	4.1	5.8	2.6	7.1	-14.5	-4.3
India *	1.5	1.5	1.7	-0.3	2.2	1.0
Ireland *	4.9	5.8	10.0	3.3	11.4	7.3
Italy	2.0	4.3	7.7	16.2	12.4	14.3
Japan	1.2	1.8	1.5	8.3	-2.7	2.6
Kyrgyzstan *	7.8	6.5	5.1	-3.6	-4.6	-4.1
Latvia	5.3	5.1	5.7	-0.6	1.9	0.7
Lithuania	4.7	5.1	7.5	1.6	8.1	4.8
Maldives *	2.8	1.8	0.3	-8.1	-28.1	-18.7
Mauritius *	3.5	2.3	5.1	-8.4	17.5	3.8
Netherlands	9.2	10.8	8.7	3.3	-4.1	-0.5
New Zealand	26.6	21.5	32.2	-4.2	8.4	1.9
Northern Ireland	17.6	17.3	26.2	-0.3	8.7	4.1
Norway *	9.6	12.4	18.0	5.1	7.7	6.4
Peru *	18.5	22.5	20.8	4.0	-1.5	1.2
Poland	5.1	6.1	5.2	3.5	-3.0	0.2
Portugal	4.9	3.6	3.2	-5.8	-2.4	-4.1
Republic of Korea *	11.8	13.2	13.3	2.3	0.2	1.2
Republic of Moldova	5.8	4.7	6.2	-4.3	5.7	0.6
Romania	6.0	5.8	5.2	-0.9	-2.1	-1.5
Scotland	11.8	11.6	18.0	-0.2	9.2	4.4
Singapore *	2.8	3.0	2.7	2.0	-2.3	-0.2
Slovakia	3.9	3.1	3.2	-4.0	0.5	-1.8
Slovenia	3.4	5.0	2.7	7.6	-11.2	-2.3
Sri Lanka *	3.9	6.4	7.4	10.4	2.9	6.6
Sweden	14.2	23.5	40.6	10.6	11.6	11.1
Switzerland	4.9	6.3	8.5	5.3	6.3	5.8
Thailand*	5.9	6.4	8.0	1.7	4.4	3.0
Turkey *	1.2	1.9	2.5	10.2	5.5	7.8
Ukraine *	3.5	2.4	2.1	-7.4	-2.0	-4.7
United States of America	35.1	31.2	30.2	-2.3	-0.6	-1.5
Zimbabwe	28.7	44.7	40.0	9.3	-2.2	3.4

* Figure from adjacent year used as proxy

Table 5. Robbery rates in different countries (police recorded assaults/100,000 population)

Below the lowest Quartile (1)	Robbery		Lowest Quartile - Median (2)	Robbery
Albania (2002)	7.2		Bahrain (2006)	31.3
Armenia (2006)	5.6		Bosnia and Herzegovina (2006)	20.4
Azerbaijan (2006)	2.8		China (2000)	24.5
Bangladesh (2006)	0.6		Croatia (2006)	32.6
Brunei Darussalam (2006)	0.5		Czech Republic (2006)	46.8
Cyprus (2006)	9.5		Denmark (2006)	48.8
France (2004)	10.8		Finland (2006)	32.3
Iceland (2004)	12.0		Greece (2006)	23.4
India (2006)	1.6		Hungary (2004)	31.9
Japan (2006)	4.0		Indonesia (2000)	29.8
Jordan (2006)	14.0		Israel (2004)	36.3
Kuwait (2002)	11.2		Kenya (2006)	14.2
Lebanon (2006)	3.5		Kyrgyzstan (2006)	45.5
Montenegro (2006)	12.9		Mongolia (2006)	33.8
Myanmar (2002)	0.01		Norway (2006)	29.7
Nepal (2006)	0.5		Panama (2006)	38.1
Occupied Palestinian Territory (2005)	5.4		Paraguay (2006)	31.5
Oman (2002)	6.7		Republic of Moldova (2006)	23.3
Pakistan (2000)	0.1		Romania (2006)	18.9
Philippines (2006)	8.4		Serbia (2006)	37.5
Qatar (2004)	2.6		Singapore (2006)	21.7
Republic of Korea (2004)	10.4		Slovakia (2006)	29.6
Saudi Arabia (2000)	2.9		Slovenia (2006)	31.5
Syrian Arab Republic (2006)	4.3		Sri Lanka (2004)	41.0
Tajikistan (2006)	2.7		The former Yugoslav Republic of Macedonia (2006)	24.7
Tunisia (2002)	11.5		Turkey (2006)	28.5
Turkmenistan (2006)	2.9		Uganda (2004)	17.7
United Arab Emirates (2006)	13.2		Zambia (2000)	25.8

Median - highest Quartile (3)	Robbery		Above the highest Quartile (4)	Robbery
Algeria (2006)	72.4		Argentina (2006)	905.3
Australia (2002)	81.8		Barbados (2000)	170.1
Austria (2006)	61.6		Belarus (2006)	100.2
Bulgaria (2004)	53.0		Belgium (2004)	211.4
Canada (2006)	94.2		Belize (2006)	182.4
Colombia (2000)	61.7		Bolivia (2002)	110.9
El Salvador (2006)	92.0		Chile (2004)	1275.6
Estonia (2006)	74.7		Costa Rica (2006)	527.3
Georgia (2006)	62.4		Dominican Republic (2006)	556.4
Germany (2006)	65.2		Ecuador (2006)	398.8
Ireland (2006)	55.7		England and Wales (2006)	188.7
Jamaica (2000)	90.8		Guatemala (2000)	102.8
Kazakhstan (2006)	88.9		Italy (2006)	121.7
Luxembourg (2002)	95.8		Latvia (2006)	98.6
Malaysia (2006)	82.1		Lithuania (2006)	128.2
Malta (2006)	54.9		Maldives (2004)	161.9
Mauritius (2006)	88.3		Mexico (2006)	504.7
Morocco (2006)	83.4		Nicaragua (2006)	440.7
Netherlands (2006)	83.7		Peru (2004)	156.1
New Zealand (2006)	59.7		Portugal (2006)	197.3
Northern Ireland (2006)	90.4		South Africa (2002)	494.5
Papua New Guinea (2000)	63.0		Spain (2006)	201.2
Poland (2006)	92.2		Swaziland (2004)	304.2
Russian Federation (2000)	90.3		Thailand (2006)	107.1
Scotland (2006)	69.9		United States of America (2006)	146.4
Sweden (2006)	94.2		Uruguay (2004)	277.5
Switzerland (2006)	54.6		Venezuela (Bolivarian Republic of) (2000)	143.3
Ukraine (2006)	89.4		Zimbabwe (2004)	101.4

Table 6. Mean annual changes in the robbery rates

	Robbery rate			Mean annual change	Mean annual change	Mean annual change
	1996	2001	2006	1996-2001	2001-2006	1996-2006
Armenia *	3.7	5.3	5.6	7.6	1.1	4.3
Azerbaijan	3.2	2.2	2.8	-7.5	5.0	-1.5
Belarus *	52.9	56.4	100.2	1.3	12.2	6.6
Canada	107.5	88.0	94.2	-3.9	1.4	-1.3
Croatia	10.5	17.9	32.6	11.2	12.8	12.0
Cyprus	2.6	5.3	9.5	15.5	12.4	14.0
Czech Republic	41.5	42.8	46.8	0.6	1.8	1.2
Denmark	43.4	59.6	48.8	6.5	-3.9	1.2
England and Wales	144.0	231.8	188.7	10.0	-4.0	2.7
Estonia *	199.7	346.9	74.7	11.7	-26.4	-9.4
Finland	40.7	41.6	32.3	0.4	-4.9	-2.3
Germany	82.6	69.5	65.2	-3.4	-1.3	-2.3
Italy	54.7	66.4	121.7	4.0	12.9	8.3
Japan	2.0	5.0	4.0	20.8	-4.5	7.4
Kyrgyzstan *	36.1	30.2	45.5	-3.5	8.6	2.3
Latvia	118.9	129.9	98.6	1.8	-5.4	-1.9
Lithuania	96.6	120.2	128.2	4.5	1.3	2.9
Malaysia *	33.5	63.1	82.1	13.5	5.4	9.4
Mauritius *	84.4	97.6	88.3	2.9	-2.0	0.4
Netherlands	97.4	131.6	83.7	6.2	-8.7	-1.5
New Zealand	49.1	42.4	59.7	-2.9	7.1	2.0
Northern Ireland	103.8	131.5	90.4	4.8	-7.2	-1.4
Norway *	18.8	39.7	29.7	16.1	-5.7	4.7
Poland	68.0	129.9	92.2	13.8	-6.6	3.1
Portugal	128.1	169.3	197.3	5.7	3.1	4.4
Republic of Moldova	55.0	66.7	23.3	3.9	-19.0	-8.2
Romania	17.1	15.7	18.9	-1.7	3.8	1.0
Scotland	103.2	83.5	69.9	-4.1	-3.5	-3.8
Singapore *	21.4	11.5	21.7	-11.6	13.5	0.1
Slovakia	23.8	23.0	29.6	-0.7	5.2	2.2
Slovenia	25.7	27.1	31.5	1.1	3.1	2.1
Sweden	65.8	96.1	94.2	7.9	-0.4	3.7
Switzerland	31.6	31.2	54.6	-0.3	11.9	5.6
Turkey	2.4	2.5	28.5	0.1	63.2	27.8
Ukraine	54.4	43.8	89.4	-4.2	15.3	5.1

* Figure from adjacent year used as proxy

Table 7. Burglary rates in different countries (police recorded cases/100,000 population)

Below the lowest Quartile (1)	Burglary
Azerbaijan (2006)	1.7
Bangladesh (2006)	2.2
Bolivia (2002)	10.4
Costa Rica (2004)	3.9
El Salvador (2006)	0.0
India (2006)	8.0
Kenya (2006)	5.6
Kyrgyzstan (2006)	19.9
Maldives (2004)	9.0
Mexico (2006)	20.6
Morocco (2006)	23.3
Myanmar (2002)	0.0
Nepal (2006)	0.1
Occupied Palestinian Territory (2005)	3.0
Pakistan (2000)	0.1
Paraguay (2006)	13.4
Peru (2002)	26.9
Republic of Korea (2004)	4.4
Saudi Arabia (2002)	0.1
Singapore (2006)	25.7
Syrian Arab Republic (2006)	14.1
Tajikistan (2006)	1.5
Thailand (2000)	21.2
Uganda (2004)	25.1

Lowest Quartile - Median (2)	Burglary
Algeria (2006)	28.3
Armenia (2006)	27.8
Bahrain (2006)	52.9
Bosnia and Herzegovina (2006)	106.3
Brunei Darussalam (2006)	145.7
Chile (2004)	134.0
China (2000)	90.7
Colombia (2000)	33.6
Ecuador (2006)	111.3
Estonia (2004)	40.5
Georgia (2006)	113.7
Jamaica (2000)	94.5
Latvia (2006)	89.2
Malaysia (2006)	104.7
Mongolia (2006)	88.5
Norway (2006)	75.0
Papua New Guinea (2000)	48.6
Qatar (2004)	50.6
Republic of Moldova (2006)	105.2
Romania (2006)	79.8
Sri Lanka (2004)	88.5
Tunisia (2000)	81.3
United Arab Emirates (2004)	54.7
Zambia (2000)	94.3

Median - highest Quartile (3)	Burglary
Belarus (2006)	316.6
Belize (2006)	523.9
Bulgaria (2004)	328.2
Croatia (2006)	458.1
Cyprus (2006)	363.1
Czech Republic (2006)	523.3
Finland (2006)	467.2
Greece (2006)	292.3
Hungary (2004)	442.2
Italy (2006)	190.2
Japan (2000)	234.0
Lithuania (2006)	195.9
Malta (2006)	321.1
Mauritius (2006)	186.4
Netherlands (2006)	427.5
Poland (2006)	455.3
Portugal (2006)	429.1
Serbia (2006)	151.0
Slovakia (2006)	186.8
Suriname (2004)	442.1
The former Yugoslav Republic of Macedonia (2006)	443.7
Turkey (2006)	216.9
Uruguay (2004)	251.9

Above the highest Quartile (4)	Burglary
Australia (2006)	1530.2
Austria (2006)	1203.3
Barbados (2000)	1177.4
Belgium (2004)	586.6
Canada (2006)	680.9
Denmark (2006)	1317.9
England and Wales (2006)	1157.7
France (2004)	622.4
Germany (2006)	631.6
Iceland (2004)	950.4
Ireland (2006)	567.9
Israel (2004)	1844.5
Luxembourg (2002)	659.1
New Zealand (2006)	1476.3
Northern Ireland (2006)	663.9
Scotland (2006)	597.6
Slovenia (2006)	902.9
South Africa (2002)	852.8
Spain (2006)	878.9
Swaziland (2004)	749.1
Sweden (2006)	1094.2
Switzerland (2006)	758.1
United States of America (2006)	714.4
Zimbabwe (2004)	540.8

Mean	339
1st Quartile	27
Median	146
3rd Quartile	532

Table 8. Mean annual changes in the burglary rates

	Burglary rate			Mean annual change	Mean annual change	Mean annual change
	1996	2001	2006	1996-2001	2001-2006	1996-2006
Belarus	120.7	266.7	316.6	17.2	3.5	10.1
Canada	1 342.1	901.7	680.9	-7.6	-5.5	-6.6
Croatia	316.7	477.7	458.1	8.6	-0.8	3.8
Cyprus	177.5	100.5	363.1	-10.8	29.3	7.4
Czech Republic	955.4	618.9	523.3	-8.3	-3.3	-5.8
Denmark	2 083.7	1 774.5	1 317.9	-3.2	-5.8	-4.5
England and Wales	2 265.3	1 677.9	1 157.7	-5.8	-7.2	-6.5
Finland	1 015.5	767.0	467.2	-5.5	-9.4	-7.5
Latvia	41.9	524.2	89.2	65.7	-29.8	7.8
Malaysia *	108.1	141.4	104.7	5.5	-5.8	-0.3
Mauritius *	99.1	132.6	186.4	6.0	7.0	6.5
Netherlands	676.4	573.1	427.5	-3.3	-5.7	-4.5
New Zealand	2 148.2	1 521.2	1 476.3	-6.7	-0.6	-3.7
Northern Ireland	969.7	1 014.8	663.9	0.9	-8.1	-3.7
Norway *	100.6	118.1	75.0	3.3	-8.7	-2.9
Poland	791.9	848.6	455.3	1.4	-11.7	-5.4
Portugal	499.1	422.0	429.1	-3.3	0.3	-1.5
Republic of Moldova	110.7	53.6	105.2	-13.5	14.4	-0.5
Romania	128.6	79.8	79.8	-9.1	0.0	-4.7
Scotland	1 266.1	886.0	597.6	-6.9	-7.6	-7.2
Singapore *	48.3	24.7	25.7	-12.6	0.8	-6.1
Slovakia	586.5	437.5	186.8	-5.7	-15.6	-10.8
Slovenia	392.0	744.4	902.9	13.7	3.9	8.7
Sweden	1 638.0	1 327.7	1 094.2	-4.1	-3.8	-4.0
Switzerland	1 050.1	793.7	758.1	-5.4	-0.9	-3.2
United States of America	914.5	727.3	714.4	-4.5	-0.4	-2.4

* Figure from adjacent year used as proxy

Table 9. Motor vehicle theft rates in different countries (police recorded cases/100,000 population)

Below the lowest Quartile (1)	Car theft		Lowest Quartile - Median (2)	Car theft
Albania (2002)	6.4		Belarus (2006)	16.0
Algeria (2006)	6.9		Belize (2006)	21.5
Armenia (2006)	4.3		Bolivia (2006)	35.1
Azerbaijan (2006)	1.4		China (2000)	35.5
Bangladesh (2006)	0.7		Côte d'Ivoire (2000)	17.1
Georgia (2006)	4.1		Dominican Republic (2006)	30.6
India (2006)	7.9		El Salvador (2006)	20.7
Kazakhstan (2006)	3.0		Hong Kong (2004)	25.4
Kenya (2006)	0.1		Indonesia (2000)	14.2
Kyrgyzstan (2006)	4.1		Jamaica (2000)	10.0
Mongolia (2006)	3.6		Japan (2006)	28.3
Morocco (2006)	4.4		Jordan (2006)	42.4
Myanmar (2002)	0.1		Lesotho (1997)	27.7
Namibia (2002)	3.2		Montenegro (2006)	15.8
Nepal (2006)	0.1		Oman (2002)	17.0
Nicaragua (2006)	3.6		Panama (2006)	18.8
Occupied Palestinian Territory (2005)	7.6		Papua New Guinea (2000)	14.0
Pakistan (2000)	0.1		Paraguay (2006)	24.6
Qatar (2004)	7.9		Peru (2004)	38.7
Republic of Moldova (2006)	3.7		Russian Federation (2006)	17.8
Romania (2006)	5.9		Serbia (2006)	39.0
Sri Lanka (2004)	4.2		Singapore (2006)	20.6

Below the lowest Quartile (1)	Car theft
(Contd.)	
Syrian Arab Republic (2006)	4.5
Tajikistan (2006)	0.6
Turkmenistan (2006)	0.0
Uganda (1997)	2.1
United Republic of Tanzania (1997)	0.8
Yemen (2000)	4.5
Zambia (2000)	7.6

Lowest Quartile - Median (2)	Car theft
Suriname (2004)	8.1
Swaziland (2004)	27.5
Thailand (2006)	35.1
The Former Yugoslavian Republic of Macedonia (2006)	17.9
Tunisia (2002)	17.6
Ukraine (2006)	11.9
United Arab Emirates (2006)	14.3
Zimbabwe (2000)	8.8

Median - highest Quartile (3)	Car theft
Argentina (2006)	84.9
Austria (2006)	78.5
Barbados (2000)	88.6
Bosnia and Herzegovina (2006)	64.5
Brunei Darussalam (2006)	44.8
Bulgaria (2000)	99.0
Chile (2004)	57.9
Colombia (2000)	83.3
Costa Rica (2006)	127.4
Croatia (2006)	45.8
Ecuador (2006)	53.7
Estonia (2004)	46.5
Fiji (1997)	54.9
Germany (2006)	51.4
Guatemala (2000)	63.0
Hungary (2004)	73.8
Iran (2004)	134.9
Kuwait (1996)	57.3
Latvia (2006)	95.1
Lebanon (2006)	47.8
Lithuania (2006)	93.7
Luxembourg (2002)	128.4
Maldives (2004)	109.6
Mauritius (2006)	79.6
Mexico (2006)	136.8
Poland (2006)	80.0
Saudi Arabia (2002)	85.4
Slovakia (2006)	96.9
Slovenia (2006)	42.5
Turkey (2006)	45.9

Above the highest Quartile (4)	Car theft
Australia (2004)	436.2
Bahamas (1997)	334.0
Bahrain (2006)	289.3
Belgium (2004)	180.4
Canada (2006)	268.3
Cyprus (2006)	211.1
Czech Republic (2006)	205.3
Denmark (2006)	281.9
England and Wales (2006)	360.0
Finland (2006)	290.3
France (2004)	323.4
Greece (2006)	138.6
Iceland (2004)	150.3
Ireland (2004)	326.3
Israel (2004)	469.4
Italy (2006)	475.0
Malaysia (2006)	315.3
Malta (2006)	144.4
Netherlands (2006)	138.3
New Zealand (2006)	563.2
Northern Ireland (2006)	196.3
Norway (2006)	312.6
Portugal (2006)	231.3
Scotland (2006)	293.1
South Africa (2002)	201.6
Spain (2006)	271.9
Sweden (2006)	566.7
Switzerland (2006)	768.8
United States of America (2006)	390.2
Uruguay (2004)	140.7

Mean	118
1st Quartile	4
Median	46
3rd Quartile	135

Table 10. Mean annual changes in the motor vehicle theft rates

	Motor vechile theft rate			Mean annual change	Mean annual change	Mean annual change
	1996	2001	2006	1996-2001	2001-2006	1996-2006
Azerbaijan	1.4	0.9	1.4	-8.8	9.0	-0.3
Belarus	19.5	16.6	16.0	-3.2	-0.7	-2.0
Bulgaria *	145.6	140.9	99.0	-0.6	-6.8	-3.8
Canada	608.8	544.0	268.3	-2.2	-13.2	-7.9
Costa Rica	30.5	109.1	127.4	29.0	3.2	15.4
Croatia	44.0	49.6	45.8	2.4	-1.6	0.4
Czech Republic	267.0	230.6	205.3	-2.9	-2.3	-2.6
Denmark	822.7	550.3	281.9	-7.7	-12.5	-10.2
England and Wales	959.9	626.7	360.0	-8.2	-10.5	-9.3
Finland	395.3	435.5	290.3	2.0	-7.8	-3.0
Georgia	9.2	5.1	4.1	-11.0	-4.4	-7.8
Germany	208.9	91.8	51.4	-15.2	-11.0	-13.1
Greece *	136.6	77.6	138.6	-10.7	12.3	0.2
Hong Kong Ukraine *	40.5	42.1	42.1	0.7	0.0	0.4
Hungary *	156.7	91.1	73.8	-10.3	-4.1	-7.2
Ireland *	368.5	396.0	396.0	1.5	0.0	0.7
Italy	556.1	411.7	475.0	-5.8	2.9	-1.6
Japan	218.0	49.9	28.3	-25.5	-10.7	-18.5
Kyrgyzstan *	5.6	3.3	4.1	-10.1	4.6	-3.0
Latvia	102.4	117.6	95.1	2.8	-4.2	-0.7
Lithuania	108.3	167.2	93.7	9.1	-10.9	-1.4
Malaysia (2006)	119.2	240.1	315.3	15.0	5.6	10.2
Mexico (2006)	158.9	148.5	136.8	-1.4	-1.6	-1.5
Netherlands	235.5	219.0	138.3	-1.4	-8.8	-5.2
New Zealand	849.1	538.3	563.2	-8.7	0.9	-4.0
Northern Ireland	505.7	688.7	196.3	6.4	-22.2	-9.0
Norway *	393.4	520.5	312.6	5.8	-9.7	-2.3
Paraguay *	37.0	26.2	24.6	-6.6	-1.3	-4.0
Poland	123.2	154.9	80.0	4.7	-12.4	-4.2
Portugal	198.7	254.4	231.3	5.1	-1.9	1.5
Republic of Moldova	36.0	17.4	3.7	-13.5	-26.7	-20.4
Romania	8.0	8.5	5.9	1.3	-7.1	-3.0
Scotland	670.8	458.3	293.1	-7.3	-8.5	-7.9
Singapore *	68.7	41.1	20.6	-9.8	-12.9	-11.3
Slovakia	124.6	94.6	96.9	-5.4	0.5	-2.5
Slovenia	74.1	43.2	42.5	-10.3	-0.3	-5.4
Spain *	233.6	334.3	271.9	7.4	-4.0	1.5
Sweden	809.0	675.7	566.7	-3.5	-3.5	-3.5
Turkey *	36.2	22.5	45.9	-9.1	15.3	2.4
Ukraine *	7.8	6.5	11.9	-3.6	12.9	4.4
United States of America	508.7	422.1	390.2	-3.7	-1.6	-2.6
Zimbabwe *	11.4	10.8	8.8	-1.1	-4.0	-2.6

* adjacent year used as proxy

Table 11. Kidnapping rates in different countries (police recorded cases/100,000 population)

Below the lowest Quartile (1)	Kidnapping		Lowest Quartile - Median (2)	Kidnapping
Austria (2004)	0.05		Albania (2001)	0.49
Brunei Darussalam (2004)	0.00		Algeria (2006)	0.44
Costa Rica (2006)	0.11		Azerbaijan (2006)	0.25
Croatia (2006)	0.16		Belarus (2006)	0.24
Czech Republic (2002)	0.16		Bosnia and Herzegovina (2006)	0.24
Dominican Republic (2006)	0.14		Denmark (2006)	0.30
Egypt (2006)	0.02		Ecuador (2006)	0.36
El Salvador (2006)	0.13		Hungary (2006)	0.19
Estonia (2006)	0.07		Italy (2006)	0.47
Finland (2004)	0.02		Kyrgyzstan (2002)	0.25
Germany (2002)	0.17		Latvia (2004)	0.35
Japan (2006)	0.15		Maldives (2006)	0.35
Mongolia (2006)	0.04		Morocco (2006)	0.27
Myanmar (2006)	0.004		Oman (2006)	0.20
Nicaragua (2004)	0.11		Panama (2006)	0.46
Paraguay (2005)	0.08		Peru (2002)	0.41
Philippines (2006)	0.03		Republic of Moldova (2006)	0.35
Poland (2005)	0.06		Saudi Arabia (2002)	0.49
Singapore (2006)	0.02		Serbia (2006)	0.19
Tajikistan (2006)	0.08		Slovakia (2006)	0.30
Thailand (2006)	0.02		Slovenia (2006)	0.30
Uruguay (2006)	0.09		Syrian Arab Republic (2002)	0.27
Median - highest Quartile (3)	Kidnapping		**Above the highest Quartile (4)**	Kidnapping
Armenia (2006)	0.85		Australia (2006)	3.81
Bangladesh (2006)	0.72		Bahrain (2004)	2.82
Bolivia (2002)	0.53		Belgium (2006)	3.68
Chile (2006)	0.71		Belize (2002)	2.77
Cyprus (2006)	1.78		Bulgaria (2002)	2.46
Georgia (2003)	0.77		Canada (2006)	13.82
Iceland (2006)	0.70		England and Wales (2006)	4.41
Ireland (2006)	1.87		France (2006)	3.53
Jordan (2005)	0.59		India (2006)	2.09
Kazakhstan (2006)	0.55		Kuwait (2006)	11.52
Lebanon (2004)	0.90		Luxembourg (2006)	5.14
Lithuania (2006)	1.77		Northern Ireland (2006)	3.10
Mexico (2006)	0.56		Occupied Palestinian Territory (2006)	5.37
Montenegro (2006)	0.64		Portugal (2006)	5.25
Nepal (2006)	0.89		Scotland (2004)	7.45
New Zealand (2006)	0.91		South Africa (2004)	6.65
Qatar (2004)	0.75		Sri Lanka (2006)	4.48
Romania (2006)	1.34		Swaziland (2006)	8.61
Spain (2004)	0.51		Switzerland (2004)	3.66
The former Yugoslav Republic of Macedonia (2002)	1.18		Tunisia (2006)	5.77
Ukraine (2004)	0.50		Turkey (2006)	14.84
Zimbabwe (2006)	1.58		Turkmenistan (2006)	2.66
			United Arab Emirates (2006)	1.94

Mean	1.7
1st Quartile	0.2
Median	0.5
3rd Quartile	1.9

Chapter 3 – Drug crime

Steven Malby*

Abstract

This chapter presents available police-recorded data on drug crime. Whilst many forms of crime may ultimately be driven by or related in some way to the use or effects of narcotic drugs or psychotropic substances, most countries also employ specific laws concerning the production, use, purchase and sale of drugs. It is offences under these specific laws with which this chapter is concerned. The chapter demonstrates the challenges of collection and cross-national comparability of data on drug crime with reference to applicable international definitions and the translation of such definitions into national laws. It explores regional differences between the proportion of major to minor police-recorded drug offences and examines available trends in drug-crime. It concludes that levels of police-recorded drug offences are likely driven as much by law enforcement policies and priorities concerning narcotic drugs and psychotropic substances as they are by underlying levels of drug use and markets.

Introduction

Crime recorded by law enforcement agencies may be directly or indirectly related to drugs. A proportion of crimes such as robbery, theft, assault or burglary are driven by underlying factors such as drug use. However, from a statistical point of view, the extent to which drug use is responsible for such crimes is not easily captured and rarely forms part of official reports. On the other hand, law enforcement agencies in most countries produce and retain information on offences that directly involve narcotic drugs or psychotropic substances.

Collecting and analyzing such data on a cross-national basis presents a considerable challenge. National drug laws show significant variations in the extent to which the range of possible actions involving drugs (such as cultivation, possession, use, or sale) are made into criminal offences. National laws further differ on the extent to which criminal sanctions apply according to the particular drug and the specific amount in question.

Guidance on appropriate definitions in this respect may be obtained from the international framework for drug control. This consists of three drug-related treaties: The Single Convention on Narcotic Drugs of 1961 (as amended by the 1972 Protocol), the Convention on Psychotropic Substances of 1971, and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988. Over 95 percent of all States have chosen to become parties to the conventions. The conventions require parties to establish a wide range of drug-related activities as criminal offences under their domestic law.

The Conventions do, however, grant some latitude with regard to the penalization of personal consumption-related offences. Parties to the 1961 Convention, for example, are under obligation not to permit the possession of drugs for personal non-medical consumption. Parties to the 1988 Convention are required to establish as criminal offences activities preparatory to personal consumption (possession, purchase or cultivation), subject to each party's constitutional principles and basic legal concepts.

Analysis of the wording of the Conventions indicates that there is a sharp distinction between offences related to drug *trafficking* and offences related to *personal use* of illicit drugs. This distinction can be used to define three broad categories for data collection on offences involving drugs:

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- **Drug-related crime (**corresponding to all offences involving drugs);
- **Drug possession/use** (the 'less serious' offence corresponding most closely to personal use offences); and
- **Drug trafficking** (the 'more serious' offence corresponding more closely to the production, manufacture, delivery or sale of drugs not for personal use).

The Sixth to Tenth United Nations Surveys of Crime Trends and Operations of Criminal Justice Systems (UN-CTS), covering the years 1995 to 2006, collected data on the first of these categories; total drug-related crime. The definition supplied was drawn from the international drug conventions and included cultivation, production, manufacture, extraction, preparation, offering for sale, distribution, purchase, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit, transport, importation, exportation, possession or trafficking of internationally controlled drugs.

The Tenth UN-CTS (2005-2006) collected data both on total drug-related crime, and also on drug trafficking, which it defined as 'drug offences, which are not in connection with personal use'. The Eleventh UN-CTS (2007-2008) (data from which is not included in this analysis) expanded the questions further to cover all three categories – total drug-related crime, possession/use, and drug trafficking.

Drug crime data collection at the national and international level

Whilst the exact border between possession/use and trafficking offences will differ as between countries, the use of these categories offers a broad approach to data collection on less and more serious drug offences. In national law and practice, the distinction is likely to be made either by reference to the quantity of drugs involved or through the way in which the offender operates (such as part of organized criminal operations). The distinction may be set out in a separate 'trafficking' offence, or simply by an additional criterion applied to a single general drug-related crime offence.

For example, in Austria, offences akin to 'trafficking' are distinguished based on the quantity of drug involved and an '*intention to put it on the market*'. The 'trafficking' offence is set out separately in law (Articles 28 (narcotic drugs) and 31 (psychotropic substances) of the Narcotic Substances Act (*Suchtmittelgesetz*)) and Austria reports offences recorded under Articles 28 and 31 at the international level when asked for drug 'trafficking' offences under the definition '*not solely in connection with personal use*'. A general primary offence (Article 27) covers possession, production, import, export and purchase of quantities that do not qualify for the more serious Article 28 offence. Article 27 further includes a '*personal use*' exception that allows for a lesser sentence in the case of personal use.

In Germany, a general primary offence (Article 29 Narcotic Substances Act (*Betäubungsmittelgesetz*)) covers all drug-related activities, including cultivation, production, trade, import, export, sale, transfer, making available, buying and possession. The law allows the prosecutor or the court to drop a case with respect to small quantities for personal consumption only. In addition to the 'small quantity' provisions, the Act also specifies 'large quantities' (most important in Article 29a). In order to construct the number of drug 'trafficking' offences it is necessary to add the relevant criminological categories of police statistics together from the general primary offence and the different qualified offences (Articles 29a to 30b, mainly covering aggravated forms of trafficking, such as trafficking of large quantities). These statistical categories include illegal trade or smuggling, illegal importation of large quantities, cultivation, production or trading, giving drugs to minors, and irresponsibly causing the death of another by giving him or her drugs. Moreover, the distinction for these categories can be made with respect to either 'medium' quantities of drugs (not 'small' or 'large') or only in respect of 'large quantities'. As shown in box 2 in this chapter, this distinction can cause difficulties in the comparability of data, depending upon the approach adopted to reporting of data at the international or regional level.

Such examples illustrate the complexity of translating data recorded under national offence definitions into figures with some degree of cross-national comparability. Such differences are not limited to the national level only however. At the international and regional level, a range of approaches to data collection on drug crime exist.

Table 1 below sets out the definitions and units of count used for data collection by five cross-national data collection initiatives – (i) the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, (ii) the UNODC 'Annual Reports Questionnaire' used for data collection on drug issues, (iii) the crime and criminal justice data collection of the Statistical Office of the European Union (Eurostat), (iv) the European Sourcebook of Crime and Criminal Justice Statistics (European Sourcebook), and (v) data collected by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA).

As table 1 demonstrates, whilst these five data collection initiatives adopt the same underlying approach to data collection (based on total drug-related crime, drug possession/use, and drug trafficking) they sometimes use subtly different definitions and counting unit approaches.

As shown in box 1, this can result, for example, in different data being provided for the same definition, or even the same data provided for different definitions. As such, reconciling data collected on drug crime by different cross-national initiatives represents a significant challenge in understanding underlying changes in levels and trends of drug offences.

Table 1. Definitions, units of count and metadata used by five cross-national data collection initiatives on drug crime

Data Collection Instrument	▪ **UNCTS**				
Geographic Coverage	▪ **All UN Member states**				
Data Collection Frequency	▪ **Biennial**				
Crime Category	**Definition applied**	**Unit of Count**			**Other Metadata**
		Cases/ Offences	**Arrested**	**Convicted**	
Total	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, exportation and possession of internationally controlled drugs	✓	✓	✓	▪ Tick box for where definition differs ▪ Free text comments field
Use	Drug offences related to drug use or possession for use (11th CTS only)	✓	✓	✓	▪ Tick box for where definition differs ▪ Free text comments field
Trafficking	Drug offences, which are not in connection with personal use	✓	✓	✓	▪ Tick box for where definition differs ▪ Free text comments field
Data Collection Instrument	▪ **UN ARQ**				
Geographic Coverage	▪ **All UN Member States**				
Data Collection Frequency	▪ **Annual**				
Crime Category	**Definition applied**	**Unit of Count**			**Other Metadata**
		Cases/ Offences	**Arrested**	**Convicted**	
Total		Data not collected			
Use	Possession/abuse of drugs	✓	✓	✓	▪ Disaggregation for offences and persons arrested by drug type, gender, age group and occupation of perpetrator ▪ Tick box for unit of count and option to use other unit
Trafficking	Trafficking of drugs (includes arrests made in the context of illicit cultivation and manufacture of drugs)	✓	✓	✓	▪ Disaggregation for offences and persons arrested by drug type, gender, age group, occupation, nationality of perpetrator ▪ Tick box for unit of count and option to use other unit ▪ Free text field for description of drug trafficking groups

Data Collection Instrument	▪ Eurostat crime and criminal justice statistics				
Geographic Coverage	▪ EU-27 ▪ EU Candidate: HR, MK, TR ▪ EU Potential Candidate: AL, BiH, Kosovo under UNSCR 1244, Montenegro, Serbia ▪ EFTA/EEA: IS, LI, NO, CH ▪ Other countries: Australia, Canada, Japan, New Zealand, Russian Federation, USA, South Africa				
Data Collection Frequency	▪ Annual				
Crime Category	Definition applied	Unit of Count			Other Metadata
		Cases/ Offences	Arrested	Convicted	
Total	Data not collected				
Use	Data not collected				
Trafficking	Includes illegal possession, cultivation, production, supplying, transportation, importing, exporting, financing etc. of drug operations which are not solely in connection with personal use	✓			▪ Metadata by country including information on penal code, counting unit and attempts

Data Collection Instrument	▪ European Sourcebook of Crime and Criminal Justice Statistics				
Geographic Coverage	▪ EU-27 except LU, MT, ES ▪ EU Candidate: HR, TR ▪ EU Potential Candidate: AL ▪ EFTA/EEA: IS, CH ▪ Other countries: Armenia, Georgia, Russian Federation, Moldova, Ukraine				
Data Collection Frequency	▪ Ad hoc				
Crime Category	Definition applied	Unit of Count			Other Metadata
		Cases/ Offences	Arrested	Convicted	
Total	Included possession, cultivation, production, sale, supplying, transportation, importation, exportation and financing of drug operations	✓	✓	✓	▪ Metadata by country including whether total drug offences includes possession of small quantities, transportation, importation, exportation and financing of drug operations.
Use	Data not collected				
Trafficking	Includes, where possible, drug offences which are not in connection with personal use	✓	✓	✓	▪ Metadata by country

Data Collection Instrument	▪ European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)				
Geographic Coverage	▪ EU-27 (except HU & SK) ▪ EU Candidate: HR, TR (MK not reporting) ▪ EFTA/EEA: NO				
Data Collection Frequency	▪ Annual				
Crime Category	Definition applied	Unit of Count			Other Metadata
		Cases/ Offences	Arrested	Convicted	
Total	Number of reports of all offences against national drug legislation (use, possession, trafficking, etc.) – criminal and non criminal – reported by all law enforcement agencies at national level during the year	✓	✓?		▪ Metadata by country for statistical units and counting rules [*Unit of count varies by country between offences (all/main), persons (double counting possible) and cases(double counting possible)*], stage in the criminal justice system of the statistics, geographic coverage, details of categories 'other', details on deviations. ▪ Data by drug type and broad type of drug law offence (use, supply)
Use	The category 'Drug-related use/possession' refers to drug law offences which are related to drug use and/or possession for use. (PT-ES-IT-	✓	✓?		

	includes administrative sanctions)				
Supply	The category 'Drug-related dealing/trafficking/production' refers to drug law offences which are related to drug dealing and/or drug trafficking/smuggling and/or drug production or any other offence related to these types of illicit activities	✓	✓?		
Use and supply	The category 'Drug-related use and trafficking' refers to offences of use and trafficking simultaneously (not applicable when counting offences or main offences); it may also refer to a specific category existing in some countries in their national monitoring system.	✓	✓?		

In addition to exact definitions used, further challenges arise from the counting unit used by law enforcement authorities and requested by cross-national data collections. The UN-CTS questionnaire, for instance, requests both police-recorded drug 'offences' and 'suspects'. The definition of 'suspects' in particular may differ significantly at different stages of the system (for example, persons 'suspected' by the police of having committed an offence, or persons 'referred' by the police to prosecutorial or judicial authorities). Due to the challenges of comparing 'suspect' data, the analysis in this chapter is limited to police-recorded *offences*. The analysis covers both most recent data (rates per 100,000 population) reported for as many countries as possible, in addition to trend analysis for a smaller selection of countries.

Box 1. Cross-national data collection challenges

Responses provided to the UN-CTS, Eurostat and European Sourcebook questions on drug trafficking for the year 2006 illustrate the data collection challenges for this crime type. Use of the *same* definition by two questionnaires (UN-CTS and Eurostat) resulted in the reporting of *different* data by Switzerland. In contrast, Denmark reported approximately the *same* data for two *different* definitions:

Same definition / different data: Switzerland 2006	
10th CTS	**Eurostat**
Drug trafficking ('not in connection with personal use')	Drug trafficking ('not in connection with personal use')
47,001	**6,296**

Different definitions / same data: Denmark 2006		
European Sourcebook	**Eurostat (2008 edition)**	**European Sourcebook**
Aggravated drug-trafficking	Drug-trafficking	Drug trafficking
1,106	**1,111**	**2,912**

Possible reasons for such differences may include the fact that different national agencies respond to different data collections, that data may refer to different points in time, and that lack of metadata in data collection instruments do not allow for correct interpretation of figures provided. Remedies include enriching data with as much additional information (metadata) as possible, in addition to the nomination of a single focal point responsible for provision of data at the international or regional level. The inconsistencies shown above have largely been resolved in subsequent years. Switzerland, for example, revised its figure for drug trafficking for 2006 to 6,296 in its later reporting to the 11th UN-CTS. Denmark revised its figure for 2006 for drug trafficking reported to Eurostat to 2,917 in the 2009 edition of Eurostat *Statistics in Focus*.

Relationship between total drug-related crime and drug trafficking

Despite the challenges of drug crime data recording and collection at national and international level, it nonetheless remains possible to carry out some analysis, at least when dealing with a single data source such as the UN-CTS.

A first approach to analysis that may prove informative concerns the relationship between overall, or total, drug-related crime, and the more serious end of the spectrum of drug crime, such as drug trafficking. Whilst drug trafficking offences are themselves often included in the total number of drug-related crime offences reported, examination of the relative size of the two numbers (total offences and trafficking offences) nonetheless provides some indication of the response of the criminal justice system to drug issues.

Where a large number of, more minor, drug personal use offences are recorded, the total number of recorded drug-related offences is likely to be relatively large in comparison to drug trafficking offences. In comparison, where the criminal justice system does not focus on more minor offences, drug trafficking offences may constitute a greater proportion of overall drug-related crime.

The table in the Annex to this chapter shows rates per 100,000 population of police-recorded total drug-related crime and drug trafficking as reported to the UN-CTS, for the latest available year after 2000. As noted above, data for drug trafficking were only collected by the Tenth UN-CTS, covering the years 2005 and 2006.

Data from some 109 countries for which information is available indicates that the median rate for total drug-related offences (latest available year, 2002-2006) is **45 per 100,000 population**.

In contrast, the median rate for drug trafficking offences (55 countries, latest available year, 2005-2006) is **20 per 100,000 population**.

Both measures, however, show a huge range of values. Total drug-related offences show a maximum of 868 per 100,000 population and a minimum reported value of 0.15 per 100,000 population. The range of responses for drug trafficking offences shows a maximum of 628 per 100,000 population and a minimum of 0.07 per 100,000 population.

Caution must however be exercised in the interpretation of results. The number of drug offences recorded is a product both of the extent of underlying drug activity and the extent of drug enforcement activities. As a result, it is possible that countries with relatively minor drug problems can have drug offence rates higher than those with very severe ones.

Data published by UNODC in the World Drug Report 2009, for example, suggests that law enforcement priorities play a particularly important role when it comes to levels of police-recorded drug offences. Of all countries which showed an increase in drug trafficking offences over a two year period, for example, almost 70 percent also showed an increase in possession offences (UNODC 2009). This strong association suggests that overall levels of recorded offences may be driven by law enforcement priorities as much as changes in the drug situation itself.

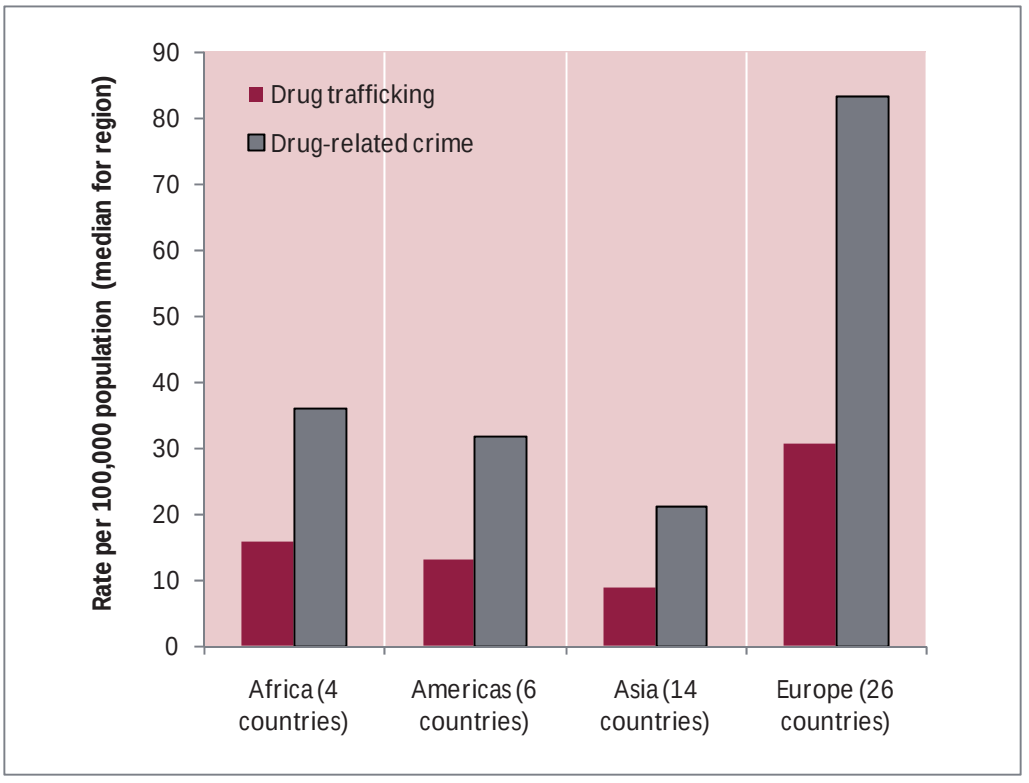
At the regional level, despite the limited number of countries for which data is available (Africa, 4 countries; Americas, 6 countries; Asia, 14 countries; Europe, 26 countries) some patterns can nonetheless be identified.

Figure 1 shows police-recorded rates per 100,000 population for both total drug-related offences and drug trafficking offences.

Median rates of police-recorded drug trafficking offences are reasonably comparable. This is likely due to the somewhat more restricted definition of this crime, than the more general 'total drug-related offences'.

Police-recorded drug trafficking rates per 100,000 population were highest in Europe (around 30 per 100,000 population) and lowest in Asia (around 10 per 100,000 population). Rates of total police-recorded drug-related crime showed considerably greater variability with a particularly high number of drug-related crime offences in Europe (over 80 per 100,000 population) as compared with other regions.

Figure 1. Median regional drug trafficking and total drug-related offence rates (2005/2006) per 100,000 population



In interpretation of the results, it should be noted that reporting practices differed as between respondent States with respect to whether numbers for the more serious 'trafficking' offence were included in the 'total' drug-related crime figure.

Nonetheless, in general, whether trafficking was included in the total or not, it can be considered that the majority of the 'total drug-related crime' figure likely corresponds to the less serious possession/use offence. This would suggest that law enforcement place a greater emphasis in the countries of Europe on less serious offences relative to more serious offences than in other regions of the world.

Further exploration of the link between levels of police-recorded total drug-related crime and drug trafficking shows a weak association. Figure 2 shows a scatter plot of rates of police-recorded total drug-related crime (x) against police-recorded drug trafficking (y) for the 51 countries (excluding 2 outliers) that reported both figures to the Tenth UN-CTS.

Figure 2. Police-recorded drug-related crime and drug-trafficking, by region (each data point corresponds to one country)

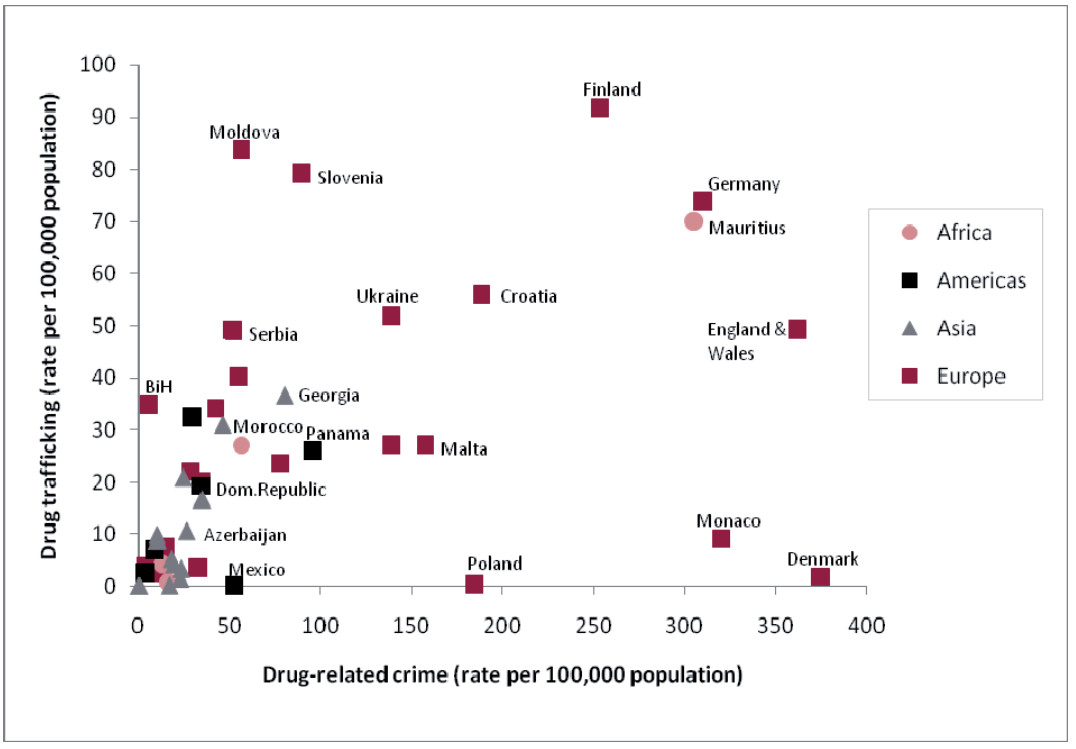


Figure 2 shows a range of values of police-recorded drug trafficking compared to police-recorded total drug-related crime. In very general terms however, at the national level, increased levels of police-recorded drug-related crime do seem to go hand-in-hand with increased levels of police-recorded drug trafficking offences.

Both the broad correlation and variability can likely be explained by a combination of underlying drug use/trafficking levels and the range of law enforcement priorities. A higher underlying level of drug use naturally requires cultivation, manufacture, import, handling and sale of drugs. Assuming equal distribution of police resources across crime types, this may well be reflected in increased contact of both drug traffickers and drug users with law enforcement officers.

On the other hand, in some countries, national drug policies that specifically target the more serious drug offences, such as trafficking, may result in a different ratio of overall drug-related crime to drug trafficking.

Figure 2 suggests that such variability is greater for countries in Europe, than for Africa, the Americas and Asia. Countries in East and South East Europe, for example, show rates of drug trafficking offences that are much closer to total drug-related crime than those for countries in West and Central Europe. This likely indicates either different distinctions between less and more serious drug offences in criminal laws, or different law enforcement priorities in practice.

Overall, figure 2 shows that a large range of national approaches lie behind the global median values of 45 offences per 100,000 population for total drug-related crime and 20 offences per 100,000 population for drug trafficking (a ratio of around 2:1). A number of factors may mean that in any individual country, law enforcement authorities could record up to more than one hundred times as many total drug-related offences as drug trafficking offences.

Box 2. Drug-crime data collection challenges (Country example: Germany)

Country example: Germany

Data reported by Germany to a number of cross-national data collection initiatives well exemplify the challenges of data collection on drug crime. Figures I and II show counts for total drug-related crime (figure I) and drug trafficking (figure II) reported to four different sources for the period 1997 to 2008.

The four sources used in figures I and II are the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS), the United Nations drug Annual Reports Questionnaire (UN-ARQ), the European Sourcebook on Crime and Criminal Justice (ESB) and the Statistical Office of the European Communities (Eurostat). Figure I (total drug-related crime) shows clearly the difference between drug crime *suspects* identified by the police and police-recorded *offences* in Germany. The number of suspects reported to the UN-CTS is consistently around 25 percent lower than the number of recorded offences. Whilst the number of total drug-related offences reported to the UN-CTS agrees with that reported to the European Sourcebook, figure I shows that data reported to the UN-ARQ does not match that reported to the other sources and varies between approximate agreement with suspect and offence data.

Figure I. Total Drug-related crime (Germany, 1997-2008)

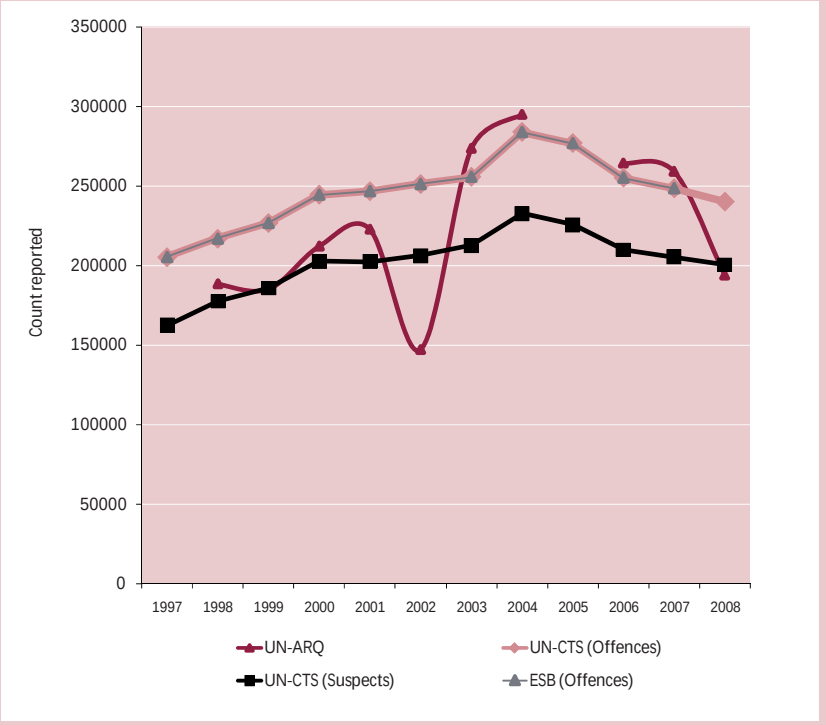


Figure II. Drug-Trafficking (Germany, 1997-2008)

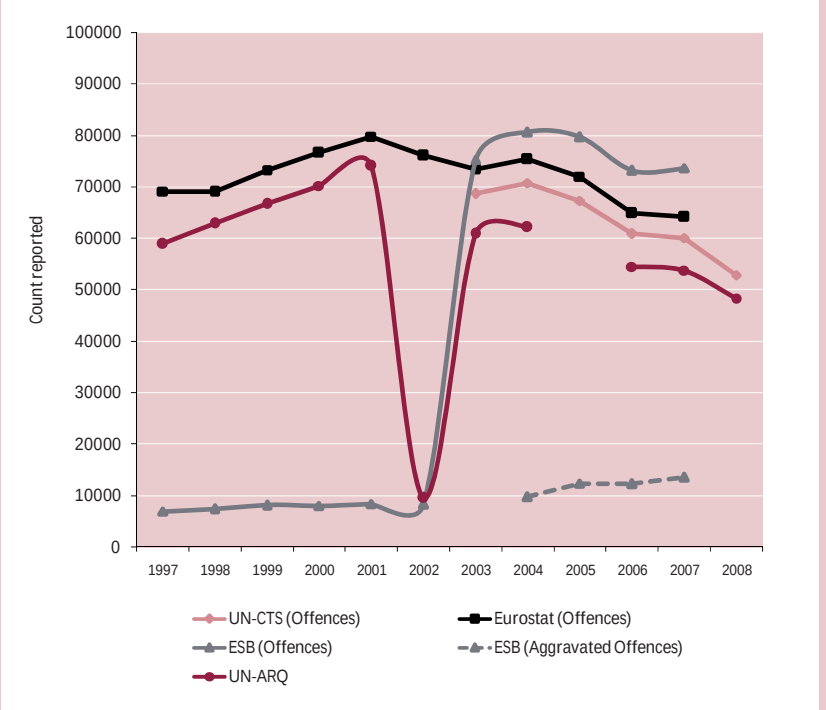


Figure II shows data reported to the UN-CTS, European Sourcebook and Eurostat for drug trafficking offences. Two broad categories of data reporting are apparent – drug trafficking and *aggravated* drug trafficking. The European Sourcebook correspondent reported aggravated trafficking instead of total trafficking until 2002, whereafter figures reported are closer to drug trafficking counts reported to the UN-CTS and Eurostat. Nonetheless, between 2003 and 2008, there is no clear agreement on the count of police-recorded drug-trafficking offences between data reported to the UN-CTS, Eurostat, UN-ARQ and the European Sourcebook. Counts corresponding to aggravated trafficking were reported to the UN-ARQ for one year (2002) but correspond more closely to the broader drug trafficking category for all other years.

Trends in drug-related crime

In addition to comparison of levels of total recorded drug-related offences and recorded drug trafficking offences, a second productive approach to analysis concerns examination of *trends* in drug crime.

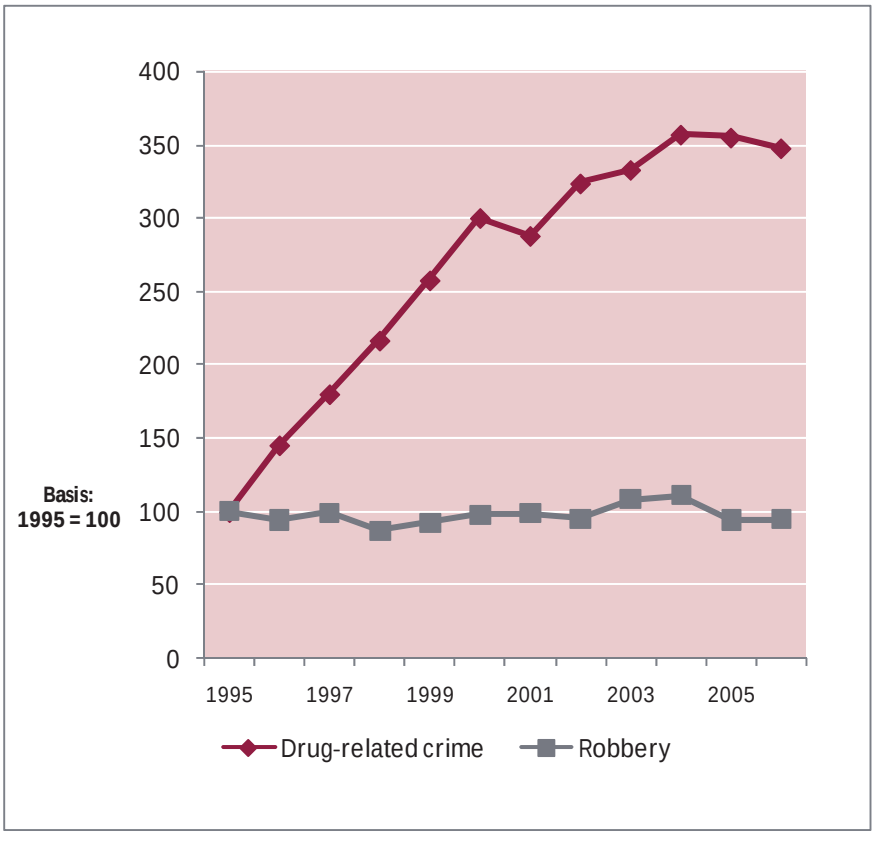
Whilst absolute levels of police-recorded drug-related crime and drug trafficking may be particularly challenging to interpret, *changes over time* may nonetheless be more accurately followed. Even trends monitoring, however, is dependent upon the maintenance over time of equivalent police-recording systems within a country.

Long-term trends monitoring further requires consistent periodic reporting by Member States at the international level.

Over a ten year period, the number of Member States for which data on drug-related crime is available for each year is comparatively small, with the majority of countries located in Central and Eastern Europe. Despite this limited subset of countries, analysis of national level data on drug-related crime shows a clear emerging picture.

Figure 3 shows trends in drug-related crime compared to trends in robbery for 20 countries (Canada, Belarus, Bulgaria, Czech Republic, England and Wales, Finland, Germany, Hungary, Japan, Latvia, Lithuania, Mauritius, Poland, Portugal, Republic of Moldova, Romania, Russian Federation (robbery only), Slovakia, Slovenia, and Switzerland) for the period 1995 to 2008 as reported to the UN-CTS. The median of the rates of each crime type was calculated for each year, followed by 'normalization' to a starting value of 100 for the year 1995. As such, the figure shows percentage change for each subsequent year, compared to the initial year.

Figure 3. Trends in total drug-related crime and robbery in 20 countries (Median, 1995-2008)

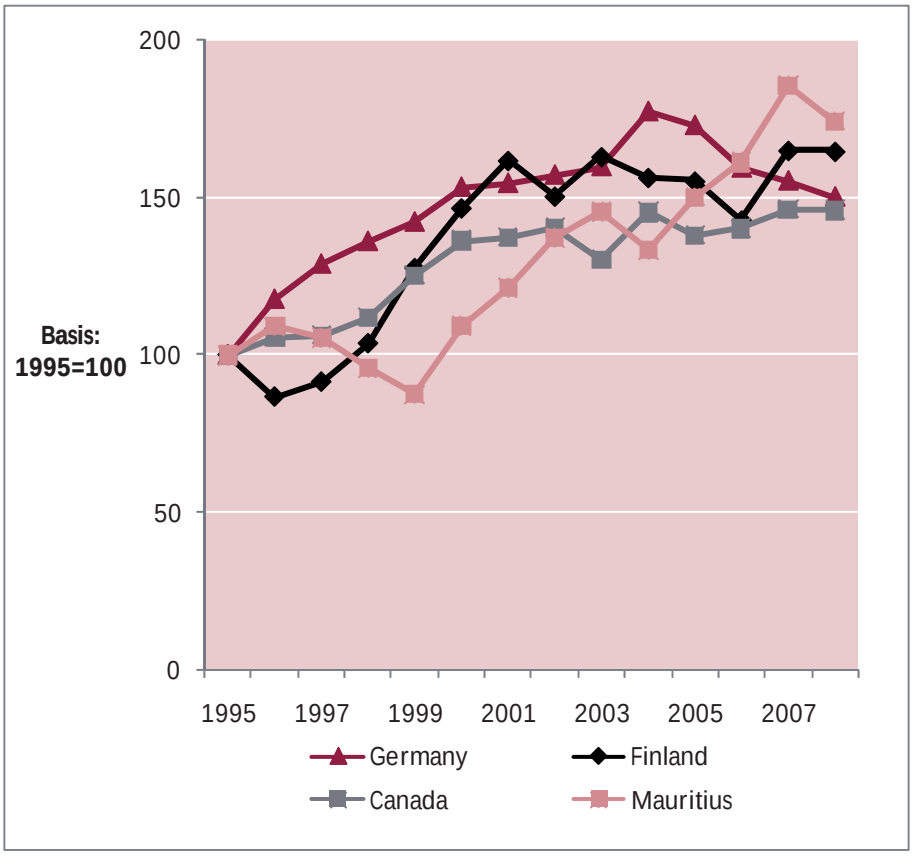


The pattern is quite striking. Whereas police-recorded rates of robbery stayed reasonably constant over the time period, police-recorded drug-related crime increased some three-fold. Such trends cannot, however, be interpreted as indicative of changes in the underlying amount of drug crime in these countries. Rather, it is likely that the increase is due to a combination of

both changes in underlying drug levels and law enforcement activity. Policy considerations may result, for example, in increased police and law enforcement focus on relatively minor offences, including drug possession/use. Whilst drug-related crime has almost certainly received increased attention by law enforcement authorities in the past decade, drug demand data nonetheless does show rising demand in countries in Europe (including countries used in figure 3 above) for cocaine at least from the late nineties until around 2007 (UNODC 2009).

The pattern is also interesting when viewed from the individual country perspective. Figure 4 shows relatively similar overall increases in total drug-related crime reported to the UN-CTS for the period 1995 to 2008 in four countries with reasonable geographic dispersion: Canada, Finland, Germany and Mauritius.

Figure 4. Trends in total drug-related crime in selected countries



Such patterns in geographically-dispersed countries reinforce the proposition that levels of police-recorded drug crime may be as – if not more – affected by law enforcement priorities and focus than by underlying changes in levels of drug use and markets.

Moreover, as shown in box 2, even monitoring of trends over time in drug crime creates significant challenges, particularly where the exact content of data reported for a broad offence category, such as 'total' drug-related crime or drug trafficking changes from year to year.

Summary and conclusions

Police-recorded data on drug crime is typically collected by countries using categories inspired, at least in part, by definitions found in the international drug control conventions. These include 'total' drug-related crime and the distinction between the more minor offence of drug 'possession/use' and a more serious offence of 'drug trafficking'. At the regional level, comparison of median levels of police-recorded total drug-related crime and drug trafficking for countries where data is available show significant differences as between regions. Police-recorded

drug trafficking rates per 100,000 population were highest in Europe (around 30 per 100,000 population) and lowest in Asia (around 10 per 100,000 population). Rates of total police-recorded drug-related crime showed considerably greater variability with a particularly high number of drug-related crime offences in Europe (over 80 per 100,000 population) as compared with other regions. Caution must be exercised in interpretation of such results however. The content of data reported as drug-trafficking offences differs significantly as between countries in terms of the range of actions (such as production, selling, transport) that are included and the seriousness threshold (such as weight/amount of drug or intent to supply). In addition, overall numbers of police recorded offences are likely to be as related to law enforcement policies and activities as they are to underlying levels of drug use and markets.

Indeed, trend analysis in countries with available data suggests that a number of geographically-dispersed countries show broadly equivalent increasing trends in drug-related crime, supporting the proposition that such changes may be related to law enforcement activity. Analysis of trend data from individual countries using multiple sources further highlights the challenges in collection and reporting of drug crime data. A number of cross-national sources are seen to report non-identical data for the same definition and same year for the same country.

Improvement of data accuracy and availability on drug crime requires careful use of definitions in cross-national data collection instruments and the inclusion of additional questions (metadata) in order to understand the content of offence counts reported by national law enforcement authorities.

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Annex to chapter 3

Table 1. Drug-related crime and drug trafficking offences (rates per 100,000 population) reported to the UN-CTS, latest available year

			Drug-Related Crime		Drug Trafficking	
Region	Sub-Region	Country	Rate per 100,000 population	Year	Rate per 100,000 population	Year
Africa	East Africa	Kenya	16	2006	1	2006
		Mauritius	305	2006	70	2006
		Seychelles	314	2000		
		Uganda	6	2004		
	North Africa	Algeria	13	2006	4	2006
		Morocco	56	2006	27	2006
		Tunisia	8	2002		
	Southern Africa	South Africa	116	2002		
		Swaziland	67	2004		
		Zambia	4	2000		
		Zimbabwe	41	2004		
	West and Central Africa	Côte d'Ivoire	2	2000		
Americas	Latin America and the Caribbean	Argentina	63	2006		
		Barbados	580	2000		
		Belize	425	2006		
		Bolivia	45	2002		
		Chile	4	2004		
		Colombia	53	2000		
		Costa Rica	9	2006	7	2006
		Dominican Rep.	34	2006	19	2006
		Ecuador	22	2006		
		El Salvador			18	2006
		Jamaica	463	2000		
		Mexico	52	2006	0	2006
		Nicaragua	29	2006	33	2006
		Panama	96	2006	26	2006
		Paraguay	4	2006	3	2006
		Peru	35	2004		
		Suriname	32	2004		
		Uruguay	22	2004		
		Venezuela	11	2000		
Asia	Central Asia and Transcaucasian countries	Armenia	18	2006	5	2006
		Azerbaijan	27	2006	11	2006
		Georgia	80	2006	37	2006
		Kazakhstan	68	2006		
		Kyrgyzstan	46	2006	31	2006
		Tajikistan	10	2006	9	2006

			Drug-Related Crime		Drug Trafficking	
Region	Sub-Region	Country	Rate per 100,000 population	Year	Rate per 100,000 population	Year
		Turkmenistan	25	2006	21	2006
	East and South-East Asia	Brunei Darussalam	43	2006		
		Hong Kong SAR, China	32	2004		
		Indonesia	3	2000		
		Japan	17	2006	0	2006
		Korea, Rep.	8	2004		
		Malaysia	59	2000		
		Mongolia	0	2006	0	2006
		Myanmar	6	2002		
		Philippines	5	2006		
		Singapore	10	2006	9	2006
		Taiwan, Prov. of China	167	2006		
	Near and Middle East /South-West Asia	Bahrain	107	2006		
		Israel	448	2004		
		Jordan			5	2006
		Lebanon	35	2006	17	2006
		Oman	10	2002		
		Pakistan	0	2000		
		Palestinian Territory	23	2005	3	2005
		Qatar	23	2004		
		Saudi Arabia	52	2000		
		Syria	19	2006	4	2006
		United Arab Emirates	23	2006	2	2006
		Yemen	1	2000		
	South Asia	Bangladesh	10	2006	10	2006
		India	3	2006		
		Maldives	250	2004		
		Nepal	1	2006		
		Sri Lanka	228	2004		
Europe	East Europe	Belarus	51	2006	49	2006
		Moldova, Rep.	56	2006	84	2006
		Russian Federation	166	2000		
		Ukraine	139	2006	52	2006
	Southeast Europe	Albania	8	2002		
		Bosnia & Herzegovina	5	2006	35	2006
		Bulgaria	31	2004		
		Croatia	188	2006	56	2006
		Macedonia, FYR	13	2006	3	2006
		Montenegro	70	2006		
		Romania	15	2006	7	2006
		Serbia	52	2006	49	2006

			Drug-Related Crime		Drug Trafficking	
Region	Sub-Region	Country	Rate per 100,000 population	Year	Rate per 100,000 population	Year
		Turkey	4	2006	4	2006
	West & Central Europe	Austria	24	2006		
		Belgium	427	2004		
		Cyprus	77	2006	24	2006
		Czech Rep.	29	2006	22	2006
		Denmark	374	2006	2	2006
		Estonia	73	2006		
		Finland	253	2006	92	2006
		France	57	2004		
		Germany	310	2006	74	2006
		Greece	74	2006		
		Hungary	66	2004		
		Iceland	574	2004		
		Ireland	85	2006		
		Italy	55	2006	40	2006
		Latvia	44	2006		
		Liechtenstein	114	2006		
		Lithuania	34	2006	20	2006
		Luxembourg	295	2002		
		Malta	157	2006	27	2006
		Monaco	320	2006	9	2006
		Netherlands	100	2006		
		Norway	622	2006		
		Poland	184	2006	0	2006
		Portugal	42	2006	34	2006
		Slovakia	32	2006	4	2006
		Slovenia	89	2006	79	2006
		Spain			29	2006
		Sweden	734	2006	10	2006
		Switzerland			628	2006
		UK - England and Wales	362	2006	49	2006
		UK - Northern Ireland	138	2006	27	2006
		UK - Scotland	868	2006	213	2006
Oceania	Oceania	New Zealand	312	2006	103	2006
		Papua New Guinea	16	2000		

Chapter 4 – Complex crimes

Anna Alvazzi del Frate*

Abstract

This chapter presents available data on 'complex crimes', i.e. a category of crimes which are legally defined and identified by national and international law, but hardly fall into the category of 'volume' crime. Yet, such crimes are highly relevant from a policy point of view, since they may be considered among the most serious threats to stability of any country, and are often transnational in their nature, thus affecting more than one country at the same time. Organized crime, trafficking in persons, smuggling of migrants, currency counterfeiting and corruption are surely considered among the most dangerous crimes affecting societies but their seriousness cannot be assessed by their frequency in administrative statistics. Nevertheless, awareness of the dimensions of such phenomena may be crucial for the development of any prevention and control strategy. However, the current availability of data, especially administrative statistics, on such crimes is particularly limited, thus making the analysis and understanding of the dimensions and characteristics of crime problems a very difficult task.

Introduction

An accurate description of the crime situation requires development of statistics and research that reveal the nature and extent of both 'conventional' crime and organized, transnational or complex crimes. Organized crime, trafficking in persons, smuggling of migrants, bribery/corruption and counterfeited currency were covered by the Tenth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS) for the first time.

These types of crime are frequently composed by more than a single action, often a combination of different illicit behaviours (thus 'complex' crimes). It is not easy, and actually not advisable, to measure them by using administrative statistics. Indeed, in-depth research and population-based surveys may be better tools to assess the extent of these phenomena. While most 'conventional' crimes correspond to quite simple behaviours (killing, stealing and raping are almost universal concepts), some crime definitions are so complex that it is extremely difficult to translate them into single acts.

Simpler acts are more likely to be measured as they occur. In practice, whilst it is relatively simple to count how many homicides are committed, counting episodes in trafficking in persons requires either a legislative construct that criminalizes trafficking or splitting the concept into the different crimes which may be committed in the course of the more complex trafficking action. Administrative data are useful to analyse the availability of statistics on criminal justice response to these phenomena. Some of these crimes have recently been defined by international law (UN Convention against Transnational Organized Crime and its Protocols, UN Convention Against Corruption), which foresees criminalization of specific illicit behaviours. Once the new types of crime are translated into domestic criminal law – as is the case, for example, when countries introduce a specific crime of trafficking in persons after ratifying the TOC convention – the new legislation may be used in some cases instead of other types of crime. On the other hand, it may happen that courts tend to continue using old legislation even in the presence of new specific forms of crime.

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In both scenarios it will be relatively difficult to analyse trends. From the statistical point of view, every time new specific legislation is adopted to deal with a 'complex' type of crime and relevant data are collected, a drop in another type of offence is likely to be observed. On the contrary, in cases where new legislation may be initially difficult to use for the judiciary, very few cases may be registered under the new category. This may depend on lack of adequate information and training on the application of the new legal instruments. Furthermore, due to the absence of trend data, criminological interpretation of statistics on new types of offences may be particularly difficult.

Organized crime, trafficking in persons and smuggling of migrants

In principle, transnational organized crime is better defined at the international level than the majority of 'conventional' or 'volume' crime. International instruments such as the United Nations Convention on Transnational Organized Crime (UNTOC) reflect consensus on the core elements of organized crime. The UNTOC and its Protocols on Trafficking in persons and Smuggling of migrants include several types of illicit behaviours which should be criminalized in all countries ratifying these international instruments. (United Nations 2003) Relevant crimes included in the 10th UN-CTS were the following: a) participation in organized criminal groups, b) trafficking in persons and c) smuggling of migrants. Definitions of these crimes are presented in box 1.

A. Participation in organized criminal groups

The definition of participation in organized criminal groups was taken from the UNTOC. It may apply to anyone who, being aware of the group's criminal objectives, becomes involved in activities that contribute to the achievement of such objectives. Statistics were collected at the police, prosecution and courts level. Figure 1 shows that relatively few countries were able to respond. Thirty-six countries provided statistics of police recorded crimes for the years 2005-06, 38 provided prosecution statistics for 2005 and 37 for 2006, while court data were the least available, with only 31 countries for both 2005 and 2006. However, only some 20 countries confirmed that the definition applied by the UN-CTS matched the one they had been using at the national level.

Box 1. UN-CTS crimes from the UN Convention on Transnational Organized Crime

Definitions of Participation in organized criminal groups, Human Trafficking and Smuggling of Migrants in the 10th UN-CTS:

Participation in organized criminal groups

"Participation in organized criminal groups" may be understood as participating in the activities of an organized criminal group and/or organizing, directing, aiding, abetting, facilitating or counselling serious crimes involving organized criminal groups. This definition may apply to anyone who, being aware of the group's criminal objectives, becomes involved in activities that contribute to the achievement of such objectives. When applicable, reference may be made to the provisions of the United Nations Convention against Transnational Organized Crime.

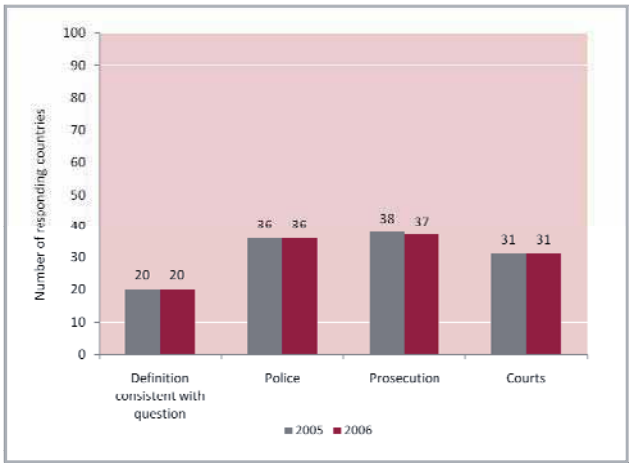
Human Trafficking

"Human Trafficking" may be understood to mean the recruitment, transportation, transfer, harbouring or receipt of persons, by means of threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of abuse of power or position of vulnerability or of giving or receiving payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. When applicable reference may be made to the provisions of the Protocol to Prevent, Suppress, and Punish Trafficking in Persons, supplementing the United Nations Convention against Transnational Organized Crime.

Smuggling of migrants

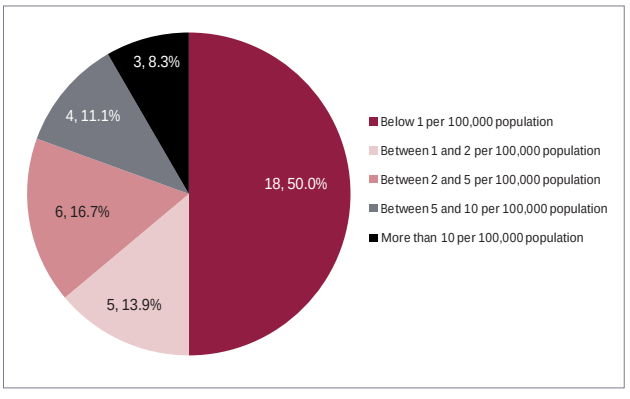
"Smuggling of migrants" may be understood to mean the procurement, in order to obtain, directly or indirectly, a financial or other material benefits of illegal entry into the country of a person who is not a national or a permanent resident. When applicable reference may be made to the provisions of the Protocol against the Smuggling of Migrants by Land, Sea and Air supplementing the United Nations Convention against Transnational Organized Crime.

Figure 1. Number of countries responding to the 10th UN-CTS question on participation in organized criminal groups



It is difficult to draw conclusions about the frequency of this crime on the basis of the available statistics. At the police level, high variations can be observed between countries, with a median rate of 0.9 crimes per 100,000 population in 2005 and 1.4 in 2006. Figure 2 shows the distribution of countries in five categories depending on the observed rate in 2006, with the category below 1 crime per 100,000 population counting 18 countries, i.e. half of the responses received. Approximately one third of the countries showed rates above 2 per 100,000 population, with 7 countries (19%) above five. The observed trend towards increase, although limited to two years, is determined by half of the countries, while in the other half the observed rates were mostly stable.

Figure 2. Participation in organized criminal groups, police recorded offences. Number and percentage of countries responding to the Tenth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS), by category, 2006



Similar rates were observed in prosecution statistics, with a median rate of approximately 1 person prosecuted per 100,000 population (0.9 in 2005 and 1.0 in 2006). Only 13 out of 31 reporting countries showed an increase between 2005 and 2006. The distribution across the categories largely reflected that observed at the police level, with 40% of the countries below 1 per 100,000 pop., 40% between 1 and 5, and 20% above 5 per 100,000 population. Participation in organized criminal groups is of high relevance for the criminal justice system, and is more likely to appear in person-based rather than offence-based statistics. As the type of crime would suggest, the number of offenders is likely to be larger than the number of offences, thus explaining the relatively high rates and no attrition observed at the prosecution level. However, at the court level, rates of persons convicted fall to a median of 0.3 per 100,000 population (both in 2005 and 2006).

B. Trafficking in persons

Specific legislation on trafficking in persons was passed in many countries pursuant to the entry into force of the Protocol to Prevent, Suppress and Punish Trafficking in Persons (December 2003). The number of countries having specific anti-trafficking legislation more than doubled between 2003 and 2008 (UNODC 2009). Still, many countries may use legislation on specific forms or aspects of trafficking in persons to criminalize this phenomenon. For example, laws on slavery, sexual or labour exploitation, or child protection, may be applied instead or in the absence of specific legislation on trafficking.

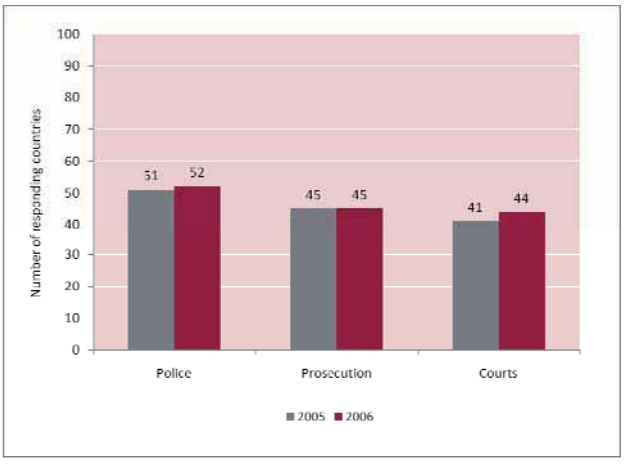
The measurement of trafficking in persons is the object of considerable attention at the international level. Criminal justice data alone cannot measure the extent of human trafficking flows, which would require a broader approach to include survey-based information. Criminal justice statistics may deal with victims (trafficked persons) and offenders. By collecting information from a wide range of sources in 111 countries, the UNODC Global Report on Trafficking in Persons found over 21,400 identified victims of human trafficking for the year 2006.

The 10th UN-CTS only covered statistics on recorded offences and offenders arrested, prosecuted and convicted, based on the UNTOC Protocol definition. Data were collected at the police, prosecution and court level. The number of police-recorded cases is highly dependent upon the extent of law enforcement activities and counter-trafficking operations. Figure 3 shows

that responses to the Police section were more numerous than those to the other parts, and were received from 51 countries as regards the year 2005 and 52 as regards 2006.

In many countries (33 out of 52 in 2006), the definition applied by the UN-CTS was the same used in national statistics, thus demonstrating the increased availability of data on this specific form of crime.

Figure 3. Number of countries responding to the 10th UN-CTS question on trafficking in persons

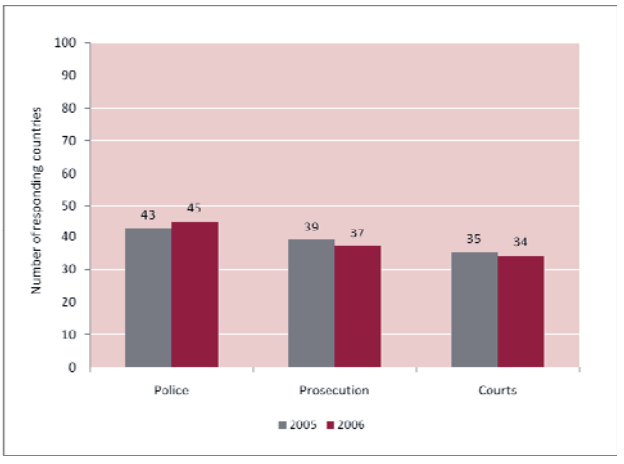


As regards the actual crime levels observed, it should be noted that the seriousness of these crimes cannot be measured by their frequency, especially as regards the number of incidents recorded or offenders arrested. In 2006, a median of 0.2 per 100,000 population was observed at the police and prosecution level, while the median rate at the court level was 0.1 per 100,000 pop. The highest rate of police recorded offences (49.4 per 100,000 population, almost 7 times higher than the second highest rate of 7.8) was actually from a country in which the UNTOC definition was not used, thus the higher number of offences recorded may indeed refer to different types of crime.

C. Smuggling of migrants

A slightly lower number of countries were able to provide data on smuggling of migrants than on trafficking in persons. Figure 4 shows that only 45 countries could provide data on the question about police recorded offences for the year 2006 (33 of which confirmed using the same definition as in the UN protocol). Many less countries could provide data on prosecution (39 for the year 2005 and 37 for 2006) and courts (35 for 2005 and 34 for 2006). As was the case for human trafficking, the median rates per 100,000 population are very low (1.4 police recorded offences, 1 person prosecuted and 0.7 persons convicted for the year 2006). Contrary to trafficking in persons, the two countries with the high rates of recorded offences in 2006 (131.1 and 61.5 per 100,000 population respectively) were using the same definition as per the UN Protocol.

Figure 4. Number of countries responding to the 10th UN-CTS question on smuggling of migrants



Bribery and corruption

Data based on reported cases of bribery/corruption usually do not reflect the real extent of corruption. Administrative statistics on bribery and corruption cannot provide much information on the extent of the phenomenon. Nevertheless, it is important to look at them in order to consider the criminal justice response to behaviours which have recently been the object of international treaties (UN Convention Against Corruption) and gained more visibility in the eyes of the public.

The UNCAC concepts of 'active' and 'passive' bribery (see box 2), included in all articles of the Convention dealing with criminalization, have been used in the 10th UN-CTS to formulate questions aimed at collecting relevant statistics. Active corruption refers to the situation in which a citizen or a company actively seeks favours from a public official by promising or offering other favours, gifts or money. Passive bribery/corruption instead is the case in which a public official who is in the position to provide advantages or favours to private citizens or companies, requests them for gifts, money or other favours in exchange.

Box 2. Bribery and corruption: definitions

The UN Convention Against Corruption (UNCAC) provides a broad framework for the criminalization of corrupt behaviours. In particular, it is possible to identify the two aspects of 'active' and 'passive' bribery.

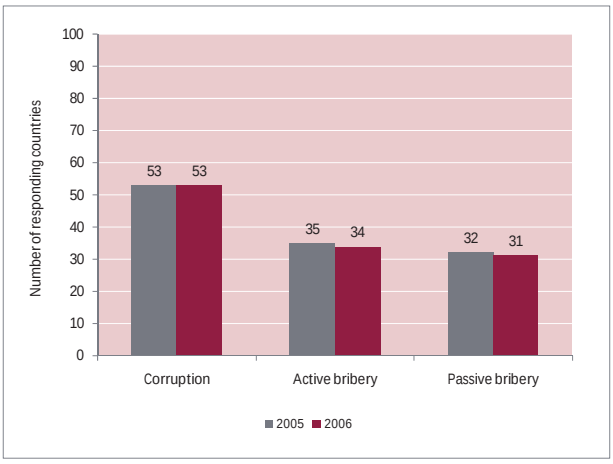
Bribery and/or corruption
"Bribery and/or corruption" may be understood to mean requesting and/or accepting material or personal benefits, or the promise thereof, in connection with the performance of a public function for an action that may or may not be a violation of law and/or promising as well as giving material or personal benefits to a public officer in exchange for a requested favour. Where appropriate, reference may be made to the provisions of the United Nations Convention against Corruption.

Active bribery	Passive bribery
The promise, offering or giving, to a public official, directly or indirectly, of an undue advantage, for the official himself or herself or another person or entity, in order that the official act or refrain from acting in the exercise of his or her official duties.	The solicitation or acceptance by a public official, directly or indirectly, of an undue advantage, for the official himself or herself or another person or entity, in order that the official act or refrain from acting in the exercise of his or her official duties.

Source: UNCAC, United Nations Convention against Corruption (General Assembly resolution 58/4, Annex), Chapter III, Criminalization and law enforcement.

Data from the 10th UN-CTS therefore deal with total recorded offences at the police level for a) bribery/corruption, b) active bribery, and c) passive bribery. Availability of detailed statistics is still limited, nevertheless 53 countries were able to provide data on general offences related to bribery/corruption, 35 on active bribery and 30 on passive bribery (figure 5). Among them, more than half confirmed that their definitions matched those provided by the UN-CTS. Thirteen countries specified that no distinction between active and passive bribery/corruption exists in their countries. One country specified that while the distinction exists in the law, no separate statistics are collected.

Figure 5. Number of countries responding to the 10th UN-CTS questions on corruption, police recorded offences

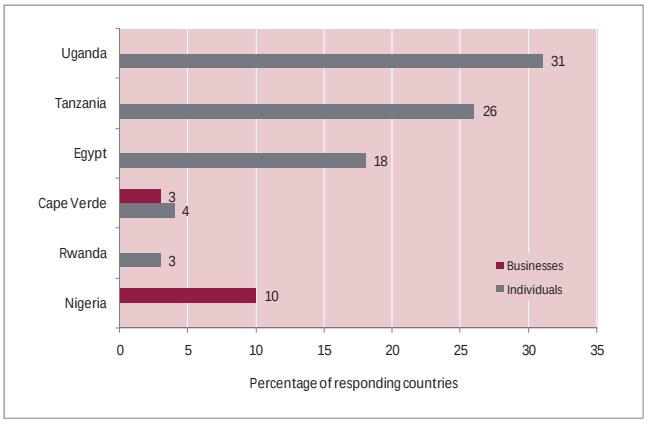


The median rate for the general crime of bribery/corruption is 1.3 per 100,000 population, while active and passive bribery showed rates of 0.6 and 0.7 per 100,000 population respectively. The majority of countries showed a rate below 1 per 100,000 population, while only 6 countries had rates above 10 per 100,000 population. In many countries, the small number of cases reported may depend on the difficulty of considering corruption as a matter for the police. Indeed, some countries have established specialized anti-corruption authorities. In order to obtain a more comprehensive picture it would be important to capture incidents reported to such authorities as well.

A number of alternative approaches to administrative statistics have been developed. Several attempts at measuring the worldwide extent of corruption have been made, both in broad contexts and specific areas. These attempts include the use of population-based surveys and the production of composite indices, such as the Corruption Perception Index of Transparency International. Increased information on the nature and extent of corruption is necessary to assess its impact on economy and development as well as for monitoring trends. In this context, UNODC has developed a 'package' of surveys capable of providing information on the experience and perception of corruption events, risk factors, modalities of corruption, and attitudes on integrity. Such surveys may be targeted to the general population, to the business sector, to civil servants, or to specific government institutions, such as the justice sector.

Sample population surveys, when conducted in a methodologically sound manner, can supplement information on the proportion of individuals (or enterprises) that paid a bribe in the previous year, the characteristics of victims and perpetrators, changes in the level of corruption over time, and the sectors/regions most affected by corruption. Results from recent surveys conducted in five African countries, for example, indicated that between around 30 percent and 3 percent of respondents had paid a bribe to a public official in the 12 months before the survey (see figure 6). (UNODC 2009a) Survey results also suggest that bribes paid by businesses are more frequently paid to some government sectors, including the police and medical sectors, than to other institutions, such as tax or municipal officials. Further survey responses indicated that police investigations and traffic offences were typical situations in which bribes had been paid.

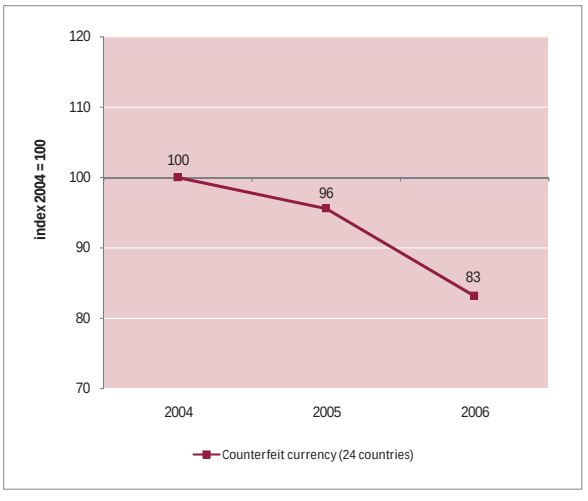
Figure 6. Percentage of survey respondents (individuals and/or businesses) who were requested to pay at least one bribe over the previous year, by country (UNODC 2008-09)



Counterfeited currency

A question on counterfeit currency was included for the first time in the 10th UN-CTS. According to Interpol, the crime of counterfeiting currency continues to present a serious danger to national economies, as well as financial losses to consumers. Interpol used to collect statistics on this type of crime. Upon discontinuation of the Interpol series in 2004, UNODC agreed to insert this question in the police section of the UN-CTS for continuity. Among the 64 countries which provided information to the UN-CTS for the years 2005-06, only 27 had provided data to Interpol for the year 2004. For three countries it was clear that the source used to respond to Interpol was not the same as the one replying to UNODC, so they have been excluded from the trend analysis presented in figure 7. It appears that, at least in the 24 countries under consideration, a decrease in this type of offences has been observed.

Figure 7. Counterfeited currency. Trend in police recorded offences (2004 = 100). Sources: Interpol and Tenth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS)



Indeed, one country observed that "the large decrease in counterfeiting in recent years may be partially attributed to enhanced security features that make the replication of bills more difficult, increased education and awareness by merchants and retailers in detecting counterfeit bills, and to law enforcement efforts". (UNODC 2008) The majority of countries (44) indicated that the definition in use matched that provided by the questionnaire. Interestingly, one country specified that the counting unit was each single counterfeit note, which leaves some doubt about which counting other countries may use.

Figure 8. Counterfeited currency, police recorded offences. Number and percentage of countries responding to the Tenth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS), by category, 2006.

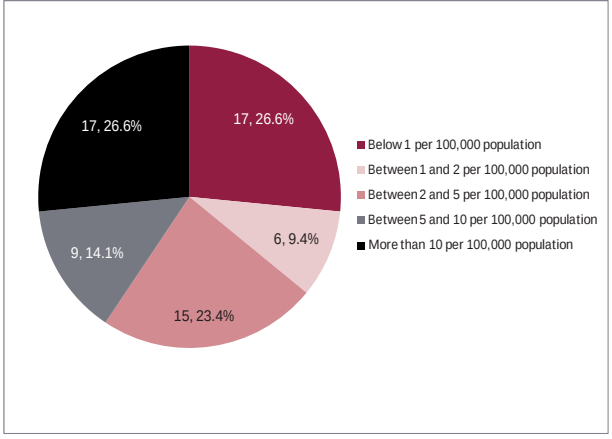


Figure 8 shows that rates per 100,000 population varied in reporting countries, with the same number of countries (17, i.e. 27%) falling into the lowest and highest categories (below 1 and above 10 per 100,000 population). Another quarter of responding countries, 15, were in the category between 2 and 5 per 100,000 population, while the remaining countries were distributed in the categories between 1 and 2 per 100,000 population (6 countries) and between 5 and 10 per 100,000 population (9 countries). The median observed among the 64 responding countries was 4.3 per 100,000 population in 2005 and 3.5 in 2006, thus confirming the decreasing trend observed in the 24 countries having data for a longer period.

Summary and conclusions

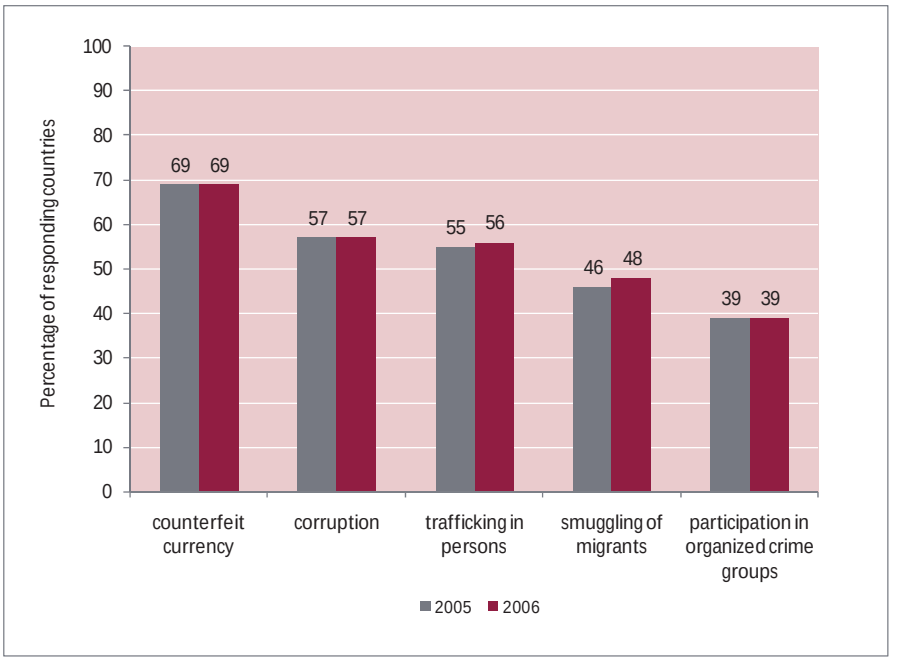
This chapter has analysed the available statistics on a number of 'complex' types of crime included in the 10th UN-CTS. These data represent a small treasure to which more information should be added to develop further analysis. Figure 9 shows that only for three 'complex' types of crime (counterfeit currency, corruption and smuggling of migrants) could the majority of countries responding to the 10th UN-CTS provide data. For smuggling of migrants and participation in organized crime groups, it appears that a comprehensive collection of international statistics may be too early. More than half of the responses to the 10th UN-CTS were missing this information.

It is well known, however, that at the international level, data on trafficked persons and smuggling of migrants are often confused, together with statistics on migrants, illegal migrants, asylum seekers, and refugees. It is therefore important to note that many countries are aligning their definitions for statistical purposes to those provided by the relevant international instruments. Despite the excellent collaboration of several respondents to the 10th UN-CTS who provided extensive comments to these questions, information received appears insufficient.

The mechanisms for monitoring implementation of the UNTOC and UNCAC will definitely require a parallel mechanism for the collection of information on the extent of the phenomena as well as on the response of the criminal justice system. The UN-CTS may indeed represent the most appropriate vehicle for collecting the latter type of information, while specific methodologies should be developed and used (including population based surveys and other types of research) for the assessment of the extent and flows of the phenomena.

This suggests that in the future the UN-CTS may opt for in-depth modules, which may even go beyond criminal justice data, on each 'complex' crime. The questionnaire could be conceived in a way to accommodate more metadata and additional references. This will result in supplementing the scarce numbers with relevant qualitative information.

Figure 9. Percentage of countries responding to the 10th UN-CTS who answered police questions on organized crime, trafficking in persons, smuggling of migrants, corruption and counterfeited currency, 2005 and 2006



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Annex to chapter 4

Table 1. Participation in organized criminal groups: police recorded offences, persons prosecuted, persons convicted, 2005 and 2006

Country	Definition consistent		Police-recorded offences				Persons prosecuted				Persons convicted			
			Count		Rate		Count		Rate		Count		Rate	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Algeria	Yes	Yes					1,586	437	4.8	1.3	2,782	543	8.5	1.6
Armenia			15	95	0.5	3.2	13	31	0.4	1.0	17	101	0.6	3.4
Austria			234	156	2.8	1.9	716	518	8.6	6.2	28	17	0.3	0.2
Azerbaijan			52	117	0.6	1.4	65	118	0.8	1.4				
Belarus	Yes	Yes	867	590	8.9	6.1	346	433	3.5	4.4	150	149	1.5	1.5
Belize			1	1	0.4	0.4	0	0	0.0	0.0				
Bermuda											0	0	0.0	0.0
Bolivia														
Bosnia and Herzegovina	Yes	Yes	0	15	0.0	0.4								
Brunei Darussalam			0	0	0.0	0.0								
Canada			19	42	0.1	0.1								
Costa Rica	Yes	Yes	1	2	0.0	0.0								
Croatia	Yes	Yes	29	26	0.6	0.6	132	94	2.9	2.1		1		0.0
Cyprus							0	0	0.0	0.0	0	0	0.0	0.0
Czech Republic			902	623	8.9	6.1	181	118	1.8	1.2	9	21	0.1	0.2
Ecuador			311	242	2.4	1.8	178	176	1.4	1.3				
El Salvador							148	243	2.2	3.6	9	84	0.1	1.2
Estonia							217	332	16.1	24.8				
Finland	Yes	Yes	3	0	0.1	0.0	0	0	0.0	0.0	0	0	0.0	0.0
Georgia	Yes	Yes	24	15	0.5	0.3					31	38	0.7	0.9
Germany							23	8	0.0	0.0	15	6	0.0	0.0
Hong Kong SAR of China							356	449	5.0	6.3	169	249	2.4	3.5
Hungary							69	57	0.7	0.6				
Ireland	Yes	Yes	5	18	0.1	0.4								
Italy			153	128	0.3	0.2	457		0.8		2,109	1,656	3.6	2.8
Japan														
Kazakhstan			70	54	0.5	0.4	359	345	2.4	2.3	6	5	0.0	0.0
Kyrgyzstan	Yes	Yes	47	24	0.9	0.5	47	24	0.9	0.5				
Latvia	Yes	Yes	102	61	4.4	2.7		16		0.7	13	27	0.6	1.2
Liechtenstein	Yes	Yes	2	2	5.8	5.7	1	0	2.9	0.0	0	0	0.0	0.0
Lithuania	Yes	Yes	31	5	0.9	0.1	20	19	0.6	0.6	2	10	0.1	0.3
Malaysia							2,996	2,364	11.7	9.1	1,179	1,077	4.6	4.1
Malta			4	1	1.0	0.2	4	1	1.0	0.2				
Mauritius							0	0	0.0	0.0	4	7	0.3	0.6
Mexico											172	187	0.2	0.2
Monaco							0	0	0.0	0.0	0	0	0.0	0.0
Mongolia			23	11	0.9	0.4	41	18	1.6	0.7				
Montenegro			42	263	6.9	43.8								
Morocco							94	156	0.3	0.5				
Nepal			35	33	0.1	0.1								
Netherlands							343	419	2.1	2.6	245	171	1.5	1.0
New Zealand			8	3	0.2	0.1								
Nicaragua	Yes	Yes	82	82	1.5	1.5	753	992	13.8	17.9				
Northern Ireland							12		0.7		4		0.2	
Panama							11	46	0.3	1.4				
Paraguay														
Philippines											0	0	0.0	0.0
Poland	Yes	Yes	868	914	2.3	2.4					337	261	0.9	0.7
Republic of Moldova	Yes	Yes	78	92	2.0	2.4					4		0.1	
Romania	Yes	Yes	474	897	2.2	4.2	152	305	0.7	1.4		24		0.1
Serbia														
Singapore														

Country	Definition consistent		Police-recorded offences				Persons prosecuted				Persons convicted			
			Count		Rate		Count		Rate		Count		Rate	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Slovakia			65	79	1.2	1.5	11	10	0.2	0.2	76	47	1.4	0.9
Slovenia			397	499	19.9	24.9								
Spain	Yes	Yes	1,224	1,140	2.8	2.6					585	623	1.3	1.4
Swaziland							0	0	0.0	0.0				
Switzerland											2	2	0.0	0.0
The FYR of Macedonia	Yes	Yes	293	223	14.4	11.0								
Turkey	Yes	Yes	547	613	0.7	0.8	759	911	1.0	1.2	298	219	0.4	0.3
Ukraine	Yes	Yes	7,741	3,977	16.5	8.5	577	437	1.2	0.9	1,264	931	2.7	2.0
United Arab Emirates							21	8	0.5	0.2				
Venezuela							2,114	1,954	7.9	7.2				

Table 2. Trafficking in persons (Human trafficking): police recorded offences, persons prosecuted, persons convicted, 2005 and 2006

Country	Definition consistent		Police-recorded offences				Persons prosecuted				Persons convicted			
			Count		Rate		Count		Rate		Count		Rate	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Algeria			1,167	1,693	3.6	5.1								
Armenia			31	40	1.0	1.3	14	16	0.5	0.5	17	36	0.6	1.2
Austria	Yes	Yes	92	7	1.1	0.1	437	395	5.3	4.7	30	19	0.4	0.2
Azerbaijan			1	28	0.0	0.3	1	27	0.0	0.3				
Bahrain							3	5	0.4	0.7				
Bangladesh			164	107	0.1	0.1								
Belarus	Yes	Yes	169	102	1.7	1.0	62	48	0.6	0.5	18	20	0.2	0.2
Belize	Yes	Yes	4	7	1.5	2.5	3	0	1.1	0.0				
Bermuda											0	0	0.0	0.0
Bosnia and Herzegovina	Yes	Yes	5	6	0.1	0.2								
Brunei Darussalam			0	0	0.0	0.0								
Canada	Yes	Yes	0	4	0.0	0.0								
Costa Rica	Yes	Yes	5	4	0.1	0.1	6	0	0.1	0.0	6	0	0.1	0.0
Croatia	Yes	Yes	5	5	0.1	0.1	6	14	0.1	0.3		1		0.0
Cyprus							0	0	0.0	0.0	0	0	0.0	0.0
Czech Republic	Yes	Yes	16	18	0.2	0.2	12	15	0.1	0.1	20	2	0.2	0.0
Denmark	Yes	Yes	3	2	0.1	0.0					1	7	0.0	0.1
Dominican Republic											6	4	0.1	0.0
Ecuador	Yes	Yes	34	65	0.3	0.5	11	70	0.1	0.5				
El Salvador	Yes	Yes	4	1	0.1	0.0	37	66	0.6	1.0	0	5	0.0	0.1
England and Wales	Yes	Yes	33	43	0.1	0.1	28	43	0.1	0.1	13	22	0.0	0.0
Finland	Yes	Yes	2	3	0.0	0.1	0	7	0.0	0.1	0	7	0.0	0.1
Georgia	Yes	Yes	13	30	0.3	0.7	2	20	0.0	0.5	10	15	0.2	0.3
Germany		Yes	621	840	0.8	1.0	183	195	0.2	0.2	136	150	0.2	0.2
Hong Kong SAR of China							24	6	0.2	0.1	2	1	0.0	0.0
India			149	67	0.0	0.0								
Ireland							0	0	0.0	0.0				
Italy	Yes	Yes	181	145	0.3	0.2	35		0.1		43	34	0.1	0.1
Japan	Yes	Yes	81	72	0.1	0.1	6	17	0.0	0.0	0	12	0.0	0.0
Kazakhstan			10	20	0.1	0.1	3	8	0.0	0.1	303	211	2.0	1.4
Kyrgyzstan	Yes	Yes	34	36	0.7	0.7	21	24	0.4	0.5	3	7	0.1	0.1
Latvia	Yes	Yes	4	47	0.2	2.1		14		0.6	22	36	1.0	1.6
Liechtenstein			0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0
Lithuania	Yes	Yes	32	29	0.9	0.9	15	25	0.4	0.7	12	3	0.4	0.1
Malaysia			12,580	12,901	49.0	49.4					924	914	3.6	3.5
Malta			0	1	0.0	0.2	9	10	2.2	2.5		1		0.2
Mauritius			3	5	0.2	0.4	4	6	0.3	0.5	33	13	2.7	1.0
Mexico											1	0	0.0	0.0
Monaco							0	0	0.0	0.0	0	0	0.0	0.0
Mongolia	Yes	Yes	6	6	0.2	0.2	9	11	0.3	0.4		1		0.0
Montenegro			5	1	0.8	0.2								
Nepal			56	59	0.2	0.2	118	75	0.4	0.3	57	60	0.2	0.2
Netherlands								20		0.1				
New Zealand			0	0	0.0	0.0								
Nicaragua	Yes	Yes		21		0.4	4	12	0.1	0.2				
Northern Ireland							0		0.0		0		0.0	
Norway			11	36	0.2	0.8	0		0.0			3		0.1
Panama							1	1	0.0	0.0				
Paraguay	Yes	Yes	0	0	0.0	0.0								
Philippines											1	1	0.0	0.0
Poland	Yes	Yes	22	23	0.1	0.1					271	239	0.7	0.6
Portugal							68	66	0.6	0.6	56	50	0.5	0.5
Republic of Moldova	Yes	Yes	282	299	7.3	7.8	33	37	0.9	1.0	59	119	1.5	3.1
Romania	Yes	Yes	1,201	1,383	5.6	6.4	684	574	3.2	2.7	146	187	0.7	0.9

Country	Definition consistent		Police-recorded offences				Persons prosecuted				Persons convicted			
			Count		Rate		Count		Rate		Count		Rate	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Serbia			39	45	0.4	0.5								
Singapore			0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0
Slovakia	Yes	Yes	14	19	0.3	0.4	49	97	0.9	1.8	6	16	0.1	0.3
Slovenia	Yes	Yes	1	3	0.1	0.1	11	2	0.6	0.1				
Spain	Yes	Yes	3,070	3,062	7.1	7.0								
Swaziland							0	1	0.0	0.1				
Sweden	Yes	Yes	44	38	0.5	0.4	26	1	0.3	0.0	7	11	0.1	0.1
Switzerland											12	5	0.2	0.1
Tajikistan			0	0	0.0	0.0					2	3	0.0	0.0
The FYR of Macedonia	Yes	Yes	5	3	0.2	0.1		5		0.2	6	6	0.3	0.3
Turkey	Yes	Yes	149	132	0.2	0.2	451	403	0.6	0.5	271	301	0.4	0.4
Ukraine	Yes	Yes	415	376	0.9	0.8	151	121	0.3	0.3	169	164	0.4	0.4
United Arab Emirates			3	0	0.1	0.0								
United States of America							96	111	0.0	0.0				
Venezuela							5	12	0.0	0.0				

Table 3. Smuggling of migrants: police recorded offences, persons prosecuted, persons convicted, 2005 and 2006

Country	Definition consistent		Police-recorded offences				Persons prosecuted				Persons convicted			
			Count		Rate		Count		Rate		Count		Rate	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Algeria	Yes	Yes	321	403	1.0	1.2	8,806	3,593	26.8	10.8				
Austria	Yes	Yes	1,298	3,088	15.7	37.1	1,619	1,380	19.5	16.6	369	323	4.5	3.9
Bangladesh	Yes	Yes	4,181	4,772	2.7	3.1								
Belarus			12	10	0.1	0.1								
Belize	Yes	Yes	1	4	0.4	1.4	0	0	0.0	0.0				
Bermuda											0	0	0.0	0.0
Bosnia and Herzegovina	Yes	Yes	34	65	0.9	1.7								
Brunei Darussalam			0	0	0.0	0.0								
Canada														
Costa Rica							1		0.0					
Croatia	Yes	Yes	260	320	5.7	7.0	321	371	7.1	8.1	214	200	4.7	4.4
Cyprus	Yes	Yes	13	10	1.6	1.2								
Czech Republic	Yes	Yes	114	81	1.1	0.8	130	70	1.3	0.7	104	136	1.0	1.3
Denmark	Yes	Yes	210	199	3.9	3.7					119	132	2.2	2.4
Denmark	Yes	Yes	210	199	3.9	3.7					119	132	2.2	2.4
Dominican Republic											4	6	0.0	0.1
Ecuador	Yes	Yes	25	58	0.2	0.4	470	771	3.6	5.8				
El Salvador	Yes	Yes	16	16	0.2	0.2	674	540	10.1	8.0	3	3	0.0	0.0
England and Wales							138	131	0.3	0.2	167	137	0.3	0.3
Estonia														
Finland	Yes	Yes	26	15	0.5	0.3	19	19	0.4	0.4	15	19	0.3	0.4
Georgia	Yes	Yes					0	0	0.0	0.0				
Germany	Yes	Yes	5,154	3,572	6.2	4.3	1,340	973	1.6	1.2	1,117	766	1.4	0.9
Hong Kong SAR of China	Yes	Yes					2	0	0.0	0.0	2	0	0.0	0.0
Hungary							496	455	4.9	4.5				
Ireland							2	3	0.0	0.1				
Italy	Yes	Yes	5,057	5,399	8.6	9.2					939	961	1.6	1.6
Japan							29	23	0.0	0.0	6	26	0.0	0.0
Kazakhstan			42	79	0.3	0.5	37	56	0.2	0.4	85	35	0.6	0.2
Kyrgyzstan														
Latvia			14	33	0.6	1.4		8		0.3	4	4	0.2	0.2
Lebanon			3,299	2,496	82.3	61.5								
Liechtenstein	Yes	Yes	8	7	23.1	20.0	0	4	0.0	11.5	0	0	0.0	0.0
Lithuania	Yes	Yes	9	22	0.3	0.6	3	32	0.1	0.9	7	29	0.2	0.9
Malaysia							650	549	2.5	2.1	1,163	738	4.5	2.8
Malta			0	7	0.0	1.7	0	7	0.0	1.7				
Mauritius			0	0	0.0	0.0	0	0	0.0	0.0				
Mexico			2,024	1,771	1.9	1.7					964	621	0.9	0.6
Monaco							0	0	0.0	0.0	0	0	0.0	0.0
Mongolia														
Montenegro			8	10	1.3	1.7								
Morocco			7,687	7,500	25.2	24.3	15,574	12,139	51.1	39.3				
Nepal			19	28	0.1	0.1								
Netherlands							215	236	1.3	1.4	158	116	1.0	0.7
New Zealand			0	0	0.0	0.0								
Nicaragua							23	12	0.4	0.2				
Northern Ireland							2		0.1		2		0.1	
Norway			33	41	0.7	0.9	7		0.2		5	8	0.1	0.2
Panama							3	14	0.1	0.4				
Paraguay	Yes	Yes	0	0	0.0	0.0								
Philippines											0	0	0.0	0.0
Poland	Yes	Yes	182	111	0.5	0.3					430	288	1.1	0.8
Republic of Moldova		Yes		39		1.0								
Romania	Yes	Yes	32	82	0.1	0.4					992	1,448	4.6	6.7
Romania	Yes	Yes	32	82	0.1	0.4					992	1,448	4.6	6.7
Serbia				90		0.9								

Country	Definition consistent		Police-recorded offences				Persons prosecuted				Persons convicted			
			Count		Rate		Count		Rate		Count		Rate	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Singapore	Yes	Yes	7,865	5,744	181.7	131.1	6,146	4,987	142.0	113.8				
Slovakia	Yes	Yes	93	130	1.7	2.4	116	93	2.2	1.7	63	52	1.2	1.0
Slovenia	Yes	Yes	463	348	23.2	17.4	162	300	8.1	15.0				
Spain	Yes	Yes	806	669	1.9	1.5								
Swaziland							0	0	0.0	0.0				
Sweden			1,478	1,131	16.4	12.5	23	15	0.3	0.2	383	435	4.2	4.8
Switzerland											47	20	0.6	0.3
Syrian Arab Republic			227	272	1.2	1.4								
Thailand											34,241	38,025	54.3	59.9
The FYR of Macedonia	Yes	Yes	35	23	1.7	1.1	14	25	0.7	1.2	11	9	0.5	0.4
Turkey	Yes	Yes	2,257	2,633	3.1	3.6	3,794	2,181	5.2	3.0	2,042	1,585	2.8	2.1
Ukraine	Yes	Yes	0	19	0.0	0.0								
United Arab Emirates							83	44	2.0	1.0	114	477	2.8	11.2
United States of America							3,773	3,831	1.3	1.3				
Venezuela							307	86	1.1	0.3				

Table 4. Corruption: police recorded offences, 2005 and 2006

Country	Definition consistent		Police-recorded offences			
			Count		Rate	
	2005	2006	2005	2006	2005	2006
Algeria	Yes	Yes	93	114	0.3	0.3
Armenia			8	17	0.3	0.6
Austria	Yes	Yes	27	11	0.3	0.1
Azerbaijan			166	172	2.0	2.0
Bahrain			8	6	1.1	0.8
Bangladesh						
Belarus	Yes	Yes	4,160	3,387	42.5	34.8
Bolivia						
Bosnia and Herzegovina	Yes	Yes	7	16	0.2	0.4
Brunei Darussalam	Yes	Yes	6	7	1.6	1.8
Canada						
Costa Rica	Yes	Yes	29	38	0.7	0.9
Croatia	Yes	Yes	442	336	9.7	7.4
Cyprus	Yes	Yes	4	14	0.5	1.7
Czech Republic	Yes	Yes	138	138	1.4	1.4
Ecuador	Yes	Yes		54		0.4
El Salvador	Yes	Yes	9	17	0.1	0.3
Estonia			117	106	8.7	7.9
Finland			94	71	1.8	1.3
Georgia	Yes	Yes	104	81	2.3	1.8
Germany			1,807	1,792	2.2	2.2
Hong Kong SAR of China	Yes	Yes				
India			3,008	3,285	0.3	0.3
Ireland			6	2	0.1	0.0
Italy			249	209	0.4	0.4
Japan	Yes	Yes	112	158	0.1	0.1
Jordan						
Kazakhstan			327	538	2.1	3.5
Kenya	Yes	Yes	107	252	0.3	0.7
Kyrgyzstan	Yes	Yes	201	243	3.9	4.6
Latvia	Yes	Yes	49	58	2.1	2.5
Lebanon						
Liechtenstein		Yes	1	0	2.9	0.0
Lithuania	Yes	Yes	99	316	2.9	9.3
Malta			5	24	1.2	5.9
Mauritius			7	11	0.6	0.9
Mongolia	Yes	Yes	114	92	4.4	3.5
Montenegro		Yes	7	11	1.2	1.8
Morocco			13	14	0.0	0.0
Nepal			14	25	0.1	0.1
Netherlands			786	780	4.8	4.8
New Zealand			10	8	0.2	0.2
Norway			21	24	0.5	0.5
Occupied Palestinian Territory	Yes	Yes	487		12.9	
Panama						
Paraguay						
Poland			6,127	6,520	16.0	17.1
Portugal	Yes	Yes	104	106	1.0	1.0
Republic of Moldova	Yes	Yes	292	331	7.5	8.6
Romania	Yes	Yes	8,278	8,357	38.3	38.8
Scotland			7	3	0.1	0.1
Serbia	Yes	Yes	681	1,813	6.9	18.4
Singapore	Yes	Yes	617	652	14.3	14.9
Slovakia	Yes	Yes	238	255	4.4	4.7
Slovenia			18	49	0.9	2.4
Spain	Yes	Yes	72	90	0.2	0.2

Country	Definition consistent		Police-recorded offences			
			Count		Rate	
	2005	2006	2005	2006	2005	2006
Sweden						
Syrian Arab Republic	Yes					
Tajikistan			1,248	967	19.1	14.6
The FYR of Macedonia	Yes	Yes	19	10	0.9	0.5
Turkey	Yes	Yes	291	300	0.4	0.4
Turkmenistan			107	64	2.2	1.3
Ukraine	Yes	Yes	3,771	3,259	8.0	7.0
United Arab Emirates			71	65	1.7	1.5
United States of America						

Table 5. Active and passive bribery: police recorded offences, 2005 and 2006

Country	Active bribery						Passive bribery					
	Definition consistent		Count		Rate		Definition consistent		Count		Rate	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Algeria	Yes	Yes					Yes	Yes				
Armenia			1	3	0.0	0.1			7	14	0.2	0.5
Austria	Yes	Yes	25	8	0.3	0.1	Yes	Yes	2	3	0.0	0.0
Azerbaijan			3	4	0.0	0.0			10	8	0.1	0.1
Bahrain												
Bangladesh			5	7	0.0	0.0						
Belarus			362	442	3.7	4.5			954	597	9.7	6.1
Bolivia												
Bosnia and Herzegovina			1	0	0.0	0.0						
Brunei Darussalam			0	0	0.0	0.0			0	0	0.0	0.0
Canada												
Costa Rica	Yes	Yes	7	1	0.2	0.0	Yes	Yes	8	1	0.2	0.0
Croatia	Yes	Yes	88	50	1.9	1.1	Yes	Yes	51	43	1.1	0.9
Cyprus												
Czech Republic	Yes	Yes	94	89	0.9	0.9	Yes	Yes	44	49	0.4	0.5
Ecuador												
El Salvador			1	7	0.0	0.1			6	10	0.1	0.1
Estonia			48	49	3.6	3.7			69	57	5.1	4.3
Finland	Yes	Yes	18	9	0.3	0.2	Yes	Yes	19	7	0.4	0.1
Georgia	Yes	Yes	16	17	0.4	0.4	Yes	Yes	88	64	2.0	1.4
Germany	Yes	Yes	808	713	1.0	0.9	Yes	Yes	999	1,079	1.2	1.3
Hong Kong SAR of China												
India												
Ireland												
Italy	Yes	Yes	115	86	0.2	0.1	Yes	Yes	132	122	0.2	0.2
Japan	Yes	Yes	18	33	0.0	0.0	Yes	Yes	84	110	0.1	0.1
Jordan			80	124	1.4	2.2						
Kazakhstan												
Kenya												
Kyrgyzstan			130	142	2.5	2.7			70	74	1.3	1.4
Latvia			19	26	0.8	1.1	Yes	Yes	24	23	1.0	1.0
Lebanon			15	4	0.4	0.1						
Liechtenstein	Yes	Yes	1	0	2.9	0.0	Yes	Yes	0	0	0.0	0.0
Lithuania	Yes	Yes	58	259	1.7	7.6	Yes	Yes	41	57	1.2	1.7
Malta												
Mauritius			2	9	0.2	0.7			5	2	0.4	0.2
Mongolia	Yes	Yes	3	2	0.1	0.1	Yes	Yes	13	19	0.5	0.7
Montenegro			5	9	0.8	1.5	Yes	Yes	2	2	0.3	0.3
Morocco												
Nepal												
Netherlands												
New Zealand												
Norway												
Occupied Palestinian Territory	Yes	Yes	487		12.9		Yes	Yes	487		12.9	
Panama												
Paraguay												
Poland												
Portugal												
Republic of Moldova	Yes	Yes	110	126	2.8	3.3	Yes	Yes	151	172	3.9	4.5
Romania	Yes	Yes	2,450	2,652	11.3	12.3			5,005	5,026	23.1	23.3
Scotland												
Serbia	Yes	Yes	84	113	0.9	1.1	Yes	Yes	143	166	1.4	1.7
Singapore												
Slovakia	Yes	Yes	97	167	1.8	3.1	Yes	Yes	141	88	2.6	1.6

Country	Active bribery						Passive bribery					
	Definition consistent		Count		Rate		Definition consistent		Count		Rate	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Slovenia	Yes	Yes	5	18	0.3	0.9	Yes	Yes	11	17	0.6	0.8
Spain												
Sweden												
Syrian Arab Republic	Yes		27	27	0.1	0.1						
Tajikistan												
The FYR of Macedonia	Yes	Yes	6	4	0.3	0.2	Yes	Yes	13	6	0.6	0.3
Turkey	Yes	Yes					Yes	Yes				
Turkmenistan												
Ukraine	Yes	Yes	911	747	1.9	1.6	Yes	Yes	2,857	2,511	6.1	5.4
United Arab Emirates												
United States of America												

Table 6. Counterfeited currency: police recorded offences, 2005 and 2006 (UN-CTS) and 2004 (Interpol)[1]

Country	Definition consistent		Interpol	Police-recorded offences (UN-CTS)			
			Count	Count	Count	Rate	Rate
	2005	2006	2004	2005	2006	2005	2006
Armenia				60	52	2.0	1.7
Austria	Yes	Yes		13,264	9,970	160.0	119.7
Azerbaijan				15	9	0.2	0.1
Bahrain				52	29	7.2	3.9
Bangladesh				325	309	0.2	0.2
Belarus			2,844	2,822	2,120	28.8	21.8
Belize					16		5.7
Bosnia and Herzegovina	Yes	Yes	301	241	170	6.2	4.3
Brunei Darussalam	Yes	Yes	19	34	10	9.1	2.6
Canada	Yes	Yes		165,014	119,405	511.3	366.5
Costa Rica	Yes	Yes	5	65	33	1.5	0.8
Croatia	Yes	Yes	496	470	483	10.3	10.6
Cyprus	Yes	Yes		1	3	0.1	0.4
Czech Republic	Yes	Yes	2,894	3,989	2,731	39.1	26.8
Denmark	Yes	Yes	1,127	525	459	9.7	8.5
Ecuador	Yes	Yes		107	140	0.8	1.1
El Salvador			12	12	15	0.2	0.2
Estonia			607				
Finland	Yes	Yes	1,945	2,344	2,147	44.7	40.8
Georgia	Yes	Yes	26	82	109	1.8	2.5
Germany				7,873	7,923	9.5	9.6
Greece	Yes	Yes	4,887	319	249	2.9	2.2
India				2,383	2,169	0.2	0.2
Ireland	Yes	Yes		242	151	5.8	3.6
Italy	Yes	Yes	8,824	9,414	9,376	16.1	16.0
Japan	Yes	Yes		3,765	1,479	2.9	1.2
Kazakhstan				1,077	805	7.1	5.3
Kenya	Yes	Yes		119	297	0.3	0.8
Kyrgyzstan	Yes	Yes		43	43	0.8	0.8
Latvia			175	502	609	21.8	26.6
Lebanon			137	133	41	3.3	1.0
Liechtenstein	Yes	Yes	5	5	1	14.5	2.9
Lithuania	Yes	Yes		1,170	1,298	34.2	38.1
Malaysia	Yes	Yes		184	225	0.7	0.9
Malta				20	21	5.0	5.2
Mauritius				17	35	1.4	2.8
Monaco			32	36	18	110.8	55.2
Mongolia	Yes	Yes	4	12	5	0.5	0.2
Montenegro				73	139	12.0	23.1
Morocco	Yes	Yes		405	405	1.3	1.3
Nepal				30	27	0.1	0.1
Netherlands	Yes	Yes	1,525	776	570	4.8	3.5
New Zealand			85	91	65	2.2	1.6
Nicaragua	Yes	Yes		56	71	1.0	1.3
Northern Ireland	Yes	Yes		304	146	17.6	8.5
Norway	Yes	Yes	298	320	240	6.9	5.1
Occupied Palestinian Territory	Yes	Yes		78		2.1	
Panama							
Paraguay	Yes	Yes		0	0	0.0	0.0
Poland	Yes	Yes	11,954	9,513	8,166	24.9	21.4
Portugal	Yes	Yes		7,319	7,186	69.5	67.9
Republic of Moldova	Yes	Yes		27	32	0.7	0.8
Romania	Yes	Yes		343	759	1.6	3.5

[1] Interpol data for 2004 were provided to UNODC for research purposes.

Country	Definition consistent		Interpol	Police-recorded offences (UN-CTS)			
			Count	Count	Count	Rate	Rate
	2005	2006	2004	2005	2006	2005	2006
Scotland	Yes	Yes		719	914	14.1	17.9
Serbia				338	266	3.4	2.7
Singapore	Yes	Yes	2	10	28	0.2	0.6
Slovakia	Yes	Yes	881	885	662	16.4	12.3
Slovenia	Yes	Yes	1,868	1,439	1,823	72.0	91.1
Spain	Yes	Yes	1,743	2,280	1,652	5.3	3.8
Sweden	Yes	Yes	2,414	1,982	1,259	21.9	13.9
Syrian Arab Republic	Yes	Yes		514	678	2.7	3.5
Tajikistan				36	35	0.5	0.5
The FYR of Macedonia	Yes	Yes		195	172	9.6	8.4
Turkey	Yes	Yes		2,811	5,243	3.9	7.1
Turkmenistan	Yes	Yes		9	12	0.2	0.2
Ukraine	Yes	Yes	1,573	1,436	1,480	3.1	3.2
United Arab Emirates				226	171	5.5	4.0
United States of America							

Chapter 5 – Responses of the criminal justice system

Paul Smit* and Stefan Harrendorf**

Abstract

In this chapter the responses of the criminal justice system on crime are described, from the moment an offender is found until a decision of a judge at a penal court. The number of persons prosecuted and convicted are analysed, both adults and juveniles as well as the proportion of females. This is done for total offences and separately for intentional homicide. Where possible, data are given by country and by continent. Next, the attrition process is discussed in two ways. Firstly the number of offenders convicted are compared to the offenders found. Secondly, the attrition process is shown in more detail with four moments in the criminal justice system, i.e. crimes recorded, offenders found, offenders prosecuted and offenders convicted.

Introduction

This chapter describes the reaction from the criminal justice system on crime. Although this can start at the moment a victim reports a crime to the police - or one can argue maybe even before that with general preventive measures - the starting point for this chapter is when a suspected offender is found. And the end point will be the decision of a judge at a penal court. Again, one could also consider the types of sanctions and the prison population as part of the criminal justice system. However, information on types of sanctions was not asked for in the 8th, 9th and 10th survey of the UN-CTS. Information on prisons and prisoners will be dealt with in chapter 7.

This means that the main theme in this chapter is what happens in the prosecution stage and at the court level. Some attention is given to the police level as well, but mainly from the perspective of the prosecution (i.e. as potential input for the prosecution). The main indicators in this chapter are the number of persons that have been prosecuted and the number of persons that have been convicted. For both indicators the proportions of females and juveniles will be considered as well. Prosecutions and convictions will be given regardless of the crime type with one exception: intentional homicide will be dealt with separately.

At every phase in the criminal justice system some attrition is expected to take place. This is caused both by technical / legal reasons (e.g. not enough evidence for an alleged offender found) and by efficiency reasons where police and/or prosecution make a case ending decision themselves. In this chapter the attrition process will be described between the moment a crime is registered and the conviction by a court.

Data are taken from the UN-CTS exclusively, from the 6th to the 10th survey (and for some countries the 5th survey was used as well). Where possible, data from the three years 1996, 2001 and 2006 were used. However, in order to minimize the number of 'missing values', other years were taken instead if there were no data available for one or more of these three years for a specific country. Besides, a quality check was made on the data. This could have resulted in using another year for a country as well (or in not considering the data at all). See Annex B and C for a complete description of the data selection process.

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In the following sections the number of persons prosecuted and convicted will be described, both the most recent data available and the trends over the last ten years. Median values per continent will be presented where possible (see Annex B) while data will also be given by country. Finally, the attrition process will be described, starting with the relation between alleged offenders and recorded crime and ending with convicted offenders.

Prosecutions

In the 10th UN-CTS the following definition was used for 'persons prosecuted':

"*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.

In many countries the general procedure in the criminal justice system is that, after an offender is found, the Prosecution Service will be the institution that brings the offender to the court. The court then decides on the guilt of the offender and the appropriate punishment. Within this general scheme many variations are possible, depending on the precise function of the Prosecution Service: whether the country has a legality or opportunity principle or whether the Prosecution Service in a country has a monopoly to prosecute. Other variations can be found in the options the police has to end proceedings without any involvement of the Prosecution Service. For a more detailed discussion on these issues see (Elsner, Smit, Zila 2008; Jehle, Smit, Zila 2008; Smit 2008; Wade 2006) These variations obviously have a considerable impact in the figures presented here.

But other, more technical or statistical factors are responsible for variations in the figures as well: three offences by one suspected offender could be counted as one or three, depending on the statistical counting choice made in a country. And although in the UN definition 'other law enforcement agencies' are explicitly included, presumably not every country would be able to provide figures for these besides the Public Prosecutor.

Another factor, probably causing considerable variation in the total number of persons prosecuted is the precise operationalisation of what is included in 'all offences' in the context of the prosecution process. Are only the most serious crimes considered here? Or also minor crimes (even infractions)? That this is probably an important factor is also shown by the correlation between the total number of persons prosecuted and the number of prosecutions for intentional homicide which is remarkably low (0.25).

In table 1 the latest available figures for person prosecuted are given. Unless otherwise mentioned (in the columns '*yr*'), the data are for 2006. The earliest year possible is 2000. Only the 92 countries that were able to provide at least one figure for 'persons prosecuted' are in the table. The countries are grouped by continent and if at least five responses were available in a continent the median was computed. Both for all offences and for intentional homicide the total number of persons prosecuted are given (in the case of 'all offences' the total number was split between adults and juveniles) as well as the rates per 100,000 inhabitants. Both for adults and juveniles the proportion of females was computed.

As expected, when looking at the rates per 100,000 there is considerable variation in the number of persons prosecuted. Nepal and Pakistan are the lowest with 5 and 6 persons prosecuted per 100,000 inhabitants. Other countries with less than 50 are Guatemala, Venezuela, the Republic of Moldova and Papua New Guinea. For most of these countries, by comparing with the persons prosecuted for intentional homicide, there is a strong suspicion that only the most serious crimes are included here. As an example, in Venezuela almost half of the 9,550 persons prosecuted are prosecuted for homicide.

Countries with the highest number of persons prosecuted are Belgium (6,512) and Turkey (4,588). Other countries with numbers of 2,000 or more are South Africa, the Republic of Korea, Austria, Finland, England & Wales and New Zealand.

Clearly, most countries with higher numbers of persons prosecuted can be found in Europe, with a median of 973. America has the lowest median (191). However, due to the considerable variation and the low number of countries responding in some continents (only 6 in Africa) it is very problematic to draw conclusions from this.

Less variation can be seen in the proportion of juveniles among persons prosecuted. However there is one outlier at the high end (Ukraine with 44% juveniles). Also there are several countries with very low percentages (3% or less) which should be interpreted with some caution: in many countries juveniles committing a crime are for a large part dealt with outside the Criminal Justice System. Generally the highest percentages of juveniles can be found in America and Europe (median 8%).

The proportion of females prosecuted is typically between 10% and 15%, again with some outliers such as Singapore with 28% and Hong Kong and Slovenia with 27% adult females, or Barbados and Swaziland with more than 30% juvenile females. And on the low end Pakistan with 0% adult females, Jordan with 0% juvenile females and Georgia with 1% for both adults and juveniles. Some of the outliers are possibly due to low absolute numbers. The proportion of females tend to be a little higher in Europe, particularly for adult females. And within Europe mainly the Northern and Western countries have a higher proportion of females, possibly due to shoplifting (Smit 2008).

For homicide again the variation is considerable. Partly this is because some countries could have presented the data including attempts (see Annex B). In Asia and Europe most countries have a low number of persons prosecuted for intentional homicide per 100,000, typically between 1.0 and 3.0. However, some countries in these continents do have much higher numbers, from 8.0 upwards. This is the case for Kazakhstan, Mongolia, Sri Lanka, Albania, Belgium, Belarus, Estonia, Lithuania, the Russian federation, and Turkey. Still the median for Asia is 2.1 and for Europe 2.3 which is lower than for Africa and America.

In table 2 (Annex A) the trends in persons prosecuted are shown. Trends for adults and juveniles are computed separately, as well as trends for homicides. For two periods the average annual change is given: for the most recent years 2001 to 2006, and for the whole period 1996 to 2006. It was not possible to use these exact periods for every country, in some cases other years we taken as substitute. See Annex B for a detailed description. However, by computing the average annual change the figures in the table are comparable. For 44 countries at least one trend figure could be computed.

In general the number of adults prosecuted seems to increase over the years, particularly in the last few years. Some of the increases are remarkable, such as for Georgia and Iceland. The increases in Finland, England & Wales and Northern Ireland have mainly occurred in the 1996 – 2001 period.

The trends in juveniles prosecuted is completely different. Here there is a decrease, again mainly in the last few years. There are some exceptions such as the very high increase in juveniles prosecuted in Portugal, most probably this could be explained by a change in the system there.

For homicide a decrease can be seen as well, although the variation seems to be somewhat higher between countries.

Convictions

In the 10th UN-CTS the following definition was used for 'persons convicted':

"*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.

Not all persons against whom a prosecution has started will be convicted. Apart from a – usually small – percentage of alleged offenders found not guilty in court, in many countries this is mainly dependent on the possibilities for the prosecutor to end a case, either with or without consequences for the alleged offender. For some European countries the different options for the prosecutor has been shown in (Jehle, Smit, Zila 2008; Wade 2006). Other factors, like special procedures for juveniles or for minor offences will also cause some variation in the figures.

As was the case with persons prosecuted, technical or statistical factors could be responsible for variations in the figures as well. And also here, the issue of which offences are exactly included in 'all offences' is important. The more so as the correlation between the total number of persons convicted and the number of persons convicted for intentional homicide is almost zero (-0.07).

In table 3 (Annex A) the latest available figures for person convicted are given. Unless otherwise mentioned (in the columns '*yr*'), the data are for 2006. The earliest year possible is 2000. Only the

95 countries that were able to provide at least one figure for 'persons convicted' are in the table. The countries are grouped by continent and if at least five responses were available in a continent the median was computed. Both for all offences and for intentional homicide the total number of persons convicted are given (in the case of 'all offences' the total number was split between adults and juveniles) as well as the rates per 100,000 inhabitants. Both for adults and juveniles the proportion of females was computed.

Generally and for most countries, looking at the rates per 100,000, the number of persons convicted is somewhat lower than persons prosecuted. This will be discussed more in detail below. Still, there is a considerable variation in the rates. Colombia with a rate of 0 and Ethiopia and Papua New Guinea with 4 are the lowest. Other countries with a rate less than 30 are Zambia, Bolivia, Ecuador, Venezuela, Afghanistan, Nepal, the Philippines and Malta. As we also saw with the prosecutions in table 5.1, by comparing with the persons convicted for intentional homicide, there is a strong suspicion for some of these countries that only the most serious crimes are included here. As an example, in Papua New Guinea almost all (220 of the 283) persons convicted are convicted for homicide.

Countries with the highest number of persons convicted are Mauritius (10,762) and Egypt (7,105). Other countries with numbers of 2,000 or more are Finland, England & Wales and New Zealand.

Clearly, most countries with higher numbers of persons convicted can be found in Europe, with a median of 698. America has the lowest median (75). However, due to the considerable variation and the low number of countries responding in some continents (only 7 in Africa) it is very problematic to draw conclusions from this.

The highest percentages of juveniles compared to the total number of persons convicted can be found in Malta (60%) and Australia (46%). In the case of Malta this could well be caused by the low absolute numbers. The highest percentages can be found in America (median 11%) and Europe (median 7%). In general the proportion of juveniles convicted is somewhat lower than juveniles prosecuted. A possible explanation could be that a prosecutor is more inclined to end a case with juveniles outside the court.

The percentage of females convicted is generally about 10%, for adults somewhat higher than for juveniles. Outliers are Barbados (53%, possibly due to low absolute numbers), Hong Kong (28% for adults) and Thailand (26% for adults). Mauritius, Afghanistan, Armenia, the Occupied Palestinian Territory, the Philippines and Qatar have very low proportions of females convicted, either for adults, juveniles or both. The highest percentages can be found in Europe and America. The median proportion of females convicted is considerably lower than females prosecuted. This could well be explained by the fact that crimes committed by female offenders tend to be less serious and thus have a greater chance to get a settlement outside the court.

As with prosecution, possibly because some countries could have presented the data including attempts (see Annex B), the variation in persons convicted for intentional homicide is considerable. Guatemala (26.3), Turkey (18.6), the Russian Federation (13.2) Mongolia (11.0) and Belarus (10.0) are the highest while on the other hand for 15 countries the rate is 0.5 or less. The median is about 1 for all continents except for America where it is 3.6.

In table 4 the trends in persons convicted are shown. Trends for adults and juveniles are computed separately, as well as trends for homicides. For two periods the average annual change is given: for the most recent years 2001 to 2006, and for the whole period 1996 to 2006. It was not possible to use these exact periods for every country, in some cases other years we taken as substitute. See Annex B for a detailed description. However, by computing the average annual change the figures in the table are comparable. For 57 countries at least one trend figure could be computed.

In most countries the number of adults convicted seems to increase over the years, particularly in the last few years (the median of the average annual increase is 3.0%). The largest increases can be seen in Malaysia (24.4% in the whole period 1996 – 2006), England & Wales (20.2% in 1996 – 2006) and Northern Ireland (37.6% in the period 2001 – 2006). Kazakhstan (-13.6%) and Armenia (-11.8%) show a decrease in the period 2001 – 2006. With some exceptions (Georgia, Spain, Sweden and Northern Ireland) the trends in juveniles convicted is downward. This is consistent with what we saw for prosecutions: for adults an increase and for juveniles a decrease.

For homicide however there is an increase in the number of persons convicted in the last period (2001–2006). But the variation between countries is considerable.

Possible measures of attrition

In only a small minority of all criminal offences committed an offender will be convicted. In every step between the commitment of a crime and the conviction of the offender(s) some attrition can and will occur:

a) Firstly, the crime must be recognized and considered as a crime by someone, either the offender, the victim, a witness or the police. This is not always the case: when a dead body is found it could be labelled an accident while in fact it was a homicide. But also for other crimes (e.g. fraud, domestic violence) the offender and sometimes even the victim could well be convinced that what happened was not a crime at all.

b) The next step is that the crime must be brought to the attention of the police, usually by a victim reporting the crime. From Crime Victim Surveys (van Dijk, van Kesteren, Smit 2008) it is known that, depending on the type of crime, only about half of the crimes are actually reported to the police.

c) Then, the crime has to be registered by the police. Again, although in many countries the police are obliged to register every crime, this does not happen in practice. This could be because the crime is not considered serious enough by the police. Or because the police will not do anything about that particular crime anyhow.

d) After a crime is registered - and by this registration formally entered the criminal justice system - an offender will be found or not. As we will see in this paragraph on average for every two crimes registered one offender is found. There is a statistical complication here: the counting unit changes now from crime to offender. Since a crime can be committed by more than one offender (and possibly for some crimes more than one offender is actually found), one cannot say that half of the crimes are 'solved'. Indeed it is possible, and for some countries this actually occurs, that the number of offenders found is larger than the number of crimes registered.

e) Not all offenders that are found will be prosecuted. Both police and prosecution can decide not to continue proceedings against an offender, either for technical reasons (not enough evidence) or policy reasons. And, in some countries and under specific conditions, the police can end a procedure with some sanction for the offender.

f) After a prosecution against an offender has started, not all offenders will be brought before a penal court. As in the preceding step, the prosecutor can end a procedure as well, either with or without any consequences for the offender.

g) Not all offenders brought before a judge will get a conviction. Although in practice this is a small percentage in most countries not all alleged offenders will be found guilty.

Essentially this ends the attrition, although one can consider the possibility a judge has in some countries, i.e. to convict an offender *without* imposing a penalty as another step in the attrition process. Another possible step in the attrition process is that the penalty could not be executed for some reason (e.g. the offender has escaped). But these are very small percentages anyhow. See also (Marshall 1998; Mayhew 2003; Tonry, Farrington 2005) on the attrition process in the criminal justice system.

It is important to realize that the various steps described above are not independent of each other. In particular the attrition in step c) can influence the outcome of the attrition in d): if the police records a crime only when there is a realistic possibility to find the offender, then the attrition in step c) is expected to be high while it is low in step d). But there is also a mutually dependency between e) and f) according to the possibilities of either the police or the prosecution. This is very different across countries as was shown in (Elsner, Smit, Zila 2008; Wade 2006).

In the UN Crime Trends Survey information can be obtained for crimes recorded, offenders found, offenders prosecuted and offenders convicted. This relates to the above mentioned steps c), d), e) and g). In table 5 the attrition between the steps d) and g) is shown. Assuming that the 'offenders found' is the potential input for the prosecution this essentially shows the total attrition in the combined prosecution and courts process.

The convictions are given as a percentage of the number of offenders found, for adults, juveniles, females and homicides. Data are for the year 2006 where available. If another year was used, this is indicated in the columns 'C' (for

convicted) or 'O' (for offenders found). Only the 81 countries where at least one attrition rate could be computed are in the table. The countries are grouped by continent and if at least five responses were available in a continent the median was computed.

As in previous tables the variations between countries seem to be considerable. Indeed, very low percentages (under 10%) or percentages much higher than 100% are difficult to understand. Possibly these are due to data availability or other statistical artefacts. If, for example, all convictions are counted regardless of crime type but for offenders found only offenders suspected of more serious crimes (e.g. excluding traffic offences) are counted, a percentage higher than 100% could well be the result.

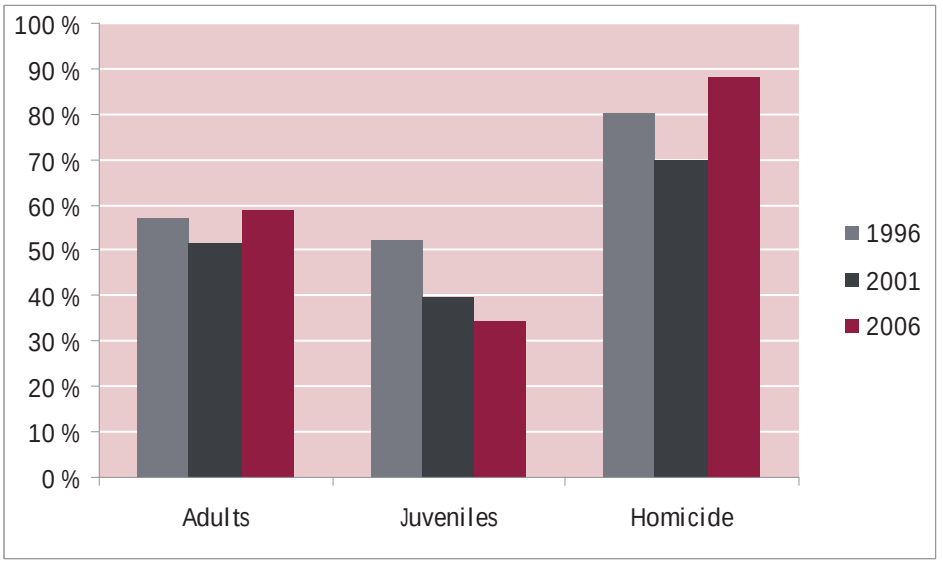
For adults, the median Convictions / Offenders quotient is 60%. Not surprisingly this is somewhat lower for females (49%). Except for some Asian countries - where the attrition measured in this way is actually lower for females - in almost all countries the Conviction / Offenders quotient is lower for females.

Generally the attrition is in Asia somewhat lower than in Europe. Due to the small number of countries responding in Africa and America the high median attrition in these continents cannot be seen as representative for these continents.

Clearly juvenile offenders are usually dealt with outside a penal court, at least compared to adult offenders. Only 35% of the juvenile offenders (and with 22% even less female juveniles) will be convicted in court. Again, the attrition is somewhat lower in Asia. As expected, the attrition rate for homicide offenders is much lower, i.e. higher percentages for the Convictions / Offenders quotients. The median rate is 71%, in Europe the rate is the highest with 84%.

In figure 1 the trends are shown for the convictions as percentage of the offenders found. Due to the lack of trend data it was not useful to give the information by continent. Also, because the data used for the trends analysis are not exactly the same as those for the 'last year available' (see Annex B for an explanation), the percentages for 2006 in figure 1 are not the same as in table 5. Trends for adults, juveniles and homicides are shown in the figure.

Figure 1. Percentage of persons convicted per suspected offenders, trends 1996-2006

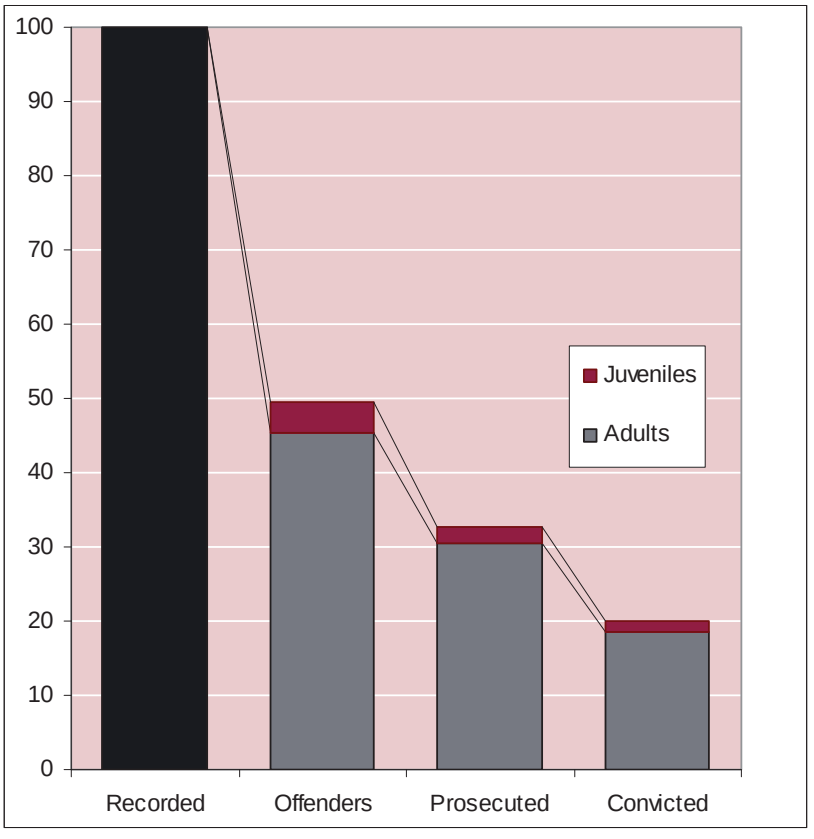


Both for adults and for homicides attrition seemed to increase (i.e. lower percentages) in the period 1996 - 2001. This trend was reversed in the period 2001 - 2006 resulting in a level comparable to 1996. For juveniles however the attrition increased during the whole 10 year period. This possibly indicates that there has been a change in attitude towards juveniles, i.e. a tendency to deal with juvenile offenders more and more outside a penal court.

Tables 6 and 7 look into the attrition process in more detail. Here, the number of offenders found, offenders prosecuted and convicted (steps d), e) and g) as earlier described) are related to the number of offences recorded (step c)). Table 6 gives the information for all offences, table 7 for homicide. In table 6 the offenders are separated into adult and juveniles. Where available, the year 2006 is taken, otherwise another year (but not before 2000) is used. This is indicated in the tables. In the 'recorded' column the rates of offences recorded per 100,000 inhabitants are given. The other columns give the number of offenders ('found', 'prosecuted' and 'convicted') per 100 offences recorded. Since the counting unit has changed from offences to offenders these are *not* percentages and could well be more than 100. The countries are grouped by continent and if at least five responses were available in a continent the median was computed.

Figure 2 shows the medians over all countries and all offences, for adults and juveniles. This is a graphical representation of the last line in table 6.

Figure 2. Attrition in the criminal justice system for all offences, 2006. Median of all countries. Indexed with Recorded = 100



On average - or, more precisely, by taking the median over all countries - one offender is found for every two crimes recorded. In both steps that follow the attrition is about one third: two of the three offenders found are prosecuted and two of the three offenders prosecuted are convicted. At the individual country level the attrition between offenders found and offenders prosecuted can be very different from the attrition between offenders prosecuted and convicted. As an example in Finland 41 of the 68 adult offenders found are prosecuted, but then almost all (40) are convicted. But in Slovakia the attrition mainly takes place in the last part:

almost all (37 out of 41) adult offenders found are prosecuted, but only 21 are convicted.

In Asia the attrition is less than in the other continents. However, the rate of offences recorded is low for Asia. A possible mechanism here could be that crimes with a low chance of finding an offender are not always recorded. In America the overall attrition is very high with only 4.6 adult and 0.5 juvenile offenders convicted per 100 crimes recorded.

For homicide the attrition is much less. Obviously because the criminal justice system, starting with a police investigation, will give a higher priority to homicides than to less serious offences. Also, when an offender is found the case will usually be brought before a penal court. In many countries more offenders are found than offences recorded. One of the reasons is that, while some homicides will never be solved (and no offenders will be found) there will also be homicides with more than one offender. Hardly any attrition is found for the prosecution: almost all (102 out of 108) offenders found will be prosecuted. But in the next stage there is some attrition: three out of four prosecutions end in a conviction.

Different from other offences, the attrition for homicide is less in Europe than in Asia. The data in the other continents are too unstable to draw any conclusions. Remarkably, in many European countries the number of persons prosecuted is higher than the number of offenders found. This could be due to the fact that where a case starts as a 'threat' or 'assault' case, the prosecutor could decide to prosecute for (attempted) homicide instead.

Summary and conclusions

In this chapter the responses of the criminal justice system on crime are described, in particular from the moment an alleged offender is found until the decision of a judge at a penal court. The main indicators are persons prosecuted and persons convicted. Both the latest information available and trend data over the last 10 years are used.

Due to organisational, technical and statistical factors the variation in the number of persons prosecuted and convicted is very high. Countries with the highest rate per 100,000 inhabitants have a rate of more than 1,000 times of countries with the lowest rate, both for prosecutions and for convictions. Countries in Europe show the highest rates, in America the lowest.

The proportion of juveniles is about 7% for persons prosecuted and 6% for persons convicted. The highest proportions can be found in Europe and America. The proportion of females prosecuted is typically between 10% and 15% and about 10% for convictions. The proportion of adult females is somewhat larger than for juveniles, and the highest proportion can be seen in Europe. For juveniles the lower percentages for convictions could be explained by the fact that a prosecutor will be more inclined to end a case with juveniles outside the court. For female offenders this is probably because crimes committed by female offenders tend to be less serious and thus have a greater chance to get a settlement outside the court.

Looking at trends, for both prosecutions and convictions there is an increase in the number of adults, mainly in the last 5 years and a decrease in the number of juveniles, also mainly in the last 5 years. Differences between continents are small.

The variations in persons prosecuted and convicted for intentional homicide are also large. Partly this is because probably some countries included attempts as well in their responses. Although some countries in Europe and Asia have very high rates per 100,000 inhabitants, the median values for these two continents are lower than in America and Africa. While there is a decrease of persons prosecuted for homicide, the trend for convictions is upward.

In every step between the commitment of a crime and the conviction of the offender(s) some attrition can and will occur. This can be due to technical or legal reasons – e.g. the offender is not found, or there is not enough evidence – or because of efficiency reasons. In many countries the prosecution and/or the police have the possibility to end a proceeding, with or without consequences for the alleged offender.

Looking at persons convicted as a percentage of suspected offenders, the median for all countries that answered both questions in the UN-CTS is 60% for adults and 35% for juveniles. For females these percentages are considerably lower: 49% for adults and 22% for females. But, not surprisingly, for homicide it is higher: 71%. Because of the scarcity of data it is hard to show

differences between continents. It seems that the percentages are somewhat higher (meaning less attrition) in Asia. Remarkably, the attrition for adult females in Asia is less than for adults total. For adults and for homicide the trends over the last ten years are similar: more attrition in the period 1996 – 2001 and less attrition in the period 2001 – 2006. For juveniles there seems to be more attrition for the whole period.

Looking in more detail at the attrition process (considering the number of persons prosecuted as well) and starting one step before offenders found, i.e. crimes recorded we find the following results:

For every 100 crimes recorded:

- 45.4 adult and 4.1 juvenile alleged offenders are found
- 30.4 adult and 2.2 juvenile alleged offenders are prosecuted
- 18.5 adult and 1.4 juvenile offenders are convicted

In Asia the figures are higher, particularly for adults and for offenders found, while in America the figures are somewhat lower. For homicide, the figures are much higher: for every 100 homicides recorded 108 offenders are found, 102 prosecuted and 76 convicted.

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Annex A to chapter 5: Tables

Table 1. Persons prosecuted, 2006

All offences													International homicide		
		Total	Adults				Juveniles				% juveniles	Total		
Continent	Country	rate/ 100k	yr	persons	yr	% females	yr	persons	yr	% females	yr	of total	rate/ 100k	persons	yr
Africa	Algeria	*1.686*		544.891		5%		11.571		4%		2%			
	Egypt												*0.6*	428	*00*
	Ethiopia			291.479	*02*	13%	*02*	55.904	*02*	12%	*02*	16%	*12.5*	8.660	*02*
	Mauritius	*912*		10.926		7%		589		14%		5%	*4.0*	51	
	Morocco			447.509		13%		20.946		15%		4%	*2.2*	676	
	Namibia												*6.6*	126	*02*
	South Africa	*2.689*	*00*										*23.8*	10.696	*00*
	Swaziland	*70*		743		8%		54		31%		7%	*3.8*	43	
	Uganda	*194*	*04*										*3.8*	1.055	*04*
	Zambia												*0.1*	11	*00*
	Zimbabwe	*457*	*00*	54.934	*00*	6%	*00*	1.958	*00*	19%	*00*	3%	*7.6*	948	*00*
	median	***685***				***8%***				***15%***		***5%***	***3.9***		
Americas	Barbados	*1.845*	*00*	4.643	*00*	7%	*00*	69	*00*	36%	*00*	1%	*7.2*	18	*00*
	Belize	*61*		174		5%		1		0%		1%	*13.2*	38	
	Canada	*1.313*		372.084		16%		56.463		21%		13%	*1.0*	328	
	Chile			26.862	*04*								*4.3*	689	*04*
	Costa Rica	*192*		7.800		4%		644				8%	*5.4*	237	
	Dominican Republic	*94*													
	Ecuador	*1.405*											*6.2*	800	*04*
	El Salvador	*1.186*	*02*	68.031	*02*	13%	*02*	3.083	*02*	11%	*02*	4%	*13.3*	795	*02*
	Guatemala	*14*	*00*										*2.9*	329	*00*
	Mexico	*105*	*02*	91.000	*02*	5%	*02*	16.589	*02*	10%	*02*	15%	*0.8*	769	*02*
	Nicaragua	*463*		21.839		8%		3.747		10%		15%	*7.2*	398	
	Panama	*597*		17.431		12%		1.893		9%		10%	*11.9*	391	
	Peru	*169*	*02*												
	Uruguay	*190*	*00*												
	Venezuela (Bolivarian Republic of)	*38*	*02*	9.550	*02*			797		11%		8%	*15.2*	4.123	
	median	***191***				***8%***				***10%***		***8%***	***6.7***		
Asia	Armenia	*126*		3.481		17%		325		2%		9%	*2.6*	80	
	Azerbaijan	*144*		18.077		15%		487		6%		3%	*2.4*	208	
	Bahrain	*1.980*		14.566				159		14%	*04*	1%	*3.2*	24	
	China	*56*	*00*	667.935	*00*			40.901	*00*			6%			
	Georgia	*404*		16.915		1%		888		1%		5%	*4.2*	187	
	Hong Kong Special Administrative Region of China	*411*		27.259		27%		1.146		18%		4%	*0.4*	28	
	Israel	*623*		38.639		9%		3.784		8%		9%	*0.4*	27	*04*
	Japan	*141*		178.689		9%		1.351		6%		1%	*0.5*	696	
	Jordan							3.109	*02*	0%	*02*				
	Kazakhstan	*347*		48.736		18%		4.316		20%		8%	*11.2*	1.720	
	Kyrgyzstan	*305*		14.491				1.151				7%	*9.0*	476	
	Malaysia	*489*		45.680		17%		3.100		7%		6%	*2.7*	713	
	Maldives	*1.123*	*02*	2.828	*02*			322	*02*			10%	*1.8*	5	*02*
	Mongolia	*652*		15.938		10%		887		5%		5%	*12.9*	332	
	Myanmar	*51*	*02*	16.129	*02*	14%	*02*						*2.7*	1.291	*02*
	Nepal	*5*											*1.3*	348	
	Oman	*695*	*02*										*0.7*	17	*02*
	Pakistan	*6*	*00*	9.213	*00*	0%	*00*	3	*00*			0%	*0.1*	198	*00*
	Republic of Korea	*2.893*	*04*	1.349.214	*04*	13%	*04*	21.125	*04*	13%	*04*	2%	*1.7*	802	*04*
	Saudi Arabia												*0.5*	112	*02*
	Singapore	*283*		12.096		28%		267		11%		2%	*1.0*	45	
	Sri Lanka	*1.642*	*04*	45.979	*04*	4%	*04*	812	*04*	5%	*04*	2%	*10.0*	1.939	*04*

	Syrian Arab Republic												1.6	263	00
	Thailand	1.191	00	572.083	00			146.890	00			20%	5.5	3.417	00
	Turkmenistan	132		6.351		16%		127		9%		2%	4.5	221	
	United Arab Emirates												0.3	14	
	median	**375**				**14%**				**7%**		**5%**	**2.1**		
Europe	Albania	249	04	6.127	04			1.955	04			24%	9.3	288	04
	Austria	3.565		226.349		21%		58.725		20%		21%	4.1	342	
	Belgium	6.512	02	668.591	02	19%	02						11.4	1.171	02
	Bosnia and Herzegovina	638		22.130				1.994				8%			
	Bulgaria	816	04	59.750	04			4.274	04			7%	3.3	254	04
	Belarus	806		72.638		14%		6.061		10%		8%	10.6	1.040	
	Croatia	1.774		44.226		13%		2.830		7%		6%	5.9	262	
	Cyprus												0.2	2	
	Czech Republic	1.388		135.178		9%	00	6.725		11%	00	5%	1.6	163	
	Denmark	549	02										0.4	22	02
	Estonia	1.295		12.526	04	7%	00	1.415	04	13%	00	10%	8.9	120	
	Finland	4.248		212.419		18%		11.138		18%		5%	3.5	185	
	Germany	888		653.102		19%		78.901		19%		11%	0.3	232	
	Hungary	1.028		95.459		15%		7.943		12%		8%	1.7	174	
	Iceland	865	04	3.549	04			271	04			7%	0.7	2	04
	Ireland	151		19.970	04	23%	04	2.384	04	14%	04	11%	0.9	38	
	Italy	940	05	531.701	05	15%	05	19.289	05	15%	05	4%	2.8	1.665	05
	Latvia	363		7.292		10%		976		6%		12%	4.0	91	
	Lithuania	510		13.794		10%		3.472		6%		20%	8.3	280	
	Luxembourg	1.009	02	4.401	02								1.1	5	02
	Malta	663											0.5	2	
	The former Yugoslav Republic of Macedonia	1.154		23.514		4%		1.500		3%		6%	4.4	89	
	Republic of Moldova	30	04	14.884	04	12%	04	3.187	04	8%	04	18%	4.9	181	
	Netherlands	1.568		220.501		14%		36.516		17%		14%	1.1	180	
	Norway	601	05	25.659	05	14%	05	2.215	05	18%	05	8%	1.1	52	05
	Poland	1.645		638.860	04								2.6	980	04
	Portugal	1.007		94.533		12%		12.170		8%		11%	2.2	235	
	Romania	246		46.234		7%		6.709		5%		13%	2.0	424	
	Russian Federation	1.037	00										19.6	28.694	00
	Slovenia	772		11.945		27%	00	720		8%	02	6%	1.0	21	
	Slovakia	863		42.950		14%		3.541		6%		8%	2.3	125	04
	Spain												2.8	1.145	00
	Sweden	1.340		91.064	02			15.247				14%	0.9	86	
	Turkey	4.588		2.250.430	04	8%	04	136.358	04	9%	04	6%	23.7	17.062	
	Ukraine	442		20.662	04			16.526				44%	6.9	3.233	
	England and Wales	3.312		1.641.989		19%		126.189		15%		7%	1.3	700	
	Northern Ireland	1.775	05	28.816	05	13%	05	1.793	05	13%	05	6%	2.1	36	05
	Scotland	1.256	05	46.839	05	18%	05	17.137	05	12%	05	27%	1.0	53	05
	median	**973**				**14%**				**11%**		**8%**	**2.3**		
Oceania	New Zealand	3.401	00	125.323	00	18%	00	3.876	00	16%	00	3%	1.2	49	02
	Papua New Guinea	20	00	1.041	00	1%	00						1.2	65	00
All countries	**median**	**657**				**13%**				**11%**		**7%**	**2.7**		

Table 2. Persons prosecuted, trends 2001 – 2006; 1996 – 2006

		Adults		Juveniles		Homicides	
Continent	**Country**	**2001-2006**	**1996-2006**	**2001-2006**	**1996-2006**	**2001-2006**	**1996-2006**
Africa	Morocco					-0.2%	
Americas	Canada	-3.8%	-1.1%	-8.0%	-6.5%	-10.5%	-1.2%
	Chile		2.0%			19.0%	
	Costa Rica		0.9%		17.7%		7.8%
Asia	Armenia		-4.6%		0.5%	-4.0%	
	Azerbaijan		18.9%		0.0%		-5.0%
	Georgia	16.0%	22.3%	13.1%	2.1%	3.4%	-5.2%
	Hong Kong Special Administrative Region of China	1.1%	-2.8%	-4.0%	-5.8%	-8.6%	-8.4%
	Israel		0.1%		2.1%		-3.2%
	Japan	3.0%	3.7%	-0.5%	4.9%	-3.4%	-0.8%
	Kazakhstan		-7.7%		-6.5%		-3.2%
	Kyrgyzstan	-6.3%	-4.0%	-6.4%	-3.7%	-1.6%	-3.6%
	Nepal					-19.5%	
	Republic of Korea	2.0%	5.1%	-22.0%	-10.1%	-9.0%	2.7%
	Singapore	2.0%	-0.3%	9.8%	0.6%	1.6%	4.9%
	median	***2.0%***	***-0.1%***	***-2.3%***	***0.3%***	***-3.7%***	***-3.2%***
Europe	Albania					-22.1%	
	Bulgaria	8.3%	8.6%		4.6%	15.4%	3.4%
	Belarus	2.7%	1.9%	-0.3%	-0.8%	-3.6%	-1.4%
	Croatia	6.9%	-0.7%	8.8%	2.2%	23.8%	-1.9%
	Cyprus						-8.8%
	Czech Republic	5.8%	3.6%	-5.1%	-7.1%	-6.6%	-3.2%
	Estonia	2.4%	4.5%	-7.3%	-4.5%	-3.5%	-5.1%
	Finland	1.4%	10.6%	-1.8%	2.3%	13.6%	5.1%
	Germany	5.0%	1.8%	1.7%	-3.5%	1.6%	1.1%
	Hungary	-2.6%	-1.1%	-5.4%	-4.6%	-2.5%	-4.5%
	Iceland	23.8%		-19.8%		0.0%	-9.4%
	Ireland						4.7%
	Italy	1.8%	-0.7%	0.4%	-2.6%	-15.9%	2.3%
	Latvia	-15.2%	-5.6%	-21.3%	-5.3%	-13.1%	
	Lithuania	-9.7%		-1.1%		-3.2%	
	The former Yugoslav Republic of Macedonia	2.5%	1.9%	-3.1%	-1.2%	-1.1%	3.2%
	Republic of Moldova		0.9%		5.0%	-15.9%	-5.2%
	Netherlands	4.1%	1.4%	5.3%	3.4%		
	Norway	16.4%	9.6%	14.6%	10.5%	12.4%	8.5%
	Portugal	-1.8%	0.5%	64.3%	24.9%	-0.6%	0.6%
	Romania	-8.8%	-7.7%	-4.8%	-6.0%	-10.6%	-6.1%
	Slovenia	-3.6%	-2.2%	-10.4%	-13.1%	-13.4%	-10.1%
	Slovakia	4.2%	3.0%	-3.0%	-4.0%	-6.5%	0.0%
	Sweden			-7.4%		4.5%	1.0%
	Turkey		3.6%		7.3%		2.1%
	Ukraine			-9.3%	-6.2%	-5.1%	-2.1%
	England and Wales	2.5%	17.5%	-19.4%	-2.8%	-2.9%	1.1%
	Northern Ireland	-0.5%	12.6%	12.5%	8.1%	14.4%	3.2%
	Scotland	0.8%	-1.5%	-3.5%	-4.5%	5.4%	-3.5%
	median	***2.5%***	***1.9%***	***-3.1%***	***-2.6%***	***-2.9%***	***0.0%***
All countries	***median***	***2.0%***	***1.1%***	***-3.1%***	***-1.0%***	***-3.0%***	***-1.3%***

Table 3. Persons convicted, 2006

All offences													International homicide		
		Total		Adults				Juveniles				% juveniles	Total		
Continent	Country	rate/ 100k	yr	persons	yr	% females	yr	persons	yr	% females	yr	of total	rate/ 100k	persons	yr
Africa	Algeria												*1.3*	406	*04*
	Egypt	*7.105*		5.548.300		12%		36.758		3%	*00*	1%	*4.0*	3.123	
	Ethiopia	*4*	*02*										*0.4*	310	*02*
	Mauritius	*10.762*		135.557		1%		263		11%		0%	*0.8*	10	
	Morocco			26.539	*04*	3%	*04*	364	*04*	5%	*04*	1%			
	Swaziland	*1.291*	*00*										*0.9*	10	*00*
	Uganda	*68*	*04*										*0.0*	6	*04*
	Zambia	*19*	*00*	1.309	*00*	1%	*00*	1	*00*			0%	*0.9*	98	*00*
	Zimbabwe	*277*	*04*	53.782	*04*	12%	*04*	1.710	*04*	22%	*04*	3%	*1.0*	130	*00*
	Median	***277***				***3%***						***1%***	***0.9***		
Americas	Argentina	*68*	*02*												
	Barbados							15	*00*	53%	*00*		*8.3*	21	*00*
	Bolivia	*20*		1.735		13%		180		13%		9%	*2.3*	198	*02*
	Canada	*849*		242.988		14%		34.065		19%		12%	*0.5*	161	
	Chile	*318*	*04*	15.494	*04*	10%	*04*	2.845	*04*	6%	*04*	16%	*2.7*	432	*04*
	Colombia	*0*	*04*	38	*04*	16%	*04*								
	Costa Rica	*82*		3.586		10%		236		2%	*00*	6%	*2.9*	128	
	Dominican Republic	*38*		3.416		17%		213		17%		6%	*5.0*	485	
	Ecuador	*18*	*04*	2.345	*04*								*2.5*	325	*04*
	El Salvador	*39*	*02*	2.059	*02*	5%	*02*	270	*02*	7%	*02*	12%	*7.2*	429	*02*
	Guatemala	*312*	*00*	34.115	*00*	14%	*00*						*26.3*	2.954	*00*
	Mexico	*135*		143.214		9%							*3.6*	3.846	
	Panama	*141*		4.130		8%		499		6%		11%	*2.6*	85	
	Uruguay	*147*	*00*	7.704	*00*	8%	*00*						*7.3*	243	*00*
	Venezuela (Bolivarian Republic of)	*18*	*00*	4.294	*00*	4%	*00*						*6.4*	1.555	*00*
	Median	***75***				***10%***				***10%***		***11%***	***3.6***		
Asia	Afghanistan	*12*	*02*	738	*02*	1%	*02*	80	*02*			10%	*1.0*	215	*02*
	Armenia	*106*		3.070		6%		168		1%		5%	*1.1*	34	
	Azerbaijan	*159*	*04*	13.054	*04*	10%	*04*	299	*04*	3%	*04*	2%	*3.7*	311	*04*
	Bahrain	*302*	*04*										*0.1*	1	*03*
	China	*51*	*00*	598.106	*00*										
	Georgia	*383*		15.909		6%		1.002		2%		6%	*7.1*	311	
	Hong Kong Special Administrative Region of China	*341*		22.763		28%		843		18%		4%	*0.2*	16	
	Indonesia			1.088.678	*00*	3%	*00*	29.106	*00*			3%	*0.9*	1.912	*00*
	Israel	*578*		35.835		9%		3.563		8%		9%	*0.4*	26	*04*
	Japan	*68*		86.218				164				0%	*0.5*	696	
	Jordan							399	*02*						
	Kazakhstan	*213*		30.176		11%		2.406		8%		7%	*8.4*	1.287	
	Kyrgyzstan	*255*		12.606		12%		874		7%		6%	*7.6*	403	
	Malaysia	*321*		64.687		11%		2.908		6%		4%	*0.6*	159	
	Mongolia	*302*		7.065		9%		727		5%		9%	*11.0*	284	
	Myanmar	*33*	*02*	15.848	*02*	15%	*02*	1.444	*02*	20%	*02*	8%	*1.4*	673	*02*
	Nepal	*11*		2.908		6%		23		4%		1%	*0.9*	261	
	Occupied Palestinian Territory	*52*		1.530		0%		498		3%		25%	*0.9*	35	
	Philippines	*6*		5.240		23%		32		0%		1%	*0.1*	72	
	Qatar	*423*	*00*	3.387	*00*	1%	*00*	107	*00*			3%			
	Republic of Korea	*451*	*04*	233.253	*04*	13%	*04*	3.817	*04*	8%	*04*	2%			
	Saudi Arabia	*273*	*02*	59.875	*02*										

	Singapore	*293*	*00*									*0.4*	17	
	Syrian Arab Republic	*421*	*03*					13.376	*03*			*1.7*	275	*00*
	Tajikistan	*109*										*3.4*	225	
	Thailand	*962*		620.957		26%		18.799		8%		3%		
	Turkmenistan	*181*		8.770		15%		141		5%		2%	*4.5*	222	
	United Arab Emirates	*1.934*		81.060		15%		803				1%	*0.7*	28	
	median	***264***				***10%***				***6%***		***4%***	***1.0***		
Europe	Albania	*142*	*02*	4.064	*02*	7%	*02*	274	*02*			6%	*8.2*	253	*02*
	Austria	*525*		40.525		14%		2.889		14%		7%	*0.7*	59	
	Belgium	*1.372*	*02*	132.053	*02*			485	*02*			0%	*1.8*	188	*02*
	Bosnia and Herzegovina	*481*		18.200				7				0%			
	Bulgaria	*381*	*04*	26.238	*04*	8%	*04*	3.408	*04*	6%	*04*	11%	*2.0*	158	*04*
	Belarus	*801*		72.426		14%		5.812		10%		7%	*10.0*	975	
	Croatia	*568*		24.216		10%		974		5%		4%	*4.3*	189	
	Cyprus												*0.2*	2	
	Czech Republic	*679*		66.672		12%	*04*	2.773		9%	*04*	4%	*1.2*	123	
	Denmark	*945*		44.051		17%		7.250		18%		14%	*0.9*	51	
	Estonia	*942*	*04*	9.746	*04*	7%	*04*	1.181	*04*	7%	*04*	11%	*7.9*	106	*04*
	Finland	*4.169*		208.517		18%		10.874		18%		5%	*3.3*	172	
	France	*981*	*00*	540.980	*00*	10%	*00*	39.059	*00*	9%	*00*	7%	*0.8*	494	*00*
	Germany	*698*		524.627		19%		50.525		17%		9%	*0.2*	204	
	Hungary	*979*	*04*	91.890	*04*	14%	*04*	7.059	*04*	10%	*04*	7%	*1.9*	195	*04*
	Iceland	*881*	*04*	2.450	*04*	14%	*04*	118	*04*	14%	*04*	5%	*0.3*	1	*03*
	Ireland												*0.6*	23	*04*
	Italy	*336*		195.394		14%		2.869		19%		1%	*1.2*	718	
	Latvia	*439*		8.656		9%		1.350		6%		13%	*4.4*	101	
	Lithuania	*384*		11.773				1.240				10%	*8.2*	278	
	Luxembourg	*959*	*02*	4.269	*02*	6%	*02*						*0.9*	4	*02*
	Malta	*8*	*04*	32	*04*	3%	*04*	48		15%		60%	*0.2*	1	
	The former Yugoslav Republic of Macedonia	*497*		9.280		6%		844		4%		8%	*1.8*	37	
	Republic of Moldova	*335*		11.118		11%		1.316		5%		11%	*7.5*	280	
	Netherlands	*748*		111.163		12%		11.415		14%		9%	*0.9*	142	*04*
	Norway	*303*		13.318		13%		864		12%		6%	*0.5*	25	
	Poland	*1.285*		462.937		8%		27.419		14%		6%	*1.0*	374	
	Portugal	*659*		61.056		9%		8.761		6%		13%	*1.5*	162	
	Romania	*263*		50.560		8%		6.145		8%		11%	*3.9*	845	
	Russian Federation	*807*	*00*	1.035.071	*00*	14%	*00*	148.560	*00*	7%	*00*	13%	*13.2*	19.415	*00*
	Slovenia	*430*		8.119		12%		511		8%		6%	*2.2*	44	
	Slovakia	*478*		24.180		15%		1.584		6%		6%	*1.1*	59	
	Spain							16.229					*0.1*	34	
	Sweden	*1.313*		94.295		16%		25.390		23%		21%	*1.8*	163	
	Switzerland	*1.497*		97.911		14%		14.045		21%		13%	*1.3*	98	
	Turkey	*1.306*		918.936		7%		22.596		8%		2%	*18.6*	13.424	
	Ukraine	*345*		146.926		14%		13.939		7%		9%	*4.8*	2.228	
	England and Wales	*2.646*		1.320.084		20%		93.689		15%		7%	*0.7*	373	
	Northern Ireland	*1.523*	*05*	24.800	*05*	13%	*05*	1.455	*05*	13%	*05*	6%	*0.9*	15	*05*
	Scotland	*1.090*	*05*	40.876	*05*	18%	*05*	14.650	*05*	12%	*05*	26%	*0.8*	42	*05*
	median	***698***				***13%***				***10%***		***7%***	***1.3***		
Oceania	Australia	*69*	*04*	14.998	*04*	13%	*04*	12.856	*00*			46%	*1.7*	349	*04*
	New Zealand	*2.475*	*00*	93.877	*00*	17%	*00*	560	*00*	13%	*00*	1%	*0.6*	24	*02*
	Papua New Guinea	*4*	*00*	283	*00*	8%	*00*	18	*00*			6%	*4.1*	220	*00*
All countries	median	*341*				11%				8%		6%	*1.4*		

Table 4. Persons convicted, trends 2001 – 2006; 1996 – 2006

		Adults		Juveniles		Homicide	
Continent	Country	2001-2006	1996-2006	2001-2006	1996-2006	2001-2006	1996-2006
Africa	Egypt				-1.7%	4.0%	8.7%
	Mauritius		12.9%				15.8%
	Zimbabwe	-1.2%		-27.5%			
Americas	Bolivia	-3.0%		-14.4%			
	Canada	-2.2%	-0.7%	-8.1%	-7.6%	-1.5%	14.4%
	Chile		-8.0%			2.3%	
	Costa Rica	3.0%	-6.6%	-2.1%	-8.6%	0.6%	1.3%
	Dominican Republic					39.8%	
	Mexico	3.9%	1.7%			5.2%	-4.4%
	Panama		1.8%				-5.3%
	median		***-0.7%***			***2.3%***	
Asia	Armenia	-11.8%	-7.1%	-7.2%	-7.4%	-16.7%	
	Azerbaijan	-0.8%	0.2%	-3.5%	-5.0%	10.9%	-4.4%
	Georgia	12.4%	7.2%	17.1%	7.4%	7.8%	0.4%
	Hong Kong Special Administrative Region of China	1.7%	-2.1%	2.1%	-3.7%	6.4%	2.9%
	Israel		0.8%		2.9%		-1.8%
	Japan	1.3%	3.2%	-3.6%	0.1%	7.2%	5.9%
	Kazakhstan	-13.6%	-9.2%	-12.6%	-8.2%		-2.9%
	Kyrgyzstan		-2.4%		-1.9%	-2.4%	-2.8%
	Malaysia	6.8%	24.4%	-0.6%	39.5%	23.0%	20.3%
	Occupied Palestinian Territory	7.3%	1.2%	5.2%	34.9%	-6.1%	-3.1%
	Republic of Korea	9.1%	7.1%	-22.6%	-16.4%		
	Singapore						-2.5%
	Tajikistan						0.4%
	median	***1.7%***	***0.8%***	***-3.5%***	***-1.9%***	***6.8%***	***-1.8%***
Europe	Austria		-4.0%		-1.2%		
	Bulgaria	-0.7%	7.1%	0.1%	14.1%	2.9%	-2.1%
	Belarus	9.8%	2.7%	2.9%	-0.8%	3.4%	1.3%
	Croatia	6.6%	6.2%	3.6%	2.9%	1.1%	4.0%
	Cyprus					18.9%	-8.8%
	Czech Republic	3.4%	2.6%	-6.1%	-7.8%	-3.6%	-4.9%
	Denmark	-5.4%	-4.5%	2.5%	1.8%	4.1%	-1.8%
	Estonia	3.0%	4.3%	-7.6%	-3.3%	-0.9%	-2.6%
	Finland	1.4%	10.8%	-1.9%	2.3%	12.6%	4.7%
	Germany	4.7%	1.7%	2.5%	-3.1%	0.7%	1.0%
	Hungary	1.2%	2.5%	-1.6%	-1.2%	-10.4%	-2.8%
	Iceland	7.7%		7.5%			
	Italy	-3.6%	-2.1%	-7.4%	-3.2%	0.1%	7.6%
	Latvia	-4.5%	-0.6%	-5.1%	0.9%	-1.1%	0.0%
	Lithuania	-8.4%	-2.3%	-13.9%	-5.5%	-20.7%	-1.5%
	Malta					-30.1%	
	The former Yugoslav Republic of Macedonia	6.1%	3.9%	-1.8%	-3.1%	1.9%	1.2%
	Republic of Moldova	-6.1%	-0.7%	-7.0%	-2.1%	-6.7%	3.8%
	Netherlands	3.9%	2.6%	4.7%	4.6%		
	Norway	4.9%	-2.2%	1.1%	-5.8%	2.9%	-2.1%
	Poland	8.0%	7.9%	-15.4%	-2.8%	-8.0%	-2.1%
	Portugal	4.1%	6.2%	-3.8%	11.2%	-3.9%	-0.9%
	Romania	-7.9%	-6.0%	-1.8%	-5.1%	-5.5%	-0.3%
	Slovenia	2.9%	7.5%	-2.2%	0.2%	17.1%	1.7%
	Slovakia	3.2%	0.3%	-8.9%	-6.1%	-5.7%	0.7%
	Spain				25.3%		-10.9%
	Sweden	13.2%	7.1%	39.9%	9.2%	13.1%	2.3%
	Switzerland	4.1%	4.1%	2.0%	4.7%	-0.8%	12.9%
	Turkey		2.1%		-3.5%		
	Ukraine	-5.8%	-4.1%	-5.9%	-3.1%	-9.5%	-4.6%

	England and Wales	4.0%	20.2%	-18.1%	-1.2%	5.2%	3.6%
	Northern Ireland	37.6%	14.4%	22.4%	7.9%	1.7%	1.6%
	Scotland	2.8%	-0.7%	-2.0%	-3.7%	5.4%	-3.1%
	median	***3.3%***	***2.6%***	***-1.8%***	***-1.2%***	***0.4%***	***-0.1%***
Oceania	Australia	3.0%	-0.8%			-13.2%	
All countries	***median***	***3.0%***	***1.7%***	***-2.1%***	***-1.8%***	***1.1%***	***0.0%***

Table 5. Percentage persons convicted per suspected offenders, 2006

		All offences												Homicide	
		Adults						Juveniles							
Continent	**Country**	**total**	**C**	**O**	**females**	**C**	**O**	**total**	**C**	**O**	**females**	**C**	**O**	**total**	**C**
Africa	Algeria													91%	*04*
	Mauritius	200%			7%			15%			6%			14%	
	Morocco	9%	*04*		2%	*04*		3%	*04*		1%	*04*			
	Swaziland				48%	*00*	*04*				23%	*00*	*04*	4%	*00*
	Uganda				40%	*04*	*04*				30%	*04*	*04*	1%	*04*
	Zambia	5%	*00*	*00*	1%	*00*	*00*	0%	*00*	*00*				15%	*00*
	Zimbabwe													9%	*00*
	median				***7%***									***12%***	
Americas	Canada	44%			35%			40%			33%			29%	
	Chile	3%	*04*	*04*	3%	*04*	*04*	5%	*04*	*04*	2%	*04*	*04*	101%	*04*
	Colombia	0%	*04*	*00*											
	Costa Rica	39%			50%									46%	
	Dominican Republic													43%	
	Ecuador	10%	*04*											63%	*04*
	El Salvador	5%	*02*	*02*	3%	*02*	*02*	6%	*02*	*02*	5%	*02*	*02*	48%	*02*
	Mexico	98%		*02*	91%		*02*							77%	
	Uruguay	6%	*00*	*04*	3%	*00*	*04*							37%	*00*
	Venezuela (Bolivarian Republic of)	24%	*00*	*02*	17%	*00*	*02*							103%	*00*
	median	***10%***			***17%***									***48%***	
Asia	Azerbaijan	72%	*04*		50%	*04*		61%	*04*		30%	*04*		145%	*04*
	Bahrain				153%	*04*	*04*							14%	*03*
	Georgia	94%			443%			113%			288%			166%	
	Hong Kong Special Administrative Region of China	70%			74%			9%			7%			33%	
	Israel	84%		*04*				70%		*04*				9%	*04*
	Japan	32%						0%						50%	
	Jordan							6%	*02*	*02*					
	Kazakhstan							28%						55%	
	Kyrgyzstan	77%			80%			76%			93%			105%	
	Malaysia													120%	
	Mongolia	42%			41%			82%			81%			86%	
	Myanmar	61%	*02*	*02*	84%	*02*	*02*							566%	*02*
	Nepal	91%			79%			24%			14%			28%	
	Occupied Palestinian Territory	31%			9%			32%			58%			28%	
	Philippines	9%			21%			2%			0%				
	Qatar	61%	*00*	*04*	6%	*00*	*04*	175%	*00*	*03*					
	Republic of Korea	11%	*04*	*04*	8%	*04*	*04*	4%	*04*	*04*	2%	*04*	*04*		
	Saudi Arabia	140%	*02*	*02*											
	Singapore													36%	
	Syrian Arab Republic							187%	*03*	*04*				70%	*00*
	Tajikistan													104%	
	Thailand	57%		*00*	116%		*00*	69%		*00*	31%		*00*		
	Turkmenistan	138%			132%			111%			64%			144%	
	United Arab Emirates	147%			181%			42%							

	median	***70%***			***79%***			***52%***			***31%***			***70%***	
Europe	Albania	74%	*02*	*02*				51%	*02*	*02*				137%	*02*
	Austria	20%			15%			8%			4%			37%	
	Bosnia and Herzegovina	64%						50%							
	Bulgaria	41%	*04*	*04*	29%	*04*	*04*	30%	*04*	*04*	14%	*04*	*04*	73%	*04*
	Belarus	164%			131%			114%			102%			154%	
	Croatia	82%			74%			29%			17%			282%	
	Czech Republic	59%			51%	*04*		48%			50%	*04*		108%	
	Denmark	89%		*04*	88%		*04*	104%		*04*	110%		*04*	121%	
	Estonia	78%	*04*	*04*	72%	*04*	*00*	83%	*04*	*04*	28%	*04*	*04*	83%	*04*
	Finland	60%			62%			33%			31%			167%	
	France	65%	*00*	*04*	40%	*00*	*04*	21%	*00*	*04*	13%	*00*	*04*	56%	*00*
	Germany	28%			23%			18%			11%			7%	
	Hungary	78%	*04*	*04*	58%	*04*	*02*	57%	*04*	*04*	44%	*04*	*04*	92%	*04*
	Iceland	84%	*04*	*03*	62%	*04*	*03*	19%	*04*	*03*	10%	*04*	*03*	33%	*03*
	Ireland													35%	*04*
	Italy	25%			20%			9%			11%			71%	
	Latvia	44%		*04*	34%		*04*	37%		*04*	21%		*04*	24%	
	Lithuania	62%						38%						93%	
	Luxembourg	40%	*02*	*02*	12%	*02*	*02*								
	Malta	1%	*04*		0%	*04*		17%			11%				
	The former Yugoslav Republic of Macedonia	63%						20%						88%	
	Republic of Moldova	73%			61%			61%			39%			184%	
	Netherlands	39%			35%			16%			13%			71%	*04*
	Norway	43%		*05*	39%		*05*	16%		*05*	11%		*05*	45%	
	Poland	87%			77%			51%			66%			47%	
	Portugal	24%		*04*				191%						126%	
	Romania	17%			9%			21%			19%			180%	
	Russian Federation	66%	*00*	*00*	53%	*00*	*00*	84%	*00*	*00*	71%	*00*	*00*	80%	*00*
	Slovenia	49%			37%			32%			16%			314%	
	Slovakia	52%			51%			35%			31%			84%	
	Spain							75%						6%	
	Sweden	115%			99%			95%			92%			114%	
	Switzerland	191%						111%							
	Turkey	109%												230%	
	Ukraine	74%			74%			82%			76%			84%	
	England and Wales													54%	
	Northern Ireland													54%	*05*
	median	***63%***			***51%***			***37%***			***21%***			***84%***	
Oceania	Australia													196%	*04*
	New Zealand	57%	*00*		54%	*00*		1%	*00*		1%	*00*		40%	*02*
	Papua New Guinea													47%	*00*
All countries	***median***	***60%***			***49%***			***35%***			***22%***			***71%***	

Table 6. Attrition in the criminal justice system for all offences, 2006

		Recorded		Offenders				Prosecuted				Convicted			
		Total		Adults		Juveniles		Adults		Juveniles		Adults		Juveniles	
Continent	Country	rate/100k		(Recorded = 100)				(Recorded = 100)				(Recorded = 100)			
Africa	Algeria	*423*		49.7		4.6		385.8		8.2					
	Côte d'Ivoire	*405*	*00*	11.4	*00*	0.8	*00*								
	Kenya	*196*		104.0											
	Mauritius	*3.847*		139.6		3.6		22.5		1.2		279.2		0.5	
	Morocco	*970*		97.9		4.5		149.5		7.0		8.9	*04*	0.1	*04*
	Swaziland	*4.544*	*04*	46.0	*04*	12.5	*04*	1.5		0.1					
	Tunisia	*1.355*	*02*	98.9	*00*	5.6	*00*								
	Zambia	*568*	*00*	48.5	*00*	1.4	*00*					2.2	*00*	0.0	*00*
	Zimbabwe	*1.040*	*04*					42.3	*00*	1.5	*00*	41.4	*04*	1.3	*04*
	median	***970***		***73.8***		***4.5***		***42.3***		***1.5***					
Americas	Barbados	*4.334*	*00*					42.6	*00*	0.6	*00*			0.1	*00*
	Bolivia	*359*	*02*									5.6		0.6	
	Belize	*3.665*		21.1		11.8		1.6		0.0					
	Canada	*8.304*		20.3		3.2		13.7		2.1		9.0		1.3	
	Chile	*8.013*	*04*	34.5	*04*	4.4	*04*	2.1	*04*			1.2	*04*	0.2	*04*
	Colombia	*539*	*00*	69.7	*00*	3.5	*00*					0.0	*04*		
	Costa Rica	*1.233*		16.9				14.4		1.2		6.6		0.4	
	Dominican Republic	*1.491*										2.4		0.1	
	Ecuador	*815*		21.9		-						2.2	*04*		
	El Salvador	*747*	*02*	88.5	*02*	9.4	*02*	152.0	*02*	6.9	*02*	4.6	*02*	0.6	*02*
	Guatemala	*243*	*00*									124.9	*00*		
	Mexico	*1.445*		9.5	*02*	1.1	*02*	5.9	*02*	1.1	*02*	9.3			
	Nicaragua	*2.180*		31.7		2.1		18.1		3.1					
	Panama	*1.391*						38.1		4.1		9.0		1.1	
	Paraguay	*259*		72.3		9.8									
	Peru	*602*	*04*	32.2	*02*	0.9	*02*								
	Uruguay	*5.372*	*04*	66.7	*04*	13.7	*04*					4.3	*00*		
	United States of America	*3.730*		68.1		12.1									
	Venezuela (Bolivarian Republic of)	*968*	*00*	7.5	*02*	1.2	*02*	4.0	*02*	0.3		1.8	*00*		
	median	***1.391***		***31.9***		***3.5***		***14.1***		***1.2***		***4.6***		***0.5***	
Asia	Armenia	*318*						35.7		3.3		31.5		1.7	
	Azerbaijan	*223*		94.9		2.6		94.9		2.6		68.5	*04*	1.6	*04*
	Bahrain	*3.762*		41.5	*04*	1.8	*04*	52.1		0.6					
	Bangladesh	*83*		107.8		1.3									
	Brunei Darussalam	*1.161*		45.6		2.9									
	China	*287*	*00*					18.4	*00*	1.1	*00*	16.4	*00*		
	Georgia	*1.412*		27.2		1.4		27.2		1.4		25.5		1.6	
	Hong Kong Special Administrative Region of China	*1.237*	*04*	38.6		11.2		32.2		1.4		26.9		1.0	
	India	*445*				0.6									
	Israel	*7.859*	*04*	8.2	*04*	1.0	*04*	7.5		0.7		6.9		0.7	
	Japan	*1.609*		13.2		5.5		8.7		0.1		4.2		0.0	
	Jordan	*501*				21.3	*02*			10.8	*02*			1.4	*02*
	Kazakhstan	*923*				6.1		34.5		3.1		21.4		1.7	
	Kuwait	*793*	*02*	98.6	*02*	12.8	*02*								
	Kyrgyzstan	*594*		52.1		3.7		46.2		3.7		40.2		2.8	
	Lebanon	*182*		102.6		4.5									
	Malaysia	*761*						23.0		1.6		32.6		1.5	
	Maldives	*3.171*	*04*	26.2	*04*	2.9	*04*	30.9	*02*	3.5	*02*				
	Mongolia	*707*		92.2		4.9		87.3		4.9		38.7		4.0	
	Myanmar	*39*	*02*	142.4	*02*			88.1	*02*			86.6	*02*	7.9	*02*
	Nepal	*15*		77.2		2.3						70.3		0.6	
	Oman	*474*	*02*	118.6	*02*	8.4	*02*								
	Pakistan	*2*	*00*	299.9	*00*	0.1	*00*	299.9	*00*	0.1	*00*				

	Occupied Palestinian Territory	604	05	22.0		6.9						6.7		2.2	
	Philippines	82		83.5		1.8						7.4		0.0	
	Qatar	604	04	115.7	04	1.3	03					70.3	00	2.2	00
	Republic of Korea	3.719	04	123.8	04	4.9	04	76.6	04	1.2	04	13.2	04	0.2	04
	Saudi Arabia	386	02	50.5	02	12.7	02					70.8	02		
	Singapore	904		44.7		5.0		30.6		0.7					
	Sri Lanka	441	04	564.6	04	13.7	04	53.8	04	1.0	04				
	Syrian Arab Republic	426		93.8	04	8.5	04							15.9	03
	Tajikistan	169		7.4		2.5									
	Thailand	906	00	193.9	00	4.8	00	101.2	00	26.0	00	109.9		3.3	
	Turkmenistan	96		135.4		2.7		135.4		2.7		187.0		3.0	
	United Arab Emirates	1.717		76.0		2.6						111.5		1.1	
	median	***594***		***83.5***		***3.7***		***40.9***		***1.5***		***32.6***		***1.6***	
Europe	Albania	172	02	103.8	02	10.1	02	115.5	04	36.9	04	76.6	02	5.2	02
	Austria	7.126		34.1		6.2		38.4		10.0		6.9		0.5	
	Belgium	9.817	04					65.7	02			13.0	02	0.0	02
	Bosnia and Herzegovina	1.104		68.3		0.0		53.0				43.6		0.0	
	Bulgaria	1.824	04	45.4	04	7.9	04	42.0	04	3.0	04	18.5	04	2.4	04
	Belarus	1.960		23.1		2.7		37.9		3.2		37.8		3.0	
	Croatia	2.650		25.1		2.9		37.6		2.4		20.6		0.8	
	Cyprus	938		36.1		7.4									
	Czech Republic	3.291		33.9		1.7		40.2		2.0		19.8		0.8	
	Denmark	6.811		13.3	04	1.9	04					11.9		2.0	
	Estonia	3.855		24.2	04	2.7	04	24.2	04	2.7	04	18.8	04	2.3	04
	Finland	9.822		67.6		6.3		41.1		2.2		40.3		2.1	
	France	6.309	04	21.8	04	4.8	04					14.1	00	1.0	00
	Germany	7.651		30.2		4.4		10.4		1.3		8.3		0.8	
	Greece	2.174		81.9		1.5									
	Hungary	4.146	04	28.1	04	2.9	04	22.8		1.9		21.9	04	1.7	04
	Iceland	17.663	04	5.7	03	1.2	03	6.9	04	0.5	04	4.8	04	0.2	04
	Ireland	2.416		83.7		12.7		19.4	04	2.3	04				
	Italy	4.699		27.8		1.1		19.2	05	0.7	05	7.1		0.1	
	Latvia	2.734		31.3	04	5.9	04	11.7		1.6		13.9		2.2	
	Lithuania	2.227		25.0		4.4		18.3		4.6		15.6		1.6	
	Luxembourg	5.816	02	40.7	02	5.8	02	16.9	02			16.4	02		
	Malta	4.086		17.0		1.7						0.2	04	0.3	
	The former Yugoslav Republic of Macedonia	1.081		66.8		18.8		106.8		6.8		42.1		3.8	
	Republic of Moldova	565		72.5		10.3		71.0	04	15.2	04	53.0		6.3	
	Netherlands	7.434		23.6		5.8		18.1		3.0		9.1		0.9	
	Norway	5.924		11.1	05	2.0	05	9.3	05	0.8	05	4.8		0.3	
	Poland	3.375		41.5		4.2		49.6	04			35.9		2.1	
	Portugal	3.779		62.8	04	1.1		23.6		3.0		15.2		2.2	
	Romania	1.080		131.4		12.4		19.9		2.9		21.7		2.6	
	Russian Federation	2.013	00	53.0	00	6.0	00					35.1	00	5.0	00
	Slovenia	4.506		18.4		1.8		13.2		0.8		9.0		0.6	
	Slovakia	2.137		40.5		4.0		37.3		3.1		21.0		1.4	
	Spain	2.414		26.6		2.1								1.5	
	Sweden	13.442		6.7		2.2		7.4	02	1.2		7.7		2.1	
	Switzerland	3.852		17.8		4.4						34.0		4.9	
	Turkey	1.370		85.1				227.9	04	13.8	04	93.1		2.3	
	Ukraine	903		46.9		4.0		4.9	04	3.9		34.9		3.3	
	England and Wales	10.103						30.2		2.3		24.3		1.7	
	Montenegro	1.539		76.8		4.8									
	Northern Ireland	6.956						23.8	05	1.5	05	20.5	05	1.2	05
	Scotland	8.194						11.2	05	4.1	05	9.7	05	3.5	05
	Serbia	1.007		5.4		0.1									
	median	***3.375***		***33.9***		***4.1***		***23.8***		***2.7***		***18.8***		***1.7***	
Oceania	New Zealand	10.212		38.8		9.2		29.5	00	0.9	00	22.1	00	0.1	00
	Papua New Guinea	247	00					7.8	00			2.1	00	0.1	00
all countries	***median***	***1.380***		***45.4***		***4.1***		***30.4***		***2.2***		***18.5***		***1.4***	

Table 7. Attrition in the criminal justice system for homicide, 2006

		Recorded			Offenders		Prosecuted		Convicted	
Continent	Country	rate/ 100k	Value		(Recorded = 100)		(Recorded = 100)		(Recorded = 100)	
Africa	Algeria	0.6	214		208.4				189.7	04
	Egypt	0.7	528	05			81.1	00	591.5	
	Kenya	5.7	2.090		85.7					
	Mauritius	4.0	50		144.0		102.0		20.0	
	Morocco	0.5	162		172.2		417.3			
	Namibia	6.6	126	02			100.0	02		
	South Africa	46.7	21.553	02			49.6	00		
	Swaziland	12.6	141	04	190.1	04	30.5		7.1	00
	Tunisia	1.2	119	02	169.7	02				
	Uganda	7.4	2.049	04	51.5	04	51.5	04	0.3	04
	Zambia	7.6	797	00	84.1	00	1.4	00	12.3	00
	Zimbabwe	8.7	1.092	04	129.3	04	86.8	00	11.9	00
	median	***6.2***			***144.0***		***81.1***		***12.3***	
Americas	Barbados	7.9	20	00			90.0	00	105.0	00
	Bolivia	4.9	454						43.6	02
	Belize	31.9	92		83.7		41.3			
	Canada	1.9	606		91.9		54.1		26.6	
	Chile	1.7	276	04	155.4	04	249.6	04	156.5	04
	Colombia	66.7	26.539	00	20.6	00				
	Costa Rica	7.9	348		79.6		68.1		36.8	
	Dominican Republic	15.9	1.537		72.9				31.6	
	Ecuador	18.1	2.385		21.6		33.5	04	13.6	04
	El Salvador	33.8	2.024	02	44.1	02	39.3	02	21.2	02
	Guatemala	25.9	2.904	00			11.3	00	101.7	00
	Jamaica	34.5	887	00	62.3	00				
	Mexico	10.9	11.558		43.3	02	6.7	02	33.3	
	Nicaragua	8.4	465		90.8		85.6			
	Panama	11.0	363				107.7		23.4	
	Paraguay	12.3	742		71.0					
	Peru	5.6	1.526	04	48.8	04				
	Suriname	9.3	46	04	306.5	04				
	Uruguay	5.8	194	04	335.6	04			125.3	00
	United States of America	5.6	17.034		78.9					
	Venezuela (Bolivarian Republic of)	32.9	8.022	00	18.8	00	51.4		19.4	00
	median	***10.9***			***72.9***		***52.8***		***33.3***	
Asia	Armenia	2.4	75				106.7		45.3	
	Azerbaijan	2.2	190		113.2		109.5		163.7	04
	Bahrain	0.9	7		100.0	04	342.9		14.3	03
	Bangladesh	2.7	4.123		160.4					
	Brunei Darussalam	0.5	2		400.0					
	Georgia	7.3	323		57.9		57.9		96.3	
	Hong Kong Special Administrative Region of China	0.6	44	04	111.4		63.6		36.4	
	India	2.8	32.481		194.2					
	Indonesia	1.1	2.204	00					86.8	00
	Israel	2.6	173	04	169.4	04	15.6	04	15.0	04
	Japan	0.4	565		248.7	02	123.2		123.2	
	Jordan	1.7	100		131.0					
	Kazakhstan	11.3	1.729		135.2	00	99.5		74.4	
	Kuwait	0.9	23	02	113.0	02				
	Kyrgyzstan	8.4	446		85.7		106.7		90.4	
	Lebanon	0.6	23		113.0					
	Malaysia	2.3	604		22.0		118.0		26.3	
	Maldives	1.4	4	03	425.0	04	125.0	02		
	Mongolia	12.0	311		106.8		106.8		91.3	
	Myanmar	0.2	92	02	129.3	02	1.403.3	02	731.5	02
	Nepal	1.8	509		181.3		68.4		51.3	

	Oman	*0.6*	15	*02*	126.7	*02*	113.3	*02*		
	Pakistan	*0.0*	66	*00*	300.0	*00*	300.0	*00*		
	Occupied Palestinian Territory	*3.9*	145	*05*	85.5				24.1	
	Philippines	*3.8*	3.296						2.2	
	Qatar	*0.8*	6	*04*	100.0	*04*				
	Republic of Korea	*2.2*	1.041	*04*	115.3	*04*	77.0	*04*		
	Saudi Arabia	*0.9*	202	*02*	44.6	*00*	55.4	*02*		
	Singapore	*0.4*	17		276.5		264.7		100.0	
	Sri Lanka	*7.1*	1.377	*04*	140.8	*04*	140.8	*04*		
	Syrian Arab Republic	*1.2*	239		164.4	*04*	110.0	*00*	115.1	*00*
	Tajikistan	*3.4*	228		94.7				98.7	
	Thailand	*7.6*	5.023		41.4		68.0	*00*		
	Turkmenistan	*2.9*	142		108.5		155.6		156.3	
	United Arab Emirates	*0.9*	39				35.9		71.8	
	median	***1.8***			***115.3***		***108.1***		***86.8***	
Europe	Albania	*5.8*	179	*02*	103.4	*02*	160.9	*04*	141.3	*02*
	Austria	*0.7*	61		262.3		560.7		96.7	
	Belgium	*2.1*	214	*04*			547.2	*02*	87.9	*02*
	Bosnia and Herzegovina	*1.9*	73		108.2					
	Bulgaria	*3.1*	240	*04*	90.4	*04*	105.8	*04*	65.8	*04*
	Belarus	*7.5*	734		86.5		141.7		132.8	
	Croatia	*1.7*	74		90.5		354.1		255.4	
	Cyprus	*1.7*	14				14.3		14.3	
	Czech Republic	*1.3*	136		83.8		119.9		90.4	
	Denmark	*0.5*	29		144.8	*04*	75.9	*02*	175.9	
	Estonia	*6.8*	91		139.6		131.9		116.5	*04*
	Finland	*2.1*	112		92.0		165.2		153.6	
	France	*1.6*	990	*04*	89.3	*04*			49.9	*00*
	Germany	*0.9*	727		389.4		31.9		28.1	
	Greece	*1.0*	109		208.3					
	Hungary	*2.1*	212	*04*	100.0	*04*	82.1		92.0	*04*
	Iceland	*1.0*	3	*04*	100.0	*04*	66.7	*04*	33.3	*03*
	Ireland	*1.6*	67		97.0		56.7		34.3	*04*
	Italy	*1.1*	625		161.3		266.4	*05*	114.9	
	Latvia	*6.5*	148		283.1		61.5		68.2	
	Lithuania	*8.2*	277		108.3		101.1		100.4	
	Luxembourg	*0.9*	4	*02*			125.0	*02*	100.0	*02*
	The former Yugoslav Republic of Macedonia	*2.0*	41		102.4		217.1		90.2	
	Republic of Moldova	*5.0*	184		82.6		98.4		152.2	
	Netherlands	*1.0*	159		125.8	*04*	113.2		89.3	*04*
	Norway	*0.7*	33		166.7	*05*	157.6	*05*	75.8	
	Poland	*1.3*	490		163.1		200.0	*04*	76.3	
	Portugal	*2.1*	227		56.8		103.5		71.4	
	Romania	*2.0*	438		107.3		96.8		192.9	
	Russian Federation	*19.7*	28.904	*00*	84.3	*00*	99.3	*00*	67.2	*00*
	Slovenia	*0.6*	12		116.7		175.0		366.7	
	Slovakia	*1.2*	65		107.7		192.3	*04*	90.8	
	Spain	*0.8*	336		176.5		340.8	*00*	10.1	
	Sweden	*1.3*	115		124.3	*04*	74.8		141.7	
	Switzerland	*0.8*	60						163.3	
	Turkey	*4.2*	2.999		195.0		568.9		447.6	
	Ukraine	*6.3*	2.958		90.0		109.3		75.3	
	England and Wales	*1.4*	755		91.0		92.7		49.4	
	Northern Ireland	*1.3*	23		121.7	*02*	156.5	*05*	65.2	*05*
	Scotland	*2.1*	109				48.6	*05*	38.5	*05*
	Serbia	*1.5*	144		54.2					
	median	***1.6***			***107.5***		***116.5***		***90.3***	
Oceania	Australia	*1.3*	256	*04*	69.5	*00*			136.3	*04*
	New Zealand	*1.1*	47		127.7		104.3	*02*	51.1	*02*
	Papua New Guinea	*8.6*	465	*00*	100.0	*00*	14.0	*00*	47.3	*00*
all countries	***median***	***2.1***			***108.0***		***102.0***		***76.0***	

Annex B to chapter 5: Methodological notes

Four data points in time

For every country and for every variable four figures, representing four different points in time, were taken from the UN Crime Trends Survey dataset.One of these figures was used for all analyses, tables and graphs that are based on the latest year available, the other three were used for the tables, graphs and analyses that deal with trends. Since not every country responded to all surveys these points in time can differ from country to country. The following decision rules were used to obtain the four figures:

Latest year available

If available, the year 2006 from the 10th survey was taken. Otherwise the last available year was taken, provided this year was 2000 or later. If the last available year was 1999 or earlier this data point had a missing value.

Trends

For trends three points in time were taken. If available these were the years 1996 (designated 'Start'), 2001 ('Mid') and 2006 ('End').

- If 2006 was not available for a specific variable and country, the year 2005 was taken as 'End' point or alternatively the year 2004, if 2005 was not available either.
- If 2001 was not available for a specific variable and country, the year 2000 was taken as 'Mid' point or alternatively the year 2002, if 2000 was not available either.
- If 1996 was not available for a specific variable and country, the year 1995 was taken as 'Start' point or alternatively the year 1994, if 1995 was not available either. If none of these three years were available, 1997 was taken as an alternative.

This was done because using only the years 1996, 2001 and 2006 would have resulted in too many missing values.

Data quality checking

After determining the 'Latest', 'Start', 'Mid' and 'End' points a quality check was carried out on the data.

Firstly, because of the instability of the data due to small numbers, all data from countries with less than 100,000 inhabitants were removed.

Next for the other countries it was found that some of the data were not stable or clearly not consistent with other data (either in other surveys or in the same survey compared to other variables). Examples of suspected inconsistencies were:

- The data given for one survey were clearly different from the data given for other surveys.
- The sum of the number of adults plus the number of juveniles was completely different from the total number of suspects/prosecuted/convicted persons. Although this sum does not necessarily need to be exactly the same (due to other data sources used, or due to counting also companies as offenders), if the difference is too large this could be a sign that the figures given indicate something different from what was meant in the questionnaire.
- The number of persons prosecuted was from a different order of magnitude compared to the number of suspected offenders and/or the number of convicted persons. This would probably reflect an unusual organisation or function of the prosecution service and could therefore not be used for attrition analyses.
- The number of persons prosecuted and/or convicted for homicide was much larger than the number of suspects. Actually this was most probably due to the fact that apparently the questionnaire was not clear on this point: many countries included the number of attempted homicides in the prosecution and conviction parts of the questionnaire.

When a suspected inconsistency was found a decision had to be made how to deal with it. Basically there were three possibilities:

1. The suspected figure was removed
2. The suspected figure was replaced by another figure for the same variable from another year if more consistent figures could be found. This was only possible within the restricions for the points in time as described in above.
3. An estimate was made based on other variables. As an example, the number of juveniles could sometimes be estimated by subtracting the number of adults from the total.

A complete listing of all inconsistencies found and the actions taken can be found in Annex C.

Computing trends

When presenting and comparing trends, the complication is that the period is not the same for every country: e.g. for some countries the 'Start' year could be 1996 and the 'End' year 2006, for others this could be 1997 and 2004. To circumvent this the mean *annual* change was computed with the following formula:

If $\mathbf{x_1}$ is the value at year $\mathbf{t_1}$ and $\mathbf{x_2}$ the value at year $\mathbf{t_2}$ (with $\mathbf{t_2 > t_1}$), the mean annual change is:

$$(x_2 / x_1)^{1/(t2-t1)} - 1$$

This mean annual change was computed for two periods, i.e. between 'Start' and 'End' (for most countries 1996 - 2006) and between 'Mid' and 'End' (for most countries between 2001 and 2006).

Figures by continent

When computing figures per continent the median was calculated. This was done on the continental level and not on the subcontinental level because otherwise the number of observations (countries) would have been too low for almost all subcontinents. Also, the median was only computed when there were at least five observations. This meant that no medians are given for Oceania, where only four countries could provide data for this chapter. For the trends analyses usually only Asia and Europe had at least 5 countries with sufficient trend data. When comparing medians between tables or between columns within one table one should be aware that in every table and column different countries contribute to the median.

Annex C to chapter 5: Data modifications

Country	Variable(s)	Observation	Solution
Albania	all prosecution variables except homicide	8th survey not consistent with 9th survey and obviously too low	Mid point removed
Algeria	Convicted for homicide	10th survey clearly different and out of line	The year 2004 used as Latest year and End point
	Prosecuted for homicide	10th survey too high and not consistent with suspects	Latest year and End point removed
Bosnia and Herzegovina	Adult suspects	Not in line with total suspects	Replaced by an estimated 28500
	juveniles prosecuted	10th survey not consistent with suspects and convictions	Latest year and End point removed
Chili	total adults prosecuted	8th survey not consistent with other surveys	Mid point removed
	total persons prosecuted, juveniles and females prosecuted	8th and 9th survey not consistent with other surveys and other variables	Only Start point kept
	Juveniles and female juveniles convicted	5th survey too low compared to 9th survey	Start point removed
China	Juveniles prosecuted	Total minus adults is not equal to juveniles	Juveniles recomputed (= total minus adults)
Costa Rica	all prosecution variables	7th and 8th survey not consistent with other surveys	Mid point removed
	adults prosecuted	10th survey too low	Latest year and End point estimated by 7800 based on total prosecuted
	Juvenile suspects	10th survey atypically low	Latest year and End point removed
Cyprus	all prosecution and conviction variables except homicide	9th and 10th survey not consistent with other surveys. And they can not be used for comparisons	Only Start point kept
	homicide suspects	9th and 10th survey apparent break in series and too low absolute numbers	Latest year and End point removed
Denmark	all conviction variables	8th survey inconsistent with other surveys	The year 2000 used as Mid point
Ecuador	Prosecuted for homicide	10th survey too high and not consistent with suspects	The year 2004 used as Latest year and End point
Egypt	Recorded crimes total	10th survey not consistent with other surveys	Latest year and End point removed
El Salvador	all conviction variables except homicide	10th survey inconsistent with other surveys	The year 2004 used as Latest year, End point removed
France	all prosecution variables	only 7th survey present, figures atypically low	Latest year removed
Guatemala	total adults convicted	Not consistent with total persons convicted	Year 2000 replaced by estimated 34,115
	homicide suspects	7th survey not consistent with other homicide variables	Latest year and Mid point removed
Indonesia	suspected offenders	5th survey not consistent with prosecution and court figures	Start point removed
TFYR Macedonia	homicide suspects	The year 2000 is an outlier	The year 1999 used as Mid point
Malaysia	all offender variables except homicide	7th and 10th survey inconsistent with other data	Latest year removed
Malta	recorded homicides and homicide suspects	Too low absolute numbers for analysis	Latest year and End point removed
Mexico	juvenile suspects	9th survey obviously too low	The year 2002 used as Latest year. End point removed.
	adults prosecuted	8th survey not consistent with total	Estimated based on total by 91,000 (2002, Latest year) and 83,000 (2001, Mid point)
Myanmar	all conviction variables	5th survey completely different from 8th survey	Start point removed
	total and female juvenile suspects	8th survey too low	Latest year removed
	juveniles prosecuted	8th survey atypically low	Latest year and Mid point removed
The Netherlands	Convicted for homicide	Numbers in all surveys reflect attempts as well	Latest year and End point replaced by 142 (year 2004); Start point removed
	Prosecuted for homicide		Latest year and End point replaced by an estimated 180 (year 2006); Start point removed
Peru	Prosecuted for homicide	8th survey atypically high	Latest year removed
Saudi Arabia	persons convicted for homicide	8th survey too high, not consistent with suspected and prosecuted	Latest year removed
Slovakia	Prosecuted for homicide	10th survey not consistent with other surveys	The year 2004 used for Latest year and End point

Country	Variable(s)	Observation	Solution
Sweden	homicide suspects	10th survey too low, not consistent with other surveys	The year 2004 used for Latest year and End point
Syria	Females convicted (adults and juveniles)	7th survey not clear	Latest year and Mid point removed
Thailand	Grand total recorded crimes	10th survey atypically low	The year 2000 used as Latest year, End point removed
Turkey	all conviction variables	8th survey inconsistent with other surveys	Mid point removed
	total adult suspects	not filled in	Latest year estimated (840,000)
	all prosecution variables except homicide	Not consistent with suspects and convictions	Data not used for Fig 4.5
UAE	all prosecution variables except homicide	10th survey not consistent with police and court data	Latest year and End point removed
UK: England & Wales	total persons prosecuted	8th survey apparently factor 10 too high	Divided by 10
Ukraine	total and female juveniles prosecuted	Apparently the female juveniles prosecuted in the 7th survey is actually the total juveniles.	Replaced total juveniles with female juveniles for the Mid point.
USA	all prosecution variables	Apparently only the years '95 to '99 can be used for comparative analysis	Only Start point kept
Venezuela	all prosecution variables	8th survey not consistent with 10th survey	Mid point removed; 2002 used as Latest year.
Zambia	all prosecution variables except homicide	only 7th survey present, figures atypically low	Latest year removed

Chapter 6 – Attributes of criminal justice systems: resources, performance and punitivity

Stefan Harrendorf* and Paul Smit**

Abstract

This chapter focuses on attributes of the criminal justice system itself, namely on resources of the system, its performance and the systemic punitivity. Regarding resources, it focuses on police and prosecution personnel, professional judges and the staff in adult prisons. With respect to performance, quantitative productivity of the different criminal justice systems is analyzed, focusing on the rates of persons suspected per police officer, persons prosecuted per prosecutor, persons brought before a criminal court per prosecutor and persons convicted per prosecutor. Finally, systemic punitivity is estimated by the rate of total persons incarcerated per total persons convicted. The chapter covers data not only from the 10th UN-CTS, but also from earlier waves, back as late as to the 6th wave for trend analysis. As in the other chapters, the scale is worldwide. Trying to cover as many countries as possible, data for the analysis of the most recent status quo was not only taken from the 10th UN-CTS survey, but also from the 7th to 9th waves, with the year 2000 being the earliest "latest available" year covered here. For trend analysis, the preferred starting year was 1995, the first point in time in the 6th wave. If necessary, trend analysis was made for shorter periods of time instead.

Criminal justice system resources

Firstly, we will take a close look at criminal justice system resources. As in preceding publications based on UN-CTS data (Marshall 1998; Mayhew 2003; Gruszczynska, Marshall 2008), once again the resources variables analyzed have been restricted to personnel variables. While the UN-CTS questionnaire also asks for data on financial resources in all its sections (police, prosecution, courts, and prisons), these data have been excluded from analysis due to problems regarding the interpretation: The resources were to be added up to a single variable per chapter. The value had to be given in millions of local currency units. Such a value would be extremely hard to compare between countries. First of all, the comparability of a single monetary value representing the whole police (etc.) budget would be extremely questionable, as long as it is not clear which budget posts have been included there and which not. Moreover, the exchange rate problem will render comparison between countries almost impossible, especially with respect to countries with a large variance in the rates.

Small countries with a population of less than 100,000 persons have been excluded from analysis (except where noted otherwise) because it could be feared that these data might be misleadingly different from results for larger countries because of the special structure and necessities of very small countries.

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Police personnel

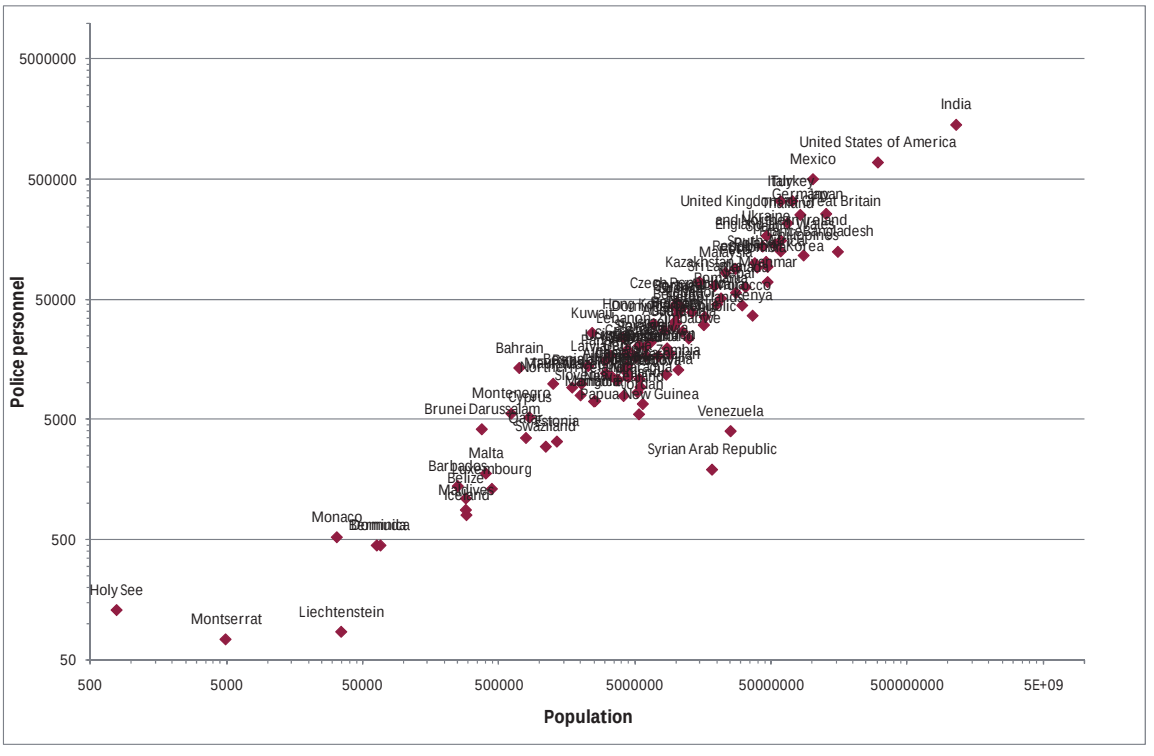
The 10th UN-CTS questionnaire defines "police personnel or law enforcement personnel" as "personnel in public agencies whose principal functions are the prevention, detection and investigation of crime and the apprehension of alleged offenders. Data concerning support staff (secretaries, clerks, etc.) should be excluded from your replies." The definition is in line with the definition used in earlier survey waves covered here (6th to 9th).

Regarding police personnel, the questionnaire not only asks for the total, but also for the number of females, males and police officers assigned to the policing of organized crime. Apart from this, the questionnaire includes some metadata on the police, like whether there was more than one police force in the relevant country etc.

Still, data analysis in this publication has been restricted to the total of police personnel (for analysis of rates of female officers see previous publications: Mayhew 2003; Gruszczynska, Marshall 2008). Attempting to measure the total police personnel with only one value, one has to keep in mind the shortcomings of such an approach: The police force is not a monolithic entity with similar structures and tasks all over the world. There are several types of police forces that might exist in one country, but not in another. Also, the tasks executed by the police may differ between countries. Thus, figures might include (or not include) data on criminal police, traffic police, border police, gendarmerie, uniformed police, city guard or municipal police, but also customs officers, tax police, military police, secret service police, police reserves, cadet police officers or court police. Apart from this, the way of counting personnel might differ (e.g. heads vs. budget posts, which will make a difference when counting part-time personnel). Therefore, comparability could be considered fairly weak. One cannot be sure that each and every country was able to exclude support staff from their data, because this would depend on the statistical possibility to do so. Also, it is not fully clear whether, apart from support staff, other civilians in the police force are included or only uniformed police are counted.

As in earlier waves of the UN-CTS, information on private security personnel is not included in the data, although the private security sector is of great importance in many countries, thus making comparisons even more problematic (Marshall 1998; Mayhew 2003; Gruszczynska, Marshall 2008).

Figure 1. Police personnel by population (including small countries; log. scales)

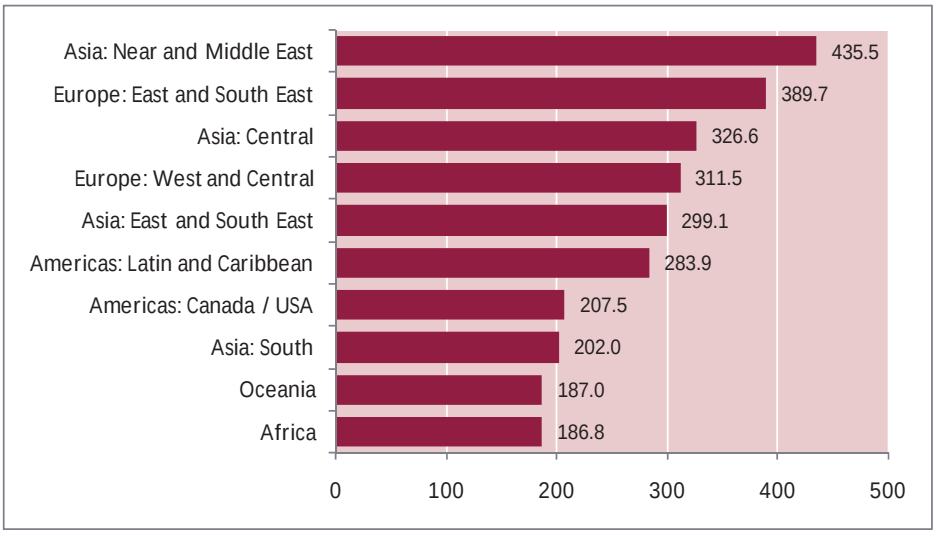


As figure 1 shows, while comparability of police personnel levels between countries can still be considered an issue, the absolute police personnel figures are at least quite clearly dependent on the population size. I.e., even taking into account all the differences in police personnel levels between countries, there is an almost perfect linear dependency of police personnel from population size. The correlation coefficient is 0.93, R^2 0.87. Therefore, about 87 % of the variance in the police personnel figures can be explained by population size. The distribution in figure 1 shows only very few clear outliers. Even among small countries below 100,000 population only one real outlier can be identified, the Holy See with a very high police personnel value compared to population size. This special result can of course be explained by the special structure and security necessities of Vatican City. On the other hand, the police personnel values for Venezuela and for the Syrian Arab Republic are far below the usual.

If one looks at the police personnel rates per 100,000 population (see figure 2 and table 1), there are some interesting results. The median is 303.3 police officers per 100,000 population, while the mean is 341.8. The standard deviation is quite high (241.5). This can be explained by the aforementioned problems in measuring the strength of the police force(s) of a country in a single variable, and by structural differences between countries.

The distribution of police personnel values is clearly positively skewed. An explanation might be that there is a minimum number of police officers per 100,000 population that is by any means necessary in any country to guarantee at least minimum security, while there is no such clear limit at the top end (although budgetary limits will prevent personnel figures from becoming too high).

Figure 2. Police officers per 100,000 population by regions and sub-regions (medians)



The assumption of a necessary minimum number of police officers in a certain country can also be backed by the individual country results as presented in table 1 in the Annex. Only four countries show police personnel values lower than 100 officers per 100,000 population, and only two have values that are far below that level. For these two countries (Venezuela and Syrian Arab Republic) the respective values are so low (16 and 10, respectively) that one can quite definitely assume that they do not represent the whole police force of these two countries. Figure 1 also showed that the values for these countries are clear outliers.

Figure 2 shows summary results for regions and sub-regions. As can be seen by these results, there are two regions in the world with relatively high numbers of police personnel (around 400), the Near and Middle East as well as East and South East Europe. Central, East and South East Asia, Latin America and the Caribbean as well as West and Central Europe show median rates around the overall median, i.e. around about 300. Lower levels of police officers (median around 200) can be found in Africa, Canada, USA, South Asia and Oceania.

As could be expected, the countries with the highest police personnel figures are often located in regions where the median is quite high, too (see table 1). This is the case for Bahrain (1867 police officers per 100,000 population), Kuwait (1065) and Montenegro (891), but not for Brunei Darussalam (1087) and Mauritius (777).

Table 1 also shows the trends in the development of police personnel figures. Where possible (i.e. for the minimum of a three-year trend) average annual change rates have been calculated. The longest trends cover 11 years (1995 – 2006). Data have been validated, especially with respect to trend analysis, and unreliable data, e.g. values in certain survey waves that did not fit the responses from the other waves, have been deleted, or, where possible, replaced with the right values. Details on this process can be found in the technical Annex to this chapter.

As can be seen, police personnel figures tend to be quite stable across time. The mean and median of the change rates per year are around 0 % with a standard deviation of 2.5 percentage points. However, some countries show larger increases or decreases across longer periods of time, reflected in average annual change rates around 5 %, e.g. the Republic of Moldova, Slovenia or Turkey with average yearly increases of 4.7 %, 6.4 % and 7.4 % across an eleven-year period. Remarkable decreases over longer periods of time can be observed for example in Hong Kong, Lithuania, Israel, Estonia, Sweden and Chile (-3.0 %, -3.3 %, -3.1 %, -3.2 %, -3.4 %, -3.7 %).

Prosecution personnel

Regarding prosecution personnel, the 10th UN-CTS used the following definition:

"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. Data concerning support staff (secretaries, clerks, etc.) should be excluded.

This definition has also been used in the 6th to 9th UN-CTS waves. As with the police force, summarising information on the prosecution service in one single variable is very problematic. The problems are even bigger than on the police level, since the prosecution service is placed at a later stage of the criminal justice process. Therefore, legal differences between systems are even more remarkable here. Size and structure of the prosecution service will be subject to significant variation across countries due to the different legal tasks assigned to prosecutors:

Not all cases investigated by the police will necessarily show up on prosecution level (see Elsner, Smit, Zila 2008 and also Elsner, Lewis, Zila 2008), for example due to police competences to drop cases if no offender was found or if there was insufficient evidence. In minor cases the police in some countries can even impose or suggest some kind of sanction (e.g. a police caution). Therefore, the input that prosecutors have to face in different countries is subject to huge variation.

Apart from this, the competences of the prosecutors themselves are quite different (see Wade 2006; Wade et al. 2008). In some countries a strict principle of legality is still more or less observed, obliging prosecution officers to investigate each case until the decision can be made to present an indictment to the court or drop the case based on legal or factual reasons. In other countries, the binding to a principle of legality is less strict or even replaced by a principle of expediency, allowing the prosecution service to drop cases not only for legal or factual reasons, but also in cases of minor guilt without any sanction or dispose of cases under the condition of a certain activity to be executed by the accused voluntarily, like paying a certain sum of money or doing community work. In some countries apart from this the prosecution service in certain clear cases can even issue real sanctions that count as convictions.

In addition, efficiency and structure of the prosecution service may influence the personnel numbers as well as statistical issues like counting rules (instructive with respect to the effect of counting rules on police level Aebi 2008).

Table 2 (in the Annex) and figure 3 show the results for the prosecution personnel rates per 100,000 population. As with police rates, prosecutor rates are subject to remarkable variation. The differences are even bigger here than on police level, with rates ranging from 0.2 in Zambia to 44.9 in Colombia. In any case, in all countries the rate of prosecutors is much lower than the rate of police officers. The median is 6.1, the mean 8.0. The standard deviation is 7.9 and the distribution of values is once again positively skewed. Differently from police figures, prosecution personnel rates do not imply that there is any minimum rate of prosecutors per

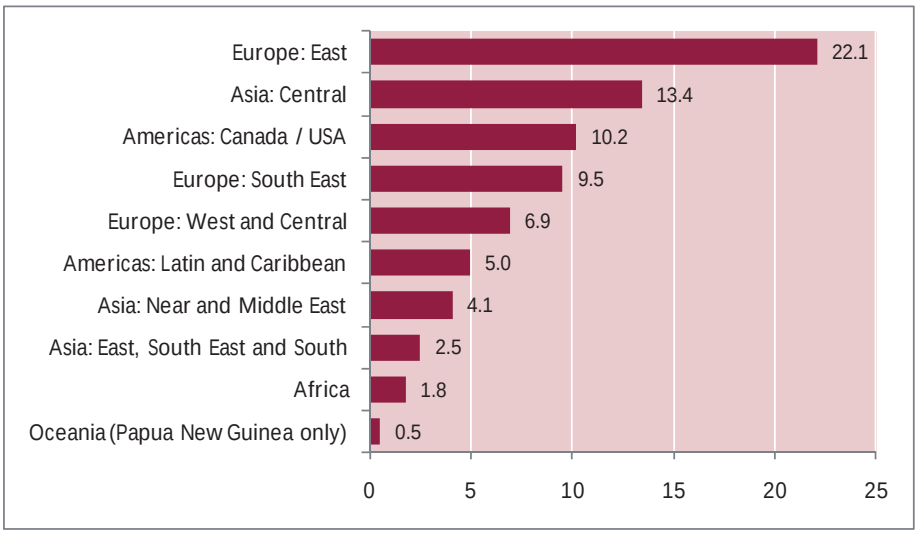
100,000 population. In quite a few countries there are less than three prosecutors per 100,000 population.

As can be seen in figure 3, there are also huge differences in regional and sub-regional medians for prosecution personnel rates. The highest rates of prosecutors can be found in Eastern Europe (median: 22.1). All countries in that area show prosecutor rates above 20 (Belarus: 20.4, Republic of Moldova: 20.1, Russian Federation: 30.3, Ukraine: 30.3). All other countries that were formerly part of the Soviet Union (even the Baltic countries) also show very high or at least fairly high prosecutor rates (between 25.2 for Lithuania and 10.8 for Azerbaijan). To a lesser extent, the same is true for the countries formerly under Socialist regimes in Central Europe, especially for Poland, Hungary and Slovakia with rates around 15. Moreover, China (13.5) and Mongolia (14.4) also support the assumption that there is a connection between (former) socialist influence and high prosecution personnel rates (similar results for earlier reference years can be found in Mayhew 2003, 89; Gruszczynska, Marshall 2008, 19).

The sub-regional medians for Central Asia and South East Europe are also quite high due to the fact that the first mentioned sub-region includes only data from countries that were formerly Soviet Republics, while the latter (except for Turkey with a rate of only 4.8) includes countries from the Balkans that were formerly socialist, too.

Regarding the Americas, there is considerable variation in prosecutor rates. Both Canada (11.6) and the USA (8.8) show prosecutor rates above the average. For Latin America and the Caribbean, the median rate is much lower (5.0). However, there are very different rates to be found in the different countries of that region, ranging from 2.2 in the Dominican Republic to 44.9 in Colombia.

Figure 3. Prosecutors per 100,000 population by regions and sub-regions (medians)



The same observation (although less extreme) can be made in Western and Central Europe, even if excluding the countries that were formerly socialist: In the remaining countries, rates range from 1.5 in Malta to 11.6 in Portugal, without any clear pattern. For example, in Scandinavia rates range from 2.0 in Norway to 11.2 in Denmark.

Clearly lower median rates can be found for the Near and Middle East (4.1), for East, South East and South Asia (2.5), for the whole of Africa (1.8) and for the only country from Oceania that was able to provide data (Papua New Guinea: 0.5). But even in these areas, there are some outliers with much higher values. For example, Egypt shows a rate of 25.4 prosecutors, which is also much higher than the rates for the other two participating North African countries (Algeria: 1.7, Morocco: 1.8).

Table 2 in the Annex also shows the trends for prosecution personnel rates over time. Differently from police personnel, the general trend shows increasing personnel rates. The median average annual change rate is 2.0 %, the mean 1.9 %, the standard deviation 3.9 percentage points. There are countries with remarkable increases up to 11.4 % per year in an eleven-year period (Malaysia). Only few countries show relevant decreases, most prominently the Dominican Republic with an annual change rate of -7.4 % during a period of 8 years.

Judges

The data collected on judges is again even more critical than the data collected on prosecutors. While the issues addressed in the prosecution section should also appear at courts level (legal and factual differences in criminal justice systems and therefore in the duties of and need for judges, efficiency and structure of the court system, differences in statistical counting rules), there is also a severe problem with the definition used:

First of all, the questionnaire asks for the number of professional judges or magistrates and defines this group of persons "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".

The numbers reported are not restricted to judges deciding criminal cases. Therefore, this value is not at all directly related to criminal justice. It does not mean very much in this respect. The comparability problem might get even worse because some countries might still only report the number of judges whose duty is the judgment of criminal cases. Apart from this, it is not clear whether really all judges are included in the reported figures in all countries. Numbers will often only include judges at ordinary courts, but not those working at specialized courts (like administrative courts etc.).

Still, this chapter will present some main results on the rates of professional judges and magistrates in international comparison. The reader should, however, keep in mind the restrictions regarding the comparability of these figures. We will not report results on lay judges. While the UN-CTS questionnaire also includes a question regarding this group of judges, their tasks and the areas of the criminal justice process and other court hearings where laypersons are needed are so much dependent on the individual legal system of each country that values are not at all comparable.

Figure 4. Professional judges per 100,000 population (medians)

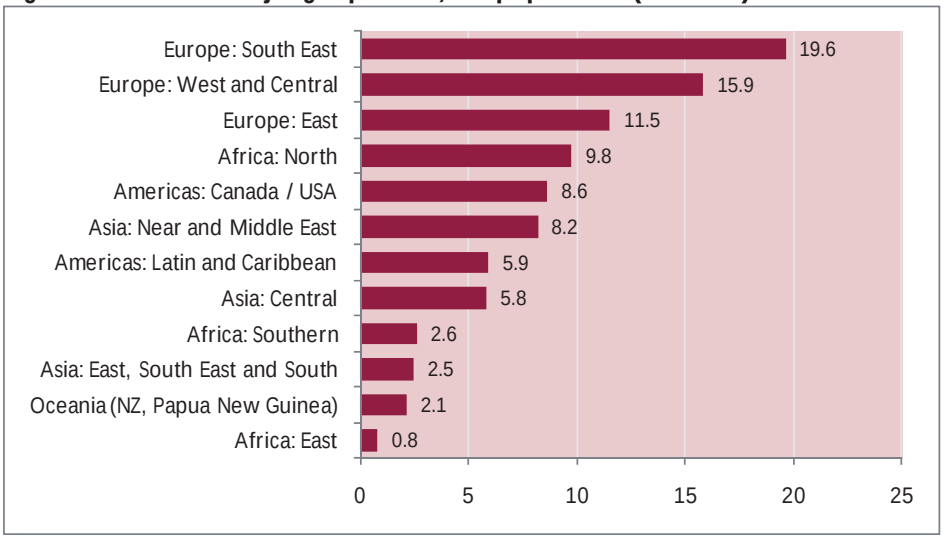


Figure 4 and table 3 (in the Annex) show the distribution of rates of professional judges across the world. There is significant variation in the rates, with a median rate of 9.7, a mean of 11.5 and a standard deviation of 9.9. Once again, skewness is positive. Rates for professional judges are as wide-ranged as are the rates for prosecutors: The lowest rate can be found in Ethiopia (0.2 judges per 100,000 population), the highest in Slovenia (50.0).

The highest rates can be found in Europe, with medians of more than 10 for all three sub-regions that were separately analyzed (West and Central, East, South East). This result is repeated even more impressively when looking at the individual country results: Among the 20 countries with the highest rates of professional judges are 19 countries from Europe, with Costa Rica being the only exception (19.6). Additionally, there are 42 countries with judges rates of 10 or more per 100,000 population, of which 33 are from Europe.

Among the top-ranking countries, there are also once again quite many countries from Central, South East and East Europe with a socialist history, although the connection is not as pronounced as it was for the prosecutors. But apart from a continental European legal tradition (for example the UK not only has a different legal tradition, but also lower rates of judges) a socialist history might explain high rates of judges. This interpretation is supported by the results for China and Mongolia, where judges rates are around 15.

The next highest rates of judges can be found in North Africa (9.8), Canada / USA (median: 8.7 with 6.5 for Canada and 10.8 for the USA) and the Near and Middle East (8.2), with quite uniform results in North Africa and USA / Canada, but quite high variation in the Near and Middle East (from 3.2 in Saudi Arabia to 16.0 in Bahrain). The results for Central Asia (5.8) and Latin America and the Caribbean (5.9) are considerably lower, although the former countries also had a socialist past. This supports the assumption that the relationship between such a history and judges rates is weaker than it is for prosecutor rates.

Low rates of professional judges can be found in East (0.8) and Southern (2.6) Africa and also in East, South East and South Asia (2.5), however with some remarkable outliers. Apart from the already named countries Mongolia and China, Zambia (9.8) is also to be mentioned here.

The trend in judges rates is overall quite comparable with the trend in prosecutors rates, showing average annual change rates of 1.8 % in the median and 2.2 % in the mean. The standard deviation is higher with 4.2 percentage points. The incredible change rate for Tajikistan of 23.7 per cent per year – leading to about ten times higher rates at the end of the eleven-year period – might of course also be due to changes in the reporting of data, i.e. not necessarily only reflect changes in the real world. However, this could not be confirmed due to the fact that the country only participated in the 6th and 10th waves. There are also some other countries with quite remarkable increases (e.g.: 7.1 % per year over an eleven-year period for Moldova) or decreases (e.g.: -7.7 % per year over an eight-year period for Malaysia; but also note the strong increase in prosecutors rates for that country [see above]).

Prison staff

The fourth section of the UN-CTS questionnaire addresses prisons / penal institutions. Apart from budget and staff variables, which are included in all sections of the UN-CTS questionnaire, the prisons section also includes questions on the number of adult and juvenile prisons and the number of available places (without overcrowding). These latter variables are not evaluated here (but see Walmsley in this publication, chapter 7, for some results on overcrowding). The sheer number of institutions means nothing with respect to resources (since this number would also depend on the number of available places per prison and is therefore not a direct indicator of the amount of resources spent). The number of places available without overcrowding is also not a measure for the extent of resources spent, because the “official capacity” of prisons is mainly subject to definition by each and every country, which does not necessarily imply a certain minimum standard and thus minimum standard costs.

In this publication, we are going to focus on the total staff in adult prisons only. The UN-CTS also asks for data on juvenile prison staff, but this data can also not be interpreted under the resources aspect. The extent to which juveniles can be sent to prison is subject to wide variation across the world. Apart from or instead of prisons, there are reformatories, borstals and other types of custodial institutions for juvenile offenders available inside or outside of criminal law. Not all of the custodial institutions would be counted under a prison staff heading (especially if not under prison administration, see definition below). Apart from this, many countries focus primarily on non-custodial responses to juvenile delinquency. The staff figure will therefore be subject to wide variation and cannot be validly interpreted without looking in detail into the different systems.

Even with respect to adult prison staff, the results have to be interpreted carefully. The staff numbers are only collected as a total (and differentiated by sex), but not differentiated by functions. Therefore, a high number of prison staff may be an outcome of a high number of custodial personnel or it might be an outcome of a high number of treatment personnel. The interpretation would be very different, depending on the distribution of the different functions within the total prison staff. With respect to custodial personnel, the necessary number might dramatically be reduced in prisons where security is mainly guaranteed by technical means and architecture (therefore, the inmate / staff ratio is

also no valid indicator for the quality of prison conditions: see Mayhew 2003, 93, although an extremely low rate might be a piece of evidence for lack of quality).

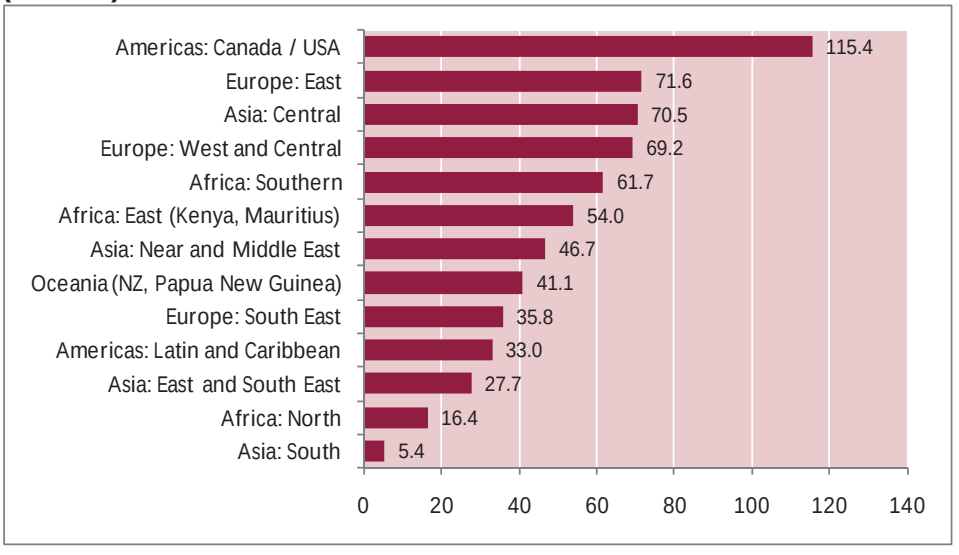
Apart from this, prison staff is highly dependent on the number of persons sent to prison. This number – in relation to the total number of persons in contact with the system and / or the number of persons convicted – is subject to wide variation, too, and it especially depends on the punitivity of the system. Therefore, one might say, personnel rates are high in countries were a high number of personnel is needed due to a high number of prisoners (although this is no general rule; see Mayhew 2003, 93). This makes the interpretation of staff numbers under a mere resources aspect questionable.

The 10th UN-CTS questionnaire defines prison staff "to mean all individuals employed in penal or correctional institutions, including management, treatment, custodial and other (maintenance, food service etc.) personnel." Prisons, penal institutions or correctional institutions are defined 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, and psychiatric facilities under the prison administration." This definition is in line with the earlier editions covered here, too.

Table 4 (in the Annex) and figure 5 show the results for the total staff in adult prisons in international comparison. Once again the results are quite wide-ranged, with a minimum of 2.4 prison staff members per 100,000 population in Nepal and a maximum of 160.4 staff members in Colombia. The median is 50.7, the mean 54.4, the standard deviation 33.6. The distribution of values is once again positively skewed.

Regional and sub-regional analysis shows that the highest prison staff rates can be found in the area of Canada and the USA (median: 115.4, USA: 138.3, Canada: 92.5). Only five other areas in the world also show median prison staff rates above the overall median: East Africa (54.0), Southern Africa (61.7), Central Asia (70.5) and West and Central Europe (69.3). Clearly lower rates around 30 can be found in Latin America and the Caribbean (33.0), East and South East Asia (27.7) and South East Europe (35.8), while the lowest rates by far can be found in North Africa (16.4) and especially in South Asia (5.4).

Figure 5. Correctional staff in adult prisons per 100,000 population by regions and sub-regions (medians)



Ten of the responding countries show staff rates greater than 100 per 100,000 population, with Colombia (160.4) at the top, followed by the USA (138.3) and Latvia (127.5). Many of the countries ranking high here will do so due to high incarceration rates, as is known for example for the USA (see Mayhew 2003, 93; Gruszczynska, Marshall 2008, 27). Most of the countries ranking high, even among the "top 30", are countries from Europe and the Americas. On the other hand, at the bottom of the list, countries from Asia clearly dominate, although there are also a high proportion of countries from Latin America and the Caribbean among these countries with the lowest personnel rates. There are only six countries with rates lower than 10, five of which are from Asia, three of them more precisely from South Asia, thus explaining the very low median for that area.

Table 4 in the Annex also informs about the trends in prison staff. As with prosecution personnel and judges rates, prison staff rates have been increasing in the last years, if looking at the general trend. The median average annual change rate is 1.2 %, the mean even 1.9 %. The standard deviation is fairly high with 4.1 percentage points. Accordingly, there are some countries with very strong increases over long periods of time. For example, Jordan and the Dominican Republic show average yearly increases of more than 10 % for an eleven-year period. There are no countries with comparably strong decreases. A country with quite high decrease rates over quite a long period of time is for example Estonia with -4.2 % per year over a nine-year period, or Panama with -5.4 % per year over an eleven-year period.

Possible measures of criminal justice performance

Regarding criminal justice system performance, the indicators the UN-CTS data provide are somewhat limited. However, some brief estimates can be made by connecting data on criminal justice personnel with the data on offenders they have to deal with. This is – of course – only a restricted view on performance, not looking at the quality, but on the quantity of work done by the different actors in the criminal justice system: Quantitative productivity defined as the relation between personnel strength and the output produced (see Mayhew 2003 and Smit 2008 with comparable approaches).

The term "productivity" is used here without any judgment or quality assessment connected (for criticism of this term see Smit 2008, 108). This means: High quantitative productivity is not a measure for the overall performance of a system or for the quality of the results produced. The extent of productivity is highly dependent on the structure of a criminal justice system. Therefore, the results presented do not imply that a system with high productivity rates performs better than a system with low productivity rates.

In the resources section of this chapter, we discussed data on four different actors within the criminal justice system, namely the police, prosecution service, judges and correctional staff. In this section, we only focus on the police and prosecution service:

Judges' output cannot be validly measured due to restrictions of the definition used. Since it is not clear to what extent the judgment of criminal cases is part of the judges' duties (see above), their performance cannot be measured by the output (in convictions) they produced. Regarding prison staff, one should clearly think about the meaning of the ratio persons incarcerated per prison staff member, because incarceration is not the product of prison staff members. Since the distribution of functions among prison staff is not clear, this rate can also not be interpreted as a support or attendance rate (see above, and also Mayhew 2003, 93, who tested this). Neither can it be interpreted as a security rate, especially when taking into account the other, technical and architectural means of achieving security, which are not reflected in staff rates.

For the police and prosecution services there are also many problems connected with this kind of measurement. These problems will be addressed in detail within the relevant subsections. However, as a general remark, it should be noted that the structure of the criminal justice process should be taken into consideration when measuring the productivity of a system. Therefore, police productivity can be measured by the number of suspects they "produced", but not by the number of prosecutions or convictions that resulted afterwards. This is due to the fact that at least under usual circumstances the police have no powers to prosecute cases in their own competence or present them in court (see Elsner, Smit, Zila 2008; Elsner, Lewis, Zila 2008). Therefore, the products "persons prosecuted" and "persons convicted" are not produced by the police.

Both of these are, however, usually produced by the prosecution service. This is also the case for convictions, although these fall primarily under the duties of judges. But the prosecutor will have to present the case in court, thus making the resulting convictions his or her product, too (see Wade, Smit, Aubusson de Cavarlay 2008 on the influence of prosecutors on the decisions of criminal courts). The same would be true for the number of persons brought before the criminal courts. This product, that is located at an intermediate stage between persons prosecuted and persons convicted, is also usually produced by the prosecution service.

Persons suspected per police officer

Starting from these initial thoughts, a first performance indicator would be the number of suspects produced per police officer. This relationship is visualized in figure 6; the connected rates can be found in table 5 in the Annex. Please note that the figure uses logarithmic scales for both values, due to large variance in the respective rates. The diagram also does not start with 1, but with 50 for both variables, due to the fact that lower values do not occur[1], and in order to allow looking at the distribution of countries in more detail. The same has been done with the other figures in this section, which also use logarithmic scales and have sometimes been trimmed, too.

As can clearly be seen from the figure, country values do not suggest a simple linear relationship between police personnel rates and the rate of suspects produced (see also Mayhew 2003, 104). The assumption that more police officers will also produce a higher output must therefore be rejected. This is at least the case with respect to UN-CTS data with all of its methodological problems, some of which have already been addressed above. Especially, suspects are not the only product of the police, which have not only repressive, but also preventive functions. One of different other products of the police is therefore security. This part of police performance cannot, however, be measured in terms of suspects. Depending on the relationship of preventive and repressive functions of the police personnel of any given country, the importance of the repressive product of "suspects produced" might vary.

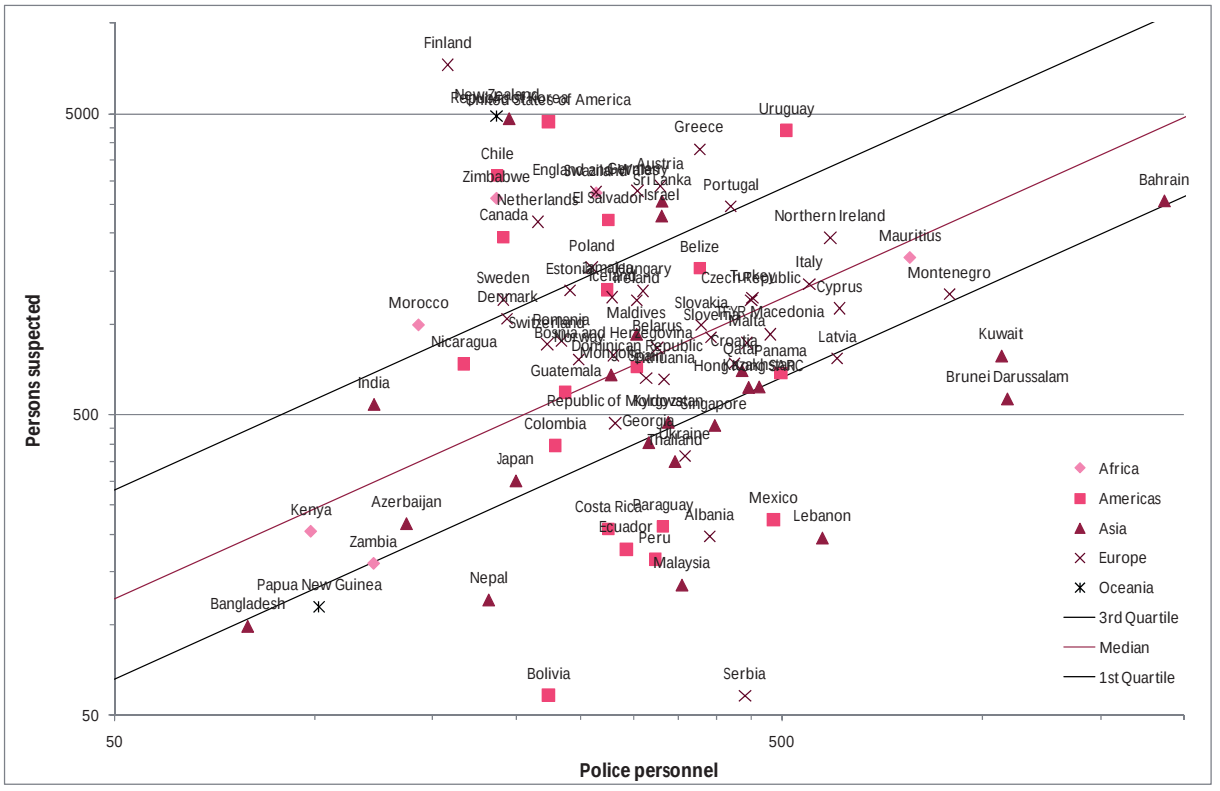
Of course, the number of police-recorded suspects also depends on the definition of "suspect" and other issues of criminal law (especially the definition of what is considered a "criminal" offence), criminal procedure law (defining the fields of investigative work to be done by police officers, in some countries excluding certain offence types, like tax offences, from their responsibility) and rules of statistical recording.

The number of suspects as a system produced value is also less dependent on the population size than is the number of police officers. While in the beginning of this chapter we showed that there is a very strong correlation between the size of the police force and the population size (corr. 0.93, R^2 0.87), the correlation between the absolute total number of suspects and the population size is much weaker (corr. 0.59, R^2: 0.35).

In accordance with the distribution shown in figure 6, there is no correlation between the rate of suspects and the rate of police officers in a country (corr. 0.02). As figure 6 indicates, there is also no clear relationship between police productivity and the region a country is located in. But it can be seen that those countries ranking lowest on the police productivity scale are mostly from Latin America and Asia (countries below the 1st Quartile). Although there is no linear relationship between the suspects rate and the rate of police officers, there seems to exist one clear centre in the figure.

[1] With one exception: The Syrian Arab Republic has been excluded from this diagram due to an unrealistically low police personnel rate of only about 10 (see above).

Figure 6. Suspects per police officer by countries and regions (log. scales)



The rate of suspects per police officer can be seen in table 5, below. As is visualized there and also in figure 6, the productivity of the police measured this way is subject to remarkable variation, with a median of 2.4, a mean of 5.2 and a standard deviation of 8.0. The minimum is 0.1 for Serbia, the maximum 46.0 for Finland. The distribution is positively skewed.

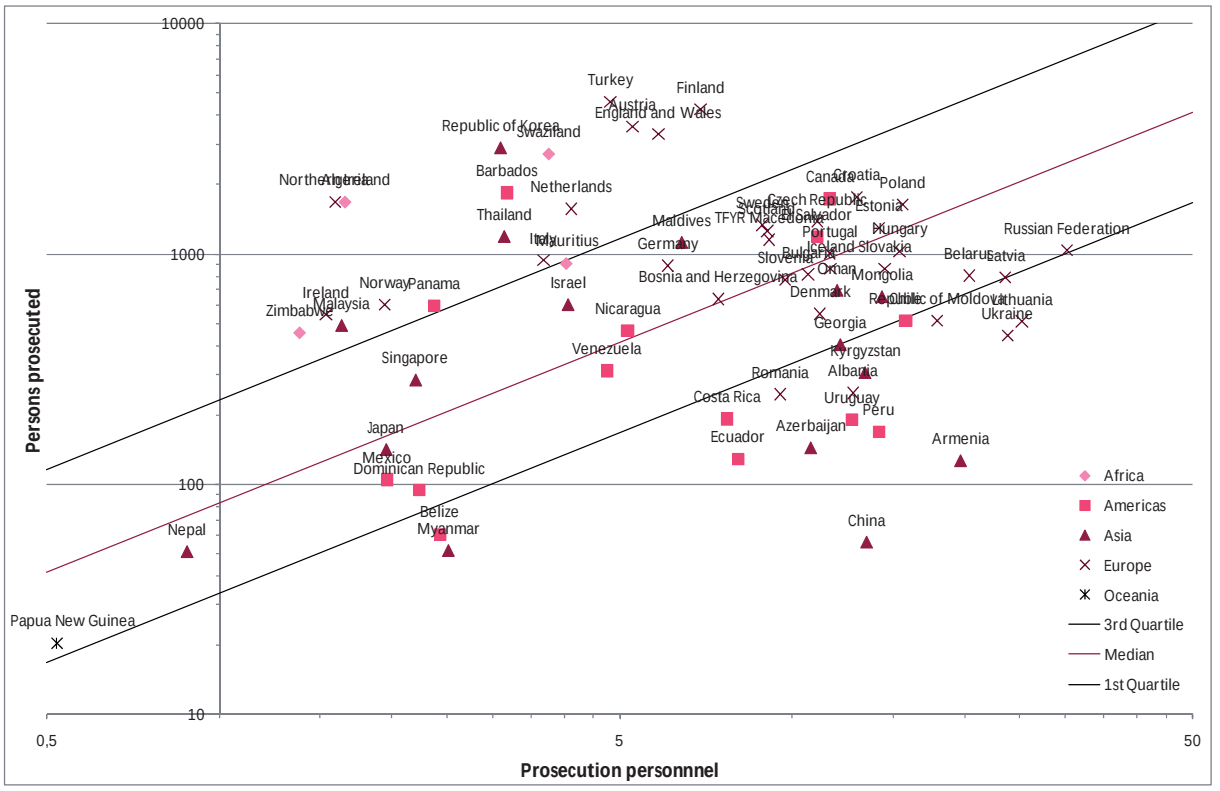
Persons suspected per police officer

A second product we are going to have a detailed look at is the number of prosecutions per prosecutor. This relation is made visible in figure 7. The calculated rates can be found in table 5 in the Annex. As with the suspects per police officer, the rate of persons prosecuted per prosecutor is subject to wild variation (a result already found by Mayhew 2003, 106, and Smit 2008, 105). The median is 82.6 persons prosecuted, the mean 194.0 and the standard deviation 262.3. Again, we find a positively skewed distribution. The minimum is 4.1 for China, the maximum 1057.9 for Northern Ireland.

As with the suspects per police officer rates, these values do not mean very much if compared directly between countries. Once again this is due to the differences between criminal justice systems, influencing prosecution input and output (see above). Apart from this, as always, differences in statistical recording have to be taken into account. In addition, there is a problem related to the definition used for "persons prosecuted" in the UN-CTS questionnaire:

"'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."

Figure 7. Persons prosecuted per prosecutor by countries and regions (log. scales)



"Official charge" in this respect might be a misleading term, because some might understand this to mean all persons officially prosecuted, while others might understand persons indicted.[2]

Like the ratio between suspects and police officers, the ratio between persons prosecuted and the number of prosecutors is not even close to being a constant. There is no linear relationship between these two values at all (corr. -0.12). There is also once again no clear relationship between the region in which a country is located and the quantitative productivity of the prosecution service, although the countries with a ratio below the 1st Quartile are often from Asia or Latin America. Apart from these areas, also some countries from Europe can be found here. Many of the countries from Asia and all from Europe below the 1st Quartile are countries with a socialist past, i.e. also countries with a relatively high rate of prosecutors. This leads to the assumption that the tasks of prosecutors in these countries might be broader than the tasks in other countries, thus reducing the quantitative productivity as measured by the number of persons prosecuted per prosecutor.

If there was any relationship between the personnel rates and the rates of persons prosecuted, figure 7 would point at a negative slope rather than a positive one, a result which is also denoted by the (though extremely weak and not significant) negative correlation. This result would make clear that the ratio between persons prosecuted and the number of personnel can by no means be a measure of the quality of performance. Different ratios can be explained by differences in the respective criminal justice systems.

[2] These ambiguities could be avoided. The European Sourcebook, for example, differentiates, inter alia, between a headline category *"Output cases total"*, which is defined as: *"All disposals made by the prosecuting authority in the reference year,"* and a subcategory *"Cases brought before a court (e.g. indictment, acte d'accusation, Anklageschrift),"* (see Aebi et al. 2010).

Earlier publications by Mayhew (2003, 106) and Smit (2008, 109) could show for Europe and North America that there was a negative correlation between the rate of persons prosecuted (which could be interpreted as the workload) and the ratio between the convictions rate and that number: -0.56 and -0.47, respectively. This was interpreted to provide some support for the findings of Jehle (2000) according to which a lower workload of the prosecution service correlates with a higher proportion of cases brought before a court. Data analyzed for this chapter, for the first time now on a world-wide scale, displayed a much weaker correlation (corr. -0.18). Even if one restricts the analysis to Europe and Canada (no data available for the USA), the correlation is still low, only -0.22 for the latest available year.

Persons brought before a court per prosecutor

Although defined as an input value at court level in the UN-CTS questionnaire, the rate of persons brought before a court could be interpreted as an output by the public prosecution service, since this is the public body in charge of bringing cases before the court in most countries. The results for this variable in relation to the prosecution personnel variable are, however, equally problematic as the results for persons prosecuted (discussed above). Once again, the rates differ very much: The median is 85.5 cases brought before a court per prosecutor, the mean is 201.2, the standard deviation 266.2. The minimum rate is 3.6 for Ecuador, the maximum 1057.9 for Northern Ireland. The ratio between persons brought before a court and the number of prosecutors is therefore not even close to being a constant. There is no linear relationship between these two values (corr. -0.08).

The distribution is quite similar to the distribution that can be found for persons prosecuted per prosecutor. This can also be confirmed by checking for the correlation between the rate of persons prosecuted and the rate of persons brought before a court (corr. 0.87, R^2 0.75). Additionally, the ratio of persons brought before a court per persons prosecuted is exactly 1 in the median, the mean being 1.28. However, the interpretation of both variables seems to be quite different across countries, since the minimum is a bit over 0.2 for Japan (i.e. about 4 to 5 persons brought before court per 1 person prosecuted), the maximum 5.8 for the Republic of Korea. The standard deviation is, accordingly, 1.0.

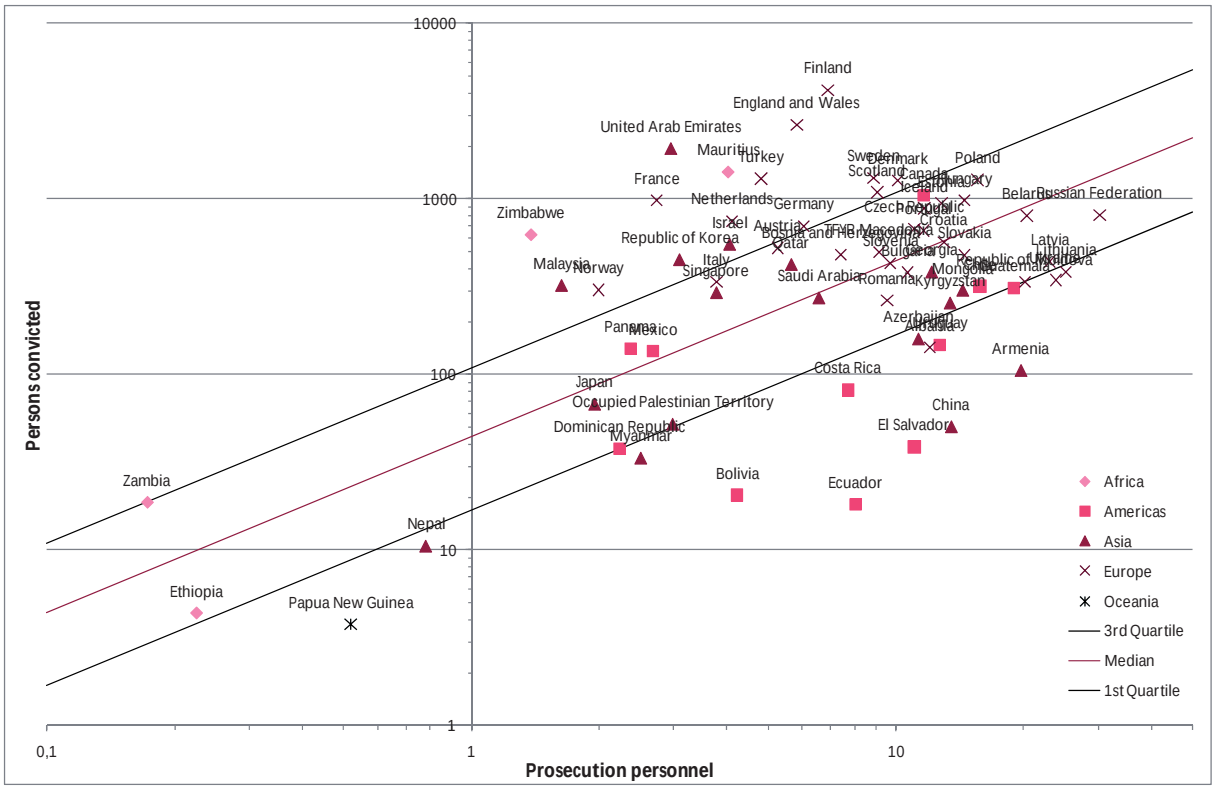
Apart from differences in the criminal justice systems, these results reflect problems related to the quality and the comprehensibility of these definitions. The majority of respondents, however, tend to understand both variables almost synonymously. Therefore, the ratio of persons brought before a court per prosecutor is not analyzed more closely here.

Persons convicted per prosecutor

A final “productivity” indicator introduced here is the ratio between persons convicted and the number of prosecutors. The results for this relation can be seen in figure 8 and table 5 (in the Annex).

As with the other ratios already discussed, this final ratio shows once again pronounced differences (see also the earlier results by Mayhew 2003, 107). The median is 44.3 convictions per prosecutor, the mean 97.1, the standard deviation 138.6. With a minimum of 2.3 (Ecuador) and a maximum of 654.9 (United Arab Emirates), the maximum is once again much higher than the minimum. The distribution is positively skewed.

Figure 8. Persons convicted per prosecutor by countries and regions (log. scales)



As was already shown for the other performance indicators, it can be clearly seen in figure 8 that there is also no linear relationship between prosecution personnel rates and conviction rates (corr. 0.02). However, the relationship between quantitative productivity and the region a country is located in seems to be more pronounced: While below the 1st Quartile almost all countries are located in Asia, Latin America and the Caribbean, above the 3rd Quartile most countries are located in Europe. Apart from these, three out of four represented countries from Africa can be found here. There are also a number of Asian countries in the highest-ranking quartile.

Of course, as for the other variables discussed here, once again comparability issues have to be taken into account, based on the differences of the criminal justice systems and of statistical recording. At least, the variable of "persons convicted" is less ambiguous than other variables discussed here, especially the "persons prosecuted" variable.

The definition used by the UN-CTS was: "'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."

However, since the conviction is located at the end of the criminal justice process of first instance, the differences of the legal systems are fully pronounced here. Rates are, for example, influenced by the percentage of cases that are subject to diversion and thus not or only informally sanctioned (for details on attrition within the criminal justice process see Smit and Harrendorf in this book, chapter 5).

Combining the measures

So far, we presented four different indicators of quantitative productivity of criminal justice systems. One of these measures (persons brought before the court per prosecutor) was rejected due to the close interrelation with and dubious connection to the ratio of person prosecuted per prosecutor. For the remaining three ratios, we calculated correlations. The results are 0.45 for suspects ratio by persons prosecuted ratio, 0.65 for suspects ratio by persons convicted ratio and 0.66 for persons prosecuted ratio by persons convicted ratio. Therefore, systems with a high quantitative productivity with respect to one of these

measures also tend to have a high quantitative productivity with respect to the other two measures. Although one has got to keep in mind that quantitative productivity is not a measure of overall criminal justice performance, especially not a measure for quality, this relationship makes is nevertheless possible to think about a combined productivity measure, based on all three ratios.

Such a productivity measure was calculated. In order to do so, the distribution of all three ratios was standardized to the range 0 to 1. Afterwards, where all three measures were available for a country, these were added together and the result was divided by three. If only two measures were available, these were added and divided by two, and if there was only one measure, this was used (in the standardized version, of course). The results can be seen in table 5 in the Annex (CPM column).

Table 5 also shows the separate ratios (non-standardized) that were used to calculate the index. For these ratios, the table also features average annual change rates and information on the trend length, where available.

Punitivity of the system

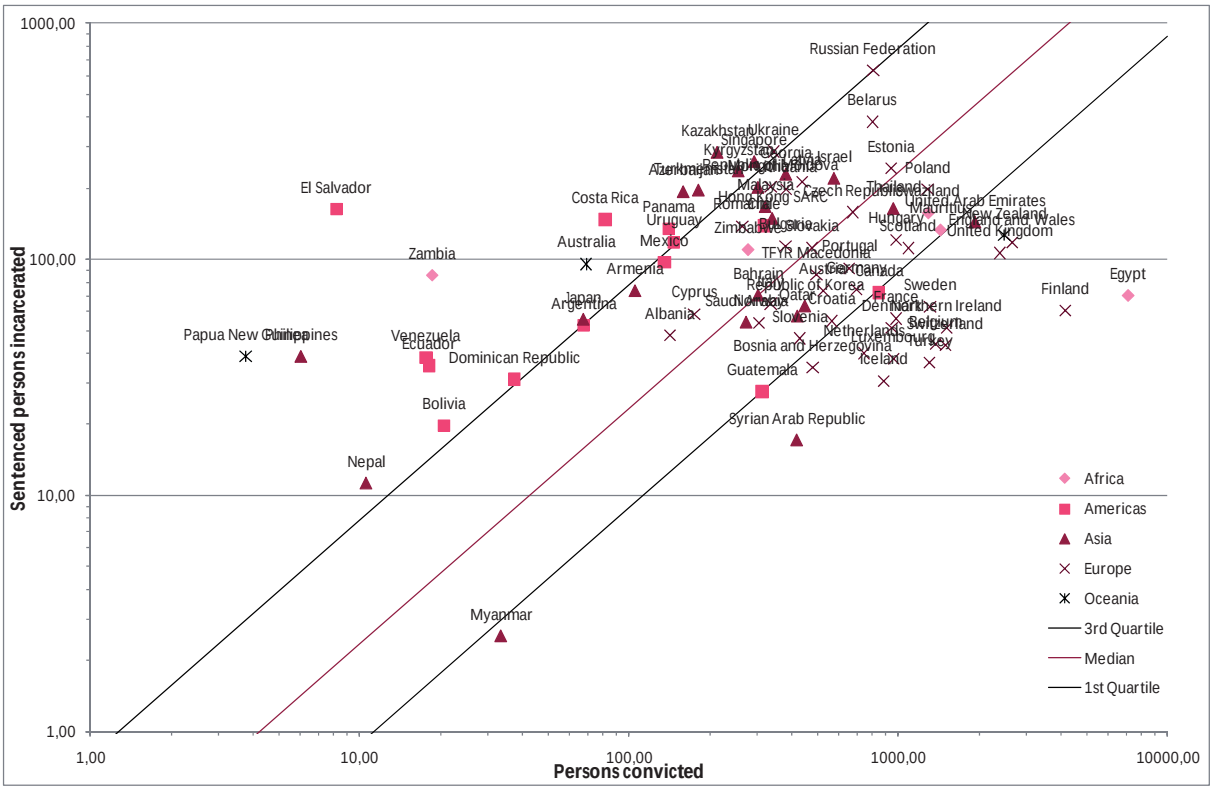
Punitivity is an ambiguous term that requires definition. One might understand punitivity to mean an attitude within the population, a measure for the demand for harsh punishment. This type of punitivity cannot be measured with UN-CTS data. However, punitivity can also be understood to mean a feature of the criminal justice system itself, e.g. measuring the harshness of sentences (juridical punitivity; see Kury, Ferdinand 2008). Punitivity with respect to the UN-CTS can only be understood in this latter way. Therefore, punitivity is regarded here as an attribute of any given criminal justice system, measuring the severity of the response to criminal offending.

UN-CTS data does not cover information on sentences imposed for survey waves after the 7th anymore. Therefore, the length and severity of sentences cannot be directly calculated with UN-CTS data. However, there is another possible approach: The UN-CTS still covers information on the number of sentenced persons incarcerated. It also includes data on the total number of convictions. Systemic punitivity can now be estimated by the ratio between the rate of sentenced persons incarcerated and the rate of persons convicted (see Smit 2009):

The number of sentenced persons in prison at any given date is influenced 1) by the number of persons sent to prison and 2) by the actual lengths of prison sentences served. The ratio between sentenced persons incarcerated and the total of persons convicted is, however, only an estimate for systemic punitivity due to the fact that 1) counting units do not exactly fit and 2) the persons actually in prison at a given date in the reference year have been sent there before. They might have already been in prison for a longer period of time. Therefore, the estimate calculated this way is not robust against changes in the degree of systemic punitivity over time.

Taking all this into account, we calculated punitivity ratios (see table 6). Additionally, figure 9 visualizes the connection between the rates of sentenced persons incarcerated and the rate of persons convicted.

Figure 9. Sentenced persons incarcerated per persons convicted by countries and regions (log. scales)



There is remarkable variation in the results produced this way. As table 6 shows, the median ratio is 0.23, the mean 0.92. The standard deviation is 2.56 with a minimum of 0.01 for Finland and Egypt and a maximum of 19.83 for El Salvador. The distribution is – again – positively skewed. The results for countries ranking extremely high for this ratio should, however, be interpreted with care: Results much above 1 need justification and explanation. Such results are possible if the input into prison is continuously higher than the output (in the meaning of released persons) and the rate of unsuspended prison sentences per total convictions and the average sentence lengths are high. However, extremely high rates are likely to invite some other explanations: For example, the "top six" countries in table 6 (in the Annex) all show extremely low conviction rates. This combined with the higher incarceration rates leads to the assumption that these countries do not report all of their convictions, but only a small part of them, in the UN-CTS.

As figure 9 shows, most of the countries ranking lowest for the punitivity ratio are located in Europe, while most high-ranking countries can be found in Asia, Latin America and the Caribbean.

Since the punitivity ratio calculated here gives only an estimate of the "real" punitivity of a system, it is useful to test its quality against other measures of punitivity. One other measure of punitivity of the system is the rate of harsh sanctions among all sanctions imposed, namely the percentage of longer unsuspended prison sentences within the total of convictions for a certain offence or for all convictions.

Based on the approach chosen, there are different advantages and problems connected: If one wants to measure the punitivity of the whole system, one might think the best solution would be to calculate the above mentioned percentage for all convictions, regardless of offence type. However, there are certain problems regarding this solution. The term "total convictions" is a black box with respect to offences covered. This is due to the fact that the borderline between criminal and non-criminal behaviour is drawn somewhat differently in every country. Apart from this, convictions stand at the end of the criminal justice process. Therefore, depending on the system, a larger or smaller quantity of (especially: minor) offences might have dropped out of the criminal justice process without any conviction at all, e.g. due to diversion etc. A low percentage of long prison sentences might also

be due to an extensive criminal justice system in which even minor cases lead to a conviction.

One solution might be to refer to a certain, known offence that is well-defined and more or less comparable instead (like theft). This would help to calibrate the punitivity measure to a certain offence severity. However, still huge problems remain if looking at such a minor offence: A varying percentage of cases will never reach the convictions level, but will be dropped, diverted or disposed of at earlier stages.

However, it would be short-sighted to draw the conclusion that one should look instead at more severe, well-defined offences (like robbery). Of course, for these offences the attrition rate will be lower in all countries than for minor offences. However, another problem will arise: The severity of sanctions for grave offences will not necessarily represent overall severity of the criminal justice response. Long sentences for, e.g., robbery might also be due to severe punishment of this special crime type, and only this. Apart from this, with increasing severity of the offence the punishment will increase everywhere. Since there is an upper limiting value for sentence severity, this will lead to decreasing variation in the distribution of sentences with increasing gravity of the offence.

Due to these restrictions, we used a combined approach in table 6 in the Annex, calculating the percentage of unsuspended prison sentences of more than one year in the total of convictions, the percentage of sentences above two years in robbery convictions and the percentage of sentences longer than one year in theft convictions. The rates were calculated using the raw data of the European Sourcebook of Crime and Criminal Justice Statistics for the reference year 2006 (Aebi et al. 2010).

Apart from these measures of punitivity of the system, we also introduced a measure of punitivity of the general public into table 6: The percentage of the general public opting for imprisonment as punishment for a recidivist burglar in 2004 / 2005 (taken from van Dijk, van Kesteren, Smit 2007, 149).

Table 1. Correlations and R^2 for punitivity measures

Correlations			
incarceration / public opinion	incarceration / long sentences total	incarceration / long robbery sentences	incarceration / long theft sentences
0.20	0.92	0.46	0.89
public opinion / long sentences total	public opinion / long robbery sentences	public opinion / long theft sentences	
-0.03	0.39	-0.01	
long sentences total / long robbery sentences	long sentences total / long theft sentences		
0.53	0.88		
long robbery / long theft sentences			
0.70			
R^2			
incarceration / public opinion	incarceration / long sentences total	incarceration / long robbery sentences	incarceration / long theft sentences
0.04	0.85	0.21	0.78
public opinion / long sentences total	public opinion / long robbery sentences	public opinion / long theft sentences	
0.00	0.15	0.00	
long sentences total / long robbery sentences	long sentences total / long theft sentences		
0.28	0.77		
long robbery / long theft sentences			
0.49			

Correlations and R^2 between each pair of these measures are shown in table 1. As can be seen there, all measures of systemic punitivity are highly correlated. There is a 0.92 correlation between the rate of sentenced persons incarcerated per total convictions and the percentage of sentences longer than one year in all convictions. The punitivity measure calculated with UN-CTS data is also very strongly correlated with the percentage of unsuspended theft sentences over one year in the total of theft convictions (corr. 0.89). As could be expected, based on the theoretical thoughts presented above, the correlation with long robbery sentences above two years is weaker, though not irrelevant (0.46).

The correlation with the measure for the punitivity of the general public, on the other hand, is only 0.20. This supports the assumption that public punitivity and punitivity of the system are two different issues that have to be addressed separately (although there might be a weak relationship between them, as was also found in van Dijk, van Kesteren, Smit 2007, 151). This hypothesis is also supported by the fact that most other measures for the punitivity of the system used in table 6 (in the Annex) are not correlated with the public opinion variable. According to the results presented in table 1, this is the case for long sentences total (corr. -0.03) and long theft sentences (corr. -0.01). Only the punishment for more severe offences seems to be more strongly influenced by public opinion (or in any other way interrelated): Here we can find a correlation of 0.39. These findings support other research results that show that the interrelations between public opinion, lawmaking and legal practice are complex (see i.a. Green 2008; Theodore, Kury 2008; Kury, Ferdinand, Obergfell-Fuchs 2008).

Summary and conclusions

This chapter focused on three different attributes of criminal justice systems all over the world, namely resources, performance (productivity) and punitivity.

Resources

Regarding criminal justice resources, four personnel variables provided in the UN-CTS data were analyzed: police personnel, prosecution personnel, professional judges and staff in adult prisons.

With respect to police personnel, the following main results were found: Absolute police personnel figures are quite clearly dependent on the population size (corr. 0.93). Police personnel rates per 100,000 population vary significantly between countries. The median is 303.3, the mean 341.8, the standard deviation 241.5. The distribution is positively skewed. Results imply that there is a minimum number of police officers per 100,000 population that is necessary in any country. Only four countries worldwide show police personnel values lower than 100 officers per 100,000 population. There are two regions in the world with relatively high median rates of police personnel (around 400), the Near and Middle East as well as East and South East Europe, while the regions with the lowest median rates (median around 200) can be found in Africa, Canada / USA, South Asia and Oceania. Police personnel figures were quite stable across the reference period (1995 – 2006). The mean and median of the change rates per year are around 0 % (standard deviation 2.45 percentage points).

For prosecution personnel, we observed that rates vary remarkably, ranging from 0.2 to 44.9. In all countries the rate of prosecutors is much lower than the rate of police officers. The median is 6.1, the mean 8.0. The standard deviation is 7.9, and the distribution of values is positively skewed. The highest rates of prosecution personnel can be found in Eastern Europe (above 20). All other countries that were formerly part of the Soviet Union also show high prosecutor rates (between 25.2 and 10.8). To a lesser extent, the same is true for the countries formerly under socialist regimes in Central Europe. Moreover, results for China and Mongolia also support the assumption that there is a connection between (former) socialist influence and high prosecution personnel rates. Regarding the Americas, there is considerable variation in prosecutor rates. Both Canada (11.6) and the USA (8.8) show prosecutor rates above the average. For Latin America and the Caribbean, the median rate is much lower (5.0). However, rates range from 2.2 to 44.9. A similar observation can be made in Western and Central Europe (excluding formerly socialist countries): Rates

range from 1.5 to 11.6 without any clear pattern. Clearly lower median rates can be found for the Near and Middle East (4.1), for East, South East and South Asia (2.5), for the whole of Africa (1.8) and for Papua New Guinea (0.5). But once again there are outliers with much higher values. The general trend shows increasing prosecution personnel rates. The median average annual change rate is 2.0 %, the mean 1.9 %, the standard deviation 3.9 percentage points. There are countries with remarkable increases of up to 11.4 % per year in an eleven-year period, and only few countries show relevant decreases.

As regards professional judges, there is significant variation with a median rate of 9.7, a mean of 11.5 and a standard deviation of 9.9. Rates range from 0.2 to 50.00. The highest rates of judges can be found in Europe, with medians of more than 10 for all three sub-regions that were separately analyzed (West and Central, East, South East). Among the 20 countries with the highest rates of professional judges are 19 countries from Europe with Costa Rica being the only exception (19.6). The lowest median rates of professional judges can be found in East (0.8) and Southern (2.6) Africa and also in East, South East and South Asia (2.5), however with some remarkable outliers (Mongolia and China with rates around 15 and Zambia with about 10). Trends in judges rates are overall quite comparable with trends in prosecutors rates, showing average annual change rates of 1.8 % in the median and 2.2 % in the mean with a standard deviation of 4.2 percentage points.

The results for staff rates in adult prisons are quite wide-ranged once again with a minimum of 2.4 prison staff members per 100,000 population and a maximum of 160.4 staff members. The median is 50.7, the mean 54.4, the standard deviation 33.6. Regional analysis shows that the highest prison staff rates can be found in the area of Canada and the USA (median: 115.4), while the lowest rates by far can be found in North Africa (16.4) and especially in South Asia (5.4). Ten of the responding countries show staff rates greater than 100. Many of the countries ranking high here will do so due to high incarceration rates, although this is not necessarily the case. Most of the countries ranking high are countries from Europe and the Americas. On the other hand, among the countries with the lowest rates, countries from Asia clearly dominate. Prison staff rates have been increasing in the last years, if looking at the general trend. The median average annual change rate is 1.2 %, the mean 1.9 %, the standard deviation 4.1 percentage points. Accordingly, there are some countries with very strong increases (more than 10 % per year) over long periods of time. There are no countries with comparably strong decreases.

Productivity

Regarding criminal justice system performance, the indicators the UN-CTS data provide are somewhat limited. Estimates can be made by connecting data on criminal justice personnel with the data on offenders they have to deal with: Quantitative productivity defined as the relation between personnel strength and the output produced. In this section, we focused on the police and prosecution service, looking at the "products" persons suspected per police officer, persons prosecuted per prosecutor, persons brought before the court per prosecutor and persons convicted per prosecutor.

Regarding the ratio persons suspected per police officer, it should be noted that there is no linear relationship between police personnel rates and the rate of suspects produced (corr. 0.02). More police officers will not necessarily produce a higher output. There is also no clear relationship between police productivity and the region a country is located in, although countries ranking lowest on the police productivity scale are mostly from Latin America and Asia. The number of suspects as a system produced value is also less dependent on the population size than is the number of police officers (corr. 0.59). As a result, the ratio of suspects per police officer is subject to remarkable variation, with a median of 2.4, a mean of 5.2 and a standard deviation of 8.0. The minimum is 0.1, the maximum 46.0.

The rate of persons prosecuted per prosecutor is varying strongly, too: The median is 82.6 persons prosecuted, the mean 194.0 and the standard deviation 262.3. The minimum is 4.1, the maximum 1057.9. As with the suspects per police officer rates, these values do not mean very much if compared directly across countries. Once again this is due to the differences between criminal justice systems and differences in statistical recording. In addition, the definition used for persons prosecuted in the UN-CTS is ambiguous, because official charge might be understood to mean all persons officially prosecuted, but might also alternatively be understood to mean persons indicted. Accordingly, there is no linear relationship between the number of persons

prosecuted and the number of prosecution personnel (corr. -0.12). There is also once again no clear relationship between the region in which a country is located and the quantitative productivity of the prosecution service. However, many of the countries from Asia and all from Europe below the 1st Quartile are countries with a socialist past, i.e. also countries with a relatively high rate of prosecutors. Tasks of prosecutors in these countries might be broader, thus reducing the quantitative productivity.

The distribution of the ratio of persons brought before a court per prosecutor ratios is quite similar to the distribution that can be found for persons prosecuted per prosecutor as regards mean, median, standard deviation, minimum and maximum. The correlation between the rate of persons prosecuted and the rate of persons brought before a court is 0.87. Additionally, the test ratio of persons brought before a court per persons prosecuted is exactly 1 in the median, the mean is 1.3. However, the interpretation of both variables seems to differ across countries. These results indicate problems related to the quality and the comprehensibility of these definitions, although the majority of respondents seem to understand both variables almost synonymously.

For the ratio of persons convicted per prosecutor, pronounced differences can once again be found, with a median of 44.3 convictions per prosecutor, a mean of 97.1 and a standard deviation of 138.6. Accordingly, the distribution is wide-ranged with a minimum of 2.3 and a maximum of 654.9. There is also no linear relationship between prosecution personnel rates and conviction rates (corr. 0.02). However, the relationship between quantitative productivity and the region a country is located in seems to be more pronounced: While below the 1st Quartile almost all countries are located in Asia, Latin America and the Caribbean, above the 3rd Quartile most countries are located in Europe.

The interrelation of the three ratios persons suspected per police officer, persons prosecuted per prosecutor and persons convicted per prosecutor was analyzed, too. Correlations are 0.45 for suspects ratio by persons prosecuted ratio, 0.65 for suspects ratio by persons convicted ratio and 0.66 for persons prosecuted ratio by persons convicted ratio. Therefore, systems with a high quantitative productivity with respect to one of these measures also tend to have a high quantitative productivity with respect to the other two measures. We calculated a combined productivity measure based on these three ratios (see table 5 in the Annex). This is, however, still a measure for quantitative productivity, not for quality of the output or work of a criminal justice system.

As regards the overall performance of criminal justice systems in international perspective, UN-CTS data is not able to provide a valid answer. Such an overall assessment would necessarily mean an in-depth look at the criminal justice systems of the different countries in theory and practice. And even with sufficient knowledge on all criminal justice systems of the world it would be a very ambitious task to translate this knowledge into a handy performance index, allowing for a ranking of countries based on the quality of criminal justice performance.

Punitivity

Finally, this chapter focused on the punitivity of the system in the meaning of the severity of the response to criminal offending. Systemic punitivity was estimated by the ratio between the rate of sentenced persons incarcerated and the rate of persons convicted. Punitivity ratios were calculated, with remarkable variation in the results produced this way. The median ratio is 0.23, the mean 0.92. The standard deviation is 2.56 with a minimum of 0.01 and a maximum of 19.83. The results for countries ranking extremely high for this ratio need, however, be interpreted with care: Results much above 1 need justification and explanation.

Most of the countries ranking lowest for the punitivity ratio are located in Europe, while most high-ranking countries can be found in Asia, Latin America and the Caribbean. Since the punitivity ratio calculated here gives only an estimate of the "real" punitivity of a system, its quality was tested against other measures of punitivity, taken from the European Sourcebook of Crime and Criminal Justice Statistics (Aebi et al. 2010) and from EU ICS and ICVS data (taken from: van Dijk, van Kesteren, Smit 2007, 149). Results show that we have a good measure of systemic punitivity that is highly correlated with punitivity measures taken from the ESB, especially the percentage of sentences longer than one year in all convictions (corr. 0.92) and the percentage of unsuspended theft sentences over one year in the total of theft convictions (corr. 0.89). The correlation with long robbery sentences above two years is weaker, though not

irrelevant (0.46). There is only a weak interrelation with the punitivity of the general public, as measured by ICVS and EU ICS data (corr. 0.20). Two out of three systemic punitivity measures taken from the ESB are also not correlated with public opinion, long sentences total (corr. -0.03) and long theft sentences (corr. -0.01). Only the punishment for more severe offences seems to be more strongly connected with public opinion (corr. 0.39 for long robbery sentences).

These findings support other research results that show that the interrelations between public opinion, lawmaking and legal practice with respect to punitivity are complex (Green 2008).

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Annex A to chapter 6: Tables

Table 1. Police officers per 100,000 population by country

Country	Region	Sub-region	Latest available	Year	Trend start	Year	Average annual change rate	Trend length in years
Albania	Europe	Southeast	389.7	2002	492.9	1997	-4.6%	5
Australia	Oceania	…	222.7	2004	204.5	1995	1.0%	9
Austria	Europe	West & Central	328.6	2006	311.2	2001	1.1%	5
Azerbaijan	Asia	Central	137.0	2006	138.7	2005	…	…
Bahrain	Asia	Near and Middle East	1866.7	2004	…	…	…	…
Bangladesh	Asia	South	79.2	2006	…	…	…	…
Barbados	Americas	Latin	548.0	2000	521.7	1998	…	…
Belarus	Europe	East	325.5	2004	…	…	…	…
Belgium	Europe	West & Central	357.1	2004	353.8	1995	0.1%	9
Belize	Americas	Latin	377.2	2006	…	…	…	…
Bolivia	Americas	Latin	223.6	2002	217.7	2001	…	…
Bosnia and Herzegovina	Europe	Southeast	280.0	2006	…	…	…	…
Brunei Darussalam	Asia	East / South-East	1086.5	2006	…	…	…	…
Canada	Americas	Canada / USA	191.4	2006	187.7	1995	0.2%	11
Chile	Americas	Latin	187.6	2004	272.4	1994	-3.7%	10
Colombia	Americas	Latin	229.2	2000	234.6	1995	-0.5%	5
Costa Rica	Americas	Latin	275.3	2006	291.8	1995	-0.5%	11
Croatia	Europe	Southeast	424.4	2006	415.7	1997	0.2%	9
Cyprus	Europe	West & Central	609.3	2006	520.2	1995	1.4%	11
Czech Republic	Europe	West & Central	449.6	2006	428.9	1995	0.4%	11
Denmark	Europe	West & Central	197.8	2006	196.8	1995	0.0%	11
Dominican Republic	Americas	Latin	303.5	2006	…	…	…	…
Ecuador	Americas	Latin	292.6	2006	…	…	…	…
El Salvador	Americas	Latin	275.2	2006	271.0	2001	0.3%	5
England and Wales	Europe	West & Central	263.4	2006	247.3	1995	0.6%	11
Estonia	Europe	West & Central	240.8	2006	344.7	1995	-3.2%	11
Finland	Europe	West & Central	157.9	2006	159.1	1995	-0.1%	11
France	Europe	West & Central	210.2	2000	195.6	1998	…	…
Georgia	Asia	Central	315.7	2006	252.0	1998	2.9%	8
Germany	Europe	West & Central	303.8	2006	303.5	1995	0.0%	11
Greece	Europe	West & Central	376.4	2006	359.9	1995	0.4%	11
Guatemala	Americas	Latin	237.2	2000	175.9	1998	…	…
Hong Kong SARC	Asia	East / South-East	445.5	2006	625.8	1995	-3.0%	11
Hungary	Europe	West & Central	310.1	2004	287.5	1998	1.3%	6
Iceland	Europe	West & Central	271.1	2004	226.9	1995	2.0%	9
India	Asia	South	122.5	2006	101.7	1995	1.7%	11
Ireland	Europe	West & Central	303.3	2006	300.0	1995	0.1%	11
Israel	Asia	Near and Middle East	330.1	2004	437.0	1995	-3.1%	9
Italy	Europe	West & Central	549.9	2006	552.7	1995	0.0%	11
Jamaica	Americas	Latin	273.9	2000	269.1	1998	…	…
Japan	Asia	East / South-East	199.8	2006	178.0	1995	1.1%	11
Jordan	Asia	Near and Middle East	115.9	2006	…	…	…	…
Kazakhstan	Asia	Central	462.0	2000	606.3	1995	-5.3%	5
Kenya	Africa	East	98.5	2006	…	…	…	…
Kuwait	Asia	Near and Middle East	1065.2	2002	881.4	2001	…	…
Kyrgyzstan	Asia	Central	337.6	2000	348.5	1995	-0.6%	5
Latvia	Europe	West & Central	604.8	2006	446.6	1998	3.9%	8
Lebanon	Asia	Near and Middle East	574.2	2006	…	…	…	…
Lithuania	Europe	West & Central	333.5	2006	480.9	1995	-3.3%	11
Luxembourg	Europe	West & Central	291.8	2002	280.5	2001	…	…
Malaysia	Asia	East / South-East	354.0	2000	403.9	1995	-2.6%	5
Maldives	Asia	South	302.7	2004	267.5	2003	…	…
Malta	Europe	West & Central	433.8	2006	451.5	2001	-0.8%	5
Mauritius	Africa	East	776.5	2006	870.2	1995	-1.0%	11

Mexico	Americas	Latin	485.9	2002	…	…	…	…
Mongolia	Asia	East / South-East	277.3	2004	…	…	…	…
Montenegro	Europe	Southeast	890.9	2006	…	…	…	…
Morocco	Africa	North	142.8	2006	142.9	2001	0.0%	5
Myanmar	Asia	East / South-East	145.6	2002	146.6	2001	…	…
Nepal	Asia	South	202.0	2006	185.8	2001	1.7%	5
Netherlands	Europe	West & Central	215.5	2006	195.4	1995	0.9%	11
New Zealand	Oceania	…	187.0	2006	185.8	1995	0.1%	11
Nicaragua	Americas	Latin	166.8	2006	…	…	…	…
Northern Ireland	Europe	West & Central	523.8	2006	698.3	1995	-2.6%	11
Norway	Europe	West & Central	248.3	2000	233.9	1998	…	…
Panama	Americas	Latin	498.0	2002	482.8	1997	0.6%	5
Papua New Guinea	Oceania	…	101.4	2000	114.6	1998	…	…
Paraguay	Americas	Latin	331.5	2006	…	…	…	…
Peru	Americas	Latin	323.0	2004	…	…	…	…
Philippines	Asia	East / South-East	131.9	2006	149.1	1998	-1.5%	8
Poland	Europe	West & Central	259.6	2006	257.9	1995	0.1%	11
Portugal	Europe	West & Central	419.4	2006	435.7	1995	-0.3%	11
Qatar	Asia	Near and Middle East	435.5	2004	…	…	…	…
Republic of Korea	Asia	East / South-East	195.1	2004	180.6	1995	0.9%	9
Republic of Moldova	Europe	East	281.5	2006	169.7	1995	4.7%	11
Romania	Europe	Southeast	233.8	2006	237.9	1995	-0.2%	11
Scotland	Europe	West & Central	317.2	2006	361.4	1995	-1.2%	11
Serbia	Europe	Southeast	440.1	2006	…	…	…	…
Singapore	Asia	East / South-East	396.4	2006	264.3	1995	3.8%	11
Slovakia	Europe	West & Central	378.4	2006	370.3	1998	0.3%	8
Slovenia	Europe	West & Central	391.8	2006	199.1	1995	6.3%	11
South Africa	Africa	Southern	219.9	2002	343.5	1995	-6.2%	7
Spain	Europe	West & Central	313.0	2006	310.7	1995	0.1%	11
Sri Lanka	Asia	South	330.5	2004	310.7	1995	0.7%	9
Swaziland	Africa	Southern	263.4	2004	225.0	1998	2.7%	6
Sweden	Europe	West & Central	191.2	2006	280.5	1995	-3.4%	11
Switzerland	Europe	West & Central	222.6	2006	201.1	1995	0.9%	11
Syrian Arab Republic	Asia	Near and Middle East	10.2	2004	…	…	…	…
TFYR Macedonia	Europe	Southeast	480.0	2006	420.0	1998	1.7%	8
Thailand	Asia	East / South-East	321.0	2006	365.2	1995	-1.2%	11
Turkey	Europe	Southeast	451.9	2006	206.1	1995	7.4%	11
Ukraine	Europe	East	358.2	2006	467.0	1995	-2.4%	11
Uruguay	Americas	Latin	507.4	2004	532.1	2001	-1.6%	3
USA	Americas	Canada / USA	223.6	2006	243.6	1995	-0.8%	11
Venezuela	Americas	Latin	15.6	2002	15.1	2001	…	…
Zambia	Africa	Southern	122.3	2000	111.3	1998	…	…
Zimbabwe	Africa	Southern	186.8	2004	161.3	1997	2.1%	7
Median			303.3		272.4		0.1%	11.0
Mean			341.8		315.8		0.0%	9.1
Standard deviation			241.5		164.4		2.4%	2.5

Table 2. Prosecutors per 100,000 population by country

Country	Continent	Sub-continent	Latest available	Year	Trend start	Year	Average annual change rate	Trend length in years
Albania	Europe	Southeast	12.8	2004	11.6	2001	3.4%	3
Algeria	Africa	North	1.7	2006	…	…	…	…
Armenia	Asia	Central	19.7	2006	…	…	…	…
Austria	Europe	West & Central	5.3	2006	…	…	…	…
Azerbaijan	Asia	Central	10.8	2006	15.8	1995	-3.4%	11
Barbados	Americas	Latin	3.2	2000	3.2	1998	…	…
Belarus	Europe	East	20.4	2006	19.6	2001	0.8%	5
Belize	Americas	Latin	2.4	2006	…	…	…	…
Bolivia	Americas	Latin	4.2	2006	…	…	…	…
Bosnia and Herzegovina	Europe	Southeast	7.4	2006	…	…	…	…
Bulgaria	Europe	Southeast	10.7	2004	7.2	1995	4.5%	9
Canada	Americas	Canada / USA	11.6	2001	10.4	1998	3.9%	3
Chile	Americas	Latin	15.8	2004	…	…	…	…
China	Asia	East and South-East	13.5	2000	17.2	1995	-4.7%	5
Colombia	Americas	Latin	44.9	2000	55.3	1995	-4.1%	5
Costa Rica	Americas	Latin	7.7	2006	8.4	1995	-0.8%	11
Croatia	Europe	Southeast	13.0	2006	6.7	1995	6.2%	11
Cyprus	Europe	West & Central	4.5	2004	6.3	1995	-3.7%	9
Czech Republic	Europe	West & Central	11.1	2006	8.2	1995	2.8%	11
Denmark	Europe	West & Central	11.2	2002	8.7	1995	3.6%	7
Dominican Republic	Americas	Latin	2.2	2006	4.1	1998	-7.4%	8
Ecuador	Americas	Latin	2.7	2006	…	…	…	…
Egypt	Africa	North	25.4	2000	22.1	1998	…	…
El Salvador	Americas	Latin	11.1	2002	10.9	2001	…	…
England and Wales	Europe	West & Central	5.8	2006	4.3	1995	2.8%	11
Estonia	Europe	West & Central	14.2	2006	10.1	1995	3.2%	11
Ethiopia	Africa	East	0.2	2002	0.2	2001	…	…
Finland	Europe	West & Central	6.9	2006	4.7	1995	3.6%	11
France	Europe	West & Central	2.7	2000	2.6	1998	…	…
Georgia	Asia	Central	12.2	2006	17.5	1995	-3.3%	11
Germany	Europe	West & Central	6.1	2006	6.6	1995	-0.7%	11
Greece	Europe	West & Central	4.8	2006	4.1	1995	1.3%	11
Guatemala	Americas	Latin	19.0	2000	15.2	1998	…	…
Hungary	Europe	West & Central	15.4	2006	12.2	1998	3.0%	8
Iceland	Europe	West & Central	11.7	2004	5.6	1995	8.5%	9
Ireland	Europe	West & Central	1.8	2006	1.6	1995	1.3%	11
Israel	Asia	Near and Middle East	4.1	2004	6.4	1995	-4.9%	9
Italy	Europe	West & Central	3.8	2006	3.8	2001	-0.1%	5
Japan	Asia	East and South-East	2.0	2006	1.7	1995	1.4%	11
Kazakhstan	Asia	Central	21.8	2000	19.7	1995	2.0%	5
Kyrgyzstan	Asia	Central	13.4	2006	12.8	1995	0.4%	11
Latvia	Europe	West & Central	23.1	2006	24.0	1995	-0.4%	11
Lithuania	Europe	West & Central	25.2	2006	21.2	1995	1.6%	11
Malaysia	Asia	East and South-East	1.6	2006	0.5	1995	11.4%	11
Maldives	Asia	South	6.4	2002	7.2	2001	…	…
Malta	Europe	West & Central	1.5	2004	…	…	…	…
Mauritius	Africa	East	4.0	2006	…	…	…	…
Mexico	Americas	Latin	2.7	2006	1.6	2001	10.8%	5
Mongolia	Asia	East and South-East	14.4	2006	…	…	…	…
Morocco	Africa	North	1.8	2006	…	…	…	…
Myanmar	Asia	East and South-East	2.5	2002	2.4	2001	…	…
Nepal	Asia	South	0.8	2006	0.9	2001	-2.7%	5
Netherlands	Europe	West & Central	4.1	2006	3.6	2001	2.9%	5
Nicaragua	Americas	Latin	5.2	2006	…	…	…	…
Northern Ireland	Europe	West & Central	1.6	2002	1.5	2001	…	…
Norway	Europe	West & Central	2.0	2006	…	…	…	…
Occupied Palestinian Territory	Asia	Near and Middle East	3.0	2006	1.6	1997	7.5%	9

Oman	Asia	Near and Middle East	12.0	2002	12.4	2001	…	…
Panama	Americas	Latin	2.4	2006	…	…	…	…
Papua New Guinea	Oceania	...	0.5	2000	0.6	1998	…	…
Peru	Americas	Latin	16.3	2004	13.2	2001	7.1%	3
Philippines	Asia	East and South-East	1.7	2004	…	…	…	…
Poland	Europe	West & Central	15.6	2006	14.1	2001	2.1%	5
Portugal	Europe	West & Central	11.6	2006	9.4	1995	2.0%	11
Qatar	Asia	Near and Middle East	5.7	2000	6.3	1998	…	…
Republic of Korea	Asia	East and South-East	3.1	2004	2.1	1995	4.2%	9
Republic of Moldova	Europe	East	20.1	2006	10.9	1995	5.8%	11
Romania	Europe	Southeast	9.5	2006	8.2	1995	1.4%	11
Russian Federation	Europe	East	30.3	2000	29.8	1999	…	…
Saudi Arabia	Asia	Near and Middle East	6.6	2002	6.0	2001	…	…
Scotland	Europe	West & Central	9.3	2006	5.4	1995	5.1%	11
Singapore	Asia	East and South-East	2.2	2006	2.0	1995	0.9%	11
Slovakia	Europe	West & Central	14.5	2006	10.3	1995	3.2%	11
Slovenia	Europe	West & Central	9.7	2006	7.2	1995	2.8%	11
South Africa	Africa	Southern	5.5	2002	3.9	1995	4.9%	7
Spain	Europe	West & Central	3.6	2000	…	…	…	…
Swaziland	Africa	Southern	4.4	2006	…	…	…	…
Sweden	Europe	West & Central	8.9	2006	7.9	1995	1.0%	11
Syrian Arab Republic	Asia	Near and Middle East	1.8	2000	1.9	1998	…	…
TFYR Macedonia	Europe	Southeast	9.1	2006	8.6	1998	0.7%	8
Thailand	Asia	East and South-East	3.1	2000	2.7	1998	…	…
Turkey	Europe	Southeast	4.8	2006	4.6	1995	0.4%	11
Ukraine	Europe	East	23.8	2006	…	…	…	…
United Arab Emirates	Asia	Near and Middle East	3.0	2006	…	…	…	…
Uruguay	Americas	Latin	12.7	2000	11.7	1998	…	…
USA	Americas	Canada / USA	8.8	2005	8.7	1997	0.1%	8
Venezuela	Americas	Latin	4.8	2006	…	…	…	…
Zambia	Africa	Southern	0.2	2000	0.3	1998	…	…
Zimbabwe	Africa	Southern	1.4	2000	1.2	1998	…	…
Median			6.1		6.9		2.0%	11.0
Mean			8.8		8.8		1.9%	8.8
Standard deviation			7.9		8.6		3.8%	2.7

Table 3. Professional judges per 100,000 population by country

Country	Continent	Sub-continent	Latest available	Year	Trend start	Year	Average annual change rate	Trend length in years
Afghanistan	Asia	Near and Middle East	8.8	2002	9.1	2001	…	…
Albania	Europe	Southeast	10.8	2002	8.8	1998	5.4%	4
Algeria	Africa	North	9.3	2006	…	…	…	…
Armenia	Asia	Central	5.8	2006	…	…	…	…
Austria	Europe	West & Central	28.5	2006	…	…	…	…
Azerbaijan	Asia	Central	3.9	2004	2.7	1995	4.2%	9
Bahrain	Asia	Near and Middle East	15.9	2005	9.3	1995	5.5%	10
Barbados	Americas	Latin	7.2	2000	7.1	1998	…	…
Belarus	Europe	East	9.7	2006	8.5	1995	1.2%	11
Belgium	Europe	West & Central	23.2	2002	12.3	1995	9.5%	7
Bolivia	Americas	Latin	10.3	2006	…	…	…	…
Bosnia and Herzegovina	Europe	Southeast	22.4	2006	…	…	…	…
Bulgaria	Europe	Southeast	19.6	2004	12.1	1995	5.5%	9
Canada	Americas	Canada / USA	6.5	2003	6.6	1998	-0.3%	5
Chile	Americas	Latin	5.0	2004	3.4	1998	6.8%	6
China	Asia	East and South-East	15.9	2002	14.0	1995	1.8%	7
Colombia	Americas	Latin	10.0	2000	11.0	1995	-1.8%	5
Costa Rica	Americas	Latin	18.0	2006	14.3	1995	2.1%	11
Croatia	Europe	Southeast	43.7	2006	25.1	1995	5.2%	11
Cyprus	Europe	West & Central	11.7	2006	8.2	1995	3.3%	11
Czech Republic	Europe	West & Central	28.6	2006	21.1	1995	2.8%	11

Denmark	Europe	West & Central	12.9	2004	12.4	1997	0.6%	7
Dominican Republic	Americas	Latin	5.9	2006	6.1	2000	-0.3%	6
Ecuador	Americas	Latin	1.0	2004	…	…	…	…
Egypt	Africa	North	9.8	2006	…	…	…	…
El Salvador	Americas	Latin	5.4	2006	…	…	…	…
England and Wales	Europe	West & Central	7.0	2006	6.3	2000	1.8%	6
Estonia	Europe	West & Central	17.9	2006	13.0	1995	3.0%	11
Ethiopia	Africa	East	0.2	2002	0.2	2001	…	…
Finland	Europe	West & Central	13.1	2006	18.2	1995	-2.9%	11
France	Europe	West & Central	11.5	2000	11.1	1998	…	…
Georgia	Asia	Central	7.3	2004	7.5	1995	-0.3%	9
Germany	Europe	West & Central	17.8	2006	27.1	1995	-3.7%	11
Greece	Europe	West & Central	25.0	2006	19.5	1995	2.3%	11
Guatemala	Americas	Latin	3.4	2000	3.3	1998	…	…
Hong Kong SARC	Asia	East and South-East	2.2	2006	2.4	1995	-0.8%	11
Hungary	Europe	West & Central	26.8	2004	23.5	1998	2.2%	6
Iceland	Europe	West & Central	16.1	2004	17.6	1995	-0.9%	9
Ireland	Europe	West & Central	3.0	2004	2.4	1995	2.5%	9
Israel	Asia	Near and Middle East	8.2	2004	6.7	1995	2.3%	9
Italy	Europe	West & Central	10.9	2006	14.4	1995	-2.5%	11
Japan	Asia	East and South-East	2.6	2006	2.3	1995	1.3%	11
Kenya	Africa	East	0.8	2006	…	…	…	…
Kyrgyzstan	Asia	Central	6.2	2006	5.0	1995	1.9%	11
Latvia	Europe	West & Central	20.4	2006	9.8	1995	6.9%	11
Lithuania	Europe	West & Central	21.7	2006	12.6	1995	5.1%	11
Luxembourg	Europe	West & Central	16.5	2002	16.5	2001	…	…
Malaysia	Asia	East and South-East	0.9	2006	1.6	1998	-7.7%	8
Malta	Europe	West & Central	8.2	2006	8.7	2001	-1.2%	5
Mauritius	Africa	East	4.1	2006	3.7	1995	0.9%	11
Mexico	Americas	Latin	0.8	2004	…	…	…	…
Mongolia	Asia	East and South-East	15.1	2006	…	…	…	…
Morocco	Africa	North	10.1	2006	…	…	…	…
Myanmar	Asia	East and South-East	2.4	2002	2.5	2001	…	…
Nepal	Asia	South	0.8	2006	…	…	…	…
Netherlands	Europe	West & Central	12.6	2006	…	…	…	…
New Zealand	Oceania	...	4.0	2002	4.2	1995	-0.6%	7
Northern Ireland	Europe	West & Central	7.0	2002	6.7	2001	…	…
Norway	Europe	West & Central	11.4	2006	…	…	…	…
Occupied Palestinian Territory	Asia	Near and Middle East	3.7	2006	2.4	1997	4.8%	9
Panama	Americas	Latin	8.0	2006	7.7	1998	0.5%	8
Papua New Guinea	Oceania	...	0.3	2000	0.3	1998	…	…
Philippines	Asia	East and South-East	2.5	2006	2.0	1998	2.4%	8
Poland	Europe	West & Central	25.9	2006	19.8	2001	5.5%	5
Portugal	Europe	West & Central	15.6	2006	11.6	1995	2.7%	11
Qatar	Asia	Near and Middle East	9.2	2000	9.0	1998	…	…
Republic of Korea	Asia	East and South-East	3.5	2004	2.5	1995	3.9%	9
Republic of Moldova	Europe	East	11.6	2006	5.5	1995	7.1%	11
Romania	Europe	Southeast	19.0	2006	12.4	1995	4.0%	11
Russian Federation	Europe	East	46.4	2000	45.0	1999	…	…
Saudi Arabia	Asia	Near and Middle East	3.2	2002	3.1	1998	1.3%	4
Scotland	Europe	West & Central	3.6	2006	5.1	1995	-3.2%	11
Singapore	Asia	East and South-East	2.3	2006	2.7	1995	-1.4%	11
Slovakia	Europe	West & Central	24.7	2004	21.1	1995	1.8%	9
Slovenia	Europe	West & Central	50.0	2006	34.8	1995	3.3%	11
South Africa	Africa	Southern	4.3	2002	4.0	1995	1.2%	7
Spain	Europe	West & Central	9.8	2006	8.1	1995	1.8%	11
Swaziland	Africa	Southern	0.9	2000	1.0	1998	…	…
Sweden	Europe	West & Central	16.8	2006	13.9	1995	1.8%	11
Switzerland	Europe	West & Central	10.6	2002	…	…	…	…
Syrian Arab Republic	Asia	Near and Middle East	6.6	2000	7.4	1998	…	…
Tajikistan	Asia	Central	4.8	2006	0.5	1995	23.7%	11
TFYR Macedonia	Europe	Southeast	29.5	2006	17.3	1995	5.0%	11
Thailand	Asia	East and South-East	5.7	2006	3.9	1998	4.8%	8

Turkey	Europe	Southeast	8.6	2006	9.0	1995	-0.4%	11
Ukraine	Europe	East	11.5	2004	13.9	1995	-2.1%	9
Uruguay	Americas	Latin	13.2	2000	14.1	1995	-1.2%	5
USA	Americas	Canada / USA	10.8	2001	10.2	1998	1.7%	3
Venezuela	Americas	Latin	2.6	2000	1.2	1998	…	…
Zambia	Africa	Southern	9.8	2000	…	…	…	…
Zimbabwe	Africa	Southern	0.7	2000	0.6	1998	…	…
Median			9.7		8.3		1.8%	9.0
Mean			11.4		9.8		2.2%	8.9
Standard deviation			9.9		8.2		4.2%	2.4

Table 4. Correctional staff in adult prisons per 100,000 population by country

Country	Continent	Subcontinent	Latest available	Year	Trend start	Year	Average annual change rate	Trend length in years
Albania	Europe	Southeast	48.8	2002	40.0	2001	…	…
Algeria	Africa	North	50.7	2006	…	…	…	…
Armenia	Asia	Central	36.3	2006	…	…	…	…
Austria	Europe	West & Central	48.6	2006	…	…	…	…
Azerbaijan	Asia	Central	70.5	2006	26.9	1995	9.2%	11
Bahrain	Asia	Near and Middle East	55.4	2004	62.0	1995	-1.2%	9
Bangladesh	Asia	South	5.4	2006	…	…	…	…
Barbados	Americas	Latin	18.3	2000	15.8	1998	…	…
Belarus	Europe	East	65.4	2006	61.0	1998	0.9%	8
Belgium	Europe	West & Central	67.7	2002	42.5	1995	6.9%	7
Belize	Americas	Latin	95.3	2006	52.2	1995	5.6%	11
Bolivia	Americas	Latin	13.5	2006	…	…	…	…
Bosnia and Herzegovina	Europe	Southeast	20.3	2006	…	…	…	…
Botswana	Africa	Southern	73.0	2000	76.1	1998	…	…
Brunei Darussalam	Asia	East and South-East	93.4	2004	…	…	…	…
Bulgaria	Europe	Southeast	35.8	2004	32.2	1995	1.2%	9
Canada	Americas	Canada / USA	92.5	2006	97.5	1995	-0.5%	11
Chile	Americas	Latin	42.6	2004	47.4	1995	-1.2%	9
China	Asia	East and South-East	22.1	2000	22.4	1995	-0.3%	5
Colombia	Americas	Latin	160.4	2004	…	…	…	…
Costa Rica	Americas	Latin	69.7	2006	50.9	2001	6.5%	5
Croatia	Europe	Southeast	50.9	2006	69.5	2001	-6.0%	5
Cyprus	Europe	West & Central	41.2	2006	29.1	1995	3.2%	11
Czech Republic	Europe	West & Central	104.6	2006	79.5	1995	2.5%	11
Denmark	Europe	West & Central	92.4	2006	63.7	1995	3.4%	11
Dominican Republic	Americas	Latin	9.4	2006	2.6	1995	12.3%	11
Ecuador	Americas	Latin	87.9	2004	…	…	…	…
Egypt	Africa	North	13.2	2001	…	…	…	…
El Salvador	Americas	Latin	21.7	2002	…	…	…	…
England and Wales	Europe	West & Central	85.1	2004	63.7	1997	4.2%	7
Estonia	Europe	West & Central	109.2	2004	160.1	1995	-4.2%	9
Finland	Europe	West & Central	52.5	2006	51.7	1995	0.1%	11
Georgia	Asia	Central	72.5	2004	33.6	1995	8.9%	9
Germany	Europe	West & Central	43.8	2006	44.1	1997	-0.1%	9
Greece	Europe	West & Central	35.1	2006	18.4	1995	6.0%	11
Guatemala	Americas	Latin	62.1	2000	70.7	1999	…	…
Hong Kong SARC	Asia	East and South-East	64.4	2006	63.1	1995	0.2%	11
Hungary	Europe	West & Central	72.4	2002	59.2	1995	2.9%	7
Iceland	Europe	West & Central	31.9	2004	32.2	1995	-0.1%	9
India	Asia	South	4.2	2005	2.4	1995	5.8%	10
Ireland	Europe	West & Central	73.9	2006	69.1	1995	0.6%	11
Israel	Asia	Near and Middle East	100.1	2006	69.1	1995	3.4%	11
Italy	Europe	West & Central	82.6	2006	75.6	1995	0.8%	11
Japan	Asia	East and South-East	12.8	2006	10.6	1997	2.0%	9
Jordan	Asia	Near and Middle East	45.4	2006	14.1	1995	11.2%	11

Kazakhstan	Asia	Central	111.1	2006	56.3	1995	6.4%	11
Kenya	Africa	East	34.2	2006	…	…	…	…
Kuwait	Asia	Near and Middle East	20.3	2002	22.7	2001	…	…
Kyrgyzstan	Asia	Central	32.2	2004	41.2	1995	-2.7%	9
Latvia	Europe	West & Central	127.5	2006	75.8	1995	4.8%	11
Lebanon	Asia	Near and Middle East	10.9	2006	…	…	…	…
Lithuania	Europe	West & Central	90.9	2006	85.0	1995	0.6%	11
Luxembourg	Europe	West & Central	66.3	2002	65.1	2001	…	…
Malaysia	Asia	East and South-East	43.4	2000	38.7	1995	2.3%	5
Maldives	Asia	South	54.8	2004	39.1	2001	11.9%	3
Malta	Europe	West & Central	47.2	2006	52.6	2001	-2.1%	5
Mauritius	Africa	East	73.8	2006	60.1	1995	1.9%	11
Mongolia	Asia	East and South-East	82.4	2006	…	…	…	…
Morocco	Africa	North	16.4	2006	17.1	2001	-0.8%	5
Myanmar	Asia	East and South-East	6.8	2002	7.0	2001	…	…
Nepal	Asia	South	2.3	2006	…	…	…	…
Netherlands	Europe	West & Central	85.7	2006	67.4	1995	2.2%	11
New Zealand	Oceania	...	54.5	2002	57.8	2001	…	…
Northern Ireland	Europe	West & Central	106.5	2006	156.6	1995	-3.4%	11
Oman	Asia	Near and Middle East	13.1	2000	13.5	1998	…	…
Panama	Americas	Latin	23.4	2006	43.1	1995	-5.4%	11
Papua New Guinea	Oceania	...	27.7	2000	29.2	1998	…	…
Paraguay	Americas	Latin	17.3	2006	21.5	1998	-2.7%	8
Peru	Americas	Latin	17.8	2004	18.2	2001	-0.9%	3
Philippines	Asia	East and South-East	10.8	2006	7.8	1998	4.2%	8
Poland	Europe	West & Central	70.1	2006	62.9	2001	2.2%	5
Portugal	Europe	West & Central	57.5	2006	43.1	1995	2.7%	11
Qatar	Asia	Near and Middle East	48.1	2004	56.7	1998	-2.7%	6
Republic of Korea	Asia	East and South-East	27.7	2006	25.5	1995	0.8%	11
Republic of Moldova	Europe	East	71.6	2006	41.9	1995	5.0%	11
Romania	Europe	Southeast	45.5	2006	26.5	1995	5.0%	11
Saudi Arabia	Asia	Near and Middle East	56.3	2002	55.8	2001	…	…
Scotland	Europe	West & Central	67.8	2006	71.3	1995	-0.5%	11
Singapore	Asia	East and South-East	45.8	2006	44.3	1995	0.3%	11
Slovakia	Europe	West & Central	97.5	2006	79.7	1995	1.9%	11
Slovenia	Europe	West & Central	33.0	2006	36.8	1995	-1.0%	11
South Africa	Africa	Southern	47.7	2002	71.5	1995	-5.6%	7
Spain	Europe	West & Central	45.4	2004	47.7	1995	-0.6%	9
Sri Lanka	Asia	South	23.7	2004	24.1	1995	-0.2%	9
Suriname	Americas	Latin	85.6	2000	88.1	1998	…	…
Swaziland	Africa	Southern	103.6	2006	97.2	1998	0.8%	8
Sweden	Europe	West & Central	81.2	2006	63.6	1995	2.2%	11
Switzerland	Europe	West & Central	68.4	2002	38.8	1995	8.4%	7
Syrian Arab Republic	Asia	Near and Middle East	8.9	2004	…	…	…	…
TFYR Macedonia	Europe	Southeast	23.8	2006	20.9	1998	1.7%	8
Thailand	Asia	East and South-East	16.6	2006	17.5	1998	-0.6%	8
Turkey	Europe	Southeast	35.3	2006	39.3	1995	-1.0%	11
Ukraine	Europe	East	102.5	2006	114.2	1998	-1.3%	8
United Arab Emirates	Asia	Near and Middle East	78.6	2004	…	…	…	…
Uruguay	Americas	Latin	80.5	2004	…	…	…	…
USA	Americas	Canada / USA	138.3	2000	119.0	1995	3.1%	5
Venezuela	Americas	Latin	11.6	2002	6.8	2000	…	…
Zambia	Africa	Southern	17.4	2000	17.7	1998	…	…
Zimbabwe	Africa	Southern	61.7	2004	29.8	1995	8.4%	9
Median			50.7		44.3		1.2%	9.0
Mean			54.4		49.7		1.9%	9.0
Standard deviation			33.6		31.1		4.0%	2.3

Table 5. Performance rates and trends by country

Country	Region	CPM	SR	Y	ACR	TL	PPR	Y	ACR	TL	PCR	Y	ACR	TL
Albania	Europe	0.012	0.5	02	…	…	19.5	04	…	…	11.8	02	…	…
Algeria	Africa	0.961	…	…	…	…	1017.0	06	…	…	…	…	…	…
Armenia	Asia	0.003	…	…	…	…	6.4	06	…	…	5.4	06	…	…
Austria	Europe	0.325	8.8	06	1.5%	5	677.1	06	…	…	99.7	06	…	…
Azerbaijan	Asia	0.020	1.6	06	…	…	13.3	06	13.9%	11	14.1	04	1.7%	9
Bahrain	Asia	0.027	1.4	04	…	…	…	…	…	…	…	…	…	…
Bangladesh	Asia	0.024	1.3	06	…	…	…	…	…	…	…	…	…	…
Barbados	Americas	0.547	…	…	…	…	580.4	00	…	…	…	…	…	…
Belarus	Europe	0.048	2.6	04	…	…	39.5	06	5.1%	5	39.3	06	8.9%	5
Belize	Americas	0.053	4.1	06	…	…	25.0	06	…	…	…	…	…	…
Bolivia	Americas	0.005	0.3	02	…	…	…	…	…	…	4.8	06	…	…
Bosnia and Herzegovina	Europe	0.077	2.8	06	…	…	85.9	06	…	…	64.8	06	…	…
Brunei Darussalam	Asia	0.008	0.5	06	…	…	…	…	…	…	…	…	…	…
Bulgaria	Europe	0.060	…	…	…	…	76.5	04	7.4%	9	35.7	04	6.9%	9
Canada	Americas	0.164	10.2	06	-0.4%	11	149.1	01	-2.3%	3	89.6	01	-3.5%	3
Chile	Americas	0.138	16.6	04	7.5%	9	32.5	04	…	…	20.1	04	…	…
China	Asia	0.001	…	…	…	…	4.1	00	7.7%	5	3.7	00	7.5%	5
Colombia	Americas	0.035	1.7	00	17.4%	5	…	…	…	…	…	…	…	…
Costa Rica	Americas	0.015	0.8	06	-4.3%	11	24.9	06	0.8%	9	10.6	06	3.9%	8
Croatia	Europe	0.075	1.7	06	1.4%	9	136.6	06	-1.2%	11	43.7	06	-1.0%	11
Cyprus	Europe	0.038	1.9	06	3.6%	11	…	…	…	…	…	…	…	…
Czech Republic	Europe	0.087	2.7	06	-1.0%	8	125.5	06	-0.2%	11	61.4	06	-0.5%	11
Denmark	Europe	0.115	5.4	04	-1.0%	9	49.1	02	…	…	125.5	00	-6.5%	5
Dominican Republic	Americas	0.036	2.4	06	…	…	42.2	06	1.7%	7	16.8	06	1.2%	8
Ecuador	Americas	0.007	0.6	06	…	…	16.0	04	…	…	2.3	04	…	…
El Salvador	Americas	0.091	8.1	06	25.5%	5	107.3	02	…	…	3.5	02	…	…
England and Wales	Europe	0.483	10.4	06	-4.2%	11	566.7	06	…	…	452.7	06	-2.7%	11
Estonia	Europe	0.102	5.4	06	9.0%	11	91.1	06	2.3%	11	73.5	04	3.2%	9
Ethiopia	Africa	0.026	…	…	…	…	…	…	…	…	19.3	02	…	…
Finland	Europe	0.833	46.0	06	5.2%	11	614.2	06	4.9%	11	602.7	06	5.1%	11
France	Europe	0.546	…	…	…	…	…	…	…	…	358.3	00	…	…
Georgia	Asia	0.033	1.3	06	…	…	33.2	06	12.8%	11	31.6	06	13.3%	11
Germany	Europe	0.168	9.1	06	0.6%	11	146.5	06	1.9%	11	115.1	06	2.0%	11
Greece	Europe	0.218	10.1	06	3.0%	11	…	…	…	…	…	…	…	…
Guatemala	Americas	0.062	2.5	00	…	…	…	…	…	…	16.4	00	…	…
Hong Kong SARC	Asia	0.027	1.4	06	…	…	…	…	…	…	…	…	…	…
Hungary	Europe	0.082	4.2	04	-2.2%	6	66.7	06	-6.3%	8	67.5	04	-2.3%	6
Iceland	Europe	0.091	4.4	03	…	…	74.1	04	4.6%	9	75.5	04	6.2%	4
India	Asia	0.093	4.4	06	4.7%	11	…	…	…	…	…	…	…	…
Ireland	Europe	0.208	4.0	06	0.7%	11	354.8	04	-5.5%	6	…	…	…	…
Israel	Asia	0.163	6.9	04	7.8%	9	148.3	04	2.9%	9	135.8	04	3.6%	9
Italy	Europe	0.141	2.5	06	0.3%	11	255.4	05	2.0%	4	88.9	06	-4.1%	5
Jamaica	Americas	0.101	4.8	00	…	…	…	…	…	…	…	…	…	…
Japan	Asia	0.048	1.5	06	1.3%	11	72.3	06	1.7%	11	34.7	06	1.8%	11
Kazakhstan	Asia	0.026	1.3	00	6.4%	5	…	…	…	…	…	…	…	…
Kenya	Africa	0.042	2.1	06	…	…	…	…	…	…	…	…	…	…
Kuwait	Asia	0.013	0.7	02	…	…	…	…	…	…	…	…	…	…
Kyrgyzstan	Asia	0.024	1.4	00	1.1%	5	22.7	06	-4.1%	11	19.0	06	-6.3%	8
Latvia	Europe	0.026	1.3	06	-3.0%	8	33.6	04	5.7%	9	19.0	06	0.9%	11
Lebanon	Asia	0.005	0.3	06	…	…	…	…	…	…	…	…	…	…
Lithuania	Europe	0.025	2.0	06	3.7%	11	20.2	06	-9.1%	5	15.2	06	-4.0%	11
Malaysia	Asia	0.195	0.4	00	…	…	299.4	06	…	…	196.9	06	…	…
Maldives	Asia	0.113	3.1	04	…	…	175.0	02	…	…	…	…	…	…
Malta	Europe	0.040	2.0	04	4.5%	3	…	…	…	…	…	…	…	…
Mauritius	Africa	0.265	2.1	06	-1.7%	11	225.8	06	…	…	355.6	04	…	…
Mexico	Americas	0.043	0.5	02	…	…	53.5	02	…	…	50.4	06	…	…
Mongolia	Asia	0.039	2.4	04	…	…	45.4	06	…	…	21.0	06	…	…
Montenegro	Europe	0.028	1.4	06	…	…	…	…	…	…	…	…	…	…
Morocco	Africa	0.149	7.0	06	2.1%	5	…	…	…	…	…	…	…	…
Myanmar	Asia	0.012	0.3	02	…	…	20.5	02	…	…	13.3	02	…	…

Nepal	Asia	0.027	0.7	02	…	…	58.1	02	…	…	13.5	06	…	…
Netherlands	Europe	0.284	10.1	06	2.0%	11	380.8	06	0.6%	5	181.6	06	0.4%	5
New Zealand	Oceania	0.569	26.2	06	0.5%	11	…	…	…	…	…	…	…	…
Nicaragua	Americas	0.087	4.4	06	…	…	89.8	06	…	…	…	…	…	…
Northern Ireland	Europe	0.534	3.3	02	…	…	1057.9	02	…	…	…	…	…	…
Norway	Europe	0.195	3.1	00	…	…	309.7	05	…	…	152.5	06	…	…
Occupied Palestinian Territory	Asia	0.023	…	…	…	…	…	…	…	…	17.5	06	-8.3%	9
Oman	Asia	0.051	…	…	…	…	57.9	02	…	…	…	…	…	…
Panama	Americas	0.117	1.4	02	…	…	251.6	06	…	…	59.4	06	…	…
Papua New Guinea	Oceania	0.021	1.1	00	…	…	39.3	00	…	…	7.3	00	…	…
Paraguay	Americas	0.011	0.6	06	…	…	…	…	…	…	…	…	…	…
Peru	Americas	0.008	0.5	04	…	…	11.9	02	…	…	…	…	…	…
Poland	Europe	0.115	5.9	06	3.1%	11	105.5	06	4.3%	5	82.4	06	7.2%	5
Portugal	Europe	0.096	5.9	06	1.6%	11	86.5	06	-1.0%	11	56.6	06	3.5%	11
Qatar	Asia	0.088	1.6	04	…	…	…	…	…	…	74.6	00	…	…
Republic of Korea	Asia	0.545	24.5	04	3.2%	9	934.8	04	0.1%	9	145.7	04	-0.1%	9
Republic of Moldova	Europe	0.026	1.7	06	-1.3%	11	28.6	00	-3.1%	5	16.7	06	-5.9%	11
Romania	Europe	0.046	3.8	06	0.2%	11	25.7	06	-7.8%	11	27.6	06	-6.1%	11
Russian Federation	Europe	0.033	…	…	…	…	34.3	00	…	…	26.7	00	…	…
Saudi Arabia	Asia	0.060	…	…	…	…	…	…	…	…	41.4	02	…	…
Scotland	Europe	0.155	…	…	…	…	138.8	05	-6.9%	10	120.5	05	-6.4%	10
Serbia	Europe	0.000	0.1	06	…	…	…	…	…	…	…	…	…	…
Singapore	Asia	0.085	1.2	06	-4.3%	8	128.8	06	-5.4%	11	77.4	00	-15.5%	5
Slovakia	Europe	0.051	2.6	06	0.8%	5	59.5	06	-2.3%	11	33.0	06	-3.1%	11
Slovenia	Europe	0.061	2.3	06	-4.2%	11	79.4	06	-4.8%	11	44.3	06	4.2%	11
Spain	Europe	0.043	2.1	06	2.6%	11	…	…	…	…	…	…	…	…
Sri Lanka	Asia	0.165	7.7	04	…	…	…	…	…	…	…	…	…	…
Swaziland	Africa	0.453	10.4	04	-5.8%	6	724.1	04	…	…	…	…	…	…
Sweden	Europe	0.166	6.3	06	4.7%	11	151.2	06	-4.8%	8	148.1	06	-2.8%	11
Switzerland	Europe	0.081	3.9	06	…	…	…	…	…	…	…	…	…	…
Syrian Arab Republic	Asia	0.991	45.6	04	…	…	…	…	…	…	…	…	…	…
TFYR Macedonia	Europe	0.078	1.9	06	…	…	126.4	06	…	…	54.4	06	…	…
Thailand	Asia	0.187	1.0	00	0.2%	5	379.0	00	…	…	…	…	…	…
Turkey	Europe	0.456	2.7	06	1.9%	11	953.3	06	5.2%	11	271.4	06	…	…
Ukraine	Europe	0.017	1.0	06	-1.7%	11	18.6	06	…	…	14.5	06	…	…
United Arab Emirates	Asia	1.000	…	…	…	…	…	…	…	…	654.9	06	…	…
United States of America	Americas	0.456	21.0	06	-0.8%	11	…	…	…	…	…	…	…	…
Uruguay	Americas	0.070	8.7	04	16.7%	3	15.0	00	…	…	11.6	00	…	…
Venezuela	Americas	0.058	…	…	…	…	65.5	06	…	…	…	…	…	…
Zambia	Africa	0.107	1.3	00	…	…	…	…	…	…	108.2	00	…	…
Zimbabwe	Africa	0.435	14.0	04	11.6%	7	330.8	00	…	…	454.6	00	…	…
Median		2.4					82.6				44.3			
Mean		5.2					194.0				97.1			
Standard deviation		8.0					262.3				138.6			

Legend: CPM = Combined productivitiy measure; **SR** = Suspects per police officer ratio; **PPR** = Persons prosecuted ratio; **PCR** = Persons convicted ratio; **Y** = Reference year; **ACR** = Average annual change rate; **TL** = Trend length

Table 6. Total number of prisoners by total number of convictions and other punitivity measures by country

Country	Region	PR	PC	Y	SIP	Y	PPO	S	>1yAO	S	>2yR	S	>1yT	S
Albania	Europe	0.33	142.1	02	47.5	02	…	…	…	…	…	…	…	…
Argentina	Americas	0.77	67.8	02	52.5	06	…	…	…	…	…	…	…	…
Armenia	Asia	0.69	105.5	06	73.3	06	…	…	…	…	…	…	…	…
Australia	Oceania	1.38	69.2	04	95.5	04	33%	ICVS	…	…	…	…	…	…
Austria	Europe	0.14	524.8	06	73.5	06	13%	EU ICS	5.2%	ESB	30.7%	ESB	8.5%	ESB
Azerbaijan	Asia	1.21	159.4	04	192.4	06	17%	EU ICS	…	…	…	…	…	…
Bahrain	Asia	0.23	302.4	04	70.2	06	…	…	…	…	…	…	…	…
Belarus	Europe	0.48	800.8	06	382.8	06	…	…	…	…	…	…	…	…
Belgium	Europe	0.03	1371.7	02	43.8	02	…	…	…	…	…	…	…	…
Bolivia	Americas	0.97	20.5	06	19.8	06	…	…	…	…	…	…	…	…
Bosnia and Herzegovina	Europe	0.07	481.5	06	34.7	06	…	…	…	…	…	…	…	…
Bulgaria	Europe	0.30	380.6	04	114.0	04	50%	ICVS	10.9%	ESB	18.1%	ESB	12.5%	ESB

Canada	Americas	0.08	849.1	06	72.1	06	44%	ICVS	…	…	…	…	…	…
Chile	Americas	0.44	317.7	04	138.7	04	…	…	…	…	…	…	…	…
Costa Rica	Americas	1.81	81.6	06	147.5	06	…	…	…	…	…	…	…	…
Croatia	Europe	0.10	567.9	06	54.8	06	…	…	3.7%	ESB	15.6%	ESB	3.8%	ESB
Cyprus	Europe	0.34	174.4	06	58.6	06	…	…	14.3%	ESB	26.9%	ESB	13.4%	ESB
Czech Republic	Europe	0.23	679.2	06	158.2	06	…	…	5.2%	ESB	22.6%	ESB [2]	5.3%	ESB
Denmark	Europe	0.05	944.5	06	51.1	06	18%	EU ICS	…	…	…	…	…	…
Dominican Republic	Americas	0.83	37.5	06	31.0	06	…	…	…	…	…	…	…	…
Ecuador	Americas	1.95	18.2	04	35.4	04	…	…	…	…	…	…	…	…
Egypt	Africa	0.01	7105.5	06	70.1	02	…	…	…	…	…	…	…	…
El Salvador	Americas	19.83	8.2	06	162.7	06	…	…	…	…	…	…	…	…
England and Wales	Europe	0.04	2645.5	06	118.2	06	51%	EU ICS	2.2%	ESB	63.8%	ESB	6.7%	ESB
Estonia	Europe	0.26	942.4	04	242.8	06	26%	ICVS	…	…	…	…	…	…
Finland	Europe	0.01	4168.6	06	60.7	06	15%	EU ICS	0.7%	ESB	15.2%	ESB	0.1%	ESB
France	Europe	0.06	981.0	00	56.0	00	13%	EU ICS	3.6%	ESB	…	…	6.7%	ESB
Georgia	Asia	0.60	383.4	06	228.2	06	…	…	42.3%	ESB	78.9%	ESB	44.8%	ESB
Germany	Europe	0.11	698.1	06	74.2	06	19%	EU ICS	3.2%	ESB	51.3%	ESB	3.8%	ESB
Guatemala	Americas	0.09	311.6	00	27.5	00	…	…	…	…	…	…	…	…
Hong Kong SARC	Asia	0.43	341.4	06	148.2	06	58%	ICVS	…	…	…	…	…	…
Hungary	Europe	0.12	979.4	04	120.6	04	29%	EU ICS	4.8%	ESB	38.2%	ESB	3.9%	ESB
Iceland	Europe	0.03	881.4	04	30.6	04	16%	ICVS	…	…	…	…	…	…
Israel	Asia	0.38	578.4	06	219.3	06	…		…	…	…	…	…	…
Italy	Europe	0.19	336.1	06	64.8	06	24%	EU ICS	18.0%	ESB	15.4%	ESB	4.6%	ESB
Japan	Asia	0.82	67.8	06	55.4	06	55%	ICVS	…	…	…	…	…	…
Kazakhstan	Asia	1.33	213.0	06	282.6	06	…	…	…	…	…	…	…	…
Kyrgyzstan	Asia	0.92	255.2	06	235.7	06	…	…	…	…	…	…	…	…
Latvia	Europe	0.48	438.9	06	212.2	06	…	…	22.7%	ESB	34.6%	ESB	28.3%	ESB
Lithuania	Europe	0.52	384.0	06	198.2	06	…	…	…	…	…	…	…	…
Luxembourg	Europe	0.04	958.6	02	37.7	02	16%	EU ICS	…	…	…	…	…	…
Malaysia	Asia	0.52	321.4	06	166.4	00	…	…	…	…	…	…	…	…
Mauritius	Africa	0.09	1431.6	04	132.9	06	…	…	…	…	…	…	…	…
Mexico	Americas	0.72	135.3	06	97.2	02	70%	ICVS	…	…	…	…	…	…
Mongolia	Asia	0.66	301.9	06	200.7	06	…	…	…	…	…	…	…	…
Myanmar	Asia	0.08	33.5	02	2.5	02	…	…	…	…	…	…	…	…
Nepal	Asia	1.06	10.6	06	11.2	02	…	…	…	…	…	…	…	…
Netherlands	Europe	0.05	747.9	06	40.1	06	32%	EU ICS	1.8%	ESB	7.7%	ESB	0.9%	ESB
New Zealand	Oceania	0.05	2474.9	00	126.3	02	40%	ICVS	…	…	…	…	…	…
Northern Ireland	Europe	0.03	1513.7	06	51.2	06	53%	ICVS	2.5%	ESB	66.7%	ESB	4.5%	ESB
Norway	Europe	0.18	303.3	06	54.0	05	29%	ICVS	…	…	…	…	…	…
Panama	Americas	0.96	140.8	06	134.5	06	…	…	…	…	…	…	…	…
Papua New Guinea	Oceania	10.29	3.8	00	38.8	00	…	…	…	…	…	…	…	…
Philippines	Asia	6.38	6.1	06	38.6	06	…	…	…	…	…	…	…	…
Poland	Europe	0.15	1284.9	06	197.5	06	34%	ICVS	5.9%	ESB	46.6%	ESB	11.8%	ESB
Portugal	Europe	0.14	658.8	06	91.7	06	15%	EU ICS	5.1%	ESB	32.7%	ESB	19.1%	ESB
Qatar	Asia	0.14	423.1	00	57.2	04	…	…	…	…	…	…	…	…
Republic of Korea	Asia	0.14	450.8	04	63.1	06	…	…	…	…	…	…	…	…
Republic of Moldova	Europe	0.60	335.3	06	202.1	06	…	…	…	…	…	…	…	…
Romania	Europe	0.52	263.2	06	138.1	06	…	…	27.1%	ESB	91.6%	ESB	50.2%	ESB
Russian Federation	Europe	0.78	807.0	00	629.7	00 [1]	…	…	…	…	…	…	…	…
Saudi Arabia	Asia	0.20	273.1	02	53.9	02	…	…	…	…	…	…	…	…
Scotland	Europe	0.10	1090.0	05	111.5	06	49%	ICVS	2.7%	ESB	24.0%	ESB	1.1%	ESB
Singapore	Asia	0.88	292.7	00	258.3	06	…	…	…	…	…	…	…	…
Slovakia	Europe	0.23	478.0	06	111.5	06	…	…	5.1%	ESB	16.4%	ESB	5.9%	ESB
Slovenia	Europe	0.11	430.3	06	46.2	06	…	…	8.9%	ESB	41.7%	ESB	9.9%	ESB
Swaziland	Africa	0.12	1291.0	00	156.9	06	…	…	…	…	…	…	…	…
Sweden	Europe	0.05	1313.4	06	63.1	06	33%	EU ICS	2.5%	ESB	13.8%	ESB	0.9%	ESB
Switzerland	Europe	0.03	1496.7	06	43.1	06	12%	ICVS	1.2%	ESB	12.5%	ESB	0.4%	ESB
Syrian Arab Republic	Asia	0.04	420.9	03	17.1	04	…	…	…	…	…	…	…	…
TFYR Macedonia	Europe	0.17	496.8	06	86.1	06	…	…	…	…	…	…	…	…
Thailand	Asia	0.17	961.9	06	163.3	06	…	…	…	…	…	…	…	…
Turkey	Europe	0.03	1306.1	06	36.5	06	53%	ICVS [3]	1.4%	ESB	…	…	…	…
Turkmenistan	Asia	1.08	181.5	06	195.4	06	…	…	…	…	…	…	…	…
Ukraine	Europe	0.83	345.2	06	285.6	06	…	…	…	…	…	…	…	…

United Arab Emirates	Asia	0.07	1934.1	06	143.2	06	…	…	…	…	…	…	…	…
United Kingdom	Europe	0.04	2388.1	02	106.3	02	…	…	…	…	…	…	…	…
Uruguay	Americas	0.80	146.8	00	118.1	04	…	…	…	…	…	…	…	…
Venezuela	Americas	2.18	17.6	00	38.3	02	…	…	…	…	…	…	…	…
Zambia	Africa	4.59	18.6	00	85.5	00	…	…	…	…	…	…	…	…
Zimbabwe	Africa	0.40	276.8	04	109.7	04	…	…	…	…	…	…	…	…
Median		0.23	384.0		86.1									
Mean		0.92	710.9		119.4									
Standard deviation		2.56	1005.3		105.5									
Greece	Europe	…	…	…	65.3	06	30%	EU ICS	5.9%	ESB	…	…	…	…
Ireland	Europe	…	…	…	58.5	06	38%	EU ICS	…	…	…	…	…	…
Mozambique	Africa	…	…	…	…	…	42%	ICVS[6]	…	…	…	…	…	…
Peru	Americas	…	…	…	33.9	04	56%	ICVS[5]	…	…	…	…	…	…
South Africa	Africa	…	…	…	276.4	02	76%	ICVS[4]	…	…	…	…	…	…
Spain	Europe	…	…	…	106.9	04	17%	EU ICS	…	…	…	…	…	…
United States of America	Americas	…	…	…	552.7	02	47%	ICVS	…	…	…	…	…	…

Legend:
PR = Punitivity ratio; **PC** = Persons convicted per 100,000 population; **SIP** = Sentenced incarcerated persons per 100,000 population; **Y** = Reference year; **PPO** = Percentage of public voting for prison in case of recidivist burglar; **>1yAO** = Percentage of all offences punished with unsuspended prison sentences of more than one year; **>2yR** = Percentage of robbery offences punished with unsuspended prison sentences of more than two years; **>1yT** = Percentage of theft offences punished with unsuspended prison sentences of more than one year; **S** = Source.

Sources (other than UN-CTS):
ICVS = International Crime Victim Survey (data taken from van Dijk. van Kesteren and Smit 2007, 149); EU ICS = European Crime and Safety Survey (data taken from van Dijk, van Kesteren and Smit 2007, 149); ESB = European Sourcebook of Crime and Criminal Justice Statistics, 4th edition (Aebi et al. 2010).

Footnotes:
1 Total prison population instead of sentenced only.
2 Estimated value (only sanction range from one to under five years available).
3 Istanbul only.
4 Johannesburg only.
5 Lima only.
6 Maputo only.

Annex B to chapter 6: Methodological notes

Data validation

UN-CTS data were provided un-validated by the UN. Therefore, for the purposes of this chapter, a quality check was carried out on the data. All data from countries with less than 100,000 inhabitants were removed (with the exception of the results presented in Figure 1) because of the instability of these data due to the small absolute numbers.

Then, three types of checks were made, the first two of these routinely for all variables used: Trend check, internal validity check, other sources check. The internal validity check was always carried out after the trend check and therefore also after possible modifications due to this first check. Other sources were only checked for suspicious values and only where such other sources were available.

Trend check was a check for consistency of data within responses provided all over the reference period of this publication (6th to 10th UN-CTS). It was mainly looked for significant "jumps" in the time series between adjacent UN-CTS waves. Where a gap in the time series existed since a country did not respond to all waves, the trend check was still carried out. However, the acceptable thresholds for fluctuations were adapted in such a case.

Internal validity check was a check for:

1.) Extreme, implausible outliers in the responses from the different countries, i.e. values totally outside the acceptable and expectable variation of a certain variable.

2.) Consistency of data within responses provided to different questions of the UN-CTS. The following consistency checks were routinely made for chapter 7:

a) Prosecution personnel per police personnel: This ratio was expected to be far smaller than 1. This rule was never violated.

b) Judges per police personnel: This ratio was expected to be far smaller than 1. This rule was never violated.

c) Juvenile prison staff by adult prison staff: This ratio was expected to be smaller than 1. This rule was never violated.

c) Persons prosecuted by persons suspected: This ratio was expected to be smaller than 1. If this rule was violated, data and trend for both variables were thoroughly checked. If the data seemed trustworthy except for the violation of this rule, this was accepted if the ratio was not much bigger than 1, because this might be explained by incomplete statistical recording at police level (e.g. restricted to certain offence types etc.) and other factors, such as time lags within the criminal justice process.

d) Persons brought before court by persons suspected: This ratio was expected to be smaller than 1. Violations were handled as under 2.c).

e) Persons convicted by persons suspected: This ratio was expected to be smaller than 1. Violations were handled as under 2.c).

f) Persons convicted by persons prosecuted: This ratio was expected to be smaller than 1. Violations were handled as under 2.c).

g) Persons convicted by persons brought before court: This ratio was expected to be smaller than 1. Violations were not accepted.

h) Pre-trial detainees by total prison population: This ratio was expected to be smaller than 1. Violations were not accepted.

i) Sentenced prisoners by total prison population: This ratio was expected to be smaller than or equal to 1. Violations were not accepted.

j) Pre-trial detainees plus sentenced prisoners by total prison population: This ratio was expected to be equal to or moderately lower than 1. Violations were accepted in both directions, if not too extreme, for lower ratios already due to the existence of other categories ("convicted awaiting sentence" and "other") in the UN-CTS data, for higher ratios due to possible overlapping between both categories and / or double counts.

k) Adult prisoners by total prison population: This ratio was expected to be smaller than or equal to 1. Violations were not accepted in principle. However, in the case of very small differences (excess of less than 10 %) these were allowed if the data were plausible in all other respects, because the differences might be due to different sources or reference dates for these data.

l) Juvenile prisoners by total prison population: This ratio was expected to be far smaller than 1. This rule was never violated.

m) Adult prisoners plus juvenile prisoners by total prison population: This ratio was expected to be equal to 1. Violations were sometimes accepted: Lower values are possible in general due to the fact that the breakdown by adults and juveniles might refer to *sentenced* prisoners only in some countries. Higher values than 1 are more problematic and can only be explained by differences in statistical recording. These have only been accepted if the excess was lower than 10 % and the data were plausible in all other respects.

When a suspected inconsistency was found, a decision had to be made as to how to deal with it. Basically there were three possibilities:

- The suspected value was replaced by another value for the same variable and the same year, but from another source.

- The suspected value was replaced by another value for the same variable from another year if more consistent figures could be found within the UN-CTS data. This was only possible within the restrictions for the points in time as described below.

- The suspected value was removed without replacement.

Apart from the process described, values for a certain country that were missing in a UN-CTS survey wave were not added to the data from the other sources.

A complete listing of all inconsistencies found and the actions taken can be found in Annex C.

Latest available year and start / end year for trend analysis

If available, the year 2006 from the 10th survey was taken. Otherwise the latest available year was taken, provided this year was 2000 or later. Data from 1999 or earlier were not used for this data point.

In order to include as many countries as possible in trend analysis, trends were computed using only two points in time (start and end). The earliest starting date for trends was – different from most other chapters in this book – not 1996, but 1995, because resources variables were only covered for 1995 and 1997 in the 6th UN-CTS. The years 1995 (preferred) to 2001 were accepted as possible starting dates for trend analysis, whereas the years 2006 (preferred) back to 2000 were accepted as possible end dates. The end date for trend analysis is therefore always identical to the latest available year throughout chapter 7. The starting and end year can also be seen directly in the table, allowing the reader to interpret the results correctly. In trend tables there are always two values printed for each country which had at least two values available that could be considered as starting date and end date based on the rules above.

Average annual change rate

When presenting and comparing trends, the complication is that the period is not the same for every country: e.g. for some countries the 'start' year could be 1995 and the 'end' year 2006, for others this could be 2000 and 2004. To circumvent this, the mean *annual* change was computed with the following formula:

If x_1 is the value at year t_1 and x_2 the value at year t_2 (with $t_2 > t_1$), the mean annual change is:

$$(x_2 / x_1)^{1/(t_2-t_1)} - 1$$

This mean annual change was computed between the 'start' and 'end' (for most countries 1995 – 2006). But of course it would be useless to calculate an average annual change rate with only one or two years in between these dates. Therefore, annual average change rates were only calculated if (end year - start year >= 3).

Summary measures in figures and tables

When computing figures per regions and sub-regions the non-weighted median was calculated. This means that the rates of large and small countries have equal weight when calculating the median. The choice was made to facilitate comparison of crime rates between countries without taking into account the size of the country. The disadvantage of the method is that one cannot exactly estimate the overall picture of criminal justice in different regions. Accurate and complete regional comparisons are, however, impossible because not all countries have responded to the UN-CTS.

Calculation of medians was done partially on the regional and partially on the sub-regional level, based on the available number of observations. In general, medians were not calculated for a sub-region if there were only three or less reporting countries there. There were some exceptions from this rule where this was necessary in order to separately show the results for other sub-regions within the same region with more than three reporting countries.

In order to document the restrictions for the interpretation of medians, but still be able to report as differentiated as possible, the total n values for each region / sub-region were included in the figure. Sometimes, medians were even calculated for only two values, where considered necessary (e.g. for Oceania not to lose it completely). In order to avoid misinterpretations, in these cases these two countries were explicitly listed directly in the figure.

The lines "1st Quartile", "Median" and "3rd Quartile" in the other figures refer to the non-weighted Quartiles (1st, 2nd, 3rd) of the respective ratio (e.g. in figure 6: suspects per police officer).

Most tables feature the following summary measures: median, mean, and standard deviation. As with the medians calculated for the figures by regions and sub-regions, these measures are calculated without weighting them by population. Since these summary measures refer to the total of responding countries, this decision was necessary in order to avoid the misinterpretation that the total medians, means and standard deviations would represent "the world" in total.

Annex C to chapter 6: Data modifications

The following modifications only refer to variables that were analyzed for chapter 7, not to other variables, also not to those solely used for the purposes of internal validity checks.

If a value is listed to have been *deleted*, it is explicitly noted if it has been replaced by a value from another source or from the UN-CTS, but from outside the usual time range. However, it is not explicitly listed if it has been replaced by a value from an adjacent UN-CTS in accordance with the general selection rules as described in Annex B. Such values have been automatically selected as replacement values if they were within the general range for start or end (= i.e.: latest available) year of trend analysis.

Police personnel

Azerbaijan: Trend check failed for 8th UN-CTS (2001 / 2002); deleted.
Belgium: Trend and other sources check failed for 6th UN-CTS (1995 – 1997); deleted; used ESB 2nd edition data for 1995 instead.
Chile: Trend check failed for 6th UN-CTS (1995 – 1997); deleted; used 5th UN-CTS data for 1994 (instead of 1995).
Costa Rica: Trend check failed; deleted 7th and 9th UN-CTS (1998 – 2000; 2005 / 2006).
Maldives: Trend check failed; deleted 6th and 8th UN-CTS (1995 – 1997; 2001 / 2002).
Mexico: Trend check failed for 9th UN-CTS (2003 / 2004); deleted.
Spain: Trend and other sources check failed for 6th UN-CTS (1995 – 1997); deleted; used ESB 1st edition data for 1995 instead.
Turkey: Corrected typo in 2006 data.

Total number of persons suspected / arrested / cautioned

Austria: Trend and other sources check failed for 8th UN-CTS (2001 / 2002); deleted; used ESB 3rd edition data for 2001 instead.
England & Wales: Trend and other sources check failed for 6th UN-CTS (1995 – 1997); deleted; used ESB 2nd edition data for 1995 instead.
Greece: Trend and other sources check failed; deleted 7th and 10th UN-CTS (1998 – 2000; 2005 / 2006); deleted; used ESB 4th edition data for 2006 instead.
Latvia: Trend and other sources check failed; deleted 6th and 10th UN-CTS (1995 – 1997; 2005 / 2006); deleted; used ESB 4th edition data for 2005 / 2006 instead, but not ESB 2nd edition data for 1995 – 1997, because the latter values also failed trend check.
Malaysia: Trend check failed; deleted 6th and 10th UN-CTS (1995 – 1997; 2005 / 2006).
Morocco: Trend check failed for 7th UN-CTS (1998 – 2000); deleted.
Nepal: Trend check failed for 10th UN-CTS (2005 / 2006); deleted.
Occupied Palestine Territory: Trend check failed for 1995 value from 6th UN-CTS; deleted.
Panama: Trend check failed; deleted 6th and 7th UN-CTS (1995 – 1997; 1998 – 2000).
Paraguay: Trend check failed for 7th UN-CTS (1998 – 2000); deleted.
Singapore: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Spain: Trend and other sources check failed for 6th UN-CTS (1995 – 1997); deleted; used ESB 2nd edition data for 1995 instead.
Thailand: Trend check and internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
Venezuela: Internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.

Prosecution personnel

Argentina: According to 10th UN-CTS metadata, 2006 data only cover federal and Buenos Aires City personnel; excluded from comparison.
Bahrain: Internal validity check failed for 6th UN-CTS; deleted.
Chile: Trend check failed; deleted 7th and 8th UN-CTS (1998 – 2000; 2001 / 2002).
El Salvador: Trend check failed for 7th UN-CTS (1998 – 2000); deleted.
England & Wales: Trend check failed; deleted 7th and 8th UN-CTS (1998 – 2000; 2001 / 2002).
Georgia: Trend check failed for 9th UN-CTS (2003 / 2004); deleted.
Malta: Trend and internal validity check failed for 2002 value from 8th UN-CTS; deleted.
Mexico: Trend and internal validity check failed for 1999 value from 7th UN-CTS; deleted.
Pakistan: Internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.
Peru: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Sri Lanka: Internal validity check failed for 9th UN-CTS (2003 / 2004); deleted.
Sweden: Trend and other sources check failed for 6th UN-CTS (1995 – 1997); deleted; used ESB 1st edition data for 1995 instead.

Total number of persons prosecuted

Chile: Trend check failed for 8th UN-CTS (2001 / 2002); deleted.
Cyprus: Trend and internal validity check failed for all survey waves; all deleted.
Ecuador: Trend and internal validity check failed for 10th UN-CTS (2005 / 2006).
England & Wales: Trend check failed for 6th UN-CTS (1995 – 1997); deleted; internal validity check failed for 2001 value from 8th CTS.
Guatemala: Internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.
Ireland: Trend check failed for 10th UN-CTS (2005 / 2006); deleted.
Latvia: Trend check failed for 2006 value from 10th UN-CTS; deleted.
Malta: Trend check failed for 9th UN-CTS (2003 / 2004); deleted.
Nepal: Trend and internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
Northern Ireland: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Republic of Moldova: Trend and internal validity check failed; deleted 8th and 9th UN-CTS values (2001 / 2002; 2003 / 2004).
Swaziland: Trend and internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
United Arab Emirates: Internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
United States of America: Trend check failed for 10th UN-CTS (2005 / 2006); deleted.
Venezuela: Trend and internal validity check failed for 8th UN-CTS (2001 / 2002); deleted.
Zambia: Internal validity check failed for 7th UN-CTS (1998 - 2000); deleted.

Professional judges

Colombia: Trend check failed for 9th UN-CTS (2003 / 2004); deleted.
Denmark: Trend check failed for 10th UN-CTS (2005 / 2006); deleted.
England & Wales: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Germany: Trend and other sources check failed; deleted 9th and 10th UN-CTS (2003 / 2004; 2005 / 2006); used data taken from the Federal Statistical Office in Germany for 2006 instead.
Maldives: Trend and internal validity check failed for all survey waves; all deleted.
Northern Ireland: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Pakistan: Internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.
Slovakia: Trend check failed for 10th UN-CTS (2005 / 2006); deleted.
United States of America: According to 10th UN-CTS metadata, 2005 / 2006 data only cover federal judges; excluded from comparison. Trend check also failed for 1997 value from 6th UN-CTS; deleted.

Total number of persons brought before the criminal courts

Afghanistan: Internal validity check failed for 8th UN-CTS (2001 / 2002); deleted.
Australia: Trend and internal validity check failed for all survey waves; all deleted.
Bahrain: Trend and internal validity check failed for all survey waves; all deleted.
Bolivia: Trend and internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
Colombia: Trend and internal validity check failed for all survey waves; all deleted.
Costa Rica: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Cyprus: Trend and internal validity check failed for all survey waves; all deleted.
Denmark: Trend check failed; deleted 6th to 9th UN-CTS (1995 – 1997; 1998 – 2000; 2001 / 2002; 2003 / 2004).
El Salvador: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
England & Wales: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Japan: Trend check failed; deleted 6th and 7th UN-CTS (1995 – 1997; 1998 – 2000).
Luxembourg: Internal validity check failed for 8th UN-CTS (2001 / 2002); deleted.
Malta: Trend and internal validity check failed for 9th UN-CTS (2003 / 2004); deleted.
Mauritius: Trend and internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
Myanmar: Internal validity check failed for 8th UN-CTS (2001 / 2002); deleted.
Northern Ireland: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Occupied Palestine Territory: Internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
Saudi Arabia: Internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.
Sweden: Internal validity check failed for all survey waves; all deleted.
Turkey: Trend check failed for 8th UN-CTS (2001 / 2002); deleted.
Turkmenistan: Internal validity check failed; deleted 9th and 10th UN-CTS (2003 / 2004; 2005 / 2006).
United States of America: Trend and internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
Venezuela: Internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.

Total number of persons convicted

Chile: Trend and internal validity check failed; deleted 7th and 8th UN-CTS values (1998 – 2000; 2001 / 2002).
Colombia: Trend and internal validity check failed for all survey waves; all deleted.
Costa Rica: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Cyprus: Trend, internal validity and other sources check failed; deleted 7th to 10th; used ESB 4th edition data for 2006 instead.
Denmark: Trend check failed for 8th UN-CTS (2001 / 2002); deleted.
England & Wales: Trend and other sources check failed for 6th UN-CTS (1995 – 1997); deleted; used ESB 2nd edition data for 1995 / 1996 instead.
Malta: Internal validity check failed for 9th UN-CTS (2003 / 2004).
Mauritius: Trend and internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
Northern Ireland: Trend and other sources check failed; deleted 6th to 8th UN-CTS (1995 – 1997; 1998 – 2000; 2001 / 2002); used ESB 2nd edition data for 1995 / 1996 and 4th edition for the missing 2006 instead.
Sweden: Trend and other sources check failed; deleted 6th to 9th UN-CTS (1995 – 1997; 1998 – 2000; 2001 / 2002, 2003 / 2004); used ESB 2nd edition data for 1995 / 1996 instead.
Turkey: Trend check failed for 2002 value from 8th UN-CTS; deleted.

Total staff in adult prisons

Colombia: Trend check failed; deleted 6th and 7th UN-CTS (1995 – 1997; 1998 – 2000).
Ecuador: Trend check failed for 8th UN-CTS (2001 / 2002); deleted.
El Salvador: Trend and internal validity check failed for 10th UN-CTS (2005 / 2006); deleted.
Maldives: Trend and internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.
Mexico: Trend and internal validity check failed for all survey waves; all deleted.
Ukraine: Trend and internal validity check failed for 6th UN-CTS (1995 – 1997); deleted.

Total staff in juvenile prisons

Czech Republic: Trend check failed; deleted 7th to 9th UN-CTS (1998 – 2000; 2001 / 2002; 2003 / 2004).
Maldives: Trend and internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.
Mexico: Trend and internal validity check failed for all survey waves; all deleted.
Phillipines: Trend and internal validity check failed for all survey waves; all deleted.

Total number of persons incarcerated

Argentina: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Azerbaijan: Trend check failed for 7th UN-CTS (1998 – 2000); deleted.
Cyprus: Trend and other sources check failed; deleted 8th and 10th UN-CTS (2001 / 2002; 2005 / 2006); used ESB 4th edition data for 2006 instead.
Jordan: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Maldives: Internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.
Mauritius: Trend check failed; deleted 6th and 9th UN-CTS (1995 – 1997; 2003 / 2004).
Sri Lanka: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Swaziland: Trend check failed for 7th UN-CTS (1998 – 2000); deleted.

Number of sentenced persons incarcerated

Argentina: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Cyprus: Trend and other sources check failed; deleted 8th and 10th UN-CTS (2001 / 2002; 2005 / 2006); used ESB 4th edition data for 2006 for the variables “total number of prisoners: stock” and “of which in pre-trial detention: stock” to calculate a replacement value.
Jordan: Trend check failed for 6th UN-CTS (1995 – 1997); deleted.
Kazakhstan: Trend check failed; deleted 6th and 7th UN-CTS (1995 – 1997; 1998 – 2000).
Kyrgyzstan: Trend check failed for 7th UN-CTS (1998 – 2000); deleted.
Latvia: Trend check failed for 7th UN-CTS (1998 – 2000); deleted.
Maldives: Trend and internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.
Mauritius: Trend check failed for 9th UN-CTS (2003 / 2004); deleted.
Morocco: Trend check failed for 9th UN-CTS (2003 / 2004); deleted.
Paraguay: Trend and internal validity check failed for 7th UN-CTS (1998 – 2000); deleted.
Phillipines: Trend and internal validity check failed; deleted 7th and 8th UN-CTS values (1998 – 2000; 2001 / 2002).
Swaziland: Trend check failed for 7th UN-CTS (1998 – 2000); deleted.

Chapter 7 – Trends in world prison population

Roy Walmsley*

Abstract

The chapter focuses on three topics relating to international prison population levels. First, it examines the pattern of changes to prison population levels during the decade 1997-2007. Changes over the whole decade and in the most recent five years are considered separately. Second, in respect of pre-trial/remand detention, the chapter identifies the countries with the highest proportion of their prison population held in such conditions in 2007 and finally, as an indication of overcrowding, attention is drawn to the highest occupancy levels in 2007. In each case the figures are shown continent by continent. The overall trend is that prison populations have grown during the decade 1997-2007. Prison population rates rose between 1997 and 2007 in 68% of the countries studied. There was little difference between the continents in terms of the proportion of countries showing growth in prison population rates: in every continent there was growth in 60-75% of countries. There were sharp contrasts between the highest and lowest prison population levels in the same continent. Of the countries on which information was available 45% had at least 30% of their prison population in pre-trial/remand detention in 2007, and in 20% of the countries at least half the prison population were held in such conditions. Pre-trial/remand detention levels were generally higher in Africa, the Americas and Asia than in Europe and Oceania. Of the countries on which information was available the prison system in 61% had more than 100% occupancy in 2007 and in 22% the occupancy level was over 150%. Occupancy levels were highest in countries in Africa, the Americas and Asia but also exceeded 100% in almost a half of European countries.

Introduction

This chapter focuses on three topics relating to international prison population levels. First, it examines the pattern of changes to prison population levels during the decade 1997-2007. Changes over the whole decade and in the most recent five years are considered separately. In addition, attention is drawn to the highest and lowest prison population rates in 2007. Second, in respect of pre-trial/remand detention, the Chapter identifies the countries with the highest proportion of their prison population held in such conditions in 2007 and finally, as an indication of overcrowding, attention is drawn to the highest occupancy levels in 2007. In each case the figures are shown continent by continent. A final section draws together the main points that emerge from these findings.

The data used are in respect of a total of 144 United Nations member-states (three-quarters of all member-states): 30 in Africa, 31 in the Americas, 27 in Asia, 46 in Europe and 10 in Oceania.

Sources are the national prison administrations, the Ministries responsible for prisons, national statistical offices and data provided by these bodies to, for example, the United Nations Crime Trends Surveys, the Asian and Pacific Conferences for Correctional Administrators and the Council of Europe Annual Penal Statistics (SPACE).

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Changes in prison population levels

Figures 1-18 show the changes in prison population rates over the years 1997-2007 and 2002-2007. Where figures for one of those two years are not available, those for a date within two years of the intended date are substituted and asterisked.

Africa

Of the twenty-five United Nations member states in Africa on which the necessary information was available (1997-2007), the prison population rose during this decade in twenty and fell in five. Rises of more than 50% were recorded in eight countries. In five countries the prison population fell (Annex 1, tables 1 and 2).

However, the best indicator of trends in overall prison population levels is not the prison population total but the prison population rate per 100,000 of the national population. The former is affected by changes in the size of the national population and provides therefore a less accurate picture of the trends.

Removing the effect of changes in the size of the national population (which was rising in most countries) reveals that although there was indeed substantial growth over the decade the growth affected slightly fewer countries and was less marked than the changes in the prison population totals had indicated. In fact the prison population rate rose in 15 of the 25 countries and fell in 8. In the remaining two the rate was unchanged.

Rises of more than 25% were recorded in eight countries (figure 1). It is to be noted that whereas eight countries had at least 50% increases in their prison population totals, the corresponding level of increases in prison population rates was markedly lower. The prison population rate decreased in eight countries (figure 2). Because of the growth in national populations in most countries the decreases were greater than the decreases in prison population totals.

The figures 1-2 have shown the changes in prison population rates over the whole decade 1997-2007. However, it is changes in the most recent five years (2002-07) that are perhaps of the most immediate interest: Of the thirty United Nations member states in Africa on which the necessary information was available, prison population rates rose during this five-year period in fifteen and fell in fifteen. Rises of more than 20% were recorded in eight countries (figure 3). Falls of more than 20% were recorded in six countries (figure 4).

Figure 1. Largest increases in African prison population rates (per 100,000 of the national population) 1997-2007 (%)

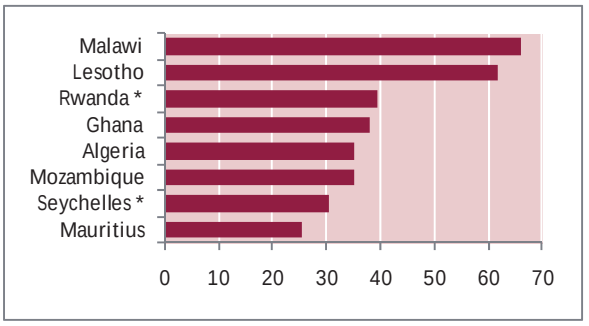


Figure 2. Largest decreases in African prison population rates (per 100,000 of the national population) 1997-2007 (%)

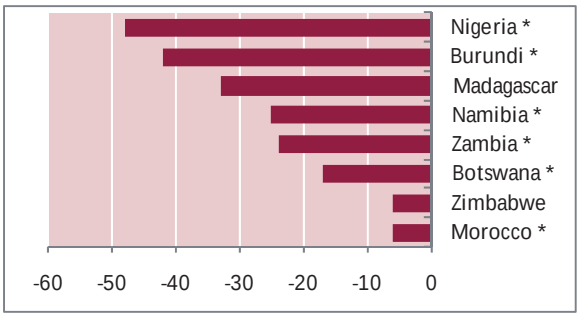


Figure 3. Largest increases in African prison population rates (per 100,000 of the national population) 2002-2007 (%)

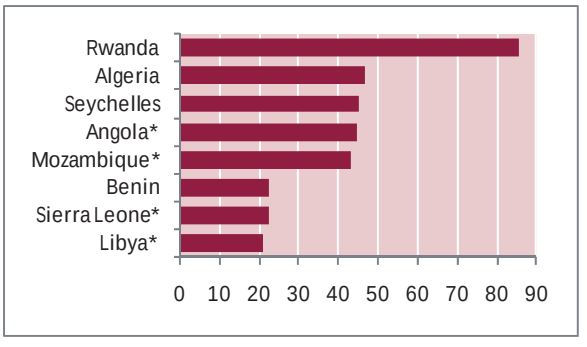
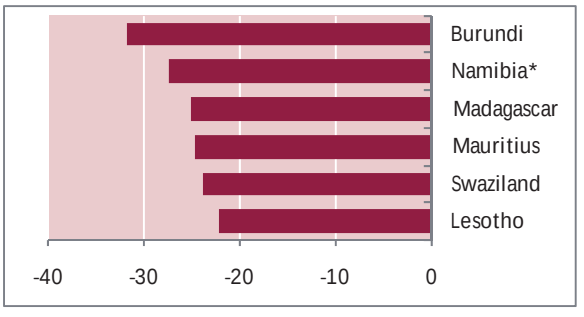


Figure 4. Largest decreases in African prison population rates (per 100,000 of the national population) 2002-2007 (%)



Americas

Of the thirty-one United Nations member states in the Americas on which the necessary information was available (1997-2007), the prison population rose in 27 and fell in four. Rises of more than 50% were recorded in 11 countries (Annex, table 3) In four countries the prison population fell 1997-2007 (Annex, table 4).

However, as stated above, the best indicator of trends in overall prison population levels is not the prison population total but the prison population rate per 100,000 of the national population.

As in Africa, removing the effect of changes in the size of the national population reveals that although there was indeed substantial growth over the decade, the growth affected slightly fewer countries and was less marked than the changes in the prison population totals had indicated. In fact the prison population rate rose in 23 of the 31 countries and fell in eight.

Rises of more than 25% were recorded in 13 countries (figure 5). Also parallel to the situation in Africa, it is to be noted that whereas 11 countries had at least 50% increases in their prison population *total*s, the corresponding level of increases in prison population *rates* was markedly lower.

The prison population rate decreased in eight countries (figure 6). Because of the growth in national populations in most countries the decreases were generally greater than the decreases in prison population numbers.

Of the 31 United Nations member states in the Americas on which the necessary information was available (2002-2007), prison population rates rose during this five-year period in 23, fell in seven and remained unchanged in one. Rises of more than 20% were recorded in 12 countries (figure 7). Only one of the seven countries that registered falls in this period had a fall of more than 20% (figure 8).

Figure 5. Largest increases in prison population rates in the Americas (per 100,000 of the national population) 1997-2007 (%)

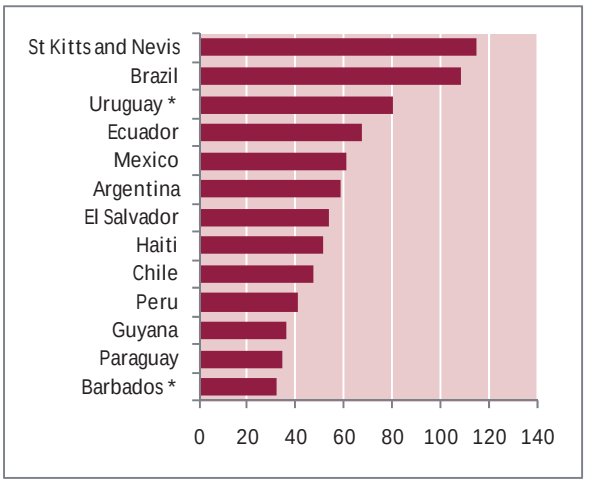


Figure 6. Largest decreases in prison population rates in the Americas (per 100,000 of the national population) 1997-2007 (%)

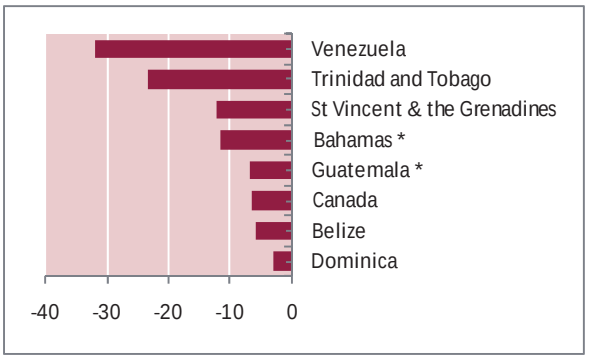


Figure 7. Largest increases in prison population rates in the Americas (per 100,000 of the national population) 2002-2007 (%)

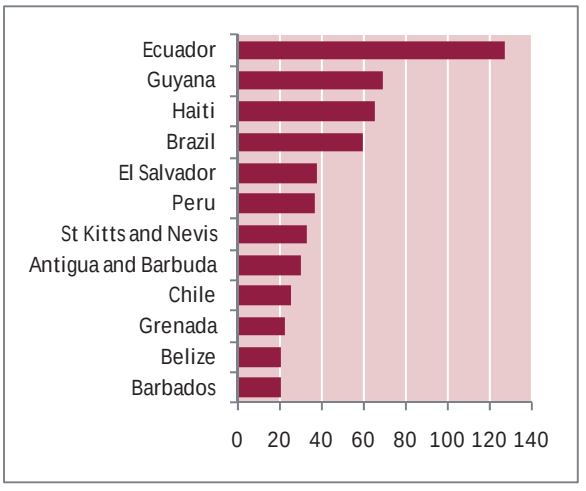
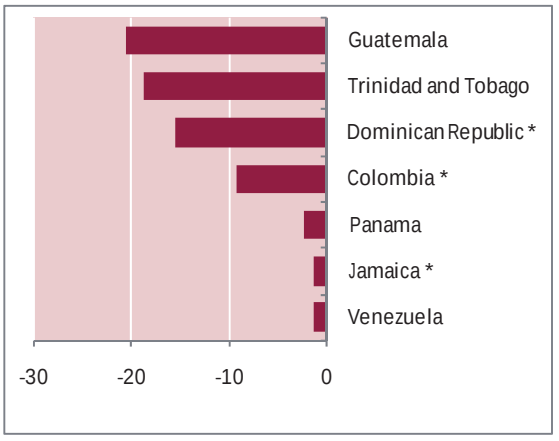


Figure 8. Largest decreases in prison population rates in the Americas (per 100,000 of the national population) 2002-2007 (%)



Asia

Of the 23 United Nations member states in Asia on which the necessary information was available, the prison population rose during this decade in 18 and fell in five. Rises of more than 50% were recorded in 12 countries. In five countries the prison population fell (Annex 1, tables 5 and 6).

The prison population rates show that although there was indeed substantial growth over the decade the growth affected one country fewer and was less marked than the changes in the prison population totals had indicated. In fact the prison population rate rose in 17 of the 23 countries and fell in six.

Rises of more than 25% were recorded in 11 countries (figure 9). Whereas 12 countries had at least 50% increases in their prison population *totals,* the corresponding level of increases in prison population *rates* was markedly lower.

The prison population rate decreased in six countries (figure 10). Because of the growth in national populations in most countries, the decreases were generally greater than the decreases in prison population numbers.

Of the 26 United Nations member states in Asia on which the necessary information was available, prison population rates rose during this five-year period (2002-2007) in thirteen and fell in thirteen. Rises of more than 20% were recorded in nine countries (figure 11).

Falls of more than 20% were recorded in six countries (figure 12).

Figure 9. Largest increases in Asian prison population rates (per 100,000 of the national population) 1997-2007 (%)

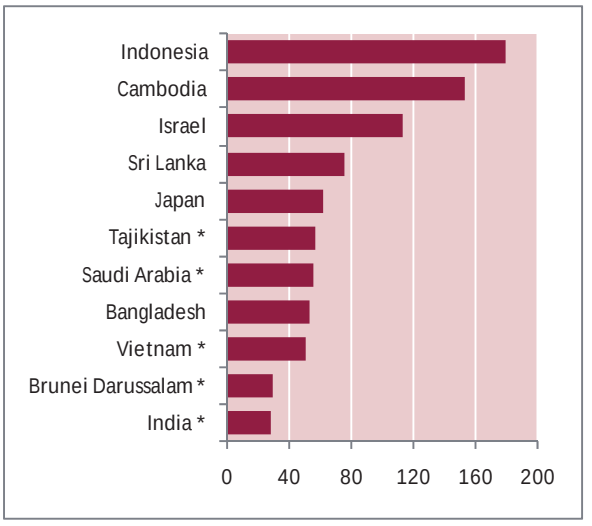


Figure 10. Largest decreases in Asian prison population rates (per 100,000 of the national population) 1997-2007 (%)

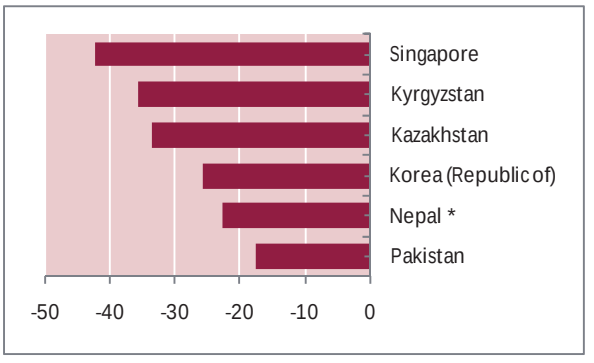


Figure 11. Largest increases in Asian prison population rates (per 100,000 of the national population) 2002-2007 (%)

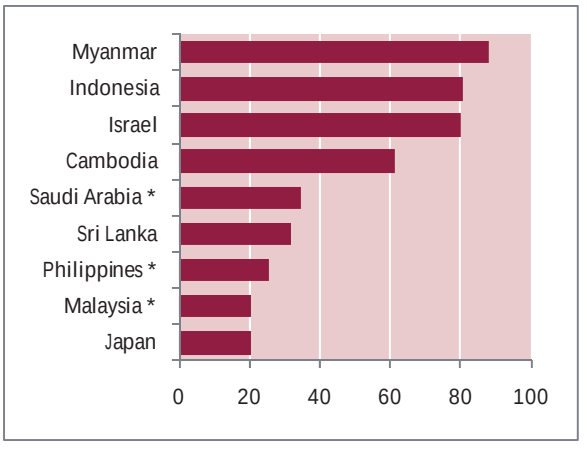
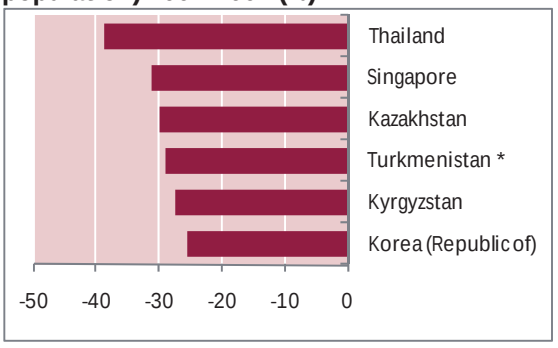


Figure 12. Largest decreases in Asian prison population rates (per 100,000 of the national population) 2002-2007 (%)



Europe

Of the 45 United Nations member states in Europe on which the necessary information was available, the prison population rose during this decade (1997-2007) in 30 and fell in 15. Rises of more than 50% were recorded in 12 countries. Of the 15 countries where the prison population fell, in nine the decrease was more than 20% (Annex 1, tables 7 and 8).

Turning to the more reliable indicator of change in prison population trends, the prison population rates show that there was indeed substantial growth over the decade and it was scarcely less marked than the changes in the prison population totals had indicated. In fact, as with the prison population totals, the prison population rates rose in 30 of the 45 countries and fell in 15.

Whereas in Africa, the Americas and Asia prison population rates showed the rises to be less marked than had been indicated by the prison population totals, this was much less evident in European countries; this is because national population totals were fairly stable in many countries and in others they were falling. Indeed, rates rose by at least 50% in ten countries (figure 13), just two less than recorded at least 50% rises in their prison population totals. Rates rose by at least 25% in 18 countries.

The prison population rate decreased in 15 countries, in eight of which the decrease exceeded 20% (figure 14). The size of the decreases was similar to the size of the decreases in prison population totals.

Of the 45 United Nations member states in Europe on which the necessary information was available, prison population rates rose during this five-year period (2002-2007) in 32 and fell in 14. Rises of more than 20% were recorded in 13 countries (figure 15). Falls of more than 20% were recorded in seven countries (figure 16).

Figure 13. Largest increases in European prison population rates (per 100,000 of the national population) 1997-2007 (%)

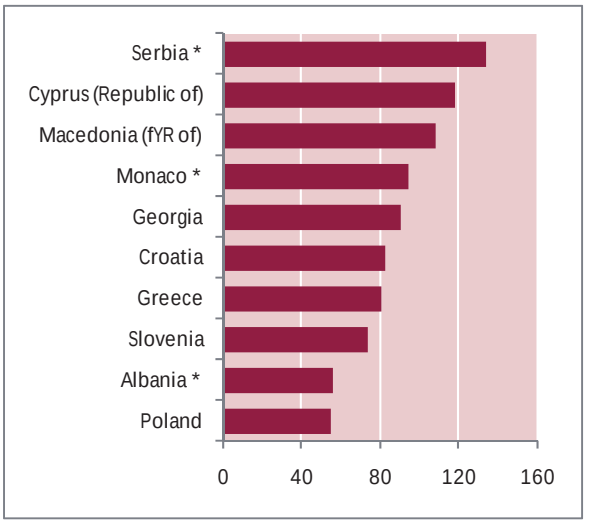


Figure 14. Largest decreases in European prison population rates (per 100,000 of the national population) 1997-2007 (%)

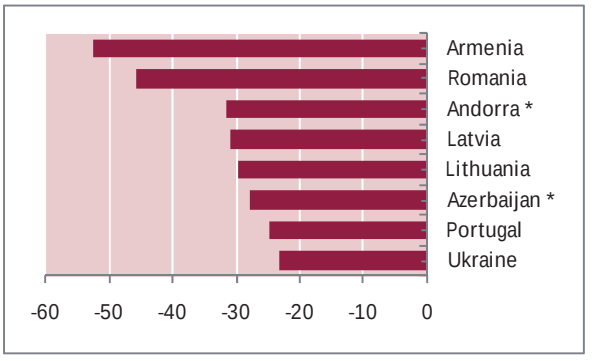


Figure 15. Largest increases in European prison population rates (per 100,000 of the national population) 2002-2007 (%)

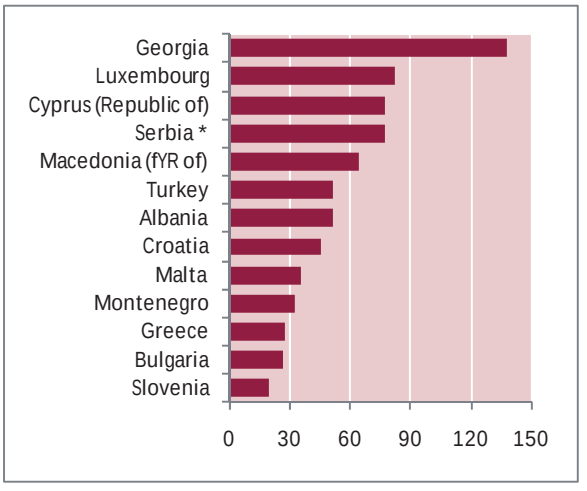
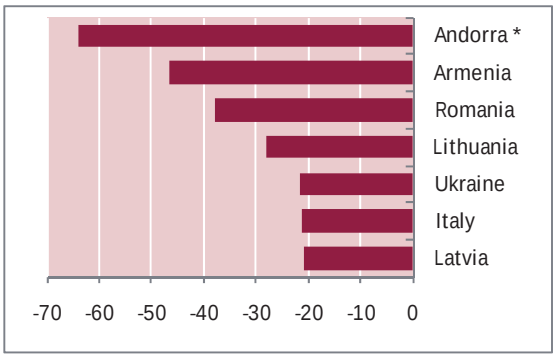


Figure 16. Largest decreases in European prison population rates (per 100,000 of the national population) 2002-2007 (%)



Oceania

Of the ten United Nations member states in Oceania on which the necessary information was available, the prison population rose during this decade (1997-2007) in nine countries (in two of them by more than 50%) and fell in one. The changes are shown in Annex 1, table 9.

The prison population rates show that although there was indeed substantial growth over the decade the growth affected fewer countries and was less marked than the changes in the prison population totals had indicated. In fact the prison population rate rose in six of the ten countries (in three of them by more than 25%) and fell in four (in two of them by more than 20%). The changes are shown in figure 17.

Of the ten United Nations member states in Oceania on which the necessary information was available, the prison population rose during this five-year period (2002-2007) in seven countries (in one of them by 50%) and fell in three (in two of them by more than 20%). The changes are shown in figure 18.

This chapter has focused on prison population trends without commenting on the actual size of the prison population. Annex 2 shows the highest and lowest prison population rates (per 100,000 of the national population) in each continent in 2007. They are based on an analysis of prison population levels in the 144 countries covered by the above study of prison population trends.

Figure 17. Changes in prison population rates in Oceania (per 100,000 of the national population) 1997-2007 (%)

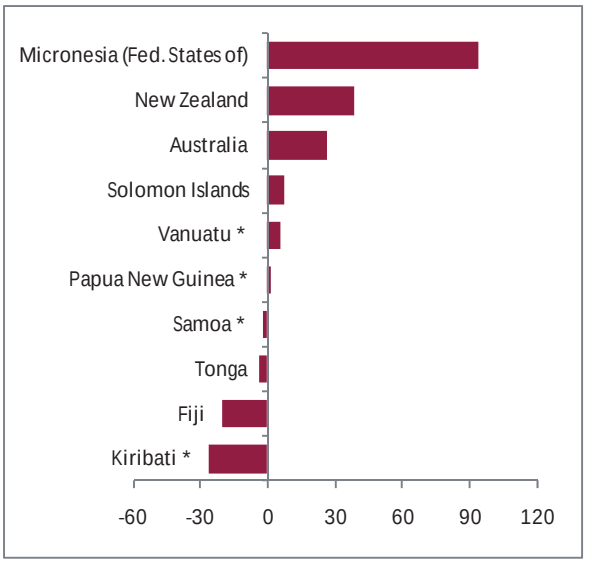
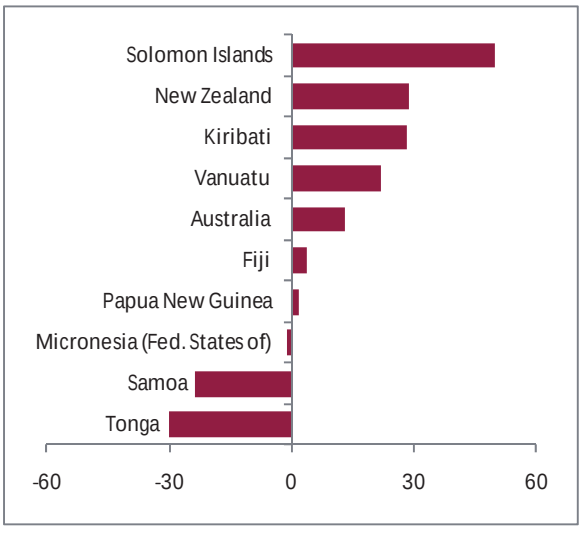


Figure 18. Changes in prison population rates in Oceania (per 100,000 of the national population) 2002-2007 (%)



Countries with the highest proportion of their prison population in pre-trial/remand detention

International standards emphasise that pre-trial/remand detention should be used as sparingly as possible and that those who are so detained should remain in such conditions for as short a time as possible. Nevertheless for a variety of reasons in many countries such prisoners constitute a high proportion of the total prison population. The following figures show for each continent the countries with the highest proportion of their prison population in pre-trial/remand detention in 2007. Where figures for 2007 are not available those for a date within two years of 2007 are substituted and asterisked.

Africa

Of the 29 United Nations member states in Africa on which the necessary information was available, the proportion of the prison population in pre-trial/remand detention exceeded 30% in 20 and in nine of these it exceeded 50% (figure 19).

Americas

Of the 32 United Nations member states in the Americas on which the necessary information was available, the proportion of the prison population in pre-trial/remand detention exceeded 30% in 21 and in 11 of these it exceeded 50% (figure 20).

Asia

Of the 21 United Nations member states in Asia on which the necessary information was available, the proportion of the prison population in pre-trial/remand detention exceeded 30% in 11 and in five of these it exceeded 50% (figure 21).

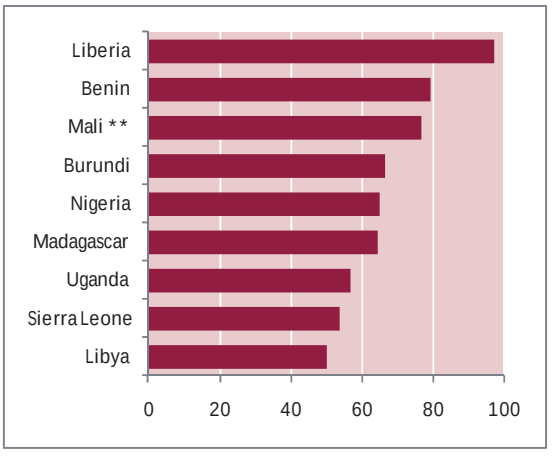
Europe

Of the 45 United Nations member states in Europe on which the necessary information was available, the proportion of the prison population in pre-trial/remand detention exceeded 30% in nine and in three of these it exceeded 50% (figure 22).

Oceania

Of the nine United Nations member states in Oceania on which the necessary information was available, the proportion of the prison population in pre-trial/remand detention exceeded 30% in only one (figure 23).

Figure 19. Highest proportion of prison population in pre-trial/remand detention - Africa 2007 (%)



** the figure for Mali relates to 2004

Figure 20. Highest proportion of prison population in pre-trial/remand detention - Americas 2007 (%)

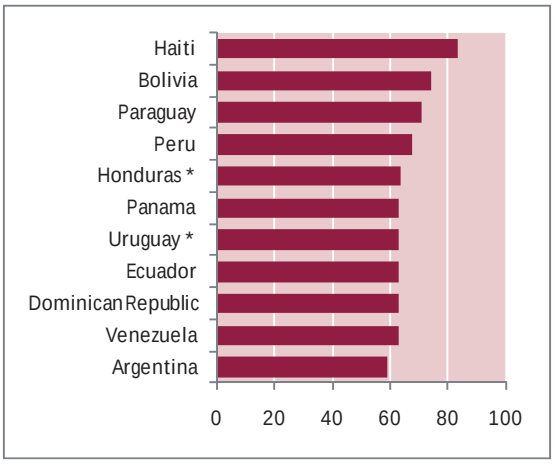


Figure 21. Highest proportion of prison population in pre-trial/remand detention - Asia 2007 (%)

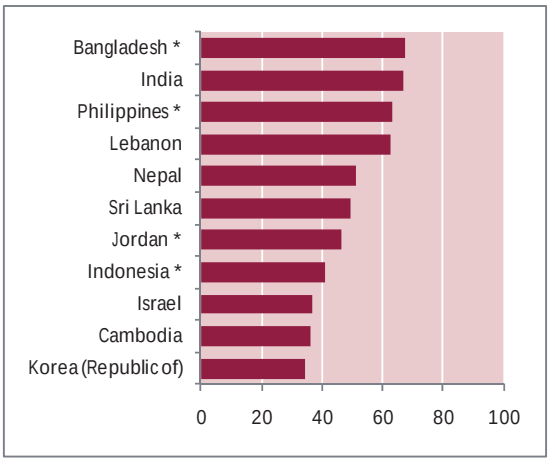


Figure 22. Highest proportion of prison population in pre-trial/remand detention - Europe 2007 (%)

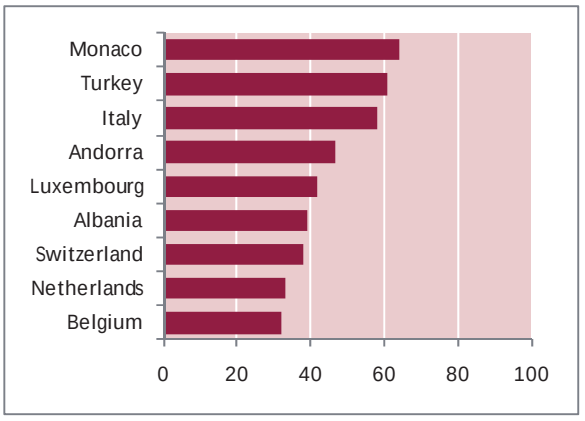
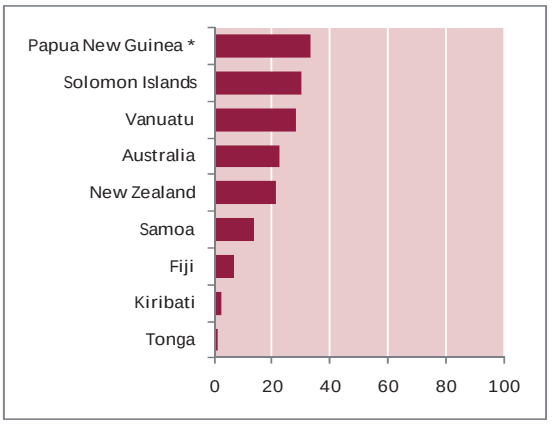


Figure 23. Highest proportion of prison population in pre-trial/remand detention – Oceania 2007 (%)



Countries with the highest occupancy levels in 2007

Occupancy rates (density levels) are an indication of the level of overcrowding in a prison system but they are an imperfect measure because they are based on the officially declared capacity levels which in some countries allow so little space per prisoner as to constitute overcrowding themselves. Furthermore prison systems that do not exceed their official capacity levels overall may nonetheless include individual prisons that are severely overcrowded. Table 1 showing the highest occupancy levels in each continent in 2007 should therefore be considered with those factors in mind. Where figures for 2007 are not available those for a date within two years of 2007 are substituted and asterisked.

Africa

Of the 24 United Nations member states in Africa on which the necessary information was available, the occupancy level exceeded 100% in 19 countries and was below 100% in five. Of the countries where the rate exceeded 100%, in 11 cases it exceeded 150% (table 1).

Americas

Of the 29 United Nations member states in the Americas on which the necessary information was available, the occupancy level exceeded 100% in 23 countries and was below 100% in six. Of the countries where the rate exceeded 100%, in 10 cases it was at least 150.

Asia

Of the 20 United Nations member states in Asia on which the necessary information was available, the occupancy level exceeded 100% in 11 countries and was below 100% in nine. Of the countries where the rate exceeded 100%, in eight cases it exceeded 130.

Europe

Of the 45 United Nations member states in Europe on which the necessary information was available, the occupancy level exceeded 100% in 21 countries and was below 100% in 24. Of the countries where the rate exceeded 100%, in eleven cases it exceeded 115%.

Oceania

Of the six United Nations member states in Oceania on which the necessary information was available, the occupancy level exceeded 100% in two countries and was below 100% in four.

Table 1. Highest occupancy rates in different regions 2007 (%)

Africa	2007
Zambia *	330.6%
Benin *	307.1%
Kenya *	284.3%
Cote d'Ivoire	218.0%
Morocco	197.6%
Tanzania *	193.4%
Uganda	192.3%
Burundi	173.4%
Malawi	172.6%
Algeria	171.8%
Ghana	171.0%

(contd.)

Table 1 (contd.). Highest occupancy rates in different regions 2007 (%)

Americas	2007
Grenada**	374.5%
Haiti**	260.2%
Bolivia	209.3%
El Salvador	207.0%
Ecuador *	202.7%
St Vincent & the Grenadines	191%
Panama	159.1%
Peru *	159.1%
Chile	155.0%
Dominican Republic	150%

Asia	2007
Bangladesh	315.6%
Pakistan	249.5%
Thailand	170.0%
Indonesia *	166.1%
Lebanon *	155.0%
Cambodia	148.8%
India	135.7%
Brunei Darussalam	132.8%

Europe	2007
Cyprus	197.4%
Greece	141.9%
Spain	136.3%
Croatia	130.6%
Georgia	129.3%
Slovenia	122.1%
Hungary	121.0%
Albania	119.4%
Poland	119.1%
Belgium	118.5%
France	118.1%

Oceania	2007
Papua New Guinea *	119.7%
Kiribati	110.0%
New Zealand	96.4%
Fiji	88.8%
Vanuatu	61.6%
Solomon Islands	57.3%

** By 2009 the occupancy rate in Grenada had fallen to 195%, while that in Haiti had risen to 335.7%.

Conclusion: main findings

The overall trend is that prison populations have grown during the decade 1997-2007.

Prison population totals rose between 1997 and 2007 in 104 of the 134 countries on which information was available (78%); they rose by over 50% in 45 countries (34%). Totals fell in 30 countries (22%); in 16 of these they fell by more than 20%.

However, prison population totals are affected by changes in the size of the national population. The best indicator of trends in overall prison population levels is the prison population rate per 100,000 of the national population.

Prison population rates rose between 1997 and 2007 in 91 of the countries studied (68%); they rose by over 50% in 30 countries (22%). Totals fell in 41 countries (31%); in 22 of these they fell by more than 20%.

There was little difference between the continents in terms of the proportion of countries showing growth in prison population rates between 1997 and 2007: in every continent there was growth in 60-75% of countries (Africa 60%, Americas 74%, Asia 74%, Europe 67%, Oceania 60%).

However, the size of the growth did vary between the continents: only 4% of African countries (2/25) recorded growth of 50% or more, compared with 26% of countries in the Americas (8/31), 39% of Asian countries (9/23), 22% of European countries (10/45) and 10% (1/10) of the countries in Oceania.

Where the prison population levels (i.e. rates) fell between 1997 and 2007 there was little difference between the continents in the size of the falls, with one exception: falls of more than 20% were recorded by about 20% of countries in Africa (5/25), Asia (5/23), Europe (8/45) and Oceania (2/10) but in the Americas falls of such a size were recorded only in 6% of countries (2/31).

Between 2002 and 2007 prison population rates rose in 90 of the 143 countries on which information was available (63%); they rose by over 25% in 36 countries (25%). Totals fell in 52 countries (36%); in 22 of these they fell by more than 20%.

There was some difference between the continents in the proportion of countries showing growth in prison population rates between 2002 and 2007: it was somewhat lower in Africa (50% - 15/30) and Asia (50% - 13/26) than in the Americas (74% -

23/31), Europe and Oceania (both 70% - 32/46 and 7/10 respectively).

Similarly, there was some continental variation in the size of growth between 2002 and 2007: growth of 25% or more was recorded in 15% of European countries (7/46) and 17% of African countries (5/30) but in 27% of those in Asia (7/26), 29% of those in America (9/31) and 30% of those in Oceania (3/10).

Where the prison population rates fell between 2002 and 2007 there was little difference between the continents in the size of the falls, again with the exception of the Americas: falls of more than 20% were recorded by 15-23% of countries in Africa (6/30), Asia (6/26), Europe (7/46) and Oceania (2/10) but in only 1 (3%) of the 31 countries in the Americas on which such information was available.

Comparison of the changes over the whole 10-year period from 1997 with those in the five years from 2002 shows that a smaller proportion of African and Asian countries showed growth between 2002 and 2007 than showed growth over the whole decade 1997-2007. No such change was apparent in the figures for the other continents.

There were sharp contrasts between the highest and lowest prison population levels in the same continent:

- In Africa the highest rates tend to be in southern Africa, and the lowest rates in western Africa .
- In the Americas many of the highest rates are in the Caribbean while the lowest rates tend to be in southern America.
- In Asia the highest rates tend to be in (former Soviet) central Asia and the lowest rates in south Asia.
- In Europe the highest rates are in the countries of the former Soviet Union, while the lowest rates tend to be in the Nordic countries.
- In Oceania the highest rates are in New Zealand and Australia and the lowest rates in Pacific island nations.

Pre-trial/remand detention levels were high in many countries. Of the 137 countries on which information was available 62 (45%) had at least 30% of their prison population in pre-trial/remand detention in 2007 and in 28 countries (20%) at least half the prison population were held in such conditions.

Pre-trial/remand detention levels were generally higher in Africa, the Americas and Asia than in Europe and Oceania:

- In Africa more than two-thirds of countries studied had over 30% of their prison population in pre-trial/remand detention and almost a third had over 50% in such conditions.
- In the Americas almost two-thirds of countries studied had over 30% of their prison population in pre-trial/remand detention and more than a third had over 50% in such conditions.
- In Asia half the countries studied had over 30% of their prison population in pre-trial/remand detention and nearly a quarter had over 50% in such conditions.
- By contrast, only one-fifth of European countries studied had over 30% of their prison population in pre-trial/remand detention and only three had over 50% in such conditions.
- Only one of the countries studied in Oceania had over 30% of the prison population in pre-trial/remand detention.

Of the 124 countries on which information was available the prison system in 76 (61%) had more than 100% occupancy in 2007 and in 27 (22%) the occupancy level was over 150%.

Occupancy levels were highest in countries in Africa, the Americas and Asia but also exceeded 100% in almost a half of European countries.

- In 79% of African countries studied the occupancy level exceeded 100% and in 46% it exceeded 150%.
- In 79% of countries studied in the Americas the occupancy level exceeded 100% and in 34% it exceeded 150%.
- In 55% of Asian countries studied the occupancy level exceeded 100% and in 25% it exceeded 150%.
- In 47% of European countries studied the occupancy level exceeded 100% and in one of them it exceeded 150%.
- In 2 of 6 countries studied in Oceania (33%) the occupancy level exceeded 100% but it did not exceed 120% in either of them.

Annex to chapter 7

Table 1. Changes in prison population totals 1997-2007 (%)

1. Largest increases in African prison population totals 1997-2007

Africa	1997-2007
Malawi	+114.7%
Rwanda *	+95.6%
Benin	+81.9%
Mozambique	+68.3%
Angola *	+61.3%
Algeria	+54.6%
Mauritius	+53.4%
Lesotho	+50.4%

2. Largest decreases in African prison population totals 1997-2007

Africa	1997-2007
Nigeria *	-28.3%
Burundi	-25.4%
Madagascar	-11.4%
Botswana *	-8.3%
Namibia *	-7.6%

3. Largest increases in prison population totals in the Americas 1997-2007

Americas	1997-2007
Brazil	+150.5%
St Kitts and Nevis	+116.8%
Uruguay *	+101.3%
Ecuador	+91.6%
Mexico	+86.1%
El Salvador	+85.5%
Haiti	+81.4%
Argentina	+76.7%
Chile	+68.2%
Paraguay	+67.1%
Peru	+63.3%

4. Largest decreases in prison pop. totals in the Americas 1997-2007

Americas	1997-2007
Trinidad and Tobago	-23.3%
Venezuela	-17.6%
St. Vincent & the Grenadines	-11.4%
Bahamas *	-0.1%

5. Largest increases in Asian prison population totals 1997-2007

Asia	1997-2007
Cambodia	+255.3%
Indonesia	+209.1%
Israel	+152.6%
Sri Lanka	+100.5%
Saudi Arabia *	+93.2%
Bangladesh	+81.0%
Vietnam *	+67.6%
Tajikistan *	+65.0%
Japan	+64.1%
Brunei Darussalam *	+58.7%
India *	+52.6%
Malaysia *	+52.6%

6. Largest decreases in Asian prison population totals 1997-2007

Asia	1997-2007
Kazakhstan	-33.8%
Singapore	-25.3%
Kyrgyzstan	-23.8%
Korea (Republic of)	-21.9%
Nepal *	-0.7%

7. Largest increases in European prison population totals 1997-2007

Europe	1997-2007
Cyprus (Republic of)	+155.1%
Monaco *	+123.1%
Macedonia (former Yugoslav Republic of)	+112.4%
Greece	+91.9%
Georgia	+82.2%
Croatia	+77.8%
Slovenia	+77.7%
Serbia *	+74.3%
Luxembourg	+68.2%
Spain	+56.9%
Poland	+53.0%
Bosnia and Herzegovina	+51.4%

8. Largest decreases in European prison population totals 1997-2007

Europe	1997-2007
Armenia	-59.7%
Latvia	-36.5%
Romania	-34.9%
Lithuania	-33.8%
Andorra *	-31.8%
Ukraine	-29.2%
Belarus *	-22.9%
Azerbaijan *	-21.3%
Portugal	-20.8%

9. Changes in prison population totals in Oceania 1997-2007

Oceania	1997-2007
Micronesia (Federated States of)	+95.9%
New Zealand	+54.5%
Solomon Islands	+43.5%
Australia	+42.3%
Vanuatu *	+38.2%
Tonga	+14.7%
Papua New Guinea *	+5.9%
Samoa *	+5.7%
Kiribati *	+2.2%
Fiji	-11.4%

Where figures for 2007 are not available those for a date within two years of 2007 are substituted and asterisked.

Table 2. Countries with the highest and lowest prison population rates (per 100,000 of the national population) 2007

1. Highest prison population rates in Africa

Africa	2007
South Africa	348
Botswana	329
Seychelles	270
Swaziland	247
Libya	209
Rwanda	202
Namibia	194
Morocco *	167
Algeria	161
Mauritius	153

2. Lowest prison population rates in Africa

Africa	2007
Nigeria	28
Mali **	33
Sierra Leone	33
Angola *	52
Senegal	53
Ghana	58
Mozambique	73
Benin	76
Malawi	83
Sao Tome e Principe	83

** the figure for Mali relates to 2004

3. Highest prison population rates in the Americas

Americas	2007
United States of America	762
St Kitts & Nevis	588
Belize	460
Bahamas	422
Grenada	408
Barbados	384
Dominica	351
Panama	339
St Vincent & the Grenadines	323
Guyana	283
Antigua & Barbuda	282
Trinidad & Tobago	270
Chile	265
El Salvador	235
Brazil	219

4. Lowest prison population rates in the Americas

Americas	2007
Guatemala	54
Haiti	71
Venezuela	76
Bolivia	80
Paraguay	98
Nicaragua *	107
Canada	116
Colombia	128
Argentina	132
Ecuador	134

5. Highest prison population rates in the Asia

Asia	2007
Kazakhstan	366
Israel	313
Kyrgyzstan	283
Singapore	267
Thailand	253
Mongolia *	250
Turkmenistan *	224
Iran	222
Saudi Arabia *	178
Lebanon	159
Tajikistan	149
Malaysia *	147

6. Lowest prison population rates in Asia

Asia	2007
Nepal	24
India	32
Pakistan	52
Indonesia	56
Bangladesh	57
Japan	65
Cambodia	71
Korea (Republic of)	96
Vietnam	107
Philippines *	108

Where figures for 2007 are not available those for a date within two years of 2007 are substituted and asterisked.

7. Highest prison population rates in the Europe

Europe	2007
Russian Federation	613
Belarus *	468
Georgia	417
Ukraine	323
Estonia	322
Latvia	287
Moldova	242
Lithuania	239
Poland	230
Azerbaijan *	229
Czech Republic	182
Luxembourg	155

8. Lowest prison population rates in Europe

Europe	2007
Andorra *	37
Iceland	37
Bosnia	62
Slovenia	66
Denmark	67
Finland	67
Norway	73
Sweden	74
Ireland	76
Monaco	76
Switzerland	76
Italy	77

9. Prison population rates in Oceania

Oceania	2007
New Zealand	188
Australia	130
Fiji	112
Samoa	99
Micronesia	89
Kiribati	86
Tonga	74
Papua New Guinea	61
Vanuatu	56
Solomon Islands	42

Where figures for 2007 are not available those for a date within two years of 2007 are substituted and asterisked.

Chapter 8 – Crime and criminal justice statistics challenges

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Abstract

An efficient system for the collection, analysis and dissemination of information on crime and criminal justice is a prerequisite for effective crime prevention. Over the past few years much emphasis has been placed on issues of measurement of crime at the international level. Quantitative information on crime and criminal justice remain scarce and mostly limited to the developed world. Furthermore, the availability of internationally comparable statistics is very limited. Different sources may provide slightly different information, thus increasing the confusion of the users. There is still no unique reliable source of international crime statistics which could guarantee simple use and comparability of data. This is a problem which may never find a solution because of the serious challenges of measuring hidden phenomena: what is measurable is only what comes to light.

Introduction

Administrative statistics on recorded crimes are the most readily available type of data. Virtually all law enforcement systems keep records of crimes committed in their respective jurisdictions. If these data are regularly published, they can also be used to monitor trends in the same jurisdiction over time. Nevertheless, there are well known challenges in straightforward comparisons of administrative data in the field of criminal justice. Victimization surveys not only provide information that supplements and complements administrative statistics, but may be easier to compare across countries. This chapter will highlight the current challenges in the collection and analysis of international statistics on crime and criminal justice, with particular reference to the difficulties faced by developing countries in producing reliable statistics.

The difficulty or even impossibility to assess the crime situation depends on the lack or insufficiency of reliable relevant statistics. There are three prerequisites to the development of a solid system of crime and criminal justice statistics:

a) The availability of specific data collection methods and instruments, adapted to the local context;

b) The availability of technical expertise and/or equipment to carry out data collection and analysis; and

c) The commitment and motivation of relevant government agencies to introduce a strategic approach to the collection and analysis of crime and criminal justice statistics.

Lack of resources may often be considered the main obstacle to the collection and analysis of statistics. However, experts often suggest that lack of training, lack of commitment either from the government or heads of responsible institutions, lack of proper legislation, fear of misuse of the data or insufficient information on the good use that can be made of statistics may equally represent serious obstacles. Participants in a workshop on crime statistics in Addis Ababa in 2008 (UNODC-UNECA 2008) indicated a number of issues they perceived as priorities to be addressed in order to improve crime and criminal justice statistics in their respective countries (figure 1).

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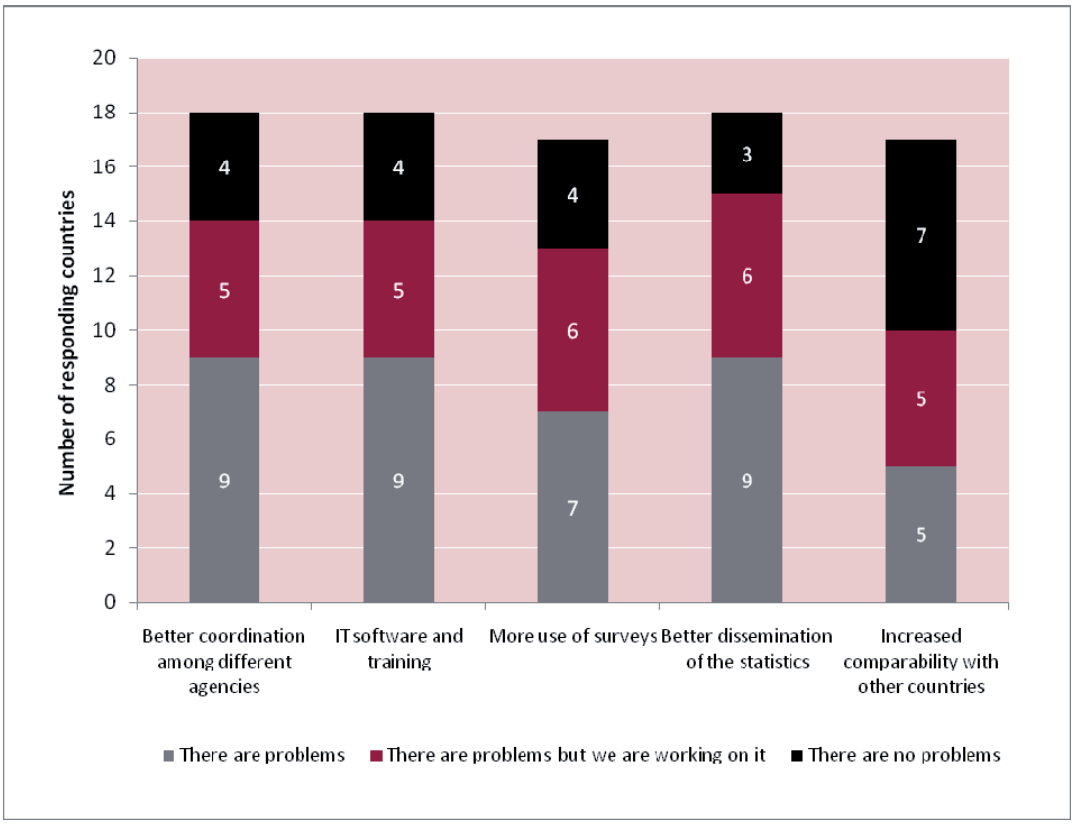
Issues such as better coordination among agencies, better dissemination of statistics, and improved IT software and provision of relevant training were indicated as problems to be urgently addressed. Respondents also mentioned the need to increase the use of surveys and comparability with other countries. All participants in the Addis workshop also indicated their willingness to have a forum where to exchange their experiences with other experts in the region.

Furthermore, the scattered information produced by a variety of different sources, the difficulty of having more than one source available to reconcile and verify the data, the irregular frequency of data collection, the lack of feedback given to communities in which surveys are carried out, the poor follow up given to recommendations, and the scarce sharing and dissemination of information are all problems shared by many countries in the world.

Figure 1. Priority needs for improving crime and criminal justice statistics as indicated by African countries (Number of responding countries - Source: UNODC-UNECA, 2008)



National definitions for international problems

Which type of data is required to produce the particular crime information needed by the final users to measure crime trends? The strict measurement of crime cannot be separated from the response to crime, i.e. the enforcement of laws defining crime.

For the purpose of international comparability, it is important to ensure that data reflect shared concepts and clear definitions. The type of offences included in the core UN-CTS are generally included in national statistical classifications. Indeed, most countries are able to provide police statistics on general categories like homicide, robbery, theft, assault and rape. When more details on the circumstances of the crime are requested, it may be more complicated for countries to meet the requirements for international reporting. As an example, whilst more than 90% of countries responding to the UN-CTS are able to provide data on intentional homicides and approximately three quarters to indicate the relevant number of persons arrested, only two-thirds can provide information on homicides committed *with firearms.*

Nevertheless, in order to advance with international comparisons of crime statistics, it is important to gain knowledge on a number of agreed upon and stable indicators. Different

countries may have different priorities, which may result in different ways to collect statistics. Countries may however need to compare data on their respective priority issues at the international level.

Victimization surveys of general population and businesses, as well as self-report surveys, are widely accepted as important tools to understand crime problems and trends. They also represent a promising area for the development of internationally comparable indicators. The UNODC-UNECE Manual on Victimization Surveys has recently been finalized (UNODC-UNECE 2010). The Manual was drafted by a Task Force composed of experts from seven countries and five international institutions. It covers a wide range of issues related to planning and implementing a victimization survey. The Manual deals with ways to analyse, present and interpret data with a view to communicating key findings and results. It is addressed in particular to countries that are in the process of developing victim survey programmes for the first time and have limited experience in this field. It is expected that the Manual will assist in the carrying out of victimization surveys, which may as a result provide important information on a wide range of issues that are best measured through population-based survey.

The mix of administrative statistics and survey-based indicators is considered the best way to go about assessing crime. The international community may also establish priorities in the collection and analysis of different crime and criminal justice indicators. The identification of core indicators for selected crimes and components of the activity of criminal justice systems is also a priority for UNODC. Part of this work is being conducted in collaboration with international and regional organizations.

An interesting approach is the establishment of sets of regional indicators. For example, a recent initiative promoted by the Institute CISALVA, Universidad del Valle of Cali, Colombia, with the support of the Interamerican Development Bank, consists of the development of a system of regional indicators to monitor urban safety and security in South American countries. The system of indicators includes administrative and survey data and represents an interesting sample of 'core' indicators for the comparison across countries. Table 1 shows the proposed indicators and indicates which are included in the UN-CTS.

An interesting aspect of the CISALVA project is the work done in identifying national sources in each country for each indicator, which can be based on administrative statistics produced by the criminal justice system or the result of population-based surveys. Since a number of these indicators are among those included in the core UN-CTS, their use at the regional level is likely to strengthen the commitment and motivation of countries to provide relevant statistics.

Table 1. Proposed regional indicators for urban safety, South America, and inclusion in the UN-CTS

Type of data	Indicator	Included in UN-CTS
Administrative	Homicide rate per 100,000	Yes
Administrative	Rate of traffic-related deaths per 100,000	
Administrative	Suicide rate per 100,000	
Administrative	Rate of homicide with firearm per 100,000	Yes
Administrative	Rate of simple theft per 100,000	Yes
Administrative	Rate of robbery per 100,000	Yes
Administrative	Rate of kidnapping per 100,000	Yes
Administrative	Amount of seized drugs per year (Kg)	
Administrative	Percentage of breaches to traffic regulations	
Survey	Perception of conflict resolution (percentage of survey respondents who feel likely that conflicts will be solved)	
Survey	Percentage of survey respondents who justify the use of violence, by reason	
Survey	Percentage of survey respondents who trust institutions	
Survey	Fear of crime (percentage of survey respondents who feel that they may become victims of crime in the near future)	
Survey	Feelings of insecurity (percentage of survey respondents feeling insecure at home or in their neighbourhood)	
Administrative	Rate of (police) recorded sexual offences per 100,000	Yes (rape)
Survey	Prevalence of sexual victimization	
Survey	Rate of child maltreatment (per 1,000 persons aged 18 or below)	
Survey	Prevalence of domestic violence	
Survey	Rate of (police) recorded domestic violence per 100,000 population	

Source: CISALVA, 2009 (translated by UNODC)

At the European level, the European Commission, through the work of the Expert Group on policy needs for data on crime and criminal justice (and relevant sub-groups) as well as a parallel group established at the Statistical Office of the European Commission (Eurostat), has promoted the collection of administrative statistics on a set of indicators (total crime, homicide, violent crime, robbery, domestic burglary, theft of motor vehicle, drug trafficking, prison population and number of police officers), which are regularly published(Eurostat 2009). Furthermore, as a first result of the ongoing exercise on assessing policy priorities for crime statistics at the regional level, Eurostat has started the collection of statistics on money-laundering, based on a set of 24 selected indicators.

Work on a classification of criminal offences for statistical purposes is being carried out at the EU-level and as a collaboration between UNODC, UNECE and the Conference of European Statisticians (CES), through a Task Force established in 2010. This includes the following broad activities: (i) developing a set of principles around international crime classification systems for statistical use; (ii) undertaking a case study of defining and classifying selected offences; and (iii) working with the European Commission on the current EU level classification project.

Another activity at the EU level is the advancement of research aimed at developing indicators for the effectiveness of criminal justice systems and juvenile criminal justice.

A two year project (2009-2011) coordinated by UNODC, in partnership with the European Institute for Crime Prevention and Control affiliated with the United Nations (HEUNI), the Joint Research Centre on Transnational Crime (Transcrime), and the International Centre for Migration Policy Development (ICMPD), funded by the European Commission, deals with the 'Development of monitoring instruments for judicial and law enforcement institutions in the Western Balkans'. The aim of the project is to bring national statistics

mechanisms in justice and home affairs institutions towards compliance with relevant EU and international standards and good practices, with the overall objective to strengthen the response to crime and corruption.

A further important example of ongoing statistical work at the UN is the development of indicators on violence against women. (United Nations 2008) The Friends of the Chair, in their report to the Statistical Commission, recommended 'both the use of statistical surveys and administrative records, depending on the form of violence experienced by women' and proposed a core set of statistical indicators for measuring violence against women, as follows:

i) Total and age specific rate of women subjected to physical violence in the last 12 months by severity of violence, relationship to the perpetrator and frequency;

ii) Total and age specific rate of women subjected to physical violence during lifetime by severity of violence, relationship to the perpetrator and frequency;

iii) Total and age specific rate of women subjected to sexual violence in the last 12 months by severity of violence, relationship to the perpetrator and frequency;

iv) Total and age specific rate of women subjected to sexual violence during lifetime by severity of violence, relationship to the perpetrator and frequency;

v) Total and age specific rate of ever-partnered women subjected to sexual and/or physical violence by current or former intimate partner in the last 12 months by frequency;

vi) Total and age specific rate of ever-partnered women subjected to sexual and/or physical violence by current or former intimate partner during lifetime by frequency;

vii) Total and age specific rate of women subjected to psychological violence in the past 12 months by the intimate partner;

viii) Total and age specific rate of women subjected to economic violence in the past 12 months by the intimate partner;

ix) Total and age specific rate of women subjected to female genital mutilation.

The outcome of the current work will result in a strong mandate for the collection of data on the above indicators in all Member States.

International data collection

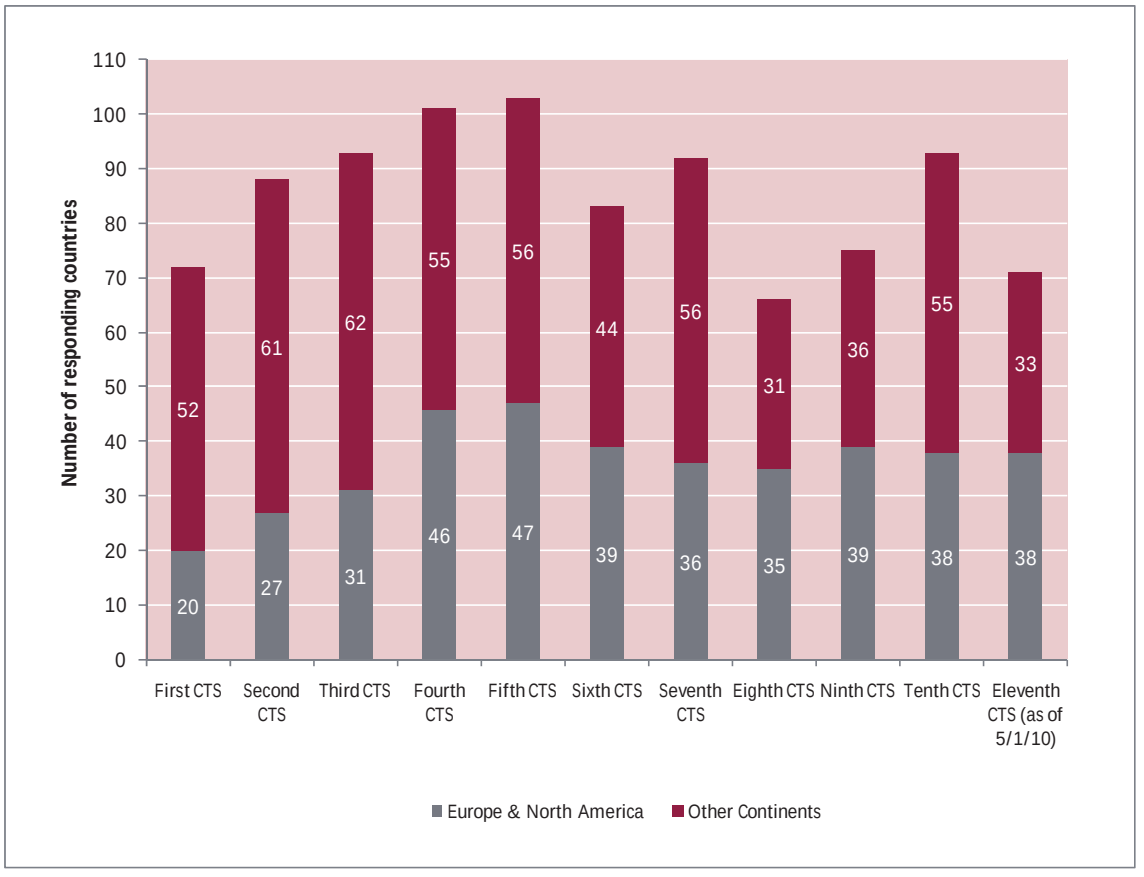
UNODC regularly collects statistics on crime and criminal justice through the *United Nations Survey of Crime Trends and the Operations of Criminal Justice Systems* (UN-CTS). Regular collection of information on crime trends and the operations of criminal justice systems by the United Nations started in the 1970s in pursuance to a request from the General Assembly (GA Res. 3021, XXVII, 1972). A detailed questionnaire for data collection was developed in the mid-70s and the UN-CTS started in 1977, aimed at collecting police and judicial statistics, virtually from all Member States. Ten surveys have been concluded so far, representing data for the period 1975-2006. The Eleventh Survey, sent to Member States in 2009, is ongoing (UNODC 2009).

The UN-CTS consists of a questionnaire dealing with information from the police, prosecution, courts and prisons. It is sent to all UN Member States through diplomatic (Permanent Missions, Ministries of Foreign Affairs) and statistical channels (National Statistical Offices, nationally appointed focal points for crime statistics). Over the years, replies to the UN-CTS were received from a variable number of countries (see figure 2). After reaching a peak in 1996 with the Fifth UN-CTS (103 responses received), a decline followed until 2003, which represented the minimum with only 66 responding countries. Since then, the Ninth and Tenth UN-CTS showed a marked increase. Although the overall rate of response remains quite low, (50% approximately at the Tenth UN-CTS), efforts towards better coordination at the central level and to provide technical assistance to requesting countries have proven effective. It can be observed that the upwards trend in the Tenth UN-CTS was mostly determined by countries outside Europe and North America, which now represent the majority of respondents (56 versus 38).

Whilst there have been a number of recent initiatives to improve crime and criminal justice statistics in recent years, including the emergence of crime, violence and delinquency observatories, the overall availability of crime and criminal justice statistics remains scarce, at the national, regional and international level.

Many countries still face significant challenges in compiling, processing and disseminating relevant crime and criminal justice statistics in a systematic and sustainable way. The international community has recognized the importance of building the capacity of member states to collect and report such information. Such capacity building must involve assistance not only to the process of generation and collection of criminal justice statistics, but also in institutional reporting at the national, regional and international levels, including systematic participation in the UN-CTS.

Figure 2. Number of member states responding to the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS), by main regions (1978-2010)



UNODC, in cooperation with relevant partners has begun strengthening its capacity to support countries in this respect, with the aim of increasing the quality, availability and international comparability of crime and criminal justice information. The establishment of a network of national contact points for crime and criminal justice statistics is also an important step in achieving sustainable reporting of crime and criminal justice data at the international level. Such a network should include contact focal points in national statistical offices, law enforcement, prosecution, courts and national penal administrations. For specific crime issues, including corruption and forms of organized crime, national focal points should also be established on a thematic basis as in the case of the informal EU Network of National Rapporteurs or Equivalent Mechanisms on Trafficking in Human Beings. UNODC has taken concrete steps in this direction, including through the development of expert networks on a regional basis. Experience in the Africa region within the 'Data for Africa' initiative suggests that national single points of contact can represent an effective approach to increasing country responses and stimulating discussion on issues of mutual interest among countries in the same region. The number of African countries responding to the Eleventh UN-CTS (2007-2008), for example, significantly increased compared to the Tenth UN-CTS (2005-2006) as at the time of writing (see figure 3).

Analysis of missing responses within the returned questionnaires (figure 4) shows that eighty percent of the responding countries were able to provide data on more than half of the

questions included in the Tenth UN-CTS questionnaire. This was slightly less than in the Ninth UN-CTS (83%), but it should be noted that many more developing countries responded to the Tenth UN-CTS and some of them still have limited capacity to provide good quality information. Indeed, the percentage of countries responding to less than a quarter of the questions went down to only 9%.

Figure 3. Percentage of member states responding to the Tenth and Eleventh United Nations Surveys of Crime Trends and Operations of Criminal Justice Systems (UN-CTS), by continent

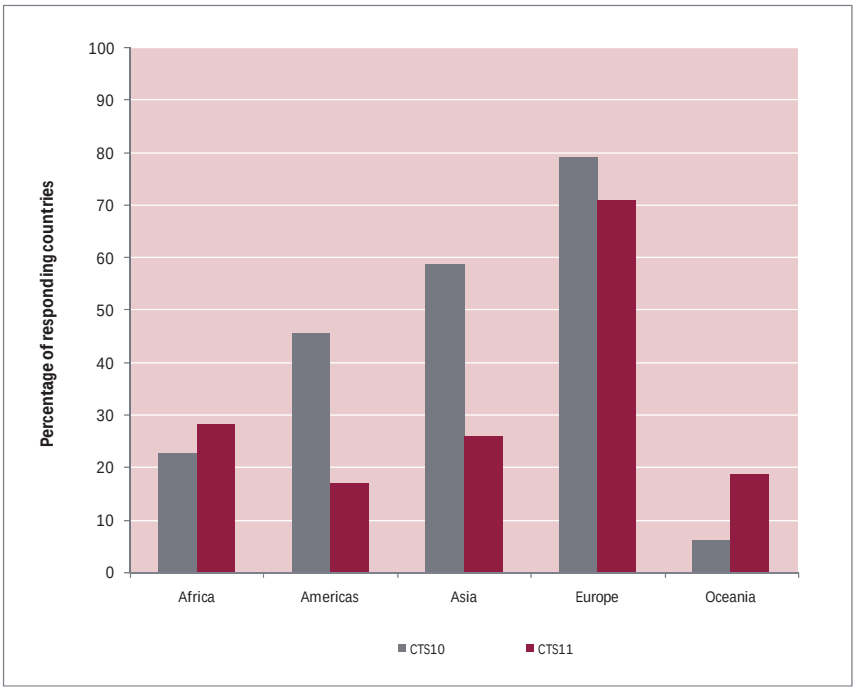


Figure 4. Overall rates of response to questionnaire variables in the Ninth, Tenth and Eleventh United Nations Survey on Crime Trends and Operations of Criminal Justice Systems (UN-CTS)

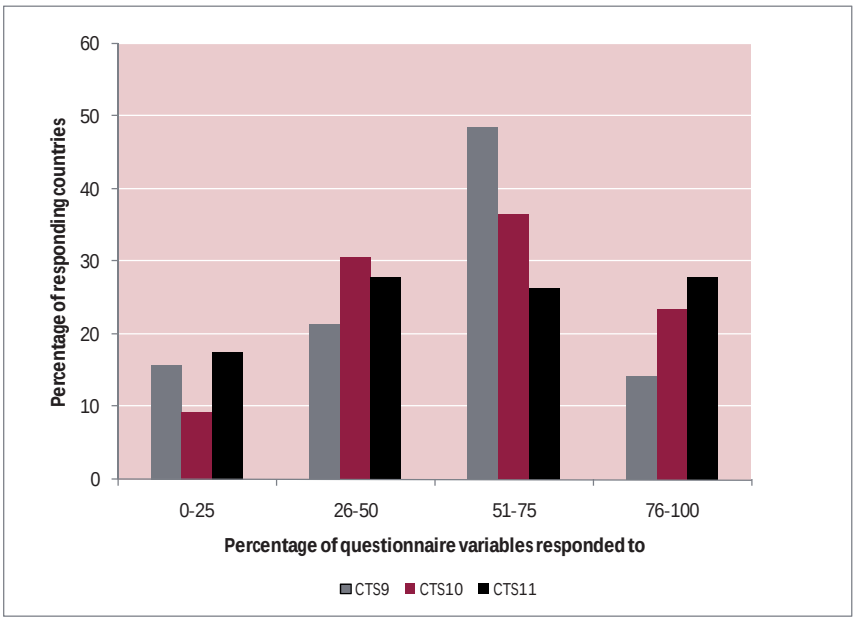
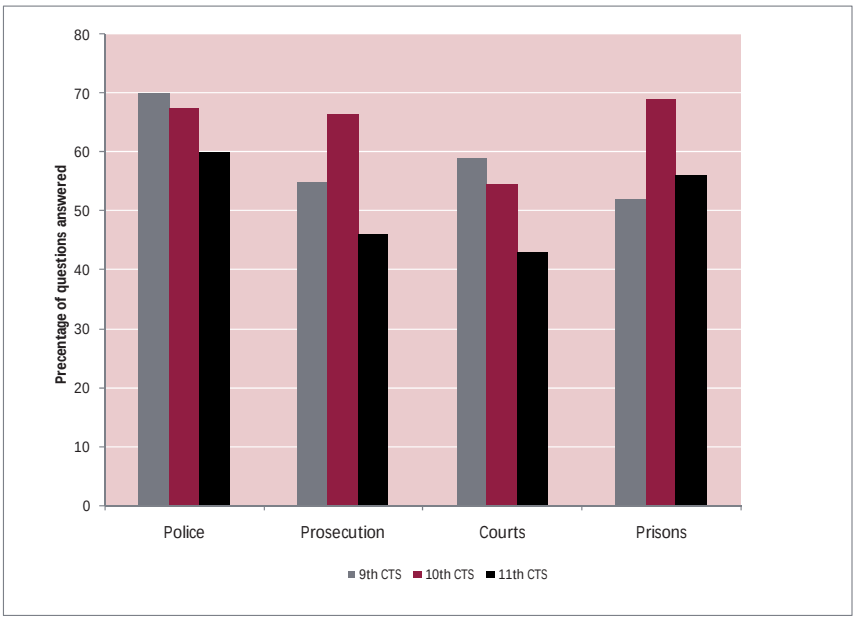


Figure 5. Percentage of numerical variables completed – Ninth, Tenth and Eleventh United Nations Survey on Crime Trends and Operations of Criminal Justice Systems (UN-CTS)



When considering which parts of the questionnaire were completed in the Tenth UN-CTS, it should be noted that 21 countries did not return either the prosecution or the courts section, 15 countries did not provide prison statistics and only 7 countries did not report police data. When looking only at the filled questionnaires, it can be observed that the percentage of numerical items completed by countries was quite high, with the majority of countries being able to respond to more than half of the questions (figure 4).

It was mostly developing countries that were unable to complete the questionnaire, thus indicating the need for further work to be done to assist them in producing crime and criminal justice statistics. Lack of information is not only an obstacle to the formulation of evidence-based policies and crime prevention strategies, but also represents a limit to the possibility to access international development aid.

Conclusion and way forward

UNODC will continue to work to improve the availability and quality of crime and criminal justice statistics at national and international level. In particular, it will, subject to funding, continue to support countries in building institutional capacity to conduct victimization surveys with the guidance of relevant parts of the Manual on Victimization Surveys. It will also continue its ongoing work in the area of corruption surveys in countries that request assistance in establishing baseline data and monitoring trends regarding corruption-related behaviours.

Furthermore, work will continue towards a better understanding of global and regional homicide patterns through research on available homicide statistics from multiple sources. Following the publication of an international homicide statistics dataset in December 2008 (UNODC 2008), UNODC published updated figures early in 2010, drawing on multiple sources for the years 2003-2008 (UNODC 2010).

UNODC homicide statistics are intended to represent a starting point for further research and require development and updating as more timely information becomes available. Nonetheless, within the framework of initiatives such as the Geneva Declaration on Armed Violence and Development, such data sources play an important role in forming the basis of indicators for measuring the nature and extent of non-conflict related armed violence. In response to the need for a greater understanding of armed violence, UNODC has also carried out recent research on the structure and underlying causes of intentional homicide in selected regions, in addition to methodological approaches to the measurement

of criminal justice system performance in the case of crimes involving armed violence.

As a follow up to the 2006 open-ended expert group on ways and means to improve crime data collection, research and analysis, UNODC organized an expert group meeting on crime statistics (Vienna, 28-30 January 2009). Following the subsequent ECOSOC Resolution 2009/25 (entitled "Improving the collection, reporting and analysis of data to enhance knowledge on trends in specific areas of crime), UNODC established an open-ended intergovernmental expert working group to prepare recommendations on the improvement of tools for the collection of relevant crime data, in particular, the UN-CTS. At the kind invitation of the Government of Argentina, the first meeting of the open-ended intergovernmental expert working group was held in Buenos Aires from 8-10 February 2010.

The meeting based its work on the considerations contained within Resolution 2009/25, including the need to simplify and improve the reporting system of the UN-CTS in order to encourage more Member States to report, in a coordinated and integrated way, on their efforts, achievements and challenges in specific areas of crime. The meeting resulted in a set of practical recommendations for the advancement of work in the collection and analysis of international crime and criminal justice statistics. A key recommendation was to revise the UN-CTS questionnaire in order to improve the response rate, produce more timely data and minimize the reporting burden and complexity for Member States.

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HEUNI

INTERNATIONAL STATISTICS on CRIME AND JUSTICE

The objective of this report is to show users of international crime data what they could learn from these, and provide guidance as to restrictions, pitfalls and strengths of the unique set of data that is now available thanks to the countries that have responded to the United Nations Surveys of Crime Trends and Operations of Criminal Justice Systems. The present report, prepared in partnership of HEUNI and the UNODC, for the first time pulls together global responses of the surveys.

The report comprises eight chapters. They are designed to deal with all central issues addressed in the surveys. First, police-recorded crime is discussed, with separate chapters on homicides (Chapter 1), other police-recorded crimes (Chapter 2), and drug-related crime and drug trafficking (Chapter 3). Also, complex crimes are analysed, such as organised crime, and trafficking in human beings (Chapter 4). Such offences have played a marginal role in traditional crime statistics, and in order to improve the relevance of the data on such offences, new solutions need to be developed. Chapter 5, shifting to the next stage of the criminal justice system, presents data on responses of the criminal justice system, including an innovation where attrition issues are being discussed. A parallel issue to responses of the criminal justice system are resources and performance. These are discussed in Chapter 6 where also a discussion on the punitivity of criminal justice systems is included. Next, a presentation on prison populations of the world closes the analysis of criminal justice data. The last chapter finally discusses challenges with crime and criminal justice statistics, arguing for the importance of further improvements in the area.

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