

Legal infrastructure of the Netherlands in international perspective

Crime control

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Foreword

One of the core responsibilities of the Minister of Justice is to provide an adequate legal infrastructure in the Netherlands. This encompasses a legal system - a set of rules, a judicial organisation and the implementation of those rules - that is tailored to the needs of society. The importance of this infrastructure to society and to the economy can scarcely be overestimated, and attention to the legal infrastructure is definitely on the rise. Moreover, the Netherlands is becoming ever more strongly involved in many ways in international coordination and development of legal infrastructures, both in European and in broader contexts.

Altogether, this is more than sufficient reason to expand our understanding of the Dutch legal infrastructure in an international perspective. This report is a first attempt at international comparison of the Netherlands with nine reference countries in this field. The comparison is of an exploratory nature and is limited to the aspect of crime control.

Despite the many limitations inherent in an international comparison and one that is still in an exploratory phase, the findings are of interest and they are relevant for policy-particularly in their possible implications for overall strategy in respect of crime control in the Netherlands.

Comments on the report are very much invited, and will help us to improve future editions.

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Key findings

This international comparison focuses our attention on manifest differences between the Netherlands and nine reference countries in the problem of crime, and the methods and financial means used to control crime. But it is important to note that the study is of a general and exploratory nature. Further limitations arise from the limited availability, comparability and reliability of data. This means it is not possible to formulate policy measures directly on the basis of this study. Further analysis and more research are needed of striking differences to establish whether policy changes are warranted. With this reservation, the most important findings can be summarised as follows.

In comparison with nine reference countries, the Netherlands has a substantial amount of crime, with the emphasis on less serious offences.

The Netherlands occupies a middle position in respect of:

- Serious crime against persons. Only the situation in respect of car thefts is markedly favourable.
- Violent crime against business (including bank robberies).

The Netherlands distinguishes itself in a positive sense primarily by a low level of corruption in the public sector:

The Netherlands distinguishes itself in a negative sense by:

- A very large number of less serious crimes against persons and against business.
- A greater degree of violence, including fatal violence, in the (larger) cities and urban areas.

Some more tentative conclusions on account of data restrictions:

- There is extensive international trafficking in drugs, while addiction remains around average;
- There is a great deal of financial and economic crime.

An important reason why the crime profile of the Netherlands is different from the international profile seems to be the opportunity structure (opportunities for crime), in particular:

- The level of urbanisation.
- The volume of international flows of goods, services and financial transactions.

The ample opportunity structure in the Netherlands is not likely to improve, but rather to worsen, primarily as a result of ongoing internationalisation. Because of the specific Dutch opportunity structure, the Netherlands will have to make greater efforts towards prevention and repression than the reference countries if it is to achieve the same crime level as these countries.

The fact that the crime profile in the Netherlands differs from the international profile cannot be explained by factors that encourage crime (factors specific to individuals that incite them to crime):

- Age composition of the population, juvenile unemployment and alcohol consumption are average.
- The low overall unemployment rate, little poverty and low rate of firearm possession should sooner lead to less crime than in the other countries.

Government policy has a large influence on these socio-economic factors. Such policy contributes indirectly to the prevention of crime. However, most of these factors cannot be viewed as stable, and require permanent monitoring.

A fact that does play a role is that little is done in the Netherlands, in comparison to the reference countries, in the way of prevention by private individuals and organisations:

- Few preventive measures are taken by private citizens or by business.
- There is a relative small number of private security officers

In relation to the results achieved, comparison of the level of government spending on crime control and the allocation of funds yields a number of remarkable findings for the Netherlands:

- The per capita level of expenditures to control crime (the entire criminal justice system) is average for the countries studied. In relation to the volume of crime (total number of crimes against persons), however, expenditures are low.
- The figures give the impression that the Dutch police force is small in relation to total expenditures. Furthermore, there seems to be a strong negative trend in the percentage of crimes that are solved, and the confidence of the public in the police is small.
- The small number of public prosecutors in relation to total expenditures, and in relation to total staffing, is striking. The expenditures per solved case also seem to be relatively high.
- On a per capita basis, the funds allocated by the Netherlands for the administration of justice (the judiciary), and thus for the administration of criminal justice, are low.
- The Netherlands opts for a humane prison system in comparison with most other countries studied, in accordance with the standards of the Council of Europe. One of the effects of this choice is the relatively high cost.

There is no unequivocal answer to the question how government performance in the control of crime compares to that of the other countries. On the one hand, in view of the ample opportunity structure and the relatively low level of efforts made by the private sector, the organisations charged with law enforcement perform very reasonably on the funding they receive, which is at an average level per capita. In particular, the relatively small number of serious crimes against persons supports this view. On the other hand, it can be argued that, in view of the relatively high level of overall crime, the joint efforts of the public and private sectors are apparently not sufficient to bring crime to the average level of the reference countries.

Restrictions as to information available:

This exploratory study also aims to make an inventory of the availability and usability of data for purposes of international comparison. Specific problems are:

- Limited availability of information on the extent to which businesses and other societal organisations are victims of crime.
- Overriding absence of estimates of the volume of financial and economic crime.
- Limited information on illegal markets such as the narcotics market.

- Lack of international coordination in definition of terms and data collection, despite important initiatives in this direction by the UN and the Council of Europe. This primarily makes itself felt when comparing aspects such as funding and the performance of the criminal justice system, and results in a less accurate comparison.

In this report the Netherlands is compared with the European countries of Austria, Denmark, France, Germany, Sweden and the United Kingdom, and outside Europe, with Australia, Canada and the USA.

The reference countries are comparable societies in both economic and socio-cultural respects and basically have good legal systems. The choice of countries was limited by the availability of data.

Summary

In this report, the performance of the public sector in the Netherlands in its efforts to control crime are placed in an international perspective. Using quantitative data, the report aims to make a link between the nature and volume of crime and the efforts of the public sector to fight crime. Account is taken of autonomous or semi-autonomous environmental factors such as the opportunity structure and the activities of the private sector to fight crime.

The objective of this international comparison is the exploration of:

- the performance of the public sector in fighting crime;
- areas in which there is room for improvement;
- threats;
- promising routes toward improvement.

An aspect inherent in international comparisons is that they primarily focus on manifest differences between countries in areas such as issues, methods, and funding. Policy measures cannot simply be promulgated on the basis of such differences. Further analysis and research will first have to show whether policy innovation on these points is indeed possible.

Schematically, the volume of crime can be seen as the result of the opportunity structure (the presence of targets of crime) and factors that encourage or inhibit crime (facilitating factors: factors specific to individuals that incite them to crime) on the one hand,

and private and public measures against crime on the other. For an international comparison of public sector performance, it is too simplistic to show a relationship between crime and the efforts of the government. Attention must be devoted to the entire complex of factors. In principle, the Netherlands is compared with nine reference countries.

It should be remarked that the very nature of the issues, as well as the use of different definitions, mean that the availability, comparability and reliability of data are not always satisfactory. Countries have been omitted from the tables if data was not available for them. This summary will emphasise aspects on which the Netherlands differs from the other countries studied.

Nature and volume of crime

The Netherlands has a substantial crime rate, and distinguishes itself primarily in that it has a very large number of less serious crimes the victims of which are individuals (table S.1). Even leaving out bicycle thefts, the Netherlands has the largest volume of less serious crime among the countries studied. The Netherlands occupies a middle position as to serious crimes against persons. This applies to the various categories within this group, with car thefts as a favourable exception.

Table S.1 **Crimes against persons per 100,000 inhabitants according to the International Crime Victims Survey, 1995**

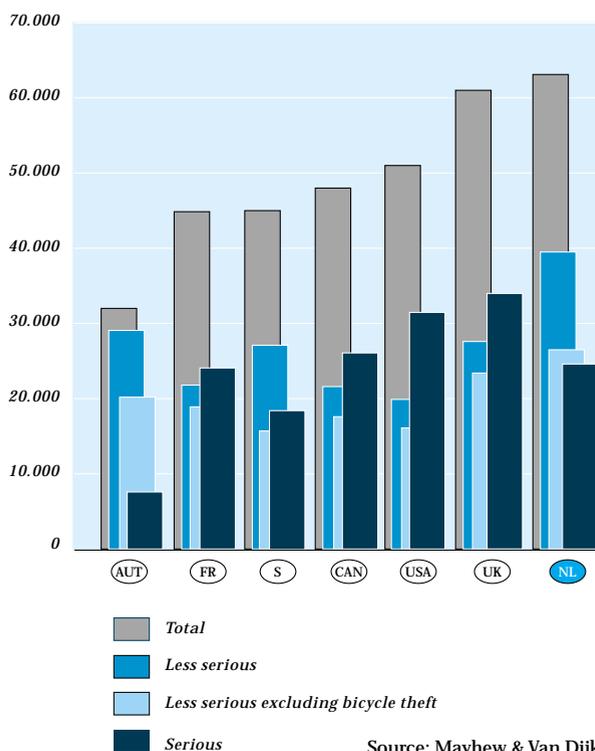


Table S.2 **Percentage of retailers that were victims of crime in 1994**

	attempted burglary	theft	vandalism
Germany	28.7	63.5	9.6
Australia	29.4		23.0
France	31.6	61.3	8.9
Netherlands	34.7	66.4	18.1
UK	36.9	61.7	22.0

Source: Van Dijk & Terlouw, 1996

The scant data available on crime against business yield a similar, although less pronounced, picture. The retail trade in particular has to contend with considerable but generally less serious crime (table S.2). The Netherlands occupies a middle position as to bank robberies, a form of serious violent crime against business.

The fact that there is much violence in urban areas is cause for concern. The situation in the Netherlands is comparable to that in the United Kingdom (table S.3). The situation in the cities is unfavourable in respect of fatal violence as well (table S.4).

The relatively unfavourable situation in the Netherlands seems to be developing into a drawback for international competition. The Global Competitiveness Report 1999 reckons the weak protection of personal safety to one of the three major competitive disadvantages of the Netherlands (WEF, 1999).

As to fraud and other forms of financial and economic crime, it must first and foremost be observed that reliable data are scarce.

However, the little information available does arouse the impression that the volume of this category of crime is relatively high in the Netherlands. Considering the large economic interests which are at stake, there is plenty of reason to gain more insight into the magnitude of the problem.

As to drug-related issues, it is striking that addiction is no higher in the Netherlands than in most other countries, despite particularly low consumer prices for hard drugs (table S.5). Addiction seems not to be very sensitive to price levels. Even if no account is taken of differences in size of the countries, police seizures involve large quantities of hard drugs and soft drugs (table S.6). The low prices and large quantities seized point to an abundant supply of drugs and thus to substantial international trafficking.

Table S.3 **Victims of violence and threats (prevalence) in urban and rural areas and nation-wide, per 100,000 inhabitants, 1995**

	urban areas	rural areas	nation-wide
Austria	2,800	1,800	2,100
Canada	4,200	3,900	4,000
France	4,500	3,800	3,900
Sweden	5,200	4,200	4,500
Netherlands	6,900	3,200	4,000
UK	7,100	5,400	5,900
USA	9,800	4,700	5,700

Source: Crime Guide HEUNI, 1998

Table S.4 **Homicide in cities per 100,000 inhabitants, average 1995-1997**

Vienna	1.8
Ottawa	1.9
London	2.2
Paris	3.3
Berlin	3.8
Stockholm	4.1
Copenhagen	4.6
Rotterdam	5.0
Amsterdam	7.9
New York	16.8
Washington, DC	64.1

Source: Home Office, 1998

Table S.5 **Consumer prices of heroin, cocaine and cannabis, 1983-1993; average price or band width in US\$ per gram**

	heroin	cocaine	cannabis
Australia	37-732	73-585	4.4-23.5
Germany	113	99	
France	100	78	8.2
Netherlands	43	54	7.4
USA	80-500	20-200	1.4 - 16
UK	115	98	5.2
Sweden	305	149	14

Source: Farrell, et al., 1996; UNIDCP, 1997

Table S.6 **Hard drugs and cannabis seized, in kilograms, in 1995 and 1998**

	hard drugs		cannabis	
	1995	1998	1995	1998
Denmark	187	124	2,414	1,572
Germany	2,917	2,129	14,245	21,007
France	1,468	1,560	42,270	55,698
Netherlands	5,247	14,930	332,086	118,122
Austria	104	225	697	1,336
UK	2,592	7,881	58,000	149,969
Sweden	314	225	527	469

Source EMCDDA, 1997, 1999

In the category of crime against and within the public sector, the almost total absence of political corruption is a favourable distinguishing feature (table S.7).

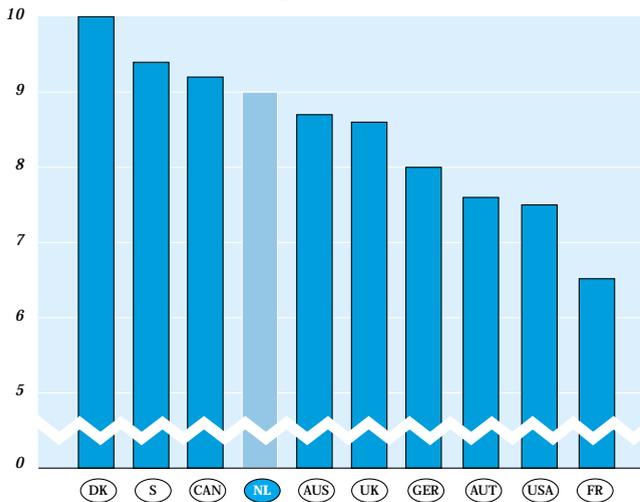
Opportunity structure

The phenomena described in the foregoing are closely connected with a relatively ample opportunity structure for crime in the Netherlands. Specifically, the level of urbanisation and the volume of goods and financial flows play an important role (table S.8). As a result of the ample opportunity structure - which looks set to become even more ample rather than less, due to developments such as internationalisation - this country must make greater efforts to prevent and combat crime than most other countries studied.

Facilitating factors

Factors that encourage criminal activity do not play a major negative role. Age composition of the population, juvenile unemployment, poverty and alcohol consumption are all around the average of the countries studied, while overall unemployment is low (table S.9). The low level of firearm possession in the Netherlands may well have an inhibitory effect (table S.10).

Table S.7 Political corruption index, 1999



Source: Transparency International, 1999; 10: no corruption

Table S.9 Unemployment rate, 1996

	juvenile unemployment (15-24)		total	
	male	female	male	female
Austria	7	7	5	5
Germany	8	8	8	10
Denmark	9	12	6	8
Netherlands	11	12	5	8
USA	13	11	5	5
Australia	15	14	9	8
Sweden	17	15	8	7
UK	18	11	10	6
Canada	18	15	10	9
France	22	32	10	14

Source: UNDP, 1998

Private prevention

Combating crime is not just a responsibility of the government, but it foremost takes place in the private sector. Individual citizens and organisations bear the primary responsibility for crime prevention when they take preventive measures. The Netherlands would seem to have some catching up to do in the area of private security. This appears from the relatively small number of households that have taken preventive measures (table S.11). In particular, more complex precautions such as alarm installations are not very widespread. Data on the retail trade show that the situation there is similar.

The number of private security officers in the Netherlands is far lower than the average in the countries studied, and is also below the EU average (table S.12).

Public prevention and repression

In view of the ample opportunity structure and the limited private willingness to take precautions against crime, the public sec-

Table S.8 Deviating factors in the opportunity structure, 1997

	urban population as a percentage of the total population	imports as a percentage of GDP
Austria	64	39
France	75	20
USA	76	13
Canada	77	35
Sweden	83	36
Australia	85	20
Denmark	85	29
Germany	87	22
UK	89	29
Netherlands	89	46

Source UNDP, 1998; OECD, 1997

Table S.10 Households in the possession of a firearm per 100,000, 1995

Netherlands	2,100
UK	4,100
Denmark	8,000
Germany	9,400
Austria	15,500
Australia	16,000
Sweden	18,000
France	23,900
Canada	25,800
USA	36,200
Finland	50,000

Source: Crime Guide HEUNI, 1998; United Nations, 1998

tor faces a difficult task. The crime figures presented above show that the government does not fully succeed in bringing the crime rate to a level near the average for the reference countries.

Table S.13 charts the financial resources that are available for the criminal justice system. This table as well as all other tables in relation to financial and human resources use the data available for the most recent period (generally 1997 or 1998). There is the greatest uncertainty in relation to expenditures for the administration of criminal justice (prosecution and sentencing). In some countries prosecutors are reckoned to the magistracy, in others they belong to the police force. In either situation, it is often diffi-

cult to isolate the financial resources allocated for this task. Comparison of the funds available for criminal justice is primarily difficult due to a lack of information on the amount of time spent on criminal cases as opposed to civil and administrative cases.

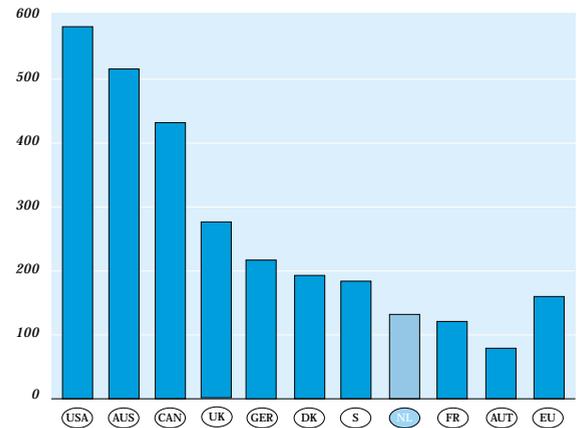
The expenditure level of the criminal justice system as a whole per inhabitant is close to the average of the countries studied. If expenditures are related to total volume of crime, however, a different picture emerges (tables S.13 and S.14).

Table S.11 **Percentage of households that have taken preventive measures, 1995**

	burglary alarm	extra security locks on access doors	extra security locks on windows
UK	24.5	68	27.1
USA	17.7	58	20.9
Canada	16.2	47	23.0
France	14.6	34	12
Netherlands	8.8	63	12.6
Austria	6.1	37	11.5
Sweden	5.9	42	5.7

Source: Crime Guide HEUNI, 1988

Table S.12 **Persons employed in the private security sector per 100,000 inhabitants, 1996**



Source: De Waard, 1999

Table S.13 **Total public expenditure on the criminal justice system in € per inhabitant, 1998 prices**

	total	police	prosecution and sentencing (public prosecution service and criminal courts)	prison system
USA	379	188	38	153
UK	274	205	20	49
Canada	243	169	16	58
Austria	243	203	14	26
Netherlands	223	151	18	54
Australia	212	160	14	38
Germany	196	137	34	25
Sweden	177	119	15	43
Denmark	166	117	17	32
France	165	132	14	19

Source: Appendix 1

Table S.14 **Total expenditure on the criminal justice system in € per crime committed, 1998 prices**

	total	police	prosecution and sentencing (public prosecution service and criminal courts)	prison system
Austria	759	632	44	83
USA	742	368	73	301
Canada	506	352	33	121
UK	449	337	33	79
Sweden	395	265	35	95
France	366	294	31	41
Netherlands	354	239	31	84

Source: Appendix 1 and table 1

A low figure, such as that for the Netherlands, points to a high crime rate and/or a low level of public crime prevention. Since the two phenomena are related, the Dutch situation can be characterised by the combination of relatively little public crime control and a relatively high crime rate.

Prevention and detection

In relation to the magnitude of the problem, the financial resources of the police are limited (table S.13). This applies the more strongly to the staffing level, which is low even when the volume of crime is not taken into account (table S.15). The impression is aroused that the Dutch police force has a low level of staff in relation to total expenditures. It is unclear why this is the case.

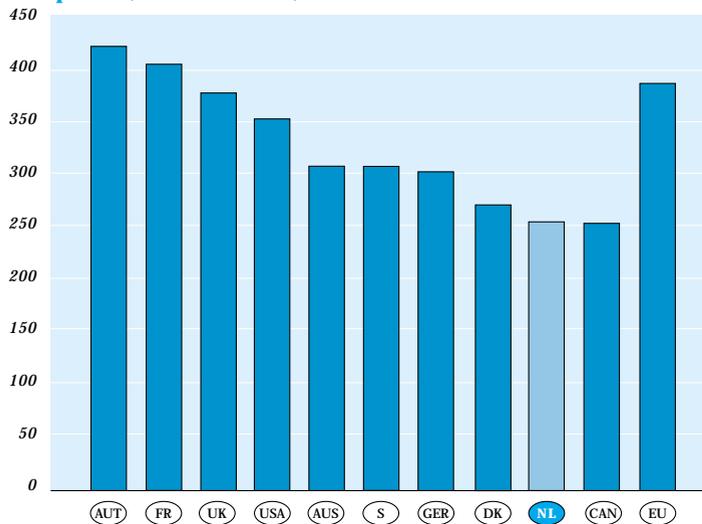
An indication for police performance can be derived from trends in figures on cases solved. Developments from 1980 onward paint an unfavourable picture for the Netherlands (table S.16). Due to differences in definitions used between countries, the figures cannot be compared in an absolute sense.

Correspondingly, the confidence of the public in the police is low (table S.17).

Criminal prosecution

The limited availability of data on criminal prosecution has been pointed out. An additional problem is that the division of responsibilities between investigating and prosecuting authorities differs from country to country. To the extent that any assessment can be

Table S.15 Staffing level of police, per 100,000 inhabitants, 1996



Source: table 48

Table S.17 Evaluation of the police, 1995 dissatisfaction with law enforcement by the police*

Canada	12
USA	18
UK	22
Sweden	23
France	25
Germany	26
Austria	27
Netherlands	31

* Percentage of unsatisfied respondents.

Source: Crime Guide HEUNI, 1998

Table S.16 Trends of clear-up rates for crimes of violence, and crimes against property, 1980-1997 (index, 1990 = 100)

Violence	1980	1990	1996
Denmark		100	106
Germany	104	100	99
France		100	109
Netherlands	122	100	82
UK	104	100	94
USA	96	100	102
Sweden	128	100	102
Property	1980	1990	1996
Denmark		100	90
Germany	85	100	103
France		100	73
Netherlands	119	100	75
UK	127	100	80
USA	94	100	100
Sweden	125	100	95

Source: WODC/CBS, 1999

Table S.18 Resources for prosecution authorities per 100,000 inhabitants

	expenditure in € per inhabitant	public prosecutors per 100,000 inhabitants	staff per 100,000 inhabitants
USA	13	10.0	27.1
Netherlands	11	3.0	18.2
UK	9	4.1	11.2
Sweden	9	7.9	14.6
Canada	8	5.6	10.6
Denmark	5	10.0	
Germany		7.5	
Austria		2.6	6.3

Source: table 52.

made with these limitations, expenditures per capita are above average, but in proportion to the volume of crime, they are on an average level (tables S.18 and S.19). The number of public prosecutors in the Netherlands is remarkably low whereas total staffing level is average, which points to a different organisational structure (table S.19).

There are a few indications that expenditures, in relation to the number of cases solved and therefore the number of cases to be handled, are relatively high (table S.20). This could of course be due to a variety of factors. Because of the low expenditures on the police force, expenditures on prosecution are relatively high in comparison with those for investigation.

Table S.19 **Resources available to prosecution authorities in relation to the volume of crime**

	expenditure in € per committed offence 1998 prices	officers per 100,000 offences	total number of staff per 100,000 committed offences
USA	25	19.7	53.1
Sweden	18	17.5	32.5
Netherlands	18	4.8	29.0
Canada	16	11.6	22.2
UK	15	6.7	18.3
Austria		8.0	19.8

Source: table 53

Table S.20 **Tentative production indicators of prosecution authorities, 1998 prices**

	expenditure x 1000 € per solved case	expenditure of prosecution services in € per 1000 € expenditure police
USA	1.2	32.0
Netherlands	0.8	34.5
UK	0.3	19.5
Sweden	0.2	31.2
Canada		20.3
Denmark		19.8

Source: table 54

Table S.21 **Expenditures on the administration of justice in € per capita, 1998 prices**

	total	criminal law	civil and administrative law
USA	82	25	57
Germany	64	16	48
Austria	57	10	47
Sweden	33	8	25
Denmark	29	11	18
Canada	28	9	19
Australia	25	9	16
UK	23	11	13
Netherlands	23	8	15
France	23	8	15

Source: appendix 1

Administration of criminal justice

Even without taking into account the volume of crime, the financial resources for justice, and therefore for criminal justice, are small (table S.21). The quality of the justice dispensed receives a particularly high mark (table S.22), although it should be noted that the differences between countries are small.

Prison system

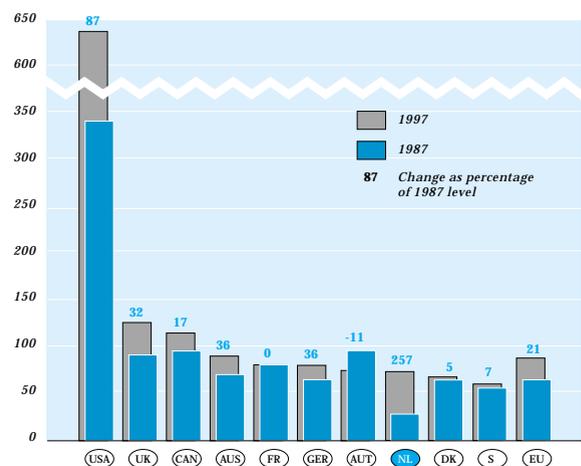
As appears from table S.13, the level of expenditures in relation to the population is relatively high. In proportion to the volume of crime, expenditures are below the average of the countries studied (table S.14).

Table S.22 **Evaluation of quality of the administration of justice**

	independence	impartial	absence of corruption
Netherlands	6.64	6.36	6.91
Canada	6.64	6.33	6.78
Australia	6.60	6.50	6.81
Denmark	6.55	6.19	6.68
Germany	6.50	6.30	6.62
UK	6.30	6.26	6.59
Austria	6.19	6.17	6.75
Sweden	6.16	5.69	6.81
USA	5.91	6.29	6.30
France	5.46	5.87	6.42

Source: WEF, 1999, Scale 1-7, with 7 as the highest score

Table S.23 **Number of prisoners per 100,000 inhabitants**



Source: Walmsley, 1999

The prison population is lower than in the Anglo-Saxon countries, and lies at the same level as in France, Germany and Austria. However, growth is particularly strong (table S.23). Just as do Sweden, Denmark and Canada, the Netherlands opts for a humane prison system, in accordance with the standards of the Council of Europe, and the high costs this entails (table S.24). This choice would seem to place limits on the number of persons who can be detained.

An indicator of both the humane nature and the performance of the prison system is the cell occupancy rate. An occupancy rate above capacity (overcrowding) naturally has a negative effect on prison conditions, while a low rate points to a poor utilisation of capacity. The Netherlands scores well on this indicator (table S.25).

Threats

Threats can also be deduced from the collected data. Significant threats arise from possible developments in opportunities and factors that promote crime (facilitating factors).

- As appears from table S.10, firearm possession is particularly low in the Netherlands. It is not unlikely that firearm possession will increase to a level closer to the average. This would allow extreme violence, already frequent in urban areas, to increase strongly.
- In an economic respect, ongoing internationalisation is favourable for the Netherlands, but it is linked to an increase in opportunities for financial and economic crime. Developments in information technology contribute to this.
- In connection with the preceding point, the international position of the Netherlands in drugs trafficking may be expected to be further strengthened. This would also cause other forms of crime, including the use of extreme violence, to increase.

Significant opportunities

- Encouraging greater efforts on the part of the private sector for the prevention of crime. Some crimes can be prevented rather simply by taking precautionary measures in the private sphere

(see for example box 4).

- Better coordination of policy in respect of the opportunity structure and its consequences. This primarily concerns a recognition of the consequences of urbanisation and the ample opportunities the economic structure offers for financial and economic crime and international drug trafficking.
- Integration of policy in respect of the relationships between types of crime such as drug trafficking, financial and economic crime and violent crime.
- Systematic use of best practices to increase the effectiveness of deployment and working procedure of the organisations in the criminal justice system (see for example box 15) and introduction of local benchmarking (see box 14). It would also be wise to take a closer look at the efficacy of the small number of public prosecutors in the Netherlands.
- Better coordination of the capacity of the organisations in the criminal justice system. The relatively small volume of financial and human resources for the administration of justice and criminal justice will need special attention.

Problem areas in the provision of information

This exploratory study is also intended to make an inventory of the availability and usability of data for purposes of international comparison. Specific problems are:

- Limited availability of information on the extent to which businesses and other societal organisations are victims of crime.
- Overriding absence of estimates of the volume of financial and economic crime.
- Limited information on illegal markets such as the narcotics market.
- Lack of international coordination in definition of terms and data collection, despite important initiatives in this direction by the UN and the Council of Europe. This primarily makes itself felt when comparing aspects such as funding and the performance of the criminal justice system, and results in a less accurate comparison.

Table S.24 **Staffing and expenditures in € per detainee, 1998 prices**

	expenditures	staff
Sweden	71,000	1.6
Netherlands	63,000	1.1
Canada	50,000	0.7
Denmark	50,000	1.3
Australia	40,000	0.6
UK	39,000	0.7
Austria	31,000	0.5
Germany	28,000	0.5
USA	24,000	0.4
France	20,000	0.5

Source: table 62

Table S.25 **Cell occupancy rate, 1995**

	cell occupancy rate
Austria	84
Denmark	90
Sweden	92
Germany	96
Netherlands	100
UK	102
Canada	103
Frankrijk	112
USA	120

Source: Walmsley, 1997

1 Introduction

1.1 Objective and scope

One of the core responsibilities of the Minister of Justice is to provide an adequate legal infrastructure. This encompasses a legal system—a set of rules, a judicial organisation and the implementation of those rules—that is tailored to the needs of society. The importance of this infrastructure to society and to the economy can scarcely be overestimated, and attention to the legal infrastructure is definitely on the rise. This is shown, for instance, by the international competitiveness reviews which are published on an annual basis, and in which an increasing number of aspects are discussed related to the rule of law, such as the safety of persons and property, the quality of legislation and the administration of justice, and the integrity of the public administration (WEF, 1999, IMD, 1999). The economic importance also appears from recent international comparative research investigating the correlation between economic performance of a country and its legal infrastructure. Several major studies show that the extent to which rights are guaranteed has a big influence, both on the present prosperity level and on the further development thereof. These factors are even the main determinants of the economic success of countries (Hall & Jones, 1999, World Bank, 1997, La Porta et al., 1998).

In view of the great importance of the legal infrastructure, it is helpful to place the performance of the Netherlands in this field in an international perspective. In the first place, international

comparison is one of the few ways of arriving at an assessment of a country's own performance that is at least to some degree objective, and to systematically identify tried and true ways of improving it. This is the case despite all the limitations involved in international comparison in this field. This aspect is elaborated in further detail in the following sections. International comparison is a tradition within the Dutch Ministry of Justice, but it is also linked to benchmarking as a management science method (see box 1).

In the second place, the legal infrastructure influences the long-term economic competitive position of a country. Insight into the position of the Netherlands as compared to major competitors is therefore of importance. In the third place, thanks to ongoing internationalisation, it is becoming more important to be aware of one's own position. Due to harmonisation and convergence within the EU, but also in global contexts, more and more often questions arise about how the situation in the Netherlands relates on specific points to that in other countries. The report focuses on the first of these points: evaluating a country's performance and exploring ways to improve it. The report is exclusively directed at the control of crime. With this specific field in mind, the objective of the international comparison is to explore:

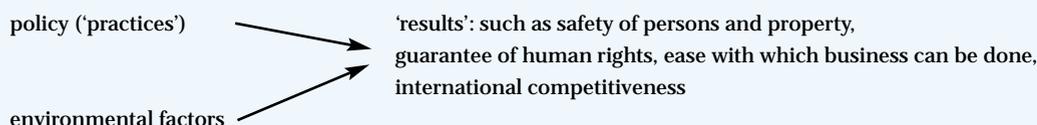
- the performance of the public sector in combating crime;
- fields in which there is room for improvement;
- threats;
- promising routes toward improvement.

Box 1 Benchmarking

Benchmarking is a method borrowed from management science that aims to improve performance through comparison. There are various types of benchmark studies, but the following are frequently distinguished: benchmarking on the basis of standards set down in advance, on the basis of results and on the basis of processes. This report concerns results. Using this approach, the differences in performance are studied in a certain field between entities that are comparable in basic respects. After ascertaining which entity has achieved the best results, the next question is which policy measures contributed to its achievement. These policy measures, termed 'best practices', are then used to improve the results of entities that function less well. So it is in fact a heuristic method based on the expectation that differences in results can be more or less unequivocally attributed to differences in policy. Characteristic of benchmark studies is that, although they provide broad insight into the factors, ('practices'), that play a role, the best policy measures cannot be convincingly deduced analytically.

The entities involved may be countries, but they may also be cities or companies. An example of result benchmarking in the public sector at a local level can be found in the UK (see box 14). International comparisons in the public sector that have been conducted in the Netherlands lie primarily in the field of international competitiveness.

In working with this type of research, one must safeguard against drawing straight lines between results and policy. An example of this would be attributing the low drug prices in the Netherlands solely to a liberal policy of toleration, while bypassing international differences in opportunity structure (such as the volume of goods flows). All kinds of environmental factors—factors on which government has little or no influence—can bring about differences between countries, and they will have to be included in the considerations.



1.2 Method

To understand the report properly, it is important to make clear from the outset what it does and does not aim to do. The report aims on the basis of quantitative data, to relate the nature and volume of crime to the efforts of the public sector in fighting it. In doing this, account will be taken of autonomous and semi-autonomous environmental factors such as the opportunity structure and the activities of the private sector in fighting crime. In this way, as stated in box 1, it is attempted to link results (control of crime) with policy efforts ('practice') in a deliberate and logical manner. A quantitative approach was adopted, one in which policy efforts are primarily, but not exclusively, expressed in the deployment of financial and human resources. In brief, the essence of the report is to identify, in a broad and quantitative sense, the relationship of deployment of staff and funds to results.

The study is a broad exploration that attempts to chart the entire field of crime and the efforts to control it. This implies that, even if the data available are scarce or unreliable, they are still presented, if only to underscore the need for better information. In this sense, it is also an exploration of the sufficiency of policy information. The exploratory nature also implies that it is not always possible to draw 'hard' conclusions. Conclusions for policy are therefore formulated as attention points and questions that can only be answered on the basis of specific further research. It should be stressed that no use is made of statistical techniques.

The report is explicitly not an attempt to present 'definitive' figures. In the first place, this is a hopeless task in an international context because of differences in definitions and interpretations. In the second place, the aspiration to arrive at definitive figures would be inconsistent with the exploratory nature of the report. In the third place, it would also imply that the relationship between crime and other factors-environmental ones, for example-is beyond discussion. Although the selection of factors is based on scientific insights, the weight to be attributed to these factors, and their completeness, may well be questioned. A that conceivably can be levelled against this study is that the data collection is too haphazard. However, it must be acknowledged that, without attention to context, crime figures have little or no significance. As to the status of the figures presented, the implication of the divergency reliability of the data is that they provide information about the relative position of the Netherlands (average, above or below average), but not about the position of the Netherlands as compared to each individual country.

Its exploratory nature also means that the report has no scientific pretensions. Nor does the report describe the differences between the legal systems of the countries studied. For this, the reader is referred to the literature on comparative law.

1.3 Choice of countries

The Netherlands is compared with nine reference countries. The reference countries are comparable societies in both economic and socio-cultural respects and basically have well functioning legal systems. The choice of countries was limited by the availability of data. The countries chosen belong to four legal traditions: English (UK, US, Canada, Australia), French (France), German (Germany and Austria) and Scandinavian (Denmark, Sweden). The English legal system is strongly represented, partly thanks to its tradition of data collection. It should also be

remarked that, even for these countries, the data are incomplete. This is even more true of the other countries. If there is occasion to do so, other countries are included in the comparison, as are EU averages if it is warranted and relevant. The limited and often varying availability of data was a reason to include a fairly large number of countries in the comparison.

1.4 Data sources

The very nature of the phenomena that are being discussed here makes them difficult to measure. After all, most of the efforts of criminals are aimed at keeping their actions covert. The report must therefore resort to data derived by means of data questionnaires and enquiries and opinion surveys on some issues. The availability, consistency and reliability of data is a major problem. This is discussed in greater detail in chapter 2.

Broadly speaking, the report is based on secondary sources: international data collections and publications. An exception to this is formed by the data on human and financial resources for the criminal justice system. The data from secondary sources are highly incomplete and inconsistent, particularly in a financial respect. The gaps have been filled as well as possible by directly contacting the Ministries of Justice and statistical agencies of the countries in question.

As to the presentation of the data, it should be remarked that an explanation of the tables, figures and boxes, including source acknowledgements, is given in appendix 2. If data about certain countries were lacking on a particular aspect, these countries were omitted from the tables in question. For the sake of completeness, it is remarked that when the term 'average' is used, it refers to a unweighted average for the countries studied, unless explicitly stated otherwise.

1.5 Structure of the report

Chapter 2 outlines the general framework used to order the complex relationships between crime and crime control. The general framework is comprised of a number of elements that are covered in the following chapters. Chapter 3 concerns the nature and volume of crime. Environmental factors come up in chapter 4. These include opportunity factors, factors that encourage and inhibit crime, and prevention of crime by private parties. The chapter ends with an interim balance stressing the seriousness of the tasks facing the government. Chapter 5 discusses issues of public prevention and repression of crime. In chapter 6, the findings are summarised. Threats to government policy as well as new opportunities to control crime arising from the comparison are discussed. The chapter also discusses the major problem areas with respect to data availability and reliability.

General framework

Schematically, the volume of crime can be seen as the result of the opportunity structure, factors that encourage or inhibit crime (facilitating factors), and private and public crime prevention (see box 2). For the government, these elements - with the exception of the latter - are environmental factors of an autonomous or semi-autonomous nature. For an international comparison of public sector performance, it is too simplistic to suggest a relationship between crime and the efforts of the government disregarding differences in other factors. Attention must be devoted to the entire complex of factors.

In addition, account must be taken of feedback loops. For instance, the volume of crime influences the willingness to invest in prevention and repression. When the reactions of private and political actors are taken into account, relationships become less clear-cut. To illustrate, an ample opportunity structure (one that promotes crime) in itself leads to high crime rates, but societal

reactions to this reduce crime. On balance, the resulting crime level is not necessarily much higher than it is when there is a limited opportunity structure. If there is an ample opportunity structure, sizeable expenditures on crime control (sum of private and public expenditures) may in any case be expected.

Furthermore, to a certain extent, private and public measures act as substitutes for one another (Philipson & Posner, 1996). The effect of public measures may be partly cancelled out by reactions of private parties that feel safe and reduce precautionary measures. For this reason as well, the entire set of variables will need to be considered in order to avoid drawing erroneous conclusions.

In assessing the crime situation, attention must be devoted to the many forms crime can take, ranging from violence on the street to tax fraud from the home. Here it is important that repression

Box 2 Determinants of crime and examples

opportunity structure

- urbanisation
- volume and concentration of flows of goods and services
- goods in circulation that are likely to be stolen
- clubbing behaviour

facilitating factors

- unemployment
- poverty
- firearm possession
- drug and alcohol consumption

nature and volume of crime

private prevention

- informal supervision (social control)
- situational prevention
- security sector

public prevention and repression

- magnitude and deployment of criminal justice system
- administrative prevention
- regulations, as with respect to security of homes

Opportunity factors concern the presence of targets of crime. This includes not only actual goods, but also the behaviour of potential victims (individuals and organisations) that may make them vulnerable to crime (pull factors).

Facilitating factors are factors specific to individuals that incite them to commit crimes (push factors).

Private prevention consists of the measures taken and the conduct of individuals and private organisations to prevent crime against themselves or third parties.

Public prevention and repression concerns the measures taken by the public sector to statutorily define, prevent and punish crime. With regard to the public sector, this report only looks at the volume and deployment of the criminal justice system.

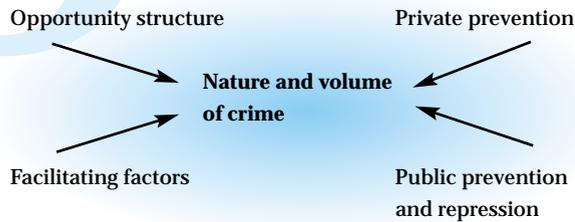
Source: Cohen & Felson, 1979; Clarke, 1997; Van Dijk et al., 1998.

and prevention can lead to crime displacement (in place, time, target, modus operandi and type of crime). On the basis of research, the conclusion may well be drawn that crime displacement occurs less frequently and less fully than is often thought (Hesseling, 1994). When displacement does occur, it is often not complete. Finally, account must be taken of the fact that what is

considered to be a crime may well differ from country to country. The Dutch policy of toleration in various fields is an example.

The elements shown in the box are discussed in the following chapters.

Nature and volume of crime



This chapter presents crime statistics and draws a distinction between the citizen, the commercial sector and the government as victim. The drug problem is dealt with separately. Because of the nature of the phenomena, there is a degree of uncertainty surrounding many of the statistics. In addition, making an international comparison is far from simple due to the limited availability of data and differences in definitions and uses. Statistics on crimes registered by the police are often available. However, these data are less reliable for certain offences (usually less serious crimes) than those provided by victimization surveys because of differences in registration and, for instance, willingness to report a crime and the quality of the information. Similarly, victimization surveys are not available for all countries. Wherever possible, figures from both sources are presented. Due to differences in definitions, both sources of data are not always fully comparable.

Box 3 Multiple victimization

Two criteria can be derived from the victim surveys. The first is the total number of offences in a year: this criterion is referred to as 'the incidence'. For the Netherlands, the incidence is 63,000 offences per 100,000 heads of population in 1995. The second criterion is the percentage of the respondents that fell victim to crime once or several times in a year; this criterion is called 'the prevalence'. For the Netherlands, prevalence is 31,000 per 100,000 inhabitants. Incidence is greater than prevalence because a number of respondents fell victim to crimes on several occasions. They could have been the victims of various crimes or one and the same crime several times.

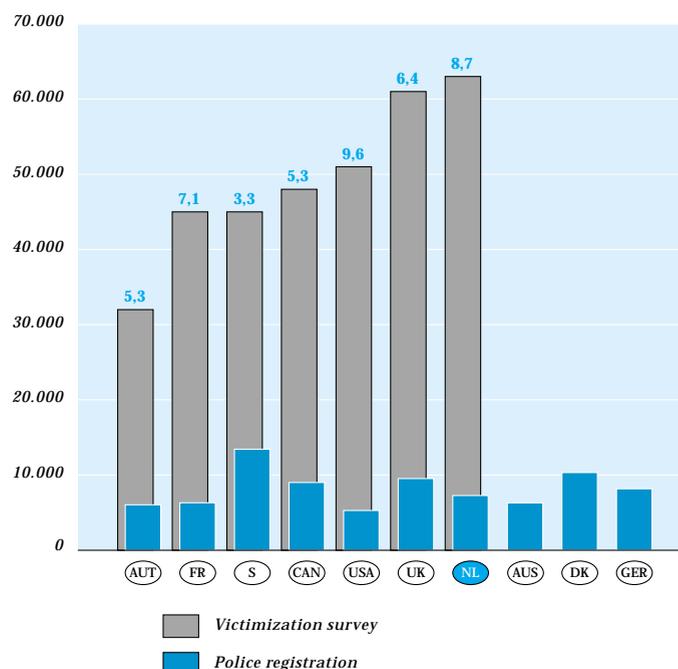
Source: Mayhew & Van Dijk, 1997

3.1 Crime against citizens

Table 1 gives an estimate of the total scale of crime against citizens. These estimates take no account of the severity of the crimes. The data yielded by the regularly held International Crime Victims Survey (Mayhew & Van Dijk, 1997), paint an unfavourable picture for the Netherlands. The number of crimes in the Netherlands and in England, too, is, at almost 60,000 per 100,000 population heads, almost twice the rate in Austria and considerably greater than, for example, in the US. In the Netherlands and the UK, 31% of the population is the victim of some form of crime at least once (see box 3).

A somewhat less negative picture emerges from the police registered crime. In 1997, the Netherlands ranked fifth, while Denmark and Sweden scored very poorly. Because of the often scant willingness to report less serious offences this criterion doesn't present a reliable picture of the total volume of crime. The ratio between both measures, which is also given in table 1, is very high for the Netherlands: of 8.7 crimes, only one is reported and registered. Only the US has a more extreme situation. The ratio is often seen as an indicator of the performance of and confidence in the police. If citizens feel the police will often not want or be able to take action, there is little willingness to report crimes (see Mayhew & Van Dijk, 1997).

Table 1 Crimes per 100,000 inhabitants in 1995



Source: Mayhew & Van Dijk 1997; Home Office, 1998

An additional explanation is that in the Netherlands a relatively large number of less severe offences such as bicycle theft are perpetrated. This is dealt with in detail in the paragraphs below. There is less willingness to report minor offences in comparison to more serious forms of crime.

With respect to the geographic distribution of crime within countries, there is no doubt that crime is more frequent in urban than rural areas. The difference is particularly noticeable in France, Sweden and the US. In the Netherlands, the situation is poor both in the city and in the country (table 2).

To follow the development of crime over time, we have to fall back on police registration. It can be assumed that factors such as willingness to report offences don't radically change and that the development over time mainly reflects changes in criminality. What is notable is that eight of the ten countries show a declining tendency. Only Australia is undergoing an increase. Registered crime in the US has been dropping since 1992 while in most

countries the decrease is more recent (figure 1). However, it should be noted that the observed drop primarily concerns offences against property. Violent crimes have increased in all countries except the US.

Fatal violence

The police registration of crimes involving loss of life is generally reliable. Table 3 confirms the current picture that the US is in an extreme position. Finland has been added because, within the EU, this country is striking because of the scale of fatal violence. In both countries, there is a close relation between the use and possession of firearms (see table 41 for this aspect). The Netherlands occupies a midfield position. The fatal use of firearms is (still) extremely limited.

Extreme violence is concentrated in the cities. US conurbations excepted, the number of murders in Amsterdam and Rotterdam ranks highest of all the cities mentioned (table 4). Recently, there have been sharp drops in American cities. In New York, the number of murders dropped to 629 in 1998. The ratio for New York dropped to 8.5 murders per 100,000 inhabitants. Recent figures show also a decline for Amsterdam: 1998, 6.8 per 100,000, and for 1999 3.3 per 100,000 inhabitants.

Figure 1 Development of registered crime per 100,000 inhabitants

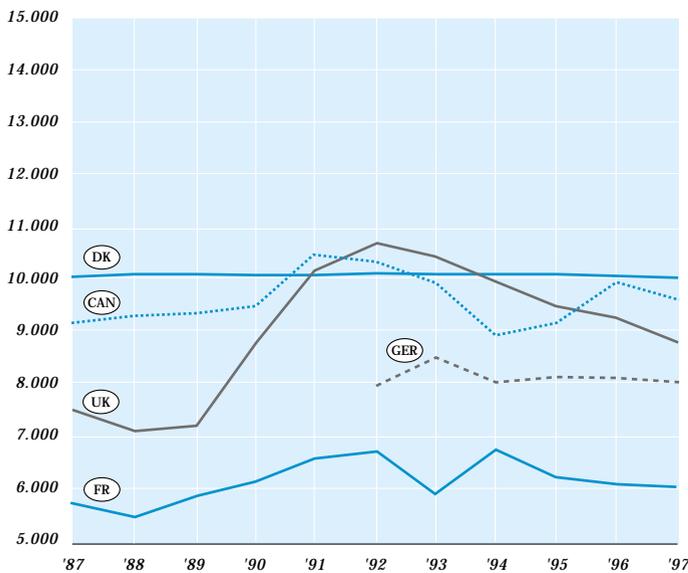
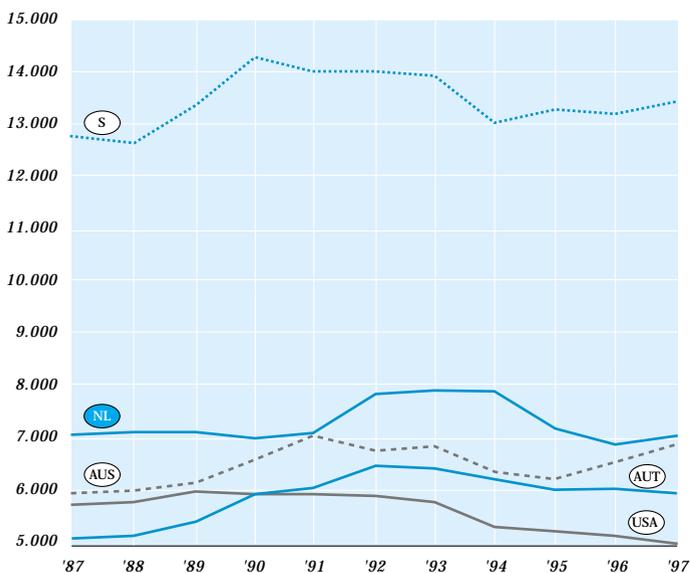


Table 2 Victims of crime per 100,000 inhabitants, 1995

	urban area	rural area	nation-wide
Austria	27,000	16,000	19,000
Canada	30,000	23,000	25,000
USA	33,000	22,000	24,000
Sweden	34,000	21,000	24,000
France	36,000	23,000	25,000
UK	37,000	29,000	31,000
Netherlands	39,000	29,000	31,000

Source: Crime Guide HEUNI, 1998



Source: Home Office, 1998

Table 3 Cases of fatal violence per 100,000 inhabitants

	murders in 1997	persons killed by firearms in 1994
Germany	1.44	1.24
UK	1.49	0.41
France	1.60	5.15
Denmark	1.67	2.09
Netherlands	1.75	0.70
Sweden	1.77	1.92
Austria	1.82	3.70
Canada	1.91	4.31
Australia	1.93	2.65
Finland	2.76	6.4
USA	6.95	14.24

Source: Home Office, 1998; Krug et al., 1998

Other forms of violence

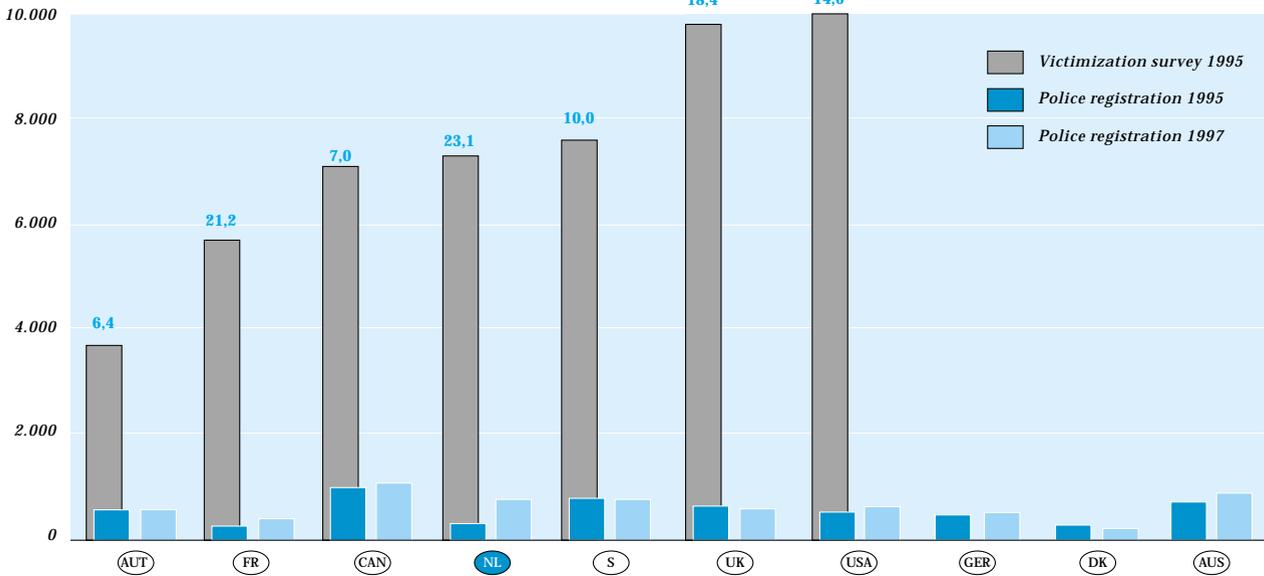
Both the International Crime Victims Survey and the police registration show that of the countries reviewed here, the United States and England in particular experience considerable violence (table 5). In this case, the victimization survey is the most reliable because offences are often not reported. According to this source, the Netherlands occupies a midfield position. The distribution of the offences registered by the police is striking. In Austria and Canada, one out of six or seven violent crimes is reported, in France only one in twenty and in the Netherlands one in ever twenty three. The difference between victimization surveys and police registration can be partially explained by the fact that the victimization survey includes threat of violence, which is omitted by the police registration.

Here, too, there are significant differences between urban and rural areas (table 6). In the Netherlands the difference is extreme. Violence in the city is at the same level as in England. Rural areas are relatively safe. This can partly be explained by nightlife in the Netherlands which, more than in other country, focuses on the cities because of the relatively short travelling distances in the Netherlands.

Burglary and theft

One of the offences that can be reliably measured in this category is domestic burglary. Willingness to report such offences is high, primarily because property insurance requires such crimes to be reported in order to qualify for insurance payment. The number

Table 5 Violent crimes per 100,000 inhabitants



Source: Mayhew & Van Dijk, 1997; Home Office, 1998; WODC/CBS, 1999

Table 4 Murders in cities per 100,000 inhabitants, average 1995-1997

Vienna	1.8
Ottawa	1.9
London	2.2
Helsinki	3.0
Paris	3.3
Berlin	3.8
Stockholm	4.1*
Copenhagen	4.6
Rotterdam	5.0*
Amsterdam	7.9*
New York	16.8
Washington, DC	64.1

* different period; see appendix 2.

Source: Home Office, 1998

Table 6 Victims of violence and threats per 100,000 inhabitants, 1995

	urban area	rural area	nation-wide
Austria	2,800	1,800	2,100
Canada	4,200	3,900	4,000
France	4,500	3,800	3,900
Sweden	5,200	4,200	4,500
Netherlands	6,900	3,200	4,000
UK	7,100	5,400	5,900
USA	9,800	4,700	5,700

Source: Crime Guide HEUNI, 1998

of domestic burglaries registered by the police is thus relatively reliable and can be used as a primary source of information. Reliability is also clear from the marginal differences between the victimization survey and police registration. Table 7 shows that there are a large number of, and more, domestic break-ins in Anglo Saxon countries than in the Netherlands. However, in the Netherlands the situation is worse than in the other European countries, with Denmark as (unexplained) exception. When we examine the development of domestic burglaries from 1995 to 1997 a considerable drop in a number of countries can be observed. The volume of domestic break-ins in the UK dropped by 19% from 1995 to 1997. In the Netherlands, there was a

decrease of 17%, in Germany 14%, in France 10% and 5% in the US.

Car theft can also be measured reliably. Willingness to report offences is high due to the high value of the object and the insurance conditions. Only in Austria and Germany are there fewer car thefts than in the Netherlands (table 8). Another striking fact to emerge is the vast number of cars stolen in Scandinavian countries.

Less serious types of crime

Vandalism, sexual intimidation (excluding assault and rape), theft of personal possessions (such as wallet or sports clothing) and bicycle theft can be seen as less serious types of crimes. Given the limited willingness to report these offences, police statistics are not informative. The international crime victims survey shows

Table 7 Domestic burglaries per 100,000 households

	police registration 1997	police registration 1995	victimization survey 1995	ratio
Austria	400	427	1,000	2.3
Sweden	460	436	1,500	3.4
Germany	513	596		
France	920	1,024	2,900	2.8
Netherlands	1,530	1,836	3,300	1.8
Canada	2,147	2,159	4,000	1.9
USA	2,442	2,574	3,900	1.5
UK	2,696	3,342	3,400	1.0
Australia	4,131	3,752		
Denmark	4,701	4,493		
Average of 13 EU Member States	1,270			

Source: Home Office, 1998; Mayhew & Van Dijk, 1997

Box 4 Risks of burglary and burglary prevention

The risk of burglary is higher when the following factors apply: no preventive measures; little occupation; free standing property; living in city centres; single adults living with children. Households that have been broken into previously run a higher risk of being burgled again. There is strong evidence that taking preventive measures is extremely effective in cutting the risk of domestic break-ins. When five relatively simple preventive measures are taken, the risk of burglaries in the Netherlands is reduced by a factor of 16.

Source: Willemse, 1996

Table 8 Number of car thefts per 100,000 vehicles

	police registration 1997	victimization survey 1995	ratio	
Austria	104	100	200	2.0
Germany	470	647		
Netherlands	668	734	400	0.5
USA	998	1,085	2,000	1.8
Canada	1,319	1,203	1,600	1.3
Australia	1,490	1,450		
France	1,642	1,784	1,900	1.1
UK	2,116	2,643	2,800	1.1
Sweden	2,175	1,940	1,500	0.8
Denmark	2,380	2,059		
Average of 14 EU Member States	1,119			

Source: Home Office, 1998; Mayhew & Van Dijk, 1997

that these types of crime occur relatively frequently in the Netherlands (table 9). Bicycle theft is the largest category in the Netherlands and Sweden. Even if bicycle theft is not taken into account, the Netherlands still ranks highest.

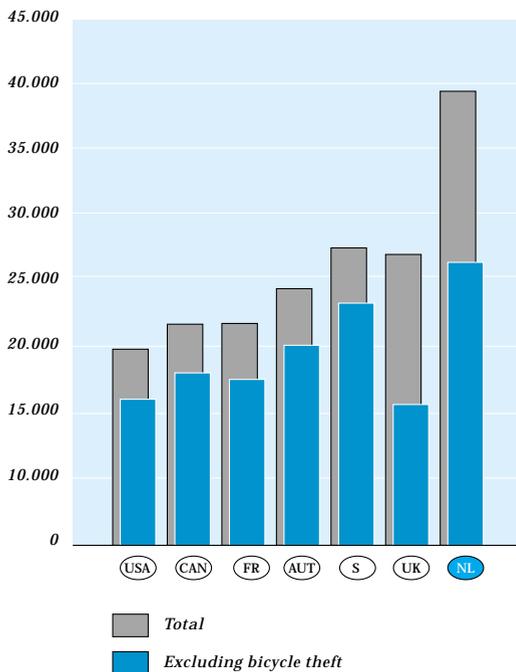
Sense of insecurity

Feelings of insecurity are important as additional indicators of crime and as one of its negative consequences. Insecurity leads to a reduced sense of wellbeing. A vicious circle can arise if citizens start seeing public spaces as dangerous. This leads to a withdrawn lifestyle that increases anonymity and decreases informal supervision. Under these conditions, potential criminals can commit crimes relatively easily. Tables 10 and 11 provide information on sub-aspects of lack of safety. These concern questionnaire results expressed in percentages of the respondents who fear falling victim to crime.

It is clear that fear of crime is widespread. In comparison with the other countries, according to table 10, the Netherlands scores average when it comes to the perceived risk of burglary and

favourably on subjective safety in inhabitant's own neighborhood (table 11). What is striking is that feelings of insecurity do not run parallel to the actual scale of crime (compare table 10 with table 7 and 11 with 5). A general judgement on safety can be derived from the international competitiveness comparison of the IMD (IMD, 1999) which asks respondents if they have confidence in the protection of person and property. According to table 12, all countries gave a positive answer to this question. Despite this the evaluation sharply differs. The results roughly tally with the crime figures presented. However, France scores remarkably poorly while the Netherlands has a mediocre score.

Table 9 Less serious crimes per 100,000 inhabitants in 1995



Source: Mayhew & Van Dijk, 1997

Evaluation of crime against citizens in the Netherlands

Slight: use of firearms, car theft

Average: (fatal) violence, domestic burglary, and fear of crime

Poor: (fatal) violence in urban areas, less serious types of crime

Table 11 Fear of crime at night while walking in one's own neighbourhood, 1996

Denmark	11
Sweden	19
Netherlands	19
Austria	20
France	29
USA	25
Canada	26
UK	31
Germany (West)	34
Germany (East)	60
Average of 15 EU Member States	32

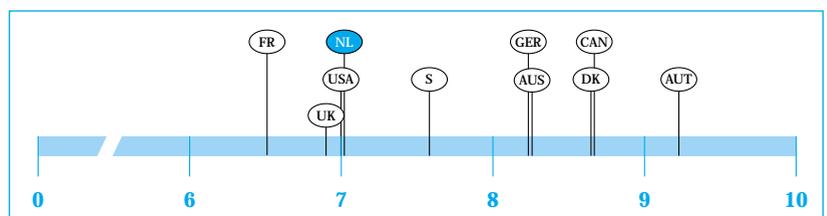
Source: Van Dijk & Toornvliet, 1996; Mayhew & Van Dijk, 1997

Table 10 Perception of risk of burglary

Austria	13
Sweden	15
USA	23
Netherlands	27
Canada	30
UK	42
France	53

Source: Mayhew & Van Dijk, 1997

Table 12 Confidence that the safety of persons and property are protected, 1999



Source: IMD, 1999

3.2 Crime against and within the commercial sector

Theft, robbery, violence

A complete picture of the degree to which the commercial sector encounters crime cannot be painted. There are major differences between branches of industry. The scant data available shows that the retail trade is often the target of crime.

Companies in this sector are more frequently the victims of crimes than ordinary citizens. Table 13 indicates that the situation in the Netherlands and England is worse than that in France and Germany. Australia, too, scores relatively poorly. The most notable differences involve vandalism.

The banking sector does provide some data on robberies. The risk

of robberies is defined as the number of hold-ups divided by the number of banking institutions. The risk shows considerable distribution. In table 14, Switzerland is added. In both Switzerland and Austria, there is a low risk. The extremely poor situation in Canada and the US is singular. The Netherlands assumes a mid-range position, just after England and Germany.

In addition to crime committed by outsiders (see box 5), crimes are perpetrated by and among employees within companies. Table 15 provides a degree of insight into violence on the work floor and crime-related problems faced by businesses. Here, the Netherlands has an average score. The situation is best in Denmark, Austria and Sweden, and worst in the UK and US.

Table 13 Percentage of companies in the retail sector that fell victim to crime in 1994

	attempted burglary	theft	vandalism	robbery	threats
Germany	28.7	63.5	9.6	4.6	5.7
Australia	29.4		23.0	2.2	13.6
France	31.6	61.3	8.9	5.2	7.3
Netherlands	34.7	66.4	18.1	4.4	11.0
UK	36.9	61.7	22.0	4.0	17.6

Source: Van Dijk & Terlouw, 1996

Table 14 The risk of robbery per financial institution, average for 1995-1997

Switzerland	1 : 182
Austria	1 : 162
Sweden	1 : 69
Germany	1 : 44
UK	1 : 44
Netherlands	1 : 38
France	1 : 31
Australia	1 : 28
Denmark	1 : 18
USA	1 : 10
Canada	1 : 6

Source: NVB, 1997; 1998

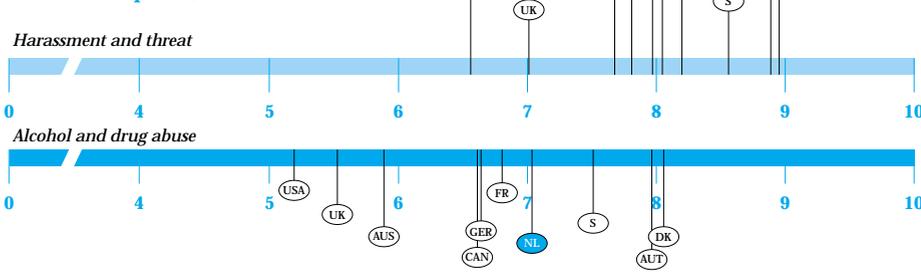
Box 5 Employees as victims of crime

In the USA in particular, crime committed against employees is seen as a serious problem. The following data from a recent American victim survey show the gravity of the issue. Between 1992 and 1996, more than 2 million employees fell victim to crime while practising their profession. This involved the murder of more than 1000 employees, some 51,000 rapes and thefts from 84,000 employees. Violence in the work place is not random. Some jobs are 'dangerous'. Factors increasing the risk of falling victim to crime include public accessibility, mobility of the employee, dealing with money and a 'difficult public'. Over recent years, employees falling victim to crime is seen as an organisational problem that demands a structural, preventive approach. In practice this involves the following measures: training in conflict management, screening personnel, drawing up codes of behaviour and installing technical facilities such as alarm installations and safes for storing money during working hours before it is banked. The most dangerous professions that largely belong to the public sector are categorised according to estimated number of offences in the USA:

- Retail branch: 290,000
- Police: 230,000
- Education: 135,000
- Medical sector: 130,000
- Mental health care sector: 80,000
- Transport: 75,000
- Private security services: 60,000

Source: CJI, 1998

Table 15 Violence and drug and alcohol abuse in the workplace, 1999



Source: IMD, 1999

Fraud

Separate attention must be given to fraud, used as an umbrella term for financial and economic offences whereby specific individuals or social organisations suffer damage. This paragraph concerns fraud in economic traffic where companies are the victims. Fraud occurs in numerous forms and can be perpetrated by a company's own staff or by outsiders, including other businesses. Data are exceptionally scarce in this field. There are very few systematic commercial victimization surveys by bodies unrelated to pressure groups. From research into the retail branch, the impression is that the situation in the Netherlands is relatively good for this sector (table 16).

Furthermore, there are various more or less systematic estimates of damage suffered due to fraud (Deloitte & Touche, 1997). The reliability of the estimates are often difficult to assess. Also these estimates only give rise to a fragmentary picture. The available data mainly illustrate the possible scale of certain types of fraud and, in as much as data are already available for the countries studied here, are of limited significance for international comparisons. The majority of data available concerns copyright infringement. These originate from branch organisations and generally concern a small number of products.

Table 16 **Percentage of companies in retail sector that fell victim to fraud, 1994**

	fraud committed by outsiders	fraud committed by staff	corruption
Netherlands	12.6	3.0	2.4
Australia	19.7	1.7	1.0
UK	21.0	2.5	1.8
Germany	27.6	3.1	3.2
France	42.3	1.3	4.8

Source: Van Dijk & Terlouw, 1996

According to the data in table 17, these products have relatively poor copyright protection in the Netherlands. Table 18 presents a number of estimates for several important categories of fraud. These figures indicate the economic importance of the fraud issue. For a comparison of the economic damage due to communal crime and that caused by fraud in general, see box 10.

Other economic offences

In addition to financial-economic offences with individual victims there are the so-called victimless crimes. These can involve crimes that disrupt the working of markets such as money laundering and insider trading, but also violations of legislation prohibiting (voluntary) economic transactions between parties. Examples are drugs and weapons trafficking and prostitution. Crimes involving drugs are dealt with in more detail in paragraph 3.4. This paragraph is entirely devoted to insider trading and money laundering.

The international competitiveness comparisons of the IMD and WEF for 1999 show diverging pictures for insider trading (table

Table 17 **Copyright infringements**

	Business software percentage of illegally copied software used in 1998	value per mille of GDP in 1998	Music value of sales of illegally copied music per mille of GDP in 1995
USA	25	0.37	
Germany	28	0.24	0.04
UK	29	0.42	0.03
Denmark	31	0.26	0.02
Australia	33	0.56	
Austria	38	0.27	
Sweden	38	0.56	0.05
Canada	40	0.58	
France	43	0.32	0.04
Netherlands	45	0.57	0.11

Source: Price Waterhouse, 1998; Deloitte & Touche, 1997

Table 18 **Damage suffered by the commercial sector due to specific types of fraud in millions of €, most recent data**

	trademark fraud	bank/ investment fraud	insurance fraud	telecom fraud	bankruptcy fraud
Australia			300		
Canada			750		
France	3,800	600	1,200		
Germany		1,400	2,500	30	
UK	350	350	700	100	
Netherlands	200	150	350		200
Europe			8,400		
USA			72,600		

Source: Deloitte & Touche, 1997; Walker, 1997; CESDIP 1999

19) although developments over recent years have been consistent. In 1997, the Netherlands assumed a good, midfield position, respectively. In 1998, the Netherlands ranked poorly in both comparisons after which, in 1999, it recovered its position (to a degree). The decline in 1998 is probably connected to the insider trading cases that started that year. A related question involves supervision of financial markets, with respect to which the Netherlands occupies a midfield position.

Another type of offence concerns money laundering which can be defined as channelling illegally gained money or investments via third parties to conceal its origins. The estimate of the sums involved in this is complex and generally based on an estimate of criminal earnings, particularly those generated by drugs trafficking (Quirk, 1996). Table 20 includes a number of estimates. Due to differences in the methods employed in making the estimates, we cannot define a clear picture of the relative gravity of the problem.

Additional information can be derived in principle from the reports of suspect transactions (table 21). However, it seems probable that the sums involved say more about the reporting system than the scale of money laundering. The suspected large scale of the international drugs trade in the Netherlands is an important indication for sizeable money laundering activities (see paragraph 3.5).

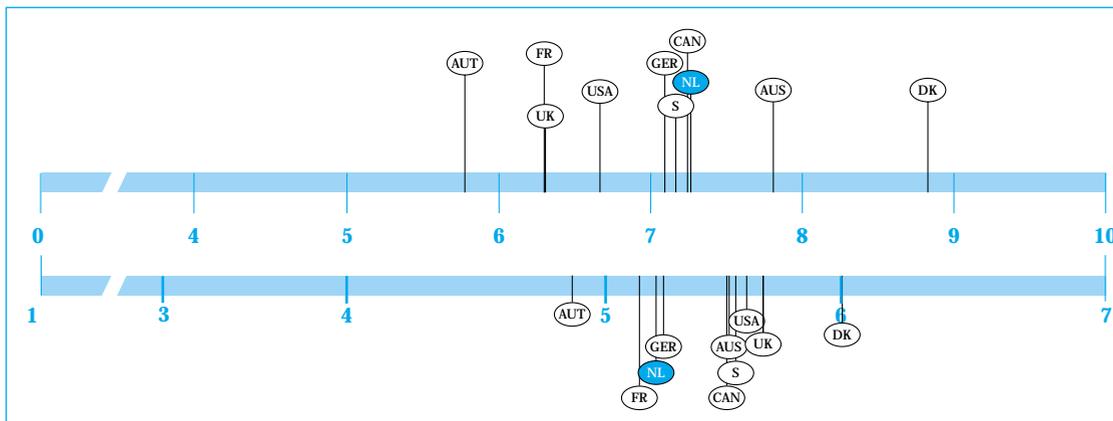
Evaluating crime in the Netherlands against and within the commercial sector

Slight: violence in the workplace

Average: bank robberies and suspected financial fraud, insider dealing

Poor: theft and vandalism in the retail sector, copyright infringement and suspected money laundering

Table 19 Evaluating the frequency of insider trading on the stock market according to two questionnaires, 1999



Source: IMD, 1999, WEF, 1999

Table 20 Estimate of the scale of money laundering, most recent data

	mln €	percentage of GDP
Australia	3,200	0.9
France	2,100-3,800	0.2-0.3
Germany	500	0.03
Netherlands	1,400	0.5
USA	272,700	3.9
World	409,000-782,000	2-4

Source: CESDIP, 1995; Sultzer, 1995; Walker, 1995; Quirk, 1996; Deloitte & Touche, 1997

Table 21 Reports of suspect transactions, 1997

Australia	689
Austria	100
Denmark	300
France	1,200
Germany	3,400
Netherlands	17,000
Sweden	900
UK	14,000
USA	

Source: Walker, 1995; NVB, 1999

3.3 Crime against and within the public sector

There is no comparative international research into the degree to which government bodies and their employees fall victim to offences involving violence or theft. Box 5 on the risks run by employees shows that some government sectors are extremely high-risk. Here, we are forced to focus solely on fraud, including tax evasion, and corruption.

Tax evasion

Tax evasion is an important category of crime against the government and thus against society as a whole. Estimates of the sums involved are scarce but do indicate the considerable scale of the problem. In the US, the uncollected share of taxes was estimated at 17% while in Switzerland, tax evasion is set at 17.5% of the national income (Andreoni et al., 1998). The international competitiveness comparisons give some insight into the relative size of the problem based on the subjective evaluation of respondents (table 22). In the Netherlands, the situation is relatively good while in Anglo Saxon countries, tax evasion seems less frequent.

The relatively low scores of Germany and Sweden could be influenced by high tax rates, as has been suggested (Frey & Weck, 1983). At high rates of taxation the benefits of tax evasion are higher than at low rates. Based on this, greater incidence of evasion seems likely. However, the link between tax evasion and tax rates has not been proven (Andreoni et al., 1998). Box 6 deals with the scale of the 'hidden economy'. The Netherlands does not perform well. It must be noted however, that the estimates are uncertain.

When considering tax evasion, it must be remembered that it not only concerns paper transactions but also the classic smuggling of goods. Although estimates are not available for all countries, cigarette smuggling seems to involve extremely large sums; totalling some 1 to 2 billion guilders per country in Germany, France and the UK (Deloitte & Touche, 1997).

Fraud with government monies

Some international comparative material can be derived from (possible) cases of fraud documented by the Member States of the EU with respect to acquiring funds for the EU and the spending of EU subsidies (table 23). The by now familiar problem that

Box 6 Size of the hidden economy

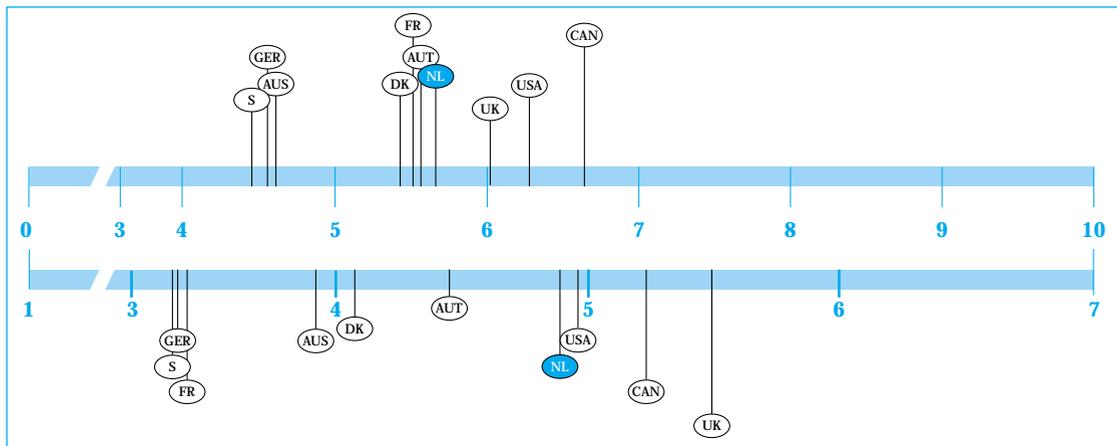
The hidden economy concerns a number of categories of activities. Firstly, this concerns legal activities that remain hidden due to evading the payment of taxes and social security premiums and secondly activities in illegal markets (such as drugs trafficking). Estimates of the scale of the problem are often founded on the demand for money. The table below provides estimates based on this method (data for Belgium and Italy are included in the table for comparison). It must be emphasised that debate is still raging on the relevance of such indirect estimates (Dixon, 1999). According to some critics, there is too great a margin of uncertainty. Furthermore, the relevance to measuring the size of the economy and unemployment is also under debate. The differences between the majority of countries are not particularly great. Sweden performs relatively badly, as do the added countries Belgium and Italy. The Netherlands does not rank very highly. It is striking that in all the countries, the size of the hidden economy is increasing.

Size of the hidden economy as percentage of GDP

	1980	1990
Italy	16.7	23.4
Belgium	16.4	19.6
Sweden	12.2	16.3
Netherlands	9.1	13.9
Canada	10.7	13.6
Germany	10.8	12.3
Denmark	8.6	11.2
UK	8.4	10.2
France	6.9	9.4
USA	5.0	6.9
Austria	3.1	5.1

Source: Schneider, 1997

Table 22 Evaluating the frequency of tax evasion, 1999



Source: IMD, 1999; WEF 1999

monitoring systems differ from country to country plays a role here. There is a strong impression that the scale of fraud is obscured by differences in monitoring systems, which seems especially to be the case for agricultural subsidies (third and fourth column). In countries where one might expect a strong (weak) enforcement culture, the occurrence of much (little) fraud is unlikely. Based on these data, it seems likely that rule enforcement, including willingness to report crimes, is not uniform within the EU.

Political corruption

Definitions of corruption are not unambiguous (Lancaster & Montinola, 1997). Political corruption can be defined as the abuse of public power for private aims. This definition is used by Transparency International. Their measure combines ten separate indices and offers the best picture of this phenomenon. Political corruption is not only damaging for the functioning of democracy but also of the economy. Corruption has negative impact on investments and with this on economic growth (Mauro, 1995, Schleifer & Vishny, 1993).

According to table 24, the Netherlands occupies a strong position. In addition to the poor score of France and, to a lesser extent, the US, the relatively poor performance of Germany and Austria is noticeable.

Evaluation of crime against and within the government in the Netherlands

Slight: political corruption

Average: tax evasion

Poor: probable scale of hidden economy

3.4 Drugs: consumption and trafficking

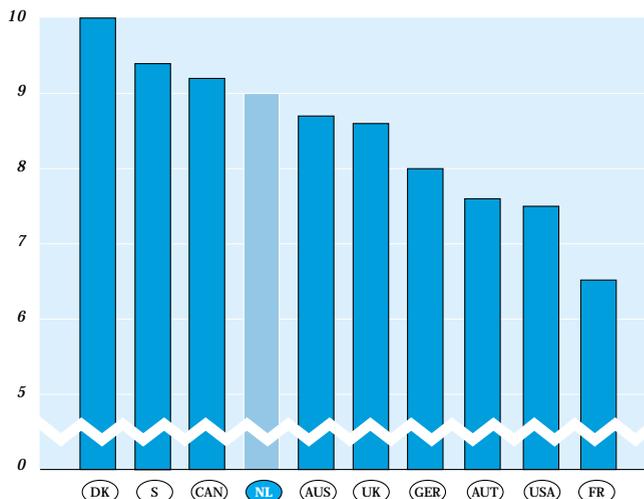
Deeming the production, trafficking in and sometimes also using psychotropic substances a criminal offence aims at reducing drug use and its consequences for the user and for society. This involves an extreme intervention in the markets of these substances. Quantity and price are key characteristics of a market. The variation of prices in a country also gives an indication of how the markets function in that country. An unrestricted market has little price spread. Although no estimates of consumed quantities are available, there is some information on drug usage. As far as hard drugs are concerned, despite large differences in policy, the prevalence of addiction shows little variation. To which Australia is an unexplained exception (table 25).

Table 23 Irregularities reported by the Member States in 1997 (in brackets, the sums in percents of the budget category)

	own		EOGFL Guarantee	
	number	means percentage of budget category	number	percentage of budget category
Austria	73	2.5	36	0.07
Denmark	82	3.4	24	0.03
France	233	2.3	91	0.04
Germany	384	0.9	601	0.47
Netherlands	453	2.4	130	0.44
Sweden	8	1.0	66	0.11
UK	455	3.5	246	0.14
Total EU	2,628	2.7	2,058	0.19

Source: European Commission, 1998

Table 24 Index of political corruption, 1999



Source: Transparency International, 1999; 10: no corruption

The percentage of young people who have ever used cannabis is considerably lower in Sweden and Austria than in the other countries. For the rest, there is little variation (table 26).

Table 27 combines data on prices from various sources. Average prices and variations are known for heroin and cocaine in four countries. For other countries, we must make do with average prices or bandwidths into which the prices fall. The table shows that the prices of hard drugs vary widely and are exceptionally low in the Netherlands. High prices can be found in repressive countries like Sweden and the US. Based on price variations we could conclude that the markets for hard drugs in the Netherlands is hindered to a similar degree as markets in France and England while being more heavily blocked in Germany. The combined data on use and prices seem to show that the users'

market for hard drugs in the Netherlands is typified by low prices and usage that parallels that in other countries. Policy seems to influence the prices but not behaviour. The prices of cannabis vary little between countries although they are higher in Sweden.

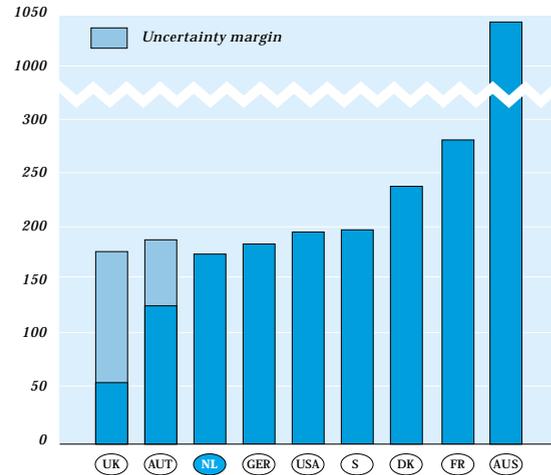
The number of arrests and registered drug offences provides direct information on the degree to which attempts are made to intervene in the drugs market. The figures in table 28 show extremely large differences between countries. Arrests are

Box 7 Hard drugs and crime

The share of drug addicts in crime in the Netherlands, almost without exception, involves frequently occurring types of local crime such as shoplifting, theft from cars, domestic break-ins and pickpocketing. Per year, some 700,000 offences (against property) are attributed to the criminally active among the 30.000 hard drug addicts. In total, these offences incur around 295 million € in material social costs. However, the use of hard drugs does not always lead to crime. A great number of users only take the drugs their legal income permits. Of those who do commit crimes, a large number seems to have been involved with crime before using hard drugs. Around 291 million € is estimated to be spent on police and judicial law enforcement (123 million of which is invested in tackling drugs trafficking). Enforcing prison sentences has especially high cost: one third of the total costs incurred by the prison system can be attributed to drug-related offences.

Source: Meijer et al., 1995

Table 25 Number of hard drug users per 100,000 inhabitants, 1994/1995



Source: EMCDDA, 1997, UNIDCP, 1997

Table 26 percentage of juveniles that has ever used cannabis; reference year 1995/1996

Sweden	3,0
Austria	9,5
Germany	22,6
Denmark	28,0
France	30,0
Netherlands	30,2
Australia	33,0
USA	34,0
UK	36,0

Source: EMCDDA, 1997; National Household Survey on Drug Abuse 1997

Table 28 Arrests for drug offences per 100,000 inhabitants, 1995/1996

Australia	313
Austria	201
Canada	207
Denmark	166
France	134
Germany	229
Netherlands	43
Sweden	100
UK	162
USA	539

Source: EMCDDA, 1998; UNIDCP, 1997

Table 27 Consumer prices of drugs in dollars per gram, 1983-1993

	heroin		cocaine		cannabis
	price	variance	price	variance	price
Australia	37-732		73-585		4.4-23.5
France	100	17	78	19	8.2
Germany	113	40	99	27	
Netherlands	43	23	54	17	7.4
Sweden	305		149		14
UK	115	14	98	23	5.2
USA	80-500		20-200		1.4 - 16

Source: Farrell, et al., 1996; UNIDCP, 1997

extremely low in the Netherlands and extremely high in the US. The disparity is primarily due to differences in legislation. Specifically, what is important is whether both trafficking and use are punishable offences.

The seizure of drugs provides information on their presence at any stage of the production and distribution chains. The figures show great fluctuations over the years, which is why table 29 presents data for two years (1995 and 1998) separately. The seizures are extremely large in the Netherlands. This can of course be due to intense efforts involved in criminal investigation and detection but, given non-aberrant drug use, pre-eminently indicates the probability of large international drug trafficking.

Not only reducing drug use but also extending (medical) care to drug users aims to limit the number of deaths due to drug abuse and to limit the spread of disease, among other things. Although here, too, we are faced with problems of definition, the number of deaths following drug abuse in the Netherlands seems extremely low (table 30). With respect to the spread of HIV/AIDS, the situation differs little from those in other countries with the exception of France and the US that both have a considerably greater incidence. The third column shows that in the Netherlands, drugs are injected relatively infrequently among the HIV/AIDS population, which may partly explain the low number of drug-related deaths.

Drugs policy also aims at restricting negative consequences of

Table 29 **Seizure of drugs in kilos, 1995**

	heroin	cocaine	amphetamine	cannabis
Austria	47	55	2	697
Denmark	37	110	40	2,414
France	499	865	104	42,270
Germany	933	1,846	138	14,245
Netherlands	351	4,851	45	332,086
Sweden	31	3.4	279	527
UK	1,390	672	530	58,000
1998				
	heroin	cocaine	amphetamine	cannabis
Austria	118	99	8	1,336
Denmark	55	44	25	1,572
France	344	1,051	165	55,698
Germany	686	1,133	310	21,007
Netherlands	2,043	11,437	1,450	118,122
Sweden	71	19	135	496
UK	2,235	2,350	3,296	149,969

Source: EMCDDA, 1997; 1999

Box 8 **Developments in drug production**

With the arrival of new technologies, organised crime has a new tool in fabricating 'designer drugs'. With relative ease, computer programmes are used to manipulate the molecular composition of drugs that fall under the Dutch Opium Act. As a result, the new designer drugs are not covered by the Dutch Opium Act. Europe is becoming an increasingly important cannabis producer. This is mainly due to high quality inland cultivation and the open trading in seeds. The THC level (tetrahydrocannabinol) is extremely high. In Europe, the Netherlands is seen as the pilot country in this development.

Source: INCB, 1999

Table 30 **Drug-related mortality and AIDS issues, 1995**

	number of drug-related fatalities per 100,000 inhabitants	number of people suffering from AIDS per 100,000 inhabitants	percentage of intravenous drug users in HIV/AIDS population
Netherlands	0.4	3.1	10.9
France	1.0	8.4	23.8
Germany	1.9	1.7	14.2
Austria	2.0	2.4	25.5
Sweden	2.2	2.1	11.5
UK	3.0	2.6	6.5
Australia	4.6	3.8	
USA	4.6	15.2	29.0
Canada		4.0	
Denmark	5.3	4.1	7.9

Source: EMCDDA, 1997; 1998; UNDP, 1997; UNIDCP, 1997

drug use for society, one aspect of which is the inconvenience citizens are caused. Table 31 shows that the degree to which citizens are confronted with drug-related problems does not differ greatly in the European countries considered, but is highest in the Netherlands. This is probably due to the 1,500 legal and illegal 'coffeeshops' throughout the country.

Drugs trafficking leads to many types of serious crime, which is among others reflected by the relatively large number of murders in Amsterdam and Rotterdam (see table 4, and Levi, 1997).

The discussion shows that we only have fragmentary data on illegal drug markets. More insight into these markets in the Netherlands and the surrounding countries is important to reach definitive conclusions.

Table 31 **Personal exposure to drug-related problems, 1996**

Germany (East)	4
Sweden	7
Denmark	8
Austria	10
France	12
Germany (West)	13
UK	14
Netherlands	17
Average of 15 EU Member States	14

Source: Van Dijk & Toornvliet, 1996

Box 9 Drug risks

In Canada and the United States, the number of deaths due to drug abuse is mounting. According to experts (INCB), this can be blamed on the increasing purity of heroin. In particular, greater numbers of young people are smoking heroin ("chasing the dragon"). This trend is also found in the UK where, in some parts of the country, there is a new heroin-using outbreak. A notable factor in the UK is that the age at which heroin is being used has dropped. The high-risk group is now aged 15-25.

Source: INCB, 1999; Parker et al., 1998

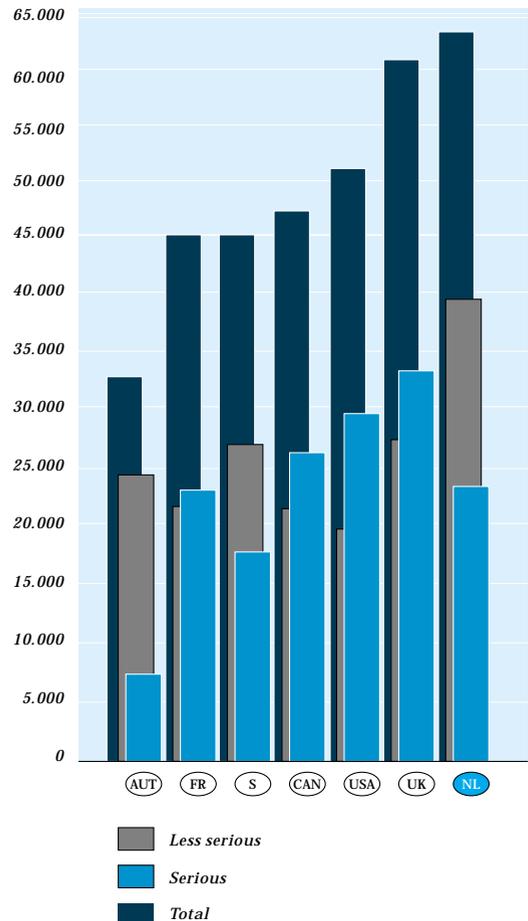
Tentative evaluation of trafficking in and use of drugs

- Slight:** number of drug-related fatalities
- Average:** use of hard drugs and soft drugs
- Poor:** international trafficking in drugs

3.5 Conclusions

With respect to crime against citizens, the volume of serious crime - murder, violence, burglary, car theft - appears to be average and for some types of crime less than average in the Netherlands, while the number of less serious offences - threats, theft of personal belongings, bicycle theft, car vandalism - is extremely high (table 32). The high level of crime against the Dutch retail sector runs parallel to this. Less serious crimes are generally considered not unimportant by their victims, and considerably reinforce a sense of insecurity. These findings confirm that the 1985 analysis of the Dutch Committee on Petty Crime (Commissie Roethof or Commissie Kleine Criminaliteit) is still valid.

Table 32 **Crimes per 100,000 inhabitants in 1995, according to victim survey**



Source: Mayhew & Van Dijk, 1997

As regards serious forms of crime, it shows that violence in urban areas occurs relatively often. Fatal violence is also frequent there. The latter is partly due to liquidations in the criminal world (particularly drug trafficking).

The relatively poor situation in the Netherlands seems to be becoming a disadvantage in international competitiveness. In the Global Competitiveness Report 1999, the weak protection of personal safety is counted as one of the three key competitive weaknesses of the Netherlands (WEF, 1999). This is not the case for the other countries considered here. It may be assumed that this observation contributes to a negative image of the Netherlands.

The information that is available on fraud and other financial and economic crime is too limited for a good international comparison. The data primarily show that these types of crime constitute

a serious international problem and also seem to indicate that the Netherlands does not score favourably. Box 10 deals with the economic damage caused by crime. Wherever possible, a distinction is made between personal crime and fraud in a general sense. One important conclusion is that both categories involve extremely high costs and, from this perspective, fraud is no less damaging than personal crime. As to crime concerning the public sector, it is important that government corruption is infrequent.

Finally, despite the low prices, the drug policy in the Netherlands is not linked to a major use of hard and soft drugs. The number of drug-related deaths and spreading of disease are limited. The low prices and large seizures of drugs indicate large-scale international drugs trafficking.

Box 10 Costs of crime and the consequences for economic growth

Two types of crime-related costs can be distinguished, the first of which are the costs due to suboptimal allocation of resources. These costs include costs for society such as scarce resources that need to be devoted to control crime and to redress its consequences and diminished wellbeing due to crime. Examples include extra medical care and reduced quality of life because of pain, suffering or fear. The second type concerns illegal redistribution of resources: the victims losses are the perpetrators gains, and society as a whole suffers no (financial) damage. Below follows an overview of the available estimates of both types of costs together. The valuation of the costs varies sharply. In the US in particular, attempts have been made to express the impaired quality of life in money. The sums concerned are substantial while in other countries, these costs are left entirely out of consideration in the estimates. For all countries, the psychological costs to others than victims, for instance due to fear, are not included in the estimates. In cases of murder and manslaughter, the value placed on human life also plays a critical part. Because of these and other discrepancies, the estimates have an illustrative character.

Costs of crime for victims in € per inhabitant

	personal crime	fraud	total	year
Australia	156-197	88-103	244-300	1996
Canada			779	1996
France	201-360	287-418	489-779	1996
Germany			98	1994
Netherlands	411	587	998	1997
UK			1,202	1998
USA	1,445			1993
			6,136	1997

Crime and economic growth

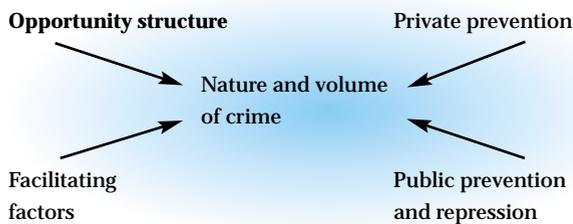
Research conducted by the IMF indicates a negative effect of crime on economic growth. This effect is partly due to the laundering of money illegally acquired. Money laundering has a large number of negative consequences, including inefficient investments, tax evasion, undermining monetary policy and disrupting capital prices. An analysis for 18 industrial nations shows that a 10% increase in crime leads to a drop in growth of 0.1%.

Source: Quirk, 1995; Deloitte & Touche, 1997; Walker, 1997; Anderson, 1999; Brantingham & Easton, 1998; Audit Commission, 1998; CESDIP, 1999.

4 Environmental factors

As we remarked in the introduction, every effort must be taken to avoid a naïve link between results and policy. Environmental factors of an autonomous or semi-autonomous nature cause differences between countries and should be taken into consideration. In accordance with the general framework of chapter 2, three groups of factors are distinguished: opportunity structure, facilitating factors and the crime-prevention efforts of the private sector. These factors are dealt with consecutively in this chapter, which closes with an interim balance.

4.1 Opportunity structure



This paragraph aims to answer the question whether the opportunity structure makes the Netherlands relatively sensitive or insensitive to crime. The opportunity structure deals with the potential for crime in the sense of the presence and accessibility of targets ('pull factors'). Insight into this aspect is required, at least in a qualitative sense, if we wish to evaluate the results of crime control efforts. After all, to realise a certain nature and scale of crime, an ample opportunity structure requires greater efforts than a limited opportunity structure. Below follows a discussion of elements that are scientifically recognised as important factors. As we explained in box 2, these factors concern the possessions and the behaviour of individuals and organisations. Here, not only individual aspects are involved, but people and

activities converging in place and time. In particular, we must consider the degree of urbanisation and concentration of economic activities.

Population density and level of urbanisation

Urban environments offer higher crime yields and lower chances of arrest than other areas. Anonymity and little social cohesion (scant reciprocal help, the disappearance of perpetrators in the crowd, etc.) cause people to lose constraint. Both similarly have a negative impact on the capacity of people to take action to stem the decline of their neighbourhoods. Disorder and crime ensure that inhabitants isolate themselves physically and mentally. The composition of the urban population and the selection processes leading to it also increase crime. Research for the US indicates a high level of urban family breakdown, which has a dramatic effect on crime rates (Glaeser & Sacerdote, 1996). It is clear that all the factors described in box 2 contribute to crime in urban areas being larger than in other areas.

Urbanisation is not a uniform concept. Table 33 gives two criteria. According to both criteria, the Netherlands is most urbanised. Relatively little urbanisation partly explains the low volume of crime in Austria, Canada, France and Sweden. The high level of urbanisation is partly responsible for the large scale of crime in the Netherlands.

Table 33 **Urbanisation, 1997**

	urban population as a percentage of the total population	population density
Austria	64	96
France	75	106
USA	76	28
Canada	77	3
Sweden	83	20
Australia	85	2
Denmark	85	122
Germany	87	229
UK	89	240
Netherlands	89	380

Source: UNDP, 1998; OECD, 1997

International traffic of goods and services

Many international business contacts expose a country to transnational crime. This traffic involves not only large physical flows of goods that offer opportunity for smuggling drugs and other products, but also substantial financial traffic that tempts financial and economic crime. As far as goods flows are concerned, both scale and concentration are key. The chance that drug smuggling will be detected on a location decreases - assuming equal investigative efforts - with the scale of the goods flows there. The relative size of imports and exports offers insight into this (table 34). The size of Dutch mainports and, in particular, the Port of Rotterdam confirms this picture. The low drugs prices in the Netherlands that we mentioned earlier correspond to the scale of trade flows. In this regard, too, the Netherlands is vulnerable to crime (Farrell, 1998).

Individual aspects: possessions and lifestyle

The presence of valuable goods and the chance of arrest influence crime. The risk of becoming a victim is especially determined by the lifestyle of owners of valuable goods. A critical factor here, for example, is whether or not houses are often left unguarded due to the absence of owners. Social factors such as how people go out at night (nightlife) can also offer opportunities for crime. Table 35 attempts to quantify these aspects.

Possessions are limited to means of transportation. The extent to which houses are left unguarded is measured by the number of single people and working women. The frequency with which people go out at night is also taken into account. The Netherlands has an average score on this scale.

New technology

Technological changes can prompt new forms of crime. At the beginning of the product lifecycle, the risks for perpetrators are often few because of limited prevention and repression. Products are only gradually becoming better protected and interest in and the expertise of investigative bodies develop slowly. How we should interpret a broad opportunity structure in this context is not entirely clear. One interpretation is that the penetration of new technology is advancing but that the technology has not yet become familiar. At least, this is the stage at which information technology seems to be. The Internet in particular offers opportunities for new types of crime (fraud, child pornography, etc). According to table 36, while Internet use is relatively high in the Netherlands compared to the surrounding countries, it lags far behind its potential (see Australia and the US, and Finland in particular). An increase of crime in this sphere seems likely. It is clear that technological developments in the crime world are as rapid as those in society. Because many perpetrators stay in step with the most recent technological developments, attention to build-

Table 34 **Import and export as percentage of GDP, 1997**

	export	import
USA	11	13
Australia	20	20
France	23	20
Germany	23	22
UK	28	29
Denmark	35	29
Canada	37	35
Austria	38	39
Sweden	41	36
Netherlands	53	46

Source: UNDP, 1998

Table 36 **Application of new technology per 1000 inhabitants**

	internet users 1995	number of hosts 1998	cellphones 1998
France	8.6	7.8	190.4
Germany	18.3	14.9	170.4
Austria	18.6	18.6	281.3
UK	25.6	22.6	220.4
USA	38.0	87.2	241.2
Denmark	38.3	17.9	351.1
Netherlands	38.8	34.6	214.8
Canada	41.2	53.5	175.0
Sweden	51.0	35.1	511.5
Australia	55.4	42.0	323.8
Finland	139.0	107.5	577.0

Source: UNDP, 1998; IMD, 1999

Table 35 **Index for possessions and lifestyle**

UK	64.8
Germany	66.7
France	68.1
Austria	68.1
Netherlands	71.8
Canada	77.8
USA	82.4
Sweden	82.4

Source: Kangaspunta, et al., 1999

ing in security measures should be given as early in a product's lifecycle as possible, preferably at the design stage (Ekblom, 1997).

Information technology emphatically encourages electronic banking and its globalisation. This creates new potential for financial and economic crime (box 11). Whether or not the biotechnological revolution will lead to a crime wave is yet to be seen.

Conclusions

Opportunity factors contribute to a high crime level in the Netherlands. The broad opportunity structure also makes the Netherlands attractive to international criminals and criminal organisations.

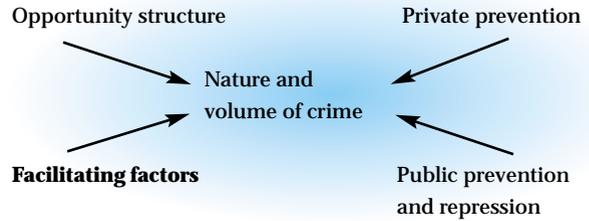
Evaluation of the opportunity structure

Slight:

Average: possessions and behaviour

Great: urbanisation, scale of goods flows, large main ports, information technology

4.2 Facilitating factors



In addition to opportunity factors, we can also distinguish facilitating factors. These are individual factors that stimulate or inhibit people to commit crimes ('push factors'), a number of which is discussed below.

Age structure of the population

Delinquent behaviour is strongly age-related. Criminal behaviour shows a sharp increase from a relatively young age (11) until the age of twenty, after which it shows a marked drop, stabilising gradually in the late twenties. The link between age and crime has been established, independent of time, culture and place. Over time, maximum participation in criminal activities is shifting to ever-younger age groups. We can conclude that people within a relatively narrow age band are committing crimes. So, the volume of crime can partly be explained by the age structure of a country. It should also be noted that persons belonging to a relatively large age cohort run a greater risk of committing crimes than those belonging to smaller age cohorts. This can be explained by the circumstance that when employment totals remain stable, there will be a higher unemployment percentage among larger cohorts (see below). Larger cohorts also place more stress on organisations and persons who fulfill supervisory functions.

Box 11 International payment traffic

The massive growth of international, monetary transactions is enabled by the development of electronic transfer systems such as that of the Society for Worldwide Interbank Financial Telecommunications System (SWIFT), the Federal Reserve (Fedwire) and the Clearing House Interbank Payments System (CHIPS). The number and the financial value of electronic transactions are enormous. Every day, more than 465.000 transactions totalling more than 2000 billion dollars are sent via Fedwire and CHIPS. In the US in 1995, 550 billion cash transactions were carried out, amounting in total to \$2,200 billion. A total of 62 billion transactions with cheques were made with a total value of \$73,000 billion. Finally, 19 billion electronic transactions were done totalling \$544,000 billion. The number of transactions made with cash, cheques and electronically is reverse in proportion to value. In many ways, this system is the dream of every money-launderer. In 1995, the American Office of Technology Assessment estimated that 0.05 to 0.1 percent of the daily electronic money transactions related to money laundering practices. Source: Blum, et al., 1998

Table 37 Percentage of 15-24-year-olds in the population, 1995

Germany	10.8
Austria	12.5
UK	12.6
Canada	12.8
France	13.1
Netherlands	13.3
Denmark	13.4
USA	14.6
Sweden	15.8
Australia	16.6

Source: OECD, 1997a

As a consequence, the intensity of supervision decreases. With the exception of Germany on the one hand and Australia and also Sweden on the other hand, the differences between countries are relatively minor (table 37). However, marginal percentile differences can have considerable impact on crime. The Netherlands occupies a midfield position.

Poverty and income inequality

Poverty and income inequality are the classic criminological causes of crime. People living in poor conditions can improve their economic situation strongly by committing crimes against property. It has been established that, at the level of individuals, there is a clear relation between socio-economic disadvantage and crime. Table 38 gives two criteria for poverty. If poverty in a country is defined relative to the average income in the country itself, the Netherlands occupies a favourable position. If an equal income limit is maintained for all countries, the position of the Netherlands is as poor as that in the US. This is due to the Netherlands' relatively low national income. Here, relative poverty seems of greatest importance.

Unemployment

Crime is linked to unemployment through the latter's connection with poverty and income inequality. However, there are other important connections. If there is no chance of legal employment or little prospect of it while there is time available, crime becomes a more attractive option. Furthermore, legal employment forms a

bond with society. Social control and informal surveillance are stronger and more effective (Sampson & Laub, 1993). Here, it must immediately be said that many unemployed persons do not belong to a high-risk group. Age plays a critical role (Nagin, 1998). Longitudinal research among cohorts of young people explicitly shows that whether or not crime is committed strongly depends on unemployment. The longer young people are unemployed after leaving school, the more crimes against property and crimes of violence they commit; they are also far more frequently arrested and sentenced (Fergusson, et al., 1997).

According to table 39, unemployment among the total population is low in the Netherlands. Among young people, unemployment is twice as high, but the unemployment rate is still relatively favourable.

Alcohol abuse

Committing (violent) crimes often goes hand in hand with alcohol consumption. Much research has shown that alcohol abuse has a high correlation with aggression (Greenfeld, 1998; Deehan, 1999). Because of its uninhibiting qualities, alcohol can result in violent behaviour and often plays a role in serious violent crimes. Perpetrators have often drunk more than their victims: young people who regularly drink too much commit more crimes than their non-drinking peers. According to table 40,

Table 39 **Unemployment, 1996**

	juvenile unemployment (15-24)		total	
	male	female	male	female
Austria	7	7	5	5
Germany	8	8	8	10
Denmark	9	12	6	8
Netherlands	11	12	5	8
USA	13	11	5	5
Australia	15	14	9	8
Sweden	17	15	8	7
UK	18	11	10	6
Canada	18	15	10	9
France	22	32	10	14

Source: UNDP, 1998

Table 38 **Percentage of the population under the poverty line, 1989-1994**

	relative poverty	absolute poverty
Germany	6	12
Sweden	7	5
Netherlands	7	14
Denmark	8	8
France	8	12
Canada	12	6
Australia	13	8
UK	14	13
USA	19	14

Source: UNDP, 1998

Table 40 **Alcohol consumption, 1997**

	total (in litres pure alcohol)	liquor (in litres pure alcohol)	beer (litres)	wine (litres)
Sweden	5.1	1.1	61.7	14.5
Canada	6.0	1.7	66.9	8.5
USA	6.6	1.8	83.2	7.4
Australia	7.6	1.4	94.7	18.4
UK	7.7	1.4	103.6	14.3
Netherlands	8.2	1.7	86.3	17.5
Austria	9.5	1.5	113.2	30.0
Germany	9.5	2.0	131.1	23.0
Denmark	9.9	1.1	113.7	29.3
France	10.9	2.4	37.5	60.0

Source: World drink trends, 1998

The Netherlands occupies a midfield position as regards total alcohol consumption, and also when it comes to the consumption of beer, which is often involved in violent crimes (committed during nights out).

Possession of firearms

Possession of firearms is closely related to murder and manslaughter (see box 12 and Sloan et al., 1988). The availability of firearms results in conflicts rapidly getting out of hand, the deaths of more victims than when using other hand weapons and more injuries during crimes such as bank robberies. The degree to which weapons are available differs widely in the various countries (table 41). In the Netherlands, there is very little possession of firearms. This is shown in the table, which demonstrates that firearms are far more frequent in the more thinly populated countries reviewed. A related factor is that more people own firearms in rural than urban areas. What is striking is that the ratio of firearms in urban and rural areas varies considerably: from 1 in 2.5 in Austria to 1 in 1.5 in the US.

The number of firearm permits issued provides a minimum estimate of the number of firearms in a country (table 42).

The number of licences is much smaller than the number of households claiming to possess one or more firearms. There is a strong impression that the licensing systems are inadequate for regulating and registering firearms.

Conclusions

As far as facilitating factors are concerned, the situation in the Netherlands is not unfavourable. The Netherlands rates a neutral score on most issues and scores favourably on several aspects.

Evaluation of facilitating factors

Good: little possession of firearms, low unemployment

Average: age structure of population, poverty, youth unemployment, alcohol abuse

Poor:

Table 41 Households in possession of a firearm per 100,000, 1994/1995

	national	urban areas	rural areas
Netherlands	2,100	1,600	2,200
UK	4,100	2,500	4,900
Denmark	8,000		
Germany	9,400	5,600	9,900
Austria	15,500	7,100	18,600
Australia	16,000		
Sweden	18,000	6,900	18,300
France	23,900	13,900	26,300
Canada	25,800	14,300	31,900
USA	36,200	23,400	33,600
Finland	50,000		

Source: Crime guide HEUNI, 1998; United Nations, 1998

Table 42 Firearm licences, 1994/1995

	estimated number of issued firearm permit of licence per 100,000 inhabitants	proportion between firearms and number of licences
Denmark	400	20.0
UK	1,480	2.8
Canada	2,000	12.9
Germany	2,500	3.8
Austria	4,104	3.8
Australia	5,860	2.7
Sweden	8,900	2.0
Finland	21,500	2.3
France	N.A.	
Netherlands	N.A.	
USA	N.A.	

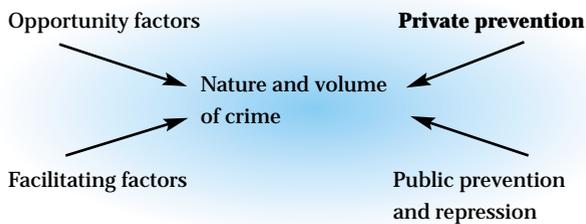
Source: United Nations, 1998

Box 12 Firearms as cause of death

In a comparative study into firearm-related deaths, in which 36 countries took part, dramatic differences were found in the degree to which firearms are used in cases of fatal violence (Krug et al., 1998). In North America, five to six times as many firearms are used than in Europe, which is 95 times more often than in Asia. On average, more than half the murders were committed with a firearm. In the US, this was the case in 71% of the murders, which firearms were used in 61% of the suicides. Research for the US and Australia showed that 92% of the regional differences in murder and suicide percentages could be explained by differences in access to firearms (Miller and Cohen, 1997). American research shows that the easy availability of weapons played a critical part in the epidemic of violence among young people at the start of the 90s (Fagan and Wilkinson, 1998). The trade in crack (cooked cocaine) and the subculture surrounding it have seen an enormous increase in firearms possession and their use by young people. American government policy is currently geared to reducing weapons possession among juveniles. This is partly due to the use of firearms in schools.

Source: Miller & Cohen 1997; Fagan & Wilkinson, 1998, Krug et al, 1998

4.3 Crime prevention by private parties



Individual citizens and community organisations themselves have primary responsibility for crime control by taking preventive measures. The degree to which this takes place determines to a large extent the need for public crime prevention. In addition, private parties, such as the private security sector, play a role alongside the regular police. Increased prosperity and the ownership of luxury consumer goods, the decrease of social control and increased prevention awareness in the business community have led to the development of a lucrative market for private parties. Below follows a discussion of the provisions taken by companies and citizens, followed by a brief outline of the security industry.

Prevention

Crime prevention differs from a repressive approach in a number of ways. Prevention is geared to removing causes and not to punishing offenders. Private prevention is mainly directed at opportunity factors. Public prevention can also involve influencing

facilitating factors. Prevention and promoting prevention involve many actors (local government, the business sector, and the social midfield) and numerous instruments can be used (information, legislation, supervision). This is in contrast to the repressive police/judicial approach.

An important category of private preventive measures involves constructional provisions such as securing doors and windows and installing alarm installations. Table 43 shows that only one of the three provisions is often used in the Netherlands. More complex measures such as the placement of alarm installations are unusual. In the UK, the US, Canada and France in particular, these measures are more prevalent. If these data are compared with table 7 on domestic break-ins we note that in countries with a high rate of domestic burglaries, many preventive measures are being taken. Of course this does not mean that prevention is ineffective. The Netherlands seems to lag behind in the field of private security measures.

As we saw in table 13, the retail trade is often the victim of crime. This business sector takes many preventive measures. Although the problem in the Netherlands ranks among the more serious of those experienced by the countries researched, prevention lags behind the measures taken in Germany, the UK and Australia (table 44). There seem to be possibilities for improvement here, too.

Table 43 **Percentage of households that have taken preventive measures, 1995**

	burglary alarm	extra security locks on access doors	extra security locks on windows
UK	24.5	68	27.1
USA	17.7	58	20.9
Canada	16.2	47	23.0
France	14.6	34	12.0
Netherlands	8.8	63	12.6
Austria	6.1	37	11.5
Sweden	5.9	42	5.7

Source: Crime Guide HEUNI, 1998

Table 44 **Percentage of retail trade that has taken security measures, 1994**

	Australia	Germany	France	Netherlands	UK
Access control	31.7	14.8	10.5	6.1	12.8
Security service during working hours	N.A.	5.8	6.1	4.1	8.3
Security service after closing time	48.6	13.7	11.8	5.6	12.6
Burglary alarm system	52.6	45.3	59.2	51.6	71.4
Security service alarm system	36.4	22.9	29.2	25.3	21.7
Security lighting	57.5	51.2	33.2	42.2	42.1
Closed Circuit TV unknown	17.3	15.2	11.5	20.0	
Staff instructions unknown	58.6	33.8	48.9	57.5	
Securing windows	54.9	46.8	56.1	49.5	60.1
Marking of products	35.6	14.2	10.8	12.2	21.1
Screening of new staff	N.A.	32.3	6.4	10.8	43.8
None of the above (otherwise)	7.0	9.7	14.4	14.1	5.2

Source: Van Dijk & Terlouw, 1996

Private security industry

The scale of the private security industry gives insight into the efforts invested to prevent crime from a different angle. However, we must remember that using the services of a security company and other preventive measures can be substitutes. Differences between countries may be partly due to organisations having different policies as to having security personnel on their staff or contracting private security companies.

According to table 45, the US and Australia outrank the other countries by far. With an average of 132 security personnel per 100,000 inhabitants, the Netherlands is under the EU average of 160. Within the private security industry, the expectation is that the size of the security workforce will increase over the coming years. Public-private collaborative relations within the security industry will also increase in importance. It is clear that, in this field, the police no longer have a monopoly. In the assistance and preventive areas in particular, the security industry will start taking over duties previously in the remit of the public police.

Evaluation of crime prevention by private parties

Substantial:

Average:

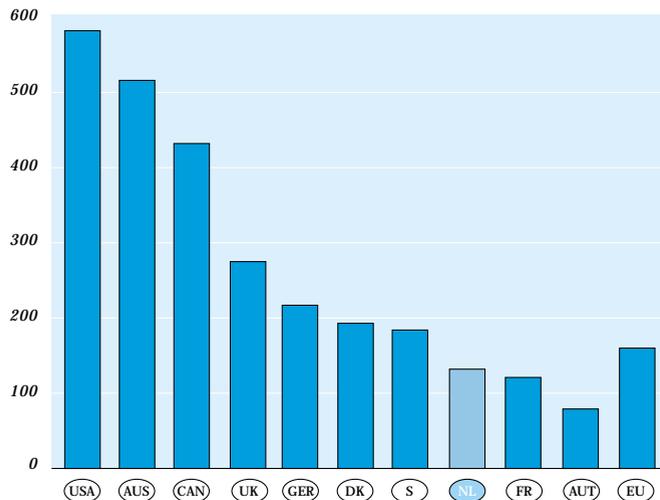
Limited: situational crime prevention by private individuals and the retail trade, size of private security industry

4.4 Interim balance

The Netherlands has an ample opportunity structure for crime. This applies to communal crime committed against citizens and the business community and also to financial and economic crime and drugs crime. As far as facilitating factors are concerned, the situation is not unfavourable. The Netherlands has an average score overall and a favourable score on a few factors - possession of firearms and unemployment.

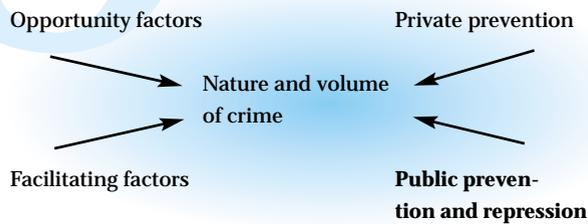
Furthermore, it appears that the Netherlands is lagging behind rather than leading the field in the prevention of crime by citizens and companies. The fact that the Netherlands is trailing behind can be deduced from direct information on the preventive investments of citizens, the commercial sector and other organisations and also from the relatively small size of the private security industry. The security back-lag is even more noticeable when seen against the massive scale of less serious crime. The broad opportunity structure and the private security back-lag have faced public crime control with a daunting task. Under these circumstances, one would expect large investments in public prevention and repression to emerge in comparison with the other countries. The substantial scale of crime extensively outlined in chapter 3 demonstrates already that the public sector is not entirely effective in fulfilling its duties. This conclusion raises the question what causes the underperformance of the public sector. This is the topic of the next chapter.

Table 45 Persons working in the private security industry per 100,000 inhabitants in 1996



Source: De Waard, 1999

Public prevention and repression of crime



Large organisations with widely divergent tasks are involved in the public control of crime. A shared characteristic is a high labour intensity. Below follows an outline of the expenses involved in the various organisations, and in view of the high labour intensity, size of personnel.

The factors discussed in the interim balance, such as the extensive opportunity structure and scant private prevention efforts, play a role in interpreting the figures. After all, when environmental factors are unfavourable, crime control requires more public efforts than favourable factors would. The input data are subsequently related to the scale of crime.

The availability and mutual comparability of data is also a problem here. This probably applies least to the prison system. When examining the police sector, differences between countries exist with respect to those with special investigative services. Furthermore, data is not always available on all expenditure categories and there is sometimes uncertainty regarding the definitions used. There are more serious problems when it comes to criminal prosecution, which in the Netherlands is the responsibility of the Public Prosecution Service. In some countries, the prosecutors belong to the judiciary while in others they number among the police. In both situations, the provision of resources for prosecution (not just expenditure but support staff as well) can often only be separated with difficulty. Finally, a comparison of the resources of the judiciary for criminal proceedings is particularly problematised by a lack of insight into the time allocated

for criminal cases on the one hand and civil and administrative cases on the other. We intend the data outlined below to be read in this context. Appendix 1 presents the data on personnel and financial resources jointly, with an explanation of the estimates. The appendix provides an overview of expenditure on the judicial apparatus, including the entire judiciary, and compares it with expenditures on public order and safety that for some countries can be drawn from the national accounts.

Before turning to the separate organisations, we first present a general picture. Table 46 contains basic data on the resources spent on law enforcement. In this and all the other tables relating to financial and personnel resources, the most recent available data are included (generally from 1997 or 1998 - see appendix 1). Abstracting for the moment from the magnitude of the crime problem, expenditure per head of population in the Netherlands is close to the average with the countries reviewed. Of the European countries surveyed, alone the UK and Austria spend more on law enforcement. However, in the Netherlands the number of personnel is extremely small.

Table 47 relates the resources to the scale of crime. This does not concern the crime registered by the police, which is partly a function of the available means, but the total crime encountered by citizens. The estimates are based on the international crime victims survey (see table 1). The total number of crimes is used, not only the number of serious crimes. As we argued earlier, the less serious crimes are often not perceived as such by the victims and contribute to a general sense of insecurity. For reference, we repeat the estimates in the table.

The low ratio for the Netherlands on both criteria (expenditure per crime and personnel per 1000 crimes) implies that, despite the considerable deployment of resources in absolute sense, resources are still insufficient to compensate for unfavourable environmental factors. The way in which resources are used, a point we deal with below, also has a part to play.

Table 46 **Total public resources of the criminal justice system: 1998 prices**

	expenditure in € per inhabitant	expenditure as a per mille of GDP	personnel per 100,000 inhabitant
USA	379	13.6	669
UK	274	14.4	494
Canada	243	10.4	352
Austria	243	10.6	488
Netherlands	223	10.8	382
Australia	212	9.8	389
Germany	196	8.4	424
Sweden	177	9.0	430
Denmark	166	6.9	39
France	165	7.6	468

Source: Appendix 1 and table 55

Table 47 **Total public resources of the criminal justice system in relation to crime: 1998 prices**

	expenditure in € per inhabitant	personnel per 1000 crimes	crimes per 100,000 inhabitants
Austria	759	15.3	32,000
USA	742	13.1	51,000
Canada	506	7.3	48,000
UK	449	8.1	61,000
Sweden	395	9.5	45,000
France	366	10.4	45,000
Netherlands	354	6.1	63,000

Source: Table 1 and 46

5.1 Prevention and detection

According to table 48, only in the Anglo Saxon countries and in Austria is expenditure on police per head of population higher than in the Netherlands. Germany has approximately the same expenditure level. Expressed in percents of Gross Domestic Product only the expenditure level in the UK and Austria is considerably higher than that in the Netherlands. This can partly be explained by the fact that GDP in the Netherlands is relatively low. Personnel relates to both executive and administrative personnel. The data are intriguing. In the Netherlands, Canada and Denmark, the workforce is relatively small. Austria and France have the largest police force, at least 60% more than the Netherlands. As far as France is concerned, this matches a South-European tradition of sizeable police apparatus (Italy has 488 and Spain 477 police officers per 100,000 inhabitants). The Dutch police force is relatively small but the level of expenditure lies just below the average of the countries reviewed here. The implication is that the expenses per staff member are high. This can be due to various things such as greater use of technology and capital goods than in the majority of other countries, and to higher personnel costs. Furthermore, we cannot entirely rule out that some of the variation is due to differences of definition. Based on the data currently available, we are unable to give a definite answer on this point.

A more important comparison is how police resources relate to the problems the police are intended to tackle. The best criterion here is again the total crime estimated. For less serious offences, the emphasis is not on investigation but on prevention by, for instance, surveillance. It is evident that the resources for the police are few in relation to the problem, both in terms of personnel and in terms of budget. The large volume of petty crime in the Netherlands exerts great pressure on the police.

Registered crime - number of official written police reports issued - can similarly be related to the size of the police (table 49). Here, it must be emphasised again that the willingness to report crimes is partly determined by the success of the police in the investigation process. The police, too, have discretion in deciding what is serious enough to warrant an official report. A barely registered type of crime can indicate a small amount of crime but also a small police force that is not very effective and/or fails to inspire confidence. So this statistic is less suited as criterion for the magnitude of crime. Often, the number of official written police reports is seen as a measure of police productivity. However, this figure is an imprecise measure of part of the police's workload. The Netherlands ranks just below average in this regard.

Table 48 Resources of the police, 1998 prices

	expenditure in € per inhabitant	expenditure as per mille of GDP	personnel per 100,000 inhabitants	expenditure x 1000 € per staff member
UK	205	10.8	376	55
Austria	203	8.8	420	48
USA	188	6.8	354	53
Canada	169	7.2	253	67
Australia	160	7.4	307	52
Netherlands	151	7.3	254	60
Germany	137	5.9	302	45
France	132	6.1	403	33
Sweden	119	6.1	307	39
Denmark	117	4.9	265	44
Average of 15 EU Member States			375	

Source: Appendix 1

Table 49 Resources of the police in relation to the magnitude of crime, 1998 prices

	expenditure in € per crime	personnel per 1000 crimes	expenditure in € per recorded crime	personnel per 1000 recorded crimes
Austria	632	13.1	3,377	70.2
USA	368	6.9	3,735	70.3
Canada	352	5.3	1,965	29.4
UK	337	6.2	2,328	42.5
France	294	8.9	2,200	66.9
Sweden	265	6.8	876	22.6
Netherlands	239	4.0	2,106	35.6
Denmark			1,148	26.0
Germany			1,693	37.4
Australia			2,314	44.5

Source: Table 1 and 48

Box 13 gives an estimate of the size of personnel in the police force and private security sector. The Netherlands has conspicuously few security personnel.

Up to now, we have dealt with the “macro” relationship between the size of the police and crime and with this on the overall efficacy of the police. Table 50 gives the development of clear-up rates over the last 16 years for two categories of crime. Because of differences in definitions, the percentages are not comparable across countries in an absolute sense. Like the majority of the

Table 50 **Trends of clear-up rates for crimes of violence and crimes against property, 1980 - 1997 (index, 1990=100)**

Violence	1980	1990	1996
Denmark		100	106
Germany	104	100	99
France		100	109
Netherlands	122	100	82
UK	104	100	94
USA	96	100	102
Sweden	128	100	102
Property	1980	1990	1996
Denmark		100	90
Germany	85	100	103
France		100	73
Netherlands	119	100	75
UK	127	100	80
USA	94	100	100
Sweden	125	100	95

Source: WODC/CBS 1999

Box 13 **Public and private security staff**

When the number of personnel employed by the police force and private security sector is totalled, the following picture emerges.

Number of personnel employed by the police and private security companies per 100,000 inhabitants, 1996

	police	private security	total
USA	354	582	936
Australia	307	516	823
Canada	253	432	685
UK	376	275	651
France	403	121	524
Germany	302	217	519
Austria	420	75	495
Sweden	307	184	491
Denmark	265	193	458
Netherlands	254	132	386
EU average	375	160	535

The US and Australia head the field when it comes to security staff. The Netherlands comes last. With a total of 386 public and private security officers, the Netherlands scores far below the EU average of 535.

Source: Table 45 and 48

other countries, the clear-up rates in the Netherlands have dropped. The Netherlands distinguishes itself in a negative sense by the rapid pace of deterioration.

Box 14 **Benchmarking local government in the UK**

Benchmarking the services provided by local government is considered an important instrument in the UK to improve performance. Performance indicators have been developed for the services - varying from education to police - provided by these governments. The local papers publish the results and the results of all local governments are also gathered and published. A selection of the indicators as regards security is given below.

Police 999 calls and emergencies	Performance in answering 999 calls Performance in responding to emergencies
Crime and detection	Number of recorded crimes per 1000 population % of all crimes cleared up % of violent crimes cleared up % of burglaries cleared up Number of crimes cleared up per police officer
Police resources	Number of police officers available for ordinary duty per 1000 population Proportion of police officers' time spent in public Expenditure on police per head of population

Source: Cowper & Samuels, 1997

Table 51 **Assessment of the police**

	satisfaction, 1999	positive opinion about police actions in one's own neighbourhood, 1995	dissatisfaction about law enforcement by the police, 1995
Austria	6.62	55	27
Denmark	6.48		
Canada	6.40	80	12
Australia	6.40		
UK	6.22	68	22
USA	6.17	77	18
Germany	6.09		26
Sweden	6.00	62	23
France	5.88	56	25
Netherlands	5.64	45	31

Source: WEF 1999; Mayhew & Van Dijk, 1997; Crime Guide HEUNI, 1998

Against this backdrop it is not surprising that confidence in the police is limited. This is highlighted by various questionnaires (table 51). For example, only 45% of the respondents believe that the police are doing a good job in tackling crime in their neighbourhood. Of the countries for which three criteria are available, Canada, the US and the UK all score well. Austria is an interesting case. Satisfaction with the police is not as great as could be expected based on the small amount of crime in that country. What plays a role here is probably the exceptionally large size of the police force. For the Netherlands, the three criteria are consistent and unfavourable. Dissatisfaction is greater in the city than in the country (38% for the Netherlands versus 30%).

Differences in performance are not only related to quantitative factors, but to qualitative factors, too. In this respect, it is important to focus on 'best practices' (see also box 1). A systematic overview of best practices cannot be given for the nine reference countries. Boxes 14 and 15 deal with instruments and strategies in the UK and US that have proved (not) to be successful.

Local benchmarking seems in the UK to lead to better police performance (box 14). Box 15 gives a summary of research into the efficacy of policing strategies.

Box 15 Effective and ineffective police strategies directed at reducing crime

The objective of this box is to present a summary of empirical research into the relative efficacy of different strategies, tactics or types of action that can be followed by the police in order to reduce crime. To organise the subject matter, the classification used by Sherman (1997), used in a recently published meta-evaluation is followed. Jordan (1998) recently supplemented this classification with three extra categories, and uses 11 types of policing strategies. Some strategies apply a purely preventive or repressive approach, other a combination of both. The table gives an overview of the strategies and includes a brief summary of the underlying hypotheses and main effects. Testing the hypotheses was done by assessing various studies for their methodological accuracy / validity using a five-point scale. The following classification was made: 1 (weakest testing) simple correlation between cause and effect; 2 measurement before and after, without control group; 3 measurement before and after with control group; 4 measurement before and after with large-scale samples comprising 'treated' and 'untreated' groups; 5 (strongest testing) random classification with controlled experiments.

Eleven policing strategies to reduce crime

Strategy	Underlying hypotheses	Efficacy
1. Increasing police strength	The more police a city employs, the less crime it will have	Unclear
2. Speed of response to incidents	The quicker the response, the less crime	Ineffective
3. Random patrol	The more random patrol the more potential perpetrators will be deterred because they will perceive the police as omnipresent	Ineffective
4. Directed patrol	The more directed patrol on criminal 'hot spots' and 'hot times' the less crime at those places and times	Effective
5. Increasing arrest frequency	The more arrests in response to reported and crimes, the less crimes there will be	Ineffective
6. Target high profile criminals	The more recidivists are arrested, the fewer (serious) crimes	Effective
7. Community policing	The greater quantity and better quality of contacts between police and local residents, the less crime	Ineffective
8. Problem-oriented policing	The more police can identify and minimise proximate causes of specific patterns of crime, the less crime	Unclear
9. Proactive work with children	Informal contacts between the police and young will dissuade those likely to offend from doing	Ineffective
10. Targeting repeat victims	Crime can be reduced by preventing criminals from returning to the same victim	Effective
11. Inter-Agency working	The police can reduce crime by working in partnership with, or providing crime related information to, other agencies	Effective

Source: Sherman, et al., 1997; Jordan, 1998

Evaluation of criminal investigation and detection

Good:

Average:

Poor: few financial resources in relation to the magnitude of the problem, few personnel, high costs per head of staff, negative trend in clear-up rates, little citizen satisfaction

5.2 Criminal prosecution

In the introduction to this chapter, we already referred to the limited availability and comparability of data on criminal prosecution. An additional problem is that the distribution of duties over investigation and prosecution bodies differs from country to country. The Public Prosecution Service as structured in the Netherlands, occupies an exceptional position with its dominant role in steering the police and its discretionary powers to prosecute or not. In some other countries (such as the UK), the police takes a major role in prosecuting. Prosecution Services also have less opportunity to settle cases than in the Netherlands, which means that more cases are brought before the courts.

In as far as this is possible, table 52 gives an estimate of the size of the organisations charged with criminal prosecution in terms of expenditure and personnel. With regard to personnel, a distinction is made between public prosecutors and the total pool of personnel. More data are available on the first category than on the second. The organisational differences between countries imply that comparisons of the number of public prosecutors can be misleading. While expenditure and total size of the workforce are closely related, the number of public prosecutors is far less

related with both other variables. In the Netherlands, the ratio of public prosecutors and total personnel is particularly extreme which indicates an aberrant organisational structure. Abstracting from the magnitude of crime, expenditure and workforce are relatively high while the number of prosecutors is particularly low. The small volume of personnel and high expenditure per individual staff member in the UK are caused by the anomalous situation that the actual prosecution is conducted by private lawyers or barristers contracted for that purpose.

As we argued earlier, the size of the apparatus can not be seen separately from the problem with which it is confronted. Given that the prosecuting bodies are responsible for prosecution policy in general, with respect to both serious and less serious offences, the index for total crime can be used again. The data also applied to the police, as derived from the international crime victims survey, are used in table 53. It must be noted that various forms of financial and economic crimes, including drugs offences, are not considered. The complexity of many of these cases claim a substantial share of capacity. If these cases are roughly similar in nature and volume in all countries, the comparison is not affected. However, in previous paragraphs, we argued that these forms of crime are particularly key in the Netherlands, which should entail a relatively large Public Prosecution Service. According to table 53, the Netherlands occupies a midfield position and, bearing in mind the large scale of financial, economic and drugs crime, weighs in at the low rather than the high end of the scale.

One indication of the workload of prosecuting bodies can in principle be derived from the amount of cases presented by the police (crimes cleared-up). Here, we should remark that the Public Prosecution Service in the Netherlands also performs duties that are not expressed in these statistics. This particularly concerns dealing with traffic violations (Mulder cases and sub-district criminal cases). In addition, the Public Prosecution Service is presented with cases by special investigative services such as the Tax

Table 52 Resources of prosecuting authorities, 1998 prices

	expenditure in € per inhabitant	prosecutors per 100,000 inhabitants	personnel per 100,000 inhabitants	expenditure x 1000 € per staff member
USA	13	10.0	27.1	48
Netherlands	11	3.0	18.2	63
UK	9	4.1	11.2	80
Sweden	9	7.9	14.6	56
Canada	8	5.6	10.6	71
Denmark	5	10.0		
Germany		7.5		
Austria		2.6	6.3	

Source: Appendix 1

Intelligence and Investigation Service (*Fiscale Inlichtingen en Opsporingsdienst* or FIOD) and the Economic Supervision Service (*Economische Controle Dienst* or ECD). The number of cases that have been cleared up is found by multiplying the number of recorded crimes with the clear-up rates. Table 54 relates these data to expenditure. As the table shows, data is only available for a small number of countries. Table 54 also provides the ratio between the expenditure for criminal prosecution and the police. Both ratios provide some insight into the production process. Apparently, a considerable dispersion exists in both criteria. The proportionately small size of the police and the average size of the Public Prosecution Service lead to a high score as far as the last ratio is concerned. Detailed performance indicators such as number of case won are not available.

Evaluation of criminal prosecution

Good:

Average: provision of resources

Poor: small number of public prosecutors, substantial size of support services

5.3 Administration of criminal justice

This paragraph firstly deals with the resources for criminal proceedings. For the majority of countries, data are only available for the expenditure of the judiciary as a whole. To assess the expenditure that can be allocated to criminal proceedings an estimate of the time spent on these proceedings is needed. Direct data are often lacking but a rough estimate can be gained from the ratio of the number penal cases and the total number of cases brought before the courts or the number of judges dealing with criminal cases compared to the total number of judges (see appendix 1). However, these data, too, are not available for all countries in useable form. For the countries lacking such data, the average of the other countries is used. It should be emphasised that due to these assumptions, the estimate of the resources for criminal proceedings is surrounded by great uncertainty. The impact on the position of the Netherlands in the ranking is, however, slight. A comparison of the personnel numbers is obscured by the input of lay judges and the administration of criminal justice by jury in some countries, and is omitted here.

Table 53 Resources of prosecuting bodies related to the scale of crime

	expenditure in € per crime, 1998 prices	officers per 100,000 crimes	total personnel per 100,000 crimes
USA	25	19.7	53.1
Sweden	18	17.5	32.5
Netherlands	18	4.8	29.0
Canada	16	11.6	22.2
UK	15	6.7	18.3
Austria		8.0	19.8

Source: table 1 and 52

Table 54 Tentative production indicators for prosecuting bodies, 1998 prices

	expenditure x 1000 € per solved case	expenditure prosecuting bodies in € per 1000 € expenditure on police
USA	1.2	32.0
Netherlands	0.8	34.5
UK	0.3	19.5
Sweden	0.2	31.2
Canada		20.3
Denmark		19.8

Source: table 1, 48 and 50

A striking feature of table 55 is that not only in the US, but in Germany and Austria, too, considerably more is expended on the judiciary and with this on criminal proceedings. The expenditure level in the Netherlands is modest. However, the Netherlands is not entirely alone in this.

There are few data on the quality of the administration of (criminal) justice. We make do with a number of indicators that are derived from the international competitiveness comparison of the World Economic Forum. This comparison offers the most detail on this topic, drawing on survey results. Table 56 shows that the differences between the countries are minimal. The quality of the administration of justice in the Netherlands ranks very high. Otherwise, there are no easily comparable quantitative data on the performance of the judiciary (such as duration of proceedings).

Table 55 Resources for the administration of (criminal) justice per head of population, 1998 prices

	total expenditure in € on the judiciary	estimated share of criminal proceedings	expenditure in € on criminal proceedings
USA	81	30	25
Germany	64	25	16
Austria	57	18	10
Sweden	33	23	8
Denmark	30	39	11
Canada	28	30	9
Australia	25	35	9
UK	23	47	11
Netherlands	23	35	8
France	23	35	8

Source: Appendix 1

Finally, we deal here with the sentences that are imposed. Sentences are partly determined by what is demanded by the public prosecutor. For a number of countries, data are available on the sentences passed. In addition, information can also be used on sentences being completed by the prison population. Tables 57 and 58 show that the Netherlands is moderate when it comes to prison sentences. However, it should be noted that the average duration of custodial sentences increased between 1985 and 1995 by 48% from 133 to 197 days (Grapendaal et al., 1997). The prison sentences issued are in line with public opinion (table 59).

Evaluation of the administration of criminal justice

Good:

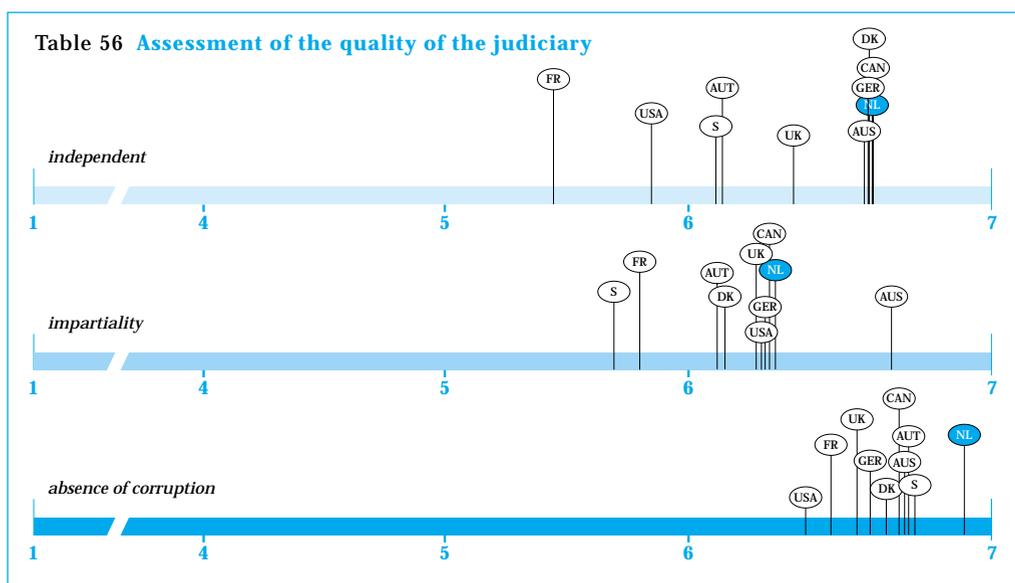
Average:

Poor: provision of resources

Table 58 Sentenced prison population in percentages by sentence length, 1996

	< 12 months	1-5 year	5 year and more
France	31	36	33
Netherlands	39	44	17
Austria	29	46	25
UK	16	49	35
Sweden	43	36	21

Source: Home Office, 1998



Source: WEF, 1999

Table 57 Prison sentences passed in terms of duration in percentages, 1994

	< 3 months	3-6 months	6-12 months	> 1 year
Denmark	78.8	10.7	6.1	4.4
Germany	unknown	26.8	33.3	39.9
France	32.8	27.9	20.8	18.5
Netherlands	53.5	19.0	12.6	14.9
Sweden	47.2	19.2	17.6	16.0

Source: Council of Europe, 1998

5.4 Punishment

Table 60 shows that the expenditure and volume of personnel of the prison system is substantial in the Netherlands. In terms of expenditure per capita, the Netherlands ranks third. The US occupies an extreme position with an expenditure level that is more than twice as high as that of the Netherlands. Dutch expenditure approximates the level of Canada, the UK and Sweden. Substantially lower expenditure is found in Austria, Germany and France.

The number of detainees in the Netherlands is not particularly high and is in the region of the prison populations in the latter countries (table 61). The number of detainees is just above the EU average. However, in the Netherlands, there is extremely rapid growth. Ten years ago, the Netherlands was in an exceptional position - which has since entirely disappeared. Both tables can be combined to calculate expenditure and personnel per detainee (table 62). Both quantities differ dramatically from country to country.

Table 59 Attitudes with regard to punishment modalities, 1995

	prison	community service	suspended	fine	other
Canada	40	34	10	10	6
Germany (West)	14	63	13	9	1
UK	43	37	6	10	4
France	13	63	12	10	2
Netherlands	29	47	8	10	5
Austria	10	65	8	14	3
USA	56	28	2	8	6
Sweden	26	51	6	14	3

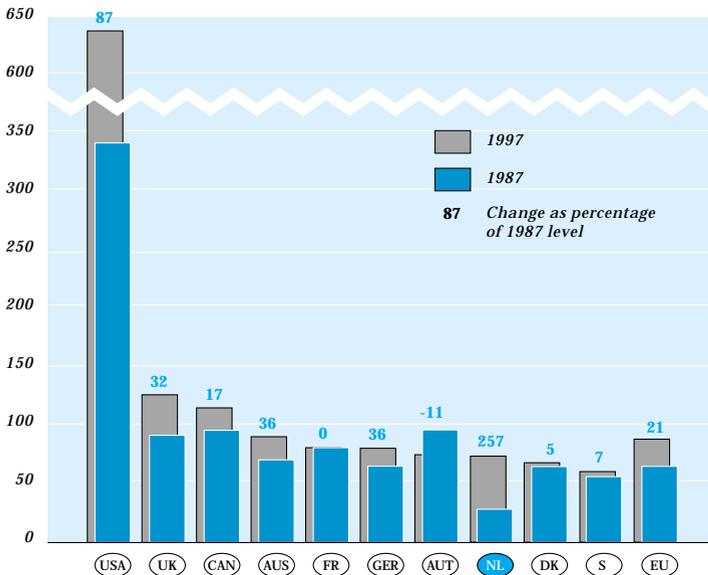
Source: Crime Guide HEUNI, 1998

Table 60 Resources of the prison system, 1998 prices

	expenditure in € per inhabitant	expenditure per mille of GDP	personnel per 100,000 inhabitants	expenditure x 1000 € per staff member
USA	154	5.5	251	61
Canada	58	2.5	76	76
Netherlands	54	2.6	9556	
UK	49	2.6	82	59
Sweden	43	2.2	94	45
Australia	38	1.8	56	68
Denmark	32	1.3	80	41
Austria	26	1.2	45	59
Germany	25	1.1	43	57
France	19	0.8	43	43

Source: Appendix 1

Table 61 Detainees per 100,000 inhabitants



Source: Walmsley, 1999

Table 62 Expenditure and personnel per detainee, 1998 prices

	expenditure in €	staff
Sweden	71,000	1.6
Netherlands	63,000	1.1
Canada	50,000	0.7
Denmark	50,000	1.2
Australia	40,000	0.6
UK	39,000	0.7
Austria	31,000	0.5
Germany	28,000	0.5
USA	24,000	0.4
France	20,000	0.5

Source: Table 60 and 61

The highest expenditure is four times higher than the lowest. In the Netherlands, Sweden and Denmark, expenditure and staffing are considerable larger than in the other countries. The prison populations in Denmark and Sweden are 25 to 30% lower than in the Netherlands.

While high expenditure on the prison service in the US can be attributed to an extremely high number of detainees at low costs per detainee, the high level of expenditure in the Netherlands is due to high costs per inmate at a number of detainees close to the EU average. Austria, Germany and France detain roughly the same numbers of individuals, but at a fraction of the costs per inmate in the Netherlands. The finding that the Netherlands spends highly per detainee is confirmed by research conducted by the IOO (IOO, 1998a). In this survey the Netherlands is compared with Belgium, Lower Saxony, England and Sweden.

High expenditure corresponds to a humane prison regime. This quality aspect is not easy to quantify, although a couple of indicators can be given. A critical aspect is the prevention of overcrowding. Table 63 suggests that in the Netherlands capacity is almost 100%. Considerable overcrowding occurs in the US and France. By contrast, Denmark and Sweden on the one hand and Austria and Germany on the other are under-utilising their prison capaci-

ty. This means that overcrowding is not a systematic explanation for low costs per inmate.

The number of suicides can be deemed to relate to prison conditions. According to table 64 this number is relatively low in the Netherlands. The US figure is conspicuously low and raises questions. There is no evident connection to expenditure per detainee.

The aforementioned IOO survey researched other determinants of a humane prison system, such as the number of hours an inmate can spend outside the cell and the number of inmates per cell. Both the Netherlands and Sweden score positively.

Escapes from prison throw light on the quality of prisons from a different perspective. Table 64 suggests that the number of escapes is high in the Netherlands. This particularly concerns escapes from semi-open prisons that occur frequently in the Netherlands and Sweden. There are few escapes from closed prisons. Finally, insight into differences in recidivism between countries would be important, but information is lacking.

Just as in earlier paragraphs, a link can be laid with the volume of crime (table 65). In this regard, the most obvious connection is

Table 63 **Prison capacity, prison population and occupancy rate, 1995**

	capacity	population	occupancy rate
Australia	N.A.	16,142	N.A.
Canada	23,072	23,700	103
Denmark	3,810	3,421	90
Germany	71,631	68,396	95
UK	50,239	51,265	102
France	48,012	53,697	112
Netherlands	10,138	10,143	100
Austria	8,097	6,761	84
USA	1,268,470	1,585,589	125
Sweden	6,259	5,767	92

Source: Walmsley, 1997

Table 64 **Tentative performance indicators for the prison system, 1994**

	number of suicides per 10,000 detainees	prison escapes per 10,000 detainees
USA	1.1	N.A.
Sweden	5.0	220.9
Netherlands	5.2	250
UK	12.8	47.1
Germany	13.8	37.1
France	18.2	9.6
Denmark	22.1	137.9
Austria	23.1	193.8

Source: DJI, 1996, Council of Europe, 1998; Maguire & Pastore, 1998

Table 65 **Ratio of detained population and volume of crime per 1000 crimes**

	serious crimes	all crimes
Austria	28.7	2.7
USA	22.5	12.6
UK	3.9	2.0
Canada	4.8	2.4
Netherlands	4.2	1.3
France	4.0	2.0
Sweden	4.0	1.3

Source: Table 1, 9, 60

Box 16 **World-wide prison populations**

More than 8 million people are detained in prisons throughout the world. More than half are incarcerated in the US (1,7 million), China (1,4 million) and Russia (1 million). Russia has the largest share of detainees per 100,000 inhabitants, namely around 685, followed by the US with 645. Roughly 65% of the countries has a detainee ratio of 150 or less per 100,000 inhabitants. The differences are very large within continents. In the Indian sub-continent the average prison population is 40 but in (ex-Soviet) Central Asia, 400. In the Caribbean this ratio is 330 and 11 on the South American continent. In Europe similar differences occur: in Southern Europe the average population totals around 50 while in Eastern Europe it is 200.

Source: Walmsley, 1999

between the number of inmates and crime. The ratio's give some insight into the degree to which countries conduct a repressive policy. The total volume of crime and the number of serious crimes as reported in the international crime victims survey (see table 32) are used as criteria. The first column is particularly interesting. The differences between the countries are strikingly small with the exception of Austria and the US. In both countries crime control strategy emphasises incarcerating perpetrators - here it should be noted that the problem in Austria is of an entirely different order than that in the United States.

5.5 Conclusions

Evaluation of punishment

Good: humane system (much personnel per inmate, few suicides) no overcrowding, no under-capacity

Average:

Poor: considerable input of collective resources

In the Netherlands public expenditure per head of population to control crime is close to the average of the countries surveyed. However, expenditure is low when related to the volume of crime. Here, one must bear in mind that the estimated volume of crime, as derived from the international crime victims survey leave financial and economic crime and drug-related offences (largely) out of consideration. As argued earlier, these categories of crime occur probably on a relatively large scale in the Netherlands. All in all, the broad opportunity structure that in combination with scant private prevention prompts high instance of crime is insufficiently compensated by the efforts of the public sector. Looking at elements of the criminal justice system individually, the situation is as follows.

The financial resources for the police follow the general picture. It is notable that, while expenditure per population head is below average, the size of the workforce is particularly small. A similar combination of relatively high expenditure and limited personnel can only be found in Canada. In combination with the negative trend in crime clear-up rates, public lack of confidence in the police is understandable.

Information on expenditure involved in criminal prosecution is not available for all countries. The expenditure level per head of population is above average for the six countries for which data is present. Related to total crime, expenditure is average. However, what applies all the more is that cases that are time-intensive for

the Public Prosecution Service in the field of financial and economic crime and drug-related crime have not been taken into consideration. Another striking feature is the small number of public prosecutors in the Netherlands in what is otherwise an average total workforce. Apparently, the organisational structure is quite different from those in other countries.

Within the criminal justice system, the resources of the judiciary lag behind. Expenditure is considerably below average even per population head; this is clearly a serious obstacle.

By contrast, expenditure per head of population on the prison system is above average. The high level of expenditure is mainly related to a humane prison regime in which expenditure and personnel input per inmate are larger and even three times as high as in France and the US. The Dutch prison regime abides by the standards of the Council of Europe. If corrected for differences in expenditure per detainee, the expenditure per head of population for the entire penal law system falls below the average of countries surveyed and the unfavourable position of the Netherlands in terms of provision of resources in relation to the scale of crime, is strengthened.

One indicator of both the humane nature and the performance of the prison system is the level of occupation. Overcrowding naturally erodes the quality of life in prisons while under-population indicates poor use of capacity. The Netherlands scores well on this indicator with a capacity level close to 100%. The humane aspect is clear from the small percentage of suicides in Dutch prisons.

Attention for the provision of resources should not conceal the fact that this chapter raises questions regarding efficiency and efficacy. In the above, we noted concerns with regard to the police. The police still make only marginal use of experiences gained internationally: so-called 'best practices' (box 15). Proven tools such as local benchmarking (box 14) are not (systematically) applied. Benchmarking also offers potential for the judicial apparatus of the Public Prosecution Service and the judiciary.

Summing up

Based on this international comparison, the following situation can be sketched. The Netherlands is faced with a severe crime problem of a complex nature that ranges from a very large number of less serious crimes to financial and economic crime and drug trafficking of a presumably large magnitude. In a positive sense, it is important to point out that serious crime here is no higher than average, and for some categories even lower. The situation is also favourable in respect of corruption in the public sector.

The phenomena primarily have to do with the ample opportunity structure that is inherent in a densely populated country with a very open economy like the Netherlands. The opportunity structure looks set to become more extensive rather than less.

Although ongoing internationalisation is a favourable development for the Netherlands in an economic sense, it also expands opportunities for financial and economic crime. Developments in information technology contribute to this as well. In this same context, it may be expected that the position of the Netherlands in international drugs trafficking will be further strengthened. This might well lead to an increase in other forms of crime, including extreme violence and economic crime. Moreover, the favourable situation in respect of factors that encourage crime (facilitating factors) should not be regarded as stable. Firearm possession is an important example. The possession of firearms is still particularly low in the Netherlands; however, it seems not unlikely that it will rise to a level closer to the average. This would allow extreme violence, already frequent in urban areas, to increase strongly.

In addition to threats, opportunities for the control of crime can be derived from this study as well. For instance, it is remarkable that fewer private measures are taken against crime than in most countries studied. Some forms of the crime against property, and even some forms of violent crime, can be prevented rather simply by taking precautionary measures in the private sphere. It is not very efficient if the government attempts to compensate for the lack of private precautionary measures, when the means available to the public sector are less well suited to this. On another front, opportunities are to be found in a better co-ordination of policy in respect of the opportunity structure and its consequences. This primarily involves a recognition of the consequences of urbanisation and of the ample opportunities for financial and economic crime and international drug trafficking. The relationships between various types of crime, such as drug trafficking, financial and economic crime and violent crime, have been pointed out in previous chapters. Integration of policy by the organisations responsible for the control of such various forms of crime offers

opportunities for greater effectiveness.

The possibility to learn from experiences abroad has not yet been fully utilised. Systematic application of best practices (see for example box 15) and introduction of local benchmarking (see box 14) can increase the effectiveness of deployment and working procedure of the organisations in the criminal justice system. In this same context, it would also be wise to take a closer look at the efficacy of the small number of public prosecutors in the Netherlands. Finally, better co-ordination of the capacity of the organisations in the criminal justice system is important. The relatively small volume of financial and human resources available to the judiciary is striking.

This exploratory study has also aimed to make an inventory of the availability and usability of data for purposes of international comparison. As the foregoing sketch has already suggested, significant problem areas exist. Resolving these would help to make policy more effective. A major problem is the widespread lack of estimates of the volume of financial and economic crime, both for the Netherlands and for other countries. Moreover, only fragmentary information is available on illegal drugs markets, while no international comparative figures at all are available on other illegal markets such as those for firearms. Our limited knowledge about the extent to which business and industry and other organisations are the victims of crime is also problematic. Problems of a different nature arise in comparing criminal justice systems as to resources and performance. In principle, core data can be derived from the budgets and other documents of the reference countries. However, they are difficult to compare due to the lack of international co-ordination of definitions and data collection, despite important initiatives in this direction by the UN and the Council of Europe. Unfortunately, these difficulties the comparison less accurate. In some cases, it is even impossible to make a comparison due to differences in definitions. Clear-up rates are an important example.

As has been shown by this exploratory study, and by studies in other areas of government policy, international comparisons can yield important insights. Prospects for expanded use of this instrument in the area of legal infrastructure are favourable. But if the instrument is to be used effectively, it is essential that bottlenecks in international information provision are eliminated.

Appendix 1

Expenditures and staffing of the justice system

The following tables summarise expenditures and staffing of the organisations that safeguard the rule of law. The most recent data available for the various countries are presented. The figures do not always relate to the same year. This distorts the overall picture because increased spending from a later year does not show up, such is inevitable in the absence of time series. All amounts are expressed in 1998 prices. Data is lacking for some countries. In order to retain an overall picture, estimates have been included in their place (italicised). The final column of expenditure tables shows expenditures on public order and safety as they can be derived for some countries from the national accounts. The figures shown in this column are higher than the sum of expenditures for the justice system from the first four columns. Fire fighting and disaster management are examples of public responsibilities that are included in expenditures on public order and safety, but not in those for the justice system. Comparison of the last two columns gives a plausibility check. In table A.1, expenditures are related to gross domestic product (GDP); exchange rates do not play a role. It is difficult to compare such absolute expenditure

levels due to differences in prosperity. For this reason, tables A.2 and A.3 show expenditures in relation to the population. Here exchange rates do play a role. For the countries in the Euro zone, both tables work with the single currency; conversion rates are fixed. For the other countries, figures can be based on the exchange rates at any given moment, as was done in table A.3. On account of large fluctuations in exchange rates, the resulting figures say relatively little. For this reason, purchasing power parities have been used in table A.2. Purchasing power parities are intended for the comparison of expenditures. As used in this report, they give a true picture of the resources devoted to the control of crime. Exchange rates are relevant to the comparison of production costs. To avoid confusion and to sidestep the problem of fluctuations in exchange rates, expenditures as given in the main text are always based on purchasing power parities. Table A.3 has been added for purposes of comparison.

Table A.1 **Estimate of expenditures per mille of GDP, 1998 prices**

	Judiciary total	Prosecution	Police	Prison system	Total Justice system	Total public order system and safety
Australia	1.12	0.28	7.37	1.76	10.53	14.87
Austria	2.49	0.17	8.79	1.15	12.60	8.90
Canada	1.20	0.34	7.23	2.48	11.25	N.A.
Denmark	1.22	0.21	4.86	1.35	7.64	9.90
France	1.05	0.26	6.10	0.85	8.26	12.00
Germany	2.72	0.79	5.86	1.06	10.43	17.21
Netherlands	1.12	0.56	7.30	2.59	11.57	N.A.
Sweden	1.67	0.42	6.07	2.18	10.34	15.00
UK	1.24	0.46	10.82	2.55	15.07	21.24
USA	2.91	0.47	6.75	5.51	15.64	N.A.

Notes:

Australia, Germany, France and Austria: the total expenditure for prosecution and judiciary is known but not separately. Of Australia and France it is also known that the expenses incurred in the administration of criminal justice in a broad sense (public prosecution and criminal courts) form approximately 50% of the total cost of justice administration (public prosecution and total judiciary). For these two countries it has been assumed that the financial resources of the public prosecution amount to 20% of the total resources available to the public prosecution and the judiciary together (the average of the countries of which details are known) and those of the criminal courts amount to 35% of the total funds of the judiciary. The numbers of public

prosecutors and judges in Germany are known; these numbers have been used to estimate expenditures. The numbers of total personnel in the Austrian public prosecution service and judiciary are known separately; these numbers have been used for the allocation of expenditures.

UK: All columns except for the last one concern England and Wales; the latter covers the UK. The estimate for the UK judiciary includes the Magistrates' Courts.

Austria: expenses incurred for public order and safety only concern final consumption.

Sources: See appendix 2. Last column: National Accounts OECD.

Table A.2 Estimate of expenditures per inhabitant in EURO, fixed exchange rates for Euro zone countries and purchasing power parities 1998 for other countries, 1998 prices

	Judiciary total	Prosecution	Police	Prison system	Total Justice system	Total public order and safety
Australia	25	6	160	38	229	322
Austria	57	4	203	26	290	205
Canada	28	8	169	58	263	N.A.
Denmark	30	5	117	32	184	238
France	23	6	132	19	180	260
Germany	64	19	137	25	245	402
Netherlands	23	11	151	54	239	N.A.
Sweden	33	8	119	43	203	295
UK	23	9	205	49	286	454
USA	81	13	188	154	436	N.A.

Table A.3 Estimate of expenditures per inhabitant in €, exchange rates as of 27 March 1999, 1998 prices

	Judiciary total	Prosecution	Police system	Prison system	Total Justice system	Total public order and safety
Australia	20	5	131	31	187	265
Austria	57	4	203	26	290	205
Canada	21	6	129	44	200	N.A.
Denmark	35	6	140	39	220	286
France	23	6	132	19	180	260
Germany	63	19	137	25	244	402
Netherlands	23	11	151	54	239	N.A.
Sweden	38	9	136	49	232	337
UK	25	9	213	51	298	501
USA	80	13	185	151	429	N.A.

Table A.4 Estimate of personnel per 100,000 inhabitants, most recent year

	Judiciary total		Prosecution		Police system	Prison system	Total Justice
	Judges	Total	Public Prosecutor	Total			
Australia		52.8		7.7	307.1	56.0	423.6
Austria	19.8	94.9	2.6	6.3	420.1	44.8	566.1
Canada		41.5	5.6	10.6	253.0	75.8	380.9
Denmark	6.5	48.9	10.0	30.0	265.1	79.9	423.9
France	11.0	37.7	2.2	9.4	402.6	43.2	492.9
Germany	25.4	144.4	7.5	42.2	302.1	43.3	532.0
Netherlands	10.0	40.1	3.0	18.2	253.9	95.4	407.6
Sweden	19.2	62.0	7.9	14.6	306.8	93.8	477.2
UK	14.9	51.2	4.1	11.2	376.2	82.1	520.7
USA		126.1	10.0	27.1	353.5	250.5	757.2

Notes:

Australia: official estimates of personnel for public prosecution and judiciary are not available to the authors. Staff levels have been estimated by dividing expenditures by the expenses per head of staff in the UK.

Denmark: Total personnel responsible for prosecution have been estimated on the basis of the average staff level per prosecutor for those countries of which data are available.

Germany: Total staff for public prosecution and the judiciary together has been allocated on the basis of the number of public prosecu-

tors and the number of judges.

France: the number of magistrates (public prosecutors and judges) and the total staff for public prosecution and judiciary together are known. Allocation of expenditures as in table A.1.

UK: The estimate of the judiciary includes the 30,000 magistrates. In the conversion from part-time to full-time equivalents, it has been assumed that magistrates fulfil on an average 20 court session days per year and paid judges on 110 days per year.

Sources: see appendix 2.

In order to calculate the resources allocated to crime control, data are needed on the expenditures of the judiciary for criminal proceedings. None of the countries have expenditure estimates that were drawn up by the judiciary itself. The figures of table 55 have been estimated on the basis of the proportion of criminal cases to total number of cases for the Netherlands, Germany, Denmark, Sweden (IOO, 1998) and France (Ministère de la Justice, 1998). See further for France and for Australia the explanatory notes to table

A.1. For Austria, the number of judges in the penal system is known (310 out of a total of 1,713, or 18%). For the UK, figures for the Magistrates' Courts were based on the weighted caseload distribution in one district; figures were then extrapolated for all courts based on the number of court days (Gloucestershire Magistrate's Courts Committee, 1999). For the remaining two countries, the average was taken for countries for which data are available (30%).

Table A.5 Estimate of the share of criminal justice in the total administration of justice in percentages

Australia	35
Canada	30
Denmark	39
Germany	25
France	35
Netherlands	35
Austria	18
UK	47
USA	30
Sweden	23

Appendix 2

Explanatory notes to the tables, figures and boxes

This appendix includes source references and additional information (if applicable) for each table, figure and box. Data covering the United Kingdom (UK) usually comprises England and Wales. Any exceptions to this rule are indicated for each table concerned. In the tables countries are labeled as follows: Australia: AUS; Austria: AUT; Canada: CAN; Denmark: DK; France: FR; Germany: GER; Netherlands: NL; Sweden: S; United Kingdom: UK; United States of America: USA.

Box 1

Source: Cowper & Samuels, 1997, Commission of the European Union, 1996, Ministry of Economic Affairs, 1997, Ministry of Social Affairs and Employment, 1996, McKinsey, 1997.

Box 2

The main theoretical insights pertaining to the determinants of crime can be found in Cohen & Felson, 1979, Clarke, 1997 and Van Dijk et al., 1998

Box 3

Mayhew & Van Dijk, 1997.

Table 1

The bar in the background gives the total number of crimes according to the International Crime Victims Survey (Mayhew & Van Dijk, 1997, p. 29). The front bar covers the number, per 100,000 inhabitants, of crimes registered by the police in 1995 (Home Office, 1998, adaptation). The ratio obtained from dividing the back bar by the front bar is shown in numbers.

Table 2

Data representing a further analysis of the International Crime Victims Survey (Crime Guide HEUNI, 1998, p. 24).

Figure 1

Concerns an adaptation of data from the Home Office (1998, p. 214). As regards Germany, data are available as from the time of unification of East and West Germany in 1992.

Table 3

The first bar shows data supplied by the Home Office (1998, p. 215). Here the UK comprises England and Wales, Scotland and Northern Ireland. The reference year for the Netherlands is 1996. The second bar show data obtained from research conducted by Krug et al. (1998). In the determination of the ratio, the number of murders, suicides, accidents and fights involving the use of firearms have been added up.

Table 4

Shows adapted and supplemented data supplied by the Home Office (1998, p. 216). For the cities of Stockholm, Amsterdam and Rotterdam this concerns the average rate over the years 1994-1996.

Table 5

The bar in the background shows the total number of crimes involving violence according to the International Crime Victims Survey (Mayhew & Van Dijk, 1997, appendix 4, table 2). The two bars in front give the number of crimes involving the use of violence per 100,000 inhabitants as registered by the police over the years 1995 and 1997 respectively (Home Office, 1998, WODC/CBS, 1999 adaptation). The ratio obtained from dividing the bar in the background by the bar in front covering the year 1995 is shown in numbers.

Table 6

Data concerns a further analysis of the International Crime Victims Survey (Crime Guide HEUNI, 1998 p. 28-29).

Box 4

Willemse, 1996.

Table 7

The first and second bar show the total number of domestic burglaries per 100,000 households registered by the police in 1997 and 1995 (Home Office, 1998, p. 218, adaptation). The third bar shows the number of domestic burglaries according to the International Crime Victims Survey (Mayhew & Van Dijk, 1997, appendix 4, table 2). The fourth bar shows the ratio obtained by dividing the third column by the second column.

Belgium and Luxembourg have not been taken into account in the calculation of the EU average because of the difference in registration methods. This concerns an unweighed average.

Table 8

The first and second bar shows the total number of car thefts per 100,000 vehicles registered by the police in 1997 and 1995 (Home Office, 1998, p. 219, adaptation). The third bar shows the number of car thefts according to the International Crime Victims Survey (Mayhew & Van Dijk, 1997, appendix 4, table 2). The fourth bar shows the ratio resulting by dividing the third bar by the second bar. As regards Sweden, the figure includes attempted car theft. Luxembourg has not been taken into account in the calculation of the EU average due to the lack of data. It concerns an unweighed average.

Table 9

The bar in the background shows a summation of the following criminal offences from Mayhew & Van Dijk, 1997 (appendix 4, table 2): vandalism to motorcars, motorcycle thefts, bicycle thefts, thefts of personal belongings, sexual harassment (excluding serious forms such as indecent assault and rape). The front bar shows the total excluding bicycle thefts.

Table 10

Shows the percentage of respondents who believe or are convinced that they will become the victims of domestic burglary in the coming year (Mayhew & Van Dijk, 1997, p.50).

Table 11

Source: Van Dijk & Toornvliet, 1996. For the US and Canada, use has been made of Mayhew & Van Dijk, 1997, p. 51. The average for the 15 EU Member States concerns an unweighed average.

Table 12

Source: IMD, 1999 (table 3.45); 0-10 scale with 10 as best score.

Table 13

Source: Van Dijk & Terlouw, 1996.

Table 14

Source: NVB, 1998, p.30. For the US and Canada use has been made of NVB, 1997.

Box 5

Source: CJI, 1998.

Table 15

First bar, IMD, 1999 (table 8.41): harassment and violence do not seriously destabilize at the workplace. Second bar, IMD, 1999 (table 8.40): alcohol and drug abuse do not pose any problem at

the work place. Scale of 0-10 with 10 as best score.

Table 16

Source: Van Dijk & Terlouw, 1996

Table 17

Source: Price Waterhouse, 1998; Deloitte & Touche, 1997

Table 18

Source: unless stated otherwise Deloitte & Touche, 1997. For Australia (Walker 1997). For banking/investment fraud and insurance fraud in Germany (Die Welt, 7 January 1997). For the Netherlands trademark fraud (Telegraaf 11 December 1997) and banking/investment fraud (Steering group Financial Fraud, 1997). For France (CESDIP, 1999). For the US, Coalition Against Insurance Fraud (<http://www.insurancefraud.org>). For Canada, Canadian Coalition Against Insurance Fraud (<http://www.fraud-coalition.org>).

Table 19

First bar, IMD, 1999 (table 4.16): insider trading is not common in the stock market. Scale 0-10 with 10 as best score. Second bar, WEF, 1999 (table 3.15): insider trading is not common in the domestic stock market. Scale 1-7 with 7 as best score.

Table 20

Source: Unless stated otherwise Deloitte & Touche, 1997. For Australia (Walker, 1995). For France (CESDIP, 1995). For the US (Sultzer, 1995). For the world (Quirk, 1996).

Table 21

Source: NVB, 1999 pp. 28-29. For Australia (Walker, 1995).

Box 6

Source: Schneider, 1997.

Table 22

First bar, IMD, 1999 (table 3.25): tax evasion is unusual in your country. Scale 0-10 with 10 as best score. Second bar, WEF, 1999 (table 2.10): tax evasion is minimal. Scale 1-7 with 7 as best score.

Table 23

Source: European Commission, 1998. Source for the budget categories: Official Journal of the European Communities 41, 16/02/1998, p. 19. Official Journal of the European Communities L141, 13/05/1998, p. 43.

Table 24

Source: Transparency International, 1999

Based on 8-11 surveys.

Economist Intelligence Unit (Country Risk Service and Country Forecasts)

Gallup International (50th Anniversary Survey)

Institute for Management Development (World Competitiveness Yearbook)

Political & Economic Risk Consultancy (Asian Intelligence Issue)

Political Risk Services (International Country Risk Guide)

World Development Report (private sector survey by the World Bank) and

World Economic Forum (Global Competitiveness Report)

Box 7

Source: Meijer et al., 1995

Table 25

Source: EMCDDA, 1997, pp.17-19. For the US, Sweden and Australia (World drug report, 1997). For the UK and Austria, only a band width is available.

Table 26

Source: EMCDDA, 1997, pp. 17-19. For the US (National Household Survey on Drug Abuse, 1997).

Table 27

Source: Farrell, et al. 1996. For Australia, the US and Sweden (UNIDCP, 1997), reference year for prices is 1994-1995.

Table 28

Source: EMCDDA, 1998, p. 32. For Australia and the US (UNIDCP, 1997, p. 249, p.321).

Table 29

Source: EMCDDA, 1997, pp. 35-39 and EMCDDA, 1999, p. 60, for the UK the reference year is 1997.

Box 8

Source: INCB, 1999

Table 30

First bar, EMCDDA, 1997, p. 25. Second bar, UNDP, 1997, p.207. Third bar, EMCDDA, 1998, p. 28. Source for number of drug use fatalities in Australia and the US (UNIDCP, 1997, p.249, p. 321).

Box 9

Source: Parker et al., 1998.

Table 31

Source: Van Dijk & Toornvliet, 1996. The average for the 15 EU Member States concerns an unweighed average.

Table 32

Source: Mayhew & Van Dijk, 1997

Box 10

Source: for Australia (Walker, 1997). For Canada (Brantingham & Easton, 1998). For Germany (Deloitte & Touch, 1997). For France (CESDIP, 1999). For the Netherlands (team analysis by the directorate for Strategy Development, 1998). For the UK (Audit Commission, 1998). For the US (Anderson, 1999; Miller, 1996).

Table 33

First bar (UNDP, 1998). Second bar (OECD, 1997).

Table 34

Source: Source: UNDP, 1998, p. 204.

Table 35

Source: Kangaspunta et al., 1999, p. 493. On the basis of possession of three types of vehicles (motorcars, motorcycles and bicycles), recreational/social activities ("participation in nightlife"), percentage of single persons and the percentage of women engaged in paid employment.

Table 36

First bar (UNDP, 1998, p. 193. Second bar (IMD, 1999, table 5.16). Third bar (IMD, 1999, table 5.21).

Box 11

Source: Blum et al., 1998

Table 37

Source: OECD, 1997a

Table 38

Source: UNDP, 1998, p. 186. For relative poverty, use has been made of the EU and OECD standard: 50% of the median disposable income for the period 1989-1994. Absolute poverty is expressed in \$ 14.40 per day (1985 ppp).

Table 39

Source: UNDP 1998, p. 192

Table 40

World drink trends, 1998

Table 41

Source: Crime Guide HEUNI, 1998, p. 50. For Denmark, Australia and Finland use has been made of (United Nations, 1998).

Box 12

Source: Miller & Cohen 1997; Fagan & Wilson, 1998; Krug et al., 1998

Table 42

First bar (United Nations, 1998). Second bar: first bar of table 42 divided by the first bar of this table, assuming that households have one firearm at their disposal.

Table 43

Source: Crime Guide HEUNI, 1998, pp. 51-52.

Table 44

Source: Van Dijk & Terlouw, 1996

Table 45

Source: De Waard, 1999. The average for the 15 EU Member States concerns an unweighed average.

Tables 46, 47, 48 and 49

See source list in appendix 1. In table 48, the average for the 15 EU Member States concerns an unweighed average.

Box 13

Source: De Waard, 1999

Table 50

Source: WODC/CBS, 1999. Most recent data for Sweden covers the year 1994

Table 51

First bar (WEF, 1999, table 8.14): the police effectively safeguard personal security so that it is not an important consideration in business activity. Scale 1-7 with 7 as best score. Extent to which the police are able to provide personal protection, which is an essential condition for industrial activity. Second column shows a percentage of the respondents with a positive opinion about police operations in their own neighbourhood (Mayhew & Van Dijk, 1997, p. 47). Third column shows the percentage of respondents with a negative opinion about the police (Crime Guide HEUNI, 1998, pp. 66-67).

Box 14

Source: Cowper & Samuels, 1997.

Box 15

Source: Sherman, et al., 1997; Jordan, 1998.

Tables 52, 53 and 54

Source listed in appendix 1.

Table 55

Source listed in appendix 1. Estimate of criminal cases as a percentage in total judicial proceedings for the countries of Germany, Denmark, the Netherlands and France on the basis of IOO, 1998.

Table 56

First bar, WEF, 1999 (Table 8.05): the judiciary is independent and not subject to interference by the government and/or parties to a dispute. Second bar, WEF, 1999 (Table 8.10): a legal framework exists for private business to challenge the legality of government actions and/or regulations. Third bar, WEF, 1999 (Table 8.09): irregular payments to judges, court personnel or other officials involved in the enforcement and execution of judgments are not common and never influence the outcome of court proceedings. Scale 1-7 with 7 as best score.

Table 57

Source: Council of Europe, 1998.

Table 58

Source: Home Office, 1998, p. 222

Table 59

Source: Crime Guide HEUNI, 1998, pp. 67-68.

Table 60

Source listed in appendix 1.

Box 16

Source: Walmsley, 1999

Table 61

Source: Walmsley, 1999

Table 62

Tables 60 and 61

Table 63

Source: Walmsley, 1997, p. 13. Prison population in the US refers to prisoners and jaillees.

Table 64

Source: Council of Europe, 1998, pp. 46-47. For the US use has been made of Maguire & Pastore, 1998, table 6.74. Number of prison escapes in the Netherlands on the basis of DJI, 1996.

Table 65

Tables 1, 9 and 60

Appendix 1.

For Australia: Report on Government Services, 1999. For Canada: Statistics Canada, 1994; Statistics Canada, 1998; Statistics Canada, 1998a; Statistics Canada, 1999. For Denmark: National Commissioner of the Danish Police, 1998; Justitsministeriet, 1999. For Germany: memorandum of the Statistische Bundesamt 3-9-1999, Kangaspunta, et al., 1998; Crime Guide HEUNI, 1998; IOO, 1998. For France: Ministère de la Justice, 1998; Palle and Godefroy, 1999;

www.interieur.gouv.fr/organisation/police/index.html;

www.defense.gouv.fr/gendarmerie/index.html;

www.defense.gouv.fr/sgc/budget/index.html; For the

Netherlands: Public Prosecution Service, 1998; 1998a; Ministry of Justice, 1999. For Austria: memoranda of the Bundesministerium für Inneres dated 10-12-1999 and 22-12-1999. For the UK: Home Office, 1996; Lord Chancellor's Department, 1998; Court Service, 1999; Lord Chancellor's & Law Officers' Departments, 1998; Barclay & Tavares, 1999; Gloucestershire Magistrates' Courts Committee, 1999. For the US: DeFrances & Steadman, 1998; Maguire & Pastore, 1998; Gifford & Lindgren, 1999. For Sweden: Justitiedepartement, 1999.

As concerns Dutch expenditures, it is noted that the recently published WODC/CBS report titled 'Criminaliteit en rechtshandhaving 1999' (Criminality and Law Enforcement 1999) mentions higher amounts spent on law enforcement. In this publication a number of cost items have been taken into account which are not considered relevant to this report (Royal Netherlands Military Constabulary, probation services, legal aid, Child Care and Protection Board and victim services).

Appendix 3

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