

Part I: Official Crime Statistics

2. Crime in Germany as Reflected in the Police Crime Statistics

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2.1 Public crime statistics

This paper uses the German official Police Crime Statistics to draw conclusions on the prevalence of crime in Germany, the age dependency of crime, and crime trends in the last few decades. The Police Crime Statistics allow an analysis of crime that is finely divided by types of offence and in some cases reaches far back into the past. This advantage comes with a major handicap: The statistics cover reported crime, meaning that offences, victims and perpetrators are only included if a crime is reported or is discovered in police investigations. The statistics thus only reflect a fraction of all criminal activity. The size of that fraction varies from offence to offence: Offences with high reporting rates (such as robbery and murder) contrast with others with very low reporting rates (such as shoplifting or sexual assaults; cf. Schwind 2010, Schwind et al. 2001, p. 347). The ratio of reported to unreported crime also shifts over time: The proportion of crime that is reported is affected by rising or falling reporting rates, increasing or decreasing police density, changes in policing strategies and other factors. This paper cannot therefore aim to paint a full picture of crime in Germany. An analysis of the Police Crime Statistics is nonetheless provided ahead of the remaining papers in this volume for three reasons. Firstly, it makes it possible to analyse offences like murder and manslaughter that are not covered by self-report studies. Secondly, as yet there is not a self-report study in Germany that is repeated at regular intervals and provides information on victimhood and offending. The surveys that exist are repeated only sporadically in specific domains or for specific year. Thus the Police Crime Statistics are the only source that is able to give information on trends in crime and victimization. Thirdly, comprehensive analysis of the Police Crime Statistics allows a comparative discussion with findings from self-report studies and so makes it possible to identify strengths and weaknesses of the statistics.

Alongside the Police Crime Statistics, Germany also has other public statistics that record crime and formal social control. This paper, however,

focuses on the Police Crime Statistics, as these in a sense form the basis for other statistics in that police investigations are usually the first step in criminal prosecution.¹ Besides the types and numbers of offences reported or recorded, the Police Crime Statistics also include sociodemographic information on identified suspects and victims (Rat für Sozial- und Wirtschaftsdaten 2009). The findings in this regard are discussed in the ensuing sections of this paper. Other criminal and judicial statistics published in Germany are as follows:

- Public prosecution service statistics (*Staatsanwaltschaftsstatistik*), which record the activities of public prosecution services at upper regional and regional courts. The statistics count the highest outcome for each court case. They also include the number of individuals affected by investigations (Heinz 2012).
- Criminal prosecution statistics (*Strafverfolgungsstatistik*), which provide information on criminal court decisions, i.e. sentencing and convictions of individuals and where applicable the nature and severity of sentences handed down. These statistics cover all accused individuals in respect of whom final sentences are imposed or main criminal proceedings terminated by judgement or dismissal of a case. The statistics thus provide an overview of trends in court-registered crime and enable an evaluation of sentencing (cf. Brings 2005, Heinz 2012, Rat für Sozial- und Wirtschaftsdaten 2009).
- Prison statistics (*Strafvollzugsstatistik*), which provide demographic and criminological data, as of a specific reporting date, on sentenced prisoners and individuals in preventive custody. These statistics also contain information on crimes committed and expected duration of custody. On a quarterly basis, they additionally record prison occupancy, intake and releases in the reporting month, and prison capacity (Heinz 2012, Rat für Sozial- und Wirtschaftsdaten 2009).
- Probation statistics (*Bewährungshilfestatistik*), recording all individuals assigned to a full-time probation officer in a given year. The statis-

1 The public prosecution service itself, however, initiates 17 percent of public prosecution investigations (Federal Ministerium of the Interior/Federal Ministry of Justice 2006, p. 536). Such cases are only included in the Police Crime Statistics if the public prosecution service involves the police in investigations (Kempe et al. 2011, p. 20).

tics include suspended sentences imposed and revoked (cf. Heinz 2012, Rat für Sozial- und Wirtschaftsdaten 2009).

A central point of criticism regarding the above statistical sources is their incompatibility. The Police Crime Statistics, for example, classify offences by a different system (a criminological classification) than the criminal prosecution and prison statistics, which follow the arrangement of sections in the German Criminal Code. Incompatibility between the different statistical sources also means individual offenders cannot be traced through the entire process of formal social control (cf. Entorf/Spengler 2005, Heinz 2012).

In the following, crime trends are analysed on the basis of the Police Crime Statistics. These provide the most detailed and comprehensive picture compared with the other justice statistics as no filtering is involved. The Police Crime Statistics report crime in three ways: Number of offences, number of victims, and number of perpetrators. The analysis in the following mainly focuses on the reported number of offences. This is justified in victimological terms in that most offences have victims. ‘Victimless’ crime (such as economic and drug crime) only accounts for a small fraction of offences. An analysis based on offences also has the merit of including cases where the perpetrator goes unidentified. The data on victims and perpetrators provided in the Police Crime Statistics are used in the demographic part of the analysis.

2.2 *Crime prevalence and trends*

A total of 5,933,278 criminal offences were recorded by the police in Germany in 2010. At a population of 81.8 million, this corresponds to a crime rate of 7,253.2 criminal offences per 100,000 inhabitants. Thefts make up the biggest share of criminal offences (38.8 percent, see Figure 2.1). This includes vehicle theft (mostly bicycle theft), shoplifting and theft from vehicles. Domestic burglary and car stealing only account for a small proportion of theft but are often a focus of public debate. The public consequently tend to significantly overestimate the prevalence of such crimes. A further 16.3 percent of criminal offences are fraud-related. This includes offences such as fare evasion as well as fraudulent failure to supply goods as agreed (merchandise fraud) and fraud using unlawfully obtained non-cash

means of payment (credit card fraud). About one in eight police-recorded offences consist of damage to property (11.8 percent).

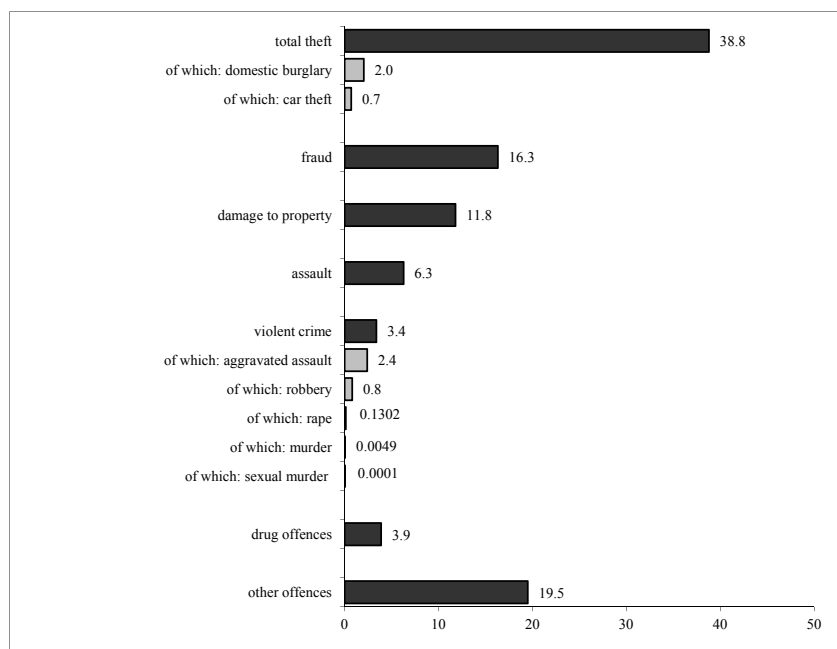
Far less common are offences involving physical assault of the victim. Assaults here entails offences by individuals where no weapon or other object is involved and no severe injury results. A total of 6.3 percent of offences come under this category. Aggravated assault is less than half as common (2.4 percent). This consists of assault with a weapon/object or by groups of perpetrators or with serious consequences. In the Police Crime Statistics, bodily injury offences of this kind are grouped with various other offences in the violent crime category.² All in all, 3.4 percent of offences recorded in Germany fall into this category. Offences involving severe violence are exceptionally rare. In 2010, for example, 293 cases of murder were recorded, four cases of sexual murder and 7,724 rapes.

Another major category of offences consists of drug offences, which made up 3.9 percent of offences recorded in 2010. Relatively frequently these are offences under the Narcotics Act (*Betäubungsmittelgesetz*) (mostly relating to heroin and cannabis) and drug dealing. A total of 19.5 percent of criminal offences do not come under any of the categories mentioned and are labelled other offences in Figure 2.1. These include a wide range of offences; relatively frequent among them are insults and offences against the Aliens Act (*Aufenthaltsgesetz*) and Asylum Procedures Act (*Asylverfahrensgesetz*).

Figure 2.2 shows the long term development of crime rates (offences per 100,000 population) in Germany. So far, the analysis has covered the whole of Germany, however this figure is limited to Western Germany plus Berlin, because crime has not been reliably recorded before 1990, the year of German reunification, in the eastern part. It is necessary to state the number of offences relative to the population because the population grew in the analysis period from 53.5 to 68.9 million. It is also important to note that there were at least four major changes in the way offences are included in the Police Crime Statistics over time, as indicated by the gaps in Figure 2.2: From 1963, the statistics ceased to include road traffic offences, producing a drop in the total number of offences. From 1971, the

2 The violent crime category comprises the offences of murder, manslaughter and killing another at his own request, rape and sexual coercion, robbery, extortion accompanied by violence, and assault on motorists with intent to rob, bodily injury resulting in death, aggravated assault, extortionate kidnapping, hostage taking, and attacks on air and sea traffic (Bundeskriminalamt 2011, p. 16-17).

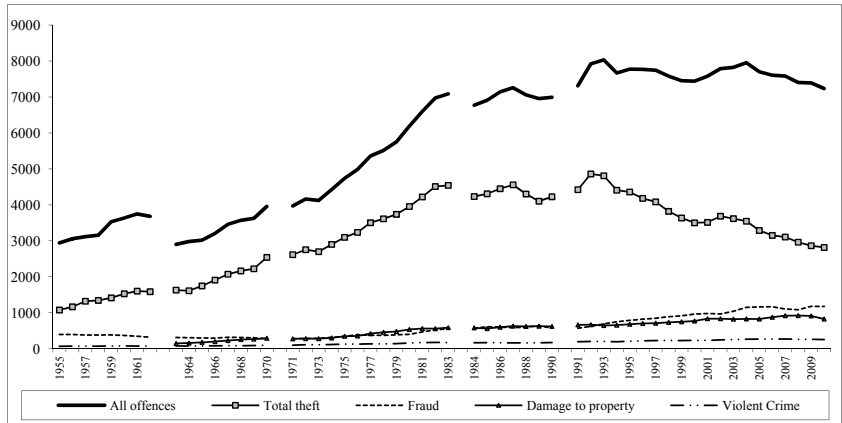
Fig. 2.1 Share of offences by type of offence in 2010 (in percent)



data began to be uniformly compiled on the basis of case outcomes, i.e. not included in the statistics until police investigations were concluded. Since 1984, perpetrators are counted once only no matter how many offences they are suspected of. In 2009, the counting method changed again to prevent double counting of perpetrators who came to the attention of the police in more than one of the Federal States. From 1991, the statistics for western Germany include Berlin as a whole and not just West Berlin; two years later, Police Crime Statistics were published for the whole of united Germany for the first time.

As Figure 2.2 clearly shows, the period between 1955 and 1993 saw continuous growth in crime within the German population. The crime rate for all criminal offences increased 2.7 times. Since then, the prevalence rate has stayed broadly constant or has slightly fallen. Whereas in 1995, 6.7 million criminal offences were recorded throughout Germany (including Eastern Germany), by 2010 the total was down to 5.9 million, as has already been mentioned; the size of the German population remained nearly constant during this period (81.5 million in 1995 and 81.1 million in

Fig. 2.2 Trends in selected criminal offences since 1955, per 100,000 population (Western Germany plus Berlin)



2010). The trend in theft is similar, with the prevalence rate rising 4.5 times between 1955 and 1992 but then dropping back again. Between 1995 and 2020, recorded cases of theft in Germany fell from 3.8 million to 2.3 million.

The remaining offences in the analysis show a rising trend that also continued beyond the early 1990s. The lowest prevalence rate for fraud-related offences was in 1966; by 2009, such offences had quadrupled. The upward trend is also visible in a comparison of the years 1995 and 2010: For Germany as a whole, the number of cases rose from 623,192 to 968,162. Damage to property has only been included in the crime statistics since 1963. That year also marked the lowest recorded prevalence rate, and 2008 the highest (6.2 times higher). 607,909 cases of damage to property were recorded by the police throughout Germany in 1995, compared with 700,801 in 2010. Finally, Figure 2.2 shows the trend in violent crime. While remaining at a low level overall, this offence category saw a four-fold increase in the prevalence rate between 1995 and 2007. There has been a sharp rise in case numbers since 1995: Whereas 170,170 violent offences were recorded in that year, in 2010 the number was 201,243.

The rise in crime cannot be solely interpreted as a rise in criminal inclination of German population. Certainly, changes came about during the period under analysis that may have resulted in an increase in crime. Sociocultural and economic changes are among the factors that can be point-

ed to in this regard. The emergence of new lifestyles and routines, like the shift of leisure activities into the public arena, is not without consequence for crime trends in society (cf. Cohen/Felson 1979). The loosening of traditional ties ('individualisation'), as reflected among other things in rising divorce and mobility rates, likewise alters the prior conditions for crime (cf. Sampson/Groves 1989, Shaw/McKay 1969). Similarly, by the logic of strain theory, rising poverty and unemployment may be reflected in the crime statistics (cf. Durkheim 1966, Merton 1968). Finally, the demographic changes since the end of the Second World War will not have gone without effect (South/Messner 2000). Such changes, however, are not enough to explain the marked rise in police-recorded crime. Other changes must also be taken into account: For instance, the period saw an increase in police density and thus formal social control. In 1964, West Germany had 210 police officers per 100,000 population; in 2005, the figure was 325 (Gesis-ZUMA 2007, p. 180). Crime reporting behaviour is also unlikely to have remained unchanged over the period. Unfortunately there are no comprehensive longitudinal data on this for Germany. Some empirical data, however, show a rising trend, for example with the reporting of assaults to police in the city of Bochum comparing the survey years 1975, 1986 and 1998 (Schwind et al. 2001, p.140-141). There is additionally a certain amount of change in what the law considers an offence, with some forms of behaviour being decriminalised and others criminalised.³

Figure 2.2 shows the trend for the main offence categories. Analysing individual offences separately yields the picture presented in Figures 2.3a and 2.3b, which show absolute numbers of offences for the whole of Germany since 1995. Case numbers are seen to increase for both forms of assault and for rape. As these are offences with low reporting rates, the rise is likely to be attributable to an increase in reporting to the police.

This does not reflect a general growing inclination towards violence in the German population, as the number of cases for other violent crimes demonstrate: Robbery has decreased by a quarter since 1995 and murder by more than half. The number of cases of sexual murder was 69.2 percent lower in 2010 than in 1995. Decreases in the number of cases are also seen for domestic burglary (down 42.5 percent) and car theft (down 79.2 percent).

3 Since the Federal Republic of Germany came into being, adultery and pornography have been decriminalised, for example, while various economic, environmental and drug crimes have been added to the statute books (Schwind 2010, p. 4).

Fig. 2.3a Trends in the numbers of selected criminal offences since 1995

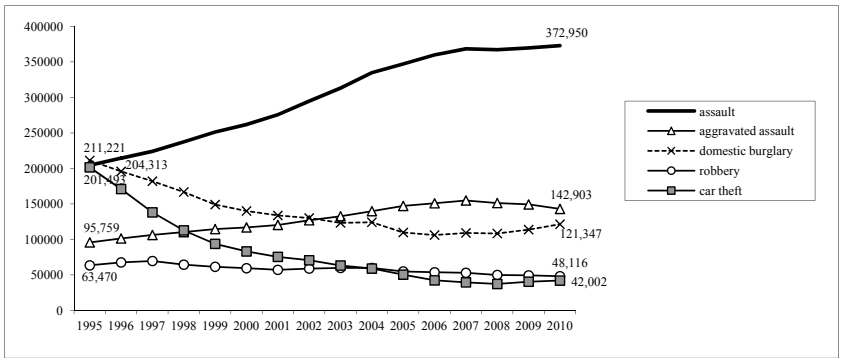
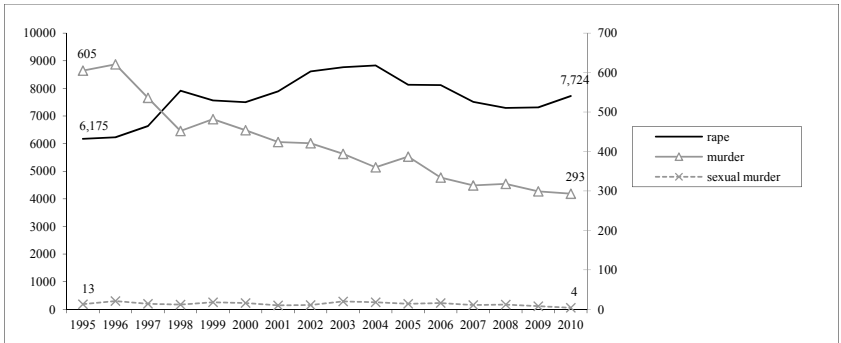


Fig. 2.3b Trends in the numbers of selected criminal offences since 1995



Looking at the last 15 years, crime in general is declining in Germany. Various developments can be pointed at to explain this (Baier et al. 2011, p. 21ff; Kemme et al. 2011):

- Germany is ageing: Between 1995 and 2010, the percentage of the population aged 60 or older increased from 20.7 percent to 25.9 percent. The share of older people in the population is thus increasing, and older people generally commit fewer crimes, while the share of younger people with greater affinity to commit crime is gradually shrinking.
- Immigration is falling: In 1993, 1.3 million individuals immigrated to Germany; in 2008, the total was down to 0.7 million. The large influx in the early 1990s was mainly related to ‘Aussiedler’ – people from

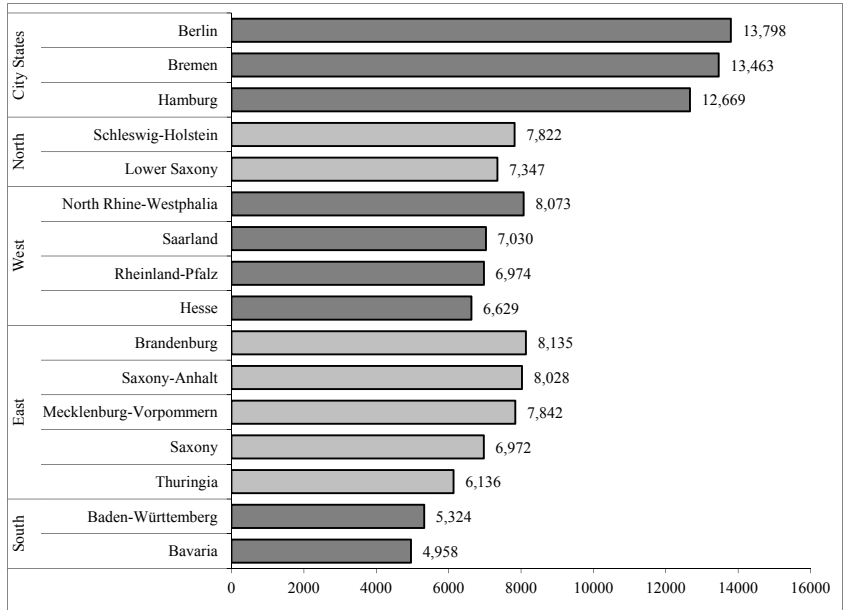
former Eastern Bloc countries claiming German nationality on account of German descent – and to asylum seekers, for example from war zones such as the former Yugoslavia. The immigrant population has since changed not just in number, but also in composition, with the great majority of recent immigrants coming from countries of the European Union. As analyses both of the Police Crime Statistics and of self-report studies show, immigrants on average have a stronger criminal inclination (cf. e.g. Baier/Pfeiffer 2007), so a decrease in immigration goes hand in hand with falling crime rates.

- Higher crime clear-up rates deter: One of the basic facts in criminology is that not only sentences or sentencing severity acts as a deterrent, but also the risk of being caught. This risk has grown in recent years, with the number of crimes cleared up rising from 46.0 percent (1995) to 56.0 percent (2010). A rise in clear-up rates of this kind can be seen for various categories of offence. The clear-up rate for murder, for example, has risen from 89.7 percent to 96.1 percent and that for theft (overall) from 27.7 percent to 30.0 percent.
- Technical precautions prevent crime: The trend in theft especially, and most of all burglary and vehicle theft, gives reason to assume that a range of technical systems are making it increasingly hard to steal. In the case of shoplifting this relates to merchandise security systems, in the case of domestic burglary to various door, window and patio door locking systems, and in the case of car theft to technology such as immobilisers.
- There is a spreading culture of nonviolence: Repeated surveys of school pupils support the conclusion that less use is made of violence today in child-rearing, that parents, teachers and others in the immediate social surroundings of adolescents increasingly disapprove of violence, and that adolescents themselves more frequently distance themselves from the use of violence (cf. Baier et al. 2009, p. 94ff). These cultural changes are likely to be important with regard to people's inclination to engage in criminal behaviour. They lead to a higher degree of informal social control; there is growing pressure to behave in accordance with the norm. And they lead to higher reporting behaviour, so that it is no contradiction that Official statistics on assaults increase whereas a culture of nonviolence spreads.

One distinguishing feature of crime as reported in the Police Crime Statistics is that there is apparently both an urban-rural and a north-south divide.

This is visible in a comparison of Germany’s 16 Federal States (Figure 2.4). The prevalence rate for all criminal offences in 2010 is highest in the three city states. It is also higher in the northern States of Schleswig-Holstein and Lower Saxony than in the southern States of Bavaria and Baden-Württemberg. Even the five eastern German States show a north-south divide. To date there are few empirical findings from self-report surveys to confirm these differences found in reported crime rates. The findings available show the north-south divide to be largely accounted for by reporting rates, meaning that victims in the north more frequently report crimes to the police than those in the south (Pfeiffer/Wetzels 1994, Baier et al. 2011, p. 90f). Reporting rates are also found to be higher in urban than in rural areas (Baier et al. 2009, p. 42). Additionally, there are differences to be found with regard to other factors (such as unemployment, poverty, and composition of the population) between urban and rural and between northern German and southern German regions, and it cannot be ruled out that these also account for part of the statistical divides.

Fig. 2.4 Number of criminal offences per 100,000 population in the 16 German States, 2010



2.3 International comparison of crime figures

Comparing official crime statistics between countries is a difficult task. There are differences between the countries regarding the legal and criminal justice system. These differences include definitions of crimes, the practice of reporting, recording and counting crimes as well as differences in the reporting behaviour (Spark 2013, p. 2). Nevertheless scholars have attempted to assemble statistics on crime that are suitable for cross-national comparisons. In this chapter we give an overview on crime in the European Union; the data presented are based on Eurostat figures by Spark (2013). The interpretation must, however, bear in mind the difficulties arising from a cross-national comparison (e.g. Aebi et al. 2010).

Assessing the trend of total recorded crime from 2005 to 2010 we see a steady decline from almost 23.5 million offences to about 21 million⁴. Taking a closer look on the single Member States we see an increase in the number of recorded offences for twelve states. Germany and 15 other countries⁵ show a decreasing number of total offences. These trends, however, are not the same for all types of crime. From 2007 to 2010 the number of recorded offences for domestic burglary increased by more than 7%⁶. For drug trafficking, violent crime and robbery the number of recorded cases dropped by 3 to 6%. By contrast motor vehicle theft decreased by 23% (Clarke 2013).

Figure 2.5 shows the total crime rates for the members of the European Union (EU-27) in the year 2010. Keeping in mind all the obstacles that come along with a cross-national comparison, we see quite a big range. The lowest crime rates are reported for the Baltic states, Cyprus, Bulgaria and Romania. The German rate is located in the upper third and similar to the United Kingdom and the Netherlands. The highest rates are shown for Scandinavia and Belgium. This results pin points at one difficulty arising from cross national comparisons of official crime statistics. Are the Baltic States really much safer than Scandinavia or does figure 2.5 merely reflect

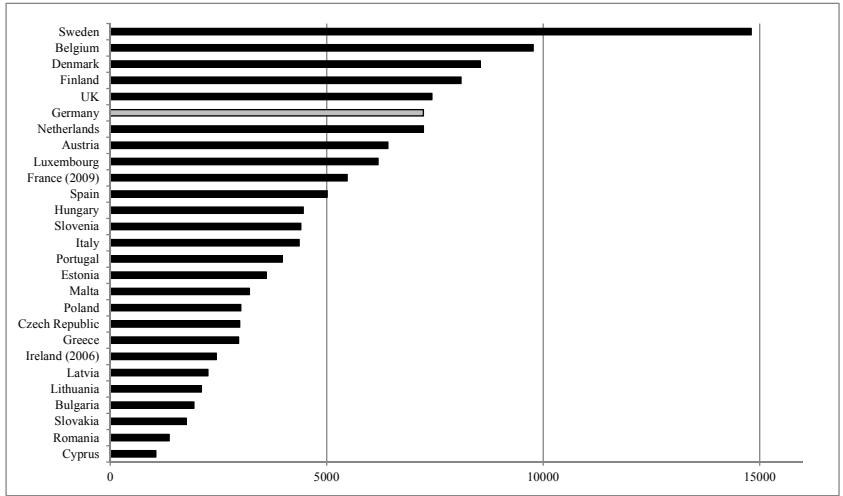
4 These EU figures do not include Estonia, Ireland, Sapin, France, Latvia and Finland due to data problems (see Clarke 2013, p. 2.).

5 Scotland, England/Wales and Northern Ireland are treated separately as they have different jurisdictions.

6 These EU figures exclude Spain and Finland and additionally Estonia (violent crime), Cyprus (violent crime), Ireland (robbery) and Hungary (drug trafficking) due to data problems (see Clarke 2013, p. 1).

differences in reporting behaviour and recording practice? The problems typically associated with official crime statistics become crucially, when we compare different jurisdiction. Trust in police and national traditions for solving conflicts may affect the propensity to report offences to the police. Additionally the ways in which national police authorities register and count offences have an impact on the amount of registered crime.

Fig. 2.5 *Number of criminal offences per 100,000 population in 27 EU member states in 2010*



Source: Crime data from Clarke (2013); Population data at 1st of January 2010 from Eurostat; own calculations.

When we compare the crime rates for different offences, we see a similar picture (Table 2.1). The Baltic states and the new Member States in Eastern Europe seem to be relatively safe, compared to Western and Northern Europe. Disaggregated crime figures for Germany show that the rates for violent crime, domestic burglary and motor vehicle theft are in the mid-field of the EU-27 rates.

However, one should not overrate those differences. Cross-national comparisons of crime figures should be based on data that is collected using the same methodology (e.g. data from cross-national victim surveys). Comparisons based on official crime statistics can only be meaningful in-

terpreted, when the relevant circumstances are similar between countries or when we look at differences/ similarities in trends and not in the levels.

Table 2.1 Number of criminal offences per 100,000 population in 27 EU member states in 2010 for total, crime, violent crime, domestic burglary and motor vehicle theft

	Total Crime		Violent Crime		Domestic Burglary		Motor vehicle theft	
	rate	rank	rate	rank	rate	rank	rate	rank
Austria	6397	8	533	8	188	17	61	22
Belgium	9689	2	1130	3	630	3	183	11
Bulgaria	1944	24	120	21	317	8	6	27
Cyprus	1024	27	57*	26	395	7	295	5
Czech Republic	2983	19	178	17	96	25	125	13
Denmark	8511	3	478	9	809	1	375	1
Estonia	3607	16	399	10	238	14	65	19
Finland	8066	4	741	4	121	23	208	8
France	5472*	10	543	7	288	10	302	4
Germany	7253	6	246	13	148	20	102	14
Greece	2954	20	109	23	715	2	244	7
Hungary	4465	12	384	11	198	16	86	17
Ireland	2452*	21	272	12	569	5	255	6
Italy	4344	14	212	16	284	11	327	3
Latvia	2273	22	63	25	187	18	56	23
Lithuania	2121	23	111	22	147	21	62	20
Luxembourg	6081	9	661	6	296	9	71	18
Malta	3209	17	90	24	170	19	90	16
Netherlands	7195	7	680	5	620	4	100	15
Poland	3016	18	129	20	99	24	43	24
Portugal	3973	15	228	15	250	12	191	9
Romania	1364	26	26	27	66	26	12	26
Slovakia	1756	25	149	18	35	27	62	21
Slovenia	4372	13	136	19	125	22	26	25
Spain	4996	11	232	14	243	13	143	12
Sweden	14671	1	1213	2	212	15	375	2
UK total	7381	5	1624	1	456	6	190	10

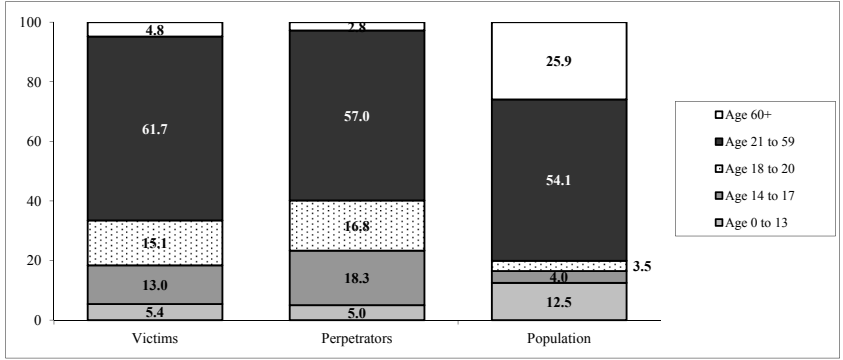
Source: Crime data from Clarke (2013); Population data at 1st of January 2010 from Eurostat; own calculations.

* The values for France (total crime) and Cyprus (violent crime) refer to 2009 and the value for Ireland (total crime) refers to 2006.

2.4 Crime by age group

The age structure of crime in Germany follows the same pattern as elsewhere, with adolescents and older youths featuring disproportionately in the crime statistics. Figure 2.6 shows this by the example of violent crime. Victim statistics are published in Germany only in relation to selected offences and not for crime as a whole, hence the analysis is restricted at this point to the violent crime offence category; the perpetrator statistics, on the other hand, allow analysis for all criminal offences (see below). Of all victims of violent crime in 2010, 13.0 percent were aged between 14 and 17, and 15.1 percent between 18 and 20. Offenders account for an even larger proportion of these two age groups. Yet these same age groups respectively made up only 4.0 percent and 3.5 percent of the resident German population in 2010. In other words, these two age groups show at least three times as much involvement in violent crime as would be expected from their share of the population as a whole. The opposite is the case for the two age groups comprising the under-14s and the over-60s: These groups are significantly less frequently victims or perpetrators of violent crime than their share of the population would lead to expect. As the example of violent crime shows, victims and perpetrators differ little in age structure.

Fig. 2.6 Selected age groups as a proportion of all victims and perpetrators of violent crime in 2010 and of the population as a whole (in percent)



As the data on perpetrators are more finely divided by age and also allow more offences and categories of offences to be analysed, the focus in the following is on the offender statistics. Figure 2.7 shows crime levels in the various age groups for all offences using the number of police-recorded suspects per 100,000 in each age group. Comparing the male and female population, it is evident that women in Germany are increasingly rarely recorded as suspects, regardless of age group. The number of suspects per 100,000 men is on average three times higher than the number per 100,000 women, with the exception of the 12 to 13 and the 14 to 15 age groups where the discrepancy is only two times. The figure also shows that the age group with the highest crime level among men is the 18 to 20 age group, whereas for women the highest crime level is found at a younger age in the 14 to 15 age group. The difference can be explained by the fact that female offenders tend to commit theft-related offences such as shoplifting (Schwind 2010, p. 84) and such offences tend to be committed earlier in an individual's biography than other offences, in which men are significantly overrepresented. In 2010, for example, the number of suspects per 100,000 was only 2.3 times as high for men than for women when it came to theft, whereas the differential for violent crime was 6.4 times. The gender gap is particularly large for sexual offences (92.8 times for rape), whereas the difference is smaller for fraud-related offences (2.2 times).

The separate analysis by age group also shows that from age 21 upwards, crime levels fall off not rapidly but gradually. The number of suspects per 100,000 is of the same order for the 21 to 24 age group (and for men even up to age 29) as for the 14 to 15 age group. The 14 to 24 age group should therefore merit special attention on the basis of the police-reported statistics.

This assessment does not apply equally for all types of offence, however, as Figure 2.8 shows. For theft and damage to property, the largest number of suspects per 100,000 relates to the 14 to 17 age group. For violent crime, the 14 to 20 age group stands out with an especially large number of suspects per 100,000. For fraud, suspects are on average somewhat older again, with the largest number of suspects per 100,000 being found for individuals aged 18 to 29.

Fig. 2.7 Suspects per 100,000 for various age groups, all offences, by gender, 2010

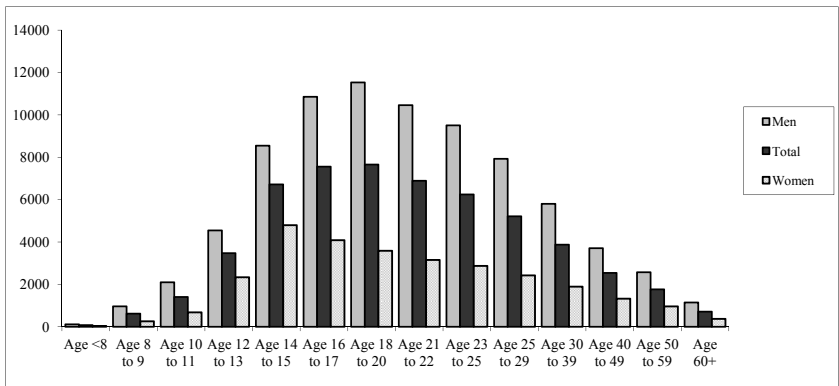
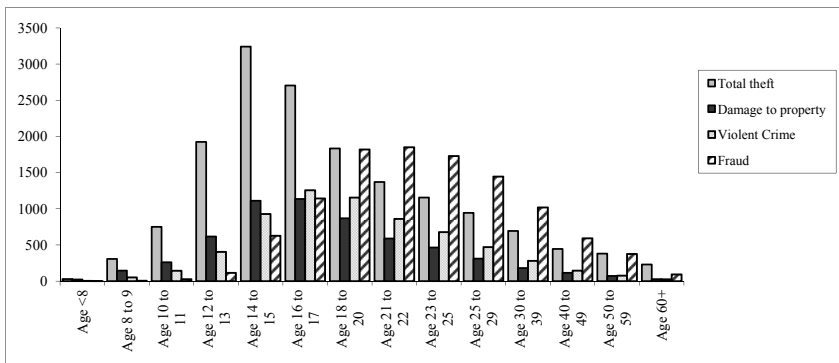


Fig. 2.8 Number of suspects per 100,000 for various age groups and various crimes in 2010



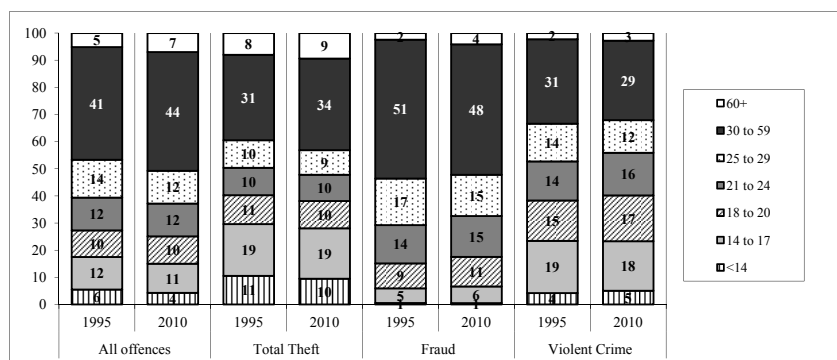
Younger age groups are disproportionately involved in crime. At the same time, crime levels in these age groups are not constant, as shown by a comparison of the numbers of suspects per 100,000 for 1995 and 2010 for the age groups between 14 and 25 in Table 2.2. Across all offences, the number of suspects per 100,000 decreased for adolescents (ages 14 to 17) and older youths (ages 18 to 20), but increased for young adults (ages 21 to 24). All three age groups show a decrease in the number of suspects per 100,000 for theft, and sharp increases in fraud and violent crime.

Table 2.2 Number of suspects per 100,000 population for various age groups and various offences, 1995 and 2010 in comparison

	14 to 17			18 to 20			21 to 24		
	1995	2010	Change (%)	1995	2010	Change (%)	1995	2010	Change (%)
All offences	7286.0	7149.7	-1.9	8155.5	7652.8	-6.2	6111.0	6569.8	7.5
Total theft	4347.3	2964.5	-31.8	3333.0	1834.1	-45.0	1923.8	1264.6	-34.3
Fraud	481.4	893.0	85.5	1119.3	1820.3	62.6	1041.1	1791.2	72.0
Damage to property	999.5	1124.2	12.5	731.0	868.2	18.8	372.4	528.0	41.8
Violent crime	798.6	1097.4	37.4	848.3	1155.4	36.2	498.1	770.3	54.6

Since with the exception of the ‘all offences’ omnibus category the three age groups under analysis and ultimately also the age groups not included in Table 2.2 show similar changes in the number of suspects per 100,000, the characteristic picture of crime where younger age groups account for a disproportionate share of criminal activity is maintained over time (Figure 2.9). Adolescents, for example, accounted for 12 percent of all offences in 1995 and still no less than 11 percent in 2010. Adolescents were responsible for 19 percent of all violent crime in 1995 and 18 percent in 2010. Based on the stability in the age distribution, which ultimately implies stability in the age-crime rate curve, it is possible to project a specific crime trend under different demographic conditions in the future, a point which will be briefly addressed in the last section of this paper.

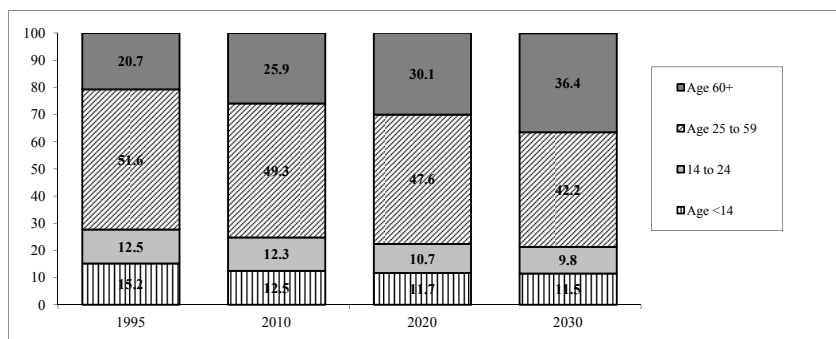
Fig. 2.9 Percentage of perpetrators from various age groups for various offences, 1995 and 2010



2.5 Crime in times of demographic change

Germany's population is rapidly ageing. Whereas only 20.7 percent of German residents were 60 or older in 1995, according to the 12th Coordinated Population Projection by the Federal Statistical Office this figure will rise to 36.4 percent by as soon as 2030 (Figure 2.10). The percentage of children and adolescents will shrink from 27.7 percent to 21.3 percent. Additional immigration will not be enough to halt this trend.

Fig. 2.10 Composition of the German population by age group in various years (in percent)



This population trend can be taken as the starting point for a projection. The size and structure of the population in 2030 are known from the projected population figures. In 2030, the German population will be down from 81.8 million to 77.7 million – a decrease of 5.1 percent. It remains to make an assumption about the trend in the number of suspects per 100,000. The simplest assumption is for this statistic to show no change and remain at the same level as in 2010. Based on the numbers for the different age groups in Figure 9, that would mean a fall in the number of police-recorded suspects from 2.2 million to only 1.8 million in 2030, representing a decrease of 16.5 percent – far more than the decline in the population. There would be a particularly large fall in the number of suspects in the 14 to 24 age group (a decrease of 23.8 percent), while the number of suspects aged 60-plus would rise (an increase of 33.3 percent). As this increase would be from a low base (because of the small number of suspects per 100,000 among the over-60s), the decrease in the younger age cohort would be the main determinant of the overall crime trend. Similar changes

would be seen in specific offences and offence categories, although violent crime would go down more than fraud in line with the differing prevalence in different age cohorts.

This sort of modelling, however, only gives a first indication of actual future crime trends. A major point of criticism is the assumption of a constant number of suspects per 100,000 population. Experience shows that this number cannot be expected to stay constant. Retrograde extrapolations for specific offences for the period 1995 to 2008 have shown that the actual trend in suspect numbers can diverge significantly from that expected from the population age structure with a constant number of suspects per 100,000 (Kemme et al. 2011). To assume that suspects per 100,000 remain constant for each age group is to presuppose that the relevant determinants stay unchanged or at least that any change in them cancels out. This applies both for factors like unemployment, poverty, social cohesion, etc., and for factors like police density, investigation strategies, reporting behaviour and laws. An assumption of zero net change in these factors is likely to be unrealistic.

By the same token, changes in age structure remain an important determinant of future crime rates. Analyses at the level of individual German Federal States, for example, show change in the number of recorded suspects to be partly explained by change in the size of the different age groups (Kemme/Hanslmaier 2011). Other studies find that the percentage of young men has an effect on crime rates, young men being a group with greater crime affinity, (cf. e.g. Carrington 2001, Cohen/Land 1987, Entorf/Spengler 2000, LKA-NRW 2006, Lee 1984). Demographic change must therefore be a component in any projection of crime rates in a situation where the future age structure of a population is subject to major change.

All told, a projection of crime rates needs a more elaborate approach that takes in more than just the demographic component. For this reason, a research project in progress at the Criminological Research Institute of Lower Saxony uses panel analyses to make projections. The analyses pool time series of crime statistics and relevant economic, demographic and social variables for the years 1995 to 2010. Analysis is conducted both at the level of the Federal States and of administrative districts.⁷ The aim of the analyses is to develop a model explaining crime for the years 1995 to

7 The analysis at administrative district level was performed for the States of Bavaria, Brandenburg, Lower Saxony and Saxony-Anhalt.

2010. The model quantifies the influence of demographic change and can be used as the basis for projections into the future.

Two problems arise with this approach, however. Firstly, little or no data are available for a number of important factors such as reporting behaviour and police density. This rules out such factors for use in a multivariate model. Secondly, ex-ante projection using a multivariate model requires the values of the independent variables to be known. Except for the population projections, there are no nationwide long-term projections for figures such as unemployment rates and socio-structural variables.

Generally speaking it is far harder to make reliable projections for crime rates than it is for population size, the determinants of which are well understood and largely known. It nonetheless appears important to work at projecting crime rates so that security policy can be placed on an empirical basis and is no longer reliant on public opinion alone.

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