

Analysis of variation in crime trends:

A study of trends in 'comparable crime' categories between the Crime Survey for England and Wales and the police recorded crime series between 1981 and 2011/12

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Foreword

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Appropriate use of crime and policing statistics is essential if public trust and confidence in those statistics, in the Police and Crime Commissioners, and in the police service is to be maintained; equally, if there is misleading or inappropriate use that may easily undermine trust and confidence. As the Chair of the Crime Statistics Advisory Committee, I welcome the publication of this report which provides important new information to help users interpret trends in crime. I also strongly support the public interest that crime statistics are accurate, clearly presented, comprehensive, transparent, and trustworthy.

The Crime Statistics Advisory Committee is a non-statutory body which was established by the National Statistician in 2011. It functions as a strategic, high-level advisory body offering independent advice to the Home Secretary, the Office for National Statistics (ONS), and Her Majesty's Inspectorate of Constabulary (HMIC) on matters related to the measurement of crime and the collection and presentation of crime data for England and Wales.

This Report was developed with the support of the Committee. In due course, the Committee will consider how to respond to the Report's findings.

Stephen Shute

Introduction

The National Statistics on crime for England and Wales are primarily based on two different sources: the Crime Survey for England and Wales (CSEW), which was until April 2012 known as the British Crime Survey, and the police recorded crime series which is compiled from data supplied by the police on the number of crimes they record which fall into the notifiable category¹.

One of the motivations behind the launch of the survey in 1982 was to assess the scale of the gap between crimes recorded by the police and that experienced by the population resident in households. A consistent finding from the survey has been that a substantial proportion of crime experienced by the public (around 61% in 2011/12) goes unreported to the police. Reporting rates vary by the type of offence and are lowest for offences such as vandalism (34% in 2011/12) and highest for offences such as theft of a vehicle (94% in 2011/12). This variation in reporting rates partly reflects the victim's perceived seriousness of the offence. It is also thought to be related to practical considerations, for example the need to obtain a crime reference number from the police to validate an insurance claim.

Making direct comparisons between the two series is problematic due to important differences between them. The survey's coverage (until the fairly recent extension to children) has been restricted to the adult population resident in households whereas the police recorded crime series covers a wider population (e.g. children, commercial bodies, overseas visitors) and a wider set of offences (e.g. homicide and crimes without a direct victim, such as drug possession).

However, in broad terms, the CSEW and recorded crime series have displayed similar trends for overall crime (with some divergence due to reporting and recording changes) with rises from the early 1980s to peaks in the early to mid-1990s and falls thereafter. CSEW crime rose steadily in the decade from 1981 and continued to rise during the early 1990s, peaking in 1995. Subsequently, CSEW crime fell markedly between 1995 and the 2004/05 survey.

Since 2004/05 the underlying trend in CSEW crime has continued to be downward with some fluctuation in year-to-year estimates, although these falls in CSEW crime have been at a slower rate than those seen in the police recorded crime series. This has raised questions as to whether or not the two series are drifting apart. This paper describes the results of statistical analyses to explore this issue. It builds on work undertaken by analysts in HMIC and the Home Office Statistics Unit².

Background

Quality of crime recording by the police

To ensure consistency, police recording practice is governed by the Home Office Counting Rules (HOCR) and the National Crime Recording Standard (NCRS). These rules provide a national standard for the recording and classifying of notifiable offences by police forces in England and

¹ Notifiable offences include all offences that could possibly be tried by jury plus a few additional closely-related summary offences dealt with by magistrates.

² The authors would like to acknowledge the input of Lawrence Morris (HMIC) and Phil Hall (Home Office Statistics Unit) in developing the analysis presented in this report.

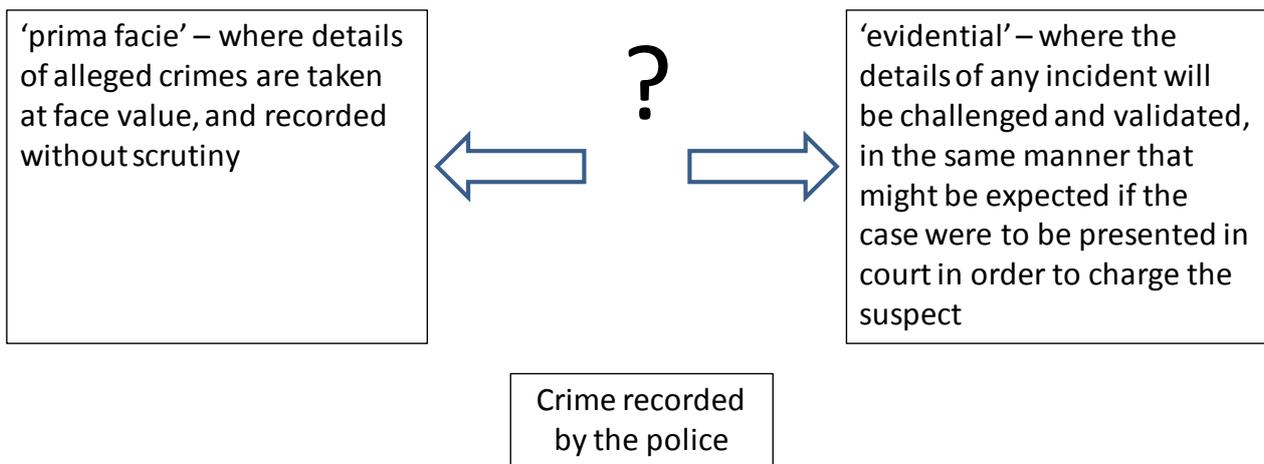
Wales (see Home Office, 2011). The HOCR have existed in one form or another since the 1920s. However, in 1998 there were substantial changes which expanded the coverage of notifiable offences to include certain additional summary offences and counts became more victim-based (the number of victims was counted rather than the number of offences).

A critical report from Her Majesty’s Inspectorate of Constabulary (HMIC) in 2000 (Povey, 2000) was influential in the development of the NCRS which was subsequently introduced in April 2002. The HMIC inspection, that preceded the NCRS, showed there was a problem with differing interpretation of the HOCR which resulted in inconsistent recording practices across forces. Research undertaken during the Inspection showed:

- offences wrongly classified;
- the inappropriate ‘no criming’³ of a record subsequent to it being recorded;
- the failure to record the correct number of crimes;
- an error rate of between 15% and 65% of the crime records examined⁴; and,
- inappropriate reclassifying of recorded crimes.

Two different models were used to describe the then police approach to crime recording, as outlined below.

The ‘prima facie’ versus ‘evidential’ model for crime recording



The 2000 HMIC Inspection found that the above models were not mutually exclusive pointing out that “the recording of crimes involves a complex interaction of the unique circumstances surrounding each crime incident, a force organisational approach and style, and the recording officer’s views.”

³ Police forces record some crimes which are subsequently ‘no crimed’ where it is judged by the police that no crime actually took place. The HOCR set out circumstances under which a crime report may be ‘no crimed’ (see section 3.4 of the User Guide to Crime Statistics for England and Wales). Crime reports that are ‘no crimed’ are removed from police crime data and thus from the police recorded crime statistics.

⁴ An exercise was undertaken to determine each forces ‘recording rate’ by determining the number of crimes found on the command and control logs which had been recorded on each force’s crime system.

However, the Inspection found that officers:

- tended to use an 'evidential and detection based' rather than a 'prima facie' model of recording;
- generally applied an evidential test of 'beyond reasonable doubt' to record a crime; and,
- tended to use a lower standard to classify a crime as detected or 'no-crime'.

The HMIC concluded that the overall effect of this practice was that:

- recorded crime levels were reduced;
- the level of 'no-crimes' increased, thereby further reducing the level of recorded crime; and
- detection rates were increased.

The 2000 HMIC report commented that the then “police approach goes beyond challenging and validating whether a crime has in fact occurred with officers taking into account a number of other factors before deciding whether to record the crime or not”. These included:

- can the victim be contacted?
- is the victim co-operative?
- can the offence be detected?
- is the Crown Prosecution Service likely to prosecute?

In response to this critical report, the Association of Chief Police Officers (ACPO) working in collaboration with Home Office statisticians developed the NCRS (Simmons et al., 2003). The NCRS aimed to ensure greater consistency between forces in recording crime and to take a more victim-oriented approach to crime recording with the police being required to record any allegation of crime unless there was credible evidence to the contrary (i.e. to adopt the 'prima facie' model described above).

While the NCRS was formally introduced in April 2002 some forces had adopted key elements of the standard earlier and compliance with it continued to improve in the years following its formal introduction. Both the change to coverage of the HOCR, in 1998, and introduction of NCRS resulted in an increase in the number of crimes recorded by the police. Certain offences, such as the more minor violent crimes, were more affected by these changes than others.

It would be naïve to believe that the introduction of NCRS, in and of itself, ensured that all notifiable offences reported by victims were subsequently recorded by the police. However, the Audit Commission carried out regular independent audits of police data quality between 2003/04 and 2006/07. In their final assessment published in September 2007 (Audit Commission, 2007) they commented that “The police have continued to make significant improvements in crime recording performance and now have better quality crime data than ever before”. The Commission found:

- 38 forces (88% of the 43 forces⁵) were assessed as “good” or “excellent” for crime data quality, which represented a substantial improvement from 12 in 2003/04 (28%)
- the remaining five forces (12%) were judged “fair”; and,
- no forces were assessed as having “poor” crime data quality in either the 2005/06 or 2006/07 audits.

⁵ The audits excluded the British Transport Police.

The system for recording crime in England and Wales by the police is widely recognised by international standards to be one of the best in the world. Few other jurisdictions have attempted to develop such a standardised approach to crime recording and some of those that have base their approach on the England and Wales model (e.g. Australia, Northern Ireland).

The independent inspections of police recording carried out by the Audit Commission ceased in 2007. Both the UK Statistics Authority (2010) and the National Statistician (2011) in their separate reports on crime statistics highlighted concerns voiced to them during their reviews about the absence of such periodic audits. Anecdotal evidence suggested that performance pressures led some officers to bend the rules, for example to record a notifiable offence as an incident of anti-social behaviour or crime-related incident which would not appear in the crime figures.

A HMIC quality review in 2009 into the way in which police forces record most serious violence (which at the time was part of a central Government target) found some variation in recording which they partly attributed to the lack of independent monitoring of crime records.

In line with a recommendation in the National Statistician's review of crime statistics (2011), HMIC carried out a review of police crime and incident reports in all forces in England and Wales during 2011 (HMIC, 2012). The review only looked at a small number of crimes and incident records (fewer than 6,000 across England and Wales) and the results can not be extrapolated to provide national estimates. The inspection found that of the incidents looked at:

- three-quarters of forces were judged to have made correct crime recording decisions 90% or more of the time with an average of 92% of incidents correctly finalised, indicating a good national standard;
- while the majority of police forces performed well, there remained a wide variation in the quality of decision making associated with the recording of crime (a range of between 86% and 100% from the lowest to the highest performing force) which was a cause for concern.

The 2011 HMIC inspection identified a number of forces whose crime recording was of sufficient concern to require a follow up inspection in 2012 and we understand the results of these inspections will be published in due course.

Quality of the Crime Survey for England and Wales (CSEW)

The CSEW is widely viewed as a gold-standard survey by national and international standards. It has served as a model for other countries to follow. The CSEW has maintained a relatively high response rate over time (for example, 75% or more since 2001/02) at a time when other similar surveys have seen reductions in response rates. The survey has employed a consistent approach to counting crime with the victimisation methodology and the crime types included in the main count of crime remaining comparable over time.

The CSEW is a face-to-face victimisation survey in which people resident in households in England and Wales are asked about their experiences of a range of crimes in the 12 months prior to the interview. A key aim of the survey is to provide robust trends for the crime types and population it covers; the survey does not aim to provide an absolute count of crime and has notable exclusions. The CSEW excludes fraud and those crimes without a specific identifiable victim (e.g. possession of drugs). As a survey that asks people whether they have experienced victimisation, homicides

cannot be included. The CSEW does not cover the population living in group residences (e.g. care homes or halls of residence) or other institutions, nor does it cover crime against commercial or public sector bodies.

For the crime types and population it covers, the CSEW provides a better reflection of the true extent of crime experienced by the population resident in households in England and Wales than police recorded statistics because the survey includes crimes that are not reported to, or recorded by, the police. The primary purpose of the CSEW is to provide national level estimates and robust estimates of crime are not available at police force area level.

Since its inception, the CSEW has been conducted by an independent survey research organisation using trained interviewers to collect data from sampled respondents. The interviewers have no vested interest in the results of the survey. As such, the survey is widely seen to operate as an independent reality-check of the police figures which are prone to changes in public reporting rates, police recording practices and, to some extent, police deployment and activity. The independence of the survey has been further strengthened by the transfer of responsibility from the Home Office to the Office for National Statistics (ONS) in April 2012.

The survey is weighted to adjust for possible non-response bias to ensure the sample reflects the profile of the general population. The CSEW was first conducted in 1982 (covering crime in 1981) and ran at mostly two-year intervals until 2001, when it became a continuous survey. The core sample is designed to be representative of the population of households in England and Wales and people living in those households.

Prior to 2001/02, CSEW respondents were asked about their crime-related experiences in the previous calendar year but when the CSEW changed to a continuous survey, respondents were asked about crime in the 12 months prior to interview. Since becoming a continuous survey, CSEW estimates are published based on interviews carried out over a 12-month period; e.g. for the publication of the 2011/12 CSEW, estimates were derived from interviews carried out between April 2011 and March 2012 (referred to as the year ending March 2012). Further details on the methodology of the survey can be found in Chapter 2 of the User Guide to Crime Statistics.

Comparing police recorded crime and the CSEW

It is not possible to match CSEW microdata (i.e. the individual records of survey respondents) to police recorded crime records. Thus it is not possible to determine whether a crime that a respondent said they reported to the police actually appeared on a police incident log and, if so, to identify how it was actually recorded.

As described above, the two series cover different populations and different offences. To improve comparisons, analysts have focused on a 'comparable' sub-set of offences that are covered by both series (see Annex A). This comparable sub-set is obtained by making various adjustments to the recorded crime categories to maximise comparability with the CSEW. However, in categories where it is not possible to distinguish victims resident in households from other victims they are not adjusted to exclude victims of commercial offences and offences committed against those under 16. As such, it should be recognised that this 'comparable' series remains broadly rather than directly comparable and that the offence classification system used in the survey can only

approximate that used by the police. Thus the mapping between CSEW categories and police recorded offence codes are approximate and categories will not be directly equivalent in all cases.

There are other acknowledged methodological limitations of the survey which might also affect the comparability. Being based on a sample of the population, estimates have a margin of quantifiable and (non quantifiable) error associated with them. The latter includes: when respondents have recalled crimes in the reference period that actually occurred outside that period ('telescoping'); crimes that did occur in the reference period may not have been mentioned at all, either because respondents failed to recall a fairly trivial incident or, conversely, because they did not want to discuss a serious incident, such as a sexual assault; some may have said they reported a crime to the police when they did not (a 'socially desirable' response); and, some incidents reported during the interview could be miscoded ('interviewer/coder error').

While the CSEW sample is relatively large by national standards, it is not big enough to produce estimates at police force area level so it cannot be used to make comparisons below England and Wales. Thus, while comparisons of trends at a macro level can be made to assess the validity of trends in police recorded crime it is not possible to do so at police force area level.

Analysis of trends in comparable crime

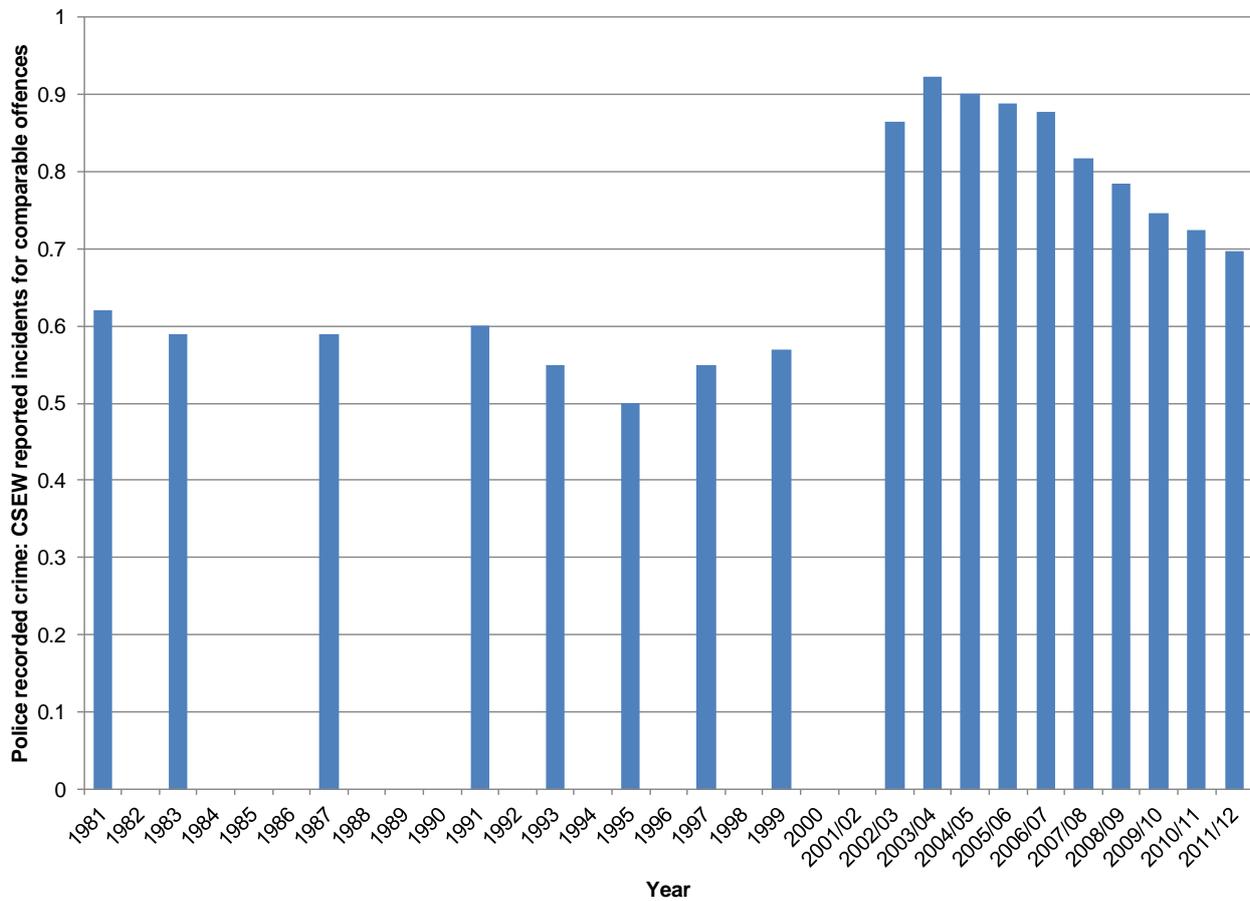
The analysis below compares trends in the comparable sub-set of offences between the two series. The CSEW figures are restricted to those offences that respondents reported to the police (i.e. by the respondent themselves, someone else or by the police coming to know about it in another way).

Figure 1 shows, prior to the introduction of the HOCR and NCRS the volume of comparable police recorded crime was between 50% and 62% of the total estimated to be reported to the police from the comparable categories on the survey. This suggests at the time that a relatively large volume of reports were not ultimately being recorded by the police which is consistent with the picture of recording described in the 2000 HMIC report (see above).

As expected, this proportion increased substantially around the time of NCRS introduction and from 2002/03 remained close to 90% for a number of years. Again, this pattern is consistent with the switch to a more victim-focused method of recording where the police were required to record a victim's report if it amounted to a crime in law and there was no credible evidence to the contrary.

However, from 2007/08 onwards there have been year on year reductions with the ratio falling to 70% for the latest year available. One might expect some variation in the ratio between the two series due to the inherent variability of sampling associated with the survey. However, the consistent downward trend seen since 2007/08 suggests it reflects a real change in the relationship between the two series.

Figure 1: Ratio between CSEW reported incidents and crimes recorded by the police (in comparable sub-set)¹



1. The offences included in the comparable sub-set for the period 1981 to 1999 differ slightly from those used from 2002/03 onwards due to changes in offence coverage.

As Table 1 shows, with regard to the impact this has had on the volume of offences, since 2002/03 the police recorded crime series shows a reduction of 41% in the comparable sub-set of offences used here but the survey only 26%. This difference in the rate of reduction has been driven by trends over the last 5 years: between 2002/03 and 2006/07 the rate of reduction in the two series was the same (at 11%) whereas since then the rate of reduction for recorded crime has been around twice the rate as seen in the survey (17%).

Table 1 Volume and percentage reduction in comparable crime categories, 2002/03 to 2011/12

	2002/03	2006/07	2011/12	Percentage change 2002/03 - 2006/07	Percentage change 2006/07 - 2011/12	Percentage change 2002/03 - 2011/12
Police recorded crime	3,231,367	2,881,327	1,922,643	-11	-33	-41
CSEW	3,727,000	3,305,000	2,749,000	-11	-17	-26

There is no obvious methodological change to the survey that might explain this differential:

- response rates have remained consistently high and the profile of respondents has not changed to a significant degree;
- since 2001/02 there has been no change in the survey contractor which might have an impact on the consistency of approach, for example to data collection or offence coding;
- there has been no deterioration in the quality of offence coding as evidenced by repeat coder variability studies;
- while there have been changes in the sample design, these are not thought to have introduced any bias to the estimates;
- it is unlikely that levels of ‘social desirability’ in survey responses has changed over time, such as more respondents saying they have reported crime to the police when they hadn’t.

One possible explanation is the phenomenon of ‘telescoping’ whereby respondents report having experienced victimisation outside the reference period (for example, inadvertently recalling a burglary that happened 13 months ago in the last 12 month reporting period). This is a source of measurement error that will be present across the life of the survey but it might be possible that, at a time when crime has been falling, the scale of it increases. If so, this might contribute to the gap between the two series.

Given the consistent pattern, one possible hypothesis is that there has been a gradual erosion of compliance with the NCRS such that a growing number of crimes reported to the police are not being captured in crime recording systems. There are a range of possible drivers for this including:

- lack of awareness or adequate understanding of the NCRS as time passes from its launch leading to some officers recording ‘as charged’ or ‘if detected’ which might result from staff turnover and lack of sufficient on-going training;
- performance pressures associated with targets (e.g. to reduce crime or increase detection rates) acting as perverse incentives for some crimes to be downgraded from notifiable into non-notifiable categories or as ASB or as crime-related incidents (which are not captured in data returned to the Home Office);
- though forces have continued with their own internal audits, the cessation of independent audits from 2006/07 onwards may have reduced the focus on addressing non-compliance;
- the move to Neighbourhood Policing in recent years may also have led to more low level crimes being dealt with informally and outside the formal crime recording system; and,
- in the context of pressure on police budgets and a general policy shift to promote greater officer discretion, a return to a more evidential recording model.

Analysis by offence type is presented in Annex B and shows this trend is evident across most offence groups with some exceptions, such as robbery, theft from the person and bike theft where the pattern is less clear. However, if there has been downgrading of offences within the police series or a dropping out of crimes into anti-social behaviour or other crime-related incidents (see below), it makes comparisons at offence level difficult. If there has been systematic downgrading of incidents by the police, for example of domestic burglary as criminal damage and criminal damage as anti-social behaviour it is difficult to make offence level comparisons without evidence of the degree of leakage from one category to another.

An alternative hypothesis is that police forces were over-zealous in the early years of NCRS and erred on the side of recording when there was a doubt about whether or not the incident reported amounted to a crime in law. This would account for the high ratios in the years around the introduction of the NCRS. However, one might have expected that following a downward correction trends would flatten out rather than continue to fall as they have done.

The above analysis cannot provide a definitive answer to these points or confirm or disprove these hypotheses. Nor, in the absence of regular independent audits since 2006/07 is it possible to draw on evidence to assess whether or not compliance with the NCRS has indeed changed over time.

It is important to note that the above analysis does not suggest that the general pattern of recorded crime falling since 2002/03 should be questioned. Rather it suggests that the rate of reduction suggested by the recorded crime series may overstate the actual level of reduction experienced by the general population, notably since 2006/07.

The quality of crime recording by the police remains amongst the best in the world. However, this analysis raises questions about whether there has been a degree of degradation of that quality over time.

The implications of this paper will be considered by the independent Crime Statistics Advisory Committee (CSAC) whose role includes advising on how best to ensure that official statistics on crime are accurate, transparent and trustworthy.

Annex A: Comparable subset of crime

The Crime Survey for England and Wales (CSEW) provides a measure of the level of crime committed against the population resident in households in England and Wales, whereas recorded crime is a measure of those crimes reported to the police (estimated to be only 43% of CSEW comparable crime in 2011/12) and then recorded by them. The CSEW includes crimes that are not reported to or recorded by the police, but is limited to crimes against people resident in households and also does not cover all crime types.

By adjusting each series, comparisons can be made between police recorded crime and the adult element of the CSEW (those aged 16 and over) allowing a better interpretation of overall crime trends. The need for this comparison has been particularly important during periods when various changes have been made to the police recording of crime.

In order to compare the crime rates measured by the CSEW and police recorded crime, a comparable subset of crimes has been created for a set of offences that are covered by both measures. Various adjustments are made to the recorded crime categories to maximise comparability with the CSEW but they are not adjusted to exclude victims of commercial offences and offences committed against those under 16. Over three-quarters of CSEW offences reported via interviews in recent years fall into categories that can be compared with crimes recorded by the police (Box 1).

Box 1: Comparable subset of crime⁶

CSEW category	Recorded crime offence and code included	
Vehicle thefts	(37.2) (45) (48) (126)	Aggravated vehicle taking Theft from a vehicle Theft and unauthorised taking of motor vehicle Vehicle interference and tampering
Burglary	(28A) (28B) (28C) (28D) (29)	Burglary in a dwelling Attempted burglary in a dwelling Distraction burglary in a dwelling Attempted distraction burglary in a dwelling Aggravated burglary in a dwelling
Bicycle theft	(44)	Theft of unauthorised taking of pedal cycle
Theft from the person	(39)	Theft from the person
Vandalism	(56) (56A) (56B) (58A) (58B) (58C) (58D) (58E) (58F) (58G) (58H) (58J)	<i>Arson</i> <i>Arson endangering life</i> <i>Arson not endangering life</i> <i>Criminal damage to a dwelling</i> <i>Criminal damage to a building other than a dwelling</i> <i>Criminal damage to a vehicle</i> <i>Other criminal damage</i> <i>Racially/religiously aggravated criminal damage to a dwelling</i> <i>Racially/religiously aggravated criminal damage to a building other than a dwelling</i> <i>Racially/religiously aggravated criminal damage to a vehicle</i> <i>Racially/religiously aggravated other criminal damage</i> <i>Racially/religiously aggravated criminal damage</i>

⁶ The offences of Arson (56, 56A, 56B), Other Criminal damage (58D) and Racially/religiously aggravated criminal damage to building other than a dwelling have been omitted from the comparable sub-set used in this report as these will largely comprise crimes against the non-household population.

Assault without injury	(104) (105A) (105B)	Assault without injury on a constable Assault without injury Racially/religiously aggravated assault without injury
Assault with minor injury and wounding	(5) (5A) (5D) (8A) (8D) (8F) (8G) (8H) (8J) (8K) (8N) (8P)	More serious wounding or other act endangering life Inflicting grievous bodily harm (GBH) with intent Assault with intent to cause serious harm Less serious wounding Racially/religiously aggravated less serious wounding Inflicting GBH without intent Actual bodily harm (ABH) and other injury Racially/religiously aggravated inflicting of GBH without intent Racially/religiously aggravated ABH or other injury Poisoning or female genital mutilation Assault with injury Racially/religiously aggravated assault with injury
Robbery	(34B)	Robbery of personal property

The mapping between CSEW categories and police recorded offence codes are approximate and categories will not be directly equivalent in all cases.

Crimes excluded from comparable subset

Recorded crimes:

The violent offences of: 'Homicide'; 'Attempted murder'; 'Intentional destruction of an unborn child'; the five offences of 'Causing death by driving'; 'Endangering life'; 'Endangering railway passengers'; 'Endangering life at sea'; 'Possession of weapons'; 'Harassment'; 'Cruelty to or neglect of children'; 'Abandoning a child under the age of two years'; 'Child abduction'; 'Procuring illegal abortion'; all 'Sexual offences'; 'Robbery of business property'; 'Non-domestic burglary'; 'Proceeds of crime'; 'Theft in a dwelling'; 'Theft by an employee'; 'Theft of mail'; 'Arson'; 'Criminal damage to a building other than a dwelling'; 'Other criminal damage'; 'Dishonest use of electricity'; 'Shoplifting'; 'Theft from automatic machine or meter'; 'Handling stolen goods'; 'Other theft or unauthorised taking'; all 'Fraud and forgery'; 'Threat etc. to commit criminal damage'; all 'Drug offences' and all 'Other' offences.

CSEW:

'Other household theft' and 'Other thefts of personal property'.

Annex B: Analysis by crime type

**Table B1. Ratio between police recorded crime and CSEW personal crimes
(in comparable sub-set)**

	All personal crime	Violence	Robbery	Theft from the person
<i>Ratio of police recorded crime to CSEW reported crime (confidence interval)</i>				
2002/03	0.78 (0.70 - 0.88)	0.84 (0.73 - 0.99)	0.62 (0.51 - 0.80)	0.67 (0.57 - 0.82)
2003/04	0.79 (0.72 - 0.88)	0.89 (0.78 - 1.02)	0.62 (0.51 - 0.80)	0.58 (0.49 - 0.69)
2004/05	0.86 (0.78 - 0.96)	0.94 (0.84 - 1.08)	0.66 (0.54 - 0.87)	0.66 (0.56 - 0.80)
2005/06	0.87 (0.79 - 0.97)	0.97 (0.86 - 1.12)	0.59 (0.48 - 0.78)	0.66 (0.56 - 0.81)
2006/07	0.84 (0.77 - 0.93)	0.96 (0.85 - 1.09)	0.61 (0.49 - 0.82)	0.57 (0.49 - 0.69)
2007/08	0.85 (0.77 - 0.94)	0.98 (0.87 - 1.12)	0.56 (0.44 - 0.75)	0.55 (0.47 - 0.67)
2008/09	0.79 (0.72 - 0.88)	0.93 (0.82 - 1.08)	0.65 (0.52 - 0.84)	0.42 (0.36 - 0.50)
2009/10	0.78 (0.71 - 0.88)	0.92 (0.81 - 1.07)	0.45 (0.36 - 0.58)	0.54 (0.45 - 0.66)
2010/11	0.78 (0.70 - 0.86)	0.87 (0.77 - 0.99)	0.57 (0.44 - 0.78)	0.56 (0.47 - 0.68)
2011/12	0.72 (0.65 - 0.80)	0.83 (0.73 - 0.96)	0.48 (0.39 - 0.63)	0.51 (0.43 - 0.62)

**Table B2. Ratio between police recorded crime and CSEW household crimes
(in comparable sub-set)**

	All household crime	Burglary	Vehicle theft	Home vandalism	Vehicle vandalism	Bike theft
<i>Ratio of police recorded crime to CSEW reported crime (confidence interval)</i>						
2002/03	0.91 (0.88 - 0.93)	0.84 (0.76 - 0.93)	0.92 (0.87 - 0.99)	0.93 (0.80 - 1.11)	1.08 (0.95 - 1.24)	0.55 (0.48 - 0.65)
2003/04	0.97 (0.94 - 1.00)	0.80 (0.73 - 0.89)	0.98 (0.92 - 1.05)	1.04 (0.90 - 1.23)	1.23 (1.09 - 1.42)	0.67 (0.58 - 0.79)
2004/05	0.92 (0.89 - 0.95)	0.89 (0.81 - 0.98)	0.92 (0.86 - 0.98)	0.89 (0.78 - 1.05)	1.10 (0.98 - 1.24)	0.61 (0.53 - 0.72)
2005/06	0.90 (0.88 - 0.93)	0.78 (0.71 - 0.87)	0.97 (0.91 - 1.04)	0.83 (0.73 - 0.97)	1.09 (0.98 - 1.22)	0.57 (0.50 - 0.66)
2006/07	0.89 (0.86 - 0.91)	0.75 (0.68 - 0.83)	0.99 (0.93 - 1.06)	0.83 (0.73 - 0.96)	0.95 (0.86 - 1.06)	0.66 (0.58 - 0.76)
2007/08	0.82 (0.79 - 0.84)	0.74 (0.67 - 0.82)	0.94 (0.87 - 1.02)	0.79 (0.69 - 0.92)	0.80 (0.72 - 0.90)	0.60 (0.52 - 0.70)
2008/09	0.77 (0.74 - 0.79)	0.73 (0.66 - 0.81)	0.89 (0.83 - 0.97)	0.75 (0.65 - 0.87)	0.74 (0.67 - 0.82)	0.53 (0.47 - 0.61)
2009/10	0.72 (0.70 - 0.75)	0.73 (0.66 - 0.82)	0.87 (0.80 - 0.95)	0.58 (0.51 - 0.68)	0.74 (0.66 - 0.83)	0.53 (0.46 - 0.62)
2010/11	0.71 (0.69 - 0.73)	0.64 (0.58 - 0.71)	0.88 (0.81 - 0.97)	0.66 (0.57 - 0.80)	0.68 (0.61 - 0.77)	0.53 (0.47 - 0.61)
2011/12	0.69 (0.66 - 0.71)	0.63 (0.57 - 0.71)	0.83 (0.76 - 0.91)	0.61 (0.52 - 0.73)	0.66 (0.59 - 0.74)	0.59 (0.52 - 0.68)

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