

## An estimate of youth crime in England and Wales: Police recorded crime committed by young people in 2009/10

Christine Cooper and Stephen Roe

### Key implications

This report provides an estimate of the proportion and number of police recorded crimes committed by young people aged 10 to 17 in 2009/10.

The approach used was to apply data on proven offending from the Police National Computer, which contains the key information on the age of proven offenders, to police recorded crime statistics. An adjustment was made to account for potential bias in the data on proven offending related to age differences in offending involving more than one perpetrator.

- The analysis estimates that young people aged 10 to 17 were responsible for 23 per cent of police recorded crime in 2009/10, equivalent to just over a million police recorded crimes.
- Young men aged 10 to 17 were found to be responsible for 20 per cent of all police recorded crime in 2009/10 and young women responsible for only four per cent.

- Acquisitive offences comprised a greater proportion of youth crime compared with crime committed by adults while violent offences accounted for a higher proportion of crime committed by adults compared with youth crime.

Although young people aged 10 to 17 were responsible for a minority of incidents of police recorded crime, the estimate of around one in four incidents of police recorded crime attributable to young people represents a disproportionate amount of crime given that 10- to 17-year-olds account for only about one in ten of the population above the age of criminal responsibility (age 10). This finding highlights the importance of tackling crime by young people in reducing overall levels of crime.

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### Keywords

Youth crime  
Young people  
Crime  
Young offenders  
Co-offending  
Police recorded crime

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### Context

The aim of this study was to estimate how much crime is attributable to young people aged 10 to 17.

Existing evidence shows that young people are more likely to offend than adults, yet there is no current, generally accepted measure of the level of youth crime in England and Wales. The Home Office has overall responsibility for crime reduction so has an interest in broader measures of youth crime beyond proven offending. Measures based on the proven offending of young people, such as first-time entrants to the Criminal Justice System (CJS) and re-offending rates, provide only partial measures as many offences and offenders are not processed by the CJS. Crime statistics include many incidents that are not brought to justice but do not typically include the age of the offender, which is not usually known until the offender is caught and processed through the CJS. A previous estimate of the extent of youth crime, based on a national self-reported offending survey in 2003, indicated that 35 per cent of offences were committed by young people aged 10 to 17 (Budd et al., 2005). The issue with this estimate is that it included many low-level offences that many people would not usually regard as a crime.

### Approach

The method used in this analysis to estimate the level of youth crime was to apply data on proven offending from the Police National Computer (PNC), which contains basic demographic characteristics on all known offenders, to crime statistics that record crimes irrespective of whether or not they are detected. Police recorded crime statistics were used as the basis of this analysis (rather than those based on the British Crime Survey) because these data have a more complete coverage of crime types and the offence categories match to those used in proven offending data.

An estimate of the level of youth crime was initially calculated based on the proportion of all proven offences for which young people had been cautioned, convicted or given a Fixed Penalty Notice. This estimate was refined by applying the proportions of each offence type committed by young people to the relevant police recorded crime offence categories. Co-offending, in which an offence involves multiple offenders, would result in 'double-counting' within the data on proven offences. This was adjusted for using data from the PNC on proven co-offending.

### Results

Overall, once co-offending has been taken into account, the analysis found that young people aged 10 to 17 were responsible for 1.01 million crimes in 2009/10, 23 per cent of total police recorded crime in that year. This represents a disproportionate amount of crime given that 10- to 17-year-olds account for about one in ten of the population aged 10 (the age of criminal responsibility) and above. Dividing the estimate by gender indicated that about 860,000 crimes were committed by young men in 2009/10 and 160,000 by young women. This equated to around 20 per cent of total police recorded crime in 2009/10 being attributable to young men and four per cent to young women (Table 1).<sup>1</sup>

The basic data from the PNC on proven offences committed during 2009/10 showed that young people (aged 10 to 17) were responsible for 20 per cent of notifiable offences (equivalent to those offences that constitute crime recorded by the police). However, the proportion of proven offences committed by young people varied considerably by offence type from around

<sup>1</sup> Proportions for men and women do not add up to the total due to rounding.

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one in two (51%) robbery offences to fewer than one in ten (7%) fraud and forgery offences. The proportion of proven offences committed by young people for each offence type was applied to the total number of police recorded crimes of that type in 2009/10 and summed. This generated a basic estimate of 1.06 million crimes committed by young people in 2009/10, which came to the attention of the police, equivalent to 25 per cent of total police recorded crime in that year.

Adjusting the basic youth crime estimate for co-offending resulted in a refined estimate of 1.01 million crimes committed by young people in 2009/10, 23 per cent of total police recorded crime. This small downward shift to the basic estimate (from 25% to 23%) is to be expected as young people are more likely to co-offend than adults, but for both adults and young people co-offending is less common than sole offending.

The analysis of police recorded crime committed by young people was also used to examine the nature of youth crime. Acquisitive offences, which include robbery, burglary, offences against vehicles, other theft (including shoplifting) and fraud and forgery, accounted for a higher proportion of youth crime compared with crime committed by adults (58% compared with 51%) while violent offences accounted for a higher proportion of crime committed by adults compared with youth crime (22% compared with 15%).

## Knowledge gaps

There is a lack of detailed information about how the attrition process, the filtering that takes place from crimes being committed to offenders being found guilty, differs between young people and adults. Therefore the analysis was unable to take account of potential differences in the likelihood of adults and young people being brought to justice for their crimes. Recent youth crime policy has sought to divert young people away from the CJS, suggesting that they are less likely to be given a formal sanction and would therefore be under-represented in the proven offending data used to construct this estimate. Consequently this analysis is likely to be an under-estimate of police recorded crime committed by young people. However, there is no evidence on differences in attrition at other stages, for example we do not know about differences in young people and adults being caught for their crimes.

The lack of information on how attrition differs by age means that the main assumption underlying the estimate is that the attrition rate does not differ between young people and adults. Further research into the attrition process and how this differs by age and gender would be useful in order to test and refine this assumption.

**Table 1: Estimates of police recorded crime committed by young people by gender, 2009/10**

		All 10 to 17	Men aged 10 to 17	Women aged 10 to 17
Basic estimate	Number (000s)	1,064	897	165
	Percentage	25	21	4
Adjusted for co-offending	Number (000s)	1,014	857	155
	Percentage	23	20	4

Note: Numbers for men and women may not add up to 'all' due to missing data on gender.

## An estimate of youth crime in England and Wales: Police recorded crime committed by young people in 2009/10

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### I. Introduction

The aim of this study is to estimate how much crime is attributable to young people and to consider patterns of youth offending in order to increase our understanding of the extent and nature of youth crime. Young people are defined here as those aged between 10 and 17 years old, the age group dealt with by the Youth Justice System.

Evidence on both self-reported and proven offending has shown that young people are more likely to offend than adults (Budd et al., 2005; MoJ, 2011a). However, there is no current, generally accepted measure of the level of youth crime in England and Wales. A previous estimate of the extent of crime attributable to young people in England and Wales was based on data from a self-reported offending survey, the 2003 Offending Crime and Justice Survey (OCJS). According to the 2003 OCJS, 35 per cent of the incidents measured by the survey were accounted for by 10- to 17-year-olds (Budd et al., 2005). Yet this estimate will have included many low-level incidents that many people, including the participants themselves, will not perceive to be serious enough to be a 'crime', such as minor assaults not involving injury taking place between pupils in school.

The Home Office, with its overall responsibility for preventing and reducing crime, has a particular interest in looking beyond levels of proven offending to a broader measure of youth crime that takes account of all crimes that have been recorded by the police, even if no offender has been brought to justice for the crime. Generally, measures based on the proven offending of young people, such as first-time entrants to the Criminal Justice System (CJS) (MoJ, 2011b) and re-offending rates (MoJ, 2011a) have been used as indicators of the level of youth crime, but these provide only partial measures as many offences and offenders are not processed by the CJS. Official crime statistics do include those many incidents that are not brought to justice but do not typically include the age of the offender, because this is not usually known until the offender is caught and processed through the CJS. This study aims to overcome some of the limitations of statistics on crime and proven offending by combining these data sources in order to produce a youth crime estimate.

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## 2. Method

The method used here to estimate the level of youth crime is based on a technique used previously in a report for the Scottish Executive to measure the extent of youth crime in Scotland (DTZ Pida Consulting, 2005). The approach is to apply data on proven offending, which contains basic demographic characteristics on all proven offenders, to crime statistics that include all offences reported to the police, regardless of whether an offender has been found guilty.

Official crime statistics cannot be used by themselves to estimate the number of crimes committed by young people, because the statistics are based on reports by the victims of crime, most of whom would not have seen the offender and therefore would not be able to provide information about their age. This means that little is known about offenders until they are caught and proven guilty for their offences.

Official crime statistics are available from two main sources: the British Crime Survey (BCS), a victimisation survey of adults resident in households in England and Wales, and police recorded crime. Comparing the two sources of crime statistics, police recorded crime only captures incidents that are reported to and recorded by the police while the BCS attempts to capture all crimes (whether or not reported to the police) committed against households and individuals (see Figure 1). Police recorded crime statistics are used as the basis of this estimate of youth crime because these data have a more complete coverage of crime types. The BCS is a victimisation survey of the resident household population, so it omits particular crime types, such as crimes against businesses (e.g. shoplifting), which may be particularly important for this age group. The police recorded crime types map more closely to the offence types captured within statistics on proven offending, which are used to gather information on the age of offenders for the youth crime measure.

There are two main sources of data on proven offending in England and Wales. There is information on flows through the Criminal Justice System (MoJ, 2011a; YJB, 2012) and data on proven offending are also available from the Police National Computer (PNC). Information from the PNC has been used for this analysis because the data can be extracted on an offence and on an offender basis, rather than by episode in the CJS (such as a court appearance).

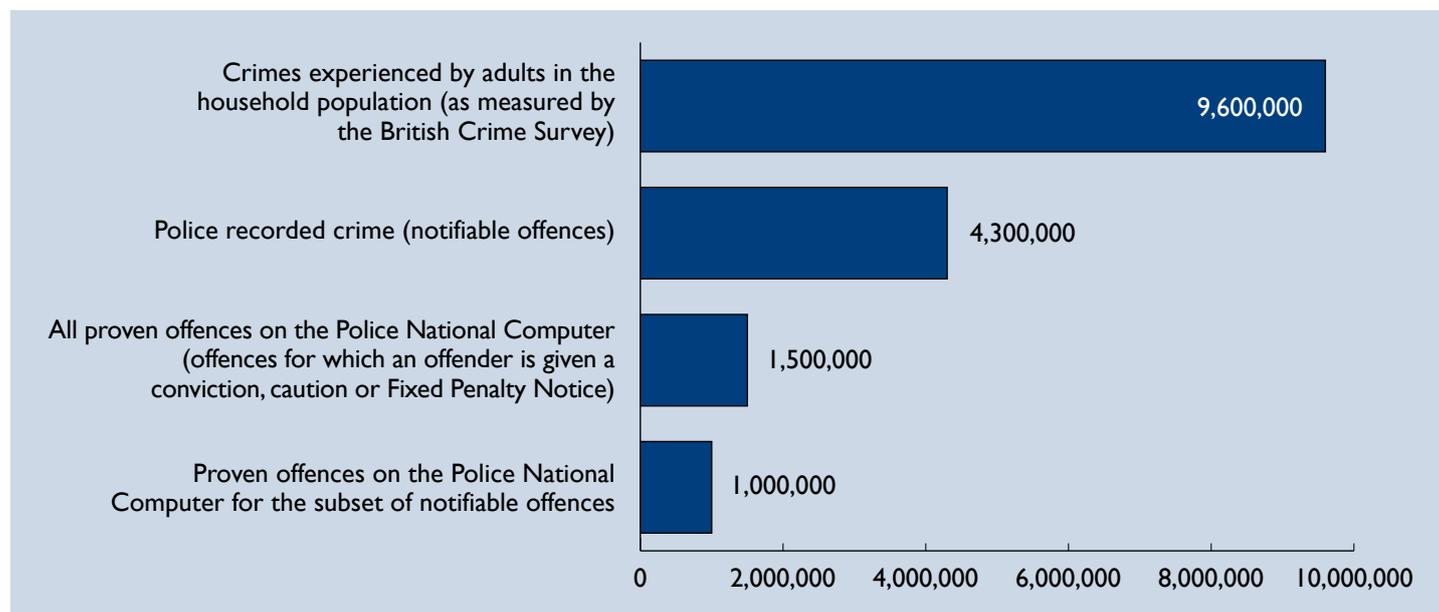
- The PNC includes details of proven ‘recordable’ offences. The disposals included in the count of proven offences in the analysis below include convictions, cautions and Fixed Penalty Notices.<sup>2</sup> Including this broad range of disposals ensured that the analysis was not affected by any greater likelihood of young people receiving one of these disposals rather than another.
- The ‘recordable’ offences on the PNC represent a broader range of crime types than the ‘notifiable’ offences that police forces are required to report to the Home Office for inclusion in police recorded crime statistics (see Figure 1). The subset of proven offences on the PNC that represent ‘notifiable’ offences were the focus of this analysis in order to ensure that the estimates derived from the PNC analysis were applicable to the police recorded crime data.
- The PNC also includes basic demographic data (age, gender and ethnic group) on proven offenders, which enable a breakdown of offences committed by young people. In this analysis, young people are considered to be those aged 10 to 17, reflecting the age range covered by the Youth Justice System. The small number of offences (0.1% of all proven offences) for which the age of the offender was unknown were excluded from the analysis.

An initial estimate of the level of youth crime was calculated directly from PNC data based on the proportion of all proven offences for which young people had been cautioned, convicted or given a Fixed Penalty Notice.<sup>3</sup> By using recorded crime data and looking at each crime type separately, a more precise estimate was generated by taking account of the differences in the volume of recorded crimes in each crime type and the proportion of each recorded crime type committed by young people. This approach of looking at individual crime types also provided valuable information on the patterns of youth offending. A breakdown of the estimate by gender has also been provided in order to give a more detailed picture of youth crime as men and women are responsible for different levels of offending and for different types of crime.

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2 Accepting a Fixed Penalty Notice does not necessarily mean that the offender has been found guilty. Nevertheless, Fixed Penalty Notices are included in this measure in order to capture the lower-level disorder that may be an important feature of youth crime. Offences taken into consideration are not included in the measure due to uncertainty over data quality.

3 This approach was used by the National Audit Office (NAO) in their report on youth offending (NAO, 2010).

**Figure 1: Numbers of crimes and proven offences, 2009/10**

### Assumptions and limitations

There are a number of assumptions underlying the methodology that may lead to biases in the estimate. The way the data on proven offences are counted means that if a single crime is committed by two offenders it will be recorded twice on the PNC. This factor may also bias the estimate of youth crime if, as suggested by previous literature, young people are more likely to co-offend compared with adults (van Mastrigt and Farrington, 2009). The PNC includes information on co-offenders for all the disposals included here, enabling adjustments to the estimate to be made to take co-offending into account.<sup>4</sup>

There are other potential sources of bias that arise from the process of attrition from committing a criminal act through to the police recording it as a crime and the crime being 'solved' and a person being 'found guilty'. For example, in 2009/10 the BCS estimated that there were 9.6 million personal and household crimes, whereas 4.3 million crimes were recorded by the police and only 1.2 million incidents 'cleared up' by a detection (Flatley et al., 2010).

<sup>4</sup> The adjustment of the estimate for co-offending assumes that co-offenders belong to the same age and sex group as the offender. Previous analysis of self-reported offending data has suggested that co-offenders tend to be from the same age group and most men offend with men but women are quite likely to offend with men (Budd et al., 2005).

A key potential source of bias for this estimate of youth crime is a difference between young people and adults in the attrition rate from police recording the crime to an offender being brought to justice. Recent youth justice policy has attempted to divert some young offenders away from the formal CJS (for example through restorative justice schemes), suggesting that young people may be less likely than adults to receive formal sanctions and would therefore be under-represented in the proven offending data used to construct this youth crime estimate. This suggests that the estimate of both the proportion and extent of youth crime presented here is likely to be an under-estimate, although the degree of the under-estimate is not clear. In addition, there are other aspects of the attrition process, such as the likelihood of being caught, for which even less is known about how this differs between young people and adults. Although detection rates provide an indication of the extent of attrition between police recorded crime and proven offences, detection rates are only available differentiated by offence type and not by age. In the absence of this information, the estimate relies on the assumption that the attrition rate does not vary between young people and adults.

For offences where detection rates are high, there is less scope for variation in attrition between young people and adults. Hence, there can be greater confidence in the estimates of youth crime for the specific offence types with higher levels of detection. Drug offences and shoplifting have relatively high detection rates

(94% and 61% respectively in 2009/10) which mean that the estimates of the percentage of these crimes committed by young people are more likely to be accurate as they are less likely to be affected by variations in attrition between young people and adults. Conversely, the estimates of youth crime for offences against vehicles, burglary and criminal damage (which all had detection rates of less than 15% in 2009/10) may be less accurate (Flatley et al., 2010).

The number of crimes committed by young people estimated in this analysis will be an under-estimate because the analysis is based on police recorded crime, which represents only a minority of actual crimes committed due to the attrition involved between the occurrence of a crime and the crime being reported to and recorded by the police (40% of BCS incidents are reported to the police). The extent to which the relative proportion of crime attributed to young people would be altered by consideration of unrecorded crime is less clear. As with detection rates, reporting rates for crime cannot be differentiated by age of the offender. Considering the different composition of youth and adult proven offending, some of the offence types that form a greater component of youth offending (compared to adult offending), such as robbery and burglary, have relatively high reporting rates, while other offence types, such as criminal damage/vandalism, have relatively low reporting rates (Flatley et al., 2010).

### 3. Results

This section presents the results from a series of analyses bringing together data on proven offences from the PNC with police recorded crime statistics. The data used were from the PNC relating to offences committed in 2009/10 (rather than offences brought to justice in 2009/10) and police recorded crimes for the same period. The section starts with a basic estimate of the proportion of recorded crime accounted for by young people, and then presents further analysis to improve and refine the estimate. The end result is a best estimate that young people aged 10 to 17 were responsible for 23 per cent of police recorded crime in 2009/10, equivalent to 1.01 million crimes.

#### Basic estimate

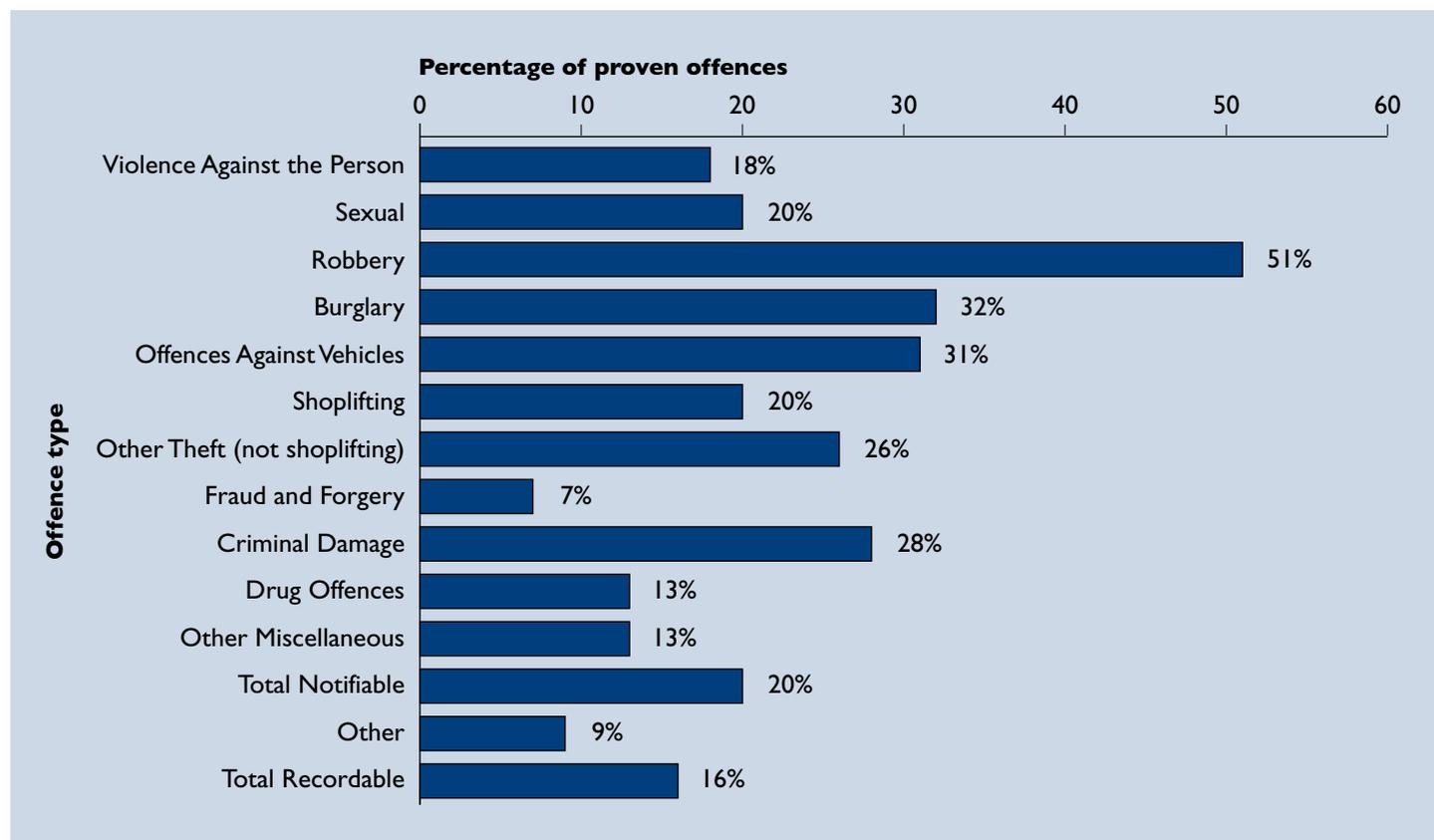
An initial estimate of the proportion of crime accounted for by young people can be calculated directly from the proportion of proven offences on the PNC committed by young people. Young people were responsible for 16 per cent of total recordable offences on the PNC. A significant proportion (around a third) of the other (non-notifiable) offences included on the PNC are motoring offences that many young people in the 10 to 17 age range are not in a position to commit. The remainder of the analysis is based only on notifiable offences as this enables the link to be made with police recorded crime.

According to data from the PNC on proven offences committed during 2009/10, young people (aged 10 to 17) were responsible for 20 per cent of notifiable offences.

Using the total number of proven offences committed by young people as the basis of the youth crime estimate does not take account of the very different proportions of each of the crime types committed by young people. The proportion of each crime type (based on notifiable offence groupings) for which young people were responsible varied considerably from around one in two (51%) robbery offences to fewer than one in ten (7%) fraud and forgery offence.<sup>5</sup> Robbery, burglary, offences against vehicles, other theft and criminal damage were all more likely than average to be committed by young people (Figure 2, Table A.1).

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<sup>5</sup> It should be noted that fraud is a particularly challenging offence to measure as incidents are known to be significantly under-reported to the police.

**Figure 2: Percentage of proven offences committed by young people aged 10 to 17, PNC 2009/10**

To refine the estimate of the proportion of crime that is committed by young people, the proportion of proven offences by young people for each offence type (given in Figure 2) was applied to the total number of police recorded offences in that crime type in 2009/10 and summed. This takes account of the differences in the proportion of different types of crime committed by young people. Using this method generated an estimate of 1.06 million crimes committed by young people in 2009/10, which came to the attention of the police (Table A.2). This is equivalent to 25 per cent of total police recorded crime in 2009/10 and provides a basic estimate that can be refined further.

### Adjustment for co-offending

As previously discussed, a potential source of bias in the estimate of the amount of crime committed by young people is co-offending, when more than one offender is involved in committing an offence. When co-offending occurs, although only one crime would be recorded within police recorded crime statistics, counts of proven offending would register that crime for each offender involved. The PNC database includes details on co-offending, which enables this issue to be examined and accounted for by an adjustment to the estimate.

The degree of co-offending can be expressed as the average number of offenders per offence. Overall, there were 1.06 offenders per proven notifiable offence committed in 2009/10. For young people there were 1.12 offenders per proven notifiable offence while for adults there were 1.05, confirming previous findings of greater co-offending amongst young people (Tables 2 and A.3). This estimate of co-offending from the PNC is lower than has been found in other studies (for example van Mastrigt and Farrington, 2009). A possible explanation is the different stage in the CJS when the co-offending is identified. The analysis of co-offending used here is based on PNC data, which will only record proven co-offenders who are found guilty of the same incident by being given a conviction, caution or Fixed Penalty Notice. While these figures are likely to under-estimate the true extent of co-offending, this will not affect the reliability of the estimate because the adjustment relates to bias that arises from the way data are presented in the PNC data rather than actual co-offending.

Co-offending was greater for the offence types of robbery and burglary than for other offences (again in accordance with previous research, Reiss and Farrington, 1991). Higher levels of co-offending amongst young people

compared to adults was consistent across most offence types apart from those that were least likely to involve co-offending (drug offences and sexual offences), where the difference between the age groups was negligible (Table 2).

The average number of offenders per offence (shown in Table 2) can be used to generate alternative estimates of the proportion of each proven offence type attributable to young people (an alternative to the estimates shown in Figure 2) that take into account co-offending. This is done by dividing the number of proven offences for each offence type and age group used to calculate the basic estimate by the average number of offenders per offence.

Applying the adjusted estimates of the percentage of proven offences by offence type attributable to young people to the police recorded crime figures provided an alternative estimate of 1.01 million crimes committed by young people in 2009/10, 23 per cent of total police recorded crime (Table A.4). This small downward shift to the basic estimate (from 25% to 23%) is to be expected as young people are more likely to co-offend than adults, but for both adults and young people co-offending is less common than sole offending (Table A.3).

## Analysis by gender

The PNC data on proven offending includes gender as well as age for (almost) all known offenders, enabling the estimate of youth crime to be calculated separately for young men and young women.<sup>6</sup> According to PNC data, of the proven offences committed during 2009/10, young men were responsible for 15 per cent of notifiable offences while young women were responsible for five per cent (Figure 3, Table A.5).

As expected, young men were responsible for a greater proportion of youth crime compared with young women and this is reflected within each offence type with the notable exception of shoplifting (Figure 3, Table A.5). Young women were responsible for five per cent or less of proven offences for each offence type except shoplifting, for which they were responsible for 11 per cent of proven offences committed in 2009/10 (compared with young men who were responsible for 9% of shoplifting offences).

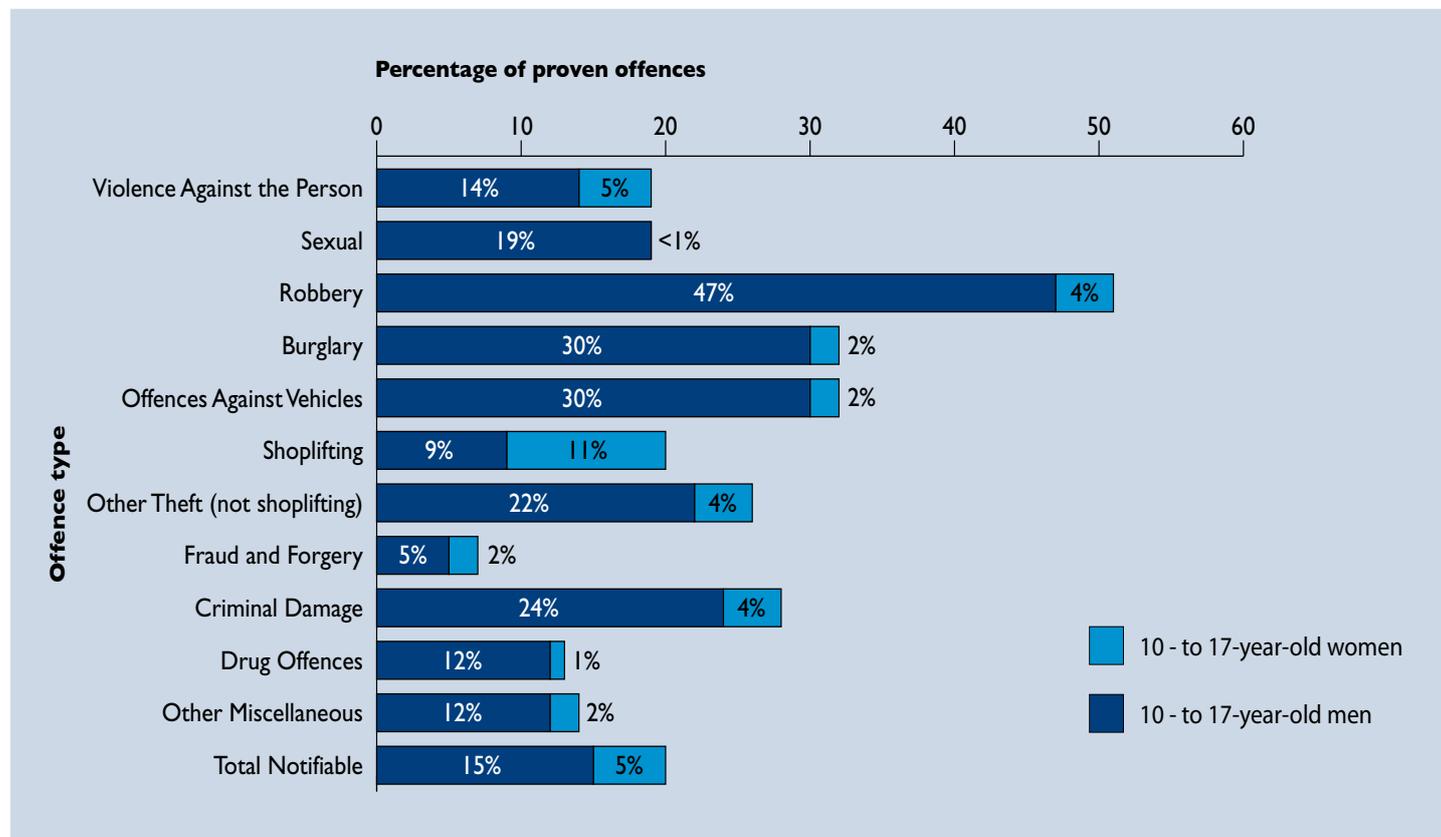
The proportion of proven offences by young men and young women for each offence type (shown in Figure 3 and Table A.5) can be applied to the total number of

**Table 2: Average number of offenders per proven notifiable offence by offence type and age group, PNC 2009/10**

Offence type	Average number of offenders per offence	
	10 - to 17-year-olds	18 years and over
Violence Against the Person	1.08	1.04
Sexual	1.03	1.02
Robbery	1.32	1.23
Burglary	1.24	1.13
Offences Against Vehicles	1.18	1.08
Shoplifting	1.17	1.05
Other Theft (not shoplifting)	1.13	1.09
Fraud and Forgery	1.08	1.04
Criminal Damage	1.11	1.03
Drug Offences	1.04	1.04
Other Miscellaneous	1.13	1.06
<b>Total Notifiable</b>	<b>1.12</b>	<b>1.05</b>

<sup>6</sup> Only 0.4 per cent of proven offences in 2009/10 were committed by an offender whose gender was unknown and these cases are excluded from the analysis.

**Figure 3: Percentage of proven offences committed by young people aged 10 to 17 by gender, PNC 2009/10**



police recorded offences in that crime type in 2009/10, in the same way as the basic estimate of youth crime was calculated above. This method generated an estimate of about 900,000 crimes committed by young men in 2009/10 and 170,000 by young women. This is equivalent to 21 per cent of total police recorded crime in 2009/10 being attributable to young men and four per cent to young women.

The estimates of youth crime for men and women can be adjusted for co-offending in the same way as the overall estimate was adapted above.

In terms of co-offending, young women appear to be slightly more likely than young men to co-offend but the difference in co-offending by gender is not as great as the difference by age (Tables 3 and A.6). Greater co-offending amongst women would suggest that they are over-represented in the figures on proven offending, in which multiple offenders involved in an offence results in 'double-counting'.

Co-offending was taken into account by dividing the number of proven offences of each proven offence type

committed by young men and young women by the number of proven offenders per offence, as shown in Table 2, and then applied to the police recorded crime figures. This generated an alternative estimate of about 860,000 crimes committed by young men in 2009/10 and 160,000 by young women. This equates to around 20 per cent of total police recorded crime in 2009/10 being attributable to young men and four per cent to young women (Table 4).<sup>7</sup>

The analysis confirms that young women were responsible for much lower levels of youth crime than were young men. Young men were estimated to be responsible for 85 per cent of youth crime. Looking at the same estimate of

<sup>7</sup> This adjusted estimate for co-offending appears to lower the proportion of youth crime attributable to young men rather than young women despite higher co-offending amongst young women. However, the decrease in the estimate for young women is disguised by rounding of the figures. Both estimates for young men and young women are reduced when co-offending is taken into account as young people co-offend more than adults. The estimate for young women is reduced proportionately by a greater extent but this does not appear in the figures as the estimate for young women is already low, so the absolute decrease in the estimate for young women is lower than for young men.

**Table 3: Average number of offenders per proven notifiable offence committed by young people by offence type and gender, PNC 2009/10**

Offence type	Average number of offenders per offence	
	Men aged 10 to 17	Women aged 10 to 17
Violence Against the Person	1.08	1.08
Sexual	1.03	1.02
Robbery	1.32	1.36
Burglary	1.24	1.34
Offences Against Vehicles	1.18	1.22
Shoplifting	1.12	1.22
Other Theft (not shoplifting)	1.13	1.13
Fraud and Forgery	1.07	1.11
Criminal Damage	1.11	1.10
Drug Offences	1.04	1.05
Other Miscellaneous	1.13	1.14
<b>Total Notifiable</b>	<b>1.11</b>	<b>1.14</b>

**Table 4: Estimates of police recorded crime committed by young people by gender, 2009/10**

		All 10 to 17	Men aged 10 to 17	Women aged 10 to 17
Basic estimate	Number (000s)	1,064	897	165
	Percentage	25	21	4
Adjusted for co-offending	Number (000s)	1,014	857	155
	Percentage	23	20	4

Note: Numbers for men and women may not add up to 'all' due to missing data on gender.

police recorded crime committed by young people from an alternative perspective, young men were responsible for 23 per cent of crime by all men and young women 25 per cent of all crime by women.

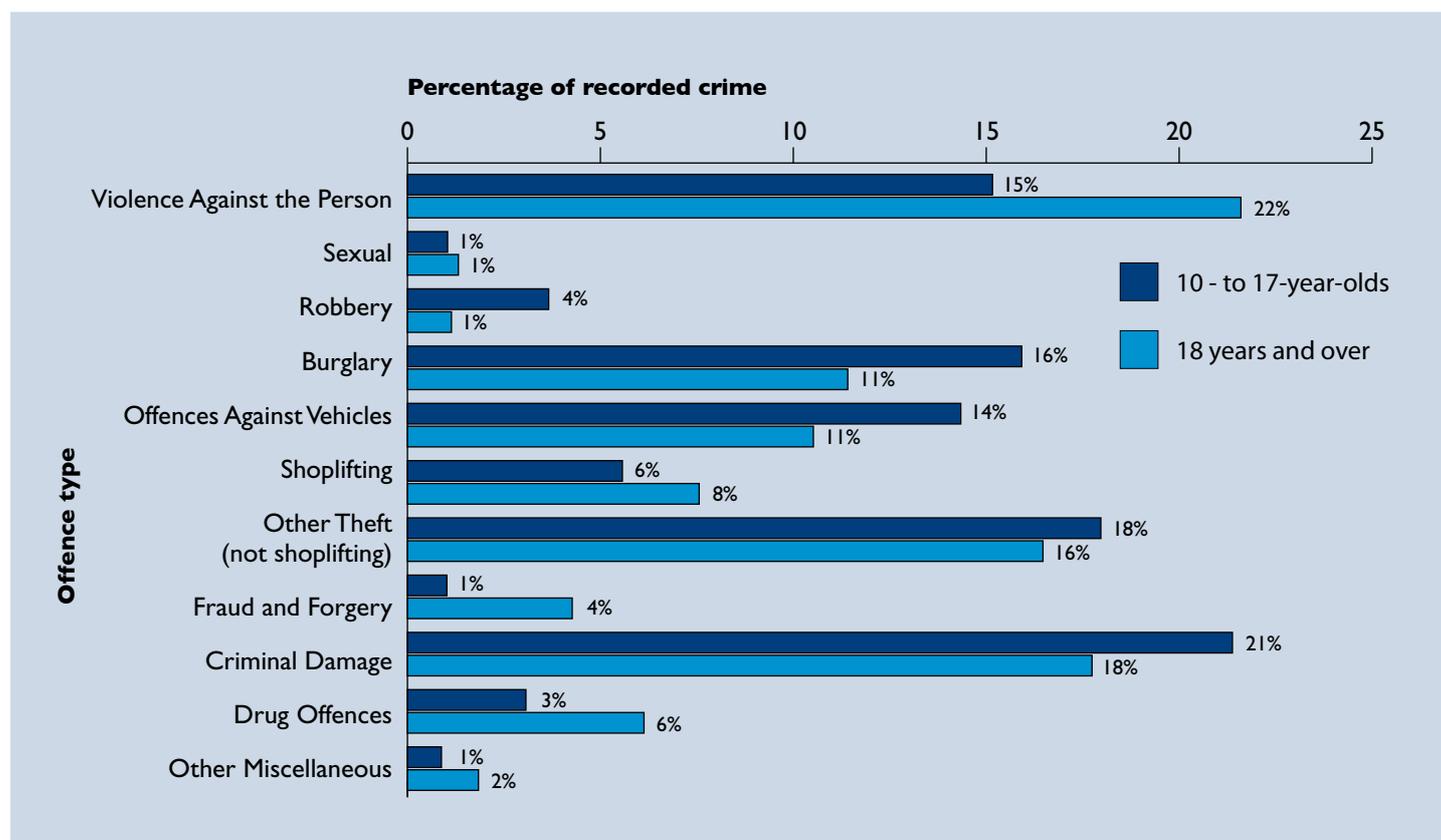
### The nature of youth crime

The analysis of police recorded crime committed by young people can also be used to examine the nature of youth crime and to make comparisons between the types of crime committed by young people and adults.<sup>8</sup>

Overall, there was a similar pattern in the composition of adult and youth crime. Other theft (including shoplifting) represented the biggest share of each (24% of crime committed by both 10- to 17-year-olds and those aged 18 and over). Criminal damage offences accounted for the next biggest share of crime committed by young people aged 10 to 17 (21%), while violence against the person offences represented the next greatest proportion of police recorded crime committed by adults (22%). Acquisitive offences, which include robbery, burglary, offences against vehicles, other theft (including shoplifting) and fraud and forgery, accounted for a higher proportion of youth crime compared with crime committed by adults (58% compared with 51%; Figure 4).

<sup>8</sup> Figures given in this section are based on estimates of police recorded crime committed by young people that have been adjusted for co-offending.

**Figure 4: Composition by offence type of estimated recorded crimes committed by young people and adults, 2009/10**



The types of crime committed by young men and young women can also be compared, bearing in mind that the figures for the composition of crime committed by young women are based on a far lower volume of crimes. Violence against the person offences represented a greater proportion of police recorded crime committed by young women compared with young men (26% compared with 13%), while criminal damage offences accounted for equal shares of crime committed by young men and young women (21% of each). Amongst acquisitive offences, shoplifting represented a much higher proportion of crime committed by young women compared with young men (19% compared with 3%) while robbery, burglary and offences against vehicles each accounted for larger shares of crime by young men (4%, 18% and 16% respectively) compared with young women (2%, 6% and 4% respectively)(Figure 5).

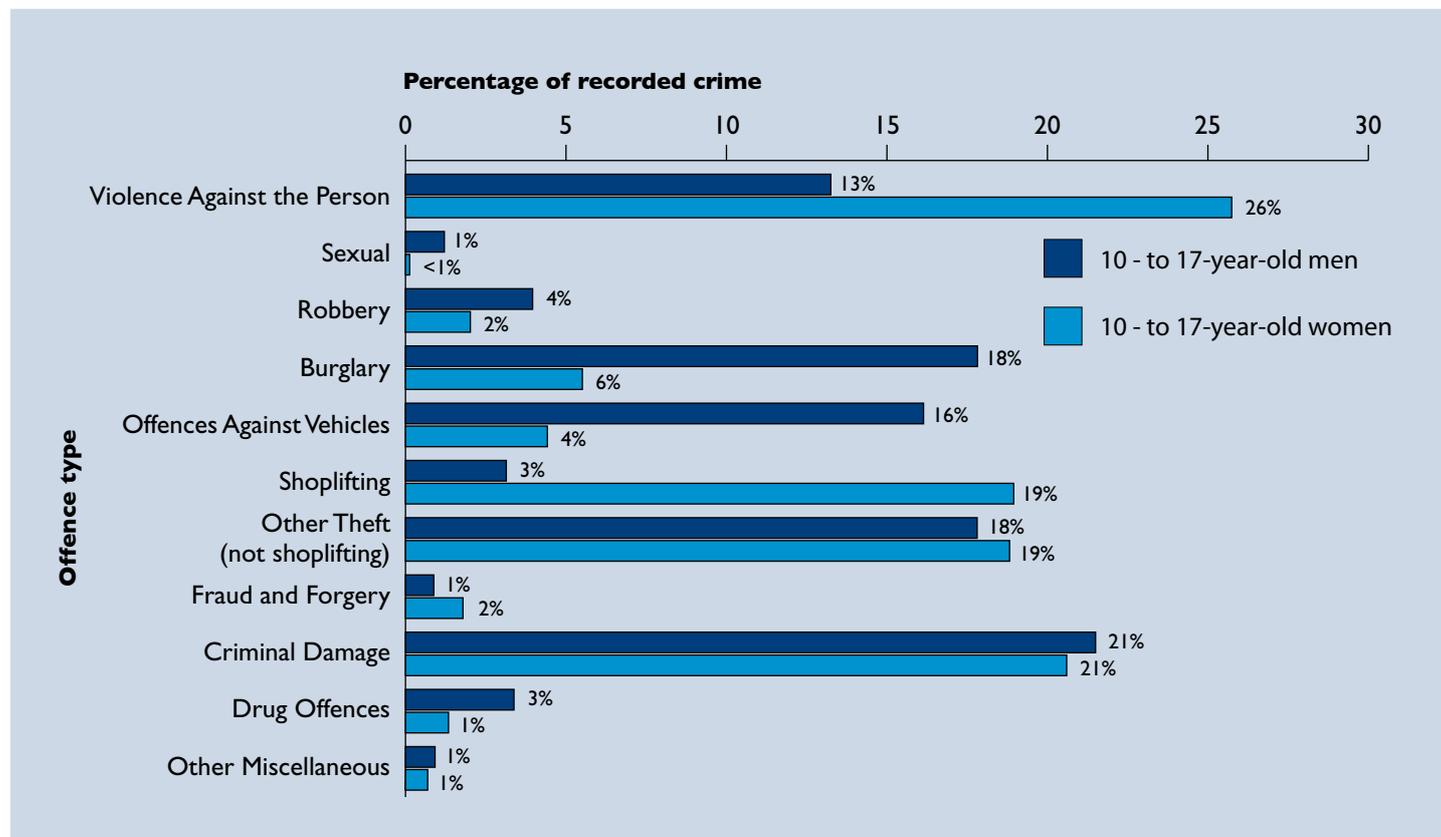
### Comparison with previous estimates

Comparing the new youth crime estimate produced in the analysis above to previous estimates can give some indication of the validity of the new estimate.

A previous estimate of the extent of crime attributable to young people in England and Wales has been produced based on data from a national self-reported offending survey, the 2003 Offending, Crime and Justice Survey (OCJS). According to the 2003 OCJS, 35 per cent of the incidents measured by the survey were accounted for by 10- to 17-year-olds, although many of these incidents will have been relatively trivial (Budd et al., 2005).

The overall adjusted estimate of 23 per cent of police recorded crime attributable to 10- to 17-year-olds is lower than the 35 per cent of self-reported offences attributable to 10- to 17-year-olds from the OCJS. This would be expected given that more of the self-reported offences committed by young people rather than by adults would be relatively minor (for example, non-injury assaults represent a greater proportion of self-reported offending by young people) and take place in contexts (such as within school) that would mean that they were less likely to come to the attention of the police and would therefore not be included in this new youth crime estimate.

**Figure 5: Composition by offence type of estimated recorded crimes committed by young people by gender, 2009/10**



However, when the figures for the percentage of police recorded crime attributable to young men and young women are compared to the 2003 OCJS estimates, the figure for men is much more similar than the figure for women (20% and 22% for men compared with 4% and 13% for women with the higher estimates for the OCJS). Previous comparisons of self-reported offending data with data on proven offending have also highlighted the greater gender differential for proven offending compared with self-reported offending (Budd et al., 2005). As women offenders appear to be less likely to have contact with the CJS, the low proportion of police recorded crime attributable to young women may be seen as a particular under-estimate. However, this finding does not necessarily imply gender bias in decision-making within the CJS as other influential factors, such as offence severity, are unable to be accounted for. Previous research in North America has suggested that, once other factors are taken into account, there is no evidence of gender bias in police arrests or juvenile justice processing (Farrington et al., 2010).

The 2003 OCJS also gave details of the profile of offences committed by young people and adults in the survey. The 2003 OCJS found that violent crime formed a greater part of offending by young people compared with adults while acquisitive offences comprised a greater share of adult offending (Budd et al., 2005). The figures presented above based on police recorded crime and proven offending suggested the reverse. This discrepancy is likely to be explained (at least in part) by the fact that many of the violent offences reported in the OCJS were very minor (often involving little or no injury), especially those reported by young people. These minor assaults are less likely to be reported to the police and therefore less likely to appear in the estimate of police recorded crime committed by young people. The 2003 OCJS also indicated that violent offences accounted for a greater proportion of offending by women compared with offending by men and this is supported by the figures presented above based on the combination of proven offending and police recorded crime.<sup>9</sup>

<sup>9</sup> Estimates in the 2003 OCJS report refer to all women compared with all men while figures presented in this report relate to crime committed by men and women aged 10 to 17.

The other previous figure to which this new youth crime estimate can be compared is the estimate produced for the Scottish Executive, which used a similar methodology. That report estimated 22–23 per cent of all crime (including crime not recorded by the police) in Scotland was accounted for by under-18s (DTZ Pieda Consulting, 2005). That figure is very similar to the best estimate (23%) produced here for England and Wales for police recorded crime.

Overall, comparison of this youth crime estimate with the previous estimate of youth crime from the OCJS highlights considerable differences. These differences are to be expected given the nature of the data sources. The lower proportion of police recorded crime, as opposed to self-reported offences, attributable to young people reflects the often relatively minor nature of many of the offences captured in a self-reported offending survey such as the OCJS. These offences are less likely to come to the attention of the police.

## 4. Conclusion

It has been well established that young people are more likely to offend than adults and will therefore account for a disproportionate amount of crime. As there is no way of directly counting youth crime, estimates or proxy measures have to be derived. These are often based on levels of proven offending by young people and such estimates will always undercount actual levels of crime. Building on a previous exercise undertaken in Scotland (DTZ Pieda Consulting, 2005), this study has produced an estimate that young people aged 10 to 17 are responsible for nearly one-quarter (23%) of police recorded crime in England and Wales, equivalent to just over a million crimes.

It is evident from the youth crime estimate that young people account for a disproportionate amount of crime because 10- to 17-year-olds represent about one in ten (11%) of the population of England and Wales aged 10 and over (based on mid-2009 population estimates) yet account for around one in four incidents of police recorded crime (according to this analysis). The youth crime estimate produced here reinforces the significance of tackling crime by young people in reducing crime overall.

The analysis presented above has adopted the previously used methodology of applying the percentage of proven offences committed by young people to crime statistics but developed this by taking into account potential bias in the proven offending figures arising from co-offending. Adjusting for co-offending decreases the estimate of youth crime as young people are more likely to co-offend. This holds true for young men and young women. Proven offending data will under-estimate the extent of co-offending because not all of those involved in an offence will be caught, but self-reported offending studies also indicate that the majority of offences are committed by sole offenders (Budd et al., 2005).

Given the assumptions and limitations of the analysis already outlined above, the youth crime estimate produced here should be seen as indicative and treated with caution. Any attempt to delineate trends over time in youth crime using replications of this estimate is fraught with difficulties of interpretation given the potential effect on the estimate of changes in the operation of the CJS. This youth crime estimate for 2009/10 should be seen in the context of a trend in decreasing use of out-of-court disposals and fewer first-time entrants to the CJS. The

trend has been seen amongst both adults and juveniles, but has been more accentuated amongst juveniles (Moj, 2011b). This trend of reduced formal processing for juveniles implies that young people will be less likely than adults to be represented in the proven offending figures used to generate this youth crime estimate, therefore making it likely that it is an under-estimate of the proportion and extent of police recorded crime attributable to young people.

The assumptions and limitations of the estimate generate some possibilities for further research that would enable the estimate to be refined. Further research into the attrition process from the commission of a crime to police recording a crime and an offence being proven and how this differs by age and gender would be useful. This further research could inform attempts to extrapolate from the data on proven offending, which has the key information on characteristics of the offender, to the broader measures of crime.

Despite the limitations noted above, the youth crime estimate produced here provides a useful, alternative perspective on the extent and nature of crimes carried out by young people. By focusing on police recorded crime, the estimate overcomes the narrow remit of proven offences (which only include those offences brought to justice) and the broader range of self-reported offending (which include many relatively minor offences). The process of creating the estimate also provides valuable information, such as an indication of which crime types young people are most likely to be responsible for, which could help in considering the factors behind changes in particular crime types (e.g. robbery) that are most likely to be committed by young people.

## Appendix A: Additional tables

**Table A.1: Number of proven offences by age group and offence type, PNC 2009/10**

Numbers (000s) and percentages	England and Wales, proven offences		
	Offence group	All ages	10 to 17
Violence Against the Person	352.2	64.4	18%
Sexual	7.0	1.4	20%
Robbery	10.5	5.4	51%
Burglary	33.3	10.6	32%
Offences Against Vehicles	27.5	8.6	31%
Shoplifting	173.3	34.6	20%
Other Theft (not shoplifting)	66.1	17.0	26%
Fraud and Forgery	33.0	2.3	7%
Criminal Damage	107.1	30.3	28%
Drug Offences	139.1	18.4	13%
Other Miscellaneous	57.2	7.7	13%
<b>Total Notifiable</b>	<b>1,006.3</b>	<b>200.7</b>	<b>20%</b>
Other	486.7	44.5	9%
<b>Total Recordable</b>	<b>1,493.0</b>	<b>245.2</b>	<b>16%</b>

**Table A.2: Estimated police recorded crime committed by young people aged 10 to 17 by offence type, 2009/10**

Numbers (000s) and percentages	England and Wales, police recorded crime		
	Offence group	Total police recorded crime	% 10 to 17
Violence Against the Person	871.7	18%	159.3
Sexual	54.5	20%	10.7
Robbery	75.1	51%	38.4
Burglary	540.7	32%	172.5
Offences Against Vehicles	495.0	31%	154.0
Shoplifting	307.8	20%	61.5
Other Theft (not shoplifting)	729.6	26%	187.9
Fraud and Forgery	152.3	7%	10.7
Criminal Damage	806.7	28%	228.3
Drug Offences	235.0	13%	31.1
Other Miscellaneous	70.1	13%	9.4
<b>Total Notifiable</b>	<b>4,338.6</b>		<b>1,063.9</b>

**Table A.3 Proven co-offending by age group and offence type, PNC 2009/10**

Numbers and percentages	England and Wales, proven offenders and offences			
Offence group	Mean number of offenders per offence		% proven offences with co-offending	
	10 to 17	18+	10 to 17	18+
Violence Against the Person	1.08	1.04	8%	3%
Sexual	1.03	1.02	3%	2%
Robbery	1.32	1.23	24%	19%
Burglary	1.24	1.13	19%	11%
Offences Against Vehicles	1.18	1.08	15%	8%
Shoplifting	1.17	1.05	15%	5%
Other Theft (not shoplifting)	1.13	1.09	12%	8%
Fraud and Forgery	1.08	1.04	8%	4%
Criminal Damage	1.11	1.03	10%	3%
Drug Offences	1.04	1.04	4%	4%
Other Miscellaneous	1.13	1.06	12%	6%
<b>Total Notifiable</b>	<b>1.12</b>	<b>1.05</b>	<b>11%</b>	<b>5%</b>

**Table A.4 Estimated police recorded crime by age group and offence type, 2009/10**

Numbers (000s)	England and Wales, police recorded crime		
Offence group	Police recorded crime committed by those aged		
	10 to 17	18 and over	All
Violence Against the Person	153.6	718.1	871.7
Sexual	10.6	43.9	54.5
Robbery	37.1	38.0	75.1
Burglary	161.3	379.3	540.7
Offences Against Vehicles	145.3	349.7	495.0
Shoplifting	56.5	251.4	307.8
Other Theft (not shoplifting)	182.1	547.5	729.6
Fraud and Forgery	10.3	142.0	152.3
Criminal Damage	216.7	590.0	806.7
Drug Offences	31.1	203.9	235.0
Other Miscellaneous	9.0	61.1	70.1
<b>Total Notifiable</b>	<b>1,013.6</b>	<b>3,325.1</b>	<b>4,338.6</b>

Note: The figures for those aged 10 to 17 presented in this table differ from those presented in Table A.2 as the estimate in this table has been adjusted for co-offending.

**Table A.5 Number of proven offences by gender, age group and offence type, PNC 2009/10**

Numbers (000s) and percentages	England and Wales, proven offences					
Offence group	Men		Women		% 10 to 17	
	10 to 17	18 and over	10 to 17	18 and over	Males	Females
Violence Against the Person	47.5	238.9	16.7	48.4	14%	5%
Sexual	1.3	5.5	0.0	0.1	19%	0%
Robbery	4.9	4.9	0.5	0.2	47%	4%
Burglary	10.0	21.6	0.6	1.0	30%	2%
Offences Against Vehicles	8.1	18.2	0.4	0.8	30%	2%
Shoplifting	15.7	92.8	18.6	45.5	9%	11%
Other Theft (not shoplifting)	14.3	39.5	2.7	9.5	22%	4%
Fraud and Forgery	1.7	23.3	0.6	7.3	5%	2%
Criminal Damage	25.7	68.0	4.4	8.6	24%	4%
Drug Offences	17.1	108.4	1.2	12.3	12%	1%
Other Miscellaneous	6.8	44.2	0.9	5.0	12%	2%
<b>Total Notifiable</b>	<b>153.1</b>	<b>665.2</b>	<b>46.7</b>	<b>138.6</b>	<b>15%</b>	<b>5%</b>

Note: Number of proven offences for males and females do not add up to totals given in Table A.1 due to missing data on gender.

**Table A.6 Proven co-offending by age group, gender and offence type, PNC 2009/10**

Numbers	England and Wales, proven offenders			
Offence group	Men		Women	
	10 to 17	18 and over	10 to 17	18 and over
Violence Against the Person	1.08	1.08	1.03	1.04
Sexual	1.03	1.02	1.02	1.07
Robbery	1.32	1.36	1.23	1.23
Burglary	1.24	1.34	1.12	1.17
Offences Against Vehicles	1.18	1.22	1.08	1.09
Shoplifting	1.12	1.22	1.05	1.07
Other Theft (not shoplifting)	1.13	1.13	1.09	1.08
Fraud and Forgery	1.07	1.11	1.04	1.04
Criminal Damage	1.11	1.10	1.03	1.03
Drug Offences	1.04	1.05	1.04	1.06
Other Miscellaneous	1.13	1.14	1.06	1.08
<b>Total Notifiable</b>	<b>1.11</b>	<b>1.14</b>	<b>1.05</b>	<b>1.06</b>

**Table A.7 Estimated police recorded crime by age group and offence type, 2009/10**

Numbers (000s)	England and Wales, police recorded crime			
	Men		Women	
	10 to 17	18 and over	10 to 17	18 and over
Violence Against the Person	113.6	597.9	39.8	120.4
Sexual	10.4	42.9	0.2	1.0
Robbery	33.9	36.2	3.1	1.8
Burglary	152.7	362.9	8.5	16.5
Offences Against Vehicles	138.3	335.4	6.8	14.4
Shoplifting	26.9	170.3	29.3	81.3
Other Theft (not shoplifting)	152.6	440.9	29.1	106.9
Fraud and Forgery	7.6	108.3	2.8	33.7
Criminal Damage	184.2	524.1	31.9	66.5
Drug Offences	29.0	183.6	2.1	20.3
Other Miscellaneous	7.9	55.0	1.1	6.1
<b>Total Notifiable</b>	<b>857.1</b>	<b>2,857.6</b>	<b>154.8</b>	<b>469.1</b>

Note: The number of police recorded crimes by gender do not add up to the totals given in Table A.4 due to missing data on gender.

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