



Home Office

Understanding organised crime: estimating the scale and the social and economic costs

Research Report 73

Hannah Mills, Sara Skodbo and Peter Blyth

October 2013

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Acknowledgement: We would like to thank everyone involved in the production of this report, including the editors, data providers and those who provided comments and quality assurance of the report content.

Implications

Understanding the costs of organised crime to the UK is an important priority, as discussed in “Local to Global: Reducing the Risk from Organised Crime” (HM Government, 2011). Estimates of the scale and social and economic costs of organised crime help us set policy and law enforcement priorities and highlight the relative potential benefits of different ways of tackling organised crime.

The current research improves estimation methods, discusses a wider range of data, and ultimately provides a considerably broader and more detailed picture of the **scale** and **costs** of organised crime to the UK than has previously been available.

- The **social and economic costs** of organised crime to the UK amount to many billions of pounds. Drugs supply (£10.7 billion), organised fraud (£8.9 billion) and organised immigration crime types (£1.0 billion) have major impacts on the UK, and other less visible crimes also cause substantial harm. This report outlines evidence on organised acquisitive crime types; organised child sexual exploitation; counterfeit currency; drugs supply; organised environmental crime; firearms; organised fraud; organised immigration crime; organised intellectual property crime; and organised wildlife crime, which all cause damage to the UK.
- The **scale** of organised crime markets is considerable and the report considers the scale of a range of crime types including drugs, organised fraud and organised immigration crime which clearly generate substantial criminal revenues. Other organised crime types such as organised acquisitive crime, counterfeit currency, and organised intellectual property crime and others are also assessed, as these also provide substantial criminal revenues.
- The report takes a cautious approach and applies high standards to the data; data is only included where there is a strong degree of confidence in accuracy.

This means that the figures will often inevitably underestimate the full extent of the scale and costs of organised crime in the UK.

- For policy makers and law enforcement partners it is therefore important to consider this report alongside other sources of information; law enforcement intelligence and in-depth professional subject knowledge provide important context for understanding the implications of this report.

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Keywords

organised crime; scale; costs; social costs; economic costs; drugs; fraud; immigration (crime); acquisitive (crime); revenues

The views expressed in this report are those of the authors, not necessarily those of the Home Office (nor do they represent Government policy).

Summary

Context

Improving our understanding of the social and economic costs of organised crime is a priority set out in “Local to Global: Reducing the Risk from Organised Crime” (HM Government, 2011). This report aims to improve our understanding of organised crime by providing up-to-date estimates of the scale of a range of organised crime types and the social and economic costs associated with these types of organised crime.

Scientifically robust estimates of the scale and the social and economic costs of organised crime form an important part of the evidence base for policy and law enforcement in this area. They contribute to priority-setting decisions, by showing the relative costs of different types of organised crime. They can be considered alongside the national intelligence picture on organised crime and improve understanding of the relative potential benefits of different approaches to tackling organised crime. The estimates of the scale of these markets can support law enforcement partners in assessing the breadth and depth of their engagement with different organised crime types.

Approach

There are substantial challenges to carrying out an exercise of this kind. In particular there is an absence of sufficient data for some crime types. To ensure that the most robust figures possible were produced, two strategies were therefore adopted.

Firstly, the research mainly focuses on producing estimates of the individual types of organised crime (drugs supply, counterfeiting and so on). An estimate of the total social and economic cost of organised crime is outlined in the findings section of this report, but as the estimates are conservative in their approach this is likely to underestimate the true costs of organised activity.

Secondly, the research is pragmatic in that it varies in the degree to which it fully maps or estimates individual markets and their harms, depending on the data available. In some cases estimates are therefore reasonably complete (for example the scale of drugs supply) whilst in other areas (such as the full extent of the social and economic costs of drugs supply) estimates are more partial. In some areas it was possible only to produce estimates based on detected instances (as with people smuggling) or ultimately not to produce estimates at all (as with trafficking for labour exploitation).

Defining and categorising organised crime can also be challenging, and the research takes a policy- and enforcement-based approach. The central definition is drawn

from “Local to Global: Reducing the Risk from Organised Crime”¹ (HM Government 2011), while the types of organised crime covered in the research largely reflect operational and strategic approaches to organised crime. The types of organised crime in this report include: types of organised acquisitive crime; organised child sexual exploitation; counterfeit currency; drugs supply; organised environmental crime; firearms supply; organised fraud; types of organised immigration crime; organised intellectual property crime; and organised wildlife crime.

The report does not attempt to cover all organised crime and there are important exclusions. Identity fraud, corruption, extortion, blackmail, kidnap, and violence are excluded. This is in part due to difficulty in disentangling data and events from the other organised crime types that they sometimes enable. Similarly, organised cyber crime has been excluded due to the high probability of extensive double counting as well as the absence of sufficient data on the prevalence of cyber crime and the extent to which it is organised². Money laundering, an important enabler and a method of legitimising the revenues of organised crime, has not been included due to the substantial data challenges and the timescales for the current work. This, however, means that any additional costs that arise from these activities are also excluded. All of these excluded crime types are important and will continue to require further research³.

The estimates of scale and social and economic costs are set out in Table S.1. Estimates of scale (or market size) are a measure of known activity across different types of organised crime and reflect the revenues, but not profit, earned by organised criminals from activity in each market. Estimates of the social and economic costs monetise, where possible, the full range of impacts of organised crime to victims and society.

In many cases the scale estimates, where these equate to the value of property stolen, also form part of the social and economic costs estimates. Therefore scale and costs figures should not be added within organised crime types.⁴

Estimates were calculated using data for the financial year 2010/11 where possible; otherwise the most recent available data prior to this have been used. Where

¹ “Organised crime involves individuals, normally working with others, with the capacity and capability to commit serious crime on a continuing basis, which includes elements of planning, control and coordination, and benefits those involved. The motivation is often, but not always, financial gain. Some types of organised crime, such as organised child sexual exploitation, have other motivations.”

² Although Anderson et al. (2012) highlight a range of costs of cybercrime.

³ See the organised crime research strategy *Future Directions for Organised Crime Research* for a discussion of research priorities for the organised crime field, available at: <http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/future-organised-crime-res-2011?view=Standard&pubID=960766>

⁴ This is because market size estimates often represent the losses sustained by victims which form part of the social and economic costs of each crime type.

necessary price data were updated to account for inflation to 2010/11 values using the HM Treasury deflator series.⁵ Estimates are for the UK unless otherwise stated.

⁵ The majority of the price data used in this report were already in 2010/11 prices.

Table S.1 Summary of estimates of the scale and the social and economic costs of organised crime, by crime type

Sector	Proportion of total crime type that is organised	Estimated scale	Completeness	Social and economic costs	Completeness
Organised acquisitive Crime	Various	£550m	See below	£1,790m	See below
Cash and valuables in transit	100%	£12m	Only includes recorded offences. Likely to underestimate scale.	£27m	Costs of recorded incidents only.
Distraction burglary	100%	£35m	Adjusted for underreporting of burglary offences. Could overestimate scale.	£89m	Adjusted for underreporting of burglary offences. Could overestimate costs.
Organised metal theft	20%	£24m	Only includes scale for selected companies and industries. Likely to underestimate scale.	£44m	Costs for selected companies and industries only. Likely to underestimate costs.
Plant theft	100%	£100m	Only includes reported thefts. Most thefts are likely to be reported.	£650m	Industry estimate of costs of reported thefts.
Road freight crime	100%	£52m	Only includes reported offences. Most offences likely to be reported.	£64m	Costs of reported offences only. Limited estimate of victim costs.
Organised vehicle crime	58%	£330m	Adjusted for underreporting of vehicle thefts. Conservative estimate of value of stolen vehicle.	£920m	Good. Adjusted for underreporting of theft of vehicle offences.
Organised child sexual exploitation	-	-	Only includes number of victims known to police and child protection authorities. No monetary estimate of scale.	£1,100m	Costs resulting from known victims. Likely to underestimate costs.
Counterfeit currency	100%	£7m	Only includes detected UK sterling notes counterfeited. No estimate of coins. Will underestimate scale.	£7m	Estimate reflects losses only. Partial estimate of costs.

Sector	Proportion of total crime type that is organised	Estimated scale	Completeness	Social and economic costs	Completeness
Drugs supply	100%	£3,700m	Data for 8 types of illicit drugs. Could underestimate scale if surveys fail to capture full drug using population. No account of differences in drug use across the UK.	£10,700m	Conservative estimate of costs of drug-related crime. Limited health data available. No account of differences in opiate and crack drug use across UK. Likely to underestimate costs.
Organised environmental crime	-	-	Data not available to allow estimation of scale.	-	Data not available to allow estimation of costs.
Firearms supply	100%	-	Data not available to allow estimation of scale.	£160m	Only includes costs of supply-related firearms offences. Likely to underestimate of total costs. No data for Northern Ireland.
Organised fraud	15%	£8,900m	Adjusted for undetected fraud. Could overestimate scale. Majority made up of robust measures of detected fraud.	£8,900m	Costs only include losses and CJS costs. Does not capture full costs.
Organised immigration crime	Various	£240m	See below	£1,040m	See below
Organised abuse of legitimate entry	75%	£26m	Only includes detected activity. Will underestimate scale.	£11m	Only includes direct costs of organised crime involvement. No impacts of migration included. Costs of enforcement response only.

Sector	Proportion of total crime type that is organised	Estimated scale	Completeness	Social and economic costs	Completeness
Human trafficking for sexual exploitation	100%	£130m	Only covers foreign women (excludes domestic trafficking and men and children) – will underestimate scale. Estimate of total victims (foreign women) not just those identified.	£890m	Only costs for foreign female victims (excludes domestic trafficking and men and children). Doesn't include impacts of migration. Includes victim costs, but could underestimate them.
Human trafficking – other exploitation	-	-	Data not available to allow estimation of scale.	-	Data not available to allow estimation of costs.
Organised people smuggling	75%	£88m	Only includes detected activity. Will underestimate scale.	£140m	Only includes direct costs of organised crime involvement. No impacts of migration included. Costs of enforcement response only.
Organised intellectual property crime and counterfeiting	80%	£90m	Only includes seizures of physical goods. No estimate of cyber crime involvement. Will underestimate scale.	£400m	Only costs of seizures of physical goods. Likely to underestimate costs.
Organised wildlife crime	-	-	Data not available to allow estimation of scale.	-	Data not available to allow estimation of costs.

Notes: Estimates are for the UK (with the certain exceptions) in 2010/11 prices, rounded to two significant figures (with the exception of drugs which is rounded to three significant figures). These figures are not additive either between rows or columns. Estimates of scale often form part of costs estimates so these two figures cannot be added for each crime type.

- Dashes highlight areas where insufficient data are available to allow estimates to be calculated.

Conclusions and implications

The research demonstrates that the impact of organised crime on the UK, expressed as estimates of the **social and economic costs** caused, is significant. As would be expected from previous work in this area, drugs supply, organised fraud and organised immigration crime types all have major impacts on the UK; the other, less familiar organised crime types also have substantial impact on the UK.

- Drugs supply (£10.7 billion social and economic costs) is associated with substantial amounts of drug-related acquisitive offending as well as health costs and drug-related deaths, impacting on individuals, families, and communities.
- Organised fraud costs to the UK are estimated to be substantial (£8.9 billion), and these, along with the costs of counterfeit currency (£7 million) and organised intellectual property crime (£0.4 billion), damage the prospects and reputation of UK businesses and financial services as well as reducing tax revenue.
- The suffering caused by human trafficking for sexual exploitation (£890 million) is extensive, despite our ability to capture only a small proportion of those harms in this report and the further work needed to map the costs of people smuggling (£140 million) and abuse of legitimate entry (£11 million).
- The damage caused by organised child sexual exploitation is well evidenced. Quantitative data are limited but the harms are still extensive (£1.1 billion).
- The six types of organised acquisitive crime (from £27 to £920 million) cause damage to individuals, communities and businesses, whether through the physical and emotional harms caused to victims, the financial losses incurred through disruption of business or the direct losses incurred.
- The costs of organised violence and homicide have not been included in the current work, nor have we been able to capture the violent offending associated with the supply of illicit drugs. However an estimate of the social and economic costs of firearms supply (£160 million) illustrates a small part of the damage by violence caused by organised crime.
- Organised environmental crime and organised wildlife crime cause pollution and damage communities and businesses in the UK. There are insufficient data to currently estimate costs, but there is clear evidence on the types of damage caused.
- We estimate that the total social and economic costs of organised crime are at least £24 billion per year.

Alongside the cost estimates, **scale** figures have also been produced; these develop our understanding of the scale of criminal activity and the revenues earned by offenders in each market⁶. Unsurprisingly, here too drugs supply and organised fraud are dominant. The less familiar types of organised crime such as organised acquisitive crime, organised child sexual exploitation, counterfeit currency, and organised intellectual property crime are also estimated to be substantial. The scale of some markets remains unknown, and further work could be done to address this gap.

Law enforcement partners, as part of their work to disrupt and dismantle organised crime groups, often seek to seize criminal assets and deny offenders the benefit of their illegal activities. Estimates of the scale of these markets will support law enforcement partners in assessing the breadth and depth of their engagement with different organised crime types.

Ideally, this report would fully map the scale and the social and economic costs of organised crime, providing estimates of the true extent of criminal activities and the harms to the UK. In the absence of perfect data, estimates have been provided for those areas that can be robustly estimated. The report takes a cautious approach and applies high standards to the data, only including data where there is a strong degree of confidence in accuracy. This means that the figures will inevitably, and to differing degrees for each crime type, underestimate both the scale and the impact of organised crime on the UK. Variation in confidence about the degree to which the data and estimates fully capture costs is indicated in Table S.1.

For the policy maker and law enforcement audience it is therefore essential to consider this report alongside other sources of information; law enforcement intelligence assessments and in-depth professional subject knowledge provide important context for understanding and operationalising the implications of this report.

⁶ Note that it does not set out the costs to offenders, and further work would be needed to assess the profit to offenders.

Understanding Organised Crime: Estimating the scale and the social and economic costs

1. Introduction

Background

Improving our understanding of the social and economic costs of organised crime is a priority for the Government, as set out in “Local to Global: Reducing the Risk from Organised Crime” (HM Government, 2011). This report sets out findings from work undertaken by the Home Office in discussion with partners across government departments and agencies to construct a better, shared understanding of the scale and costs of a range of key types of organised crime.

Scientifically robust estimates of the scale and the social and economic costs of organised crime form an important part of the evidence base for policy and law enforcement in this area. They contribute to priority-setting decisions, by showing the relative costs of different types of organised crime. They can be considered alongside the national intelligence picture on organised crime and improve understanding of the relative potential benefits of different approaches to tackling organised crime. The estimates of the scale of these markets can support law enforcement partners in assessing the breadth and depth of their engagement with different organised crime types.

Aim

The overarching aim of this research is to improve our understanding of organised crime in the UK, by providing up-to-date estimates of the scale of a range of organised crime sectors, and of the social and economic costs associated with these types of organised crime.

The work brings together a wide range of data on the scale and costs of organised crime in the UK. Data on the scale and impact of these kinds of hidden, illegal markets⁷ is understandably often scarce. The absence of sufficient data in some areas means the work has two important aspects to it in order to ensure as robust figures as possible are produced.

⁷ All types of organised crime in this report have been characterised as “markets” that can be described, in economic terms, as any structures that enable transactions to take place. The activities of organised criminals described in this report can be thought of as the buying and selling of certain “products”. It is this activity that is captured by estimates of market size or “scale”.

Firstly, the research mainly focuses on producing estimates of the individual types of organised crime (drugs supply, counterfeiting and so on). An estimate of the total social and economic cost of organised crime is outlined in the findings section of this report, but as the estimates are conservative in their approach this is likely to underestimate the true costs of organised activity.

Secondly, the research is both cautious and pragmatic in that it varies in the degree to which it fully maps or estimates individual markets and their harms, depending on the data available. In some cases estimates are therefore reasonably complete (for example, the scale of drugs supply) whilst in other areas (such as the full extent of the social and economic costs of drugs supply) estimates are more partial. In some areas it was possible only to produce estimates based on detected cases (as with people smuggling) or ultimately not to produce estimates at all (as with trafficking for labour exploitation).

This approach means that on the one hand the estimates are conservative and will tend to underestimate the full extent of the social and economic costs to the UK, while on the other hand, the estimates are scientifically robust and provide a useful contribution to the evidence base, improving our ability to measure such costs both now and in the future.

Note that this report does not aim to provide estimates that are directly comparable with earlier work in this area, as both data and methodologies have developed considerably over time.⁸

Definition and typology

Defining and categorising organised crime can be challenging. Organised crime encompasses a huge variety of criminal activities, and definitions in the literature vary. The current work takes a policy- and enforcement-based approach to this question.

The starting point is the definition set out in “Local to Global, Reducing the Risk from Organised Crime”, which states:

“Organised crime involves individuals, normally working with others, with the capacity and capability to commit serious crime on a continuing basis, which includes elements of planning, control and coordination, and benefits those involved. The motivation is often, but not always, financial gain. Some types of

⁸ Previous estimates have been published in *Extending Our Reach: A Comprehensive Approach to Tackling Organised Crime* available at <http://www.official-documents.gov.uk/document/cm76/7665/7665.pdf>. Some elements of these were based on previous unpublished Home Office research which has since been released under Freedom of Information, available at <http://www.homeoffice.gov.uk/about-us/freedom-of-information/released-information1/foi-archive-crime/9886.pdf?view=Binary>

organised crime, such as organised child sexual exploitation, have other motivations.” (HM Government, 2011)

In order to identify which types of crime to include and where to draw conceptual boundaries, discussions were held with law enforcement colleagues as well as partners across government departments and agencies. Discussions centred on the organised crime strategy definition set out above, alongside those approaches set out in law enforcement threat assessments⁹ and other law enforcement intelligence documents. The types of crime included therefore reflect operational and strategic approaches to organised crime.¹⁰ These crime types are set out in Table 1.1.

The report does not attempt to cover all of organised crime and there are important exclusions. Some types of crime were excluded due to the difficulty in disentangling data and events from other types of organised crime that they sometimes enable. This, however, means that any additional costs that arise from these activities are also excluded. These excluded crime types include identity fraud, corruption, extortion, blackmail, kidnap, and violence.

In addition, organised cyber crime has been excluded from the current work due to the high probability of extensive double counting as well as the absence of sufficient data on the prevalence of cyber crime and the extent to which this is organised¹¹. Money laundering, an important enabler and a method of legitimising the revenues of organised crime, has not been included due to the substantial data challenges and the timescales for the current work. All of these excluded crime types are important organised crime issues in their own right and will continue to require further research¹².

⁹ See for instance <http://www.soca.gov.uk/threats>

¹⁰ For many crime types in this report, a proportion of activity within the crime type is assumed to be organised and not the entire crime type.

¹¹ Although, Anderson et al. (2012) highlight a range of costs of cybercrime.

¹² See the organised crime research strategy *Future Directions for Organised Crime Research* (Home Office, 2011a) for a discussion of research priorities for the organised crime field, available at: <http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/future-organised-crime-res-2011?view=Standard&pubID=960766>

Table 1.1: Scope of this report, crime types

Organised crime types discussed in this report	Organised crime types excluded from this report
<ul style="list-style-type: none"> • Organised acquisitive crime <ul style="list-style-type: none"> ○ Cash and valuables in transit (CViT) ○ Distraction burglary ○ Organised metal theft ○ Plant theft ○ Road freight crime ○ Organised vehicle crime • Organised child sexual exploitation • Counterfeit currency • Drugs supply • Organised environmental crime • Firearms supply • Organised fraud • Organised immigration crime <ul style="list-style-type: none"> ○ Organised abuse of legitimate entry ○ Human trafficking (sexual exploitation) ○ Human trafficking (other exploitation) ○ Organised people smuggling • Organised intellectual property crime • Organised wildlife crime 	<ul style="list-style-type: none"> • Money laundering • Cyber crime • Kidnapping • Corruption • Identity fraud • Violence • Extortion

2. Methodology and data

For each crime type identified, estimates of scale and social and economic costs have been produced. Estimates have been calculated using data for the financial year 2010/11 where possible; otherwise the most recent available data prior to this have been used. Where necessary, price data were updated to account for inflation to 2010/11 values using the HM Treasury deflator series.¹³ Estimates are for the UK unless otherwise stated.

A limited range of potential data sources were available. Where a choice of sources was available, judgements were made on what data were the most appropriate based on criteria such as quality, robustness, and reputation of source. Where only one data source was available, it was assessed against the same criteria and only included if of sufficient quality. Weaknesses in any of the data used have been highlighted in the relevant sections.

The methodologies used to estimate the scale and social and economic costs are independent of each other.

- **Estimates of scale**, or market size, are produced to provide a sense of the scale of known activity across organised crime types and reflect the revenues earned by organised criminals from activity in each market¹⁴. In general, this estimation is based on the average value of the item associated with the particular offence multiplied by the annual volume of those offences. For example, in the case of vehicle crime the number of vehicles stolen by organised crime groups is multiplied by the average value of the vehicles stolen. Estimates of the market size are referred to as ‘scale’ estimates throughout this report.
- **The social and economic cost estimates**¹⁵ monetise, where possible, the full range of harms to victims and society resulting from the estimated extent of each crime type. Estimates follow existing Home Office methodology for estimating the costs of crime¹⁶. This includes the costs in anticipation of crime (such as security expenditure), costs as a consequence of crime (such as

¹³ The majority of the price data used in this report were already in 2010/11 prices.

¹⁴ These estimates however should not be used as a measure of profit of organised criminals as any costs organised criminals will incur need to be subtracted. This is not within the scope of this report.

¹⁵ The term “social and economic costs” are used in this report as in Brand and Price (2000) to include costs imposed on individuals, households, businesses or institutions by crimes they suffer directly (private costs) and wider impacts on society as a whole through, for example, responses to the perceived risk of crime (external costs). The term “social costs” is used in its economic sense to include both financial costs reflected in expenditure, and notional costs reflecting best assessments of the less tangible impacts of crime, such as the emotional and physical impact on victims.

¹⁶ See, for example, Brand and Price (2000), and Dubourg *et al.* (2005). Unit costs used are revised unit costs published with the Integrated Offender Management Value for Money toolkit (Home Office, 2011c).

property stolen¹⁷ and emotional and physical impacts), and costs in response to crime (costs to the criminal justice system).

The scope of costs considered within this report captures any harms occurring within the UK, regardless of the nationality or residency status of victims. When assessing the social and economic costs this report does not examine any 'benefits'¹⁸ of organised crime, for example benefits to offenders. Nor do the estimates of social and economic costs of organised crime types include the harms to organised criminals or costs to organised crime groups. This is consistent with previous Home Office research where any effects on a person carrying out an illegal action are not considered to affect the total welfare of society¹⁹.

Estimates have been produced for individual crime types using varying methodologies and data sources. The estimates are robust, conservative and, in most cases (because of the largely hidden nature of organised crime), partial estimates of total organised crime activity.

In many cases²⁰ the scale estimates, where these equate to the value of property stolen, also form part of the social and economic costs estimates. Therefore scale and costs figures should not be added within organised crime types.²¹

In some cases assumptions have been made to enable the production of meaningful estimates. For example, assumptions have been made concerning the proportion of a particular criminal activity that is accounted for by organised criminals, and the prices paid for particular criminal services. Such assumptions are based on intelligence, and are developed in consultation with law enforcement partners and other professionals working in the relevant crime area. Assumptions are discussed in the text as they arise and are also covered in more detail in the technical annexes.

Were these assumptions to be altered, the size of the estimates produced would change. In addition, the assumptions in this report only apply to the known aspects of organised criminal activity. As such, they cannot necessarily be applied to any emerging evidence relating to the organised crime types considered.

¹⁷ Property recovered is subtracted from this so that the value of property stolen net of the value of property recovered is used. In 2010/11 Serious Organised Crime Agency (SOCA) recovered assets worth £20.3 million.

¹⁸ Although the value of any property recovered is offset against the costs of stolen property. Other benefits could include jobs in the security industry that are necessary to protect individuals and businesses from organised crime.

¹⁹ See Brand and Price (2000) for further details.

²⁰ Generally, where scale estimates do not capture the value of stolen goods, they do not form part of the social and economic costs estimates.

²¹ This is because market size estimates often represent the losses sustained by victims which form part of the social and economic costs of each crime type.

3. Findings

Estimates of market size (scale) and the social and economic costs for a range of organised crime types were produced; these are set out in Table 3.1. The scale and cost estimates should not be added within organised crime types, as in many cases the scale estimates form part of the social and economic costs estimates (see methodology and data section).

Where possible, the estimates include enforcement costs. However, some enforcement budgets that are associated with organised crime in general, could not be broken down to identify costs related to specific crime types. These are not captured in the estimates in Table 3.1. For instance, the 2010/11 budget for the Serious Organised Crime Agency (SOCA) was approximately £430 million. This is a cost resulting from organised crime that does not apply to any specific organised crime type and cannot be further broken down.²² As such, all cost estimates presented do not include SOCA costs of preventing and responding to organised crime.

There are several crime types within the scope of this report where there are not sufficiently robust or extensive enough data available for an exercise of this kind. For these crime types, it has not been possible to estimate either the scale of organised activity or the social and economic costs of such activity. These crime types are:

- organised environmental crime;
- human trafficking for the purposes of labour exploitation;
- human trafficking of men and children; and
- organised wildlife crime.

There are a number of other crime types where estimates have been calculated but assumptions have been relied on, including in particular organised immigration crime. These assumptions are set out as they arise and are also explored in the technical annexes 1-3.

Total social and economic costs of organised crime

Adding up the costs of individual crime types, we find that the social and economic costs of organised crime are estimated to be **at least £24 billion a year**. It is highly likely that some double counting exists between the estimates for individual crime types (such as between drugs supply or firearms supply and elements of organised acquisitive crime) although this is not anticipated to be extensive. But, as the estimates are conservative in their approach (including only those where there are robust scientific data) they tend to underestimate the true scale or costs of organised

²² Similarly, assets recovered by SOCA should be taken into account as property recovered from organised criminals. In 2010/11 over £9.9 million worth of assets were recovered by SOCA. As with SOCA enforcement costs, it has not been possible to break this down by crime type.

activity to varying degrees and the degree of underestimation is highly likely to outweigh the double-counting effects.

Comparing the social and economic costs of organised crime with other costs of crime

This report estimates that the social and economic costs of organised crime are at least £24 billion per year. It is important to note that this figure may not be comparable on a one-to-one basis with other costs of crime estimates. There are two primary reasons for this.

Firstly there may be an overlap between the crimes of interest. For instance the estimated costs of crime against individuals and households of £36.2 billion in 2003/04 (Dubourg *et al.*, 2005) includes some of the organised acquisitive crimes included in this report.

Secondly there may be differences in the definition of what costs should be counted. For instance the estimated cost of domestic violence of £15.7 billion in 2008 (Walby, 2009) reflects the direct costs resulting from crime committed by individuals against victims. Conversely some of the costs included in this report are indirect, such as the costs of drug-related acquisitive crime. These costs are not caused directly by organised criminals, but are costs which would not occur in the absence of organised crime – in this case, drug supply. We believe that a broader definition of costs that should be counted is appropriate in the case of organised crime because it is, in certain cases and amongst other things, an enabling crime. Tackling organised crime could reduce not only the direct costs caused by the organised criminals themselves, but also the indirect costs that result from organised criminal activity.

It should also be noted that a significant proportion of the estimated social and economic costs of organised crime arises from deaths and ill health outcomes of drug users. Although these are clearly social costs that should be counted, there is arguably a distinction between costs which have been willingly incurred²³ and those that have been forced upon a more conventional victim of crime. The issue of addiction and the extent to which drug users are capable of making rational consumption decisions clouds this distinction.

All of these issues mean that care needs to be taken when comparing the social and economic costs of organised crime estimate with other estimates of crime costs.

²³ In the sense that they are taken into account in a market-based decision: a drug user may decide that the risk of adverse health impacts is outweighed by the pleasure gained through the drug purchase.

Table 3.1 Summary of estimates the scale and the social and economic costs of organised crime, by crime type

Sector	Proportion of total crime type that is organised	Estimated scale	Completeness	Social and economic costs	Completeness
Organised acquisitive crime	Various	£550m	See below	£1,790m	See below
Cash and valuables in transit	100%	£12m	Only includes recorded offences. Likely to underestimate scale.	£27m	Costs of recorded incidents only.
Distraction burglary	100%	£35m	Adjusted for underreporting of burglary offences. Could overestimate scale.	£89m	Adjusted for underreporting of burglary offences. Could overestimate costs.
Organised metal theft	20%	£24m	Only includes scale for selected companies and industries. Likely to underestimate scale.	£44m	Costs for selected companies and industries only. Likely to underestimate costs.
Plant theft	100%	£100m	Only includes reported thefts. Most thefts are likely to be reported.	£650m	Industry estimate of costs of reported thefts.
Road freight crime	100%	£52m	Only includes reported offences. Most offences likely to be reported.	£64m	Costs of reported offences only. Limited estimate of victim costs.
Organised vehicle crime	58%	£330m	Adjusted for underreporting of vehicle thefts. Conservative estimate of value of stolen vehicle.	£920m	Good. Adjusted for underreporting of theft of vehicle offences.
Organised child sexual exploitation	-	-	Only includes number of victims known to police and child protection authorities. No monetary estimate of scale.	£1,100m	Costs resulting from known victims. Likely to underestimate costs.
Counterfeit currency	100%	£7m	Only includes detected UK sterling notes counterfeited. No estimate of coins. Will underestimate scale.	£7m	Estimate reflects losses only. Partial estimate of costs.

Sector	Proportion of total crime type that is organised	Estimated scale	Completeness	Social and economic costs	Completeness
Drugs supply	100%	£3,700m	Data for 8 types of illicit drugs. Could underestimate scale if surveys fail to capture full drug using population. No account of differences in drug use across the UK.	£10,700m	Conservative estimate of costs of drug-related crime. Limited health data available. No account of differences in opiate and crack drug use across UK. Likely to underestimate costs.
Organised environmental crime	-	-	Data not available to allow estimation of scale.	-	Data not available to allow estimation of costs.
Firearms supply	100%	-	Data not available to allow estimation of scale.	£160m	Only includes costs of supply-related firearms offences. Likely to underestimate of total costs. No data for Northern Ireland.
Organised fraud	15%	£8,900m	Adjusted for undetected fraud. Could overestimate scale. Majority made up of robust measures of detected fraud.	£8,900m	Costs only include losses and CJS costs. Does not capture full costs.
Organised immigration crime	Various	£240m	See below	£1,040m	See below
Organised abuse of legitimate entry	75%	£26m	Only includes detected activity. Will underestimate scale.	£11m	Only includes direct costs of organised crime involvement. No impacts of migration included. Costs of enforcement response only.

Sector	Proportion of total crime type that is organised	Estimated scale	Completeness	Social and economic costs	Completeness
Human trafficking for sexual exploitation	100%	£130m	Only covers foreign women (excludes domestic trafficking and men and children) – will underestimate scale. Estimate of total victims (foreign women) not just those identified.	£890m	Only costs for foreign female victims (excludes domestic trafficking and men and children). Doesn't include impacts of migration. Includes victim costs, but could underestimate them.
Human trafficking – other exploitation	-	-	Data not available to allow estimation of scale.	-	Data not available to allow estimation of costs.
Organised people smuggling	75%	£88m	Only includes detected activity. Will underestimate scale.	£140m	Only includes direct costs of organised crime involvement. No impacts of migration included. Costs of enforcement response only.
Organised intellectual property crime and counterfeiting	80%	£90m	Only includes seizures of physical goods. No estimate of cyber crime involvement. Will underestimate scale.	£400m	Only costs of seizures of physical goods. Likely to underestimate costs.
Organised wildlife crime	-	-	Data not available to allow estimation of scale.	-	Data not available to allow estimation of costs.

Notes: Estimates are for the UK (with the certain exceptions) in 2010/11 prices, rounded to two significant figures (with the exception of drugs which is rounded to three significant figures). These figures are not additive either between rows or columns. Estimates of scale often form part of costs estimates so these two figures cannot be added for each crime type.

- Dashes highlight areas where insufficient data are available to allow estimates to be calculated.

The following sections set out the findings for each organised crime type in more detail. The scope of the organised crime type is considered and presented together with the estimates of scale and social and economic costs. Further details are discussed in the technical annexes.

Organised acquisitive crime

In this section, six types of organised acquisitive crime are considered:

- cash and valuables in transit;
- distraction burglary;
- organised metal theft;
- plant theft;
- road freight crime; and
- organised vehicle crime.

Armed robbery has not been included as an organised acquisitive crime type. Elements of several types of organised acquisitive crime considered in this section are enabled by the use of firearms, including cash and valuables in transit (CViT) and road freight crime. Additionally, many armed robbery offences are captured in the firearms section. These are thought to be the most organised elements of armed robbery with other armed robbery offences largely considered to be “unsophisticated and/or opportunistic” (SOCA website, accessed May 2012). For many of the acquisitive crime types considered, assumptions have been made about the proportion of organised involvement. These assumptions are outlined as they arise and are discussed in greater detail in Annex 1.

a. Cash and valuables in transit

Scope

Cash and valuables in transit (CViT) robbery “relates to the illegal appropriation of these high value goods – usually cash – while they are being transported from one location to another” (Wainer and Summers, 2011). These offences, classified as commercial robbery, can occur at various locations on the route between cash centres and bank branches. Such robberies typically require planning and preparation and often more than one offender,²⁴ which as a result mean that all these offences can be attributed to organised crime.

Scale

SaferCash²⁵ recorded total losses resulting from cash and valuables in transit offences of approximately £12 million in the UK in 2010²⁶. Given the nature of these

²⁴ Evidence from Wainer and Summers (2011) suggests that the majority (53%) of CViT offences detected in the Metropolitan Police Service in 2009 involved two or more offenders.

²⁵ SaferCash is a national centre for intelligence sharing on CViT robbery holding a database of all CViT robberies occurring in the UK. It is operated by the British Security Industry Association (BSIA).

robberies, this is all attributed to organised crime. The average loss per offence is approximately £15,000²⁷.

Costs

The social and economic costs of cash and valuables in transit robberies include the value of property stolen from banks and businesses, the physical and emotional harms sustained by victims, lost output for businesses, and any criminal justice system (CJS) costs from resulting prosecutions. The losses identified in the scale section form part of the social and economic costs. Additional harms have been quantified using Home Office costs of crime estimates for ‘robbery – commercial’, excluding the value of property taken²⁸. Approximately 30 per cent of these robberies result in injuries for victims (Wainer and Summer, 2011), the costs of which have been approximated using Home Office costs of crime estimates. The social and economic costs of recorded organised cash and valuables in transit robberies are estimated to be approximately £27 million.

b. Distraction burglary

Scope

Distraction burglary occurs where “a falsehood, trick or distraction is used on an occupant of a dwelling to gain, or try to gain, access to the premises to commit burglary” (Home Office, 2012c). Distraction burglars usually target residential addresses, often of vulnerable people such as the elderly. Most distraction burglary is thought to be related to organised crime as offenders are “extremely professional criminals who...may travel hundreds of miles in a day, committing 20 or 30 offences across... [police] force areas in order to avoid detection.” (Home Office, 2003) Therefore, it is assumed that all distraction burglary can be attributed to organised crime. This may overestimate the organised crime involvement as a small number of offences are thought to be committed by individuals.²⁹

Scale

There were a total of 5,480 completed distraction burglaries³⁰ recorded by police in England and Wales in 2010/11 (Chaplin et al., 2011). Allowing for the fact that many burglaries go unreported³¹, and then extrapolating from England and Wales data to

BSIA members are responsible for over 70 per cent of UK security products and services (by turnover).

²⁶ Data from SaferCash – these have not been grossed up to account for non-BSIA members.

²⁷ Number of offences taken from SaferCash data.

²⁸ The value of property taken is excluded as this would double count the scale of organised CViT robbery as estimated in the previous section.

²⁹ According to intelligence provided by Operation Liberal, an initiative to tackle distraction burglary offences.

³⁰ These are separately recorded in police recorded crime in England and Wales. This figure does not include those distraction burglaries that were attempted but unsuccessful.

³¹ Using a multiplier published by the Home Office in 2011. This follows methodology set out in Brand and Price (2000) and Dubourg et al. (2005). For further details please consult Annex 1.

the UK population gives an estimate of 17,294 distraction burglaries in the UK. The scale of organised distraction burglary is estimated to be approximately £35 million³².

Costs

The social and economic costs of distraction burglaries include the losses and the physical and emotional harms sustained by victims, as well as any CJS costs from resulting prosecutions. The losses identified in the scale section form part of the social and economic costs but additional harms have been quantified using Home Office costs of crime estimates for 'burglary – domestic'³³. The costs of the estimated 1,523 distraction burglaries that were attempted but unsuccessful in the UK have also been included.³⁴ The total social and economic costs of organised distraction burglary are estimated to be £91 million. It is possible that the costs of distraction burglaries are not the same as those of domestic burglaries but this is the best available proxy.

c. Metal theft

Scope

Metal theft refers to thefts of items for the value of their constituent metals, often copper, lead and aluminium (Ministry of Justice, 2012). Common targets for metal theft include copper wire and cable from transport and utility networks. Other targets include lead from churches and other historic buildings, catalytic converters (for their precious metal content), and street furniture, such as aluminium road signs and lead drain covers (ibid.).

Police intelligence suggests that metal theft is committed by both individuals committing low-level, opportunistic offences, and organised groups committing thefts that are often higher value, and which require greater levels of planning or expertise. It is this latter category of offences that are considered within the scope of this report.

Scale

Offences involving the theft of metal have grown rapidly in recent years. (ACPO, 2012) There is no separate recorded crime category for metal theft. However, it has been estimated that there were between 80,000 and 100,000 other theft offences recorded by police where metal was stolen in 2010/11 (Ministry of Justice, 2012)³⁵.

³² Using the average value of property stolen of £2,040. This is taken from R Chaplin *et al.* (2011) and is the average (mean) value of property stolen during a domestic burglary.

³³ Unit cost of a domestic burglary is £3,925.

³⁴ Using police recorded crime and the same multiplier as for successful distraction burglaries. The same unit cost as for successful distraction burglary is used excluding the value of property taken as it is assumed in unsuccessful distraction burglaries no property is stolen.

³⁵ Metal theft offences are likely to be underreported with some offences not recorded accurately as metal theft related.

Intelligence from the British Transport Police suggests that approximately 20 per cent of metal theft offences are organised.³⁶

The scale of organised metal theft is best³⁷ measured by calculating the scrap value of stolen items. As accurate data on the average value of metal stolen in organised offences are not available, the scale of organised metal theft has been estimated by considering the expenditure on replacing the stolen metal by victims of metal theft³⁸.

The Home Office recently estimated the expenditure on replacing stolen metal by victims of metal theft at £128 million per year. (Ministry of Justice, 2012) As this estimate is based on figures from a selection of companies and industries that were able to identify this expenditure, it is likely to understate the total expenditure on replacing stolen metal³⁹. Assuming 20 per cent of metal thefts are organised, the scale of organised metal theft is approximately £26 million. This figure does not take account of the fact that expenditure on replacement metal will be higher than the scrap value of metal stolen (since replacement expenditure covers new materials – the costs of which have been rising in recent years - and labour costs), nor the fact that organised metal theft offences are likely to have a higher average value than non-organised offences (Sidebottom, 2012) as organised criminals are likely to target higher value and larger metal items.

Costs

There are a range of costs associated with metal theft, including the cost of replacing stolen metal, the cost of repairing damage resulting from the theft, service disruption (for example, when offences occur on the rail infrastructure or affect public utilities) and loss of revenue (Ministry of Justice, 2012). Significant costs also fall to police forces⁴⁰ to tackle organised metal theft. The CJS costs of investigating and prosecuting organised metal theft offences are also relevant.

The Home Office recently estimated the cost of metal theft to the UK at £220 million per year⁴¹ (Ministry of Justice, 2012). This is likely to be a conservative estimate. Not

³⁶ This is based on the metal theft offenders apprehended by the British Transport Police. This assumption has been applied to all metal theft and so may prove inaccurate. However, this was the best available estimate of the proportion of metal theft offences that are organised.

³⁷ This is most consistent with the definition of scale used in this report which is designed to capture the market size of each organised crime type by considering the potential revenue available to organised criminals.

³⁸ This will include both the cost of materials and the cost of labour.

³⁹ Including government departments and private sector companies. These costs have not been extrapolated to the whole of the UK.

⁴⁰ Including the British Transport Police which has at least 100 officers dedicated to tackling metal theft from the railways, both organised and non-organised.

⁴¹ This estimate used a bottom-up approach using estimates from other Government departments and the private sector which provide some data on the social and economic costs of metal theft at the individual company and market sector level. This is not a comprehensive estimate as figures were only identified by a selection of companies and sectors affected by metal theft. There this is likely to represent a conservative estimate of the costs of metal theft to the UK. Figures have not been extrapolated to account for those companies or sectors affected but which do not provide figures.

all affected sectors are covered and not all the potential costs of metal theft could be quantified, including the CJS costs of organised metal theft and the defensive and preventative costs to police forces, which could not be separated from the costs of tackling other (non-organised) metal theft offences.

Assuming that 20 per cent of these costs are attributable to organised crime means that organised metal theft costs approximately £44 million each year. As with the scale estimate, this is likely to underestimate the costs of organised metal theft offences. However, this is the best available estimate of the costs of organised metal theft.

d. Plant theft

Scope

Theft of construction and agricultural equipment is commonly known as plant theft. The Plant and Agricultural National Intelligence Unit (PANIU)⁴² suggests that such equipment is often not well secured making theft easy, while demand from abroad means that equipment often moves quickly out of the UK. Theft of small (usually handheld) items is largely not considered attributable to organised crime and can be the result of opportunist thieves (Edwards, 2007). However, the theft of larger items of plant, which are often stolen to order, is usually attributable to organised criminals, who often use networks abroad to send items out of the UK.

Scale

There were over 6,000 plant items recorded as stolen by the Plant and Agricultural National Intelligence Unit in the UK in 2011 with an estimated value of £100 million. These figures cover larger plant items only so are considered wholly attributable to organised crime.⁴³

Costs

Existing estimates of the social and economic costs of plant theft have been developed by Combined Industry Theft Solutions (CITS). These costs are estimated to be approximately £650 million each year to the UK. This includes plant replacement costs, hire of replacement equipment, loss of business, and insurance claim processing (CITS, 2012). This represents the best currently available estimate and is broadly consistent with previous estimates calculated by the Home Office which place the costs of plant theft between £600 million and £1 billion (Smith and Walmsley, 1997).

⁴² PANIU is a specialist police unit. Its primary aim is to reduce plant and agricultural theft across the UK.

⁴³ Intelligence from PANIU suggests that theft of large plant items requires organised networks to plan and carry out offences, and to sell on the stolen items.

e. Road freight crime

Scope

Road freight crime (the theft of haulage vehicles and their loads) is “a largely organised and increasingly violent crime” (TruckPol, 2011). Organised criminals often target valuable loads when they are vulnerable⁴⁴ through techniques such as theft, hijacking and deception. TruckPol, the national road freight crime intelligence unit, suggested that all road freight crime is attributable to organised crime because ‘to steal and realise the value of stolen goods requires a network of individuals to whom the goods can be passed’ (ibid.).

Scale

There were 2,567 incidents of road freight crime recorded in the UK in 2010 (TruckPol, 2011). This includes 1,370 incidents of thefts of vehicle, almost 850 incidents of thefts from vehicles, as well as 12 incidents of hijacking and 10 incidents of deception. TruckPol estimated the value of stolen vehicles and loads in 2010 to be over £52 million, all of which can be attributed to organised crime.

Costs

The social and economic costs of organised road freight crime include the scale estimate of the value of goods stolen, the physical and emotional costs to victims of violent robbery or hijacking, the costs of replacing stolen goods, and any enforcement and CJS costs resulting from prosecuting organised criminals. These costs have been estimated using Home Office costs of crime estimates for ‘theft of a commercial vehicle’. The 27 violent incidents recorded by TruckPol in 2009 (TruckPol, 2010) have also been included in the costs estimates. The social and economic costs of road freight crime are estimated to be approximately £64 million.

f. Vehicle crime

Scope

Organised vehicle crime includes theft of high-value vehicles to order, theft of vehicles for export to the developing world, and theft of older vehicles to be broken down for parts. Vehicles are also stolen for use in fraud offences.

Scale

The scale of organised vehicle crime has been estimated using recorded crime figures for the ‘theft of vehicle offence’, attributing approximately 60 per cent to organised crime⁴⁵. In addition, the Crime Survey for England and Wales identifies six

⁴⁴ Either in lay-bys or when they arrive early to warehouses (source: TruckPol Intelligence).

⁴⁵ Based on intelligence from specialist vehicle crime police units that unrecovered stolen vehicles are a good indication of the involvement of organised crime. This is because the methods used by organised criminals are more sophisticated, often because vehicles are exported to other countries or dismantled for their constituent parts. As such, the chances of those vehicles being recovered is low.

per cent of burglaries as burglaries where car keys are stolen. All of these ‘car-key burglaries’ are attributed to organised crime⁴⁶ and in all cases the vehicle is assumed to be stolen but not recorded as a theft of vehicle offence.⁴⁷

It is estimated that approximately 130,000 vehicles were stolen by organised criminals in the UK, including those resulting from car key burglary. The average value of a stolen vehicle is estimated to be £2,500⁴⁸. This yields an estimated market size of organised vehicle crime of £325 million. This estimate captures both what is detected and undetected in the market⁴⁹ but is still likely to be an underestimate as organised criminals are likely to target higher than average value vehicles.

Costs

The costs of organised vehicle crime have been calculated using the Home Office costs of crime estimate for ‘theft of a vehicle’. This unit cost, including the value of property damaged or stolen, physical and emotional costs to victims, and CJS costs, is £5,298⁵⁰. Applying this unit cost to the number of stolen vehicles attributed to organised crime results in costs of approximately £690 million. In addition, the cost of approximately 47,000 “car-key burglaries”⁵¹ is also included. This gives a total cost estimate of organised vehicle crime of approximately £920 million.

Organised child sexual exploitation

Scope

“Child sexual exploitation is a form of child abuse” involving exploitative situations where young people receive something as a result of performing, or others performing on them, sexual activities. (Department for Education, 2011) There are three broad categories of child sexual exploitation:

- inappropriate relations;
- ‘boyfriend’ model of exploitation including peer exploitation; and
- organised/networked sexual exploitation or trafficking.

These categories are often linked and all three categories can contain elements that are organised. However, this section focuses on the third category because it is

The Crime Survey for England and Wales in 2011 reported that approximately 40 per cent of stolen vehicles are recovered.

⁴⁶ This is assumed because of the planning and coordination that is required in order to commit the offence.

⁴⁷ Instead the burglary would be recorded as the primary offence according to Home Office Counting Rules.

⁴⁸ The average value of a stolen vehicle as reported in the Crime Survey for England and Wales 2010/11. This is the average value of both recovered and unrecovered vehicles.

⁴⁹ Through the use of total crime multipliers to account for crime not reported to or recorded by the police.

⁵⁰ Home Office costs of crime estimate for theft of a vehicle. This has been updated to account for inflation using HM Treasury gross domestic product (GDP) deflators. Costs are for 2010.

⁵¹ Based on the assumption from the Crime Survey of England and Wales that six per cent of burglaries involve car keys being stolen and that this is necessary for the theft of the vehicle.

entirely organised in nature, according to the definition used in this report. This category involves the grooming and abuse of children and young people by organised networks and groups. For example, children and young people may be passed through networks where they may be forced or coerced into sexual activity with multiple men. (Barnardos, 2011a) This exploitation can take place over many months or years (Barnardos, 2011b) and “violence, coercion, and intimidation are common” (Department for Education, 2011).

As organised child sexual exploitation does not always involve a financial motive for the organised crime groups involved, it is not meaningful to estimate the potential revenue for organised criminals. Any such estimates would provide only a partial view of the revenues available from this type of organised crime. Instead the scale estimate reflects the number of victims of organised child sexual exploitation.

Scale

Several studies (including Barnardos (2012); CEOP (2011); and Barnardos (2011a)) have attempted to estimate the overall scale of child sexual exploitation, only a proportion of which would be classified as organised crime. The Office of the Children’s Commissioner is undertaking work to gather evidence on child sexual exploitation by gangs or groups, including the number of known victims, using a definition which closely matches the definition of organised crime used in this report. Results from Phase 1⁵² suggest there are at least 2,409 victims⁵³ of child sexual exploitation by gangs and groups. (Berelowitz et al., 2012) This only captures victims known to agencies responding to a request for evidence, and is therefore likely to underestimate the scale of organised child sexual exploitation (for example, agencies in some police force areas did not submit any information on cases of child sexual exploitation). As public and practitioner awareness of the problem increases, more victims are likely to be identified.

Costs

The social and economic costs of organised child sexual exploitation are wide-ranging and include the physical and emotional costs of coercion, the costs of sexual exploitation, and a number of costs resulting from the abuse. Organised child sexual exploitation is estimated to cost approximately £1.1 billion per year. This estimate includes violence suffered at the hands of the exploiters, the physical and emotional costs of rape and sexual assault, self-harm and attempted suicide following or during the exploitation, sexual health issues, and disengagement from education.

The estimated costs do not include costs to families as a result of a child being sexually exploited including the impacts on parents and other family members, such

⁵² Phase 1 ran from October 2011 until September 2012 and focussed on gathering evidence on the nature and reported prevalence of sexual exploitation of children by groups and gangs.

⁵³ This figure is based on records from August 2010 until October 2011. This 14 month period is likely to overestimate the number of victims in a year. However, this is still likely to underestimate the true scale of organised child sexual exploitation as many cases are thought to go unreported.

as strained relationships and family breakdown, financial expenditure, and lost output as a result of having to take time off work. This is because quantified data on the extent and cost of these harms are not available.

Costs incurred by agencies involved in preventing children becoming victims of sexual exploitation have not been included as they could not be identified separately. Criminal Justice System costs are also excluded as data on organised child sexual exploitation offences are not collected separately from other child sex offences.

Counterfeit currency

Scope

Organised criminals produce a variety of banknotes and coins but the main focus of criminals in the UK is on UK banknotes and coins. This includes Bank of England notes as well as Scottish and Northern Irish sterling banknotes. Limited data are available for both the scale and costs of organised counterfeit currency so these estimates should be considered as a minimum.

Scale

Approximately 350,000 counterfeit notes were taken out of circulation in 2010 with a face value of £6.7 million.⁵⁴ The procedures and technology necessary to produce counterfeit coins and notes are such that all counterfeit currency is assumed to be the result of organised crime. However, this is only a partial estimate of the scale of organised counterfeit currency, as not all counterfeit currency is identified and taken out of circulation. In addition, the total market size would include counterfeiting of sterling coins and non-sterling currencies produced in the UK.

Costs

It has not been possible to quantify the social and economic costs of counterfeit currency beyond the losses incurred by individuals and businesses handing in counterfeit currency and therefore losing the equivalent value in sales revenue. The social and economic costs of currency counterfeiting will be a minimum of £6.7 million. Additional costs that could not be quantified include the costs to retailers of training staff to detect counterfeits or installing detection devices, the costs of designing currency in response to specific threats, and the costs to the CJS of any prosecutions relating to counterfeit currency.

⁵⁴ Data taken from the Bank of England and the Association of Commercial Banknote Issuers (ACBI) for 2010. This can vary considerably depending on the outcome of police or SOCA operations to target counterfeit currency.

Drugs supply

Scope

Organised crime groups and networks produce, supply, and distribute illicit drugs within the UK. There will be some exceptions, for example, where cannabis is grown and used by the same person, but this is unlikely to considerably affect either scale or cost estimates.

The scale of organised drugs supply captures the amount of money spent by drug users on buying illicit drugs⁵⁵. The costs of organised drug supply include the harms resulting from the use of illicit drugs. This includes the costs of acquisitive crimes committed to fund addiction, costs of drug offences under the Misuse of Drugs Act 1971, costs of health harms resulting from drug use, the costs of drug treatment, and public spend directly aimed at tackling illegal drugs supply and demand in the UK.

Data limitations mean that it is not possible to include all illicit drug types that are facilitated by organised crime.⁵⁶

Scale

The scale of the illicit drugs supply is best estimated by considering the demand for illicit drugs. This is defined as the money spent by drug users on certain illicit drugs. This definition of scale is consistent with previous Home Office estimates including Pudney et al. (2006). Data from the Offending, Crime and Justice Survey and the Arrestee Survey have been used to calculate expenditure on eight drug types: amphetamines; cannabis; crack cocaine; ecstasy; heroin; LSD; magic mushrooms; and powder cocaine. Estimates for England and Wales have been scaled up to the UK using population and arrest statistics. The size of the illicit drugs market in the UK⁵⁷ in 2010 is estimated to be £3.7 billion. Further details of changes to the methodology and data used compared with previous Home Office estimates are described in Annex 2.⁵⁸

Costs

This report builds on previous work to estimate the proportion of each acquisitive crime type that is committed to fund addiction and to then apply these proportions to an estimate of the total cost for each type of acquisitive crime, based on the costs of crime methodology. Further details can be found in Annex 3. Drug-law offences⁵⁹ and enforcement costs were calculated using a separate methodology. Drug-related

⁵⁵ Due to data availability this report considers the supply of amphetamines; cannabis; crack cocaine; ecstasy; heroin; LSD; magic mushrooms; and powder cocaine.

⁵⁶ New psychoactive substances are within the scope of this report, however, data availability on their scale and social and economic costs are not sufficient to be estimated here.

⁵⁷ Estimates for England and Wales have been extrapolated to the UK including Scotland and Northern Ireland. Further information can be found in Annex 1.

⁵⁸ Due to the methodological changes from previous Home Office estimates of the scale of the illicit drug market, Annex 2 details the methodology and data used.

⁵⁹ These include possession, supply, unlawful importation or exportation, and other drug offences.

health costs include hospital admissions, neonatal care, and the costs of treating drug-related HIV. The social and economic costs of illicit drugs in the UK⁶⁰ are estimated to be £10.7 billion, of which almost £6 billion is the result of drug-related crime.

Organised environmental crime

Scope

Several types of environmental crime occur in the UK. Organised crime groups are involved in elements of environmental crime, including 'waste crime', which includes the illegal dumping of waste products, such as 'end of life' vehicles and metal (Environment Agency, 2011). Illegal dumping of construction and demolition waste can also include hazardous waste such as asbestos (*ibid.*).

Intelligence suggests that some criminal groups trafficking electronic-waste (e-waste)⁶¹ are also involved in crimes such as theft, human trafficking, fraud, drugs supply, firearms supply and money laundering.⁶² There is also a link between organised crime and illegal export of e-waste to countries in Africa and Asia.⁶³ The e-waste can be stripped down and valuable parts taken such as gold, copper, steel and other metals that can be reclaimed from the electrical waste.

Not all environmental crime is organised and there are limited data available, particularly concerning the proportion of activity that is organised, so estimating the scale and social and economic costs of organised environmental crime has not been possible. Instead, available data are set out to give an indication of possible scale, and social and economic costs.

Scale

The Environment Agency reports that there were 661 active illegal waste sites in April 2011, 540 of which were active sites within 200 metres of a sensitive receptor.⁶⁴ In 2010 the Environment Agency prevented 4,500 tonnes of waste from being illegally exported and carried out 280 successful prosecutions, resulting in fines at a total value of £943,000 for illegal waste activity.

The Environmental Investigation Agency estimates that up to 50% of all computers discarded in the UK enter illegal trade streams as e-waste (Environmental

⁶⁰ Estimates for England and Wales have been extrapolated to the UK including Scotland and Northern Ireland on the basis of population. Further information can be found in Annex 1.

⁶¹ E-waste contains certain valuable components that are desirable to recover. It is easy to source, relatively cheap to ship, and the risk of being caught is low.

⁶² Speech by Lord Smith, Head of the Environment Agency, 7th International Interpol Conference on Environmental Crime, September 15, 2010.

⁶³ Particularly electrical and electronic consumer goods.

⁶⁴ Sensitive receptors include: dwellings; schools; businesses; water courses; groundwater; Source Protection Zones; public foot paths; bridleways; public access areas; Sites of Special Scientific Interest; Areas of Outstanding Natural Beauty; Special Protection Areas; Special Areas of Conservation; and Ramsar sites.

Investigation Agency, 2011). When new European Union rules came into force in the UK in 2007, many companies entered the market as recyclers, expecting up to 1.5 million tonnes of electrical and electronic waste needing to be recycled every year (ibid.). By 2009 the volume of e-waste recorded was only one-third of what was projected, with the bulk of the remainder siphoned off onto the black market.⁶⁵

Costs

The social and economic costs of organised environmental crime are likely to include the costs of enforcement to prevent the illegal export and dumping of waste, the costs of removing illegally dumped waste, and the human cost due to the damage to health from hazardous waste. E-waste can be highly hazardous to both the environment and human health due to the substances it contains. For example, older computers and televisions can contain large amounts of lead. It has also been suggested that young children abroad have been involved in the stripping of materials from exported waste (ibid.) As well as the physical and environmental costs, there will be the costs of enforcement, including the regulation of waste sites and shipments, and any prosecutions resulting from organised illegal activity.

Firearms supply

Scope

The majority of criminally linked shooting incidents in the UK can be described as organised in intent but disorganised in nature (Home Office, 2012a), suggesting that the supply of illicit firearms is highly organised. While the number of illicit firearms in use by organised criminals is thought to be small, the harm caused by these firearms is substantial. Sufficient open source data do not exist to quantify the scale of illicit firearms. However, data are available to assess the social and economic costs of illicit firearms, and these are set out below.

Scale

The scale of organised illicit firearms includes the international trafficking of illicit weapons as well as the domestic supply of illicit firearms to organised crime groups throughout the UK. It is assumed that all those involved in the international trafficking of firearms would fall within the remit of organised crime as defined in this report. The supply chain involves 'importers', 'middle men', and those who store guns to be readily accessible for criminal use (ibid.). Intelligence from the National Ballistics Intelligence Service (NABIS) (Home Affairs Select Committee, 2010) suggests that, often, the same firearms are passed between different criminal groups and used in different violent incidents. This suggests that the market for illicit firearms within the UK is best characterised by that of suppliers loaning firearms to a number of organised crime groups.

⁶⁵ The Guardian, 'Dirty Deals', July 9 2009.

Costs

The social and economic costs of firearms supply capture the harms resulting from the use of firearms supplied by organised crime groups. This has been calculated using the estimated number of incidents where certain firearms⁶⁶ were fired or used as weapons. This totals over 4,000 offences⁶⁷. While these offences themselves are not necessarily organised, it is assumed that the firearms used to commit them were supplied by organised crime networks. Therefore, the offences are direct consequences of organised crime.

Using Home Office costs of crime estimates, these offences are attributed a value. The estimated social and economic costs of illicit firearms are £160 million. While this is likely to be an overestimate of the costs of these offences⁶⁸, this is likely to significantly underestimate the harms resulting from the organised supply of illicit firearms.

Data were not available for Northern Ireland so this estimate only covers England, Wales, and Scotland and should be considered partial.⁶⁹

Organised fraud

Scope

Fraud is a substantial element of the threat from organised crime groups (National Fraud Authority, 2012). Organised fraud is thought to involve a wide range of activities including personal and business tax fraud, benefit fraud, payment card crime, and elements of excise duty fraud. There are likely to be organised elements of charity fraud but no data on this were available. A number of enablers can be used to commit fraud including identity theft and cyber crime.

Scale

The scale of organised fraud is based on estimates from the National Fraud Authority (NFA) in its Annual Fraud Indicator (AFI). The majority of this is made up of organised criminal attacks on HM Revenue and Customs (HMRC). Attacks on the tax system totalled approximately £5 billion in 2010/11. (HMRC, 2012) This includes Missing Trader Intra-Community (MTIC) fraud, smuggling of alcohol and tobacco and

⁶⁶ In England and Wales those weapons excluded are air weapons, imitation firearms and other firearms or weapons for which no license is required. For Scotland air weapons, imitation firearms, and unidentified firearms are excluded.

⁶⁷ Provided by Home Office Statistics, breakdown of firearms offences reported (Home Office, 2012b).

⁶⁸ As some of the firearms involved will have been legally held or misappropriated and not supplied by organised crime. There is also the possibility that some offences are likely to still have been committed if the firearm was not available.

⁶⁹ Given the differences in the use of firearms in Northern Ireland, assuming the same rate of use per population across all countries of the UK was not appropriate. As such, estimates have not been extrapolated to the UK. No data were available for Northern Ireland so the estimate presented is for Great Britain only.

VAT repayment fraud. These are ‘co-ordinated and systemic attacks’ (HMRC, 2012) and can be wholly attributed to organised crime.

Estimated organised proportions are applied to a range of other fraud types including mass-marketing fraud and benefit fraud to estimate the scale of organised fraud. Estimates have been adjusted by the NFA to account for undetected fraud.

The total scale of organised fraud in the UK is estimated at £8.9 billion⁷⁰.

Costs

The social and economic costs of organised fraud include the losses sustained by individuals, businesses, and government departments as well as the costs of dealing with the fraud⁷¹, and the CJS costs resulting from fraud offences. The losses sustained as a result of organised fraud are outlined in the scale section and form the majority of the social and economic costs estimated. The CJS costs of organised fraud offences have been estimated as approximately £19 million.⁷² This gives an estimate of the social and economic costs of organised fraud of approximately £8.9 billion⁷³. This will not capture the full costs of organised fraud as it is not possible to quantify many of the other costs of fraud. These include the time spent by victims of fraud rectifying the damage done by organised fraudsters, the costs of operating fraud prevention bodies including Action Fraud and the Credit Industry Fraud Avoidance System (CIFAS), and the precautionary costs incurred by individuals and businesses trying to avoid becoming victims of fraud.⁷⁴ Government expenditure on tackling fraud should also be included but this could not be separately identified.⁷⁵

Organised immigration crime

Some aspects of immigration crime are known to have substantial organised elements. Not all immigration crime is organised however, so this report applies assumptions of organised involvement to data on detected immigration crime. These assumptions are largely based on what is known to date about immigration crime. The assumptions used in these sections may not be valid if applied to future evidence on immigration crime.

The following types of organised immigration crime are examined in this report:

- organised abuse of legitimate entry;
- human trafficking (sexual exploitation);

⁷⁰ This is based on the NFA estimate of £9.9 billion for organised fraud but accounting for more recent data from HMRC on the scale of criminal attacks on the tax system.

⁷¹ This can include rectifying any changes made to accounts by organised criminals, stopping credit cards and so on. It can also include emotional costs resulting from being a victim of fraud.

⁷² Full details of how this was calculated can be found in Annex 1.

⁷³ Rounded to two significant figures.

⁷⁴ This will include expenditures on shredders but also precautionary behaviour such as avoiding certain methods or places of payment (Levi & Burrows, 2008).

⁷⁵ For example, this will include HMRC costs of preventing Missing Trader Intra-Company (MTIC) fraud, as well as the costs of the *Fighting Fraud Together* and the Fraud, Error, and Debt Taskforce.

- human trafficking (other exploitation); and
- organised people smuggling.

Definitions for each subsection are set out together with estimates of scale and the social and economic costs. Data sources in this section are mainly management information from the UK Border Agency.⁷⁶ Costs include those harms occurring within the UK. In some cases this will overestimate the costs of organised crime to the UK and UK public services⁷⁷. The social and economic impacts of migration generally are not considered within the scope of this report⁷⁸.

a. Abuse of legitimate entry

Scope

This section is intended to capture organised criminals targeting legitimate processes to facilitate illegal migration, including sham marriages⁷⁹ and abuse of temporary and permanent migration routes. Organised crime activities such as the organised abuse of Tier 4 of the Points Based System (the study route) and visa overstaying are within the scope of this section, but data were not available to allow them to be estimated. The estimates in this section include the organised element within both those detected attempting to enter the UK in 2010/11 and those already in the UK but detected in 2010/11 as having abused legitimate entry processes on arrival. These figures do not account for activity unknown to the authorities. As such, this should be considered an underestimate of organised activity. Cost estimates focus on those who are successful in entering the UK and those who are detected and returned at the point of entry.

Scale

This section is based on management information provided by the UK Border Agency, highlighting detected activity. In 2011, there were:

- 22,200 forged supporting documents cases, where migrants attempt to obtain a visa to enter the UK;
- 1,900 forged enabling document cases, where migrants already residing in the UK attempt to change their immigration status⁸⁰;

⁷⁶ This is previously unpublished management information. It is derived from live UK Border Agency administrative systems and, as such, may be liable to change. All figures have been rounded to the nearest 100.

⁷⁷ The report allows for the inclusion of physical and emotional costs to irregular migrants without leave to remain in the UK which do not always result in costs to UK public services.

⁷⁸ This includes costs of health and education provision and benefits of additional tax revenues. For further information see Migration Advisory Committee (2012).

⁷⁹ A sham marriage, or marriage of convenience, is contracted between (a) a British citizen, a person settled in the UK, a European Economic Area (EEA) national, or a non-EEA national with existing leave, and (b) a non-EEA national without leave or whose leave is about to expire, solely as a basis for trying to enable the latter to enter, remain in or extend their leave in the UK.

⁸⁰ This figure includes migrants applying to change their immigration status in the UK who were found to be using fraudulent or stolen documentation.

- 2,000 visa port refusals, where migrants were denied entry to the UK after obtaining a genuine visa⁸¹;
- 1,000 enforcement arrests of migrants already in the UK⁸²;
- 1,700 Section 24 reports⁸³ of registration officers' suspicions of sham marriages.

The scale of organised abuse of legitimate entry is estimated as the fees paid to organised criminals by migrants attempting to enter or remain in the UK. In this report, it is assumed that approximately 75 per cent of forged supporting document cases, in-country enforcement arrests, and sham marriages can be attributed to (that is, enabled or facilitated by) organised crime. This is a conservative assumption reflecting intelligence that most, but not all, activity in these areas is attributable to organised crime. Intelligence suggests that approximately 80 per cent of visa port refusals and in-country forged document cases are the result of organised crime.⁸⁴

These assumptions result in an estimate of almost 22,000 incidents of abuse of legitimate entry attributable to organised crime in 2011. The value of this activity is estimated using the average fees migrants paid in order to enter or remain in the UK⁸⁵. The scale estimate for detected organised activity in this area is therefore approximately £26 million.

Costs

The social and economic costs of organised abuse of legitimate entry include the costs of removing irregular migrants detected both at the border and within the UK, the costs of asylum claims resulting from removal processes being started, and the costs of detaining irregular migrants prior to removal. The costs of operating the National Document Fraud Unit (NDFU) have also been included⁸⁶. These costs amount to approximately £11 million.

Other costs to the UK Border Agency of organised immigration crime have been considered in the organised people smuggling section. These include UK Border

⁸¹ These are visa port refusals where individuals were denied entry to the UK despite having obtained a genuine UK visa after initial decisions to grant a visa were revised following further inspection of the evidence.

⁸² And who were matched to a valid visa and encountered within 12 months of that visa being issued. These include those individuals who were arrested but did not require a visa to enter the UK (e.g. Brazilians or those from USA). As these people are encountered within 12 months of their visa being issued, visa overstayers (who are unlikely to be involved in organised immigration crime) are likely to be excluded. Those who are encountered and arrested could be breaking the terms of their visa without the involvement of organised crime groups. To reflect this, an organised proportion has been applied to these numbers.

⁸³ Section 24 reports provide an indication of the possible scale of sham marriages. They are used by registration officers to notify the UK Border Agency when they suspect that a marriage they have been asked to officiate may not be genuine.

⁸⁴ For forged enabling documents of in-country immigration applications varying proportions of organised crime involvement are assumed. These assumptions can be found in Annex 1.

⁸⁵ Further details of prices can be found in Annex 1.

⁸⁶ Attributing approximately 80 per cent to organised crime.

Agency expenditure to protect UK borders from the threat of organised immigration crime. It has not been possible to divide this expenditure between the organised immigration crime types considered in this report.

b. Human trafficking

Scope

Human trafficking is the exploitation of human beings for profit. It is a national and international crime involving the recruitment, transportation, transfer, harbouring or receipt of persons by means of threat or use of force or other forms of coercion, abduction, fraud, deception, or abuse of power⁸⁷. Forms of exploitation include sexual exploitation, forced labour, criminal exploitation and domestic servitude. Historically, most adult victims of human trafficking identified were female victims of sexual exploitation. However, other forms of exploitation, as well as the trafficking of men and children, have become more prominent. For instance, a recent report from the UK Human Trafficking Centre (UKHTC) suggests that sexual exploitation accounted for 31 per cent of victims encountered by law enforcement agencies (SOCA, 2012), with the remainder accounted for by other forms of exploitation such as labour exploitation and domestic servitude.

The estimates of human trafficking in this report focus on the trafficking of foreign women for the purposes of sexual exploitation as this is where the data are most robust. Only an overview is provided on the scale and costs of human trafficking for other types of exploitation, such as labour exploitation or the trafficking of children and men. Domestic trafficking, which is thought to involve a significant level of organised crime, is not included in this section. This is because the focus here is on immigration crime. Sufficient data do not exist to estimate the scale or social and economic costs of domestic trafficking.

Scale - sexual exploitation

The scale of organised human trafficking for sexual exploitation estimated in this report is the revenue generated by victims of human traffickers. This is not a measure of the income of the trafficked victims, rather a measure of the revenue available to their traffickers.⁸⁸ Project ACUMEN⁸⁹ identified 2,600 foreign women in England and Wales who were victims of human trafficking for the purposes of sexual exploitation in 2009/10. A further 9,200 were identified as vulnerable to being trafficked or may have been trafficked previously but are not included in this estimate.

⁸⁷ Taken from the United Nations Convention against Transnational Organised Crime (UN, 2000).

⁸⁸ There is limited evidence to suggest what proportion of revenue is kept by the trafficked victim. Webb and Burrows (2009) suggest that between 10 and 50 per cent could be kept by the victim.

⁸⁹ Project ACUMEN commenced in January 2009 as a multi-agency, year long initiative to improve knowledge and understanding of the scale of human trafficking for sexual exploitation in England and Wales. A report of its findings was published in August 2010.

Unlike other estimates for organised immigration crime in this report, this is an attempt to fully quantify the scale of the market and not just what is known. Separate data are used for Scotland and Northern Ireland where 73 and 23 victims respectively were identified or recovered in 2010/11.⁹⁰ The Scottish Crime and Drug Enforcement Agency (SCDEA) estimated the annual revenue generated by one female sex worker as £48,000 (SCDEA, 2011). This would suggest that the scale of human trafficking of foreign women for the purposes of sexual exploitation in the UK is valued at approximately £130 million, all of which can be attributed to organised crime. This estimate is based on a limited number of identified victims in Scotland and Northern Ireland so is likely to underestimate the true scale of the market.

Scale – other forms of exploitation

A recent UKHTC intelligence assessment (SOCA, 2012) highlighted that, of the 2,077 potential victims of trafficking encountered by law enforcement agencies in the UK in 2011, 69 per cent⁹¹ were involved in types of exploitation that were not sexual exploitation. This included 461 individuals identified as potential victims of labour trafficking, 353 victims of criminal exploitation, 222 victims of domestic servitude, and two victims of trafficking for organ harvesting.⁹² These estimates are likely to underestimate the scale of human trafficking as the report includes only encountered victims. Despite these estimates of the number of victims, it has not been possible to estimate the scale of these forms of human trafficking as the revenue from each type of exploitation is not known and is likely to differ from that of sexual exploitation.

Costs – sexual exploitation

The social and economic costs of human trafficking for the purposes of sexual exploitation include costs incurred by victims at the hands of traffickers as well as clients. These include physical and emotional costs and the costs of restrictions to freedom of movement. Health costs incurred by public services in dealing with victim injuries and illnesses including unplanned pregnancies and sexually transmitted infections are also included together with the costs of victim services and CJS costs for the prosecution of human trafficking offences⁹³. Total costs are estimated at £890 million. Enforcement costs to the police and the UK Border Agency should also be included but could not be estimated at this time.

Costs – other forms of exploitation

It has not been possible to estimate the social and economic costs of human trafficking for the purposes of labour exploitation, criminal exploitation, or domestic

⁹⁰ Data taken from the Scottish Crime and Drug Enforcement Agency (SCDEA) and the Organised Crime Taskforce in Northern Ireland, respectively.

⁹¹ Including those who were involved in multiple or unknown forms of exploitation.

⁹² Some of these potential victims of trafficking will be from the UK and so are victims of domestic rather than international trafficking.

⁹³ These are likely to be an underestimate as intelligence suggests prosecutors will often use other offences to secure a conviction. It was not possible to identify these other offences.

servitude. This is because of a lack of research evidence and data quantifying the harms of these forms of exploitation.

c. People smuggling

Scope

People smugglers are involved with facilitating the entry of irregular migrants into the UK. Evidence suggests that people smugglers collaborate, operating flexibly to move migrants wanting to travel to the UK. This can involve supplying migrants with the necessary documents to enter the UK or providing transport from the country of origin to the UK. These figures are based on accusations and detections of illegal activity and so do not account for activity unknown to the authorities. As such, they should be considered a partial representation of organised activity. Scale estimates reflect detected attempts to enter the UK clandestinely, whether successful or not. Cost estimates focus on those who are successful in entering the UK and those who are detected and returned at the point of entry.

Scale

As with the abuse of legitimate entry, this section uses management information from the UK Border Agency on detected activity to inform estimates. In 2011, there were:

- 7,800 clandestine entrants⁹⁴;
- 2,100 inadequately documented arrivals (IDAs)⁹⁵;
- 3,000 in-country enforcement arrests of migrants who could not be matched to a visa⁹⁶.

This scale of organised abuse of legitimate entry is estimated as the fees paid to organised criminals by migrants attempting to enter the UK. In this report it is assumed that 75 per cent of these categories are attributable to organised crime. These assumptions suggest that organised crime groups facilitated the entry of almost 10,000 people⁹⁷ detected in 2011. The average fee paid by migrants to organised crime groups varies by country of origin⁹⁸ and, in the case of inadequately documented arrivals, the route taken⁹⁹. This gives an estimate of the total scale of

⁹⁴ The number of clandestines reported here is based on operational data that includes any illegal entrants who the police or immigration officers are satisfied have arrived in the UK within the last 72 hours. Clandestine entry includes concealment in vehicles, evading controls at port or landing at an uncontrolled point such as from a small boat.

⁹⁵ IDAs are non-UK or non-EEA nationals who knowingly arrive at the UK border without the proper documentation and/or entry clearances.

⁹⁶ As these migrants could not be matched to a visa it is likely that they entered either clandestinely or as an IDA. This report assumes that 50 per cent entered clandestinely and 50 per cent as inadequately documented arrivals. Further details can be found in Annex 1.

⁹⁷ Detected either on arrival or subsequent to their arrival.

⁹⁸ Figures have been taken from Webb and Burrows (2009). Prices range from £2,000-£3,000 for journeys starting in Europe to over £20,000 for journeys starting in China and India.

⁹⁹ Different costs have been assumed for journeys via different locations. Further details can be found in Annex 1.

organised people smuggling of £88 million. This figure is partial, reflecting only attempts to enter the UK detected by authorities; it does not include unsuccessful attempts stopped before reaching the UK border or successful attempts undetected by authorities.

Costs

The social and economic costs of organised people smuggling include the costs of any asylum application processed by those successfully entering the UK illegally¹⁰⁰, the costs of removing irregular migrants detected both at the border¹⁰¹ and within the UK, and the costs of detaining irregular migrants prior to removal. These costs amount to approximately £140 million. They include UK Border Agency expenditure on the Risk and Liaison Overseas Network (RALON) and Regional Crime Teams that is attributable to organised crime. These will apply to all aspects of organised immigration crime as well as contributing to the work of the UK Border Agency more broadly. As a result, this could overestimate the costs of organised people smuggling.

Organised intellectual property crime and counterfeiting

Scope

Intellectual property (IP) crime includes the wilful infringement of registered trademarks (counterfeiting) and the unauthorised copying and use of material protected by copyright (piracy) (Intellectual Property Office, 2011). It can include both physical and digital goods sold both online and offline. It has been necessary to draw boundaries in this research in order to prevent any overlap with cyber crime, which is excluded from the scope of this report. As such, only the sale of physical goods infringing intellectual property rights, whether using the internet or not, is considered within the scope of this report. Due to data availability, the only goods considered in this section are CDs, DVDs, computer games, business software, and clothing and footwear.

Scale

The scale of organised IP crime and counterfeiting has been estimated at £90 million. Estimates have been calculated on the basis of seizure data so will only capture part of the market as it not known what proportion of the illicit market these seizures represent. Average street prices, obtained by expert stakeholders¹⁰², have been

¹⁰⁰ It is estimated that 15 per cent of asylum applications result from organised clandestine arrivals (20 per cent of asylum applications are estimated to be clandestine entrants, and 75 per cent of these are assumed to have been facilitated by organised crime. Asylum applications made by clandestine entrants and IDAs trying to avoid enforced removal are also considered in scope.

¹⁰¹ Deemed to be unsuccessful attempts.

¹⁰² Stakeholders consulted include the Alliance Against Intelligence Property Theft, the Business Software Alliance, the Federation Against Copyright Theft (FACT), the British Phonographic Institute, and the Association for UK Interactive Entertainment (UKIE), the Medicine and Health Regulatory Agency (MHRA), and the Intellectual Property Office.

combined with estimated volumes in order to monetise the scale of the market and assumptions have been made as to the organised involvement in the counterfeiting of each type of good.

The average proportion of organised crime involvement in IP crime and counterfeiting is estimated at 81 per cent. A more detailed breakdown is provided in Annex 1. This is an estimate of physical IP crime and counterfeiting as it relates to certain goods and is not designed to capture the scale of the entire market that, according to expert stakeholders, is increasingly focused on the digital environment.

Costs

The social and economic costs of organised IP crime and counterfeiting have been estimated at £400 million. These include estimates of lost revenue to legitimate business, lost revenue to the exchequer, lost jobs,¹⁰³ and enforcement costs, including CJS costs as a result of pursuing prosecutions.¹⁰⁴ It has not been possible to quantify other relevant costs such as the impact on brand reputation or the costs suffered by individual recipients of poor quality counterfeits.

Organised wildlife crime

Scope

Wildlife crime in the UK involves the illegal trade in endangered species and damage to protected UK species and habitats. It can threaten critically endangered plants and animals. In 2010 the National Wildlife Crime Unit (NWCU) had six priority areas:

- badger persecution;
- bat persecution;
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) issues (specifically trade in caviar, ivory, ramin (a tropical hardwood), tortoises and traditional medicines);
- freshwater pearl mussels;
- poaching (including deer and fish poaching and hare coursing); and
- raptor persecution (especially golden eagle, white-tailed eagle, red kite, hen harrier and goshawk) (NWCU, 2010).

The often high level of profit available from wildlife crime has become attractive to some organised crime groups, who often operate on a global scale (ibid.).

It has not been possible to estimate the scale or social and economic costs of organised wildlife crime. Instead, data that give some indication of the potential scale are included.

¹⁰³ Figures taken from Frontier Economics (2009).

¹⁰⁴ Using estimates provided by industry bodies.

Scale

The NWCU has identified several UK based organised crime groups involved in wildlife crime. (NWCU, 2010) In 2010 the NWCU assisted with two successful cross-border operations coordinated by Interpol. Operation TRAM targeted the illegal trade in traditional medicines containing wildlife products, involved 18 countries across five continents and resulted in seizures of more than £8 million worth of illegal medicines worldwide. Operation RAMP involved participants from 51 countries across five continents in an effort to fight illegal trade in reptiles and amphibians and led to more than £20 million worth of animals and product being seized.¹⁰⁵

Costs

The social and economic costs of organised wildlife crime are likely to include the costs of enforcement in preventing the illegal trade in endangered species, the costs of protecting the endangered species from poachers and thieves, reductions in tourism, and the costs of any prosecutions resulting from organised illegal activity.

¹⁰⁵ 'Wildlife Crime', Written Evidence Submitted by INTERPOL, Environmental Audit, Parliament Publications, 5th March 2012, <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenvaud/writev/1740/wild17.htm>.

4. Conclusions

This research improves our ability to provide a scientific approach to understanding the scale of organised crime markets and the impact of the harms that they cause. The findings from this research will sit alongside law enforcement intelligence assessments of the scale of the threat to the UK from organised crime, and provide an important foundation for future work in this area.

The research demonstrates that the impact of organised crime on the UK, expressed as estimates of the **social and economic costs** caused, is significant. As would be expected from previous work in this area, drugs, organised fraud and organised immigration crime types all have major impacts on the UK; the other, less familiar organised crime types also have substantial impact on the wellbeing of the UK.

- Illicit drugs supply (£10.7 billion social and economic costs) are associated with substantial amounts of drug-related acquisitive offending as well as health costs and drug-related deaths, impacting on individuals, families, and communities.
- Organised fraud costs to the UK are estimated to be substantial (£8.9 billion), and these, along with the costs of counterfeit currency (£7 million) and organised intellectual property crime (£0.4 billion), damage the prospects and reputation of UK businesses and financial services as well as reducing tax revenue.
- The suffering caused by human trafficking (£890 million) is extensive, despite our ability to capture only a small proportion of those harms in the current work and the work also needed to map the costs of people smuggling (£140 million) and abuse of legitimate entry (£11 million).
- The damage caused by organised child sexual exploitation is well evidenced. Quantitative data are limited but the harms are still extensive (£1.1 billion).
- The six organised acquisitive crime types (from £27 to £920 million) cause damage to individuals, communities and businesses, whether through the physical and emotional harms caused to victims, the financial losses incurred through disruption of business, or the direct losses incurred.
- The costs of organised violence and homicide have not been included in the current work, nor have we been able to capture the violent offending associated with the drugs markets. However an estimate of the social and economic costs of firearms supply (£160 million) illustrates a small part of the damage by violence caused by organised crime.
- Organised environmental crime and organised wildlife crime cause pollution and damage individuals, communities and businesses in the UK. There are

insufficient data to currently estimate costs, but there is clear evidence on the types of damage caused.

- We estimate that the total social and economic costs of organised crime are at least £24 billion per year.

Alongside the cost estimates we have also produced **scale** figures; these develop our understanding of the scale of criminal activity and the revenues earned by offenders in each market¹⁰⁶.

Unsurprisingly, here too drugs supply and organised fraud are dominant. The less familiar organised crime types such as organised acquisitive crime, counterfeit currency, and organised intellectual property crime are also estimated to be substantial. The scale of some markets remains unknown, and further work is needed to address this gap.

Law enforcement partners, as part of their work to disrupt and dismantle organised crime groups, often seek to seize criminal assets and deny offenders the benefit of their illegal activities. Estimates of the scale of these markets will support law enforcement partners in assessing the breadth and depth of their engagement with different organised crime types.

Ideally, the current work would fully map the scale and the social and economic costs of organised crime, providing estimates of the true extent of criminal activities and the harms to the UK. In the absence of perfect data, estimates have been provided of those areas that can be robustly estimated. The report takes a cautious approach and applies high standards to the data, only including data on harms where there is a strong degree of confidence in accuracy. This means the figures will inevitably, and to differing degrees for each crime type, underestimate both the scale and the impact of organised crime on the UK. Variation in our confidence about the degree to which the data and estimates fully capture costs is indicated in Table 3.1.

For the policy maker and law enforcement audience it is essential to consider this report alongside other sources of information; law enforcement intelligence assessments and in-depth professional subject knowledge provide important context for understanding and operationalising the implications of this report.

¹⁰⁶ Note that it does not set out the costs to offenders, and further work would be needed to assess the profit to offenders.

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Annex 1: Technical annex

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Introduction

This technical annex provides further detail of the methodology for the scale and the social and economic costs estimates presented in this report. Methodology, data sources, and underlying assumptions are set out for each crime type. For those crime types where it was not possible to estimate the scale or social and economic costs of organised activity, there is no corresponding section in this annex.

In general, there are a very limited range of potential sources from which to gather data. Where a choice of sources was available, a judgement was made on what data were most appropriate based on criteria such as quality, robustness, and reputation of source. Where only one source was available, the same criteria were used to judge whether it was appropriate to include. Wherever possible data for 2010/11 were used. However, in some cases older data had to be used. Where necessary prices were uprated to account for inflation using the HM Treasury deflator series.

This work makes extensive use of the Home Office costs of crime methodology, both in scoping the relevant costs for each organised crime type and in using the most recent unit costs estimates published for 2010/11.¹⁰⁷ Wherever there are references to the Home Office costs of crime estimates, this is referencing this latest publication unless otherwise stated.

Organised acquisitive crime

a. Cash and valuables in transit

Scale

Data covering the total losses resulting from cash and valuables in transit (CViT) robberies have been provided by SaferCash. SaferCash is a security initiative, operated by the British Security Industry Association (BSIA), which shares intelligence between industry and the police, recording information and data relating to CViT attacks. These data cover reported losses resulting from such robberies in the UK in 2010. Total losses of approximately £12 million were reported by SaferCash with the average value of losses reported as just over £15,000. This has not been scaled up to account for losses to non-BSIA members. As BSIA members account for approximately 70 per cent of products and services in the security

¹⁰⁷ These were published alongside the Integrated Offender Management Value for Money Toolkit <http://www.homeoffice.gov.uk/publications/crime/reducing-reoffending/IOM-phase2-costs-multipliers>

industry¹⁰⁸ this is unlikely to represent a considerable underestimate but it is likely to underestimate the true scale. From this an estimate of the number of offences can be derived; there were approximately 750 CViT robberies in the UK in 2010. Because of the methods and organisation involved in committing these offences, it is assumed that 100 per cent of these robberies are carried out by organised criminals.

Costs

The main components of the social and economic costs of cash and valuables in transit robberies are the losses sustained by banks and businesses, the physical and emotional costs sustained by victims, property damaged during a CViT robbery, and any resulting criminal justice system (CJS) costs.

The losses resulting from these robberies are illustrated in the scale estimate. The 'robbery – commercial' unit costs of crime, excluding the value of property taken, is used to quantify the additional costs of these offences.

It is estimated that approximately 30 per cent of Cash and Valuables in Transit robberies involve injuries to victims (Wainer and Summers, 2011). Of these injuries 79 per cent are minor, seven per cent are moderate injuries, and 1 per cent are serious injuries.¹⁰⁹ Minor injuries are approximated using the costs of crime estimate for 'common assault', moderate injuries with 'other wounding', and serious injuries with 'serious wounding'.

It is estimated that approximately six per cent of CViT robberies include damage to property (ibid.). This has been approximated using the costs of crime estimate for 'criminal damage'. The CJS component of the unit costs of these offences are not included as it is unlikely that they would be prosecuted separately from the main commercial robbery offence. CJS costs are considered in the unit costs of crime of 'robbery – commercial'.

Table A1.1 highlights the incidents and the relevant unit costs.

The total social and economic costs of organised cash and valuables in transit robberies are estimated to be £28 million.

¹⁰⁸ According to the information on the BSIA website.

¹⁰⁹ For the remainder of cases, the extent of injury is not known.

Table A1.1 Total costs of cash and valuables in transit (CViT) offences, 2010, UK

	Number of offences	Unit costs per offence ^a	Total costs (£m)
CViT offences with no injury	506	£36,036	£18.2
CViT offences with minor injury	177	£37,482	£6.7
CViT offences with moderate injury	15	£44,659	£0.7
CViT offences with serious injury	2	£46,347	£0.1
CViT offences with damage to property	48	£36,939	£1.8
Total	750	-	£27.5

Source: SaferCash data, injury data from Wainer and Summers (2011), Home Office costs of crime estimates.

Notes: Figures may not sum due to independent rounding. Total figures have been rounded to one decimal place, otherwise figures are rounded to the nearest integer.

Notes:

- a) All unit costs include the cost of CViT offence with no injury. There is assumed to be no overlap between offences that include additional injury and damage to property. In reality some offences may include both injury to victims and damage to property. However, this will not change the estimate of costs.

b. Distraction burglary

Scale

The definition of a distraction burglary used for these offences is:

“Any crime where a falsehood, trick or distraction is used on an occupant of a dwelling to gain, or try to gain, access to the premises to commit burglary. It includes cases where the offender first enters premises and subsequently uses distraction burglary methods in order to remain on the premises and/or gain access to other parts of the premises in order to commit burglary.” (Home Office, 2012)

Distraction burglary is recorded separately by the police from other domestic burglary offences. This is the main source of data for this crime type. There were a total of 5,480 distraction burglaries¹¹⁰ recorded by police in England and Wales in 2010/11. (Chaplin et al., 2011) Not all offences are reported or recorded. To reflect this, the number of distraction burglaries has been combined with a multiplier¹¹¹ to obtain the total number of offences occurring in 2010/11. As a separate estimate is not available for distraction burglary, the multiplier for domestic burglary was used instead. This results in a revised estimate of 15,344 distraction burglary offences in England and Wales in 2010/11. This may be an overestimate as distraction burglaries may be less

¹¹⁰ Excluding those that were attempted but unsuccessful.

¹¹¹ Multipliers are used in the Home Office costs of crime work and are calculated by comparing crime from the Crime Survey of England and Wales with police recorded crime. Multipliers for 2010/11 were published alongside the Integrated Offender Management (IOM) Value for Money toolkit available at: <http://www.homeoffice.gov.uk/publications/crime/reducing-reoffending/IOM-phase2-costs-multipliers?view=Binary>

likely to go unreported than domestic burglaries. But with no Crime Survey for England and Wales¹¹² data for distraction burglaries, an estimate based on the domestic burglary multiplier is judged to be the best available. This total was subsequently scaled up to the UK using population estimates.¹¹³ There were an estimated 17,294 distraction burglary offences in the UK in 2010/11.

The average loss from these burglaries is assumed to be £2,040 (R Chaplin et al., 2011). This figure is the average value of property stolen during a domestic burglary, as reported in the Crime Survey for England and Wales. This may be an imperfect measure of the losses sustained in a distraction burglary but in the absence of appropriate data, the domestic burglary figure is judged to be the best available proxy.

The estimated scale of distraction burglary is £31 million in England and Wales in 2010/11. After scaling up to the UK, this becomes over £35 million. This assumes that the prevalence and nature of distraction burglary is consistent between the countries of the UK.

The total scale is assumed to be entirely the result of organised crime as distraction burglaries are committed by

“extremely professional criminals who...may travel hundreds of miles in a day, committing 20 or 30 offences across...[police] force areas in order to avoid detection.” (Home Office, 2003)

Costs

The main components of the social and economic costs of distraction burglaries are the value of goods stolen, the physical and emotional costs sustained by victims, and any resulting CJS costs. These are estimated using the Home Office costs of crime estimate for ‘burglary in a dwelling’ – £4,955.¹¹⁴ This may be an imperfect measure of the costs of distraction burglary but it is judged to be the best available proxy. Using the UK estimate of 17,294 successful distraction burglary offences together with the unit cost gives estimated social and economic costs of successful distraction burglaries in the UK of £86 million.

The costs of attempted burglaries are also included. It is estimated that there were 1,717 attempted distraction burglaries in the UK in 2010/11.¹¹⁵ It is assumed that these will incur the same costs as a completed distraction burglary with the exception

¹¹² Previously the British Crime Survey.

¹¹³ While recorded crime figures for domestic burglary are available for Scotland and Northern Ireland, there is no separate, recordable offence of distraction burglary.

¹¹⁴ The 2010/11 unit cost of crime for *burglary in a dwelling* has been amended to account for the updated data on the value of property stolen. As such it is not comparable to updated estimates issued by the Home Office in 2011.

¹¹⁵ Using police recorded crime offence 28D and the multiplier used for successful distraction burglaries to account for unreported or unrecorded attempted distraction burglaries.

of the value of property stolen. It is assumed that the attempted distraction burglary is unsuccessful and, as a result, that there is no property stolen.

The total estimated costs of all distraction burglaries in the UK, both successful and attempted but unsuccessful, is £91 million as shown in Table A1.2.

Table A1.2 Total costs of organised distraction burglary, 2010/11, UK

	Volume	Unit costs	Total costs (£m)
Successful distraction burglary	17,294	£4,955	£85.7
Unsuccessful distraction burglary	1,717	£2,915	£5.0
Total	19,011	-	£90.7

Source: Police recorded crime figures; Home Office costs of crime estimates.

Notes: Figures may not sum due to independent rounding. Total figures have been rounded to one decimal place, otherwise figures have been rounded to the nearest integer.

c. Metal theft

Scale

It is estimated that there were between 80,000 and 100,000 police recorded metal theft offences in 2010/11. Further details can be found in “Impact assessment: Tackling Metal Theft – prohibit cash payments and higher fines”¹¹⁶ (Ministry of Justice, 2012). Intelligence from the British Transport Police suggests that the proportion of these offences which are organised is approximately 20 per cent. This means that between 16,000 and 20,000 metal theft offences are estimated to be carried out by organised crime groups. There are no accurate estimates of the average scrap value of metal stolen. Instead, the expenditure on replacing stolen metal by victims of metal theft is used as an indication of the scale of organised metal theft.

Replacement expenditure includes both the expenditure on new materials as well as the labour costs of fitting the replacement. Expenditure on replacing stolen metal, whether organised or not, is estimated to be approximately £128 million (Ministry of Justice, 2012). This estimate is a conservative estimate based on the responses of selected telecommunications, rail transport, and utilities companies. It has not been extrapolated to account for affected companies or industries not reporting replacement expenditure. As around 20 per cent of this expenditure is assumed to be attributable to organised crime the estimated scale of organised metal theft is approximately £26 million.

¹¹⁶ <http://www.justice.gov.uk/downloads/legislation/bills-acts/legal-aid-sentencing/laspo-metal-theft-ia.pdf>

There are three issues with the precision of this estimate.

- As the estimate of the replacement expenditure is based on figures from a small number of companies and industries, the expenditure stated for replacing stolen metal is likely to understate the total expenditure on replacing stolen metal.
- Replacement expenditure overstates the actual revenue to organised criminals (and the value of the market) as it includes both expenditure on new material and labour, and because the scrap value of the metal is likely to be lower than the value of replacement materials.
- In addition, this estimate makes no allowance for the fact that organised metal theft offences are likely to have a higher average value than non-organised offences (Sidebottom, 2012) as no firm data on this exists.

Costs

Recent Home Office analysis estimated the cost of metal theft to be £220 million per year. This was acknowledged to be a conservative estimate since it is based on only a selection of companies and industries affected by metal theft and does not cover all of the costs of metal theft such as CJS costs and defensive or preventative costs.¹¹⁷ Costs have not been extrapolated to the whole of the UK. Details of the methodology behind this estimate can be found in the impact assessment (Ministry of Justice, 2012).

Since approximately 20 per cent of metal theft is thought to be organised applying this proportion to the estimate of the social and economic costs gives an estimated cost of organised metal theft of £44 million. This is likely to further underestimate the costs associated with organised metal theft as it relies on the assumption that organised metal thefts have the same average cost as those which are not organised. The average cost of metal theft offences is not known.¹¹⁸ In reality, it is likely that the costs attributed to organised metal theft offences are higher than the cost of other metal theft offences, as organised crime groups are likely to target higher value and larger metal items. These high value offences are likely to result in greater disruption to the railways and public utilities, which in turn results in higher costs compared with non-organised metal offences. As there are no data available with which to refine this assumption, this is the best available estimate.

¹¹⁷ This includes expenditure by the British Transport Police and the Association of Chief Police Officers to tackle metal theft, both organised and non-organised.

¹¹⁸ While there are estimates both of the number of metal theft offences and the cost of metal theft to the UK, it has not been possible to calculate an average cost per offence. This is because the two estimates do not have the same coverage. Any average cost calculation based on these estimates would be misleading.

d. Plant theft

The sources and estimates of the scale and social and economic costs of organised plant theft are fully discussed in the main report, section 3.

e. Road freight crime

Scale

The estimated scale of road freight crime in the UK in 2010 is the value of goods stolen as recorded by TruckPol. TruckPol was a national intelligence unit that formed part of the Association of Chief Police Officers (ACPO) Vehicle Crime Intelligence Service (AVCIS). Until its closure, in March 2012, it collated and analysed road freight theft throughout the UK. The scale estimate provided by TruckPol is the combined recorded value of the vehicles and loads stolen (TruckPol, 2011). TruckPol suggests that this should be taken as a minimum value as there are likely to be differences between values reported to the police and the actual value of the load or vehicle.

There were 2,567 incidents of road freight crime¹¹⁹ recorded by TruckPol in 2010. The total value of vehicles stolen was £26 million and the value of loads stolen was about £26 million, giving a combined value of £52 million.

Intelligence from TruckPol suggests that road freight crime is an area where there is significant organised involvement, with many crimes involving deception. As a result, it has been assumed that 100 per cent of road freight crime is organised.

Estimates have not been scaled up to account for offences that are not reported to TruckPol.

Costs

The estimated social and economic costs of road freight crime include the value of property stolen, the costs of any physical and emotional injuries sustained by victims, lost output resulting from the theft, as well as anticipatory defensive expenditure and responsive CJS costs. The value of the goods stolen is taken from the scale estimate described above. The remaining costs are estimated using the Home Office costs of crime estimate for 'theft of vehicle – commercial' as a proxy. The value of property stolen is removed from the costs of crime estimate to avoid double counting but the remaining costs are multiplied by the total number of road freight crime incidents to obtain an estimate of the additional costs of road freight crime.

In 2009, 27 violent incidents were recorded as occurring with the incidents of road freight crime recorded by TruckPol. The costs of these incidents are estimated using the Home Office costs of crime estimate, excluding CJS costs, for 'violence against

¹¹⁹ Including theft of and theft from a vehicle.

the person', and have been included in the estimated total costs which are set out in Table A1.3.

Table A1.3 Costs of road freight crime, by type, 2010, UK

Costs description	Volume	Unit cost	Total costs (£m)
Road freight thefts	2,567	£24,655	£63.3
Violent incidents	27	£10,328	£0.3
Total			£63.6

Source: TruckPol data with Home Office costs of crime estimates.

Notes: Figures may not sum due to independent rounding. Total figures have been rounded to one decimal place, otherwise all figures have been rounded to the nearest integer.

f. Vehicle crime

Scale

The estimated scale of organised vehicle crime is constructed using police recorded crime for 2010/11 for the UK. Separate figures for the number of offences in England and Wales, Scotland, and Northern Ireland are used but the assumptions regarding the proportion of organised involvement are identical across the UK. It is assumed that approximately 60 per cent¹²⁰ of all theft of vehicle offences in 2010/11 can be attributed to organised crime. This is a common assumption made on the basis that unrecovered stolen vehicles are a good indicator of the involvement of organised crime in vehicle theft.¹²¹ The recovery rate of stolen vehicles in 2011 was estimated in the Crime Survey for England and Wales as approximately 40 per cent (Chaplin et al., 2011).

In addition to this, approximately six per cent of all domestic burglaries involve theft of car keys (ibid.) with organised criminals committing car key burglaries to steal high value vehicles. It is assumed that all car-key burglary meets the definition of organised crime used in this report.¹²²

The data used in constructing the scale estimates is in Table A1.4. Recorded crime figures for England and Wales, Scotland, and Northern Ireland are updated to account for unreported crimes using existing multipliers.¹²³

¹²⁰ Based on data from Chaplin *et al.* (2011).

¹²¹ As unrecovered vehicles are assumed to have been exported, broken down for parts, or altered to be unrecognisable. All of these are assumed to require a degree of organisation, preparation, and planning to complete.

¹²² This assumption has been made given the nature of car-key burglary as elements of planning and coordination are required in order to first steal the keys and then the car.

¹²³ Multipliers are used in Dubourg et al (2005); they have been updated for 2010 data and published in September 2011.

Table A1.4 Number of organised vehicle thefts, 2010/11, UK

	Vehicle theft ^a	Car-key burglary ^b	Organised vehicle thefts
England & Wales	74,855	43,369	118,224
Scotland	6,572	2,122	8,694
Northern Ireland	1,862	1,061	2,923
Total	83,289	46,552	129,841

Source: Recorded crime for England and Wales, Scotland and Northern Ireland.

Notes:

- a) Recorded crime figures for theft of vehicle offences.
- b) Recorded crime figures for burglary in a dwelling. Six per cent of these offences involve theft of a car key and subsequently the vehicle.

In order to monetise the scale of organised vehicle crime, the average value of a stolen vehicle was multiplied by the number of vehicles assumed to be stolen by organised criminals. A number of estimates exist for the value of a stolen vehicle with some as high as £20,000. This report uses the average value of a stolen vehicle, whether recovered or unrecovered, reported in the Crime Survey for England and Wales. In 2010/11, this is £2,506. This may be an underestimate but is the best available proxy based on robust data. Anecdotal evidence suggests organised criminals may target higher than average value vehicles in order to maximise revenue from the theft. This seems particularly likely for car-key burglaries, where higher value vehicles could be specifically targeted. The scale of organised vehicle theft is estimated to be £325 million.

Table A1.5 Scale of organised vehicle crime, 2010/11, UK

	Volume	Unit cost	Total scale (£m)
Vehicle theft	83,289	£2,506	£209
Vehicle theft following car-key burglary	46,552	£2,506	£117
Total	129,841	-	£325

Source: Recorded crime for England & Wales, Scotland and NI, Crime Survey for England and Wales, Home Office costs of crime estimates.

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to three significant figures, otherwise inputs have been rounded to the nearest integer.

Costs

Costs of crime estimates are used to estimate the social and economic costs of organised vehicle crime. In 2010/11 129,841 thefts of vehicles and 46,552 burglaries are attributed to organised vehicle crime. The cost of domestic burglaries have been included to account for the social and economic costs of car-key burglaries as anecdotal evidence suggests that criminals targeting car-keys in domestic burglaries will steal other items. The Home Office costs of crime estimates for 'theft of vehicle – personal' and 'burglary in a dwelling' are used to calculate the social and economic costs of organised vehicle crime which is estimated at approximately £920 million. The breakdown of these costs is highlighted in Table A1.6.

Table A1.6 Total costs of organised vehicle crime, by type, 2010/11, UK

Cost type	Volume	Unit costs	Costs (£m)
Vehicle thefts	129,841	£5,298	£690
Car-key burglaries	46,552	£4,955	£230
Total costs (£m)			£920

Source: Home Office costs of crime estimates.

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to two significant figures, otherwise inputs are rounded to the nearest integer.

Organised child sexual exploitation

Scale

The estimate of the scale of organised child sexual exploitation is taken from the Office of the Children’s Commissioner’s Inquiry into the sexual exploitation of children by groups¹²⁴ and gangs¹²⁵ (Berelowitz et al., 2012). While other studies (including Barnardos (2012); CEOP (2011); and Barnardos (2011a)) have attempted to estimate the overall scale of child sexual exploitation, none have attempted to identify the extent of organised crime involvement in this activity.

Berelowitz et al. (2012) used a narrower definition of child sexual exploitation in their study which focused on groups and gangs and most closely matches the definition of organised crime used in this report. The Inquiry found that there were 2,409 confirmed victims of child sexual exploitation by either gangs or groups between August 2010 and October 2011. This estimate is based on evidence submissions from a range of agencies working in this area; 115 evidence submissions were received but only from agencies in some police force areas in England.¹²⁶ While this estimate covers a 14 month period, it is still likely to underestimate the true scale of child sexual exploitation by groups and gangs as it only captures known victims of child sexual exploitation identified by agencies submitting evidence to the Inquiry.

As organised child sexual exploitation by groups and gangs does not always involve financial motives for the organised crime groups involved¹²⁷, it is not meaningful to estimate the potential revenue for organised criminals.¹²⁸ Instead the scale estimate highlights the number of known victims.

¹²⁴ Groups are defined in Berelowitz *et al.* (2012) as “people who come together in person or online for the purpose of setting-up, co-ordinately and/or taking part in the sexual exploitation of children.”

¹²⁵ Gangs are defined in Berelowitz *et al.* (2012) as “comprising men and boys aged 13-25 years old, who take part in many forms of criminal activity. [...] While children can be sexually exploited by a gang, this is not the reason why the gang is formed.”

¹²⁶ Further details of the methodology used in the Office of the Children’s Commissioner’s Inquiry can be found in the Appendix to Berelowitz *et al.* (2012).

¹²⁷ Motives of offenders often include the exertion of power and control, the desire to humiliate, and a belief in an entitlement to sex (Berelowitz *et al.*, 2012).

¹²⁸ Any monetised estimate of the scale would only partially reflect the extent of organised activity.

Costs

The harms of organised child sexual exploitation are diverse, with abuse often lasting for many months or even years. This estimate of the social and economic costs of organised child sexual exploitation focuses on the harms likely to occur as a result of one year of victimisation. This may underestimate the costs for some individual victims, but is judged to be the most appropriate way of presenting an annual snapshot of the costs of this type of organised crime – the measure used throughout this report. Some costs resulting from this one year of victimisation occur over many years. Examples include the costs of exclusion from school and the costs of prison sentences. Such future costs are discounted appropriately.¹²⁹

For this estimate of the social and economic costs of organised child sexual exploitation, the following process is assumed. Violence and sexual assault are used to coerce victims. Victims are then passed around the organised groups or gangs and may be repeatedly sexually assaulted and raped. While often occurring at the same time, the costs of coercion and the costs of sexual exploitation have been considered and estimated separately. The range of physical and emotional harms resulting from both the coercion and the sexual exploitation of children are quantified and detailed in Table A1.7 below.

Costs of coercion

Organised criminals often use violence and sexual assault to coerce and control their victims. (Berelowitz, 2012) According to submissions in the Office of the Children's Commissioner's Inquiry, this can involve punching, hitting, kicking, attempted strangulation, and burning with cigarettes. (ibid.) This has been approximated using estimates of 'non-sexual severe domestic force' and 'serious sexual assault' (Walby, 2004). Walby estimates that, on average, 'non-sexual severe domestic force' against females includes 18 assaults per year; 3.5 chokings, 14.5 kicks or punches¹³⁰. 'Serious sexual assault' comprises one severe sexual assault and one rape on average per year. (ibid.) The Walby estimates are considered the most appropriate available for the costs of violence suffered by victims. This approach is consistent with that used to estimate the harms to victims of human trafficking for the purposes of sexual exploitation.¹³¹

In line with Walby's (2004) approach, these offences have been mapped to the Home Office costs of crime categories as serious wounding, other wounding, sexual

¹²⁹ This discounting of costs occurring in the future is consistent with appraisal methods outlined in HM Treasury's *Green Book*. A discount rate of 3.5 per cent is used.

¹³⁰ The volumes of offences are estimated using the number of victims of domestic violence in Table 3.2 and the average number of incidents per female victim presented in Table 3.4 in Walby (2004).

¹³¹ The coercion experienced by victims of human trafficking for sexual exploitation and victims of child sexual exploitation is assumed to be similar. For more details on the costs of human trafficking for sexual exploitation please see the relevant section further on in this technical annex.

assault, and rape.¹³² CJS costs of these offences have been excluded as they are unlikely to be individually reported to the police. The lost output component of the costs of crime estimates has also been excluded as these offences are committed against children. As they are not working, there will be no lost output for the economy through any time they are unable to work through injury.

As the Home Office costs of crime estimates are calculated for victims of crime aged 16 to 59, a multiplier has been applied to the unit costs to account for higher physical and emotional costs likely to occur as the victims are children. This multiplier has been calculated using a study from Minnesota (Miller et al., 2007) which compares the costs of child and adult rape and sexual abuse, and is estimated to be approximately 1.2.¹³³ The costs of violent coercion are estimated to be approximately £285,000 per victim per year. All victims identified in the scale estimate are assumed to incur these costs.

As part of the coercion exerted by organised criminals, victims are also assumed to have restrictions placed on their quality of life. This includes some problems with performing usual activities, moderate pain or discomfort, and moderate anxiety or depression. These costs have been estimated in line with existing methodology using Quality Adjusted Life Years.¹³⁴ These costs amount to approximately £17,000 per victim per year and are assumed to be relevant to all the victims identified in the scale estimate.

Costs of sexual exploitation

In addition to the coercion described above, victims are also sexually exploited by organised groups. They may be moved around locations and sexually assaulted and raped by offenders, in many cases repeatedly. (Berelowitz et al., 2012), There is little quantified evidence on the harms of repeated rape or sexual assault so the cost of this sexual exploitation is approximated by the physical and emotional cost of one rape and one sexual assault each year. This is almost certainly an underestimate.

As for the costs of coercion, the unit costs of these offences have been combined with a multiplier to account for the higher physical and emotional costs likely to occur because the victims are children.¹³⁵ The multiplier of approximately 1.2 is used to account for the additional physical and emotional suffering for child victims. The

¹³² Chokings are assumed to be the same as *serious wounding*. Kicks and punches are assumed to be *other wounding*. Comparisons between offences and costs of crime unit costs can be seen in Table 3.6 in Walby (2004).

¹³³ This is obtained by comparing the costs of 'suffering and lost quality of life' for rape of a child (aged 0 to 17) and rape of an adult (aged 18 or over) in Miller *et al.* (2007).

¹³⁴ For this analysis, a value of £30,000 is used for each Quality Adjusted Life Year (QALY). The estimated loss of QALYs for the restrictions placed on victims of organised child sexual exploitation is approximately 0.48. This is taken from previous research on the costs of human trafficking.

¹³⁵ Home Office costs of crime estimates are calculated using data for victims of crime aged between 16 and 59 years.

estimated unit cost is approximately £125,000 per victim per year. All victims are assumed to incur these costs.

In addition, other harms that are a consequence of the ongoing exploitation are included. These are sexual health issues, self-harm, attempted suicide, mental health issues, exclusion from school, and going missing from home. The report from the Office of the Children's Commissioner (Berelowitz, 2012) provides estimates of the prevalence of these harms which are presented in Table A1.7. These are combined with appropriate unit costs which are detailed in the notes to Table A1.7.

Total costs

The social and economic costs of organised child sexual exploitation are estimated at approximately £1.1 billion each year as can be seen in Table A1.7. In many cases these costs could underestimate the true cost of organised child sexual exploitation. This is particularly likely for the costs of sexual exploitation presented in this report. Due to an absence of data on the costs of repeated rape and sexual assault, the estimates for sexual exploitation are lower than those for coercion. In reality we would expect the opposite to be true.

There are a range of other costs which should be included in the estimated social and economic costs but for which sufficient data were not available. These include costs incurred by agencies trying to prevent children from becoming victims of sexual exploitation. These costs will mostly be borne by local authorities but some expenditure will form part of larger central government programmes of work. These costs of preventing organised child sexual exploitation could not be identified separately.

Other harms of organised child sexual exploitation include substance misuse, family breakdown, criminalisation of victims, and victims placed in social care.¹³⁶ These harms could not be estimated as there is little quantified evidence about their prevalence or costs. The CJS costs also could not be estimated as organised child sexual exploitation offences could not be separated from other sexual offences against children.

¹³⁶ There is limited evidence to suggest that, as a result of child sexual exploitation, some victims who were not previously in social care are placed into care. As there is no evidence specific to organised child sexual exploitation, this has not been included in the estimates.

Table A1.7 Costs of organised child sexual exploitation, 2011, UK

	Prevalence	Unit cost	Total cost (£m)
Costs of coercion			£726.3
- Violence	100%	£284,235 ^a	£684.7
- Restrictions on quality of life	100%	£17,279 ^b	£41.6
Costs of exploitation			£298.1
- Rape	100%	£88,467 ^c	£213.1
- Sexual assault	100%	£35,278 ^d	£85.0
Other costs			£25.9
- Sexual health issues	75%	£59 ^e	£0.1
- Self-harm	31%	£427 ^f	£0.3
- Attempted suicide	16% ^g	£51,746 ^h	£19.3
- Mental health issues	27%	£342 ⁱ	£0.2
- School exclusion ^j	12%	£70,081 ^k	£2.6
- Missing children ^l	58%	£2,145 ^m	£3.4
Total			£1,050.4

Source: Prevalence estimates are taken from Berelowitz *et al.* (2012) unless otherwise stated. Unit cost sources vary and are individually provided.

Notes: Total costs rounded to 1 decimal point.

- a. Unit cost calculated using Home Office cost of crime estimates, based on Walby (2004).
- b. Unit cost calculated using the value of a QALY of £30,000.
- c. Unit cost calculated using the Home Office cost of crime estimates.
- d. Unit cost calculated using the Home Office cost of crime estimates.
- e. Unit cost for treating a sexually transmitted infection. Taken from NHS Reference costs (2011).
- f. Unit cost for treating poisoning. Taken from NHS Reference costs (2011).
- g. Prevalence taken from Melzer H., *et al.* (2002) and is the estimated prevalence of attempted suicide amongst 16-24 year olds based on the Psychiatric Morbidity survey. Melzer *et al.* (2002) noted that approximately half of young people who had self-harmed had also attempted suicide. This proportion has been applied to estimates for self harm. This was felt to be the best available proxy for victims of organised child sexual exploitation, although it could underestimate the costs.
- h. Unit cost taken from Johnson (2009). This includes costs to social services, the police, NHS (including accident and emergency costs), and mental health services.
- i. Unit cost for outpatient attendance for child and adolescent psychiatry. Taken from NHS Reference costs (2011).
- j. Permanent exclusion of pupils following child sexual exploitation.
- k. Unit cost taken from Goodall *et al.* (2007). This includes only the cost associated with providing alternative education to mainstream schooling for excluded pupils. It does not include the lifetime costs associated with permanent exclusion.
- l. Children who are victims of child sexual exploitation who subsequently go missing from home or care. It is assumed that each child who goes missing only does so once. This could underestimate the costs.
- m. Unit cost of running a missing persons police investigation. Taken from Greene & Pakes (2012).

Counterfeit currency

The scale of organised counterfeit currency is estimated using data from the Bank of England and the Association of Commercial Banknote Issuers (ACBI). The number of counterfeit sterling notes withdrawn from circulation in the UK in 2010 is included in Table A1.8. It is assumed that all counterfeit currency is the result of organised

criminal activity due to the sophisticated processes and equipment¹³⁷ needed to produce counterfeit notes. The scale of organised counterfeit currency is estimated to be the 'face value' of counterfeit notes withdrawn from circulation, which is approximately £7 million. This is a partial estimate as it only includes counterfeit sterling notes withdrawn from circulation. Data were not available for sterling coins or other currencies. The proportion of counterfeit sterling notes in circulation and not withdrawn is also not known.

Table A1.8 Number and value of notes withdrawn from circulation, 2010, UK

UK Sterling notes	Volume	Total
£1 ^a	12	£12
£5	9,781	£48,905
£10	23,694	£236,940
£20	313,005	£6,260,100
£50	3,273	£163,650
£100	12	£1,200
Total	349,775	£6,710,807

Source: Bank of England data; Association of Commercial Banknote Issuers data, 2010.

Notes:

a) These are £1 notes removed from circulation.

Drugs supply

Scale

Organised crimes groups and networks are required to produce, supply, and distribute drugs within the UK. There will be some exceptions where, for example, cannabis is grown and used by the same person, but this is unlikely to considerably affect scale estimates.

The scale of the illicit drugs supply is best estimated by considering the demand for illicit drugs. This is calculated by estimating the amount of money spent by drug users buying certain illicit drugs. The estimate in this report builds on the methodology used by Pudney et al. (2006) to calculate the scale of the illicit drugs market. The estimate uses data from the Arrestee Survey and the Offending, Crime and Justice Survey (OCJS) in order to estimate the amount spent on eight drugs: amphetamines, cannabis, crack cocaine, ecstasy, heroin, LSD, magic mushrooms, and powder cocaine.¹³⁸

Legitimately prescribed drugs are not produced or supplied by organised crime groups and are therefore excluded from the scope of this report. Similarly, there is an absence of evidence to suggest that any trade in unprescribed methadone uses organised crime networks. New psychoactive substances are within the scope of this

¹³⁷ Demonstrating that elements of planning and coordination are required to commit serious crime.

¹³⁸ These eight drugs were chosen for data availability reasons but include the three most prevalent drugs used in the UK; cannabis, powder cocaine, and ecstasy.

report but have not been included in the estimates presented due to a lack of data availability within the surveys used.

Improvements have been made in comparison with the methodology of previous estimates, particularly around the data used for the drugs market for those aged under 17. Table A1.9 provides the scale of the market for each drug type included. These results are not directly comparable with those of Pudney et al. (2006) due to changes in methodology and differing base price years used in estimation. Further details of the revised methodology can be found in Annex 2 of this report.¹³⁹ This includes revised estimates for 2004 using the improved methodology illustrating the impact that changes to the methodology have as well as providing an indication of trends over time. Changes in the scale of the illicit drugs supply cannot be fully measured as the survey data on which the estimates are based has not been updated.

Due to the surveys used to estimate the scale of the illicit drugs market, there is a possibility that certain elements of the drug using population may have been underrepresented. As such the estimates presented may underestimate the true scale of the market for certain drugs. Survey data were only available for England and Wales so estimates were scaled up to the UK. Separate scaling factors were calculated for the arrestee and non-arrestee populations using arrest and population data respectively¹⁴⁰. This is consistent with previous attempts to value the UK drugs market (Pudney et al., 2006)¹⁴¹ but assumes that drug use among arrestee and non-arrestee groups in Scotland and Northern Ireland is the same as England and Wales. Due to differing rates of drug use across the countries of the UK, this could lead to the estimates underestimating the scale of the illicit drugs supply due to differing rates of opiates and crack use across the countries of the UK.

¹³⁹ As there are substantial revisions to existing Home Office estimates, Annex 2 fully details the changes to the methodology and the data used.

¹⁴⁰ As arrest statistics reflect the level of enforcement activity among police forces, using these data to calculate scaling factors requires the assumption that enforcement activity is the same throughout the UK. This assumption does not significantly affect results and the scaling factor based on arrest statistics is highly similar to the scaling factor based on population alone. Separate results have not been presented. As no arrest statistics were available for Scotland, the England and Wales arrest rate was used.

¹⁴¹ See Pudney *et al.* (2006), Appendix 7.

Table A1.9 Scale of the illicit drugs supply, by drug type, 2010, UK

	England & Wales (£m)	UK (£m)
Amphetamines, ecstasy, LSD and magic mushrooms	£240	£270
Cannabis	£1,110	£1,200
Crack cocaine and heroin	£1,110	£1,300
Powder cocaine	£810	£920
Total	£3,300	£3,700

Source: Offending Crime and Justice Survey data; Arrestee Survey data.

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to two significant figures.

Costs

The social and economic costs considered in this report are the consequences of the supply of illicit drugs. These include the costs of drug-related acquisitive crime, health costs, drug treatment, and the cost of enforcing drug offences.¹⁴²

The costs of drug-related acquisitive crime are estimated using data from the OCJS and the Arrestee Survey. These data are used to determine the proportion of acquisitive crime that is committed by users of certain drugs in order to support drug use¹⁴³. It does not include broader offences closely associated with drugs use such as psycho-pharmacological offending, or violence due to a lack of suitable data. Full details on how these proportions were calculated can be found in Annex 3 of this report.¹⁴⁴ These proportions were applied to the total costs of acquisitive crime for 2010/11 calculated using Home Office costs of crime estimates. An estimated 44 per cent of all acquisitive crime in England and Wales is drug-related (Roe et al., 2012). This proportion is calculated using survey data from England and Wales but assumed to apply across the UK. Due to differing rates of opiates and crack use across the countries of the UK, this could lead to underestimation of the proportion of drug-related crime. The total cost of drug-related acquisitive crime in the UK in 2010/11 is estimated to be approximately £5.8 billion. Table A1.10 shows the estimated proportions of drug-related crime by crime type and the associated costs.

¹⁴² Drug offences included are unlawful importation of Class A, B, C or unspecified; unlawful exportation of Class A, B, C or unspecified; production, supply and possession with intent to supply a controlled drug – Class A, B, C or unspecified; possession of a controlled drug – Class A, B, C or unspecified; inciting another to supply a controlled drug – Class A, B, C or unspecified; and other drug offences.

¹⁴³ Calculating the proportion of acquisitive crime committed by those using heroin or crack cocaine more than twice a week. This definition was used as it is thought to best capture economic compulsive crime (acquisitive crime committed to obtain money or drugs to support drug use) which shows strong links with drug use.

¹⁴⁴ As there are substantial revisions to existing Home Office estimates, a separate report fully details the changes to the methodology and the data used. This has been attached at Annex 3.

Table A1.10 Costs of drug-related acquisitive crime committed by individuals who use heroin and/or crack cocaine at least twice weekly, 2010/11, UK

	Drug-related proportion	Unit costs of crime	Costs of drug-related crime (England and Wales, £m)	Costs of drug-related crime (UK, £m)
Vehicle theft	24%		£450	£490
- <i>Theft of vehicle</i>	16%	£4,970	£100	£110
- <i>Theft from vehicle</i>	31%	£1,034	£350	£370
Burglary	47%		£2,600	£2,800
- <i>In a dwelling</i>	57%	£3,925	£1,600	£1,700
- <i>Not a dwelling</i>	43%	£4,608	£1,100	£1,100
Robbery	25%		£680	£710
- <i>Personal</i>	19%	£8,810	£560	£580
- <i>Commercial</i>	36%	£9,372	£130	£130
Theft from person	39%	£1,016	£250	£260
Theft from a shop	66%	£124	£400	£450
Other theft	14%	£763	£190	£210
Fraud	35%	-	£730	£830
- <i>Benefit fraud</i>	21%	-	£250	£250
- <i>Credit fraud</i>	40%	-	£150	£150
- <i>Identity fraud</i>	- ^a	-	£420	£420
Total	44%	-	£5,300	£5,800

Source: Offending Crime and Justice Survey data; Arrestee Survey data.

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to two significant figures.

a) Based on drug-related proportions of fraud.

The estimated costs to the NHS of illicit drug use are divided into five parts:

- i. mental and behavioural health due to illicit drug use;
- ii. overdoses and poisoning due to illicit drug use;
- iii. neonatal diagnoses due to illicit drug use;
- iv. HIV/AIDS for injecting drug users; and
- v. deaths due to illicit drug misuse in terms of lost productivity, the human cost and medical and ambulance costs.

Due to data availability, the costs estimated do not give a full picture of the costs incurred by the NHS as they focus on inpatient episodes. For most NHS costs, data are only available for England and Wales so estimates are scaled up to the UK on

the basis of population. This does not account for differing rates of drug use across the countries of the UK. This is more fully explained for each type of NHS cost.

i. Mental and behavioural health costs due to illicit drug use

Illicit drug use can lead to mental illness such as psychotic disorders. (Hall, 1988) The costs to the NHS include the cost of intensive care of patients with drug-related mental illness as well as acute care and rehabilitation. Personal Social Services Research Unit (PSSRU) unit costs of adult mental health inpatient bed days are used to estimate the costs to the NHS. (PSSRU, 2011) The PSSRU has used the NHS reference costs to calculate an average cost of inpatient attendances. (NHS, 2011)

Data on the volume of individuals in England and Wales with drug-related mental and behavioural health problems in 2010/11 are taken from the Hospital Episode Statistics (HES, 2011a)¹⁴⁵ and Patient Episode Data for Wales (PEDW, 2011)¹⁴⁶ respectively. An example of the diagnoses included are 'psychotic disorder due to use of opioids' and 'amnesic syndrome due to use of cocaine'.¹⁴⁷ HES and PEDW data are only available when the episode has been appropriately coded so the number of episodes is likely to be an underestimate. Additionally, some of the diagnoses include the effects of legal drugs, such as caffeine, which will lead to additional cases being counted. The data only cover inpatient episodes. Equivalent data do not exist for outpatient episodes or care in the community. Therefore, in this report, only the costs to the NHS of treating inpatients has been included. This is likely to underestimate the cost to the NHS of mental and behavioural health due to illicit drug use.

The number of hospital episodes requiring paramedic services has been estimated using HES data for England and PEDW for Wales. The number of emergencies is recorded in these data and is assumed to represent the number of episodes requiring paramedic services. The cost of paramedic services has been taken from NHS referral costs for 'psychiatric/suicide attempt: mental/emotional' and is used as a proxy.¹⁴⁸

¹⁴⁵ ICD-10 codes for mental and behavioural episodes used were F11.0 – F16.9 and F19.0 - F19.9 (excluding codes ending .2 to avoid double counting with treatment budgets and excluding F13.6, F14.7, F15.6, F16.6). Data were taken from Hospital Episode Statistics 2010/11, Primary Diagnosis, <http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=214> for England.

¹⁴⁶ Patient Episode Data for Wales (PEDW) data were used, which are available from the NHS Wales website.

¹⁴⁷ Diagnoses included are mental and behavioural disorder due to use of: opioids; cannabinoids; sedatives/hypnotics; cocaine; other stimulants; hallucinogens; or multiple/psychoactive drugs.

¹⁴⁸ An average unit cost is used of three categories of paramedic response.

Table A1.11 Estimated costs to the NHS of illicit drug-related mental health and behavioural disorders, 2010/11, UK

	Volume	Unit costs	Total costs (£m)
Drug-related mental and behavioural disorders (bed days – England and Wales) ¹⁴⁹	85,796	£321	£27.5
- Proportion requiring paramedic services (England and Wales)	3,895	£198	£0.8
Estimated drug-related mental and behavioural disorders (bed days – UK)	96,701	£321	£31.0
- Estimated proportion requiring paramedic services (UK)	4,399	£198	£0.9
Estimated total cost (UK)			£31.9

Source: Hospital Episode Statistics (HES); Patient Episode Data for Wales (PEDW).

Notes: Figures rounded to one decimal place unless otherwise stated.

Sufficient data were not available for Scotland and Northern Ireland so estimates are scaled up to the UK using population estimates.¹⁵⁰ Due to differing rates of problem drug use across the countries of the UK this could lead to inaccuracies.

ii. Cost of illicit drug overdoses

In 2010/11 there were over 16,000 drug-related overdoses in England and Wales.¹⁵¹ The number of overdoses has been taken from the HES for England in 2010/11 and PEDW. Only overdoses of illicit drugs have been included, but some categories included can include poisoning resulting from prescribed drugs¹⁵² as well as from legal drugs with potential for misuse. Equivalent data were not available for Scotland and Northern Ireland so population data are used to estimate the volume of overdoses in the UK. This relies on the assumption that incidence of drug overdoses was the same in each country.¹⁵³

The costs to the NHS of treating a drug overdose are taken from the NHS Reference Costs 2010/11 of treating 'poisoning, toxic, environmental and unspecified effects' as well as the cost to paramedic services of an 'overdose/ingestion/poisoning'. (NHS, 2011b) The proportion of drug overdoses requiring paramedic services was

¹⁴⁹ This is using ICD-10 codes F11.0-F16.9 and F19 – excluding codes ending .2 to avoid double counting with treatment budgets.

¹⁵⁰ This assumes that equal proportions of the population in each country had patients presenting with drug-related mental and behavioural problems.

¹⁵¹ Using ICD-10 codes T40.1-T40.7, T40.9 and T43.6. Data taken from Hospital Episode Statistics 2010/11, Primary Diagnosis,

<http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=214>

¹⁵² Such as morphine or codeine in the *other opioids* category.

¹⁵³ As previously stated, this may lead to inaccuracies due to the differences in rate of problem drug use in the different countries of the UK. Population statistics taken from ONS, Key Statistics Feb 2012 available at: <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-242593>

estimated using HES data for England and PEDW data for Wales.¹⁵⁴ This cost does not include any permanent harm resulting from a drug overdose and therefore only reflects the immediate costs to the NHS of an overdose.

Table A1.12 Estimated costs to the NHS of illicit drug overdoses, 2010/11, UK

	Volume	Unit cost ^a	Total cost (£m)
Number of drug overdoses (England and Wales)	16,113	£723	£11.7
- Proportion requiring paramedic services (England and Wales)	13,136	£197	£2.6
Number of drug overdoses (UK)	18,161	£723	£13.1
- Proportion requiring paramedic services (UK)	14,806	£197	£3.0
Estimated cost to the NHS (UK)			£16.1

Source: Hospital Episode Statistics; Patient Episode Data for Wales.

Notes: Figures rounded to one decimal place unless otherwise stated.

a) This is a weighted average.

iii. Costs of neonatal diagnoses due to illicit drug use

A foetus or newborn can be affected by maternal use of illicit drugs. (Wang, 2012) The costs to the NHS of treating drug-related neonatal diagnoses such as babies suffering from withdrawal of addictive drugs are estimated using the 2010/11 NHS reference costs of treating major and minor 'neonatal diagnoses'. (NHS, 2011) The number of cases is estimated using the HES for England and PEDW data for Wales in 2010/11 (HES, 2011c)¹⁵⁵, which have been scaled up by population to the UK. As with mental and behavioural episodes and drug overdoses, paramedic services costs have been estimated using NHS referral costs for 'pregnancy/childbirth/miscarriage'. The proportion of episodes requiring paramedic services has been estimated by using the number of emergencies recorded in HES and PEDW data as a proxy. This estimate is likely to be an underestimate as it does not include the costs of midwives, health visitors and specialist clinics for pregnant drug users.

¹⁵⁴ This was calculated as for mental and behavioural episodes using the number of full consultant episodes (FCEs) that were emergencies. This proportion was assumed to be the same throughout the UK, in the absence of equivalent data for Scotland and Northern Ireland.

¹⁵⁵ Using ICD-10 codes P04.4 and P96.1. Data from Hospital Episode Statistics 2010/11, Primary Diagnosis (available at: <http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=214>) and Patient Episode Data for Wales 2010/11

Table A1.13 Estimated costs to the NHS of drug-related neonatal effects, 2010/11, UK

	Volume	Unit cost ^a	Total cost (£m)
Neonatal diagnoses (England and Wales)	1,456	£1,190	£1.7
- Proportion requiring paramedic services (England and Wales)	131	£210	£0.1
Estimated neonatal diagnoses (UK)	1,641	£1,190	£2.0
- Proportion requiring paramedic services (UK)	148	£210	£0.1
Estimated cost to the NHS (UK)			£2.0

Source: Hospital Episode Statistics; Patient Episode Data for Wales.

Notes: Figures rounded to one decimal place unless otherwise stated.

a) This is a weighted average.

iv. Costs of injecting drug users

Injecting drug users bring additional costs to the NHS from needle use. Sharing needles can lead to transmission of infectious diseases including Hepatitis C and HIV. The Health Protection Agency (HPA) estimates that around one-half of injecting drug users (IDUs) in the UK have been infected by Hepatitis C and one-sixth with Hepatitis B. (HPA, 2011a) By the end of 2010, an estimated 91,500 people were living with HIV in the UK (including those undiagnosed), which includes 2,300 people (3%) who inject illicit drugs.(HPA, 2011b)

The gross expenditure on 'Infectious diseases- HIV and AIDS' in England in 2010/11 (Department of Health, 2011) was used to estimate the costs to the NHS of IDUs with HIV. To estimate the costs to the UK it was assumed that the cost of HIV treatment per individual in the rest of the UK would be equal to the cost per individual in England (£16.97).¹⁵⁶ This is combined with the estimated proportion of individuals diagnosed with HIV living in the UK who are injecting drug users. It should be noted that some individuals may have contracted HIV through sexual intercourse rather than needle exchange. However, as sharing needles is proven to be a common route of HIV transmission, it is not unreasonable to assume that the majority of IDUs contracted HIV through needle sharing.¹⁵⁷ It is also assumed that all those individuals diagnosed with HIV who are IDUs seek treatment. There is no direct evidence to support this. But, as these individuals must have actively sought testing, it seems fair to assume that they would also be willing to accept treatment.

¹⁵⁶ Using ONS population figures - ONS, Key Statistics Feb 2012: <http://www.ons.gov.uk/ons/publications/reference-tables.html?edition=tcm%3A77-242593>

¹⁵⁷ www.avert.org

Table A1.14 Estimated costs to the NHS of treating IDUs with HIV/AIDS, 2010/11, UK

Estimated proportion of individuals living with HIV in the UK who are IDUs	3%
Gross expenditure on HIV/AIDs in England	£886m
Estimated gross expenditure on HIV/AIDs in the UK	£1,060m
Total estimated cost to the NHS of treating IDUs with HIV/AIDs	£27m

Source: Health Protect Agency.

Notes: Figure may not sum due to rounding. All outputs have been rounded to two significant figures.

Hepatitis C is highly prevalent amongst IDUs, with approximately 90 per cent of all new diagnoses being acquired through injecting drug use (HPA, 2011a). The HPA estimates that over 9,000 IDUs were diagnosed with Hepatitis C in 2010 (ibid). The course of Hepatitis C is unpredictable, and is associated with a wide range of health outcomes.¹⁵⁸ As a result, the costs to the NHS of Hepatitis C have not been included. One report (Hepatitis C Trust and University of Southampton, 2005) estimated that Hepatitis C would cost the NHS £1.8 billion over a ten year period.¹⁵⁹

The costs of treating other infectious diseases that are spread through needle sharing, including Hepatitis B, have also not been included. This is due to a lack of data on the number of newly diagnosed IDUs. Other health problems that arise from injecting drugs include bacterial infections at the injecting site. The necessary data are not available to be able to estimate costs from such health outcomes.

v. Costs of deaths due to drug misuse

In some cases use of illicit drugs can lead to death.¹⁶⁰ The cost of a death is taken from the Department for Transport's (2011) cost of a fatal casualty in a road accident.¹⁶¹ This is a widely used figure and, while the cost of a drug-related death is not directly comparable with the cost of a road traffic accident death, it is considered the best available estimate.

The number of deaths due to drug misuse for the UK was taken from three sources. For England and Wales the estimate is from the Office for National Statistics (ONS, 2011), for Scotland it is from the National Records of Scotland (NRS, 2011) and for Northern Ireland it is from the Northern Ireland Statistics and Research Agency (NISRA, 2011). The cases included were defined as those where illicit substances

¹⁵⁸Hepatitis C- NHS choices website, <http://www.nhs.uk/conditions/Hepatitis-C/Pages/Introduction.aspx>

¹⁵⁹ The Hepatitis C Trust and the University of Southampton. The UK vs. Europe: Losing the Fight Against Hepatitis C, 29 September 2005.

¹⁶⁰ This can be a result of the difficulty of ascertaining the purity of illicit drugs, but also because of the insanitary conditions of use.

¹⁶¹ Department for Transport, Valuation of Road Accidents, September 2011, Table RAS60001, available at: http://www.dft.gov.uk/statistics?orderby=title&post_type=table&s=ras60

were mentioned on the death certificate.¹⁶² Deaths following misuse of prescribed drugs such as benzodiazepines have not been included. Deaths resulting from misuse of the prescribed drug methadone have been included as they are assumed to stem from pre-existing opioid dependency. (Department for Health and devolved administrations, 2007)

Table A1.15 Estimated cost of deaths due to drug misuse, 2010, UK

	Number of deaths	Unit costs per death (£m)	Total Costs (£m)
England and Wales	1,357	£1.6	£2,200
Scotland	464	£1.6	£770
Northern Ireland	25	£1.6	£41
Total	1,846		£3,000

Source: Office for National Statistics (ONS, 2011); Northern Ireland Statistics and Research Agency (NISRA, 2011); National Records of Scotland (NRS, 2011).

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to two significant figures.

The total estimated costs of drug-related deaths of £3.0 billion are higher than previous estimates, such as in Singleton et al. (2006) which estimated the costs of Class A drug-related deaths to be £923 million. This is partly due to inflation in prices but also because this estimate includes deaths due to a wider range of drug use. It should also be noted that previous estimates have focused on England and Wales, whilst this estimate is for the UK and that trends in drug misuse deaths have been increasing.¹⁶³

The costs of drug treatment have also been included in the social and economic costs of illicit drug use. The budget for drug treatment in 2010/11 in the UK is estimated to be £720 million.¹⁶⁴ This may overestimate costs as it can include funding for treatment for misuse of prescription drugs. A breakdown of these figures can be seen in Table A1.16.

¹⁶² Illicit substances included: amphetamines (including ecstasy), cannabis, cocaine, heroin, and mephedrone.

¹⁶³ Looking at statistics for England and Wales, Scotland and Northern Ireland all show an increase in the number of drug misuse deaths from 2000, with a slight decrease in 2010 compared with 2009 figures.

¹⁶⁴ Data have been taken from the UK Focal Point on Drugs 2011 edition which provides treatment budgets for England and each of the devolved administrations. Budgets for Wales include treatment for alcohol misuse so a proportion has been removed to account for this. This proportion equals the proportion of total referrals where alcohol was the main problem identified.

Table A1.16 Drug treatment expenditure, 2010/11, UK by country

	Treatment budget for illicit drugs (£m)
England	£640
Wales^a	£16
Scotland^b	£57
Northern Ireland	£8
UK	£720

Source: UK Focal Point on Drugs (2011).

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to two significant figures.

- a) For 40 per cent of treatment referrals drugs were the main problem. This proportion has been applied to the total treatment allocations report in the UK Focal Point on Drugs (2011).
- b) In addition to the drug treatment funding highlighted in UK Focal Point on Drugs (2011), £28 million was spent on methadone prescriptions. This has been included in the total for Scotland.

Enforcement Costs

The cost of enforcing drug offences has been calculated using “Criminal Justice Statistics 2010” (Ministry of Justice, 2011a) to estimate the CJS costs of drug offences, as well as estimates of police and UK Border Agency budgets spent enforcing drugs supply. There were over 70,000 drug offences¹⁶⁵ resulting in court proceedings in England and Wales in 2010. Methodology concerning the CJS costs of drug offences can be found later (page 46) in this technical annex. The costs of these offences, scaled up to the UK using population data, are approximately £680 million.

Additional police costs were calculated using Activity Based Costing (ABC)¹⁶⁶ data for 2007/08 which states that approximately three per cent of police budgets were spent enforcing drug offences.¹⁶⁷ Applying this proportion to the police budget in 2010/11 suggests that the costs of drug enforcement to the police is approximately £362 million for England and Wales. Scaling this up to UK level by population suggests an estimated £370 million spent by the police enforcing drug offences. The total costs of drugs enforcement in the UK is approximately £1.1 billion. The breakdown of these costs can be seen in Table A1.17.

This does not include enforcement costs resulting from Serious Organised Crime Agency (SOCA), UK Border Force, or Ministry of Defence enforcement activity. Data were not available to estimate these costs but they are within the scope of this report. While the entire SOCA budget is a cost in response to organised crime, it has not been possible to break this down by organised crime type.

¹⁶⁵ Including importation, exportation, production, supply and possession offences.

¹⁶⁶ ABC breaks down policing costs by the activities the police perform. These exclude overhead costs.

¹⁶⁷ Hansard House of Commons Debate, 27 January 2010, c910W.

Table A1.17 Costs of drug enforcement, by type, 2010/11, UK

	Costs (England and Wales, £m)	Total costs (UK, £m)
Policing	£360	£370
Criminal Justice System	£610	£680
UK Border Agency	-	£70
Total		£1,100

Source: Various.

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to two significant figures.

Total costs

The total social and economic costs of organised illicit drug supply in the UK are estimated at £10.7 billion. The breakdown of these costs can be seen in Table A1.18.

Table A1.18 Total social and economic costs of illicit drugs, 2010/11, UK

Type	Total costs (£m)
Drug-related crime	£5,800
NHS costs	£80
Drug-related deaths	£3,000
Drug treatment	£720
Enforcement costs	£1,100
Total	£10,700

Sources: Hospital Episode Statistics; Patient Episode Data for Wales; Office for National Statistics (ONS, 2011); Northern Ireland Statistics and Research Agency (NISRA, 2011); National Records of Scotland (NRS, 2011).

Notes:

- Figures may not sum due to independent rounding.
- All outputs have been rounded to two significant figures.

Firearms supply

Scale

Due to data availability issues, it has not been possible to estimate the scale of the supply of illicit firearms by organised crime groups in the UK.

Costs

The use of firearms is not generally organised but their supply for use in particular offences often is. Organised crime groups can provide firearms for use through international importation but also through domestic supplier models. The social and economic costs of firearms supply capture the harms resulting from the use of firearms supplied by organised crime groups. This has been calculated using the estimated number of incidents where certain firearms¹⁶⁸ were fired or used as

¹⁶⁸ In England and Wales those weapons excluded are: air weapons; imitation firearms; and other firearms or weapons for which no licence is required. For Scotland: air weapons; imitation firearms; and unidentified firearms are excluded.

weapons. Estimating this number precisely is not possible so proxies have been used and assumptions made; these are set out below.

Police recorded crime can be used to identify and exclude those offences committed with less serious firearms such as air weapons, imitation firearms, and other firearms for which a licence is not required.¹⁶⁹ The remaining offences were committed using a firearm that requires the owner to hold a licence. As “licensed firearms do not appear to be used in the majority of [crime] cases” (HASC, 2010), when such a firearm is used to commit an offence it is assumed to have been supplied by organised crime groups. This could lead to an overestimate of the costs resulting from organised crime as some firearms used in these offences could have been misappropriated¹⁷⁰ rather than provided by organised crime groups. There is also the possibility that the offences would have taken place even without the provision of a firearm. In the absence of data on misappropriated firearms, it is assumed that 100 per cent of these offences are attributable to organised crime. Data are available for England, Wales, and Scotland and are presented in Table A1.19. Similar data were not available for Northern Ireland and estimates were not scaled to account for this.¹⁷¹

Home Office costs of crime estimates have been applied to these volumes. The costs of crime estimates have been adjusted to reflect the assumption that all offences committed with a serious firearm are recorded.¹⁷² The amended costs of crime estimates are displayed in Table A1.19 and are only used in conjunction with gun crime offences where the assumption of 100 per cent reporting is used.

As described above, this approach may overestimate the volume of offences committed. However, the total cost of the supply of illicit firearms is likely to be an underestimate because the impact on the communities in which these crimes take place could not be estimated.

¹⁶⁹ The full list of weapons excluded is: unconverted starting gun; imitation hand gun; soft air weapon; ball bearing gun; blank firer; other imitation; supposed type unknown; air weapon; CS gas; pepper spray; and stun gun.

¹⁷⁰ These are legally held firearms that have subsequently been stolen or obtained by fraud or forgery, or handled dishonestly. Also, a small number of offences will still have taken place had the firearm not been available.

¹⁷¹ Given the different uses of firearms in Northern Ireland, it is not appropriate to scale up on the basis of population.

¹⁷² This means that the CJS cost component of the unit cost will be higher as the total CJS costs are now averaged across recorded crimes rather than total crime.

Table A1.19 Number of offences committed using serious firearms, 2010/11, Great Britain

Offence	Volume	Unit cost ^a (£)	Total cost (£m)
Attempted murder	504	£39,269	£19.8
Burglary	107	£5,537	£0.6
Criminal damage	124	£1,378	£0.2
Homicide ^b	49	£1,774,681	£87.0
Offences against vehicles	2	£5,008	£0.01
Other offences	133	£1,951	£0.3
Other theft offences	8	£1,951	£0.02
Other violence against the person	922	£19,383	£17.9
Robbery	2,195	£14,491	£31.8
Sexual offences	12	£36,952	£0.4
Total	4,056		£157.9

Source: Police recorded crime, 2010/11.

Notes:

- These are the relevant Home Office costs of crime unit costs. the CJS component of these costs has been adjusted to reflect the assumption that 100 per cent of gun crimes are recorded.
- As data for 2010/11 includes offences committed by Derrick Bird on 2nd June 2010 these offences have been excluded from this table as his 12 victims were all killed with a licensed firearm.

Organised Fraud

Scale

The scale of organised fraud draws on estimates by HM Revenue and Customs (HMRC) and the work of the National Fraud Authority (NFA).

The organised crime proportion of the tax gap¹⁷³ is published annually by HMRC. This includes Missing Trader Intra-Community (MTIC fraud), the smuggling of alcohol and tobacco, and VAT repayment fraud. In 2010/11, the organised attacks on the tax system accounted for approximately £5 billion (HMRC, 2012).

In addition, organised fraud is assessed by the National Fraud Authority as part of the “Annual Fraud Indicator” (NFA, 2012). This work calculates the scale of organised fraud including mass marketing fraud, insurance fraud and card fraud.¹⁷⁴ It also includes the HMRC organised crime tax gap figure. The most recent estimate (NFA, 2012) assesses organised fraud in 2010/11 and incorporates the HMRC estimate of organised fraud for 2009/10 (£6 billion). Since publication of the most recent Annual Fraud Indicator (NFA, 2012) the HMRC element has subsequently been updated (£5 billion for 2010/11, HMRC 2012).

¹⁷³ The tax gap is defined as the difference between tax collected and the tax that should be collected if all individuals and companies complied with both the letter and HMRC’s interpretation of intention of Parliament in setting law. The tax gap is net of HMRC’s compliance activity. (HMRC, 2012)

¹⁷⁴ These estimates are scaled up to allow for undetected fraud, which could cause them to overestimate the scale of organised fraud losses.

Estimates have been adjusted downwards to reflect the newer HMRC figures. The total scale of organised fraud in the UK is therefore estimated at £8.9 billion¹⁷⁵.

Costs

The main economic costs of fraud considered in this report are the losses experienced by victims of fraud, which are estimated in the scale section. In addition there are CJS costs associated with organised fraud offences that should be included. CJS costs for all fraud offences in 2010 have been estimated and a proportion attributed to organised crime. This proportion has been estimated using the proportion of organised fraud losses of total fraud losses, both reported in the NFA's "Annual Fraud Indicator" (2012) which is approximately 15 per cent. This gives CJS costs resulting from organised fraud of approximately £22 million.

Other victim costs of fraud could be included in the social and economic costs of organised fraud but it has not been possible to estimate these. They include preventative costs incurred by individuals and businesses to avoid becoming victims of fraud, costs of fraud prevention bodies and strategies, social and emotional costs to victims of fraud, and government expenditure on tackling organised fraud.

The estimated social and economic cost of organised fraud is approximately £8.9 billion.

Organised immigration crime

Three broad types of organised immigration crime are considered in this section:

- abuse of legitimate entry;
- human trafficking for sexual exploitation; and
- people smuggling.

Scale and costs estimates are intended to capture successful attempts to enter, those detected on arrival, and those prevented from entering the UK. The data and estimates presented reflect what is known about organised immigration crime. This includes those detected at the border, encountered by authorities in the UK or, in the case of forged supporting documents, detected in visa applications. With the exception of human trafficking for the purposes of sexual exploitation, this section does not include estimates of hidden populations of irregular migrants residing in the UK.

The costs and impacts of migration are not considered in this section as they are beyond the scope of this report. They are also only indirectly related to organised crime and the focus of this report is the direct costs. Further information of the social

¹⁷⁵ This is based on the NFA estimate of £9.9 billion for organised fraud but accounting for more recent data from HMRC on the scale of criminal attacks on the tax system.

and economic impacts of migration can be found in the reports of the Migration Advisory Committee.¹⁷⁶

This section uses previously unpublished management information. This is derived from live UK Border Agency administrative systems and may be liable to change. All management information included has been rounded to the nearest 100 cases.

a. Abuse of legitimate entry

Scale

The scale of organised abuse of legitimate entry is defined as the fees paid by migrants to organised criminals to ensure their entry to the UK. This is estimated using data on suspected cases of:

- sham marriages;¹⁷⁷
- visa port refusals;¹⁷⁸
- forged supporting document cases of those refused entry clearance;¹⁷⁹
- forged enabling document cases of those residing in the UK but applying to change their immigration status;¹⁸⁰ and
- enforcement arrests of migrants matched to a visa issued within the past 12 months¹⁸¹.

Management information for each of these categories has been provided by the UK Border Agency for 2011.

The information provided only reflects cases detected by authorities. Therefore estimates calculated using these data are partial. Individuals entering the UK through sponsorship from a college of concern, asylum applications resulting from legitimate visa holders¹⁸², and visa overstayers are all thought to have organised elements and therefore fall within the scope of this report. However no data or information exists on the proportion of organised involvement for these offences.

¹⁷⁶ These can be found:

<http://www.ukba.homeoffice.gov.uk/sitecontent/documents/aboutus/workingwithus/mac/27-analysis-migration/>

¹⁷⁷ A sham marriage, or marriage of convenience, is contracted between (a) a British citizen, a person settled in the UK, an European Economic Area (EEA) national, or a non-EEA national with existing leave, and (b) a non-EEA national without leave or whose leave is about to expire, solely as a basis for trying to enable the latter to enter, remain in or extend their leave in the UK.

¹⁷⁸ Those migrants denied entry to the UK after obtaining a genuine UK visa.

¹⁷⁹ Those migrants encountered using forged supporting documents to apply for entry clearance to the UK.

¹⁸⁰ Those migrants encountered using forged enabling documents to change their immigration status.

¹⁸¹ Enforcement arrests made by UK Border Agency officials of migrants matched to a visa issued within the previous 12 months or those requiring no visa to enter the UK.

¹⁸² Data are available on the number of asylum applications resulting from legitimate visa holders but the proportion of organised involvement in this activity is not known.

An indication of the scale of sham marriages, or marriages of convenience, is provided by Section 24 reports.¹⁸³ These reports are completed by registration officers to notify the UK Border Agency when they suspect that a marriage, which they have been asked to officiate at, may not be genuine. This may overestimate the number of sham marriages as not all suspicions will be proved to be marriages of convenience. However, no data are available to indicate what proportion of Section 24 reports are accurate. For all other types of abuse of legitimate entry, data have been provided by the UK Border Agency on the number of cases of abuse detected.

It has been assumed that 75 per cent of Section 24 reports, forged supporting document cases of migrants attempting to enter the UK, and visa-matched enforcement arrests are the result of organised crime. This 75 per cent proportion is a working assumption reflecting intelligence that suggests that most, but not all, of these types of abuse of legitimate entry to the UK are facilitated by organised crime.

Assumptions regarding the use of forged enabling documents in country, subsequent to arrival, depend on the type of forgery recorded by the National Document Fraud Unit (NDFU). On average, organised crime involvement is approximately 80 per cent. It is estimated that approximately 80 per cent of visa port refusals are facilitated by organised crime.¹⁸⁴

Based on these assumptions, over 22,000 people were detected either entering the UK or attempting to remain in the UK by abusing legitimate entry procedures with the involvement of organised criminals in 2011. This is likely to be a conservative estimate for several reasons. Firstly, the data used to calculate this estimate reflect only the detected elements of activity, a proportion of which is organised. Secondly, there are a number of types of abuse for which sufficient data are not available for them to be included in any estimates despite remaining in scope. Finally, it is possible that the proportion of organised involvement in abuse of legitimate entry could be an underestimate.

Scale estimates were obtained by multiplying the volume of illegal entrants by the fees they paid in order to arrive in the UK. Table A1.20 displays the volume and unit costs for each type of abuse of legitimate entry. The unit cost of a sham marriage was taken from evidence obtained during Operation Golding I.¹⁸⁵ For all other types of legitimate entry, it is assumed that the price paid by the migrant to organised

¹⁸³ This relates to Section 24 of the Immigration and Asylum Act 1999 under which registrars have a duty to report suspicious marriages.

¹⁸⁴ This is calculated by examining the country of origin of migrants refused entry at port. Those countries of origin with a large number of refused migrants are assumed to have organised crime networks facilitating entry attempts. While there will be many other factors influencing organised crime involvement, this was felt to be the best proxy measure.

¹⁸⁵ This was a coordinated enforcement activity operation targeting immigration crime including illegal working, sham marriages, colleges of concern, and organised crime.

criminals in order to enter the UK is the price of buying a forged supporting document. A median price¹⁸⁶ was calculated using data from the NDFU.

Table A1.20 Scale of organised abuse of legitimate entry, 2011, UK

	Volume	Organised crime involvement	Unit cost	Total cost (£m)
Sham marriages	1,700	75%	£6,325 ^a	£8.3
Forged supporting documentation cases (entry clearance)	22,200	75%	£850 ^b	£14.2
Visa port refusals	2,000	83%	£850 ^b	£1.4
Forged supporting documentation cases (in-country)	1,900	84%	£850 ^b	£1.3
Enforcement arrests	1,000	75%	£850 ^b	£0.6
Total	28,800			£25.8

Source: UK Border Agency, various sources; National Document Fraud Unit.

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to one decimal place.

a) This is an average of prices reportedly paid by migrants to arrange a sham marriage. Taken from Operation Golding I.

b) This is the median price paid for forged enabling documents. Taken from NDFU data for 2011.

Costs

This report only considers the direct social and economic costs of organised abuse of legitimate entry. This includes the cost of asylum applications resulting from those who had entered the UK through legitimate entry procedures with the help of organised crime groups. The costs of removing these irregular entrants, and the associated costs of detention prior to removal are also in scope, together with the costs to the UK Border Agency and the NDFU of preventing organised immigration crime. Data from UK Border Agency were used to determine the volume of irregular entrants¹⁸⁷ who claimed asylum, were removed, and required detention prior to removal, as well as how long, on average, they were detained.¹⁸⁸ Table A1.21 shows the relevant volumes and unit costs.

¹⁸⁶ Median price was used rather than the mean as there was a large range of prices reported in the data.

¹⁸⁷ Those entering the UK having abused legitimate entry procedures with the help of organised crime groups.

¹⁸⁸ Separate unit costs have been used for those who claimed asylum prior to removal and those who did not. Unit costs for asylum applications include the costs of subsequent removal and detention.

Table A1.21 Direct social and economic costs of organised abuse of legitimate entry, 2011, UK

	Volume	Unit cost	Total costs (£m)
Asylum applications	700	£15,215	£8.5
Enforcement arrests ^b	1,000	£210 ^c	£0.1
Removals ^d	200	£2,548 ^e	£0.4
Detention ^f	3,800	£102	£0.3
National Document Fraud	-		£1.8
Unit costs			
Total			£11.1

Source: UK Border Agency, various sources.

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to two significant figures.

- Unit cost taken from the UK Border Agency's Asylum Performance Framework Measures¹⁸⁹. This is an internal revision of the published figure. It is based on the asylum work in progress caseload and includes the cost of processing the asylum application, the costs of asylum support, removals and detention costs.
- These are non-asylum cases only.
- Average police cost of an arrest. No equivalent figure was available for the cost of a UK Border Agency enforcement arrest so this was assumed to be the best available proxy.
- Number of removals for those irregular entrants not claiming asylum. Any removals of those claiming asylum have been costed within the asylum application unit cost.
- Unit cost provided by the UK Border Agency. It is an average cost across all removals and includes transfers within the detention estate.
- The number of nights of detention required before removal for those not claiming asylum. Any removals of those claiming asylum have been costed within the asylum unit cost.

In addition to the costs identified in Table A1.21, there are UK Border Agency costs aimed at preventing organised immigration crime, including abuse of legitimate entry, which are within scope but could not be estimated. This would include elements of UK Border Agency expenditure on running the Sponsor Management Unit¹⁹⁰. Some UK Border Agency expenditure on preventing organised illegal immigration has been identified but could not be broken down by type of organised immigration crime. UK Border Agency expenditure that has been identified is included in the people smuggling section.

b. Human trafficking – sexual exploitation

Scale

Estimates in this section focus on the trafficking of foreign women for the purposes of sexual exploitation. The trafficking of men and children, and trafficking for purposes other than sexual exploitation involves organised crime and these other types of exploitation are becoming as prominent as the trafficking of women for sexual exploitation. However, equivalent data are not available to estimate either scale or costs for these other forms of trafficking for exploitation.

¹⁸⁹ Available at: <http://www.ukba.homeoffice.gov.uk/sitecontent/documents/aboutus/further-key-data/asylum-performance1.xls?view=Binary>

¹⁹⁰ This unit is responsible for ensuring the integrity of the Points Based System for migration. This includes dealing with colleges where there may be concerns about the student status of those sponsored.

The scale estimate is calculated to reflect the operation of the trafficking market within the UK. As such it reflects the revenue generated by trafficked workers as an indication of the revenue earned by traffickers. The entire market is assumed to be attributable to organised crime.¹⁹¹

The estimated number of victims in the UK comes from a number of sources. Data for England and Wales are available from Project ACUMEN¹⁹² which estimates the number of foreign women trafficked for the purposes of sexual exploitation. Unlike other data sources for elements of organised immigration crime, this is an attempt to estimate the entire market, including the hidden elements.

For Scotland and Northern Ireland similar data were not available so instead the number of victims recovered in 2009/10 and 2010/11 respectively were used. This is the number of victims encountered by law enforcement agencies and so does not represent an estimate of the total number of victims in Scotland and Northern Ireland. Since not all victims are recovered, these numbers are likely to be significant underestimates. Table A1.22 shows the number of victims.

The Scottish Crime and Drug Enforcement Agency (SCDEA) estimated that the average annual revenue generated by one female sex worker is approximately £48,000 (SCDEA, 2011). Combining this figure with the number of victims identified in Table A1.22 gives an estimated scale of human trafficking for the purposes of sexual exploitation of approximately £130 million. This is not an estimate of the totality of human trafficking. There are many different forms of exploitation not captured by this estimate and recent intelligence suggests that some forms are becoming as prominent as sexual exploitation (SOCA, 2012).¹⁹³ Additionally, estimates provided for sexual exploitation itself are unlikely to be complete.

¹⁹¹ This is because of the networks and organisation required to transport victims between locations.

¹⁹² The estimate of trafficking is built up from an examination of the off-street prostitution sector in seven regions, which were then generalised to represent England and Wales as a whole. A further group of migrant women involved in prostitution were considered to be vulnerable to being trafficked. It should be noted that these figures are substantially higher than any attempts to identify human trafficking victims including Operation Pentameter. Pentameter was a multi-agency operation designed to target human trafficking. Part 1 identified 88 victims of human trafficking, while Part 2 identified 167 victims.

¹⁹³ This recent intelligence assessment by the UK Human Trafficking Centre (UKHTC) captures the number of potential victims encountered by a range of law enforcement agencies as well as NGOs. It suggests that 50 per cent of the 2,077 potential victims encountered were trafficked for purposes other than sexual exploitation, such as labour exploitation, criminal exploitation (including in cannabis factories and farms), domestic servitude, and, for the first time in the UK, organ harvesting.

Table A1.22 Scale of human trafficking of foreign women for the purposes of sexual exploitation, 2009/10, UK by country

	Number of victims	Unit Cost	Total Cost (£m)
England & Wales ^a	2,600	£48,000	£120
Scotland ^b	73	£48,000	£4
Northern Ireland ^b	23	£48,000	£1
Total	2,696		£130

Source: Project Acumen (2010, England and Wales); Scottish Crime and Drug Enforcement Agency (2011, Scotland); Organised Crime Taskforce (2010, Northern Ireland).

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to two significant figures.

- a) This provides an estimate of all foreign women who have been trafficked for the purposes of sexual exploitation, whether detected by law enforcement or victim support agencies.
- b) These are the number of victims that have been identified by law enforcement agencies.

Costs

As with the scale estimate, the costs estimate focuses on the operation of the market for the sexual exploitation of women within the UK. Therefore, costs considered include the harms of being a victim of trafficking for sexual exploitation in the UK and not any harms resulting from journeys to or from the UK. The social and economic costs of human trafficking for sexual exploitation include physical and emotional costs sustained by victims at the hands of both traffickers and clients, and restrictions placed on victims’ quality of life. CJS costs of enforcement against trafficking offences are also considered together with the cost of providing victim services and costs to other agencies, including SOCA and the UK Border Agency, of trying to prevent human trafficking.

The harms sustained by the victims of trafficking at the hands of traffickers have been approximated using the costs of ‘non-sexual severe domestic force’ and ‘serious sexual assault’ (Walby, 2004). This consists of 20 assaults; 3.5 chokings, 14.5 kicks or punches, 1 severe sexual assault, and 1 rape on average per year (ibid.).¹⁹⁴ In line with Walby’s (2004) approach, these have been approximated to the Home Office costs of crime categories of serious wounding, other wounding, sexual assault, and rape, respectively. CJS costs have been excluded as these offences are committed against people who are unlikely to report them. Also, as individuals who have been trafficked are not working in legitimate jobs, there will be no lost output for the economy through any time they are unable to work through injury, so the lost output component of the costs of crime estimates has also been excluded. The resultant physical, emotional, and healthcare costs caused by traffickers is estimated at approximately £235,000 per victim.

Beyond the harms perpetrated by traffickers, there are those inflicted by clients on victims of trafficking. This has been approximated by the physical and emotional costs of one rape. This is almost certainly an underestimate as each session with a client would amount to rape but there is little quantified evidence on the harms of

¹⁹⁴ Based on work completed by Sylvia Walby (2004).

repeated rape. The emotional cost of one rape, approximately £75,000 per victim, is used here as an absolute minimum value of the harm sustained by a victim of trafficking. There are also costs associated with restrictions on the quality of life of trafficking victims. It is assumed that all victims incur these costs but this may in fact be an overestimate of the victim costs.¹⁹⁵

In addition to these costs there are the costs of adult victim services. In England and Wales this is provided under the Government's contract with the Salvation Army and costs £2 million each year. Separate costs were not available for Scotland and Northern Ireland but similar contracts are in place. There are also costs of providing support to child victims of trafficking, but these could not be identified. The cost of victim support can be wholly attributed as a cost in response to organised crime.

Other enforcement costs, including CJS costs, should also be included. There were 24 proceedings for trafficking offences in England and Wales in 2010 (Ministry of Justice, 2011). The costs of these proceedings is estimated and then extrapolated to Scotland and Northern Ireland on the basis of population. This could underestimate the CJS costs as evidence suggests that prosecutors can use other offences to secure a conviction.¹⁹⁶ This has not been possible to estimate as these other offences could not be identified. The costs of these proceedings are estimated at approximately £570,000. In addition, enforcement costs incurred by SOCA, the UK Border Agency, and the police should be included but could not be quantified.

The total social and economic costs of human trafficking for the purposes of sexual exploitation are estimated to be approximately £890 million as can be seen in Table A1.23.

¹⁹⁵ Intelligence from Project ACUMEN suggests that not all victims of trafficking face the same restrictions on their movement or quality of life.

¹⁹⁶ For example prosecuting for rape, in the case of sexual exploitation, rather than trafficking.

Table A1.23 Social and economic costs of human trafficking for sexual exploitation, 2010/11, UK

	Volume	Unit cost	Total costs (£m)
Victim costs	2,700	£327,775	£880
Victim support costs	-	-	£2
CJS costs	24	£23,701	£1
Total			£890

Sources: Walby (2004); Project Acumen (2010), Scottish Crime and Drug Enforcement Agency (2011); Organised Crime Taskforce (2011).

Notes: Figures may not sum due to independent rounding. All outputs have been rounded to two significant figures.

c. People smuggling

Scale

The scale estimate of those illegally entering the UK having been facilitated by organised crime consists of three main components:

- those detected arriving clandestinely;
- those arriving with inadequate documentation; and
- those successfully entering clandestinely or as an inadequately documented arrival but subsequently arrested by the UK Border Agency in the UK.

As with abuse of legitimate entry, data used in this section only reflect detected cases, a proportion of which are attributed to organised crime. No estimates are made of the hidden population of irregular migrants.

The number of clandestine entrants detected has been provided by the UK Border Agency. Intelligence suggests that the journey of most clandestines will have been facilitated by organised crime networks at some point. As it is not possible to estimate the exact proportion that has some organised crime involvement, it has been assumed that 75 per cent¹⁹⁷ of clandestines have been facilitated by organised crime groups.

The fees individuals paid organised crime groups for their facilitation to the UK are used to monetise the scale of people smuggling. Intelligence suggests that the fees paid by individuals depend on the country of origin of the individual being smuggled. As this information is not typically captured by the UK Border Agency, proxies have been used based on the country of origin of clandestine migrants. Limited information is available on the prices paid by illegal migrants to enter the UK. As a result, it has been necessary to categorise arrivals by region, rather than country, of origin.

¹⁹⁷ This is designed to reflect that most but not all clandestines are likely to have been facilitated by organised crime during their journey.

Table A1.24 shows the region of origin of irregular migrants who have been detected entering clandestinely as well as the average fee for facilitation assumed to be paid by each individual seeking entry to the UK.

Table A1.24 Clandestine entrants attributable to organised crime, 2011, by area of origin

Area of origin	Proportion of clandestines	Average fee for facilitation ^a
Africa	31%	£2,200
Americas	0%	£37,500
Asia	30%	£23,800
Europe	9%	£3,200
Middle East	31%	£8,800
Oceania	0%	£37,500
Other	0%	£8,400
Total	100%	£10,700^b

Source: UK Border Agency management information, 2011.

Notes: All figures have been rounded to the nearest £100.

- a) Average figures taken from Home Office Research Report 15, "Organised Immigration Crime: A post conviction study"
- b) This represents the weighted average fee for facilitation, rounded to the nearest £100.

Inadequately documented arrivals (IDAs)¹⁹⁸ are also assumed to be largely facilitated by organised crime. Again 75 per cent organised crime involvement is assumed. A similar approach has been used to quantify the scale of the market as for clandestine entrants. Intelligence suggests that the price paid by migrants for facilitation into the UK varies depending on a number of factors including the route taken to the UK and the time the migrant is prepared to spend travelling.¹⁹⁹ Data held by the UK Border Agency provide the last known port of entry of IDAs but not the entire journey. These data have been used to make assumptions about the route taken. Limited information was available regarding the prices paid by migrants so assumptions were made about similar routes and an average price used for all other routes. Table A1.25 shows the assumed routes taken by IDAs together with the relevant prices paid.

¹⁹⁸ IDAs are non-UK or non-EEA migrants knowingly arriving at the UK border without the proper documentation or entry clearances. They do not include 'technical' IDAs who arrive, for example, not realising they require a visa to enter the UK.

¹⁹⁹ With more direct routes thought to be more expensive than less direct ones.

Table A1.25 Inadequately documented arrivals attributable to organised crime, 2011, by route taken

Route taken	Proportion of IDAs	Average fee for facilitation
Via Central Europe	38%	£1,000
Via Western Europe or North Africa	20%	£4,700
Via Eastern Europe	9%	£9,500
Via Central Asia ^a	10%	£13,000
Via South-East ^a Asia	2%	£17,500
Other	21%	£3,900 ^b
Total	100%	£4,600^c

Source: UK Border Agency management information, 2011.

Notes: All figures have been rounded to the nearest £100.

- a) These are likely to reflect direct flights but data are not available to determine whether this is the region of origin.
- b) This is a weighted average of the prices from all other regions based on the proportion of inadequately documented arrivals from each route.
- c) This represents the weighted average fee for facilitation, rounded to the nearest £100.

Finally, those arrested by the UK Border Agency enforcement officers in the UK who cannot be matched to a visa are assumed, in many cases, to have been largely facilitated by organised crime. It is not known how these migrants reached the UK but, given the lack of a visa match, it is likely that many will have entered clandestinely or as an inadequately documented arrival. It is assumed that 75 per cent of these enforcement arrests are attributable to organised crime, in line with the proportions used for clandestine entrants and IDAs. In this report, 50 per cent of those arrested are assumed to have arrived as clandestines and the remainder are assumed to have arrived as IDAs. The weighted average price of facilitation for each type of entrant is applied to each category.

This gives a total scale estimate of approximately £88 million. This is likely to be a conservative estimate of the scale of organised people smuggling due to the data available and the assumptions made. Table A1.26 shows the three main components of the scale estimate of organised people smuggling.

Table A1.26 Scale of organised people smuggling, 2011, UK

	Number	Organised proportion	Average fee for facilitation ^a	Total (£m)
Clandestines	7,800	75%	£10,700	£63
Inadequately Documented Arrivals	2,100	75%	£4,600	£7
Enforcement arrests	3,900	75%	£7,700 ^b	£17
Total	13,900			£88

Source: UK Border Agency management information.

Notes:

a) Weighted average of facilitation costs for each type of smuggling.

b) It is assumed that 50 per cent of those arrested are clandestines and 50 per cent are IDAs. The weighted averages displayed in this table are used for each of these.

Costs

The estimate of the social and economic costs of organised people smuggling presented here reflects the costs associated with detected organised activity. The broader costs of migration are not within scope as they are not a direct cost of organised activity. Instead, only those costs directly related to organised people smuggling are considered. This includes the cost of processing asylum applications and removals and any detention costs associated with removal.

It is estimated that approximately 15 per cent of those coming to the UK and claiming asylum are clandestine entrants, facilitated by organised crime at some point during their journey. This is based on work carried out by the UK Border Agency to profile clandestine entrants. Analysis of management information on all in-country asylum applicants for 2011 showed that approximately 20 per cent of in-country asylum applicants were served removal papers for clandestine entry. Of this proportion, 75 per cent are assumed to be the result of organised crime. As a result, the costs of almost 3,000 asylum applications in 2011 can be attributed to organised crime.²⁰⁰ In addition, management information provided by the UK Border Agency suggest a further 3,900 asylum applications were made by smuggled or clandestine entrants in order to avoid removal processes begun during 2010.²⁰¹ There is the potential for double counting of asylum applications attributable to organised crime. It is possible that the additional asylum applications resulting from irregular entrants trying to avoid

²⁰⁰ This was not a cost that could be used for the abuse of legitimate entry category as this captures those applying for asylum in the UK who have entered clandestinely. As irregular migrants in the previous section entered through legitimate entry procedures there was no equivalent population to be considered there.

²⁰¹ UK Border Agency management information was used to identify irregular entrant case types that were linked to organised crime. The 3,900 asylum applications relate to individuals served with removal papers during 2010 for clandestine entry or no evidence of lawful entry. 10,088 irregular entrants in these categories were served removal papers during 2010, 5,153 of whom claimed asylum. It is assumed that 75 per cent of these were facilitated by organised crime.

removal also have been counted in the costs of those claiming asylum having arrived clandestinely in the UK. There is no evidence as to the scale of potential double counting, but it is likely therefore that costs may have been overestimated.

Based on the assumptions stated in the scale section, an additional 1,600 removals in 2011 can be attributed to organised crime.²⁰² The costs of these removals together with the associated detention costs have also been included. On average, those being removed spent approximately 45 days in detention prior to removal. These costs together with the costs of enforcement arrests are detailed in Table A1.27.

Table A1.27 Direct social and economic costs of organised people smuggling, 2011, UK

	Volume	Unit Costs	Total Costs (£m)
Asylum applications	6,800	£15,215 ^a	£104
Enforcement arrests ^b	2,300	£210 ^c	£1
Removals ^d	1,600	£2,548 ^e	£4
Detention ^f	7,300	£102	£1
Risk and Liaison Overseas Network	-	-	£7
Regional crime teams	-	-	£19
Total			£140

Source: various UK Border Agency.

Notes: Figures may not sum due to independent rounding.

- a) Unit cost taken from UK Border Agency's Asylum Performance Framework Measures (available at: <http://www.ukba.homeoffice.gov.uk/sitecontent/documents/aboutus/further-key-data/asylum-performance1.xls?view=Binary>). This is an internal revision of the published figure. It is based on the asylum work in progress caseload and includes the cost of processing the asylum application, the cost of asylum support, and removals and detention costs.
- b) These are non-asylum cases only.
- c) Average police cost of an arrest. No equivalent figure was available for the cost of a UK Border Agency enforcement arrest so this was assumed to be the best available proxy.
- d) Number of removals for those illegal entrants not claiming asylum. Any removals of those claiming asylum have been costed within the asylum application unit cost.
- e) Unit cost provided by the UK Border Agency. It is an average cost across all removals and includes transfers within the detention estate.
- f) The number of nights of detention required before removal for those not claiming asylum. Any removals of those claiming asylum have been costed within the asylum unit cost.

Organised intellectual property crime and counterfeiting

Scale

The intellectual property (IP) crime report (IP Crime Group, 2011) describes IP crime as certain types of infringements of IP rights, including the wilful infringement of registered trademarks (counterfeiting) and the unauthorised copying and use of material protected by copyright (piracy) which are criminal offences. "The use of the internet to sell physical products and distribute digital content has increasingly become an additional threat" (ibid.).

²⁰² This is in addition to those asylum applicants who had their application denied and were subsequently removed. Removal costs are already included in the cost of processing an asylum application.

It has been necessary to draw boundaries in this research in order to prevent any overlap with cyber crime, which is excluded from the scope of this report. In consultation with industry stakeholders and government agencies, it was decided that an appropriate distinction between the IP crime considered in this report and IP crime that would fall under the heading of cyber crime is between 'physical' and 'digital' crime. Any sale of physical goods infringing intellectual property rights, whether using the internet or not, is considered within the scope of this report.

The counterfeiting of CDs, DVDs, games, business software, and clothing and footwear are all considered in this report. The list of goods could have been much longer but these goods were thought to be the main targets for organised criminals.²⁰³ This assumption also reflects available evidence at the time of publication; threats in this area are constantly changing. The focus is on the physical piracy and counterfeiting of these goods with seizure data available to estimate the market size. Using seizure data means only part of the physical market for these goods is captured in estimates particularly as many organisations are now focussing more on digital rather than physical piracy, which is reflected in their enforcement activity. Despite this, seizure data are the most consistent information available for all media types. Seizure data were provided for all goods included in this estimate with the exception of business software figures which were taken from the Business Software Alliance (BSA) Global Piracy Study which detailed the commercial value of software pirated in 2010 in the UK. This will be discussed separately.

For those media with seizure data, an average 'street value'²⁰⁴ of the goods has been obtained²⁰⁵ and multiplied by the number of items seized to calculate the illicit market. Proportions of organised involvement have then been applied to estimate the market size attributable to organised crime. The proportions attributable to organised crime are estimates based on available intelligence and the definition of organised crime used in this report. This approach may well lead to overestimates of organised involvement in some cases. Table A1.28 outlines the seizure data used together with estimates of the average 'street value' and organised proportion.

Estimates for business software have been calculated using information from BSA publications. The BSA's annual "Global Piracy Trends" publication estimated that the commercial value of pirated software in the UK was \$1.8 billion.²⁰⁶ The BSA's definition of piracy includes underlicensing software, where copies of the software are installed on more PCs than the user has purchased licences for. This is unlikely to meet the definition of organised crime used in this report because it does not require the same planning and coordination as other forms of counterfeiting and piracy considered. As a result, the estimate of organised piracy of business software

²⁰³ Based on discussions with researchers and operational colleagues at the Intellectual Property Office (IPO).

²⁰⁴ This is the value of the counterfeit or pirated goods sold.

²⁰⁵ Anecdotal evidence sourced from industry bodies within the Alliance Against IP Theft.

²⁰⁶ Approximately £1.3 billion using a GB£ to US\$ conversion rate of 1.486 (Source: US Embassy in London) for 2010.

is likely to be an overestimate. The BSA’s Global Survey of PC User Attitudes estimated that seven per cent of UK respondents would only acquire software in ways that are typically illegal. This proxy is being used to estimate the proportion of organised involvement pirated software although with the caveat that this is likely to be an overestimate as the BSA definition of piracy includes underlicensing.

Discussions with the BSA suggest there is little difference between the commercial value of legitimate software and the ‘street value’ of pirated software so no adjustments need to be made to the commercial value of pirated software estimated by the BSA. The market size of organised software piracy in the UK in 2010 is therefore assumed to be seven per cent of the commercial value of pirated software in the UK, approximately £87 million.

Table A1.28 Scale of organised intellectual property theft and counterfeiting, 2010, UK

Media	Number of items seized	Street value	Organised involvement^a	Total scale (£m)
Business software	-	-	7%	£86.9
Music – CDs ^b	188,181	£3.50-£5	100%	£0.7
Film – DVDs	766,324	£3	100%	£2.3
Games	32,600	£5	80%	£0.1
Clothing & footwear	27,322	£10	100%	£0.3
Total				£90.3

Source: Business Software Alliance; British Phonographic Industry; Federation Against Copyright Theft; The Association for UK Interactive Entertainment; Intellectual Property Office.

Notes:

- a) Games figure has been provided by The Association for UK Interactive Entertainment (UKIE) based on intelligence. For other media in this table, these figures are estimates based on information provided by stakeholders. It is likely that the majority of these markets are organised and that items seized are seized from organised criminals.
- b) This is made up of both CDs and compiled DVDs (with several albums stored on them) that have been seized. The range of street values quoted reflect the different music items seized.

The total estimated scale of organised physical IP crime is approximately £90 million. As previously mentioned, this only reflects physical counterfeiting and piracy of selected goods. The total scale of organised IP crime is likely to be far higher. However, sufficient data were not available to calculate this.

Costs

The main social and economic costs considered in this estimate are lost profit/sales to business, lost revenue to exchequer, lost jobs to industry, additional benefit payments resulting from lost jobs, and enforcement costs by media stakeholders. There are other costs, such as costs to brand reputation and reduced incentives to invest in research and development, which could also be included but sufficient data were not available to quantify these costs.

In order to estimate the impact of the consumption of counterfeit goods on legitimate sales it is necessary to distinguish between sales of counterfeit goods that displace sales of legitimate goods and those that do not. Not all counterfeit goods purchased will displace a legitimate sale so Table A1.29 highlights the cannibalisation rate for each type of good considered together with the average retail value of a legitimate sale. Cannibalisation rates for each type of good considered have been provided by industry bodies, indicating the proportion of counterfeit goods that will result in a lost sale for legitimate retailers.²⁰⁷ This cannibalisation rate, together with the value of legitimate goods sold, yields an estimated value of lost legitimate sales due to counterfeiting of £48 million.

Table A1.29 Cannibalisation rates of counterfeit goods, 2010, UK

Media	Cannibalisation rate (%)	Organised involvement	Average legitimate sale value^a	Total Cost (£m)
Business software	50 ^b	7%	-	£43.5
Music – CDs	45 ^c	100%	£8	£0.6
Films – DVDs	60 ^d	100%	£7	£3.2
Games	50 ^e	80%	£25	£0.4
Clothing & footwear	40 ^f	100%	£50	£0.8
Total				£48.5

Source: Business Software Alliance; British Phonographic Industry; Federation Against Copyright Theft; The Association for UK Interactive Entertainment; Intellectual Property Office.

Notes:

- a) These figures are an average price for each type of good.
- b) This is an assumption based on figures for music, films, and clothing.
- c) 45 per cent of counterfeit buys who Ipsos questioned about their recent purchases reported that they would definitely have bought an official release if the counterfeit had been unavailable. (BPI, 2006)
- d) Ipsos research for the British Video Association (BVA) in 2010 concluded that 60 per cent of those who had purchased counterfeit film releases would have bought an official release if the counterfeit had been unavailable.
- e) This is an assumption based on figures for music, films, and clothing.
- f) Ledbury research conducted in 2007 concluded that approximately 40 per cent of those who had bought counterfeit items would have bought a genuine item from the same or another known brand of label.

The costs to the exchequer in the form of lost business taxes as well as an increase in unemployment figures and associated increases in benefit payments are taken from recent research for the International Chamber of Commerce World Business Organisation carried out by Frontier Economics (2009). This considers the impact of four types of counterfeited goods; luxury goods, software, pharmaceuticals, and food and beverages. These estimates, of lost business taxes due to reduced company profits and lost income tax from job losses, are estimated to be 80 per cent attributable to organised crime²⁰⁸, contributing approximately £350 million to the social and economic costs of organised IP crime.

²⁰⁷ There has been much scepticism previously surrounding cannibalisation rates, as those knowingly purchasing counterfeit goods are unlikely to purchase the genuine alternative, particularly when considering high value designer items. The estimates of cannibalisation rates from stakeholders are the best available, but could still overstate the displacement of legitimate sales by counterfeit goods.

²⁰⁸ This is the average of organised involvement across all types of counterfeit goods.

Enforcement costs are calculated from reported enforcement costs by Alliance Against IP Theft members attributing 80 per cent to organised crime. This yields a further £6.5 million to the costs of organised IP crime.

The total social and economic costs of organised IP crime are estimated to be £400 million. This is likely to underestimate the true costs of this organised activity as estimates are reliant on seizure data, which only captures part of the market, and because there are other costs that should be considered but are not possible to quantify. These costs include the physical and emotional harms sustained by victims as a result of using poor quality counterfeits, reputation damage sustained by brands where consumers are unknowingly using a counterfeit item, and reduced investment in research and development as a result of counterfeiting which could have impacts for the whole economy.²⁰⁹ It has not been possible to quantify these costs due to a lack of existing data and research.

Criminal justice system

For many crime types it has been possible to use existing Home Office costs of crime estimates to estimate, among other things, the costs of organised crime to the criminal justice system (CJS). Costs of crime estimates include a CJS component, which provides average CJS costs for each type of crime. These are average costs for each type of offence across all offences committed, whether or not they were reported to or recorded by police. In some cases, these figures have been amended to be used in conjunction with recorded crime data rather than total crime, as measured by the Crime Survey for England and Wales.

However, for some crime types,²¹⁰ costs of crime estimates were not available and an alternative methodology was used to estimate the relevant CJS costs. The following methodology is applied to certain fraud and immigration crime offences. The costs to the CJS of organised crime are estimated by analysing all available offences where there are organised elements and applying a proportion that is estimated to be organised crime related.²¹¹ The costs to the CJS of each offence are calculated by summing the cost of arrests for those proceeded against, pre-charge decision cost to the Crown Prosecution Service (CPS), magistrate and Crown court costs,²¹² cost of immediate custody, cost of probation, cost of community sentence, and the cost of cautioning.

²⁰⁹ With the exception of reduced incentive to invest in research and development, these costs will only apply in the cases where consumers have been deceived in buying a counterfeit good rather than when the consumer chooses to purchase a counterfeit.

²¹⁰ Drugs, fraud, and human trafficking. For IP theft and counterfeiting industry bodies provided estimates of how much they spend on enforcement costs and prosecutions.

²¹¹ This proportion is, in most cases, the same as the proportion of organised involvement in each crime type.

²¹² Made up of the cost to the CPS, HM Courts and Tribunals Service (HMCTS) and legal aid.

Volumes have been estimated using proceedings, cautions and sentence disposal data from the “Criminal Justice Statistics 2010” (Ministry of Justice, 2011a). These data are combined with Ministry of Justice unit cost estimates to estimate the total CJS costs of organised crime-related offences.

There are certain caveats to the estimates made which are set out in the following paragraphs. Firstly, it has not been possible to estimate the cost of issuing a caution over and above the cost of first arresting the offender; however, it is expected that the additional cost would be low. It has also not been possible to include an accurate estimate on the cost of fine enforcement and conditional discharge. Compensation and fine payments received have not been included in the costs as benefits to organised criminals or society are not within the scope of this report.

A significant assumption made was that the length of trial in the magistrates’ court was one hour for all offences. This is assumed to be an average accounting for variation in lengths of trials.²¹³ For the Crown court, estimated hearing lengths were provided by HM Courts and Tribunals Service (HMCTS). Estimates only account for those proceeded against or cautioned. This does not fully reflect the cost of organised crime on the CJS as some offenders will not reach this stage but may still be associated with costs such as police investigation.

Finally, the list of offences considered to have organised crime involvement is not exhaustive, therefore estimates are likely to be an underestimate of the cost to the CJS. There are also other types of civil orders that agencies can apply for when responding to organised criminality and whose costs would be relevant.

The data used to calculate these estimates are for England and Wales. No similar data were available for Scotland and Northern Ireland. In order to estimate the CJS costs of organised crime in the UK it has been assumed that Scotland and Northern Ireland have the same offending rate as England and Wales. This is a significant but necessary assumption because of the available data but lead to inaccurate estimates. The unit costs used in these estimates are presented in Table A1.30.

²¹³ This could well be an underestimate as it is likely that organised crime cases will have more than one defendant and be more complex cases.

Table A1.30 Unit costs used in criminal justice system estimates, 2010, UK²¹⁴

	Magistrates court	Crown court
Police cost per arrest ^a	£205	£205
Pre-charge decision cost (CPS) ^b	£40	£40
CPS costs	£143	£2,500
HMCTS costs	£265	£405
Legal aid costs	£473	£4,200
Cost per month of immediate custody ^c	£2,500	£2,500
Cost per month of probation ^d	£225	£225
Cost of community sentence ^e	£2,700	£2,700

Notes:

- a) The police cost per arrest was calculated assuming 5.8 hours per arrest (taken from Deehan *et al.*, 2002) used together with Home Office estimates of the cost of police time (estimated in 2008 using Chartered Institute of Public Finance and Accounts (CIPFA) and Annual Survey of Hours and Earnings (ASHE) data, then updated to account for inflation using the Treasury gross domestic product (GDP) deflator series.
- b) Court unit costs are calculated using the unit cost per defendant for the Crown Prosecution Service, HM Courts and Tribunals Service (HMCTS) unit costs (with estimates of hearing lengths from HMCTS) (Ministry of Justice, 2011b) and 2010/11 legal aid unit costs, assuming 50 per cent are eligible for legal aid in the magistrates' court and 100 per cent in the Crown court.
- c) Based on annual yearly costs of a prison place of £30,000 from Ministry of Justice (2011b). It is assumed that 50 per cent of a prison sentence is spent in prison and 50 per cent spent on probation.
- d) The costs are based on the 2008/09 cost (Ministry of Justice 2011b), inflated using HM Treasury data to get 2010/11 nominals. These are converted into real figures in 2010/11 prices and the [Spending Review real efficiencies from 2010/11 are applied on top.²¹⁵
- e) *Ibid.*

²¹⁴ Costs are in 2010/11 prices unless otherwise stated.

²¹⁵ It is assumed that sentences under 12 months do not inflict a cost on probation services, as in 2011 Ministry of Justice re-offending compendium, available at: <http://www.justice.gov.uk/downloads/statistics/mojstats/2011-compendium-reoffending-stats-analysis.pdf>

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Annex 2: The scale of the illicit drugs market

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Introduction

The illegal and hidden nature of the drugs market makes estimating its scale challenging. In 2006 the Home Office published a paper on the scale of the UK drugs market in 2003/4, estimating it at approximately £5.3 billion (Pudney et al., 2006). This report builds on the methodology used in that paper, providing estimates for the scale of the drugs market in England and Wales in 2004 and 2010. Revising estimates for 2004 and producing new estimates for 2010 allows the impact of changes in methodology and the impact of changes over time to be considered separately. It is important to view these changes separately given the impact of changes in methodology between the Pudney et al. (2006) publication and this report.

Objectives

This work was commissioned under the organised crime strategy, so while it is separate from “*Understanding Organised Crime: estimating the scale and the social and economic costs*”, it was designed to fill a key gap in that work. As such, decisions have been made about the scope of this work with the organised crime strategy in mind. This is particularly relevant when considering which illicit drug types are included within market estimates. Any illicit drug type where the importation, production or supply is facilitated by organised crime groups and networks is within the scope of this work. Equally, legitimately prescribed drugs which may be misused have been excluded.

Key findings

The key findings of this report are:

- the estimated scale of illicit drugs market was approximately £3.3 billion in England and Wales in 2010 (Table A2.6);
- the scale of the illicit drugs market is estimated to have decreased slightly from £3.6 billion in 2004²¹⁶ (Table A2.3);
- adults arrested in the last year account for approximately 52 per cent of expenditure on drugs across all drug types²¹⁷; when looking at heroin and crack cocaine only, this share rises to 90 per cent (Table A2.6).

²¹⁶ It should be noted that this reflects a decrease in the number of drug users; other underlying data have not changed between the two estimates.

Definition

The scale of the illicit drugs market in this paper is defined as the amount of money spent by drug users in England and Wales on amphetamines, cannabis, crack cocaine, ecstasy, heroin, LSD, magic mushrooms, and powder cocaine each year. These drugs were selected on the basis of data availability within the surveys of offending and drug use used in this report. Excluded drugs include those where a large proportion of consumption may be legitimate prescriptions like methadone or tranquillizers as well as more recent market developments, like mephedrone²¹⁸. Legitimately prescribed drugs are not the product of organised crime and fall outside the scope of this work. Similarly, there is an absence of evidence to suggest that any trade in unprescribed methadone uses organised crime networks. Of those drugs excluded from scope only four were included in the 2010/11 Crime Survey for England and Wales (CSEW)²¹⁹. These are tranquillizers, ketamine, amyl nitrite, and anabolic steroids. The impact of each of these on final figures is thought to be small.²²⁰ More recent market developments, which include new psychoactive substances, are likely to be the product of organised crime but are not covered within the survey data used in this paper.

The chosen definition reflects a narrower scope than the 2006 publication, which also considered number of users, volume of drug consumption and seizure rates.²²¹ This change in approach allows more specialised and direct calculations, with fewer assumptions about average use and the volume of drug used required. The focus on a user spend definition is consistent with the approach used for legitimate consumer goods. In both cases, production costs and transactions further up the supply chain are excluded.

Previous work

The first major attempt to measure the scale of the UK illicit drugs market was a feasibility study conducted by the Office for National Statistics (ONS) and reported in Groom et al. (1998). The approach used a mix of supply side and demand side data sources, along with estimates of seizure rates. This produced an estimate of between £4.3 billion and £9.9 billion at 1996 prices.

²¹⁷ Based on data from the Arrestee Survey from survey years 2003/04, 2004/05 and 2005/06.

²¹⁸ The estimates provided in this annex are for 2010, before mephedrone was classified as an illegal drug. There is limited robust evidence available on the prevalence of mephedrone use or drug users' expenditure on this drug. For these reasons, and due to its exclusion from both the Arrestee Survey and the Offending, Crime and Justice Survey (as it had not been classified when these surveys were completed), the scale of mephedrone has not been estimated in this paper.

²¹⁹ Formerly known as the British Crime Survey (BCS). The name has been changed to reflect the geographical coverage of the survey.

²²⁰ The Crime Survey for England and Wales estimates of the number of users in the last month, along with street prices and likely dosage suggest that the market size for each of these drug types is likely to be between £10 million and £50 million.

²²¹ The single definition does not affect the number of drug types that are within the scope of this paper; this remains largely unchanged from Pudney *et al.* (2006).

Subsequent work by the National Economic Research Associates developed the ONS demand side approach, focusing on consumer data and removing the reliance on estimated seizure rates. This reported an overall market size of £6.6 billion (Bramley-Harker, 2001). These two attempts are described in more detail in Pudney et al. (2006), as they developed the demand side approach further.

This report continues the process of developing the demand side methodology. The methodology differs from Pudney et al. (2006) in two substantive ways. Firstly, this report uses a split in methodology between adult arrestees and all other groups²²². The approach for adult arrestees, described in the following section, was used for all groups in Pudney et al. (2006). The consistent approach used by Pudney et al. (2006) allowed the analysis to cover a broader range of outputs, including the estimated volume of drugs consumed. However, it also meant that data on drug spend from the Offending, Crime and Justice Survey (OCJS) could not be used because equivalent data were not available for adult arrestees.

Secondly the OCJS was used in this report for 11 to 15 year olds instead of the Smoking, Drinking and Drug Use Among Young People in England survey (schools survey) used by Pudney et al. (2006). Again, this choice reflects the reduced scope of this paper in comparison with Pudney et al. (2006). The reasons stated, in Pudney et al. (2006), for choosing the schools survey²²³ suggest that it is a more appropriate data source for estimating the number of young drug users than other, household surveys. In using the schools survey to estimate the scale of the drugs market Pudney et al. (2006) assumed that a juvenile who reports drug use with a particular frequency is spending the same amount on that drug as a similar adult. Differences in disposable income, knowledge about what they are buying and effective dose size could cause the average juvenile spend to be much lower. As the OCJS provides the amount spent on drugs within the last four weeks for juveniles, no such assumptions about patterns of drug use, drug purity and price within the juveniles' drugs market are required.

Methodology

The approach used for this report considers the amount spent on illicit drugs separately for adults arrested in the last year and all other groups. These estimates are then combined to provide a total estimate of the scale of the illicit drugs market as defined at the beginning of this report. Separate methodologies for these two groups were required because of the differences in the data available in the two main surveys.

²²² 'Other groups' are those covered by the OCJS data including adult non-arrestees, juvenile arrestees, and juvenile non-arrestees.

²²³ These reasons and the difficulties in determining which data source is most appropriate are set out in "The 2003 SS and 2003 OCJS" on page 60 of *Measuring Different Aspect of Problem Drug use* (Singleton *et al.*, 2006).

Main surveys

The principal data sources for this paper are the OCJS and the Arrestee Survey. These two surveys were used together for the main part of this analysis because they complement each other. The OCJS was a nationally representative, self-reported offending survey that, in 2003, asked 10,000 people aged ten and over, and resident in households in England and Wales about their attitudes towards and experiences of offending. The survey also covered potential risk factors including drug and alcohol use. The Arrestee Survey, which took place between 2003 and 2006, was a nationally representative survey of drugs and crime among the population of individuals aged 17 and over representing arrest events in England and Wales.

On its own, the OCJS (if scaled up to the entire population) would underestimate the scale of the drugs market. While it provides an effective measure of more commonly used drugs, those drug users who cause the most harm to themselves and society are unlikely to be involved in a household survey, due to their chaotic lifestyles. If scaled up to the entire population the Arrestee Survey, by itself, would overestimate the scale of the drugs market because drug users are more likely to be arrested than the population as a whole. Combining the two surveys provides a more accurate picture of the true scale of the drugs market. However, using these data sources does introduce the possibility that the most harmful drug users who have not been arrested in the previous year may be under-represented.²²⁴ As such, estimates of the scale of the drugs market presented in this paper could underestimate the true scale of the illicit drugs market. There is no evidence to suggest how significant this under-representation might be.

Adults arrested in the previous year were removed from the OCJS dataset in order to ensure that there was no overlap between the two surveys, as this could lead to double counting. ,

Step-by-step methodology

Separate estimates of the scale of the illicit drugs market were calculated for adult arrestees and non-arrestees (whether adult or juvenile). This is because of the different data available in each of the two surveys.

Non-arrestee group

The estimate for the non-arrestee group uses a direct approach as data are provided on the amount of money spent purchasing each type of drug in the last four weeks. This was then converted into annual expenditure by dividing by 28 to get the average daily spend and then multiplying by 365 to obtain the annual expenditure. An outline

²²⁴ This is because the most harmful drug users are unlikely to be captured by the OCJS due to their chaotic lifestyles. But if they have not been arrested within the last 12 months then they will not be captured by the Arrestee Survey either.

of this methodology is provided in Appendix 2 of this report. This approach assumes that drug consumption in the last four weeks is representative of drug use over the course of the year. As these data come from a random household survey and not following a trigger event, such as an arrest²²⁵, this is considered a fair assumption. It does not, however, allow for the possibility of reduced consumption following death²²⁶.

Arrestee group

The Arrestee Survey data does not include the same information on drug expenditure so the conversion from survey responses to annual spend is more complex. The approach for the adult arrestee group is based on the established approach²²⁷ of using the Arrestee Survey to estimate the number of drug users and the average number of days on which they consume drugs each year. This is combined with arrest statistics, average consumption per day of use and average street price to produce the annual spend for this group. A flowchart illustrating this approach is included in Appendix 1 of this report.

The first step was to convert the survey responses for frequency of drug use into an estimated number of days of drug use per year. This was done separately for each respondent and each drug using the values in Table A2.1.

Table A2.1 Conversion of Arrestee Survey responses into days of drug use per year

Frequency of drug use (survey response)	Date last used drug (survey response)	Days of use per year (assumed value)
5 or more days a week	Any	277
3 or 4 days a week	Any	182
1 or 2 days a week	Any	80
A few times a year	Any	5
Less often than once a year	Within the last year	1
Less often than once a year	More than a year ago	0
Less often than once a year	unknown	0.5

Source: Arrestee Survey data.

²²⁵ Following a trigger event it is possible that the expenditure on drugs in the preceding four weeks is not constant and could be different to the rest of the year. Using the OCJS, which is a household survey, should cancel out any changes in drug use throughout the year.

²²⁶ Whether the death is drug related or not. As a result, this approach may overestimate consumption for drugs that have a material effect on mortality rates. Alternatively, it may lead to an underestimate if consumption increases in the period before death.

²²⁷ As used by Pudney *et al.* (2006).

The second step is to convert the number of days use into spend. This involves multiplying by both an estimate of the number of units consumed per day of use and the price per unit. The units per day's use are based on the Pudney et al. (2006) estimates for intensive users and are presented in Table A2.2. No attempt has been made to update these and using recent evidence would be less applicable to consumption in the survey years. The consumption of the arrestee drug user population is assumed to mirror that of intensive users²²⁸, regardless of how frequently they consume a particular drug. Around two-thirds of Arrestee Survey respondents who used drugs used at least one drug three or more days each week²²⁹.

Price data were sourced from the United Kingdom Drug Situation Report 2008 (Eaton et al., 2008) and averaged across the three main years of the Arrestee Survey. These price data were used for their compatibility with the Arrestee Survey. While more recent price data are available, the 2008 Drug Situation Report (Eaton et al., 2008) provides data consistent with the Arrestee Survey years. All cannabis use is treated as cannabis herb as this is the most common form and not all data sources distinguished between different types.

Table A2.2 Drug usage estimates and price data for Arrestee Survey years

Drug	Units	Units per day's use	Mean Price 2003/04/05
Cannabis	Herb Grams	1.20	£2.57
Amphetamines	Grams	1.00	£9.00
Ecstasy	Tabs	2.00	£4.33
LSD and magic mushrooms	LSD tabs	1.00 ^a	£3.00
Powder cocaine	Grams	0.80	£51.67
Crack cocaine	Grams	0.70	£93.33
Heroin	Grams	0.48	£57.00

Source: Pudney et al. (2006).

Notes:

- a) These drugs were outside the scope of earlier work. A single dose per day appears reasonable as the primary effects last for six to eight hours. Source: US National Highway Traffic Safety Administration (2011).

²²⁸ See definition in Pudney *et al.* (2006).

²²⁹ A total weight of 4,889 out of 7,560.

Scaling to England and Wales

Data taken from the surveys used need to be scaled up to England and Wales in an appropriate manner. As with the methodology for the previous section, the approach for scaling to England and Wales is different for the two groups considered.

Non-arrestee group

The OCJS is a household survey, making the results more representative of the general population. As with other household surveys, the response levels were higher for juveniles than adults and higher for women than men. To overcome this bias, individuals not arrested in the last year were split into four age and gender based groups, with a fifth group for 10 to 16 year olds arrested in the last year. Results for the four age and gender groups were scaled to equivalent England and Wales levels using ONS population statistics for mid-2004, with deductions made to avoid double counting arrestees. The fifth group was scaled to England and Wales using arrest statistics.²³⁰

Arrestee group

Interviewees for the Arrestee Survey were selected at random from those aged 17 and over in custody suites. This means that individuals who were arrested multiple times during the survey year were more likely to be included in the survey than those with a single arrest. In order to produce results that are representative of everyone arrested, some responses for individuals with multiple arrests could be discarded at random. However, that approach loses information. These estimates are based on the standard alternative of weighting individual responses to achieve a similar outcome.²³¹ Once weighted, the results were scaled to the whole of England and Wales using arrest statistics for 2004/05²³², converted into an estimate of unique arrestees using data from the Arrestee Survey.

This methodology provides estimates for the scale of the illicit drugs market in England and Wales in 2004 for eight illicit drug types. As Table A2.3 shows, the scale of the illicit drugs market in 2004 is estimated to be approximately £3.6 billion. These estimates highlight the impact of the methodological changes applied in comparison to Pudney et al. (2006).

²³⁰ For more information on this process see Annex 3 to the report *Understanding Organised Crime: Estimating the scale and the social and economic costs*.

²³¹ For more information see Annex 3 to the report *Understanding Organised Crime: Estimating the scale and the social and economic costs*.

²³² Sourced from 'Arrests for Recorded Crime (Notifiable Offences) and the Operation of Certain Police Powers under PACE' table AB.

Table A2.3 Estimated scale of the drugs market, 2004, England and Wales

Drug	Arrestee Groups	Other Groups	Total
Cannabis	£322m	£1,109m	£1,431m
Amphetamines, ecstasy, LSD & magic mushrooms	£83m	£229m	£312m
Powder cocaine	£243m	£327m	£570m
Crack cocaine & heroin	£1,104m	£153m	£1,257m
Total	£1,752m	£1,818m	£3,570m

Source: Offending, Crime and Justice Survey data; Arrestee Survey data.

As Table A2.4 shows, the new estimate for 2004 is approximately £1.1 billion lower than previous estimates (Pudney et al., 2006) for the same year. The main difference is the reduction in the market for crack cocaine and heroin in the revised methodology, compared with the previous estimates. Reductions are also observed in most other drug types. The exception is in the market for cannabis where there was an increase of £0.5 billion compared with previous estimates.

The main change in methodology was to source youth data from the OCJS instead of the Schools Survey. This produces results for youth drug consumption which are more consistent with official statistics on drug misuse deaths.

Table A2.4 Re-estimating scale by drug type, comparing previous and revised estimates, 2004, England and Wales

Drug	Old Estimate	New Estimate	Change
Cannabis	£901m	£1,431m	£530m
Amphetamines, ecstasy, LSD & magic mushrooms	£515m	£311m	-£204m
Powder cocaine	£863m	£570m	-£293m
Crack cocaine & heroin	£2,366m	£1,257m	-£1,109m
Total	£4,645m	£3,570m	-£1,075m

These estimates can be compared to those for 2010 (Table A2.5) to illustrate the change in the scale of the illicit drugs market over time. It should be noted, however, that because the underlying survey data have not been updated, this is not a wholly

accurate representation of the true trend. But it does indicate, based on the best data available, that the scale of the market decreased slightly between 2004 and 2010.²³³

Updating estimates to 2010

The estimates have been updated to 2010 levels, accounting for changes in the drug using population and in the purity adjusted drug price. No adjustments were made for changes in the amount of pure drug consumed per drug user as no suitable data sources were found. This section describes the methodology used to convert the 2004 estimate into a 2010 estimate.

“Drug Misuse Declared” (Roe, (2005); Roe et al., (2006); Smith et al., (2011)) is an annual statistical bulletin that was produced by the Home Office, based on CSEW²³⁴ data. It includes estimates of the number of drug users in England and Wales for each drug. As a survey of the general household population, the CSEW provides an effective measure of more commonly used drugs. However, for drugs such as heroin and crack cocaine the CSEW is likely to underestimate use. This is because individuals with chaotic lifestyles are less likely to participate in household surveys. Despite this, the CSEW does give a good indication of relative changes over time and these are used to update the 2004 market size estimates for changes in the size of the drug using population. Scaling factors were calculated using the number of users in 2010 divided by the number of users in the survey year(s).²³⁵ The scaling factors for each drug type can be found in Table A2.5.

Table A2.5 also includes scaling factors for changes in purity adjusted street price. These were calculated to account for changes in the purity adjusted street price of each drug between the survey years and 2010. They are based on data from United Kingdom Drug Situation reports 2008 (Eaton et al., 2008) and 2011 (Davies et al., 2011). Purity data were not available for cannabis, LSD or magic mushrooms. Purity for these drugs was treated as constant over the period.

Both the user and price scaling factors are applied to the 2004 estimates in order to calculate the 2010 estimates presented in Table A2.6.

²³³ The number of opiate and crack users has also decreased over the same period (as measured by estimates from the National Treatment Agency).

²³⁴ Formerly the British Crime Survey; the name has been changed to better reflect the survey's geographical coverage.

²³⁵ The scaling factors were calculated using an average of the survey years 2003/04, 2004/05 and 2005/06.

Table A2.5 Scaling factors used to produce 2010 estimates from 2004 estimates

Drug	Users scaling factor		Price scaling factor	
	Adult Arrestees	OCJS Groups ²³⁶	Adult Arrestees	OCJS Groups
Amphetamines	0.75	0.69	1.38	1.50
Cannabis	0.73	0.66	1.10	1.11
Ecstasy	0.81	0.74	0.78	0.66
LSD & Magic Mushrooms	0.57	0.66	1.00	1.00
Powder Cocaine	0.96	0.92	1.48	1.56
Crack Cocaine	0.96 ^a	0.94	1.14	1.18
Heroin	0.85	0.79	0.90	0.68

Notes:

- a) The average number of crack cocaine users in the Arrestee Survey years was based on 2003/04 data and 2005/06 data only. The 2004/05 estimate is much lower and further investigation suggested this is more likely to be a data issue than a temporary change. Including 2004/05 data would produce a value of 1.11.

Because the underlying survey data remains the same for both the 2004 and the 2010 estimates of scale, this approach to scaling involves two implicit assumptions. The first is that the quantity of pure drug used per drug user remains constant between the survey years and 2010. The second is that changes in the number of drug users inclined to participate in household surveys (such as the CSEW) are assumed to reflect changes in the overall number of drug users. The potential impact of these assumptions is considered later in this paper.

Results

The scale of the England and Wales illicit drugs market in 2010 is estimated to be £3.3 billion. Cannabis is the largest single contributor, at just over £1 billion, with the combined category of crack cocaine and heroin adding a further £1.2 billion, and powder cocaine a further £0.8 billion. These results are presented in Table A2.6.

The illicit drugs market is split between consumers arrested within the last year²³⁷ and all other consumers for all drug types considered. Overall, arrestees account for 52 per cent of consumption while other consumers account for 48 per cent of

²³⁶ Adult non-arrestees, juvenile arrestees, and juvenile non-arrestees.

²³⁷ This includes consumers arrested for any offence within the last year, not just a drugs offence. Results from the Arrestee Survey have been weighted to ensure that those who have been arrested more often are not over-sampled.

consumption.²³⁸ The split is less even for individual drugs. For instance, 90 per cent of crack cocaine and heroin is consumed by individuals arrested within the last year while this group only account for around 23 per cent of cannabis consumption.

Table A2.6 Estimates for scale of the illicit drugs supply, 2010, England and Wales

Drug	Arrestee groups	Other groups	Total	Split
Cannabis	£246m	£813m	£1,059m	23%:77%
Amphetamines, ecstasy, LSD and magic mushrooms	£66m	£177m	£243m	27%:73%
Powder cocaine	£345m	£469m	£814m	42%:58%
Crack cocaine and heroin	£1,060m	£112m	£1,172m	90%:10%
Total	£1,717m	£1,571	£3,288m	52%:48%

Note: The proportion of consumption associated with arrestee groups is not the same as the proportion of consumers who are arrested. The latter is likely to be much smaller than the former because high consumption of a particular drug type is correlated with high likelihood of arrest.

Revised estimates for 2004 show a similar pattern and a comparison is included in the preceding section. Estimates of the split between consumers arrested within the last year and all other consumers have not been provided for these 2004 revised estimates. This is because the methodology is not suitable for estimating how the split between the two groups has changed over time.

The estimated size of the drugs market in England and Wales for 2010 is £3.3 billion, a decrease of £0.3 billion since 2004 (Table A2.7). In reality, the fall could be much larger as these figures are reported in the street prices of the year for which they were estimated. As the methodology used in this report is not suitable for estimating trends in the drug market over time real terms changes have not been calculated.

The largest contributor to the change over time is cannabis with a reduction of £0.4 billion, driven by a fall in the number of users²³⁹. This is partially offset by an increase

²³⁸ It is important to note that this does not mean that 52 per cent of drug users have been arrested. It only refers to the proportion of total consumption that is accounted for by those who have been arrested within the last year. In 2010, persons arrested made up approximately 2.8 per cent of the general population aged over 10 years.

²³⁹ This can be seen in the scaling factors reported in Table A2.5.

of £0.2 billion for powder cocaine, where although the number of users has declined the purity adjusted price²⁴⁰ has increased.

Table A2.7 Estimated change in scale by drug type, comparing revised estimates for 2004 and 2010, England and Wales

Drug	2004	2010	Change
Cannabis	£1,431m	£1,059m	-£372m
Amphetamines, ecstasy, LSD and magic mushrooms	£311m	£243m	-£69m
Powder cocaine	£570m	£814m	£244m
Crack cocaine and heroin	£1,257m	£1,172m	-£85m
Total	£3,570m	£3,288m	-£282m

Level of uncertainty

Given the illegal and hidden nature of the market for illicit drugs, there are a number of uncertainties inherent in estimations of its scale. This section explores the uncertainties inherent in the estimates presented in this report in comparison to those inherent in previous estimates.

The previous estimate for the scale of the drugs supply in England and Wales, published in Pudney et al. (2006), was between £3.5 billion and £5.8 billion. The size of this range reflected uncertainties around how to convert survey responses for frequency of drug use into amount spent. Uncertainty around the level of drug use amongst 11 to 15 year olds and the most appropriate data source was also identified but was not quantified at the time.

This report helps to quantify the potential impact of the choice of youth data source as this is the main change in methodology compared with Pudney et al. (2006). The comparison of results included in Table A2.4 shows that the updated estimate is around £1 billion lower as a result of this choice. This implies a high degree of sensitivity to the choice of source data. On balance the use of the OCJS instead of the schools survey in this report is thought to be more appropriate. Therefore the estimate based on this approach is considered to be more accurate.

²⁴⁰ This is a simple way of uprating both the price and average consumption elements of expenditure. Effectively, prices are uprated by gross street price (including cutting agents) while average consumption is uprated by purity.

The overall level of uncertainty around the results presented in this report includes some of the uncertainty present in Pudney et al.'s methodology. This is generated from the conversion of data for the adult arrestee group to drug market size and from sampling error for the other groups. This means that there is a risk that the overall scale of the drugs supply in England and Wales is around £1 billion lower or £1 billion higher than the results stated in this report. In addition use of OCJS data in place of the schools survey is associated with an 'upside' risk of around £1 billion because estimates of drug use in the schools survey are generally higher than equivalent estimates in the OCJS. However the use of the OCJS is considered to be preferable, as explained earlier in this paper. There is the additional risk that the use of the OCJS and Arrestee Survey could lead to the under-representation of those drug users who cause the most harm to themselves and society but who had not been arrested within the last year. This increases the likelihood of underestimation, but insufficient information exists on the size and consumption characteristics of this missing population on which to base an estimate of the scale of potential underestimation. These estimates are based on the best available data; however, it is possible that future work, using other data sources could identify this missing population.

Because the level of uncertainty around youth results is particularly high, separate results for youths are not included in this report. In addition, some drug types have been combined in order to reduce the impact of sampling error. Amphetamines, ecstasy, LSD and magic mushrooms were combined because drugs with the fewest users are the most vulnerable to this risk. Crack cocaine and heroin were combined because of their low number of non-arrestee users. This should ensure that the results presented are as robust as possible given the uncertainties inherent in the data described in previous sections.

As well as the uncertainties with the choice of data sources, there are additional uncertainties from scaling of revised estimates for 2004 to 2010. As the survey data have not been updated for the scaled up estimates for 2010, a number of implicit assumptions have been made. Estimates were scaled to account for relative changes in the number of drug users as well as changes in purity-adjusted price. This requires two key assumptions; firstly that the amount of pure drug used per drug user remains constant over time, and secondly, that changes in the number of drug users inclined to participate in household surveys are assumed to reflect changes in the overall number of drug users. If these two assumptions are not true then there are additional risks of uncertainty in these estimates.

As Tables A2.4 and A2.7 show, the changes to the methodology have a relatively large impact on the estimates compared to the changes over time. This reflects the data limitations in this area. As a result, caution needs to be shown when interpreting these findings due to the age of the data and the assumptions that are required in order to scale estimates from 2004 to 2010. The underlying data have not been

updated so these estimates cannot give a full indication of the changes to the scale of the illicit drugs market over time.

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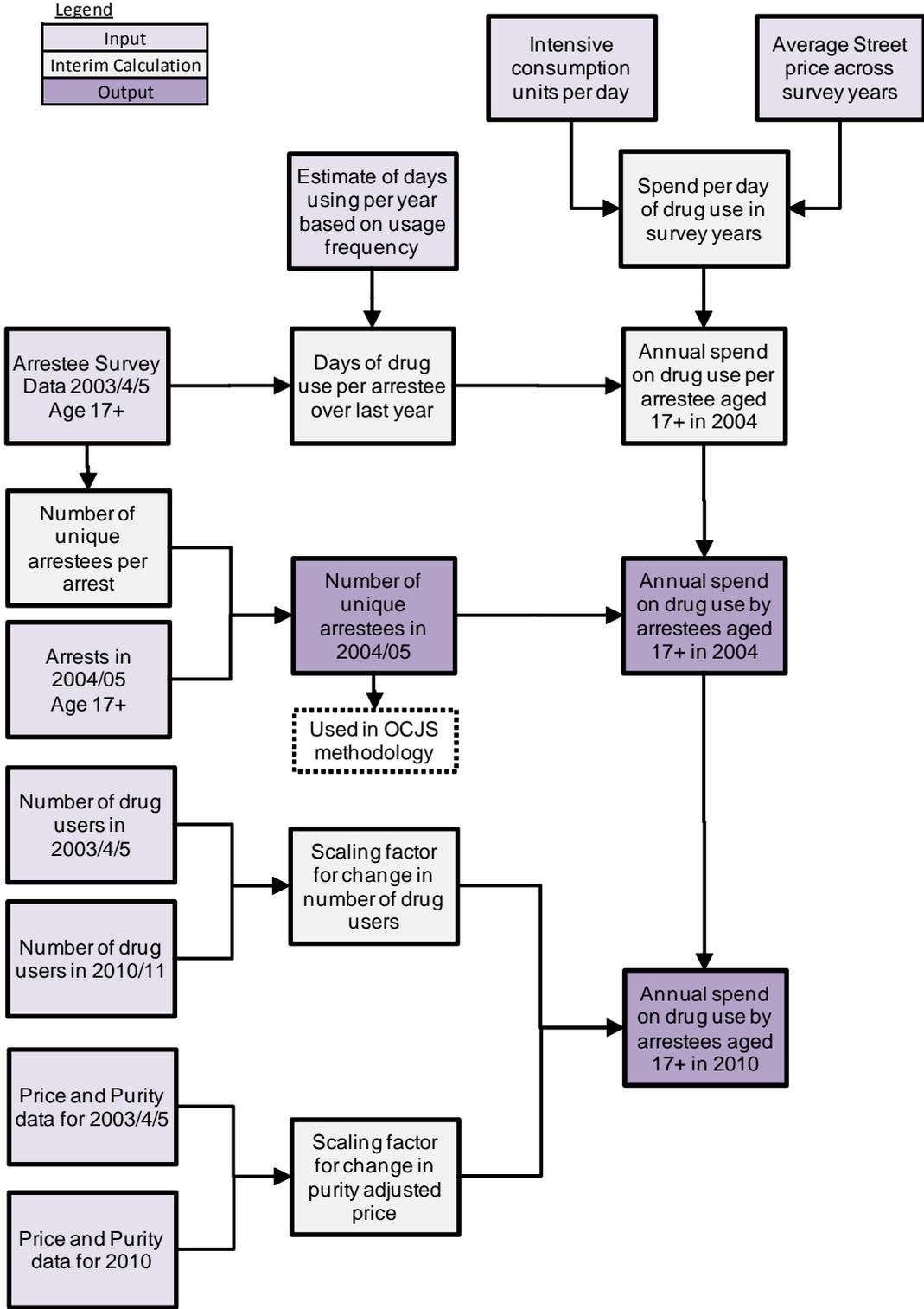
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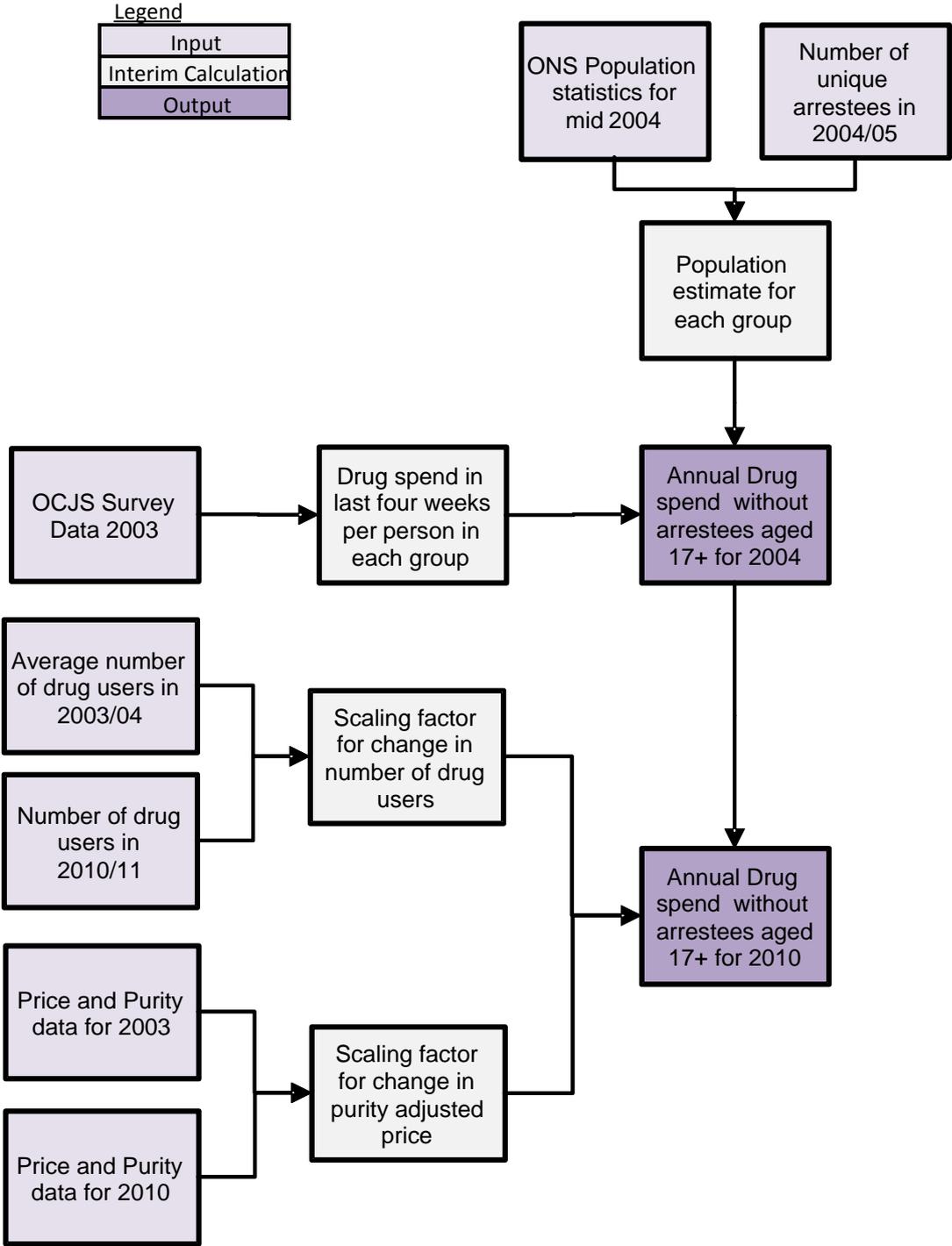
Appendix 1: Calculation flowchart for adult arrestees

The flowchart below shows the steps involved in calculating the annual drugs spend by those aged 17 and over for a single drug. The calculation was performed separately for amphetamines, cannabis, crack cocaine, ecstasy, heroin, and powder cocaine. LSD and magic mushrooms were combined into a single group.



Appendix 2: Calculation flowchart for all other groups

The flowchart below shows the steps involved in calculating the annual drugs spend for one of five population groups and a single drug. The population groups used were under 17s arrested within the last year, other 10 to 17 year old males, other 10 to 17 year old females, adult males not arrested in the last year and adult females not arrested within the last year. The calculation was performed separately for amphetamines, cannabis, crack cocaine, ecstasy, heroin, and powder cocaine. LSD and magic mushrooms were combined into a single group.



Annex 3: Measuring the costs of drug-related crime

Stephen Roe and Ian Vincent

Introduction

The illegal and hidden nature of both drug use and crime makes estimating the scale and costs of drug-related crime challenging. Previous attempts have used data on drug users in treatment or in contact with the criminal justice system (CJS) to estimate the costs of drug-related crime. This report outlines an alternative methodology which builds on previous work but incorporates more recent data on a wider range of drug users.

Objectives

This work was commissioned under the organised crime strategy, so while it is separate from “Understanding Organised Crime: estimating the scale and the social and economic costs”, it was designed to fill a key gap in that work. As such, decisions have been made about the scope of this work with the organised crime strategy in mind. This is particularly relevant when it comes to the type of drug use and drug-related crime considered in this report.

Key findings

The key findings of this report are:

- the estimated costs of drug-related crime in England and Wales range from £5.3 billion to £6.6 billion (Table A3.1);
- the proportion of acquisitive crime (excluding fraud)²⁴¹ that is drug-related ranges from 44 per cent to 48 per cent. (Table A3.2);
- burglary (including burglaries both in a dwelling and in other buildings) accounts for the largest share of the costs of drug-related crime;
- the cost of enforcing drug offences in England and Wales is estimated to be £1.0 billion, with £0.4 billion due to the costs of policing drug offences and £0.6 billion due to the further CJS costs. (Table A3.3).

Definition

Drug-related crime can encapsulate a range of crime types, depending on the definition used. There are a range of different crime categories that can be considered as drug-related (EMCDDA, 2007):

²⁴¹ Fraud was excluded from the total proportion as the drug-related fraud proportion was calculated in a different way – see Notes to Table A3.2.

1. Psychopharmacological crimes: violent crimes committed under the influence of psychoactive substances.
2. Economic compulsive crimes: acquisitive crimes committed to obtain money (or drugs) to support drug use.
3. Systemic crimes: violent offences committed to enforce or regulate the business of illicit drug markets.
4. Drug-law offences: drug possession and supply offences committed against drug legislation.

This estimate of the costs of drug-related crime focuses on economic compulsive crimes and drug-law offences because evidence, such as published Arrestee Survey data (Boreham et al., 2006; 2007), allows us to substantiate and quantify the link between these types of crime and drug use. There is insufficient evidence to enable us to do the same for psychopharmacological or systemic crimes²⁴²

Previous work

The first attempt to quantify the economic and social costs of Class A drug use was made by Godfrey et al. (2002). The basic methodology used was to distinguish types of drug user (younger recreational, older regular and problem users), estimate their prevalence and quantify the consequences associated with each type of drug user.

Due to the lack of any evidence to suggest a connection between younger non-regular Class A drug users or older regular Class A drug users and acquisitive crime, drug-related acquisitive crime was considered to be a consequence specifically relating to the dependent Class A drug users group (defined as those whose drug use is not controlled or recreational but has become an essential element of their life). Other Class A drug user groups only contributed to the costs of drug-related crime in terms of costs of arrest for possession or supply.

In Godfrey et al.'s paper, the costs of drug-related acquisitive crime were estimated based on data from the National Treatment Outcomes Research Study (NTORS), a study of the effectiveness of drug treatment between 1995 and 2000. These data included both drug users' contact with the CJS, from which the CJS costs of drug-related crime could be estimated, as well as their self-reported offending, from which the victim costs of drug-related crime could be estimated. The data also allowed differences between problem drug users in and out of treatment to be accounted for. The rates of CJS contact and self-reported offending per problem drug user in or out of treatment were scaled up using estimates of the prevalence of problem drug users

²⁴² There are limited data available on the number of homicides that the police believe are drug-related and therefore could be systemic crimes. These data are not considered robust enough to be included in this report. It should also be noted that these data would only reflect the most serious violence potentially linked to the operation of the drugs market.

(estimated through modelling techniques involving extrapolation from treatment data). This gave an estimate of the volume of CJS contacts and offences. These volumes were applied to the CJS and victim unit costs of crime data (Brand and Price, 2000) to give a total cost estimate.

This method resulted in an overall estimate of £10.6 billion (£2.4 billion CJS costs and £8.2 billion victim costs) for the economic and social costs of crime by problem Class A drug users in 2000.

Using the same basic approach, the costs of drug-related crime were updated with improved data sources and methodology by Gordon et al. (2006). Further analysis of NTORS data provided a breakdown of the offence types committed by problematic drug users (and those for which they had contact with the CJS). This information was then applied to improved estimates of the prevalence of problematic drug users (defined here as users of opiates and/or crack cocaine) and updated unit costs of crime estimates (Dubourg et al., 2005).

This updated method produced an estimate of £13.9 billion costs (£4.0 billion CJS costs and £9.8 billion victim costs) of drug-related crime in 2003/04, 90 per cent of the overall costs of Class A drug use. Due to the methodological developments between the estimates, the updated costs of drug-related crime for 2003/04 were not regarded as comparable to the previous estimates for 2000.

In addition, an alternative estimate of the costs of drug-related crime was produced as part of the Strategy Unit Drugs Report (Strategy Unit, 2003). This estimate used data from a survey of arrestees (NEW-ADAM) conducted between 1999 and 2002 to calculate the number of offences (including violent, sexual, criminal damage, traffic and other offences, in addition to acquisitive crime) committed by drug users and non-drug users, which were then applied to the Brand and Price (2000) costs of crime figures. This analysis produced an estimate of £19 billion for the costs of drug-related crime (Strategy Unit, 2003).

Separately, the proportion of acquisitive crime types that are drug related have been estimated from surveys of arrestees in custody suites in order to create the Drug Harm Index (MacDonald et al., 2005). The NEW-ADAM and Arrestee Survey were used to estimate these proportions by dividing the number of arrests for an acquisitive crime for which the arrestee reported use of heroin, crack or powder cocaine in the past 30 days/4 weeks by the total number of arrests for that offence type. These proportions were then applied to estimates of the total volume of crimes for the relevant offence category. Total volumes were derived from the British Crime Survey (BCS) for acquisitive crimes against individuals and households. For other crime types not covered by the BCS, the total volume of crimes was estimated using police recorded crime volumes divided by reporting rates²⁴³ or, for shoplifting, an

²⁴³ Reporting rates were derived from the Commercial Victimization Survey or estimated as in Brand and Price, 2000.

estimate based on the combination of two self-reported offending surveys: the Offending, Crime and Justice Survey (OCJS) and Arrestee Survey. The volumes of drug-related crimes for each acquisitive offence category were then applied to the unit costs of crime (Brand and Price, 2000). No specific estimate was given for the costs of drug-related crime in this analysis; the different costs were amalgamated to form the Drug Harm Index. However, the proportion of acquisitive crime that was drug-related (based on the NEW-ADAM and Arrestee Survey data) was shown to rise from about one-third in 1999 to just under one-half in 2004 (although the trend between these two points was highly erratic).

Methodology

The approach taken here was to build on previous work in order to estimate the proportion of each acquisitive crime type that is drug-related and then apply these proportions to a total cost of crime estimate for each acquisitive crime type. The proportions were derived using two self-reported offending surveys: the OCJS and the Arrestee Survey. This is a significant improvement on previous estimates of drug-related crime which rely on extrapolating from one cohort of drug users to the entire drug using population.²⁴⁴

Survey data

The two surveys were used in conjunction as part of the analysis because they complement each other. The OCJS was a nationally representative, self-reported offending survey that in 2003 asked 10,000 people aged 10 and over, resident in households in England and Wales, about their attitudes towards, and experiences of, offending. The Arrestee Survey, which took place between 2003 and 2006, was a nationally representative survey of drug use and crime of arrest events of individuals aged 17 and over in England and Wales.

On its own, the OCJS (if extrapolated to the entire drug using population) would underestimate the proportion of acquisitive crime that is drug related, due to the absence of the most problematic drug users who commit a high volume of offences, who are unlikely to be involved in a household survey due to their chaotic lifestyle. Similarly, if extrapolated to the entire drug using population the Arrestee Survey, by itself, would overestimate the proportion of acquisitive crime that is drug-related because the large number of non-dependent drug users who offend infrequently are less likely to have been arrested. Adults arrested in the previous year were removed from the OCJS dataset in order to ensure that there was no overlap between the two surveys, as this could lead to double-counting.

This approach has advantages over previous methods of calculating the costs and proportions of drug-related crime as it includes a broader range of drug-using

²⁴⁴ In many cases this relied on extrapolating from either a treatment seeking cohort or an arrestee cohort to the entire drug using population, thereby ignoring any drug users who manage their habit without resorting to crime or treatment.

offenders. The previous estimates of the costs of drug-related crime were based on the self-reported offending rates of only those drug users in treatment (from NTORS) and may not be representative of all drug-using offenders. The use of the Arrestee Survey and the OCJS broadens out the sample of drug-using offenders beyond those in contact with treatment services.

A weakness of the approach is that, while adult arrestees were covered in the Arrestee Survey, data on juvenile arrestees were only available from the OCJS. Juvenile arrestees may not be well represented in the OCJS due to the fact that household surveys are unlikely to include those prolific offenders and/or frequent drug users with chaotic lifestyles. Also, using these surveys introduces the possibility that offending drug users who have not been arrested may be under-represented.²⁴⁵ As such, estimates of drug-related crime presented in this paper could underestimate the true scale of the illicit drugs market. There is no evidence to suggest how significant this under-representation might be.

Data in each survey were collected in a similar fashion, further supporting the view that they are compatible. Both surveys used Computer-Assisted Personal Interviewing (where the interviewer reads the questions from a laptop and enters the respondent's answers), complemented with Computer-Assisted Self-Interviewing (where the respondent reads the questions themselves on a laptop and enters their own answers) for the more sensitive questions surrounding offending and drug use.

Both surveys asked questions regarding prevalence and volume of offending in relation to the main acquisitive crime types and for which separate costs of crime estimates were available:

- theft of a vehicle and, separately, theft from a vehicle (excluding attempts)²⁴⁶;
- burglary (separately for in a dwelling and in a building other than a dwelling);
- robbery (separate estimates for personal and commercial robbery);
- theft from the person;
- theft from a shop; and
- other theft.

Fraud comprised a substantial part of the estimate of costs of drug-related crime in 2003/04 (£4.9 billion out of £13.9 billion). While the key questions on the volume of credit and benefit fraud were asked in the Arrestee Survey, only questions on the prevalence of fraud were asked in the OCJS. In order to incorporate fraud into the estimate of drug-related crime, the questions from the Arrestee Survey were used to

²⁴⁵ The Arrestee Survey will not include offending drug-users who have not been arrested and this group may be unlikely to respond to a household survey such as the OCJS. However, using three years' worth of Arrestee Survey data (rather than a single year) helps to minimise this possibility by extending the period in which offenders might be arrested.

²⁴⁶ The OCJS asked separately about attempted thefts but attempts are not covered in the Arrestee Survey so attempted vehicle thefts are not included in the calculations.

calculate the proportions of benefit and credit fraud that are drug-related. These proportions were then adjusted to reflect the effect that the inclusion of OCJS data had on the drug-related proportions for other acquisitive crime types.²⁴⁷ Overall, the acquisitive crime types covered in this estimate of the costs of drug-related crime comprised a broader range compared with the previous estimate (Godfrey et al., 2006).²⁴⁸

Questions on prevalence and frequency of use of a range of drugs were also asked in each survey. The challenge here was to identify a group of drug users whose level of drug use was sufficient to reasonably assume that any acquisitive offences they committed were driven by the need to fund their consumption of drugs. The possibility of establishing a counterfactual (the volume of offending that would have occurred in the absence of drug use) was considered but ultimately ruled out due to the lack of appropriate data. Instead, a tight definition of drug-related offending was used in order to mitigate for the fact that some offending by regular drug users would be likely to occur anyway, in the absence of drugs.

Previous estimates of problematic drug users (Hay et al., 2006) had focused on users of heroin and/or crack cocaine and that focus was retained in this analysis. Other definitions including use of powder cocaine and variations in the frequency of use of these drugs were also considered, leading to the following range of possibilities:

- use of heroin or crack cocaine at least once a week in the past year;
- use of heroin or crack cocaine more than twice a week in the past year;
- use of heroin or crack or powder cocaine at least once a week in the past year;
- use of heroin or crack or powder cocaine more than twice a week in the past year.

Weighting systems were used to ensure that samples were representative of the underlying population. Weights to compensate for greater non-response amongst certain groups work by dividing the population into a series of categories. Results for each category are scaled up or down to compensate for the sample containing a disproportionately low or high number of respondents in each group. For the OCJS analysis, a basic non-response weighting system was used to ensure that there were representative proportions of males, females, juveniles and adults in the sample. For

²⁴⁷ For all other crime types, the inclusion of data from the OCJS reduces the drug-related proportions estimated using data from the Arrestee Survey. This is due to the fact that those falling within the definitions of this paper are more likely to be captured by the Arrestee Survey than the OCJS. The average effect of the inclusion of OCJS data is used here in the absence of data on the volume of benefit and credit fraud in the OCJS. This may not be accurate but reflects the best evidence available.

²⁴⁸ The 2003/04 estimate of the costs of drug-related crime included fraud, shoplifting, robbery and burglary while this estimate includes those crime types as well as vehicle theft, theft from the person and other theft.

the Arrestee Survey analysis, the responses were weighted by the inverse of the number of arrests the offender had previously experienced. This helps compensate for non-equal probabilities of selection arising from the fact that some offenders are more likely to be arrested than others and would therefore be more likely to be selected in the survey.

Step-by-step methodology

The precise steps taken in order to create the estimate of costs of drug-related crime were:

1. To create variables relating to the volume of offences in each acquisitive crime category (as shown above) in both the Arrestee Survey and OCJS datasets.
2. To create variables identifying drug users (using the range of definitions outlined above) in both the Arrestee Survey and OCJS datasets.
3. To create weights for each survey (as described above).
4. To produce rates of offending by drug users and non-drug users for each survey by summing the volume of weighted offences for each group and dividing by the weighted sample size of the relevant group.
5. To scale up the volume of offences committed by the relevant groups from each survey by multiplying by the number of adult arrestees²⁴⁹ in England and Wales during 2004/05 for the Arrestee Survey and 2004 mid-year population estimates for England and Wales for the OCJS.²⁵⁰
6. Adding the results from each survey together in order to calculate the proportions of each acquisitive crime type committed by drug users.
7. Applying those proportions to the total costs of crime for 2010/11.

Costs of crime

Total costs of crime figures were based on the previous methodology (Brand and Price, 2000; Dubourg et al., 2005), which include costs incurred in anticipation of, as a consequence of, and in response to crime. The costs were updated (Home Office,

²⁴⁹ National statistics on arrests in 2004/05 were divided by the number of arrests in the previous year per arrestee (derived from the Arrestee Survey) to calculate the number of arrestees in 2004/05.

²⁵⁰ The juvenile arrestees from the OCJS were separated out as part of the analysis and scaled up by the volume of juvenile arrests in 2004/05 in the same way as the Arrestee Survey analysis was conducted.

2011) to take account of inflation. Changes were also made to the multipliers used to estimate actual crime volumes from recorded crime volumes. (ibid.)

Cost figures for fraud were taken from the Annual Fraud Indicator 2012 for the categories of benefit fraud, plastic card fraud, cheque fraud and identity fraud, which also relate to costs for 2010/11, although this only includes costs in terms of direct losses to individuals and organisations (National Fraud Authority, 2012).

The cost figures for fraud from the Annual Fraud Indicator refer to Great Britain or the United Kingdom, so these figures have been re-calculated for England And Wales (based on the relevant share of the adult population) to ensure that all cost estimates in this analysis refer consistently to the same geography (England and Wales).

Although the costs of crime figures used in the estimate have been updated to 2010/11, the surveys used in the estimate were conducted between 2003 and 2006 and the analysis assumes that the drug-related proportions estimated from these surveys have remained constant since then. These estimates represent the best available.²⁵¹

Other costs

The costs of drug-law offences (drug possession and supply offences) were calculated separately. The two main components of these costs are the costs of policing drug offences and the further costs to the CJS of bringing these offences to justice in terms of processing these offences through the court and administering the sentences given. Also included are the costs that the UK Border Agency devotes to drugs enforcement where for other enforcement agencies this breakdown was not available. These costs are highlighted in Table A3.3.

Policing costs were estimated by applying the proportion of the police budget spent on drug offences (including business support costs such as personnel and finance activities), based on 2007/08 Activity Based Costing data, to the 2009/10 police budget. This estimates the cost of police time spent tackling the demand for and supply of illicit drugs in England and Wales. The 2010/11 police budget was not available on a comparable basis to earlier years' budgets.

Further CJS costs were calculated using data on volumes of court proceedings and sentence disposals (Ministry of Justice, 2011) multiplied by unit cost estimates. Altogether the CJS costs include the costs of cases proceeding through the magistrates' courts and Crown courts (including pre-charge decision-making by the Crown Prosecution Service) and the costs of community and custodial sentences (including the costs of probation supervision for those released from custodial sentences on licence).

²⁵¹ The increase in the availability of drug treatment may have reduced this proportion but there are no data available to support this.

Results

The main results of the analysis described above are presented in Tables A3.1 to A3.3 below. The analysis finds that:

- the estimated costs of drug-related crime range from £5.3 billion based on a definition that only includes use of heroin and/or crack cocaine more than twice a week, to £6.6 billion based on a definition of drug users that includes users of powder cocaine, heroin and/or crack users at least once a week (Table A3.1);
- burglary (including burglaries both in a dwelling and in other buildings) accounts for the largest share of the costs of drug-related crime. Although shoplifting offences were very likely to be drug-related, they contribute relatively little to the overall costs of drug-related crime due to the comparatively low total cost of shoplifting offences. Other theft offences contribute least to the costs of drug-related crime because these offences are least likely to be drug-related (Tables A3.1 and A3.2);
- the cost of enforcing drug offences is estimated to be £1.0 billion, with £0.4 billion due to the costs of policing drug offences and £0.6 billion due to the further CJS costs. The biggest component of the CJS costs is imprisonment (£0.4 billion) on account of the relatively long average custodial sentence length for drug offences (Table A3.3); and
- the proportion of acquisitive crime (excluding fraud)²⁵² that is drug-related ranges from 44 per cent based on a definition that only includes use of heroin and/or crack cocaine more than twice a week to 48 per cent based on a definition of drug users that includes weekly users of powder cocaine as well as weekly heroin and/or crack users (Table A3.2).

Comparison to previous estimates

The method used to calculate this estimate of the costs of drug-related crime is very different from the methods used in previous estimates, so should not be seen as comparable. Equally, changes in the various estimates over time cannot be interpreted as a trend in the costs of drug-related crime. Nevertheless, it is clear that this method produces a considerably lower estimate of the costs of drug-related crime. There are a number of reasons for this, which primarily relate to methodological improvements to the estimate.

The biggest change in costs is contained within the estimated costs of drug-related fraud which was £4.9 billion in the 2003/04 estimate of the costs of drug-related crime and is £0.7 billion to £0.9 billion in this estimate for 2010/11. It was acknowledged in the paper underlying the 2003/04 estimate that cost estimates of

²⁵² Fraud was excluded from the total proportion as the drug-related fraud proportion was calculated in a different way – see Notes to Table A3.2.

fraud at the time could not be differentiated by type. The estimate of the costs of drug-related fraud was therefore based on the estimated cost of an average fraud. The paper acknowledged the weaknesses of that approach.

This analysis has used new estimates of the costs of specific types of fraud (benefit fraud, credit fraud and identify fraud) and applied drug-related crime proportions for these fraud types to produce a more robust estimate of the costs of drug-related fraud. By limiting the fraud costs to only those specific types for which there are drug-related proportions available, the estimate of the costs of drug-related fraud for 2010/11 is likely to be an under-estimate but provides a more robust estimate than previously available. This is consistent with the approach taken in other work in this area; constructing robust estimates on the basis of what is known about a particular type of organised crime.

Further methodological differences will also have affected the size of the estimate of the costs of drug-related crime. Previous estimates assumed that two-thirds of current problematic drug users were not in treatment. A further assumption was that this group would experience the consequences of Class A drug use equivalent to those in NTORS in the 12 months before entering treatment. However, it was also acknowledged that one-third of the 'not in treatment' group would actually experience fewer consequences than other problematic drug users. This was not taken into account in cost calculations (Godfrey et al., 2002). This would have resulted in an over-estimate of the costs of drug-related crime, especially as the level of self-reported offending in the period prior to treatment entry (which is the level attributed to all problematic drug users not in treatment) can be particularly high. The difficulties involved in extrapolating from data collected on one group to other non-equivalent groups is not such an issue in the current estimate because of the more comprehensive coverage of the surveys used.

Irrespective of any methodological differences between this estimate and previous estimates, the costs of drug-related crime may be expected to fall if drug-related crimes reflect the general falls in crime over the period between 2003/04 and 2010/11. The 2003/04 estimate of the costs of drug-related crime covered the costs of burglary, robbery and shoplifting (in addition to fraud). Police recorded crimes for these three types of crimes have declined by around one quarter (26 per cent) between 2003/04 and 2010/11. Due to inflationary effects on their unit costs, the total costs of these three crime types have decreased by only eight per cent.²⁵³ If the costs of the drug-related components of these crime types had declined in the same way as the overall costs, then the costs of drug-related crime would be expected to be £0.7 billion lower.

²⁵³ The comparison between 2003/04 and 2010/11 costs of crime uses the same multiplier for each estimate so that changes to costs are limited to changes in recorded crime volumes and inflation rather than any methodological differences.

The inclusion of the OCJS in the analysis was expected to lower the estimate of the drug-related proportion of acquisitive crime due to the inclusion of lower level offenders less likely to be frequent heroin or cocaine users. If the proportions of acquisitive offences committed by drug users are calculated using the same methodology as outlined in this report but only using the Arrestee Survey data, the results show a much greater proportion of acquisitive crime to be drug-related at around 70 per cent (compared with 44 to 48 per cent when both surveys are used).

However, the combined survey approach described in this report still produces an estimated proportion at the top of the range of previously published estimates.²⁵⁴ This is because these estimates were based on the proportion of arrests for acquisitive crimes that were accounted for by drug users, while this new estimate is based on the proportion of self-reported acquisitive offences committed by drug users. As offenders will be arrested for only a small proportion of the offences they commit, the estimated proportions of acquisitive crimes that are drug related will be higher when based on self-reported offending than on arrest data (as shown in published Arrestee Survey data (Boreham et al., 2006; 2007). Godfrey's (2006) estimate of the costs of drug-related crime account for almost 40 per cent of the total cost of crimes against individuals and households in 2003/04 (Dubourg *et al.*, 2005).

Conclusion

The analysis reported above used a combination of two complementary surveys of self-reported offending and drug use (the OCJS and the Arrestee Survey) to produce a range of estimates of the proportion of acquisitive crime that is drug related. These estimates were applied to the total costs of acquisitive crime. Finally, an estimate of enforcement costs for drug offences was added to produce an overall estimate of the costs of drug-related crime. This approach finds that 44 per cent to 48 per cent of acquisitive crime is drug related and that the value of these crimes ranges from £5.3 billion to £6.5 billion. A further cost of £1.0 billion is estimated to result from the enforcement of drug offences.

The methodology used represents an attempt to consider a broader range of drug users (not just those in treatment or those in contact with the CJS) and crime types than previous estimates. Improvements to the methodology are primarily responsible for the considerably lower estimate in comparison to previous estimates, but falling crime levels are also likely to have played a role.

²⁵⁴ In previous estimates, between one-third and one-half of acquisitive crimes were estimated to be drug related.

Table A3.1 Costs of acquisitive offences by different definitions of drug users, Arrestee Survey and Offending Crime and Justice Survey, 2010/11

Offence type	Drug user definitions			
	Use of heroin or crack cocaine or cocaine powder at least once a week	Use of heroin or crack cocaine or cocaine powder more than twice a week	Use of heroin or crack cocaine at least once a week	Use of heroin or crack cocaine more than twice a week
Vehicle theft	£625m	£517m	£510m	£454m
- Theft of vehicle	£199m	£124m	£152m	£104m
- Theft from vehicle	£427m	£393m	£358m	£350m
Burglary	£3,114m	£2,917m	£2,677m	£2,616m
- Burglary in a dwelling	£1,965m	£1,861m	£1,649m	£1,613m
- Burglary in a building other than a dwelling	£1,150m	£1,056m	£1,028m	£1,113m
Robbery	£965m	£822m	£699m	£681m
- Personal robbery	£749m	£623m	£571m	£556m
- Commercial robbery	£216m	£199m	£127m	£125m
Theft from the person	£293m	£268m	£256m	£248m
Theft from a shop	£428m	£414m	£408m	£401m
Other theft	£217m	£199m	£194m	£186m
Fraud	£923m	£803m	£811m	£733m
- Benefit fraud	£307m	£248m	£261m	£225m
- Credit fraud	£158m	£145m	£142m	£133m
- Identity fraud	£458m	£410m	£407m	£375m
Total	£6,566m	£5,939	£5,555m	£5,318m

Notes:

- a) Costs of identity fraud are based on drug-related proportions for fraud shown in Table A3.1 as identity fraud is an enabler of benefit fraud and credit fraud, as well as other fraud types.
- b) Indented offence types are subsets of broader offence types.

Table A3.2 Proportion of acquisitive offences committed by different definitions of drug users, Arrestee Survey and Offending Crime and Justice Survey

Offence type	Drug user definitions			
	Use of heroin or crack cocaine or cocaine powder at least once a week	Use of heroin or crack cocaine or cocaine powder more than twice a week	Use of heroin or crack cocaine at least once a week	Use of heroin or crack cocaine more than twice a week
Vehicle theft	35%	28%	28%	24%
- Theft of vehicle	31%	19%	24%	16%
- Theft from vehicle	38%	35%	32%	31%
Burglary	55%	51%	48%	47%
- Burglary in a dwelling	69%	66%	58%	57%
- Burglary in a building other than a dwelling	50%	46%	44%	43%
Robbery	39%	34%	26%	25%
- Personal robbery	26%	22%	20%	19%
- Commercial robbery	62%	57%	37%	36%
Theft from the person	46%	42%	40%	39%
Theft from a shop	70%	68%	67%	66%
Other theft	17%	15%	15%	14%
Total (excluding fraud)	48%	46%	45%	44%
Fraud	42%	38%	38%	35%
- Benefit fraud	28%	23%	24%	21%
- Credit fraud	48%	44%	43%	40%

Notes:

- a) Total proportion was calculated by summing estimates of the volume of acquisitive offences committed by drug-users and non-drug users based on both the OCJS and the Arrestee Survey. This total excludes fraud as fraud proportions were calculated in a different way. The volume of fraud offences committed by drug-users and non-drug users based on the Arrestee Survey was used to create a drug-related proportion that was adjusted by the average effect that inclusion of OCJS figures had on other acquisitive crime types.
- b) Independent offence types are subsets of broader offence types.

Table A3.3 Costs of enforcing drug offences, England and Wales

Cost category	Cost (£m)
Policing	£362
Further CJS costs	£607
<i>Pre-charge decision-making (CPS)</i>	£3
<i>Court proceedings</i>	£150
<i>Community sentences</i>	£37
<i>Custodial sentences</i>	£383
<i>Probation</i>	£34
UK Border Agency	£70
Total	£969

Note:

- a) Indented cost are subsets of broader cost categories.
- b) Police costs in 2009/10 prices; CJS costs in 2010/11 prices.
- c) All costs are for England and Wales with the exception of UK Border Agency which is for the UK.

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ISBN 978-1-78246-236-1 ISSN 1756-3666

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