

**EXHAUSTIVENESS OF NATIONAL ACCOUNTS:  
THE HIDDEN ECONOMY - ILLEGAL ACTIVITIES**

**Submitted by the United Kingdom Office for National Statistics<sup>1</sup>**

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## **Exhaustiveness of National Accounts - the Hidden Economy: Illegal Activities**

### **Summary**

1. This paper describes possible data sources, available in the United Kingdom, for measuring illegal activities between consenting parties for inclusion with the national accounts. The paper considers illegal activities only from a national accounts perspective - that is social and moral considerations are not taken into account, only the market value of transactions. This work has been carried out by the United Kingdom Office for National Statistics (ONS), sponsored by Eurostat.

2. Under the new System of National Accounts (SNA93), illegal activities that fit the characteristics of transactions - notably that there is mutual agreement between the parties - must be included within the accounts in the same way as legal actions. This is to ensure:

- the accounts accurately reflect the whole economy;
- internal consistency of the accounts; and
- comparability of the accounts between countries and over time.

3. The paper looks at the data available for four illegal activities: sale of illegal drugs, prostitution, illegal gambling, and sale of stolen goods. Several possible data sources for drugs are set out. Limited data are available on the sale of stolen goods. No usable data are found on prostitution or illegal gambling.

4. Despite the large scale of the activity the paper cautions against overstating the effect of its inclusion in the national accounts. The vast majority of illegal activity takes place within the household sector, it is thus unlikely to explain a large amount of the discrepancies within the accounts.

5. The paper concludes that data on illegal activities is not yet of sufficient quality to be included in the national accounts, a lack of a coherent time series is a major obstacle to inclusion of the data. The paper sets out several possible areas of further work - in addition to the construction of a time series - these include investigating:

- whether the intermediate consumption of illegal businesses is already included within the accounts;
- whether illegal activity is included in the accounts under an incorrect classification;
- additional data sources, in order to justify the assumptions which had to be made to construct the above estimates.

Some suggested points for discussion are given at the end.

## Section 1 - Introduction

6. This paper examines potential sources for measuring illegal economic activities within the United Kingdom national accounts. It sets out the main data sources which are available in the United Kingdom on different illegal activities. There are a wide range of illegal activities which are at present not recorded within the United Kingdom national accounts, e.g. smuggling of endangered species. The paper concentrates on a limited number of activities - illegal drugs, prostitution, illegal gambling and the sale of stolen goods. As data on drugs are far easier to obtain than data on the other activities, the paper has tended to concentrate on this area. The paper also concentrates on the effects illegal activity has on the current account, rather than either the capital or financial accounts.

7. The paper is set out in the following sections:

Section 2 **Reasoning** - The case for including illegal activities within national accounts.

Section 3 **Classifying illegal activities within economic accounts** - The theoretical issues involved in recording illegal activities within the national accounts.

Section 4 **United Kingdom data sources** - Setting out the different sources that have been found for illegal activity.

Section 5 **Further work and conclusions** - including discussion points.

## Section 2 - Reasoning

8. This section outlines the main arguments for including illegal activity within the national accounts. It also looks briefly at some of the arguments against the inclusion of illegal activity within the accounts.

### Why record illegal activity?

#### International convention, SNA93

9. In the past, although hidden activities were required to be recorded in the accounts, there has been no specific mention of illegal activity. Most statistical offices have not made efforts specifically to identify illegal activity due to the difficulty of finding accurate data. However, the new SNA explicitly requires illegal activities to be recorded on the same basis as legal activities. The System of National Accounts (SNA93) clearly states that the legality of a transaction is irrelevant to its treatment within the system of accounts:

“Illegal actions that fit the characteristics of transactions are treated the same way as legal actions.” (Section 3.54)

10. Transactions involve mutual consent, so the sale of drugs or stolen goods which are freely bought and sold should be included in the accounts, whereas theft itself should not be included. There is a provision that ‘significant redistributions, or destruction, of assets’, through theft or otherwise, should be recorded in the accounts as ‘other flows’. This would not affect GDP or any of the main aggregates.

### **Distortion of national accounts aggregates**

11. National accounts data aim to describe the economy of a country. If illegal transactions are not included within the accounts then the economic indicators derived from the accounts will be distorted. For example, if money spent on illegal goods and services is not recorded, then the accounts will underestimate the total amount of consumer spending and overestimate the amount of money saved.

### **Internal consistency of the national accounts**

12. The national accounts are a complete, integrated system: data in one area, e.g. illegal activities, cannot be altered, or excluded without affecting data, and important indicators, in other areas of the accounts.

13. One of the reasons for having an accounting system is to allow cross-checks to be made which help to identify where there are problems with component series within the accounts. This only works if the accounts are internally consistent. If data on one area, for example income, are missed out, it will cause a discrepancy with other parts of the accounts, for example saving and expenditure. The SNA93 says of this:

“Transactions in which illegal goods are bought and sold need to be recorded not simply to obtain comprehensive measures of production and consumption but also to prevent errors appearing elsewhere in the accounts.” (Section 6.31)

### **Comparability**

14. National accounts data are used to analyse the economy over time, and to compare the United Kingdom economy with the economies of other countries. What is illegal, and what proportion of economic activity is illegal, will differ between different countries. To allow a meaningful comparison of economic activity in different countries, national accounts must include all products whether legal or illegal.

15. Similarly the legal status of many goods has changed over time (e.g. sales of firearms). To allow a sensible comparison of the level of economic activity over time all production should be included in the accounts. If this does not happen then discontinuities will occur when a product’s legal status changes, even if the economic situation (the actual level of production and employment) does not change. Economic data on countries where a large proportion of the workforce is engaged in illegal activities would be substantially affected by excluding those activities.

### **Consistency of definitions**

16. It has always been assumed that hidden activity, i.e. activity which is legal but not reported, should be included in the accounts. Most hidden activity is illegal, in the sense that it is illegal not to declare income for tax reasons. A distinction can be made between:

- income from a transaction which is itself illegal (such as selling heroin); and

- income from a legal transaction, with the offence occurring at a later date (for example not declaring income to tax authorities).

However, this distinction is not clear cut. There are several legal transactions which become illegal through lack of official approval or the appropriate permission or licences - for example, building work without planning permission. To exclude illegal activity would be to make a decision on which activities are serious enough to be excluded from the accounts.

17. There are already several types of illegal transactions recorded in the national accounts. In the United Kingdom these include sales of alcohol and tobacco to children under the age of 18; and selling tickets to '18-certificate' films to children under 18. No attempt is made to remove these illegal transactions from the accounts.

### **The case for excluding illegal activity**

18. This section will look at some of the arguments and counter-arguments which have been put forward to justify the exclusion of illegal activity from the national accounts.

#### **Goods or 'bads'**

19. One argument against including illegal activity in the accounts is that the representatives of the people have decided that these activities are 'bads' rather than goods. They do not contribute to the wellbeing of society so they should not be recorded in our economic statistics.

20. Implicit in this argument is the idea that these goods do not contribute towards welfare and that the national accounts in some way measure welfare. The national accounts **do not** measure welfare; they measure economic activity. The value of a good is measured solely by its market price, or a best approximation to the market price for own account production. The fact that a transaction is in the accounts does not mean that it is condoned. It has already been mentioned that some illegal transactions are included in the accounts (e.g. selling alcohol to children under 18 years). There are also many other transactions within the accounts which the government tries to discourage which are treated no differently from any other transaction, for example the purchase of cigarettes.

#### **Inaccurate data**

21. It has been argued that illegal activity should be left out of the accounts due to the lack of reliable data. However, at present it is implicitly assumed that the level of illegal activity is zero. This is plainly wrong. National accountants have to make the best possible estimate of economic activity using whatever data exist, even if these data may be inaccurate.

22. We should be clear what the accounts are trying to measure before we look to include 'the best possible estimates'. For many indicators within the national accounts the rate of change is more important than the actual level. For example analysts are often more concerned with the rate of growth of GDP rather than its actual level. Due to the poor quality of data on illegal activities, their inclusion within the accounts may not improve estimates of the rates of change of economic indicators.

23. There are economic indicators where the level is as, if not more, important than the rate of change; for example, the balance of payments and the saving ratio. Thus it is still important to make estimates of illegal activity. However, when making these estimates care should be taken to ensure that

there is either a good estimate of the rate of change, or that the rate of change is not so erratic that it distorts the rate of change of associated economic indicators.

### **Section 3 - Classifying illegal activities within economic accounts**

24. This section looks at what data we need in principle, and the main conceptual issues which need to be addressed when recording illegal activities within the national accounts.

25. In addition to the omission of illegal activity affecting the accounts there is a possible problem of misclassification. An illegal activity may be recorded in the accounts but incorrectly classified; for example sales of drugs may be recorded as the output of a legitimate business in order to make the proceeds appear to be generated by legitimate means. It is not clear from the available data how much money from illegal transactions is already in the accounts, although this partial recording and misclassification is likely to cause discrepancies within the accounts. It seems most likely that information about this would be found through studies of the structure of organised crime.

26. There is a general problem in identifying the intermediate consumption used in illegal production. The incorrect treatment of intermediate consumption can have several different effects depending on whether it is completely omitted, or misclassified as final expenditure, or as the intermediate consumption of another industry. There is also a possibility that illegal production could be an input into legitimate production, e.g. prostitution paid for out of business expenses.

27. The variables presented here give an indication of the effect the inclusion of illegal activity would have on the national accounts. It is not intended as an exhaustive list of the necessary information needed for full integration of illegal activity within the accounts. In particular:

- it focuses on the effects of illegal activity in the current account;
- the information on intermediate consumption necessary to compile a complete set of supply and use tables is absent. This would be needed to integrate illegal activities into the input-output process.

#### **Types of illegal activities**

28. This paper concentrates on four types of illegal activities.

- The sales and importation of illegal drugs.
- Prostitution.
- Illegal gambling.
- The sale of stolen goods.

## Drugs

29. Under SNA93 the sale of illegal drugs should be treated in the same way as legal goods. They are imported or produced within the United Kingdom, sold through a chain of dealers (each adding their own margin), and eventually sold to a final consumer.

30. There are six main variables we need:

- i) value of imports - this will affect the balance of trade position, and the expenditure measure of GDP;
- ii) similarly the value of exports (if any);
- iii) domestic output;
- iv) intermediate consumption used in any domestic production;
- v) value of final consumption - this will go into households' final consumption; and
- vi) distribution margins.

31. These variables are related by:

final consumption = distribution margins plus domestic output plus imports (less exports less purchases of illegal drugs as intermediate consumption of domestic producers)

Through this paper it is assumed that there are no significant exports and that no domestic firms buy illegal drugs as inputs.

32. The value added to the United Kingdom economy from illegal drugs will be:

- distribution margins, which will (almost all) be additional income from self-employment (i.e. mixed income of households) generated by the household sector;
- domestic output less cost of legal intermediate consumption used in producing drugs (e.g. renting a building).

Distribution margins and domestic production are different activities which would be recorded separately if activity were classified by industry.

33. The treatment of the intermediate consumption involved in producing illegal goods will depend upon how it is recorded within the accounts at present. There are three simplified cases.

- i) **Intermediate consumption is correctly recorded as intermediate consumption.** In this case the additional income will be the distribution margins and the value added from domestic production.
- ii) **Intermediate consumption is misrecorded as final consumption.** In this case the additional income will be the distribution margins and the value added from domestic

production. In addition, the intermediate consumption should be deducted from consumers' expenditure to avoid double counting on the expenditure side.

- iii) **Intermediate consumption is omitted from the accounts.** In this case the additional income will be the distribution margins and the whole domestic production output (including intermediate consumption).

34. It is unclear who makes money from the sales of drugs and whether they are household or overseas sector. For example the sale of drugs in the United Kingdom by organised crime based overseas will result in trade margins which add to United Kingdom GDP; however, the profit may leave the country which will cause a fall in United Kingdom GNP - thus there will be a smaller overall increase in GNP. Some of this net property income will already be recorded in the accounts within banking statistics.

### **Prostitution**

35. Prostitution itself is not illegal within the United Kingdom. However, most of the activities associated with prostitution, including soliciting and 'living off the proceeds of immoral earnings' are illegal. Because of these regulations prostitutes are not generally registered as businesses (at least not openly as prostitutes), and so prostitution is generally absent from the accounts.

36. There are two main variables we need:

- i) income from prostitution, which would generally be income from self-employment (mixed income) in the household sector; and
- ii) intermediate consumption involved in producing prostitution services, e.g. rent.

Value added from prostitution would be equal to:

consumers' expenditure less intermediate consumption

which would also be equal to income from prostitution.

It would be preferable to have an independent measure of expenditure; however, considering the subject area it seems unlikely that we would find a suitable estimate.

37. The conceptual problems associated with prostitution are mostly a matter of double counting and ensuring correct classification of the activity. The problems include estimating:

- i) how much, if any, prostitution services are already within the accounts misclassified as, for example, escort agencies, or massage services;
- ii) the intermediate consumption of prostitution services. Much, if not all, of this intermediate consumption may be included within the accounts as final expenditure, on, for example, rent;
- iii) how much prostitution is included in businesses intermediate consumption, misclassified as meals or accommodation.

Imports and exports of prostitution services, occurring when United Kingdom residents visit non-resident prostitutes, and when non-United Kingdom residents visit UK prostitutes, should in principle be picked up by standard sources.

### **Illegal gambling**

38. Illegal gambling occurs when bets are taken outside licenced premises, or without paying betting tax. The main problem associated with recording illegal gambling within the accounts is identifying the resultant value added. Most of the transactions involved in gambling are considered to be transfer payments, any value added made is taken to be in bringing together people who wish to bet on opposing sides (in a similar way to banks providing financial intermediary services).

39. Value added from illegal gambling would go as either income from self-employment in the household sector or operating surplus in the non-financial corporations sector. It will also add to consumers' expenditure; there are general problems of measuring consumers' expenditure on gambling regardless of legal status.

### **Selling stolen goods**

40. Although theft itself should not be recorded in the accounts as it is not a transaction (i.e. it does not involve consent between the two parties) any subsequent value added generated from selling stolen goods (fencing) should be included. Three types of transaction can be identified.

- i) **The thief sells the stolen item directly to a final consumer.** This is equivalent to selling second hand goods, and as such there is no value added. This transaction nets out within household consumption and, therefore, has no impact on the accounts.
- ii) **The thief sells the stolen item directly to a firm which uses it as intermediate consumption.** In this case the money received by the thief is netted out of household consumption, as in the first case. However, the intermediate consumption should be deducted from the firms output in order to get their value added. If the transaction is brought into the national accounts (assuming it has not been recorded previously) then total value added, and hence GDP, will fall. Specifically either mixed income in the household sector, or operating surplus in the non-financial corporations sector, would fall.
- iii) **The thief sells the stolen item to a 'fence' who then sells the item on.** In this case a distribution margin is being made by the fence. If the transaction is brought into the national accounts (assuming it has not been recorded previously) then total value added, and hence GDP, will rise. This is matched by an increase in household consumption - as the purchaser pays more than the thief receives. The fence's income may be either mixed income in the household sector or operating surplus in the non-financial corporations sector; the former is probably more likely.

#### **Section 4 - Data sources in the United Kingdom**

41. This section describes possible sources of data which could be used to construct estimates of value added from the sale of illegal drugs, prostitution, theft and illegal gambling. The reliability and availability of data sources are discussed.

##### **Types of information available**

42. Data sources for measuring illegal activity can generally be broken down into:
- administrative data, such as seizures of drugs, or numbers of arrests for an offence;
  - survey data - which can be further divided into:
    - i) national surveys; and
    - ii) targeted surveys, aimed at a specific population, such as hard drug users;
  - academic studies.

To supplement these sources informed judgements will have to be made, based on opinions formed from anecdotal evidence. In addition to government and academic sources, there are also charities and help agencies which collect information related to illegal activities.

43. Administrative data are rarely a direct measurement of required variables. They reflect only the part of illegal activities which the authorities come into contact with - a fraction of the total activity. Assumptions need to be made about what fraction of the total activity is detected. Data from law enforcement sources will also be susceptible to changes in enforcement policies, and so may reflect changes in effectiveness rather than changes in the actual level of activity.

44. Surveys face the problem of obtaining truthful answers from respondents. Respondents may be reluctant to divulge what they perceive as incriminating information; alternatively some respondents may exaggerate the extent of illegal activities. However, with suitably trained interviewers the risk of untruthful responses can be reduced. Different problems are faced depending upon the nature of the survey:

- National surveys will find few people within their sample who are involved in significant illegal activity. As these people are the most likely non-respondents, results from the survey are likely to be biased to the exclusion of participants in illegal activity; and
- Local surveys, targeted at certain groups may be good at getting specific information; however, the information cannot automatically be taken to be representative at a national level. Targeted surveys are unlikely to be strictly random, and so may be prone to biases. For example surveys on drugs often use a 'snowball' system: asking a respondent to suggest the next respondent.

45. Academic studies can be useful for assessing whether some of the assumptions which have been made are reasonable. They can also provide some data in order to construct estimates; for example, the proportion of drug related earnings which go abroad. Although these data may not be based on rigorous statistical methodology they are often the only source of data which will be available.

## Illegal drugs

### Data sources

46. This section sets out the main data sources available for recording illegal drugs. The data sources allow mostly independent estimates to be made on the expenditure and output sides.

On the expenditure side data are found on:

- the quantity of consumption (number of users of different drugs); and
- estimates of average expenditure.

On the output side data are found on:

- import prices;
- import quantities;
- cost and quantity of domestic production; and
- distribution margins.

Two variables are used in constructing both estimates:

- street prices; and
- import and street purities.

### Street prices

47. Street prices of drugs in the United Kingdom are available from two sources:

- **Release - a national drugs help agency.** Prices are obtained from information provided by drugs users through Release's national helpline and survey questionnaires. Drugs users may have reason to understate their knowledge of the market; and
- **the police.** Police prices on the other hand are obtained from prosecution records. It is therefore likely that police prices would be higher than Release prices.

Many of the prices are based on the price per gram for each drug. This assumes that a gram is the common unit of purchase of drugs.

### Value and quantity of consumption

48. The value of consumption must be calculated using the formula:

$$\text{Value Consumption}_i = \text{No. of users}_i \times \text{street price}_i \times \text{average quantity used}_i \text{ for all } i \text{ drug types}$$

To estimate the number of users, two main sources of data have been used:

- **The British Crime Survey (BCS)** is a national survey which asks the respondent whether different drugs had been taken ever, in the last year or in the last month. The survey is based on random sampling so does not target any specific groups of people. Survey findings must be treated with caution since drug users (especially heavy drug users, or users of 'hard' drugs) are more likely to be non-respondents, or to provide inaccurate data; and
- **Treatment episodes from the Department of Health** may be more reliable as an indication of the use of hard drugs but not as reliable for measuring casual use. In order to use these data a judgement must be made on the number of registered addicts as a proportion of total users.

Data on the average quantity used, are not generally available. An alternative method is to use average expenditure per user instead of the quantity used. Limited information on average expenditure per user is available for some drugs from local studies of drug addiction. This can be used to obtain a rough estimate of the value of consumption.

49. In order to use data from the BCS and the Department of Health to estimate the number of drugs users it is assumed that there are two broad groups of drugs users: users of hard drugs and users of soft drugs:

- The Department of Health data account for serious addicts who are generally users of **hard drugs** (heroin, cocaine, methadone and amphetamine); and
- the BCS data account for recreational users who are generally users of **soft drugs** (LSD, Ecstasy, cannabis and amphetamine).

Amphetamine has been included in both groups - it is assumed that there are two groups of amphetamine users: heavy users and recreational users.

#### Import prices

50. Import prices should be measured at cif (cost, insurance and freight) value, that is the value of the imports as they arrive in the United Kingdom. The distribution of the drugs after this point generates United Kingdom value added.

51. We need to understand the structure of the drugs distribution network in order to gauge that part of the earnings from the transaction which is accruing to domestic residents and that part which is accruing to non-residents. In many cases assumptions will have to be made, although the following data are available:

- Customs & Excise give 1996 distributor (kilo) price ranges for various drugs. This measures the price at which illegal drugs are traded in kilogram quantities, and represents a point in the distribution chain somewhere between the import level and the street level. A fraction of the lower end of this range has been taken as an approximation to the distribution price at the point of entry into the United Kingdom. The distributor prices, however, are not as reliable as the street prices, and the point at which the distribution prices are measured varies for different drug types since some are more bulky than others. Using this method implies that the distribution margin on imported drugs constitutes about 80% of the total street value of imports.

Import and street purities

52. Purities of drugs (cocaine, heroin and amphetamine) vary at different points in the distribution chain. They normally enter as concentrated/high purity imports, then get diluted at various stages before being sold to the final consumer. This effectively increases the quantity of each drug (LSD, Ecstasy and cannabis are not subject to this process) as it passes through the distribution chain.

53. Customs provides purities of drugs at street level, these purities take values from 0 (completely impure), to 1 (pure). Import purities were taken to be 1 since they are normally at near maximum. These purities were used to adjust the volume of drugs when trying to compare imports and consumption for balancing.

Value and quantity of imports

54. The value of imports is estimated using seizures data from Customs. Using the import prices described above an estimate of the import value of seizures can be found.

55. The published seizures of HM Customs & Excise are an accurate measure of amounts seized. However, to estimate the total amount of drugs which get past Customs into the domestic market we need to estimate the confiscation rate. It was assumed that Customs seize 10% of imported drugs; this is a rough estimate. Comparing relative movements of street and import prices could indicate any changes in the effectiveness of seizures. The confiscation rate may also vary between different drugs.

Cost of domestic production

56. Published data on costs of production are not available, though the National Criminal Intelligence Service (NCIS) have provided some anecdotal evidence. This suggests that costs are in the order of around 5% of street prices.

Cost value and quantity of domestic production

57. Estimates of the quantity of domestically produced drugs can be calculated using information on drugs seizures of the police and Customs, their associated seizure rates and an estimate of the proportion of domestic production to imports (discussed below).

58. Seizures data from the police can also be used as an indication of the proportion of drugs that are domestically produced, using a method outlined in a paper by King (1995). The method assumes that:

- police and Customs seizure rates do not vary between different types of drug; and
- all heroin and cocaine is imported.

The method then compares the seizures of police and Customs in order to get an indication of the relative seizure rates. This implies that the police seizure rate is approximately one tenth of Customs'. From this an estimate of the magnitude of domestic production relative to imports can be calculated. The paper concludes that around 20% of amphetamine is domestically produced. Further calculations using this method suggests also that 95% of LSD and 85% of Ecstasy is domestically produced. However, such information must be treated with caution since the calculations are very sensitive to fluctuations in seizures between police and Customs. Indeed, discussion with the United Kingdom National Criminal Intelligence Service (NCIS) suggest that there is no domestic production of LSD.

### Distribution margins

59. The Financial Action Task Force (FATF, established at the G7-economic summit in 1989) on money laundering suggested a framework for deriving a figure for the amount of money available for laundering. This framework assumes that the money available is equal to 70% of the street value of available drugs. The distribution margin is thus estimated at 70% of the street value of imported and domestically produced drugs. This method gives an independent measure of the distribution margins as opposed to deriving them using the difference between street and import prices.

### Stocks

60. It is possible that drug dealers may build up stocks of drugs from one accounting period to the next. If this were the case then changes in stocks would need to be recorded within the accounting framework to ensure consistent treatment. No firm data have been found on this in the United Kingdom.

### Own account production

61. Just as the national accounts should record goods produced for own use, such as food grown in allotments, so drugs produced for own use should be included. The only illegal drug which is likely to be produced in any major way for own use in the United Kingdom is cannabis. No firm data have been found on the number of people growing cannabis for their own use rather than for sale.

62. Own use drugs should be valued at the distributed price rather than the street price. As most of the street value of drugs is due to distribution margins rather than actual production, production for own use is likely to be of relatively low value compared to production for sale.

### **Reliability of data and balancing**

63. Estimates made of the value added from illegal drugs will, almost inevitably, not be consistent due to the many possible errors in the data sources. Balancing adjustments have to be made on the different data depending upon the relative strengths and weaknesses until the following holds:

Consumption - (Imports - Exports) = Domestic Production + Distribution margins

- The main problems which occur during balancing will highlight the main weaknesses in the data. Balancing can also be performed to ensure that physical quantities as well as values also balance.

64. Possible errors in the data on the output side include:

- the value of imports would be overestimated if Customs were more effective than assumed (higher seizure rate). If the seizure rate is lower than assumed then actual imports would be higher;
- distributor prices (and so import prices) are not reliable. It is not clear which point of the distribution chain they represent and how close they are to the actual import price;

- not all drugs imported will reach a final consumer, due to losses in the transportation and distribution stages and some intermediate consumption (for example, giving drugs away as bribes); and
- domestic production is based mainly on seizures data; they are very sensitive to changes in seizures.

65. The value of consumption is likely to be underestimated for various reasons:

- reluctance to disclose incriminating information to an official survey;
- users under the influence of drugs or alcohol may not remember taking drugs or how much they have consumed;
- heavier drug users are most likely to be non-respondents in a survey;
- the British Crime Survey covers only people aged 16 and over. Drug abuse, is generally thought to be most common among younger people, some of whom will be excluded from the survey.

### **Prostitution**

66. Potential data sources on prostitution include:

- Prostitutes' associations are a potential source of data for the number of prostitutes and average earnings. No data could be found from this source for the United Kingdom; and
- Law enforcement data, which gives the number of prostitutes prosecuted for prostitution offences. United Kingdom Home Office data show annual prosecutions of prostitutes of around 7500. Assuming that prostitutes earn £10-15 thousand per year on average and that one third to one fifth of all prostitutes are prosecuted each year, a rough estimate of the total income of the prostitution industry could be made at around £ 225 - 562 million.

### **Selling stolen goods (fencing)**

67. Data on the original retail value of stolen goods can be found through the British Crime Survey. It is assumed that goods are sold to the fence at 33% of retail value, and to the final consumer at 50% of retail value; so the fence generates value added of about 12% of the value of the stolen good.

### **Illegal gambling**

68. No information has been found on illegal gambling in the United Kingdom. The Home Office, a major bookmaker and the Bookmakers Licensing Authority have been approached and none knew of any sources of information on illegal gambling. There seems to be no evidence of widespread illegal gambling in the United Kingdom.

## Section 5 - Further work and conclusions

### Further work

69. The data sources set out in section 4 produce estimates which would need refining before they could be included within the national accounts. There is also a major problem in obtaining time series, which would be needed in order to include illegal activities within the accounts. This section highlights some of the main areas where further work would be useful.

70. Several assumptions needed to be made in order to build up the picture of drug use in the United Kingdom. One of the most important is that Customs seize 10% of illegal drugs (regardless of the drug or the year). This is clearly a major generalisation, which does not reflect changes in Customs' detection techniques, or differences in the detection rates for different drugs. It is important that some attempt is made to justify this rate. Other areas where assumptions could be better justified include:

- the ratio of total addicts to treatment episodes which appear in Department of Health data. These ratios were taken from a report into drug misuse in the region of Merseyside; however the ratios are likely to differ over the whole country, and for different drugs;
- the assumptions underlying the value of domestic production, and the amount of intermediate consumption involved. It is likely that as present value added is misclassified between domestic production and distribution margins.

71. Before better estimates can be made of illegal activities a better understanding is needed of the structure and workings of illegal enterprises. For example:

- what the value of intermediate consumption in the production of illegal goods and services is; and whether it is already included in the accounts;
- whether the income from illegal production is channelled through legitimate businesses, and whether much of that income goes abroad.

These links between the illegal economy and the legal economy need to be understood in order to correctly classify activities, and to make a check on existing data. Information on the structure of illegal activities is most likely to be found in research reports and academic studies.

72. Several national accounts tools, including input-output tables and top-to-bottom accounts could be used to help identify problems with data on illegal activities, and to help integrate those activities into the accounts.

### Conclusions

73. A number of data sources have been outlined within the report. By far the best data sources are on illegal drugs, which is also the most important activity in terms of relative value. At present these data sources produce estimates which are fairly rough and have the major drawback that no time series is available. **The data are not yet in a state where they can be incorporated into the accounts;** the most important obstacle being the lack of a time series. The estimates would need to be refined before inclusion

within the accounts. Priority should be given to work on improving the estimates of activities most likely to have major impacts on the accounts, mainly sale of illegal drugs.

74. Despite the large scale of this activity the effect of its inclusion should not be over-stated. The vast majority of illegal activity is consumed by, and generates income for, the household sector - and is recorded in neither the income, expenditure or output sides. Illegal activity is thus unlikely to explain a large amount of the discrepancies within the accounts. Even if in practice the inclusion of these data within the accounts does not radically affect main economic indicators, it is important to record the data as they have the capacity to affect the conclusions to be drawn from the accounts. In principle the accounts should record this activity in order to form a complete picture of the economy.

### Discussion points

- Are there any grounds for excluding economic activity be from the accounts? If so, what (moral, practical - data quality)?
- If an activity is to be excluded from the accounts on grounds of data quality, what is the minimum quality for a series to be included in the accounts?
- Does the inclusion of illegal (and some legal but undesirable) activity lessen the usefulness of the accounts? If so should alternative indicators be constructed, eg expenditure on 'desirable' production?

### References / Glossary

Leslie King, Drugs Intelligence Laboratory. Estimating the proportion of United Kingdom drug consumption which is imported, on the basis of Customs and police seizures for particular drugs - July 1995

Home Office - United Kingdom government department responsible for police and courts. Responsible for the British Crime Survey (BCS). Researches drug use.

Customs - HM Customs and Excise, United Kingdom government department responsible, amongst other things, for ensuring no illegal imports into the United Kingdom. Produces data on seizures of illegal drugs.

Release - National drugs helpline, offering confidential advice to drugs users.